CWMI

Please print or type.

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: 006099654 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 | 17364 | K | |
| | 2. | | | 4 | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 10/09/2018
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074178 JJK 20015

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: Bruce J. Dill | Signature | Month 11 | Day 2 | 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. JH
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 11 | Day 2 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

K2G

CWM, INC. - EMELLE ***** Receipt # 538230 ***** Page - 1

Date/Time In 10/31/18 9:20
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 70,760 .00
Tare .00
Net 32480.00
Adj. 38280.00
Adj. Net .00

Truck Number 1887 Trailer/Contnr #1 707226 #2 #3

17364

| 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 | 006099654GBF | 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 | | 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 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: 006099481 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 | 17872 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE:10-4-18 CAR# PW30007
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007905473 FLEK

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 11 | Day 1 | 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. JH
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 11 | Day 1 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWM, INC. - ENELLE ***** Receipt # 538231 ***** Page - 1

Date/Time In ~~10/31/18~~ 11/01/18 ~~9:22~~ 1435

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC

ENELLE AL

** WEIGHT SUMMARY **

Gross 69880 .00

Tare ~~39,400~~ .00 T.T.

Net 30,480 .00

Adj. 39400 .00

Adj. Net .00

17872 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 | 006099481GBF | 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 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 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: 006099482 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: ALD000622484

| 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 | 22408 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE:10-4-18 CAR# PW30007
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007905473 FLEK

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

INT'L

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

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name | Signature | Month | Day | Year
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Add recv'd kg wt. (JH)
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 11 | Day 1 | Year 18

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

k2G

CWM, INC. - ENELLE ***** Receipt # 538232 ***** Page - 1

Date/Time In ~~10/31/18 9:24~~ 11/01/18 1459

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
ENELLE AL

# OVER WEIGHT

** WEIGHT SUMMARY **
Gross 81,060 .00
Tare 31,660 .00
Net 49,400 .00
Adj. 22408kg .00
Adj. Net .00

Truck Number 1783 Trailer/Contnr #1 707230 #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 | ADEN # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 006099482GBF | 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 | | 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 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: 006099483 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 | 20185 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE:10-4-18 CAR# PW30007
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007905473 FLEK

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
X Transporter 1 Printed/Typed Name: Jerry Watt | Signature: Jerry Watt | Month 11 | Day 01 | 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.
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
X Printed/Typed Name: Aquandria Green | Signature | Month 11 | Day 01 | Year 18

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

**DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM**

k2G

CWM, INC. - ENELLE ***** Receipt # 538233 ***** Page - 1

Date/Time In 10/31/18 9:27
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
ENELLE AL

** WEIGHT SUMMARY **
Gross 78,560.00
Tare .00
Net 32,540.00
Adj. 46,020.00
Adj. Net 20,875 kg

Truck Number Trailer/Contnr #1 #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 | 006099483GBF | 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 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: 006099484 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 | 19087 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE:10-4-18 CAR# PW30007
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007905473 FLEK

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: Bruce Dill | Signature | Month 11 | Day 2 | 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. JH
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 11 | Day 2 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWM, INC. - EMELLE ***** Receipt # 538234 ***** Page - 1

Date/Time In ~~10/31/18~~ 11/02/18 ~~9:29~~ 08:27

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

Truck Number 1887 Trailer/Contnr #1 70722b #2 #3

** WEIGHT SUMMARY **
Gross 74680 .00
Tare 32600 .00
Net 42080 .00
Adj. .00
Adj. Net 19087 Kg .00

| 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 | 006099484GBF | 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 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: 006099657 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 | 22499 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 10/09/2018 CAR# PW20025
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074179 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: BRuce Dill | Signature | Month 11 | 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. (JH)
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 11 | Day 05 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

k2G

CWM, INC. - EMELLE ***** Receipt # 538218 ***** Page - 1

11 05 8:49

Date/Time In ~~10/31/18 9:00~~

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC

EMELLE AL

Truck Number 887 Trailer/Contnr #1 70T22C #2 #3

** WEIGHT SUMMARY **

Gross 82,020 .00

Tare ~~32400~~ .00

Net .00

Adj. 32420 .00

Adj. Net .00

49600

22499

| 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 | 006099657GBF | 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 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: 006099658 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 | 19269 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 10/09/2018 CAR# PW20025
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074179 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
X Transporter 1 Printed/Typed Name: Jerry Watt Signature: Jerry Watt Month 11 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. JH
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
X Printed/Typed Name: Aquandria Green Signature | Month 11 Day 05 Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

k2B

CWN, INC. - EMELLE ***** Receipt # 538220 ***** Page - 1

Date/Time In ~~10/31/18 9:04~~ 11 05 9:10 (19)

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 75,040.00
Tare 32560.00
Net .00
Adj. 42480.00
Adj. Net .00
19269

Truck Number 1783 Trailer/Contnr #1 707230 #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 | 0060996580BF | 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 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: 006099659 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 | 22725 | K | |
| | 2. | | | 4 | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 10/09/2018 CAR# PW20025
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074179 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: Bruce Dill | Signature | Month 11 | 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 JH
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 11 | Day 05 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

k2G

CWM, INC. - EMELLE ***** Receipt # 538219 ***** Page - 1

Date/Time In ~~10/31/18 9:03~~ 11 05 10:19 (JSS)

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC

EMELLE AL

** WEIGHT SUMMARY **

Gross 82,560 .00

Tare .00

Net 32 460 .00

~~Adj.~~ 50100 .00

Adj. Net .00

22725

Truck Number 1887 Trailer/Contnr #1 7072260 #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 | 006099659GBF | 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 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: 006099660 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 | 19450 | K | |
| | 2. | | | RQ | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 10/09/2018 CAR# PW20025
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074179 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: Jerry Watt | Signature: Jerry Watt | Month 11 | 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 rec'd kg wt. JH
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 Spear | Signature | Month 11 | Day 05 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

k26

CWM, INC. - EMELLE ***** Receipt # 538216 ***** Page - 1

Date/Time In 10/31/18 ~~8:58~~ 05 10:55

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 15,380.00
Tare 32500.00
Net
Adj. 42880.00
Adj. Net .00
19450

Truck Number 1783 Trailer/Contnr #1707230 #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 | 006099660GBF | 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 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: 006099661 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 | 23,696 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 10/09/2018 CAR# PW20001
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074180 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
X Transporter 1 Printed/Typed Name: Bruce Dill | Signature | Month 11 | 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 rec'd kg wt. JH
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: Jessica Harris | Signature: Jessica Harris | Month 11 | Day 5 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

k26

CWM, INC. - EMELLE ***** Receipt # 538221 ***** Page - 1

Date/Time In ~~10/31/18 9:07~~ 11/5/18 12:30

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

Truck Number 1887 Trailer/Contnr #1 702226 #2 #3

** WEIGHT SUMMARY **
Gross 84,620 .00
Tare .00
Net 32,380 .00
Adj. 52,240 .00
Adj. Net 23,060 .00

| 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 | 006099661GBF | 404803AL | | BASF CORP CRANSTON RI | 1 | DT | 1.00 | K | Kilogram | Y | PLF8 | 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 M1C 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 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: 006099662 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 | 21,872 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 10/09/2018 CAR# PW20001
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074180 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: Jerry Watt | Signature: Jerry Watt | Month 11 | 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
Acid recv'd kg wt. JH
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 11 | Day 05 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

k28

CWM, INC. - EMELLE ***** Receipt # 538225 ***** Page - 1

05 13:10

Date/Time In 10/31/18 9:12 (73)

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 80,060.00
Tare 32,140.00
Net .00
Adj. 48,220.00
Adj. Net 21,872.00

Truck Number 1783 Trailer/Contnr #1 707230 #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 | 0060996626BF | 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 Approved. OMB No. 2050-0039

| UNIFORM HAZARDOUS WASTE MANIFEST | 1. Generator ID Number | 2. Page 1 of | 3. Emergency Response Phone | 4. Manifest Tracking Number |
|---|---|---|---|---|
| | RID001194323 | 1 | (800)424-9300 | 006099663 GBF |

**GENERATOR**

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 | 25442 | K | |
| | 2. | | | M | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 10/09/2018 CAR# PW20001
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074180 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

**INT'L**

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

**TRANSPORTER**

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Bruce Dill — Signature: [signature] — Month 11 Day 5 Year 18
Transporter 2 Printed/Typed Name — Signature — Month Day Year

**DESIGNATED FACILITY**

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Add recv'd kg wt. JH
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: Aquandria Green — Signature: [signature] — Month 11 Day 05 Year 18

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

K2G

CWM, INC. - EMELLE ***** Receipt # 538224 ***** Page - 1

Date/Time In 11/27/18 ~~9:17~~ 05 14:48

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

Truck Number 1887 Trailer/Contnr #1 PT226 #2 #3

** WEIGHT SUMMARY **
Gross 88,520.00
Tare .00
Net 32320 .00
Adj. .00
Adj. Net .00
56200

| 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 | 006099663GBF | 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 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: 006099664 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 | T.T. 17554 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 10/09/2018 CAR# PW20001
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074180 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: Jerry Watt | Signature: Jerry Watt | Month 11 | 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. JH
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 11 | Day 5 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

k2G

CWN, INC. - EMELLE ***** Receipt # 538223 ***** Page - 1

Date/Time In ~~10/31/18~~ 11/05/18 9:09 1535

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

Truck Number 1783 Trailer/Contnr #1 707230 #2 #3

** WEIGHT SUMMARY **
Gross 70,880 ~~.00~~
Tare 32,180 .00
Net 38,700 .00
Adj. 17554 kg .00
Adj. Net .00

| 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 | 006099664GBF | 404003AL | | 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 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: 006100407 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 | 21373 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 11/1/18 CAR# PW 20028
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074195 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 11 | Day 27 | 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 Kg wt. 11/27/18 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: Aquandria Dean | Signature | Month 11 | Day 27 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

(5)

CWM, INC. - EMELLE ***** Receipt # 538838 ***** Page - 1

Date/Time In ~~11/20/18 16:23~~ 11/27/18 1506

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

Truck Number L9 Trailer/Contnr #1 707228 #2 #3

** WEIGHT SUMMARY **
Gross 81040 .00
Tare 33920 .00
Net 47120 .00
Adj. .00
Adj. Net 21373 Kg .00

| 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 | 006100407GBF | 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 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: 006100408 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 | 23070 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 11/1/18 CAR# PW 20028
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074195 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: Ryan Buchanan | Signature: Ryan Buchanan | Month: 11 | Day: 27 | 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 rec'd kg wt. 11/27/18 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

DESIGNATED FACILITY

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: 11 | Day: 27 | Year: 18

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

(6)

CWM, INC. - EMELLE ***** Receipt # 538839 ***** Page - 1

Date/Time In ~~11/20/18 16:28~~ 11/27/18 1651

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 84,500 ~~.00~~
Tare 33,640 .00
Net 50860 .00
Adj. 23070 Kg .00
Adj. Net .00

Truck Number L9 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 | 006100408GBF | 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_____ 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 Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

| 1. Generator ID Number | 2. Page 1 of | 3. Emergency Response Phone | 4. Manifest Tracking Number |
|---|---|---|---|
| RID001194323 | 1 | (800)424-9300 | 006100409 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 | 22553 | K | |
| | 2. | | | cy | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 11/1/18 CAR# PW 20028
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074195 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 | 11 | 28 | 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.
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 |
|---|---|---|---|---|
| Aquandria Green | [signature] | 11 | 28 | 18 |

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWMI

Please print or type. 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: 006100409 GBF

**GENERATOR**

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 | 22553 | K | |
| | 2. | | | cy | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 11/1/18 CAR# PW 20028
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074195 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

**INT'L**

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

**TRANSPORTER**

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Ryan Buchanan | Signature: Ryan Buchanan | Month: 11 | Day: 28 | Year: 18
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

**DESIGNATED FACILITY**

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Add recv'd kg wt. (III)
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: Jquandria Green | Signature | Month: 11 | Day: 28 | Year: 18

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

(1)

CWM, INC. - EMELLE ***** Receipt # 538841 ***** Page - 1

Date/Time In ~~11/20/18 16:31~~ 11/28/18 8:23

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

Truck Number L9 Trailer/Contnr #1 707228 #2 #3

** WEIGHT SUMMARY **
Gross 83320.00
Tare .00
Net 33600.00
Adj. .00
Adj. Net .00
49720

| 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 | 006100409GBF | 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 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: 006100410 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 | 19033 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 11/1/18 CAR# PW 20028
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074195 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 11 | Day 27 | Year 18
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Ada recv'd Kg wt. 11/27/18 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 11 | Day 27 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12/17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

(S)

CWM, INC. - EMELLE ***** Receipt # 538842 ***** Page - 1

Date/Time In ~~11/20/18 16:35~~ 11/27/18 17:41

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

Truck Number L 10 Trailer/Contnr #1 707227 #2 #3

** WEIGHT SUMMARY **
Gross 76,020 .00
Tare 34060 .00
Net 41960 .00
Adj. 19033 Kg .00
Adj. Net .00

| 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 | 006100410GBF | 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_____ BWZ 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 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: 006100411 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 | 21528 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 11/1/18 CAR# PW 30021
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074196 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

INT'L

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

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Ryan Buchanan | Signature: Ryan Buchanan | Month: 11 | Day: 28 | Year: 18
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Add recv'd kg wt. 11/28/18 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: 11 | Day: 28 | Year: 18

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

9

CWM, INC. - EMELLE ***** Receipt # 538844 ***** Page - 1

Date/Time In ~~11/20/18 16:39~~ 11/28/18 15:54

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

Truck Number L9 Trailer/Contnr #1 707228 #2 #3

** WEIGHT SUMMARY **
Gross 80860 .00
Tare 33400 .00
Net 47460 .00
Adj. 21528 kg. .00
Adj. Net .00

| 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 | 006100411GBF | 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 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: 006100412 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 | 20521 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 11/1/18 CAR# PW 30021
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074198 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: Marlin Sturdivant | Signature | Month 11 | Day 28 | 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 Kg wt. 11/28/18 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 11 | Day 28 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

(10)

CWM, INC. - EMELLE ***** Receipt # 538846 ***** Page - 1

Date/Time In ~~11/20/18 16:48~~ 11/28/18 1705

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 79240 .00
Tare 34000 .00
Net 45240 .00
Adj. 20521 Kg .00
Adj. Net .00

Truck Number L 10 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 | 006100412GBF | 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 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: 006100413 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 | 21999 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 11/1/18 CAR# PW 30021
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074196 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: 11 | Day: 28 | 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 kg wt. 11/28/18 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: 11 | Day: 28 | Year: 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

11

CWM, INC. - EMELLE ***** Receipt # 538849 ***** Page - 1

Date/Time In ~~11/20/18 16:57~~ 11/28/18 17:22

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC

EMELLE AL

** WEIGHT SUMMARY **
Gross 81,860 .00
Tare 33,360 .00
Net 48500 .00
Adj. 21999 Kg. .00
Adj. Net .00

Truck Number L9 Trailer/Contnr #1 707228 #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 | 006100413GBF | 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:_____ 818- _____ | 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 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: 006100414 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 | 25120 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 11/1/18 CAR# PW 30021
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074196 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 11 | Day 29 | 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 recvd Kg wt.
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 11 | Day 29 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

(12)

CWM, INC. - EMELLE ***** Receipt # 538850 ***** Page - 1

Date/Time In 11/20/18 17:00
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 88680 .00
Tare .00
Net 33300 .00
Adj. .00
Adj. Net .00
55380
25120

Truck Number Trailer/Contnr #1 #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 | 006100414GBF | 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 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: 006100415 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 | 3556 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 11/1/18 CAR# PW 30021
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074196 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 11 | Day 29 | 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. 11.29.18
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: Jquandria Green | Signature | Month 11 | Day 29 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

k2G

(1)

CWM, INC. - EMELLE ***** Receipt # 539046 ***** Page - 1

Date/Time In 11/29/18 11:11
Load Type Rolloff Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 39900 ~~51040.00~~
Tare 32060 .00
Net 7840 .00
Adj. 3556 Kg .00
Adj. Net .00

Truck Number L9 Trailer/Contnr #1 201607 #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 | 006100415GBF | 404803AL | | BASF CORP | 1 | CM | 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 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: 006100417 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 | 25429 | K | |
| | 2. | | | M | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 11/1/18 CAR# PW 30004
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074197 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: 11 | Day: 28 | 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. (HH)
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: Jessica Harris | Signature: Jessica Harris | Month: 11 | Day: 28 | Year: 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

1

k2G

CWN, INC. - EMELLE ***** Receipt # 538832 ***** Page - 1

Date/Time In 11/20/18 16:00
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross .00
Tare 79740 .00
Net 23680 .00
Adj. .00
Adj. Net .00
56060
25429

Truck Number Trailer/Contnr #1 #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 | 006100417GBF | 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
H2O SOL. S F PT/SOL |
H2O RXN/TEMP. INITIAL NO RXN REACTS___ |
H2O 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)_____
%H2O 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 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: 006100418 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 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 | 24,558 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 11/1/18 CAR# PW 30004
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074197 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: Ryan Buchanan | Signature: Ryan Buchanan | Month: 11 | Day: 28 | 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. (HH)
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: 11 | Day: 28 | Year: 18

DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

k2G

(2)

CWM, INC. - EMELLE ***** Receipt # 538833 ***** Page - 1

Date/Time In 11/28/18 16:06
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 87,640.00
Tare 33,500.00
Net .00
Adj. 54,140.00
Adj. Net 24,558 kg

Truck Number L9 Trailer/Contnr #1 707228 #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 | 006100418GBF | 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 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: 006100419 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 | 18 280 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 11/1/18 CAR# PW 30004
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074197 JK

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 11 | Day 28 | 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.
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: Jaquandria Green | Signature | Month 11 | Day 28 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

(3)

CWM, INC. - EMELLE ***** Receipt # 538835 ***** Page - 1

Date/Time In ~~11/20/18 16:15~~ 11/28/18 14:18

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

Truck Number L9 Trailer/Contnr #1 707228 #2 #3

** WEIGHT SUMMARY **
Gross 73760.00
Tare .00
Net 33460.00
~~Adj. .00~~
Adj. Net 40300.00
18280

| 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 | 006100419GBF | 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 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: 006100420 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 | 19196 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 11/1/18 CAR# PW 30004
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074197 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 Stundvant | Signature | Month 11 | Day 28 | 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 11/28/18 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: Jquandria Green | Signature | Month 11 | Day 28 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

(4)

CWM, INC. - EMELLE ***** Receipt # 538836 ***** Page - 1

Date/Time In ~~11/20/18 16:18~~ 11/28/18 14:56

Load Type Dumps Federal EPA ID ALD000622464

Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 76,340 ~~.00~~
Tare 34,020.00
Net 42,320.00
Adj. 19196 Kg .00
Adj. Net .00

Truck Number L 10 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 | 006100420GBF | 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 Approved. OMB No. 2050-0039

| UNIFORM HAZARDOUS WASTE MANIFEST | 1. Generator ID Number | 2. Page 1 of | 3. Emergency Response Phone | 4. Manifest Tracking Number |
|---|---|---|---|---|
| | RID001194323 | 1 | (800)424-9300 | 006100424 GBF |

**GENERATOR**

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 | 12592 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/13/18 CAR# PW ~~20020~~ 20027
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007905478 FLE

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

**INT'L**

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

**TRANSPORTER**

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Markus Sturdivant — Signature: [signature] — Month 11 Day 26 Year 18

Transporter 2 Printed/Typed Name — Signature — Month Day Year

**DESIGNATED FACILITY**

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Add recv'd Kg wt. [initials]
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: Aquandria Green — Signature: [signature] — Month 11 Day 26 Year 18

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

k2G

CWM, INC. - EMELLE ***** Receipt # 530900 ***** Page - 1

Date/Time In 11/26/18 9:54
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

Truck Number 410 Trailer/Contnr #1 707227 #2 #3

** WEIGHT SUMMARY **
Gross 63,120 .00
Tare .00
Net 34,360 .00
Adj. 27,760 .00
Adj. Net .00
12592#9

| 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 | 006100424GBF | 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 Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

| 1. Generator ID Number | 2. Page 1 of | 3. Emergency Response Phone | 4. Manifest Tracking Number |
|---|---|---|---|
| RID001194323 | 1 | (800)424-9300 | 006100425 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 | 18997 | K | |
| | 2. | | | w/ | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/13/18 CAR# PW ~~20020~~ 20027
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007905478 FLE

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
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. [illegible]
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 [illegible] — Signature: [illegible] — Month Day Year: 11 26 18

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

k26

CWM, INC. - EMELLE ***** Receipt # 538902 ***** Page - 1

Date/Time In 11/26/18 10:08
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 76360 .00
Tare .00
Net 34480 .00
Adj. 41880 .00
Adj. Net .00

Truck Number Trailer/Contnr #1 #2 #3

18497

| 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 | 006100425GBF | 404803AL | BASF CORP | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterainable | 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 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: 006100426 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 | 19,505 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: CAR# PW ~~20022~~ 20027
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007905478 FLE

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 11 | Day 26 | 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 kg wt.
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 11 | Day 26 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

1:26

CWM, INC. - EMELLE ***** Receipt # 538904 ***** Page - 1

Date/Time In 11/26/18 10:10
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

Truck Number L9 Trailer/Contnr #1 707228 #2 #3

** WEIGHT SUMMARY **
Gross 46,280 .00
Tare .00
Net 33280 .00
Adj. 4300D .00
Adj. Net 19,505kg .00

| 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 | 006100426GBF | 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 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: 006100427 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 | 22,934 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/13/18 CAR# PW ~~20022~~ 20027
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007905478 FLE

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: 11 | Day: 26 | 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.
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 Stean | Signature | Month: 11 | Day: 26 | Year: 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

k26

CWM, INC. - EMELLE ***** Receipt # 538905 ***** Page - 1

Date/Time In 11/26/18 10:14
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 83,580 .00
Tare 33,320 .00
Net 50,560 .00
Adj. .00
Adj. Net 22,934 Kg .00

Truck Number L9 Trailer/Contnr #1 707225 #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 | 006100427GBF | 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:_____

# MATERIAL SAND & STONE CORP.

WASHED SAND AND GRAVEL
618 GREENVILLE ROAD
NORTH SMITHFIELD, R.I. 02896
TEL. 767-3420
232-3010

DATE 10/3/18

M. Strategic Enviro

Address Mill St, Cranston

CUBIC YDS. Rental Tam - 1 ⅝

| | | | |
|---|---|---|---|
| | SAND Hauled To | | |
| | GRAVEL RI. Landfill | | |
| | SUB SOIL | | |
| | LOAM | | |
| | FILL | | |
| | STONES | | |
| HOURS | 6 @ $100/hr | | |
| | SHOVEL DOZER | | |
| | TRAILER 116 | | |
| | BACK HOE | | |
| | TRUCKS | | |
| | LABOR | | |
| | SALES TAX | | |
| | TOTAL | | |

REC'D BY

SP 5/12

51401

Not Responsible For Any Damage

SIR SPEEDY PRINTING, SMITHFIELD, RI (401) 232-2000 33218906

# RHODE ISLAND RESOURCE RECOVERY CORPORATION

CENTRAL LANDFILL
65 SHUN PIKE
JOHNSTON, RI 02919

OFFICE 401.942.1430
FAX 401.946.5174

103254124
**RECEIPT DOCUMENT NUMBER**

**BILL TO**

STRA100317
STRATEGIC ENVIRONMENTAL SERVICES, INC.
362 PUTNAM HILL ROAD
SUTTON, MA01590-

**HAULER**

STRA100317
STRATEGIC ENVIRONMENTAL SERVICES, INC.
362 PUTNAM HILL ROAD
SUTTON, MA01590-

| DATE | ENTRY TIME | OPER. | EXIT TIME | OPER. | MEASUREMENT | POUNDS | TONS | SCALE |
|---|---|---|---|---|---|---|---|---|
| 10/3/18 | 11:22:46 | CB | 11:23:32 | CB | GROSS: | 110120 | 55.06 | Scale 2 |
| | | | | | TARE: | 35800 | 17.90 | P.T. |
| | | | | | NET: | 74320 | 37.16 | |

| VEHICLE NUMBER | VEHICLE TYPE | PLATE NUMBER | TRANSACTION TYPE |
|---|---|---|---|
| SS116 | Roll Off | | Inbound |

| CODE | DESCRIPTION | QUANTITY | UNITS | UNIT PRICE | AMOUNT |
|---|---|---|---|---|---|
| 132 | Solid Waste Soils w Approval<br>Host Comunity Fee | 37.16 | Ton | | |
| 180 | MILL STREET 10-2-18 | | | | |

## DECLARATION REGARDING WASTE DELIVERY

The undersigned declares, under the penalty of perjury that 100% of the solid waste delivered to the Central Landfill in the vehicle and on the date above was, was generated and collected in Rhode Island, is not Hazardous Waste and does not contain in excess of 20% recyclable material by weight, as defined by DEM regulation, and complies with all applicable laws and regulations.

Driver Signature: 10/03/2018 11:23

TOTAL AMOUNT

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323

2. Page 1 of 1

3. Emergency Response Phone: 508 757-7782

4. Waste Tracking Number: 18-0315-48

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 Corporation
180 Mill St.
Cranston, RI 02905

6. Transporter 1 Company Name: MATRIPO SAND + GRAVEL

U.S. EPA ID Number:

7. Transporter 2 Company Name:

U.S. EPA ID Number:

8. Designated Facility Name and Site Address

Rhode Island Resource Recovery
65 Shun Pike
Johnston, RI 029191

Facility's Phone: 401 942-1430

U.S. EPA ID Number: RID980520183

| | 9. Waste Shipping Name and Description | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. |
|---|---|---|---|---|---|
| 1. | Non-DOT/Non-RCRA Regulated Soil | 1 | DT | | T |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |

13. Special Handling Instructions and Additional Information

18-0315 Weight is estimated

1) 20181002-180Mill Street Soil

Rate code 132

2A

14. **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.

Generator's/Offeror's Printed/Typed Name: Joshua A. Klement (Agent for BASF) Signature: Joshua A. Klement Month 10 Day 3 Year 18

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JOE VINGI Signature: Month 10 Day 3 Year 18

Transporter 2 Printed/Typed Name: Signature: Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: BOB B Signature: BOB B Month 10 Day 3 Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

18-0315-48

RID001194323 1 508 757-7782

DASF Corporation
100 Park Ave
Florham Park, NJ 07932
973 245-5269

DASF Corporation
180 Mill St.
Cranston, RI 02905

Rhode Island Resource Recovery
65 Shun Pike
Johnston, RI 02919

RID980520183

401 942-1430

Non-DOT/Non-RCRA Regulated Soil

| | 1 | DT | T |
|---|---|---|---|
| | | | |

18-0315 Weight is estimated

1)20181002-180MillStreet Soil

Rate code 132

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of: 1
3. Emergency Response Phone: 508 757-7782
4. Waste Tracking Number: 18-0315-48

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 Corporation
180 Mill St.
Cranston, RI 02905

6. Transporter 1 Company Name: MATERIAL SAND + GRAVEL
U.S. EPA ID Number:

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

8. Designated Facility Name and Site Address
Rhode Island Resource Recovery
65 Shun Pike
Johnston, RI 029191
Facility's Phone: 401 942-1430
U.S. EPA ID Number: RID980520183

| | 9. Waste Shipping Name and Description | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | |
|---|---|---|---|---|---|---|
| | 1. Non-DOT/Non-RCRA Regulated Soil | 1 | DT | | T | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

13. Special Handling Instructions and Additional Information
18-0315 Weight is estimated
Rate code 132
2A
1) 20181002-180Mill Street Soil

14. **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.

Generator's/Offeror's Printed/Typed Name: Joshua G. Klement (Agent for BASF) | Signature: Joshua G. Klement | Month 10 | Day 3 | Year 18

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

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: JOE VINCI | Signature: | Month 10 | Day 3 | Year 18
Transporter 2 Printed/Typed Name: | Signature: | Month | Day | Year

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: BOB B | Signature: BOB B | Month 10 | Day 3 | Year 18

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY'S COPY

# MATERIAL SAND & STONE CORP.

WASHED SAND AND GRAVEL
618 GREENVILLE ROAD
NORTH SMITHFIELD, R.I. 02896
TEL. 767-3420
232-3010

DATE 10/3/18

M Strategic Envir

Address Mill St Cranston

CUBIC YDS. Rental

| | | | |
|---|---|---|---|
| | SAND | | |
| | GRAVEL | | |
| | SUB SOIL 7am – | | |
| | LOAM Hauled 11 | | |
| | FILL Land Fill 10 | | |
| | STONES Johnston | | |
| HOURS 4 | @ 100 – / Hr | | |
| | SHOVEL DOZER | | |
| | TRAILER | | |
| | BACK HOE | | |
| | TRUCKS 112 | | |
| | LABOR | | |
| | SALES TAX | | |
| | TOTAL | | |

REC'D BY

SP 5/12

51402

Not Responsible For Any Damage

SIR SPEEDY PRINTING, SMITHFIELD, RI (401) 232-2000 33218906

# RHODE ISLAND RESOURCE RECOVERY CORPORATION

CENTRAL LANDFILL
65 SHUN PIKE
JOHNSTON, RI 02919

OFFICE 401.942.1430
FAX 401.946.5174

103253977
**RECEIPT DOCUMENT NUMBER**

BILL TO

STRA100317
STRATEGIC ENVIRONMENTAL SERVICES, INC.
362 PUTNAM HILL ROAD
SUTTON, MA01590-

HAULER

STRA100317
STRATEGIC ENVIRONMENTAL SERVICES, INC.
362 PUTNAM HILL ROAD
SUTTON, MA01590-

| DATE | ENTRY TIME | OPER. | EXIT TIME | OPER. | MEASUREMENT | POUNDS | TONS | SCALE |
|---|---|---|---|---|---|---|---|---|
| 10/3/18 | 09:06:08 | RK | 09:33:34 | KJJ | GROSS: | 100000 | 50.00 | Scale 2 |
| | | | | | TARE: | 35360 | 17.68 | Scale 3 |
| | | | | | NET: | 64640 | 32.32 | |

| VEHICLE NUMBER | VEHICLE TYPE | PLATE NUMBER | TRANSACTION TYPE |
|---|---|---|---|
| SS112 | Large Dump Truck | | Inbound |

| CODE | DESCRIPTION | QUANTITY | UNITS | UNIT PRICE | AMOUNT |
|---|---|---|---|---|---|
| 132 | Solid Waste Soils w Approval<br>Host Comunity Fee | 32.32 | Ton | | |
| | 180 MILL STREET 10-2-18<br>TARE | | | | |

## DECLARATION REGARDING WASTE DELIVERY

The undersigned declares, under the penalty of perjury that 100% of the solid waste delivered to the Central Landfill in the vehicle and on the date above was, was generated and collected in Rhode Island, is not Hazardous Waste and does not contain in excess of 20% recyclable material by weight, as defined by DEM regulation, and complies with all applicable laws and regulations.

Driver Signature: 10/03/2018 09:33

TOTAL AMOUNT

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: 508 757-7782
4. Waste Tracking Number: 18-0315-50

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 Corporation
180 Mill St.
Cranston, RI 02905

6. Transporter 1 Company Name: MATERIAL SAND & GRAVEL — U.S. EPA ID Number:

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

8. Designated Facility Name and Site Address — U.S. EPA ID Number: RID980520183

Rhode Island Resource Recovery
65 Shun Pike
Johnston, RI 029191

Facility's Phone: 401 942-1430

| | 9. Waste Shipping Name and Description | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | |
|---|---|---|---|---|---|---|
| 1. | Non-DOT/Non-RCRA Regulated Soil | 1 | DT | 30 | T | |
| 2. | | | | | | |
| 3. | | | | | | |
| 4. | | | | | | |

13. Special Handling Instructions and Additional Information

18-0315 Weight is estimated

1) 20181002-180Mill Street Soil

Rate code 132

2A

14. **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.

Generator's/Offeror's Printed/Typed Name: Joshua Klement (As Agent for BASF) — Signature: Joshua Klement — Month 10 Day 3 Year 18

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Thomas Brown — Signature: Thomas Brown — Month 10 Day 3 Year 18

Transporter 2 Printed/Typed Name — Signature — Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature: Karen Johnson — Month Day Year

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

18-0315-50 1 508 757-7782 RID001194023

DASF Corporation
100 Park Ave
Florham Park, NJ 07932
973 245-5269

DASF Corporation
180 Mill St.
Cranston, RI 02905

Rhode Island Resource Recovery
65 Shun Pike
Johnston, RI 02919

RID980520163

401 942-1430

Non-DOT/Non-RCRA Regulated Soil

1 DT 30 T

18-0315 Weight is estimated 1)20181002-180MillStreet Soil

Rate code 132

2A

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323

2. Page 1 of 1

3. Emergency Response Phone: 508 757-7782

4. Waste Tracking Number: 18-0315-50

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 Corporation
180 Mill St.
Cranston, RI 02905

6. Transporter 1 Company Name: MATERIAL SAND + GRAVEL

U.S. EPA ID Number:

7. Transporter 2 Company Name:

U.S. EPA ID Number:

8. Designated Facility Name and Site Address

Rhode Island Resource Recovery
65 Shun Pike
Johnston, RI 029191

Facility's Phone: 401 942-1430

U.S. EPA ID Number: RID980520183

| | 9. Waste Shipping Name and Description | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | |
|---|---|---|---|---|---|---|
| 1. | Non-DOT/Non-RCRA Regulated Soil | 1 | DT | 30 | T | |
| 2. | | | | | | |
| 3. | | | | | | |
| 4. | | | | | | |

13. Special Handling Instructions and Additional Information

18-0315 Weight is estimated

1) 20181002-180MIllStreet Soil

Rate code 132

2A

**14. 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.

Generator's/Offeror's Printed/Typed Name: Joshua Klement (As Agent for BASF) | Signature: Joshua Klement | Month 10 | Day 3 | Year 18

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Thomas Brown | Signature: [signature] | Month 10 | Day 3 | Year 18

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

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: | Signature: Karen Johnson | Month | Day | Year

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: 508 757-7782
4. Waste Tracking Number: 18-0315-50

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 Corporation
180 Mill St.
Cranston, RI 02905

6. Transporter 1 Company Name: MATERIAL SAND + GRAVEL
U.S. EPA ID Number:

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

8. Designated Facility Name and Site Address
Rhode Island Resource Recovery
65 Shun Pike
Johnston, RI 029191
Facility's Phone: 401 942-1430
U.S. EPA ID Number: RID980520183

| | 9. Waste Shipping Name and Description | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | |
|---|---|---|---|---|---|---|
| 1. | Non-DOT/Non-RCRA Regulated Soil | 1 | DT | 30 | T | |
| 2. | | | | | | |
| 3. | | | | | | |
| 4. | | | | | | |

13. Special Handling Instructions and Additional Information
18-0315 Weight is estimated
1) 20181002-180Mill Street Soil
Rate code 132
2A

14. **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.

Generator's/Offeror's Printed/Typed Name: Joshua Klement (As Agent for BASF) | Signature: Joshua Klement | Month 10 | Day 3 | Year 18

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

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Thomas Brown | Signature: [signature] | Month 10 | Day 3 | Year 18

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

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: | Signature: Karen Johnson | Month | Day | Year

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

# MATERIAL SAND & STONE CORP.

WASHED SAND AND GRAVEL
618 GREENVILLE ROAD
NORTH SMITHFIELD, R.I. 02896
TEL. 767-3420
232-3010

DATE 10/3/18

M. Strategic Enviro

Address Mill St, Cranston

CUBIC YDS. Rental Tam - 1 ea

| | | | |
|---|---|---|---|
| | SAND Hauled To | | |
| | GRAVEL Ri. Landfill | | |
| | SUB SOIL | | |
| | LOAM | | |
| | FILL | | |
| | STONES | | |
| HOURS | 6 @ 100 / hr | | |
| | SHOVEL DOZER | | |
| | TRAILER 116 | | |
| | BACK HOE | | |
| | TRUCKS | | |
| | LABOR | | |
| | SALES TAX | | |
| | TOTAL | | |

REC'D BY

SP 5/12

51401

Not Responsible For Any Damage

SIR SPEEDY PRINTING, SMITHFIELD, RI (401) 232-2000 33218906

# RHODE ISLAND RESOURCE RECOVERY CORPORATION

CENTRAL LANDFILL
65 SHUN PIKE
JOHNSTON, RI 02919

OFFICE 401.942.1430
FAX 401.946.5174

103254124
**RECEIPT DOCUMENT NUMBER**

**BILL TO**

STRA100317
STRATEGIC ENVIRONMENTAL SERVICES, INC.
362 PUTNAM HILL ROAD
SUTTON, MA01590-

**HAULER**

STRA100317
STRATEGIC ENVIRONMENTAL SERVICES, INC.
362 PUTNAM HILL ROAD
SUTTON, MA01590-

| DATE | ENTRY TIME | OPER. | EXIT TIME | OPER. | MEASUREMENT | POUNDS | TONS | SCALE |
|---|---|---|---|---|---|---|---|---|
| 10/3/18 | 11:22:46 | CB | 11:23:32 | CB | GROSS: | 110120 | 55.06 | Scale 2 |
| | | | | | TARE: | 35800 | 17.90 | P.T. |
| | | | | | NET: | 74320 | 37.16 | |

| VEHICLE NUMBER | VEHICLE TYPE | PLATE NUMBER | TRANSACTION TYPE |
|---|---|---|---|
| SS116 | Roll Off | | Inbound |

| CODE | DESCRIPTION | QUANTITY | UNITS | UNIT PRICE | AMOUNT |
|---|---|---|---|---|---|
| 132 | Solid Waste Soils w Approval<br>Host Comunity Fee | 37.16 | Ton | | |
| 180 | MILL STREET 10-2-18 | | | | |

## DECLARATION REGARDING WASTE DELIVERY

The undersigned declares, under the penalty of perjury that 100% of the solid waste delivered to the Central Landfill in the vehicle and on the date above was, was generated and collected in Rhode Island, is not Hazardous Waste and does not contain in excess of 20% recyclable material by weight, as defined by DEM regulation, and complies with all applicable laws and regulations.

Driver Signature: 10/03/2018 11:23

TOTAL AMOUNT

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323

2. Page 1 of 1

3. Emergency Response Phone: 508 757-7782

4. Waste Tracking Number: 18-0315-48

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 Corporation
180 Mill St.
Cranston, RI 02905

6. Transporter 1 Company Name: MATRIPO SAND + GRAVEL

U.S. EPA ID Number:

7. Transporter 2 Company Name:

U.S. EPA ID Number:

8. Designated Facility Name and Site Address

Rhode Island Resource Recovery
65 Shun Pike
Johnston, RI 029191

Facility's Phone: 401 942-1430

U.S. EPA ID Number: RID980520183

| | 9. Waste Shipping Name and Description | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. |
|---|---|---|---|---|---|
| 1. | Non-DOT/Non-RCRA Regulated Soil | 1 | DT | | T |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |

13. Special Handling Instructions and Additional Information

18-0315 Weight is estimated

1) 20181002-180Mill Street Soil

Rate code 132

2A

14. **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.

Generator's/Offeror's Printed/Typed Name: Joshua A. Klement (Agent for BASF) Signature: Joshua A. Klement Month 10 Day 3 Year 18

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JOE VINGI Signature: Month 10 Day 3 Year 18

Transporter 2 Printed/Typed Name: Signature: Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: BOB B Signature: BOB B Month 10 Day 3 Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

18-0315-48

RID001194323 1 508 757-7782

DASF Corporation
100 Park Ave
Florham Park, NJ 07932
973 245-5269

DASF Corporation
180 Mill St.
Cranston, RI 02905

Rhode Island Resource Recovery
65 Shun Pike
Johnston, RI 02919

RID980520183

401 942-1430

Non-DOT/Non-RCRA Regulated Soil

| | | | |
|---|---|---|---|
| | 1 | DT | T |

18-0315 Weight is estimated

1)20181002-180MillStreet Soil

Rate code 132

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of: 1
3. Emergency Response Phone: 508 757-7782
4. Waste Tracking Number: 18-0315-48

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 Corporation
180 Mill St.
Cranston, RI 02905

6. Transporter 1 Company Name: MATERIAL SAND + GRAVEL
U.S. EPA ID Number:

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

8. Designated Facility Name and Site Address
Rhode Island Resource Recovery
65 Shun Pike
Johnston, RI 029191
Facility's Phone: 401 942-1430
U.S. EPA ID Number: RID980520183

| | 9. Waste Shipping Name and Description | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | |
|---|---|---|---|---|---|---|
| | 1. Non-DOT/Non-RCRA Regulated Soil | 1 | DT | | T | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

13. Special Handling Instructions and Additional Information
18-0315 Weight is estimated
Rate code 132
2A
1) 20181002-180Mill Street Soil

14. **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.

Generator's/Offeror's Printed/Typed Name: Joshua G. Klement (Agent for BASF) | Signature: Joshua G. Klement | Month 10 | Day 3 | Year 18

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

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: JOE VINCI | Signature: | Month 10 | Day 3 | Year 18
Transporter 2 Printed/Typed Name: | Signature: | Month | Day | Year

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: BOB B | Signature: BOB B | Month 10 | Day 3 | Year 18

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY'S COPY

Global Cycle Inc.

700 Richmond Street
East Taunton, MA 02718

# Invoice

| Date | Invoice # |
|---|---|
| 10/15/2018 | 2796 |

| Bill To |
|---|
| Strategic Environmental<br>Attn: Accounts Payable<br>362 Putnam Hill Road<br>Sutton, MA 01590 |

| P.O. No. | Terms | Project |
|---|---|---|
| 18-0315 | Net 30 | |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| | WASTEWATER RECYCLING SERVICES | | |
| | site: BASF<br>180 Mill Street<br>Cranston, RI | | |
| | Wednesday, October 10, 2018 | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| | Friday, October 11, 2018 | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| | | **Total** | |

☒ CAPE COD CARTAGE ☐ RUTLAND
☐ DANIELSON ☐ SPRINGFIELD
☐ HOOKSETT ☐ WEST BRIDGEWATER

# J. P. NOONAN
TRANSPORTATION, INC.
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE: 10-10-18

LOAD NUMBER: 2877191

BILL OF LADING NUMBER:

BILL TO: Global Cycle

DELIVERED TO:

SHIPPED FROM:
BASF Cranston RI
180 Mill st.

Global Cycle E. Taunton
700 Richmond st.

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| | | |
| Wastewater | 9,000 gal | |

PH 8.6 vis-ok plate #96(MA) Profile # B-300-001

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT $

CHECK NUMBER

| TRACTOR NO. | TRAILER NO. | DRIVER | NUMBER |
|---|---|---|---|
| 629 | STK 1312 | David Fuchs | |

RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY

RECEIVER SIGNATURE [signature]

PTO PUMP TIME HRS. _____ MIN. _____

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature _____

| DELAY LOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY LOADING | | |

| DELAY UNLOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY UNLOADING | | |

SIGNATURE FOR CERTIFICATION OF DELAY TIME

SHIPPER X [signature]

CONSIGNEE _____

24 HOUR EMERGENCY PHONE - 800-922-8026

# Bill of Lading Short Form

Carrier: J.P. Noonan
Date: 10/10/2018
Bill of Lading #: 101018-2
PO #: 18-0315
Order #:
Shipper/Consignor: BASF Corporation; 180 Mill St.; Cranston, RI 02905

Consignee: GlobalCycle; 700 Richmond St.; Taunton, MA 02718

Instructions: 1st load

| Item Code | Details | Quantity | Weight (Unit) |
|---|---|---|---|
| B-300-001 | Non-DOT/Non-RCRA Regulated Groundwater | Gero | G |
| | Wastewater for Recycle | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | Total | | |

**Terms:** Prepaid [ ] Collect [ ] Other [X]

**Carrier:** Pick Up Date: 10-10-18 Signature: Mike Lem

*Carrier acknowledges receipt of packages and that they are properly described as above and are in good order except as noted*

**Shipper:** Pick Up Date: 10/10/2018 Signature:

*This section is to make it sure that all materials are properly classified, described, packaged, marked and labeled and are in good condition to be transported and according to the applicable regulations of transporting department*

---

**Received in Apparent Good Order**

Received By: (Signatures)
Print Name Here: Stephen Pognel Date: 10/10/18

☐ CAPE COD CARTAGE ☐ RUTLAND
☐ DANIELSON ☐ SPRINGFIELD
☐ HOOKSETT ☐ WEST BRIDGEWATER

# J. P. NOONAN
TRANSPORTATION, INC.
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE: 10 10 18

LOAD NUMBER: 2877165

BILL OF LADING NUMBER:

BILL TO: Global Cycle

SHIPPED FROM: Basf Cranston
180 Mill St
Cranston RI

DELIVERED TO: Global Cycle
700 Richmond St
Taunton MA

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| → Lic Plate # D 816360 (ME) | | |
| 1 Load of Waste Water | | |
| 9000 Gallons | | |
| Non RCRA/Non Dot Regulated Liquid | | |
| pH = 8.5 | | |
| Visual - ok | | |
| B-300-001 | | |

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT: $

CHECK NUMBER:

| TRACTOR NO. | TRAILER NO. | DRIVER | NUMBER |
|---|---|---|---|
| M580 | 5000 / 1803 | Michael Burns | 23 |

| DELAY LOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY LOADING | | |

| DELAY UNLOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY UNLOADING | | |

RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY

RECEIVER SIGNATURE: [signature]

PTO PUMP TIME HRS. _____ MIN. _____

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature _____

SIGNATURE FOR CERTIFICATION OF DELAY TIME

SHIPPER [illegible]

CONSIGNEE _____

24 HOUR EMERGENCY PHONE - 800-922-8026

# Bill of Lading Short Form

Carrier: J.P. Noonan
Date: 10/10/2018
Bill of Lading #: 101018-1
PO #: 18-0315
Order #:
Shipper/Consignor: BASF Corporation; 180 Mill St.; Cranston, RI 02905

Consignee: GlobalCycle; 700 Richmond St.; Taunton, MA 02718

Instructions: 2nd load

| Item Code | Details | Quantity | Weight (Unit) |
|---|---|---|---|
| B-300-001 | Non-DOT/Non-RCRA Regulated Groundwater | 9000 | G |
| | Wastewater for Recycle | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | Total | | |

**Terms:** Prepaid [ ] Collect [ ] Other [X]

**Carrier:** Pick Up Date: 10-10-18 Signature: Mike Bu

*Carrier acknowledges receipt of packages and that they are properly described as above and are in good order except as noted*

**Shipper:** Pick Up Date: 10/10/2018 Signature:

*This section is to make it sure that all materials are properly classified, described, packaged, marked and labeled and are in good condition to be transported and according to the applicable regulations of transporting department.*

**Received in Apparent Good Order**

Received By: (Signatures)
Print Name Here: Stephen Rozdeb Date: 10/10/18

[X] CAPE COD CARTAGE [ ] RUTLAND
[ ] DANIELSON [ ] SPRINGFIELD
[ ] HOOKSETT [ ] WEST BRIDGEWATER

# J. P. NOONAN
TRANSPORTATION, INC.
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE 10-11-18

LOAD NUMBER 2877843
BILL OF LADING NUMBER

BILL TO Globalcycle

DELIVERED TO Globalcycle I. Taunton 700 Richmond St.

SHIPPED FROM BASF Cranston, RI 180 Mill St.

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| Wastewater | | 9,000 gal |

Plate# 46 MN
Profile# B-300-001 PH-8.1 Vis-OK

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT $

CHECK NUMBER

TRACTOR NO. 629 | TRAILER NO. 7KVB12 | DRIVER David Fuchs | NUMBER

RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY

RECEIVER SIGNATURE [signature]

PTO PUMP TIME HRS. _____ MIN. _____

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature _____

| DELAY LOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY LOADING | | |

| DELAY UNLOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY UNLOADING | | |

SIGNATURE FOR CERTIFICATION OF DELAY TIME

SHIPPER [signature] P. McGuire SBS

CONSIGNEE _____

24 HOUR EMERGENCY PHONE - 800-922-8026

Bill of Lading Template

# Bill of Lading Short Form

Carrier: J.P. Noonan

Date: 10/11/2018

Bill of Lading #: 101018-3

PO #: 18-0315

Order #:

Shipper/Consignor: BASF Corporation; 180 Mill St.; Cranston, RI 02905

Consignee: GlobalCycle; 700 Richmond St.; Taunton, MA 02718

Instructions: 3rd load of project
1st load of day

| Item Code | Details | Quantity | Weight (Unit) |
|---|---|---|---|
| B-300-001 | Non-DOT/Non-RCRA Regulated Groundwater | 9000 | G |
| | Wastewater for Recycle | | |
| | PH-8.1 Vis-OK | | |
| | Profile# B-300-001 | | |
| | Plate# 46(MA) | | |
| | Total | | |

**Terms:** Prepaid [ ] Collect [ ] Other [X]

**Carrier:** Pick Up Date: 10/11/18 Signature X [signature]

*Carrier acknowledges receipt of packages and that they are properly described as above and are in good order except as noted.*

**Shipper:** Pick Up Date: 10/11/18 Signature [signature] As Auth Agent for BASF

*This section is to make it sure that all materials are properly classified, described, packaged, marked and labeled and are in good condition to be transported and according to the applicable regulations of transporting department.*

---

Received in Apparent Good Order

Received By: [signature] (Signatures)

Print Name Here: Jordan Fernandes Date: 10/11/18

Global Cycle Inc.

700 Richmond Street
East Taunton, MA 02718

# Invoice

| Date | Invoice # |
|---|---|
| 10/19/2018 | 2800 |

| Bill To |
|---|
| Strategic Environmental<br>Attn: Accounts Payable<br>362 Putnam Hill Road<br>Sutton, MA 01590 |

| P.O. No. | Terms | Project |
|---|---|---|
| 18-0315 | Net 30 | |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| | WASTEWATER RECYCLING SERVICES | | |
| | site: BASF<br>180 Mill Street<br>Cranston, RI | | |
| | Thursday, October 18, 2018 | | |
| 7,850 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| 7,800 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |

| | |
|---|---|
| | **Total** |

GLOBAL REMEDIATION
STRAIGHT BILL OF LADING
ORIGINAL - NOT NEGOTIABLE

PAGE 1 OF 1
BOL NO 20181018-01
DATE 10-18-18

R11/Vt2

| TRANSPORTER | US EPA ID Number | Phone |
|---|---|---|
| Global Remediation Services, Inc<br>700 Richmond Street<br>East Taunton, MA 02718-1514 | MAC300012903 | 508-828-1005 |

| GENERATOR | US EPA ID Number | Phone |
|---|---|---|
| BASF Corporation<br>180 Mill Street<br>Cranston, RI 02905 | N/A | 774-276-1480 |

| FACILITY | US EPA ID Number | Phone |
|---|---|---|
| Globalcycle, Inc<br>700 Richmond Street<br>East Taunton, MA 02718 | N/A | 508-828-1005 |

| HM | Description of Articles or Proper Shipping Name | Containers No. | Containers Type | Total Quantity | Unit Wt/Vol |
|---|---|---|---|---|---|
| | Non-DOT / Non-RCRA Regulated Material (post wash water)<br>Globalcycle Approval # C-300-001 Profile# | 001 | T T | 7850 | G |
| | PH-7.6 Vis-OK | | | | |
| | Plate # 83949 MA. | | | | |

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

| GENERATOR | Signature | Print Name | Date |
|---|---|---|---|
| X [signature] F. McCarthy IV | | Charles F. McCarthy | 10-18-18 |
| TRANSPORTER: Michael J. Raposa | | Michael Raposa | 10-18-18 |
| FACILITY: [signature] | | Jordan Fernandes | 10-18-18 |

Emergency Response Telephone Number: 508-828-1005

Monitored at all times the Hazardous Materials is in transportation including storage to transportation. (1/12/04)

# Bill of Lading Short Form

Carrier: ~~J.P. Noonan~~ Global

Date: 10/18/2018

Bill of Lading #: [redacted] 101818-1

PO#: 18-0315

Order #:

Shipper/Consignor: BASF Corporation; 180 Mill St.; Cranston, RI 02905

Consignee: GlobalCycle; 700 Richmond St.; Taunton, MA 02718

Instructions:

| Item Code | Details | Quantity | Weight (Unit) |
|---|---|---|---|
| B-300-001 | Non-DOT/Non-RCRA Regulated Groundwater | | G |
| | Wastewater for Recycle | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | Total | | |

**Terms:** Prepaid [ ] Collect [ ] Other [ ]

**Carrier:** Pick Up Date: 10/18/18 Signature: X Michael J. Rapoza

*Carrier acknowledges receipt of packages and that they are properly described as above and are in good order except as noted.*

**Shipper:** Pick Up Date: 10/18/18 Signature:

*This section is to make sure that all materials are properly classified, described, packaged, marked and labeled and are in good condition to be transported and according to the applicable regulations of transporting department.*

**Received in Apparent Good Order**

Received By: _____ *(Signatures)*

Print Name Here: _____ Date: _____

GLOBAL REMEDIATION
STRAIGHT BILL OF LADING
ORIGINAL – NOT NEGOTIABLE

PAGE 1 OF 1
BOL NO.
DATE 10-18-18

| | | |
|---|---|---|
| TRANSPORTER<br>Global Remediation Services, Inc.<br>700 Richmond Street<br>East Taunton, MA 02718-1514 | US EPA ID Number<br>MAC300012903 | Phone<br>508-828-1005 |
| GENERATOR<br>BASF Corporation<br>180 Mill Street<br>Cranston, RI 02905 | US EPA ID Number<br>N/A | Phone<br>774-276-1480 |
| FACILITY<br>Globalcycle, Inc.<br>700 Richmond Street<br>East Taunton, MA 02718 | US EPA ID Number<br>N/A | Phone<br>508-828-1005 |

| HM | Description of Articles or Proper Shipping Name | Containers No. | Type | Total Quantity | Unit Wt / Vol |
|---|---|---|---|---|---|
| | Non-DOT / Non-RCRA Regulated Material (boat wash water)<br>Globalcycle Approval # C-300-001 Profile# | 001 | TT | 7800 | G |
| | PH-7.6 Vis-OK | | | | |
| | Plate #83949 MA- | | | | |

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

| GENERATOR | Signature | Print Name | Date |
|---|---|---|---|
| X Charles F. McCarthy IV | SES | Charles F. McCarthy IV | 10-18-18 |
| TRANSPORTER | | | |
| Michael D. Raposa | Michael Raposa | | 10-18-18 |
| FACILITY | | | |
| [signature] | Jordan Fernandes | | 10-18-18 |

Emergency Response Telephone Number 508-828-1005

Monitored at all times the Hazardous Materials is in transportation including storage to transportation. (172.604)

Bill of Lading Template

# Bill of Lading Short Form

Carrier: ~~J.P. Noonan~~ Global

Bill of Lading #: [redacted] 101818-2

Order#:

Date: 10/18/2018

PO#: 18-0315

Shipper/Consignor: BASF Corporation; 180 Mill St.; Cranston, RI 02905

Consignee: GlobalCycle; 700 Richmond St.; Taunton, MA 02718

Instructions:

| Item Code | Details | Quantity | Weight (Unit) |
|---|---|---|---|
| B-300-001 | Non-DOT/Non-RCRA Regulated Groundwater | | G |
| | Wastewater for Recycle | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | Total | | |

**Terms:** Prepaid ☐ Collect ☐ Other ☐

Shipper ~~Carrier~~: Pick Up Date: 10/18/18

ACT 10/18/18 PF

Signature: [signature] As Auth Agent for BASF

Carrier acknowledges receipt of packages and that they are properly described as above and are in good order except as noted.

Carrier ~~Shipper~~: Pick Up Date: _____

Signature: [signature]

This section is to make it sure that all materials are properly classified, described, packaged, marked and labeled and are in good condition to be transported and according to the applicable regulations of transporting department.

---

**Received in Apparent Good Order**

Received By: _____ (Signatures)

Print Name Here: _____ Date: _____

Global Cycle Inc.

700 Richmond Street
East Taunton, MA 02718

# Invoice

| Date | Invoice # |
|---|---|
| 11/12/2018 | 2878 |

| Bill To |
|---|
| Strategic Environmental<br>Attn: Accounts Payable<br>362 Putnam Hill Road<br>Sutton, MA 01590 |

| P.O. No. | Terms | Project |
|---|---|---|
| 18-0315 | Net 30 | |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| | WASTEWATER RECYCLING SERVICES | | |
| | site: BASF<br>180 Mill Street<br>Cranston, RI | | |
| | Thursday, November 1, 2018 | | |
| 8,100 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| | Friday, November 2, 2018 | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| | Monday, November 5, 2018 | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| | Tuesday, November 6, 2018 | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| | Friday, November 9, 2018 | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |

| | |
|---|---|
| | **Total** |

GLOBAL REMEDIATION
STRAIGHT BILL OF LADING
ORIGINAL - NOT NEGOTIABLE

PAGE 1 OF 1
BOL NO. 20181101-02
DATE 11-1-18

R11/Ut2

| | | |
|---|---|---|
| TRANSPORTER<br>Global Remediation Services, Inc<br>700 Richmond Street<br>East Taunton, MA 02718-1511 | US EPA ID Number<br>MAC300012901 | Phone<br>508-828-1005 |
| GENERATOR<br>BASF Corporation<br>180 Mill Street<br>Cranston, RI 02905 | US EPA ID Number<br>N/A | Phone<br>774-276-1460 |
| FACILITY<br>Globalcycle, Inc<br>700 Richmond Street<br>East Taunton, MA 02718 | US EPA ID Number<br>N/A | Phone<br>508-828-1005 |

| HM | Description of Articles or Proper Shipping Name | Containers No. | Containers Type | Containers Total Quantity | Containers Unit Wt / Vol |
|---|---|---|---|---|---|
| | Non-DOT / Non-RCRA Regulated Material (groundwater)<br>Globalcycle Approval #G-300-001 profile# | 001 | TT | 8100 | G |
| | PH-7.4 Vis-OK | | | | |
| | Plate # 83949 MA. | | | | |

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

| GENERATOR | Signature | Print Name | Date |
|---|---|---|---|
| X SES | | B Rose | 11-1-18 |
| TRANSPORTER<br>Michael J. Raposa | Michael Raposa | | 11-1-18 |
| FACILITY | Jordan Fernandes | | 11-1-18 |

Emergency Response Telephone Number: 508-828-1005

Monitored at all times the Hazardous Materials is in transportation including storage to transportation. (172.604)

# Bill of Lading Short Form

Carrier: ~~J.P. Noonan~~ Global Remediation
Date: 11-1-18
Bill of Lading #: 11012018-2
PO #: 18-0315
Order #:
Shipper/Consignor: BASF Corporation; 180 Mill St.; Cranston, RI 02905

Consignee: GlobalCycle; 700 Richmond St.; Taunton, MA 02718

Instructions:

| Item Code | Details | Quantity | Weight (Unit) |
|---|---|---|---|
| B-300-001 | Non-DOT/Non-RCRA Regulated Groundwater | 8100 | G |
| | Wastewater for Recycle | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | Total | | |

**Terms:** Prepaid [ ] Collect [ ] Other [ ]

**Carrier:** Pick Up Date: Thur 11-1-18 Signature: Michael J. Rapoza

Carrier acknowledges receipt of packages and that they are properly described as above and are in good order except as noted

**Shipper:** Pick Up Date: 11/1/18 Signature:

This section is to make it sure that all materials are properly classified, described, packaged, marked and labeled and are in good condition to be transported and according to the applicable regulations of transporting department

**Received in Apparent Good Order**

Received By: _____ *(Signatures)*
Print Name Here: _____ Date: _____

☒ CAPE COD CARTAGE ☐ RUTLAND

☐ DANIELSON ☐ SPRINGFIELD

☐ HOOKSETT ☐ WEST BRIDGEWATER

# J. P. NOONAN

**TRANSPORTATION, INC.**
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE: 11-1-18

LOAD NUMBER: 2886491

BILL OF LADING NUMBER:

BILL TO: Global Cycle

SHIPPED FROM: BASF, Cranston, RI 180 Mill St.

DELIVERED TO: Global Cycle - Taunton 700 Richmond St.

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| Wastewater | | 9,000 gal |
| PH-7.9 VIS OK plate #96 (MA) Profile #B-300-001 | | |

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT $

CHECK NUMBER

TRACTOR NO.: 629 | TRAILER NO.: JK1312 | DRIVER: David Fuchs | NUMBER

DELAY LOADING | TIME IN | TIME OUT

REASON FOR DELAY LOADING

DELAY UNLOADING | TIME IN | TIME OUT

REASON FOR DELAY UNLOADING

**RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY**

RECEIVER SIGNATURE _____

SIGNATURE FOR CERTIFICATION OF DELAY TIME

PTO PUMP TIME HRS. _____ MIN. _____

SHIPPER _____

**I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.**
**Customer Signature** _____

CONSIGNEE _____

**24 HOUR EMERGENCY PHONE - 800-922-8026**

# Bill of Lading Short Form

Carrier: J.P. Noonan
Date: 11/1/18
Bill of Lading #: 110/2018 -1
PO#: 18-0315
Order #:
Shipper/Consignor: BASF Corporation; 180 Mill St.; Cranston, RI 02905

Consignee: GlobalCycle; 700 Richmond St.; Taunton, MA 02718

Instructions:

| Item Code | Details | Quantity | Weight (Unit) |
|---|---|---|---|
| B-300-001 | Non-DOT/Non-RCRA Regulated Groundwater | | G |
| | Wastewater for Recycle | 9000 | 9000 Gallons |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | Total | | |

**Terms:** Prepaid [ ] Collect [ ] Other [ ]

**Carrier:** Pick Up Date: 11-1-18 Signature

Carrier acknowledges receipt of packages and that they are properly described as above and are in good order except as noted

**Shipper:** Pick Up Date: 11/1/18 Signature

This section is to make it sure that all materials are properly classified described packaged marked and labeled and are in good condition to be transported and according to the applicable regulations of transporting department

**Received in Apparent Good Order**

Received By: Kyle Kennedy (Signatures)
Print Name Here: Date: 11/1/18

☒ CAPE COD CARTAGE ☐ RUTLAND
☐ DANIELSON ☐ SPRINGFIELD
☐ HOOKSETT ☐ WEST BRIDGEWATER

# J. P. NOONAN
TRANSPORTATION, INC.
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

LOAD NUMBER: 2887116
DATE: 11-2-18
BILL OF LADING NUMBER:

BILL TO: Global cycle
DELIVERED TO:

SHIPPED FROM: BAST Cranston, RI 180 Mill St.
DELIVERED TO: Global cycle Taunton 700 Richmond St.

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| Wastewater | | 9,000 gal |
| PH 8.0 visok plate #96(ma) Profile #B-300-001 | | |

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT $

CHECK NUMBER

| TRACTOR NO. | TRAILER NO. | DRIVER | NUMBER |
|---|---|---|---|
| 629 | 51K1312 | David Fuchs | |

RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY

RECEIVER SIGNATURE _____

PTO PUMP TIME HRS. _____ MIN. _____

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature _____

| DELAY LOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY LOADING | | |
| DELAY UNLOADING | TIME IN | TIME OUT |
| REASON FOR DELAY UNLOADING | | |

SIGNATURE FOR CERTIFICATION OF DELAY TIME

SHIPPER _____

CONSIGNEE _____

24 HOUR EMERGENCY PHONE - 800-922-8026

# Bill of Lading Short Form

Carrier: J.P. Noonan
Bill of Lading #: 101018-1
Order #:
Date: 11/2
PO #: 18-0315
Shipper/Consignor: BASF Corporation; 180 Mill St.; Cranston, RI 02905
Consignee: GlobalCycle; 700 Richmond St.; Taunton, MA 02718
Instructions:

| Item Code | Details | Quantity | Weight (Unit) |
|---|---|---|---|
| B-300-001 | Non-DOT/Non-RCRA Regulated Groundwater | 9000 | G |
| | Wastewater for Recycle | | |
| | PH-8.0 Vis-OK | | |
| | Plate # (MA) 96 | | |
| | Profile # C-300-001 | | |
| | Total | | |

**Terms:** Prepaid [ ] Collect [ ] Other [ ]

**Carrier:** Pick Up Date: 11-2-18 Signature:

*Carrier acknowledges receipt of packages and that they are properly described as above and are in good order except as noted.*

**Shipper:** Pick Up Date: 11/2 Signature:

*This section is to make it sure that all materials are properly classified, described, packaged, marked and labeled and are in good condition to be transported and according to the applicable regulations of transporting department.*

---

**Received in Apparent Good Order**

Received By: (Signatures)
Print Name Here: Kyle Kennedy Date: 11/2/18

☒ CAPE COD CARTAGE ☐ RUTLAND
☐ DANIELSON ☐ SPRINGFIELD
☐ HOCKSETT ☐ WEST BRIDGEWATER

# J. P. NOONAN
TRANSPORTATION, INC.
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE: 11-5-18

LOAD NUMBER: 2887465

BILL OF LADING NUMBER:

BILL TO: Global Cycle

DELIVERED TO:

SHIPPED FROM:
BASF Cranston, RI
180 Mill st.

Global Cycle E. Taunton
700 Richmond, St.

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| | | |
| Wastewater | 9,000 gal | |

PH-7.2 Vis-OK Plate #96(MA) Profile# B-300-001

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT $

CHECK NUMBER

| TRACTOR NO. | TRAILER NO. | DRIVER | NUMBER |
|---|---|---|---|
| 629 | JKV1312 | David Fuchs | |

RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY

RECEIVER SIGNATURE [signature]

PTO PUMP TIME HRS. _____ MIN. _____

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature _____

| DELAY LOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY LOADING | | |

| DELAY UNLOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY UNLOADING | | |

SIGNATURE FOR CERTIFICATION OF DELAY TIME

SHIPPER [signature]

CONSIGNEE _____

24 HOUR EMERGENCY PHONE - 800-922-8026

# Bill of Lading Short Form

Carrier: J.P. Noonan

Bill of Lading #: ~~101018-2~~ 11/05/2018

Order #:

Date:

PO #: 18-0315

Shipper/Consignor: BASF Corporation; 180 Mill St.; Cranston, RI 02905

Consignee: GlobalCycle; 700 Richmond St.; Taunton, MA 02718

Instructions:

| Item Code | Details | Quantity | Weight (Unit) |
|---|---|---|---|
| B-300-001 | Non-DOT/Non-RCRA Regulated Groundwater | 9000 | G |
| | Wastewater for Recycle | | |
| | PH - 7.2 Vis-OK | | |
| | Plate # 96 (MA) | | |
| | | | |
| | | | |
| | Total | | |

**Terms:** Prepaid ☐ Collect ☐ Other ☐

**Carrier:** Pick Up Date: 11-5-18 Signature:

Carrier acknowledges receipt of packages and that they are properly described as above and are in good order except as noted.

**Shipper:** Pick Up Date: 11/5/12 Signature:

This section is to make it sure that all materials are properly classified, described, packaged, marked and labeled and are in good condition to be transported and according to the applicable regulations of transporting department.

**Received in Apparent Good Order**

Received By: (Signatures)

Print Name Here: Kyle Kennedy Date: 11/5/18

☒ CAPE COD CARTAGE ☐ RUTLAND
☐ DANIELSON ☐ SPRINGFIELD
☐ HOOKSETT ☐ WEST BRIDGEWATER

# J. P. NOONAN
TRANSPORTATION, INC.
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE: 11-5-18

LOAD NUMBER: 2887467

BILL OF LADING NUMBER:

BILL TO: Global Cycle

DELIVERED TO:

SHIPPED FROM:
BASF, Cranston, RI
180 Mill St.

Global Cycle E Taunton
700 Richmond St.

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| | | |
| Wastewater | 9,000 gal | |

PH 8.0 VIS-OK plate#96 (NA) Profile#B-300-001

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT $

CHECK NUMBER

| TRACTOR NO. | TRAILER NO. | DRIVER | NUMBER |
|---|---|---|---|
| 629 | TK1312 | David Fuchs | |

RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY

RECEIVER SIGNATURE [signature]

PTO PUMP TIME HRS. _____ MIN. _____

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature _____

| DELAY LOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY LOADING | | |

| DELAY UNLOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY UNLOADING | | |

SIGNATURE FOR CERTIFICATION OF DELAY TIME

SHIPPER [signature]

CONSIGNEE _____

24 HOUR EMERGENCY PHONE - 800-922-8026

Bill of Lading Template

# Bill of Lading Short Form

Date with load #

Carrier: J.P. Noonan
Bill of Lading #: 110520 18 - 1
Order #:
Shipper/Consignor: BASF Corporation; 180 Mill St.; Cranston, RI 02905
Consignee: GlobalCycle; 700 Richmond St.; Taunton, MA 02718
Instructions:

Date: 11/5/18
PO #: 18-0315

| Item Code | Details | Quantity | Weight (Unit) |
|---|---|---|---|
| B-300-001 | Non-DOT/Non-RCRA Regulated Groundwater | 9,000 | G |
| | Wastewater for Recycle | | |
| | | | |
| | | | |
| | PH- 8.0 Vis=OK | | |
| | | | |
| | Plate #96 (M4) Profile #C-300-001 | | |
| | Total | | |

**Terms:** Prepaid ☐ Collect ☐ Other ☐

Transporter

**Carrier:** Pick Up Date: 11-5-18 Signature

Carrier acknowledges receipt of packages and that they are properly described as above and are in good order except as noted

SES →

**Shipper:** Pick Up Date: 11/5/18 Signature

This section is to make it sure that all materials are properly classified, described, packaged, marked and labeled and are in good condition to be transported and according to the applicable regulations of transporting department

**Received in Apparent Good Order**

Received By: (Signature)
Print Name Here: Kyle Kennedy Date: 11/5/18

☒ CAPE COD CARTAGE ☐ RUTLAND
☐ DANIELSON ☐ SPRINGFIELD
☐ HOOKSETT ☐ WEST BRIDGEWATER

# J. P. NOONAN
TRANSPORTATION, INC.
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE: 11-6-18

LOAD NUMBER: 2888772

BILL OF LADING NUMBER:

BILL TO: Global Cycle

SHIPPED FROM: BASF Cranston, RI
180 Mill St.

DELIVERED TO: Global Cycle Taunton
700 Richmond St.

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| Wastewater | | 9,000 gal |
| Plate# 4(MA) PH- 7.7 Vis- OK | | |
| Profile# B-300-001 | | |

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT $

CHECK NUMBER

| TRACTOR NO. | TRAILER NO. | DRIVER | NUMBER |
|---|---|---|---|
| 629 | JKB12 | David Fuchs | |

DELAY LOADING | TIME IN | TIME OUT

REASON FOR DELAY LOADING

DELAY UNLOADING | TIME IN | TIME OUT

REASON FOR DELAY UNLOADING

**RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY**

RECEIVER SIGNATURE

PTO PUMP TIME HRS. _____ MIN. _____

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature

SIGNATURE FOR CERTIFICATION OF DELAY TIME

SHIPPER X

CONSIGNEE

**24 HOUR EMERGENCY PHONE - 800-922-8026**

☒ CAPE COD CARTAGE ☐ RUTLAND
☐ DANIELSON ☐ SPRINGFIELD
☐ HOOKSETT ☐ WEST BRIDGEWATER

# J. P. NOONAN
TRANSPORTATION, INC.
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE: 11-9-18

LOAD NUMBER: 2890116

BILL OF LADING NUMBER:

BILL TO: Global Cycle

DELIVERED TO:

SHIPPED FROM:
BASI Cranston, RI
180 Mill St

Global Cycle I Taunton
700 Richmond St

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| | | |
| Wastewater | | 9,000 gal |

PH 7.1 vis ok plate #96 (MA) Profile #B-300001

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT $

CHECK NUMBER

TRACTOR NO.: 629 | TRAILER NO.: TK-136 | DRIVER: David Fuchs | NUMBER

RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY

RECEIVER SIGNATURE [signature]

PTO PUMP TIME HRS. _____ MIN. _____

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature _____

| DELAY LOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY LOADING | | |

| DELAY UNLOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY UNLOADING | | |

SIGNATURE FOR CERTIFICATION OF DELAY TIME

SHIPPER [signature]

CONSIGNEE _____

24 HOUR EMERGENCY PHONE - 800-922-8026

Global Cycle Inc.

700 Richmond Street
East Taunton, MA 02718

# Invoice

| Date | Invoice # |
|---|---|
| 11/21/2018 | 2898 |

| Bill To |
|---|
| Strategic Environmental<br>Attn: Accounts Payable<br>362 Putnam Hill Road<br>Sutton, MA 01590 |

| P.O. No. | Terms | Project |
|---|---|---|
| 18-0315 | Net 30 | |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| | WASTEWATER RECYCLING SERVICES | | |
| | site: BASF<br>180 Mill Street<br>Cranston, RI | | |
| | Monday, November 12, 2018 | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| | Wednesday, November 14, 2018 | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| | Friday, November 16, 2018 | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| | | **Total** | |

☒ CAPE COD CARTAGE ☐ RUTLAND
☐ DANIELSON ☐ SPRINGFIELD
☐ HOOKSETT ☐ WEST BRIDGEWATER

# J. P. NOONAN
TRANSPORTATION, INC.
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE: 11-12-18

LOAD NUMBER: 2890508

BILL OF LADING NUMBER:

BILL TO: Global Cycle

SHIPPED FROM: BAST Graniton, RI 180 Mill St.

DELIVERED TO: Global Cycle E Taunton 700 Richmond St

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| Wastewater | 9000 gal | |

PH 7.9 vis-ok plate # 96 (MA) Trafile # B 300-001

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT $

CHECK NUMBER

| TRACTOR NO. | TRAILER NO. | DRIVER | NUMBER |
|---|---|---|---|
| 629 | TK11312 | David Hughs | |

| DELAY LOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY LOADING | | |

| DELAY UNLOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY UNLOADING | | |

RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY

RECEIVER SIGNATURE [signature]

PTO PUMP TIME HRS. _____ MIN. _____

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature _____

SIGNATURE FOR CERTIFICATION OF DELAY TIME

SHIPPER [signature]

CONSIGNEE _____

24 HOUR EMERGENCY PHONE - 800-922-8026

☒ CAPE COD CARTAGE ☐ RUTLAND
☐ DANIELSON ☐ SPRINGFIELD
☐ HOOKSETT ☐ WEST BRIDGEWATER

# J. P. NOONAN
**TRANSPORTATION, INC.**
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE: 11-12-18

LOAD NUMBER: 2890118
BILL OF LADING NUMBER:

BILL TO: Global Cycle

SHIPPED FROM: BAST Cranston RI 180 Mill St.

DELIVERED TO: Global Cycle E Taunton 700 Richmond St.

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| Wastewater | | 9,000 gal |

DH71 VIS-OK plate #916(MA) Profile # B-300-001

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT $

CHECK NUMBER

| TRACTOR NO. | TRAILER NO. | DRIVER | NUMBER |
|---|---|---|---|
| 629 | TK-1312 | David Fichs | |

| DELAY LOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY LOADING | | |

| DELAY UNLOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY UNLOADING | | |

RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY

RECEIVER SIGNATURE X

SIGNATURE FOR CERTIFICATION OF DELAY TIME

PTO PUMP TIME HRS. _____ MIN. _____

SHIPPER X

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature _____

CONSIGNEE _____

24 HOUR EMERGENCY PHONE - 800-922-8026

[X] CAPE COD CARTAGE [ ] RUTLAND
[ ] DANIELSON [ ] SPRINGFIELD
[ ] HOOKSETT [ ] WEST BRIDGEWATER

# J. P. NOONAN
TRANSPORTATION, INC.
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE: 11-14-18

LOAD NUMBER: 2891949

BILL OF LADING NUMBER:

BILL TO: Global Cycle

DELIVERED TO:

SHIPPED FROM:
BASF Cranston, RI
180 Mill St.

Global Cycle E. Taunton
700 Richmond St.

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| | | |
| Wastewater | 9,000 gal | |

PH 8.8 VIS OK plate #96 (MA) Profile #B-300-001

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT $

CHECK NUMBER

| TRACTOR NO. | TRAILER NO. | DRIVER | NUMBER |
|---|---|---|---|
| 629 | TK1312 | David Fuchs | |

RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY

RECEIVER SIGNATURE [signature]

PTO PUMP TIME HRS. _____ MIN. _____

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature _____

| DELAY LOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY LOADING | | |

| DELAY UNLOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY UNLOADING | | |

SIGNATURE FOR CERTIFICATION OF DELAY TIME

SHIPPER [signature]

CONSIGNEE _____

24 HOUR EMERGENCY PHONE - 800-922-8026

[X] CAPE COD CARTAGE [ ] RUTLAND
[ ] DANIELSON [ ] SPRINGFIELD
[ ] HOOKSETT [ ] WEST BRIDGEWATER

# J. P. NOONAN
TRANSPORTATION, INC.
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE 11-14-18

LOAD NUMBER 2891957

BILL OF LADING NUMBER

BILL TO Global Cycle

DELIVERED TO

SHIPPED FROM
BASF Cranston, RI
180 Mill St.

Global Cycle E Taunton
700 Richmond St.

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| | | |
| Wastewater | 9,000 gal | |

D11-82 vis-ok plate # 96 (MA) Profile # B-300-001

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT $

CHECK NUMBER

| TRACTOR NO. | TRAILER NO. | DRIVER | NUMBER |
|---|---|---|---|
| 629 | TKV1312 | David Fuchs | |

| DELAY LOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY LOADING | | |

| DELAY UNLOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY UNLOADING | | |

RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY

RECEIVER SIGNATURE [signature]

PTO PUMP TIME HRS. _____ MIN. _____

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature _____

SIGNATURE FOR CERTIFICATION OF DELAY TIME

SHIPPER [signature]

CONSIGNEE _____

24 HOUR EMERGENCY PHONE - 800-922-8026

[X] CAPE COD CARTAGE [ ] RUTLAND
[ ] DANIELSON [ ] SPRINGFIELD
[ ] HOOKSETT [ ] WEST BRIDGEWATER

# J. P. NOONAN
TRANSPORTATION, INC.
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE: 11-16-18

LOAD NUMBER: 2892898

BILL OF LADING NUMBER:

BILL TO: Global Cycle

DELIVERED TO:

SHIPPED FROM: BASF Cranston, RI 180 Mill St.

Global Cycle E Taunton 700 Richmond St.

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| | | |
| Wastewater | 9,000 gal | |

PH 8.1 VIS-OK plate #96 (MA) Profile # B-300-001

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT $

CHECK NUMBER

| TRACTOR NO. | TRAILER NO. | DRIVER | NUMBER |
|---|---|---|---|
| 629 | STK 1312 | David Fuchs | |

RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY

RECEIVER SIGNATURE X [signature]

PTO PUMP TIME HRS. _____ MIN. _____

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature _____

| DELAY LOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY LOADING | | |

| DELAY UNLOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY UNLOADING | | |

SIGNATURE FOR CERTIFICATION OF DELAY TIME

SHIPPER X [signature] 15

CONSIGNEE _____

24 HOUR EMERGENCY PHONE - 800-922-8026

Global Cycle Inc.

700 Richmond Street
East Taunton, MA 02718

# Invoice

| Date | Invoice # |
|---|---|
| 11/30/2018 | 2921 |

| Bill To |
|---|
| Strategic Environmental<br>Attn: Accounts Payable<br>362 Putnam Hill Road<br>Sutton, MA 01590 |

| P.O. No. | Terms | Project |
|---|---|---|
| 18-0315 | Net 30 | |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| | WASTEWATER RECYCLING SERVICES | | |
| | site: BASF<br>180 Mill Street<br>Cranston, RI | | |
| | Wednesday, November 21, 2018 | | |
| 9,000 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |

| | |
|---|---|
| | **Total** |

[X] CAPE COD CARTAGE [ ] RUTLAND
[ ] DANIELSON [ ] SPRINGFIELD
[ ] HOOKSETT [ ] WEST BRIDGEWATER

# J. P. NOONAN
TRANSPORTATION, INC.
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE: 11-21-18

LOAD NUMBER: 2895057

BILL OF LADING NUMBER:

BILL TO: Global Cycle

DELIVERED TO:

SHIPPED FROM:
BAST Cranston, RI
180 Mill St.

Global Cycle E. Taunton
700 Richmond St.

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| | | |
| Wastewater | 9,000 gal | |

PH 8.6 vis-ok plate #96 (MA) Profile HB-300-001

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT: $

CHECK NUMBER:

TRACTOR NO.: 629 TRAILER NO.: JKV 1312 DRIVER: David Fuchs NUMBER:

RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY

RECEIVER SIGNATURE: [signature]

PTO PUMP TIME HRS. _____ MIN. _____

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature _____

| DELAY LOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY LOADING | | |

| DELAY UNLOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY UNLOADING | | |

SIGNATURE FOR CERTIFICATION OF DELAY TIME

SHIPPER: [signature]

CONSIGNEE _____

24 HOUR EMERGENCY PHONE - 800-922-8026

Global Cycle Inc.

700 Richmond Street
East Taunton, MA 02718

# Invoice

| Date | Invoice # |
|---|---|
| 12/26/2018 | 3000 |

| Bill To |
|---|
| Strategic Environmental<br>Attn: Accounts Payable<br>362 Putnam Hill Road<br>Sutton, MA 01590 |

| P.O. No. | Terms | Project |
|---|---|---|
| 18-0315 | Net 30 | |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| | WASTEWATER RECYCLING SERVICES | | |
| | site: BASF<br>180 Mill Street<br>Cranston, RI | | |
| | Wednesday, December 19, 2018 | | |
| 4,500 | Recycling non-hazardous wastewater @ Globalcycle | | |
| 1 | Transportation charge | | |
| | | Total | |

☒ CAPE COD CARTAGE ☐ RUTLAND
☐ DANIELSON ☐ SPRINGFIELD
☐ HOOKSETT ☐ WEST BRIDGEWATER

# J. P. NOONAN
TRANSPORTATION, INC.
415 WEST STREET P.O. BOX400
WEST BRIDGEWATER, MA 02379

DATE 12-19-18

LOAD NUMBER 2907841

BILL OF LADING NUMBER

BILL TO Global Cycle

DELIVERED TO

SHIPPED FROM
BASF Cranston, RI
180 Mill St.

Global Cycle E Taunton
700 Richmond, St.

| DESCRIPTION | RATE | TOTAL |
|---|---|---|
| Wastewater | 4,500 gal | |

PH 8.4 vis-ok plate #96(MA) Profile # B-300-001

FOR FLATBED AND LOW BOY MOVES - ENTER OVERALL HEIGHT _____ FT. _____ IN.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

RECEIVED PAYMENT $

CHECK NUMBER

| TRACTOR NO. | TRAILER NO. | DRIVER | NUMBER |
|---|---|---|---|
| 1029 | STKV1312 | David Fuchs | |

RECEIVER HAS INSPECTED THE UNLOADING AREA AFTER DELIVERY AND FOUND IT SATISFACTORY

RECEIVER SIGNATURE [signature]

PTO PUMP TIME HRS. _____ MIN. _____

I have verified that the connection has been made to the correct receiving tank and it has sufficient capacity.
Customer Signature _____

| DELAY LOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY LOADING | | |

| DELAY UNLOADING | TIME IN | TIME OUT |
|---|---|---|
| REASON FOR DELAY UNLOADING | | |

SIGNATURE FOR CERTIFICATION OF DELAY TIME

SHIPPER [signature]

CONSIGNEE _____

24 HOUR EMERGENCY PHONE - 800-922-8026

**APPENDIX H**

**Data Validation Reports (on CD)**

DRAFT

AEI Consultants

ESS Laboratory – Laboratory Work Order Number **1808388**; Report Issued **October 5, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-864-081518 1 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-01 | ☒ PCB (8082A) |
| B-865-081518 1 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-02 | ☒ PCB (8082A) |
| B-866-081518 1 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-03 | ☒ PCB (8082A) |
| B-867-081518 1 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-04 | ☒ PCB (8082A) |
| B-868-081518 1 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-05 | ☒ PCB (8082A) |
| B-869-081518 1 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-06 | ☒ PCB (8082A) |
| B-870-081518 1 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-07 | ☒ PCB (8082A) |
| B-871-081518 1 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-08 | ☒ PCB (8082A) |
| B-873-081518 1 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-09 | ☒ PCB (8082A) |
| B-874-081518 1 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-10 | ☒ PCB (8082A) |
| B-875-081518 1 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-11 | ☒ PCB (8082A) |
| B-877-081518 1 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-12 | ☒ PCB (8082A) |
| B-878-081518 1 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-13 | ☒ PCB (8082A) |
| B-879-081518 1 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-14 | ☒ PCB (8082A) |
| B-615-081518 3 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-15 | ☒ PCB (8082A) |
| B-615-081518 3 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1808388-15 | ☒ PCB (8082A) |
| B-615-081518-1 3 ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-16 | ☒ PCB (8082A) |
| SW-408-081518 0-3ft | 8/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808388-17 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries – Surrogate recoveries for samples 04, 07, 08, 11, and 13 primary runs were diluted below MRL (no recoveries could be calculated for samples). No qualification indicated. |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required for any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 02, 03, 05, 06, 10, 12, and 14, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 04, 07, 08, 11, and 13, all results reported from diluted runs (all at 20x dilution), with RLs raised. RLs for all ND results below PALs (maximum of 1.1 mg/kg for PCBs in all 20x diluted samples; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808388

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808439**; Report Issued **October 5, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-635-081618 3ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808439-01 | ☒ PCB (8082A) |
| SW-433-081618 0-3ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808439-02 | ☒ PCB (8082A) |
| B-765-081618 3ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808439-03 | ☒ PCB (8082A) |
| SW-520-081618 0-3ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808439-04 | ☒ PCB (8082A) |
| SW-521-081618 0-3ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808439-05 | ☒ PCB (8082A) |
| SW-522-081618 0-3ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808439-06 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - **Samples 02 & 03 DCB surrogate above QC limit for first column only. No impact on sample 02; results for Aroclor 1242 and 1254 for sample 03 considered estimates (J qualified).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – **MS/MSD not specifically requested, but performed on sample 06. MS and MSD recoveries for Aroclor 1016 above QC limit. Detected concentrations of Aroclor 1242 and Aroclor 1254 considered estimates (J qualified).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 02, and 04, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. RLs for all ND results below Project Action Levels (PAL). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808439

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-443-081618 0-3ft | PCBs | Aroclor 1242 | 0.1 | mg/kg | **0.1 J** | SA |
| | | Aroclor 1254 | 0.6 | mg/kg | **0.6 J** | SA |
| SW-522-081618 0-3ft | PCBs | Aroclor 1242 | 0.2 | mg/kg | **0.2 J** | AM |
| | | Aroclor 1254 | 1.0 | mg/kg | **1.0 J** | AM |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808495**; Report Issued **October 5, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-880-081718-1ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808495-01 | ☒ PCB (8082A) |
| B-885-081718-1ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808495-02 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Dual column RPD > 40% for sample 02 Aroclor 1252; result considered an estimate (J qualified)** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on either sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For sample 02, only reporting limit raised was for a detected Aroclor. No impact on data sensitivity. RLs for all ND results below Project Action Levels (PAL). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808495

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-885-081718-1ft | PCBs | Aroclor 1242 | 0.2 | mg/kg | **0.2 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808508**; Report Issued **October 24, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| W-40 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-01 | ☒ PCB (8082A) |
| W-41 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1808510-02 | ☒ PCB (8082A) |
| W-42 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-03 | ☒ PCB (8082A) |
| W-43 0.1-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-04 | ☒ PCB (8082A) |
| W-44 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-05 | ☒ PCB (8082A) |
| W-46 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-06 | ☒ PCB (8082A) |
| W-1 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-07 | ☒ PCB (8082A) |
| W-2 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-08 | ☒ PCB (8082A) |
| W-3 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-09 | ☒ PCB (8082A) |
| W-4 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-10 | ☒ PCB (8082A) |
| W-5 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-11 | ☒ PCB (8082A) |
| DUP-1-2018-08-16 | 8/16/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-12 | ☒ PCB (8082A) |
| W-6 0.5-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-13 | ☒ PCB (8082A) |
| W-7 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-14 | ☒ PCB (8082A) |
| W-8 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-15 | ☒ PCB (8082A) |
| W-9 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-16 | ☒ PCB (8082A) |
| W-10 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-17 | ☒ PCB (8082A) |
| W-11 0.25-2ft | 8/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-18 | ☒ PCB (8082A) |
| W-12 0.25-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1808510-19 | ☒ PCB (8082A) |
| W-13 0.25-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries – **TMX surrogate (column 1) above QC limit in sample 16. Aroclor 1242, 1254, and 1260 results for sample 16 considered an estimate (J qualified).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - MS/MSD requested and performed on sample 2. Recoveries and RPDs in QC limits. MS/MSD requested and performed on sample 19 (separate analytical batch). Recoveries for Aroclor 1016 (both columns) in MS and MSD above QC limit. As Aroclor 1016 was ND in sample, and recoveries for Aroclor 1260 were within QC limits, no qualification to data was indicated. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) – Primary sample identified as W-5 0.25-2ft (1808508-11). Both samples all ND. |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **RPD exceeds 40% for sample 18, Aroclor 1242 result. Laboratory chose to use lower concentration result (from confirmation column) due to observed matrix interference. Sample 18 Aroclor 1242 result considered an estimate (J qualified).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For sample 18, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. RLs for all ND results below Project Action Levels (PAL). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808508

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| W-9 0.25-2ft | PCBs | Aroclor 1242 | 0.8 | mg/kg | **0.8 J** | SA |
| | | Aroclor 1254 | 0.8 | mg/kg | **0.8 J** | SA |
| | | Aroclor 1260 | 0.2 | mg/kg | **0.2 J** | SA |
| W-11 0.25-2ft | PCBs | Aroclor 1242 | 1.0 | mg/kg | **1.0 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808509**; Report Issued **October 23, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| W-33a 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-01 | ☒ PCB (8082A) |
| W-33b 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-02 | ☒ PCB (8082A) |
| W-26 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-03 | ☒ PCB (8082A) |
| W-25 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-04 | ☒ PCB (8082A) |
| W-23 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-05 | ☒ PCB (8082A) |
| W-22 0-1.5ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-06 | ☒ PCB (8082A) |
| W-21 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-07 | ☒ PCB (8082A) |
| W-20 0.5-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-08 | ☒ PCB (8082A) |
| W-19 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-09 | ☒ PCB (8082A) |
| W-18 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-10 | ☒ PCB (8082A) |
| W-16 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-11 | ☒ PCB (8082A) |
| W-15 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-12 | ☒ PCB (8082A) |
| W-17 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-13 | ☒ PCB (8082A) |
| W-14 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-14 | ☒ PCB (8082A) |
| W-45 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-15 | ☒ PCB (8082A) |
| W-29 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808509-16 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness – Sample missed on COC, added by lab at the direction of client. |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries – Surrogate recoveries for samples 02, 13, and 14 diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) – Primary sample identified as W-33b 0-2ft (1808509-02) for DUP-2, and W-21 0-2ft (1808509-07) for DUP-3. Both field duplicates reported in package 1808511. However, they were extracted 69 days after collection, when they were taken off hold. While the extraction was within the method hold time (unspecified for extraction), extractions were performed well beyond the QAPP 7-day hold time. In addition, the results, particularly in comparison to the other duplicate results, indicate a very poor reproducibility that far beyond the QAPP hold time. These field duplicates are considered to be unusable, and therefore the primary samples were not qualified. |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 05, 07, and 11, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 02, 13, and 14, all results were reported from diluted runs (dilution factors of 50, 100, and 20, respectively), with RLs raised. RLs for all ND results below Project Action Levels (PALs) (maximum of 6.3 mg/kg for sample 13; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808509

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808510**; Report Issued **October 7, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| W-30 0.25-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-01 | ☒ PCB (8082A) |
| DUP-1-2018-08-17 | 8/17/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-02 | ☒ PCB (8082A) |
| W-31 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-03 | ☒ PCB (8082A) |
| W-32 0.5-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-04 | ☒ PCB (8082A) |
| W-39 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-05 | ☒ PCB (8082A) |
| W-38 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-06 | ☒ PCB (8082A) |
| W-37 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-07 | ☒ PCB (8082A) |
| W-36 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-08 | ☒ PCB (8082A) |
| W-35 0-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808510-09 | ☒ PCB (8082A) |
| W-34 1-2ft | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1808510-10 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries – **TMX surrogate (column 1) above QC limit in sample 07. Aroclor 1254 result for sample 07 considered an estimate (J qualified)** |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - MS/MSD not specifically requested, but performed on sample 10. Recoveries and RPDs in QC limits. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) – Primary sample identified as W-30 0.25-2ft (1808510-01). |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 05 and 08, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. RLs for all ND results below Project Action Levels (PAL). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808510

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| W-37 0-2ft | PCBs | Aroclor 1254 | 0.2 | mg/kg | **0.2 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808523**; Report Issued **October 23, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-845-082018 3ft | 8/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808523-01 | ☒ PCB (8082A) |
| B-850-082018 3ft | 8/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808523-02 | ☒ PCB (8082A) |
| B-855-082018 3ft | 8/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808523-03 | ☒ PCB (8082A) |
| B-860-082018 3ft | 8/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808523-04 | ☒ PCB (8082A) |
| SW-603-082018 0-3ft | 8/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808523-05 | ☒ PCB (8082A) |
| SW-608-082018 0-3ft | 8/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808523-06 | ☒ PCB (8082A) |
| SW-613-082018 0-3ft | 8/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808523-07 | ☒ PCB (8082A) |
| SW-618-082018 0-3ft | 8/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808523-08 | ☒ PCB (8082A) |
| B-825-082018 3ft | 8/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808523-09 | ☒ PCB (8082A) |
| SW-423-082018 0-3ft | 8/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808523-10 | ☒ PCB (8082A) |
| SW-428-082018 0-3ft | 8/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808523-11 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries – Surrogate recoveries for samples 02 and 07 primary runs and samples 08 and 11 diluted runs were diluted below MRL. (No qualification indicated.) **DCB surrogate above QC limit (Primary column) for sample 03 in undiluted and diluted sample run. Detected results for Sample 03 (Aroclors 1242, 1254, and 1260) are considered estimates (J qualified). DCB surrogate above QC limit (Primary column) for sample 09 in 5x dilution sample run, from which Aroclor 1254 result was reported. Aroclor 1254 result for Sample 09 is considered an estimate (J qualified).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Dual column RPD > 40% for sample 01 Aroclor 1242 and for sample 10 Aroclor 1260; results considered estimates (J qualified)** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – Reporting limits for all Aroclors raised (including ND results) for samples 02 and 07 due to dilution (raised to 20x standard RL). RLs remain below Project Action Levels (PAL). No QC issue. Samples 03, 04, and 08-11 only reporting limits raised were for detected Aroclors. No impact on data sensitivity. RLs for all ND results below PALs. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808523

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-845-082018 3ft | PCBs | Aroclor 1242 | 0.1 | mg/kg | **0.1 J** | DC |
| B-855-082018 3ft | PCBs | Aroclor 1242 | 1.7 | mg/kg | **1.7 J** | SA |
| | | Aroclor 1254 | 8.2 | mg/kg | **8.2 J** | SA |
| | | Aroclor 1260 | 1.6 | mg/kg | **1.6 J** | SA |
| B-625-082018 3ft | PCBs | Aroclor 1254 | 2.1 | mg/kg | **2.1 J** | SA |
| SW-423-082018 3ft | PCBs | Aroclor 1260 | 0.3 | mg/kg | **0.3 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808557**; Report Issued **October 5, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-455-082118 2ft | 8/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808557-01 | ☒ PCB (8082A) |
| B-465-082118 2ft | 8/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808557-02 | ☒ PCB (8082A) |
| B-470-082118 2ft | 8/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808557-03 | ☒ PCB (8082A) |
| SW-643-082118 0-2ft | 8/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808557-04 | ☒ PCB (8082A) |
| SW-663-082118 0-2ft | 8/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808557-05 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries – Surrogate recoveries for samples 04 & 05 diluted below MRL. (No qualification indicated.) |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Dual column RPD > 40% for sample 01 Aroclor 1260; result considered an estimate (J qualified)** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – Reporting limits for all Aroclors raised (including ND results) for samples 04 and 05 due to dilution (raised to 20x standard RL). RLs remain below Project Action Levels (PAL). No QC issue. Samples 01-03, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. RLs for all ND results below PALs. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808557

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-455-082118-2ft | PCBs | Aroclor 1260 | 1.6 | mg/kg | **1.6 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808591**; Report Issued **October 24, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-540-082218 7FT | 8/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808591-01 | ☒ PCB (8082A) |
| B-525-082218 7FT | 8/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808591-02 | ☒ PCB (8082A) |
| B-545-082218 7FT | 8/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808591-03 | ☒ PCB (8082A) |
| B-530-082218 7FT | 8/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808591-04 | ☒ PCB (8082A) |
| B-550-082218 7FT | 8/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808591-05 | ☒ PCB (8082A) |
| B-535-082218 7FT | 8/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808591-06 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - **DCB surrogate above QC limit (Primary column) for sample 05 in undiluted run. Detected results for Sample 05 Aroclors 1242 and 1260 are considered estimates (J qualified).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Dual column RPD > 40% for sample 01 Aroclor 1242; result considered an estimate (J qualified)** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 02-06, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. RLs for all ND results below PALs. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808591

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-540-082218 7FT | PCBs | Aroclor 1242 | 0.2 | mg/kg | **0.2 J** | DC |
| B-550-082218 7FT | PCBs | Aroclor 1242 | 0.1 | mg/kg | **0.1 J** | SA |
| | | Aroclor 1260 | 0.4 | mg/kg | **0.4 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808654**; Report Issued **October 23, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-748-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-01 | ☒ PCB (8082A) |
| B-749-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-02 | ☒ PCB (8082A) |
| B-750-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-03 | ☒ PCB (8082A) |
| B-751-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-04 | ☒ PCB (8082A) |
| B-752-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-05 | ☒ PCB (8082A) |
| B-753-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-06 | ☒ PCB (8082A) |
| B-754-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-07 | ☒ PCB (8082A) |
| B-755-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1808654-08 | ☒ PCB (8082A) |
| B-755-082318-1 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-09 | ☒ PCB (8082A) |
| B-756-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-10 | ☒ PCB (8082A) |
| B-757-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-11 | ☒ PCB (8082A) |
| B-758-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-12 | ☒ PCB (8082A) |
| B-759-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-13 | ☒ PCB (8082A) |
| B-760-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-14 | ☒ PCB (8082A) |
| B-761-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-15 | ☒ PCB (8082A) |
| B-762-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-16 | ☒ PCB (8082A) |
| B-763-082318 4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-17 | ☒ PCB (8082A) |
| SW-497-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-18 | ☒ PCB (8082A) |
| SW-498-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808654-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – **Primary/Field Duplicate are samples 08 and 09; Aroclor 1242 = 0.1 / ND (<0.06). Results qualified as estimates (J/UJ) based on professional judgment.** |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-05, 10-11, 14, 18, and 19, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. RLs for all ND results below PALs. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808654

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-755-082318 4FT | PCBs | Aroclor 1242 | 0.1 | mg/kg | **0.1 J** | DU |
| B-755-082318-1 4FT | PCBs | Aroclor 1242 | 0.06 U | mg/kg | 0.06 UJ | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808655**; Report Issued **October 23, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-499-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808655-01 | ☒ PCB (8082A) |
| SW-500-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808655-02 | ☒ PCB (8082A) |
| SW-501-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808655-03 | ☒ PCB (8082A) |
| SW-502-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808655-04 | ☒ PCB (8082A) |
| SW-503-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808655-05 | ☒ PCB (8082A) |
| SW-504-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808655-06 | ☒ PCB (8082A) |
| SW-505-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808655-07 | ☒ PCB (8082A) |
| SW-506-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808655-08 | ☒ PCB (8082A) |
| SW-507-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808655-09 | ☒ PCB (8082A) |
| SW-508-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1808655-10 | ☒ PCB (8082A) |
| SW-508-082318-1 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1808655-11 | ☒ PCB (8082A) |
| SW-671-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808655-12 | ☒ PCB (8082A) |
| SW-672-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808655-13 | ☒ PCB (8082A) |
| SW-673-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808655-14 | ☒ PCB (8082A) |
| SW-674-082318 0-4FT | 8/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808655-15 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – **Primary/Field Duplicate are samples 10 and 11; Aroclor 1242 RPD= above maximum; results qualified as estimates (J).** |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For all samples (01-15), only reporting limits raised were for detected Aroclors. No impact on data sensitivity. RLs for all ND results below PALs. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808655

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-508-082318 0-4FT | PCBs | Aroclor 1242 | 0.4 | mg/kg | **0.4 J** | DU |
| SW-508-082318-1 0-4FT | PCBs | Aroclor 1242 | 0.2 | mg/kg | **0.2 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808723**; Report Issued **October 23, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-100-082718 2ft | 8/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1808723-01 | ☒ PCB (8082A) |
| B-100-082718-1 2ft | 8/27/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1808723-02 | ☒ PCB (8082A) |
| B-105-082718 2ft | 8/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808723-03 | ☒ PCB (8082A) |
| B-110-082718 2ft | 8/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808723-04 | ☒ PCB (8082A) |
| SW-100-082718 0-2ft | 8/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808723-05 | ☒ PCB (8082A) |
| SW-105-082718 0-2ft | 8/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808723-06 | ☒ PCB (8082A) |
| W-14 0-1 | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808723-07 | ☒ PCB (8082A) |
| W-14 1-2 | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808723-08 | ☒ PCB (8082A) |
| W-17 1-2 | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808723-09 | ☒ PCB (8082A) |
| W-17 0-1 | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808723-10 | ☒ PCB (8082A) |
| W-33B 0-1 | 8/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808723-11 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☒ | Holding times/Sample preservation – **Samples 07-11 were extracted 10 days after collection (submitted to lab 10 days after collection). While the extractions were within the method hold time (unspecified for extraction), extraction was performed beyond the QAPP 7-day hold time; therefore, results are considered estimates (qualified J/UJ).** |
| ☒ | ☐ | ☒ | Surrogate recoveries – **DCB surrogate above QC limit (Primary column) for sample 02 in diluted run. Detected results for Sample 02 Aroclors 1242 and 1260 are considered estimates (J qualified).** (Detected result for Aroclor 1254 sample 02 diluted run came from confirmation column; no qualification to data). Surrogate recoveries for samples 05 (secondary analytical run only) and 06, 08, and 10 (primary runs) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – **MS and MSD recoveries for sample 01, Aroclors 1016 and first column 1260 were above QC limit; detected results for sample 01 considered estimates (J qualified).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-05, 07, and 11, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 06, 08, and 10, all results reported from diluted runs, with RLs raised. RLs for all ND results below PALs (25 mg/kg for PCBs). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808723

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-100-082718 2ft | PCBs | Aroclor 1242 | 1.6 | mg/kg | **1.6 J** | AM |
| | | Aroclor 1254 | 5.2 | mg/kg | **5.2 J** | AM |
| | | Aroclor 1260 | 0.9 | mg/kg | **0.9 J** | AM |
| B-100-082718-1 2ft | PCBs | Aroclor 1242 | 1.9 | mg/kg | **1.9 J** | SA |
| | | Aroclor 1260 | 1.0 | mg/kg | **1.0 J** | SA |
| W-14 0-1 | PCBs | Aroclor 1242 | 1.6 | mg/kg | **1.6 J** | HT |
| | | Aroclor 1254 | 8.7 | mg/kg | **8.7 J** | HT |
| | | Aroclor 1260 | 1.1 | mg/kg | **1.1 J** | HT |
| | | All remaining aroclors | 0.06 U | mg/kg | 0.06 UJ | HT |
| W-14 1-2 | PCBs | Aroclor 1242 | 1.7 | mg/kg | **1.7 J** | HT |
| | | Aroclor 1254 | 17.8 | mg/kg | **17.8 J** | HT |
| | | Aroclor 1260 | 2.9 | mg/kg | **2.9 J** | HT |
| | | All remaining aroclors | 1.1 U | mg/kg | 1.1 UJ | HT |
| W-17 1-2 | PCBs | Aroclor 1254 | 1.0 | mg/kg | **1.0 J** | HT |
| | | All remaining aroclors | 0.06 U | mg/kg | 0.06 UJ | HT |
| W-17 0-1 | PCBs | Aroclor 1254 | 42.9 | mg/kg | **42.9 J** | HT |
| | | All remaining aroclors | 2.9 U | mg/kg | 2.9 UJ | HT |

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| W-33B 0-1 | PCBs | Aroclor 1254 | 0.4 | mg/kg | **0.4 J** | HT |
| | | Aroclor 1260 | 0.07 | mg/kg | **0.07 J** | HT |
| | | All remaining aroclors | 0.05 U | mg/kg | 0.05 UJ | HT |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808724**; Report Issued **October 23, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-872-082718-C | 8/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808724-01 | ☒ PCB (8082A) |
| B-876-082718-C | 8/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808724-02 | ☒ PCB (8082A) |
| B-888-082718-C | 8/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808724-03 | ☒ PCB (8082A) |
| B-889-082718-C | 8/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808724-04 | ☒ PCB (8082A) |
| B-890-082718-C | 8/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808724-05 | ☒ PCB (8082A) |
| B-891-082718-C | 8/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808724-06 | ☒ PCB (8082A) |
| B-892-082718-C | 8/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808724-07 | ☒ PCB (8082A) |
| B-893-082718-C | 8/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808724-08 | ☒ PCB (8082A) |
| B-894-082718-C | 8/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808724-09 | ☒ PCB (8082A) |
| B-895-082718-C | 8/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808724-10 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries – **TMX surrogate below QC limit (Primary column) for sample 06. Results for sample 06 are considered estimates (UJ qualified).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – No dilutions performed. RLs (all concrete samples) below soil Project Action Limits (PAL). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808724

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-891-082718-C | PCBs | All Aroclors | ND (0.2 U) | mg/kg | **0.2 UJ** | SB |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808745**; Report Issued **October 23, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-180-082818 2ft | 8/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808745-01 | ☒ PCB (8082A) |
| B-185-082818 2ft | 8/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808745-02 | ☒ PCB (8082A) |
| B-190-082818 2ft | 8/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808745-03 | ☒ PCB (8082A) |
| SW-155-082818 0-2ft | 8/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808745-04 | ☒ PCB (8082A) |
| B-480-082818 2ft | 8/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808745-05 | ☒ PCB (8082A) |
| SW-688-082818 0-2ft | 8/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808745-06 | ☒ PCB (8082A) |
| SW-677-082818 0-2ft | 8/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808745-07 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries –Surrogate recoveries for samples 02 and 03 (secondary analytical run only) and 01 and 06 (primary runs) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 02-05, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 01 and 06, all results reported from diluted runs (20x), with RLs raised. RLs for all ND results below PALs (1.1 mg/kg for PCBs). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808745

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808807**; Report Issued **October 24, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-560-082918 3ft | 8/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808807-01 | ☒ PCB (8082A) |
| B-565-082918 3ft | 8/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808807-02 | ☒ PCB (8082A) |
| B-570-082918 3ft | 8/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808807-03 | ☒ PCB (8082A) |
| B-575-082918 3ft | 8/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808807-04 | ☒ PCB (8082A) |
| B-580-082918 3ft | 8/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808807-05 | ☒ PCB (8082A) |
| B-585-082918 3ft | 8/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808807-06 | ☒ PCB (8082A) |
| B-590-082918 3ft | 8/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808807-07 | ☒ PCB (8082A) |
| B-595-082918 3ft | 8/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808807-08 | ☒ PCB (8082A) |
| B-600-082918 3ft | 8/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808807-09 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries –Surrogate recoveries for sample 03 (secondary analytical run only) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) – Dual column RPD > 40% for sample 02 diluted run, for Aroclor 1260. As result reported from undiluted run, and RPD was acceptable, no qualification indicated. |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-04, 06, 08, and 09, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For sample 03, all results reported from diluted run (20x), with RLs raised. RLs for all ND results below PALs (1.1 mg/kg for PCBs). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808807

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808849**; Report Issued **October 24, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-373-083018 0-3ft | 8/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808849-01 | ☒ PCB (8082A) |
| SW-378-083018 0-3ft | 8/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1808849-02 | ☒ PCB (8082A) |
| SW-378-083018-1 0-3ft | 8/30/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1808849-03 | ☒ PCB (8082A) |
| SW-383-083018 0-3ft | 8/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808849-04 | ☒ PCB (8082A) |
| SW-388-083018 0-3ft | 8/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808849-05 | ☒ PCB (8082A) |
| B-630-083018 3ft | 8/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808849-06 | ☒ PCB (8082A) |
| SW-433-083018 0-3ft | 8/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808849-07 | ☒ PCB (8082A) |
| SW-438-083018 0-3ft | 8/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808849-08 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries – **DCB surrogate recovery sample 01, primary column, diluted run > QC limit; Aroclor 1254 result considered an estimate (J qualified).** DCB surrogate recovery sample 05, primary column, undiluted run > QC limit; as the only detection from the undiluted run was reported from confirmatory column, no QC issue is indicated and no data qualification necessary. Surrogate recoveries for sample 04 (secondary analytical run only) and sample 08 (primary analytical run) were diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – MS/MSD recoveries all above QC limit. Results reported as outside of control limits due to coelution, and results reported above the quantitation limit. Given this issue and the other (acceptable) QC results, including the field duplicate, LCS, and dual column results, no qualification was given to the data based on the MS/MSD recoveries. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-06, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For sample 08, all results reported from diluted run (20x), with RLs raised. RLs for all ND results below PALs (1.1 mg/kg for PCBs). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808849

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-373-083018 0-3ft | PCBs | Aroclor 1254 | 1.3 | mg/kg | **1.3 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1808883**; Report Issued **October 24, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-770-083118 3FT | 8/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808883-01 | ☒ PCB (8082A) |
| SW-525-083118 0-3FT | 8/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808883-02 | ☒ PCB (8082A) |
| B-775-083118 3FT | 8/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808883-03 | ☒ PCB (8082A) |
| B-780-083118 3FT | 8/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808883-04 | ☒ PCB (8082A) |
| B-785-083118 3FT | 8/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808883-05 | ☒ PCB (8082A) |
| SW-530-083118 0-3FT | 8/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808883-06 | ☒ PCB (8082A) |
| SW-535-083118 0-3FT | 8/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1808883-07 | ☒ PCB (8082A) |
| SW-535-083118-1 0-3FT | 8/31/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1808883-08 | ☒ PCB (8082A) |
| SW-540-083118 0-3FT | 8/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808883-09 | ☒ PCB (8082A) |
| SW-680-083118 0-2FT | 8/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808883-10 | ☒ PCB (8082A) |
| SW-681-083118 0-2FT | 8/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1808883-11 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries –Surrogate recoveries for samples 07 and 08 (secondary analytical runs only) and sample 05 (primary analytical run) were diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – MS/MSD recoveries for Aroclor 1016 above QC limit due to co-elution. MS/MSD recoveries for Aroclor 1260 below QC limit; as native sample concentrations were greater than 4x spike, MS/MSD results are not considered usable, per validation protocol. No qualifications made to data. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – **RPD exceeds QC limit (50%) for Aroclor 1260; Aroclor 1260 results for samples 07/08 are considered estimates (J qualified).** |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **RPD exceeded QC limit (40%) for sample 04 Aroclor 1242 result; result for sample 04 Aroclor 1242 is considered an estimate (J qualified).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 02, 04, 06-11, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For sample 05, all results reported from diluted run (20x), with RLs raised. RLs for all ND results below PALs (1.1 mg/kg for PCBs). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1808883

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-780-083118 3FT | PCBs | Aroclor 1242 | 0.4 | mg/kg | **0.4 J** | DC |
| SW-535-083118 0-3FT | PCBs | Aroclor 1260 | 3.6 | mg/kg | **3.6 J** | DU |
| SW-535-083118-1 0-3FT | PCBs | Aroclor 1260 | 6.3 | mg/kg | **6.3 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809025**; Report Issued **October 24, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-145-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-01 | ☒ PCB (8082A) |
| B-146-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-02 | ☒ PCB (8082A) |
| B-147-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-03 | ☒ PCB (8082A) |
| B-148-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-04 | ☒ PCB (8082A) |
| B-149-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-05 | ☒ PCB (8082A) |
| B-150-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809025-06 | ☒ PCB (8082A) |
| B-151-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-07 | ☒ PCB (8082A) |
| B-152-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-08 | ☒ PCB (8082A) |
| B-153-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-09 | ☒ PCB (8082A) |
| B-154-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-10 | ☒ PCB (8082A) |
| B-155-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-11 | ☒ PCB (8082A) |
| B-156-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-12 | ☒ PCB (8082A) |
| B-157-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-13 | ☒ PCB (8082A) |
| B-158-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-14 | ☒ PCB (8082A) |
| B-159-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-15 | ☒ PCB (8082A) |
| B-160-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809025-16 | ☒ PCB (8082A) |
| B-150-1-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-17 | ☒ PCB (8082A) |
| B-160-1-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809025-18 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries – Surrogates for samples 02, 03, 06, 07, 08, 10, 11, and 17 (secondary analytical runs only) and samples 04, 05, and 12 (primary runs) diluted below MRL. (No qualification indicated). **For sample 01, undiluted run, DCB surrogate for primary column above QC limit, and surrogates diluted below MRL in secondary analytical run; Aroclor 1242 and Aroclor 1254 results considered estimates (J qualified).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – MS/MSD recoveries and RPDs for sample 16 within limits. MS/MSD recoveries for sample 06 above QC limits; all non-spiked sample results ND; no qualification indicated. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-03, 06-08, 10, 11, and 17, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 04, 05, and 12 all results reported from diluted runs (20x, 50x, 20x, and 20x), with RLs raised. RLs for all ND results below PALs (maximum of 3.1 mg/kg for PCBs in sample 05). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809025

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-145-090418 7FT | PCBs | Aroclor 1242 | 0.9 | mg/kg | **0.9 J** | SA |
| | | Aroclor 1254 | 29.0 | mg/kg | **29.0 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809026**; Report Issued **October 24, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-130-090418 2-6FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-01 | ☒ PCB (8082A) |
| SW-131-090418 2-6FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-02 | ☒ PCB (8082A) |
| SW-132-090418 2-6FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-03 | ☒ PCB (8082A) |
| SW-133-090418 2-6FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-04 | ☒ PCB (8082A) |
| SW-134-090418 3-7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-05 | ☒ PCB (8082A) |
| SW-135-090418 3-7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-06 | ☒ PCB (8082A) |
| SW-136-090418 3-7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-07 | ☒ PCB (8082A) |
| SW-137-090418 3-7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-08 | ☒ PCB (8082A) |
| SW-138-090418 2-6FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-09 | ☒ PCB (8082A) |
| SW-139-090418 2-6FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-10 | ☒ PCB (8082A) |
| SW-140-090418 2-6FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809026-11 | ☒ PCB (8082A) |
| SW-140-1-090418 2-6FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-12 | ☒ PCB (8082A) |
| SW-141-090418 2-6FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-13 | ☒ PCB (8082A) |
| B-522-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-14 | ☒ PCB (8082A) |
| B-523-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-15 | ☒ PCB (8082A) |
| B-524-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-16 | ☒ PCB (8082A) |
| B-526-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-17 | ☒ PCB (8082A) |
| B-527-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-18 | ☒ PCB (8082A) |
| B-528-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809026-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Surrogate recoveries – Surrogates for samples 01-04,07, 15, 16, and 19 (secondary analytical runs only) and samples 05 and 06 (primary runs) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – MS/MSD Aroclor 1260 primary column recoveries above QC limit. Aroclor 1260 non-spiked sample result ND; no qualification indicated. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) - **RPD exceeded QC limit (40%) for sample 09 Aroclor 1260 result and for sample 17 Aroclor 1242 result; results for sample 09 Aroclor 1260 and sample 17 Aroclor 1242 are considered estimates (J qualified).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-04,07-09, and 14-19, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 04 and 05, all results reported from diluted runs (50x), with RLs raised. RLs for all ND results below PALs (maximum of 3.0 mg/kg for PCBs in sample 05). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809026

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-138-090418 2-6FT | PCBs | Aroclor 1260 | 3.2 | mg/kg | **3.2 J** | DC |
| B-526-090418 7FT | PCBs | Aroclor 1242 | 0.1 | mg/kg | **0.1 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809027**; Report Issued **October 24, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-529-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809027-01 | ☒ PCB (8082A) |
| B-531-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809027-02 | ☒ PCB (8082A) |
| B-532-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809027-03 | ☒ PCB (8082A) |
| B-533-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809027-04 | ☒ PCB (8082A) |
| B-533-1-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809027-05 | ☒ PCB (8082A) |
| B-536-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809027-06 | ☒ PCB (8082A) |
| B-537-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809027-07 | ☒ PCB (8082A) |
| B-534-090418 7FT | 9/4/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809027-08 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries – Surrogates for samples 06-08 (secondary analytical runs only) diluted below MRL. (No qualification indicated). DCB surrogate recovery for undiluted analytical run, primary column above QC limit for sample 07. As only detected concentration for undiluted run taken from confirmation column; no qualification necessary. **DCB surrogate recoveries for diluted sample runs, primary columns above QC limit for samples 03 and 05; detected concentrations of Aroclor 1254 in samples 03 and 05 (both from diluted runs) are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – MS/MSD recoveries for Aroclor 1260 below QC limit; however, as native concentration greater than 4x spike, results are not considered usable as QC data; no qualification indicated. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – **Samples 04/05 Aroclor 1260 results are considered estimates (qualified with J/UJ)** |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) - **RPD exceeded QC limit (40%) for sample 02 Aroclor 1242 result; result for sample 02 Aroclor 1242 is considered an estimate (J qualified).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-08, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. RLs for all ND results below Project Action Levels (PAL). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809027

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-531-090418 7FT | PCBs | Aroclor 1242 | 0.6 | mg/kg | **0.6 J** | DC |
| B-532-090418 7FT | PCBs | Aroclor 1254 | 3.6 | mg/kg | **3.6 J** | SA |
| B-533-090418 7FT | PCBs | Aroclor 1260 | 2.6 | mg/kg | **2.6 J** | DU |
| B-533-1-090418 7FT | PCBs | Aroclor 1254 | 5.4 | mg/kg | **5.4 J** | SA |
| | | Aroclor 1260 | 0.6 U | mg/kg | 0.6 UJ | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809067**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-551-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-01 | ☒ PCB (8082A) |
| B-552-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-02 | ☒ PCB (8082A) |
| B-553-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809067-03 | ☒ PCB (8082A) |
| B-553-090518-1 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-04 | ☒ PCB (8082A) |
| SW-330-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-05 | ☒ PCB (8082A) |
| SW-332-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-06 | ☒ PCB (8082A) |
| SW-334-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-07 | ☒ PCB (8082A) |
| SW-336-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-08 | ☒ PCB (8082A) |
| SW-338-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809067-09 | ☒ PCB (8082A) |
| SW-338-090518-1 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-10 | ☒ PCB (8082A) |
| SW-339-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-11 | ☒ PCB (8082A) |
| SW-340-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-12 | ☒ PCB (8082A) |
| SW-341-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-13 | ☒ PCB (8082A) |
| SW-342-090518 0-3ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-14 | ☒ PCB (8082A) |
| SW-343-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-15 | ☒ PCB (8082A) |
| SW-345-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-16 | ☒ PCB (8082A) |
| SW-347-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-17 | ☒ PCB (8082A) |
| SW-349-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809067-18 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Surrogate recoveries – Surrogates for samples 05-06, and 10 (primary runs) diluted below MRL. (No qualification indicated). DCB surrogate recovery for sample 04 above QC limit for diluted run, confirmation column; as diluted run result taken from primary column, no qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – MS/MSD recoveries above QC limit for sample 03 and 09, caused by co-elution (elevated result for Aroclor 1254 in unspiked samples). Given the potential for positive bias, and no other detects in sample 03, no qualification is indicated. **Sample 09 Aroclor 1242 detected result is considered an estimate (J qualified).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – **Samples 03/04 Aroclor 1242 results are considered estimates (qualified with UJ/J). Samples 09/10 Aroclor 1242 and 1254 results are considered estimates (qualified with J/UJ and J, respectively).** |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) - **RPD exceeded QC limit (40%) for the following results: sample 04 Aroclor 1242; sample 08 Aroclor 1242, sample 11 Aroclor 1242, and sample 14 Aroclor 1242. The Aroclor 1242 results for samples 04, 08, 11, and 14 are considered estimates (J qualified).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-04, 08, 09, 11, and 14, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 05-07, and 10, all results reported from diluted runs (20x), with RLs raised. RLs for all ND results below PALs (maximum of 1.2 mg/kg for PCBs in sample 05). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809067

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-553-090518 7ft | PCBs | Aroclor 1242 | 0.06 U | mg/kg | 0.06 UJ | DU |
| B-553-090518-1 7ft | PCBs | Aroclor 1242 | 0.2 | mg/kg | **0.2 J** | DU, DC |
| SW-336-090518 3-7ft | PCBs | Aroclor 1242 | 0.1 | mg/kg | **0.1 J** | DC |
| SW-338-090518 3-7ft | PCBs | Aroclor 1242 | 0.3 | mg/kg | **0.3 J** | DU, AM |
| | | Aroclor 1254 | 6.0 | mg/kg | **6.0 J** | DU |
| SW-338-090518-1 3-7ft | PCBs | Aroclor 1242 | 1.1 U | mg/kg | 1.1 UJ | DU |
| | | Aroclor 1254 | 10.8 | mg/kg | **10.8 J** | DU |
| SW-339-090518 3-7ft | PCBs | Aroclor 1242 | 0.3 | mg/kg | **0.3 J** | DC |
| SW-342-090518 0-3ft | PCBs | Aroclor 1242 | 0.4 | mg/kg | **0.4 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809068**; Report Issued **November 12, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-350-090518 0-3ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-01 | ☒ PCB (8082A) |
| SW-351-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-02 | ☒ PCB (8082A) |
| SW-353-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-03 | ☒ PCB (8082A) |
| SW-355-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-04 | ☒ PCB (8082A) |
| SW-356-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-05 | ☒ PCB (8082A) |
| SW-357-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-06 | ☒ PCB (8082A) |
| SW-359-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-07 | ☒ PCB (8082A) |
| SW-361-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-08 | ☒ PCB (8082A) |
| SW-362-090518 0-3ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-09 | ☒ PCB (8082A) |
| SW-363-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-10 | ☒ PCB (8082A) |
| SW-365-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-11 | ☒ PCB (8082A) |
| SW-686-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809068-12 | ☒ PCB (8082A) |
| SW-686-090518-1 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-13 | ☒ PCB (8082A) |
| SW-688-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-14 | ☒ PCB (8082A) |
| SW-689-090518 3-7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-15 | ☒ PCB (8082A) |
| B-434-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809068-16 | ☒ PCB (8082A) |
| B-434-090518-1 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-17 | ☒ PCB (8082A) |
| B-438-090518 7FT | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809068-18 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries – Surrogates for samples 03-09, and 12 (primary runs) diluted below MRL. (No qualification indicated). **DCB surrogate recovery for sample 13 above QC limit for diluted run, confirmation column; as Aroclor 1254 result was taken from diluted run confirmation column, Aroclor 1254 result for sample 13 is considered an estimate (J qualified).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – MS/MSD recoveries above QC limit for sample 12, caused by co-elution (elevated result for Aroclor 1254 in unspiked samples). Given the potential for positive bias, and no other detects in sample 12, no qualification is indicated. **Sample 16 MS and MSD recoveries were within limits, but RPDs exceeded QC limit, indicating a potential precision issue. Detected result for Aroclor 1254 in sample 16 is considered an estimate (J qualified).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – **Samples 12/13 Aroclor 1254 results are considered estimates (qualified with J). Samples 16/17 Aroclor 1254 results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) - **RPD exceeded QC limit (40%) for sample 16 Aroclor 1254 result; result for sample 16 Aroclor 1254 is considered an estimate (J qualified).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 10, 11, 13-15, and 18, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 03-09, and 12, all results reported from diluted runs (50, 20, 100, 200, 50, 20, 20, and 20x), with RLs raised. RLs for all ND results below PALs (maximum of 12.2 mg/kg for PCBs in sample 06; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809068

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-686-090518 3-7ft | PCBs | Aroclor 1254 | 10.7 | mg/kg | **10.7 J** | DU |
| SW-686-090518-1 3-7ft | PCBs | Aroclor 1254 | 5.9 | mg/kg | **5.9 J** | SA, DU |
| B-434-090518 7ft | PCBs | Aroclor 1254 | 0.1 | mg/kg | **0.1 J** | MR, DC, DU |
| B-434-090518-1 7ft | PCBs | Aroclor 1254 | 0.2 | mg/kg | **0.2 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809069**; Report Issued **November 12, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-442-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809069-01 | ☒ PCB (8082A) |
| B-446-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809069-02 | ☒ PCB (8082A) |
| B-435-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809069-03 | ☒ PCB (8082A) |
| B-439-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809069-04 | ☒ PCB (8082A) |
| B-443-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809069-05 | ☒ PCB (8082A) |
| B-447-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809069-06 | ☒ PCB (8082A) |
| B-436-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809069-07 | ☒ PCB (8082A) |
| B-440-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809069-08 | ☒ PCB (8082A) |
| B-444-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809069-09 | ☒ PCB (8082A) |
| B-448-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809069-10 | ☒ PCB (8082A) |
| B-437-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809069-11 | ☒ PCB (8082A) |
| B-441-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809069-12 | ☒ PCB (8082A) |
| B-445-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809069-13 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries – Surrogates for samples 01 and 04 (primary runs) diluted below MRL. (No qualification indicated). **DCB surrogate recoveries (both columns) for sample 05 above QC limit; Aroclor 1254 detected result for sample 05 is considered an estimate (J qualified).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 08-10, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 01 and 04, all results were reported from diluted runs (50 and 100x), with RLs raised. RLs for all ND results below PALs (maximum of 6.0 mg/kg for PCBs in sample 06; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809069

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-443-090518 7ft | PCBs | Aroclor 1254 | 0.8 | mg/kg | **0.8 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809070**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-538-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809070-01 | ☒ PCB (8082A) |
| B-539-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809070-02 | ☒ PCB (8082A) |
| B-541-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809070-03 | ☒ PCB (8082A) |
| B-542-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809070-04 | ☒ PCB (8082A) |
| B-543-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809070-05 | ☒ PCB (8082A) |
| B-544-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809070-06 | ☒ PCB (8082A) |
| B-546-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809070-07 | ☒ PCB (8082A) |
| B-547-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809070-08 | ☒ PCB (8082A) |
| B-548-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809070-09 | ☒ PCB (8082A) |
| B-549-090518 7ft | 9/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809070-10 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries – Surrogates for sample 07 (primary run) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 04, 06, 08, and 09m only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For sample 07, all results were reported from a diluted run (20x), with RLs raised. RLs for all ND results below PALs (maximum of 1.2 mg/kg for PCBs in sample 06; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809070

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809134**; Report Issued **November 12, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-790-090618 3ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-01 | ☒ PCB (8082A) |
| SW-545-090618 0-3ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-02 | ☒ PCB (8082A) |
| SW-550-090618 0-3ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-03 | ☒ PCB (8082A) |
| B-81-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-04 | ☒ PCB (8082A) |
| B-82-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-05 | ☒ PCB (8082A) |
| B-83-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-06 | ☒ PCB (8082A) |
| B-84-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-07 | ☒ PCB (8082A) |
| B-85-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-08 | ☒ PCB (8082A) |
| B-86-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-09 | ☒ PCB (8082A) |
| B-87-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-10 | ☒ PCB (8082A) |
| B-88-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-11 | ☒ PCB (8082A) |
| B-89-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-12 | ☒ PCB (8082A) |
| B-90-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-13 | ☒ PCB (8082A) |
| B-91-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-14 | ☒ PCB (8082A) |
| B-92-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-15 | ☒ PCB (8082A) |
| B-93-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-16 | ☒ PCB (8082A) |
| B-94-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-17 | ☒ PCB (8082A) |
| B-95-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-18 | ☒ PCB (8082A) |
| B-96-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809134-19 | ☒ PCB (8082A) |
| B-96-1-090618 6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809134-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness - Lab transcription error; missing a dash after SW in sample 03. |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries – Surrogates for samples 07, 10, 11, and 15 (primary runs) diluted below MRL. (No qualification indicated). DCB surrogate diluted below detectable level in diluted run, primary column only, for sample 13. As surrogate recoveries within acceptable levels for undiluted run, and for diluted run confirmatory column, no qualification is indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – **For sample 19, MS recoveries were within QC limit, but MSD recovery for Aroclor 1260, confirmatory column only, was below QC limit, with RPD for Aroclor 1260 above QC limit. Detected result for Aroclor 1254 in sample 19 and field duplicate sample 20 (both reported from confirmatory column) is considered an estimate (J qualified). (No other data for those samples were reported from the confirmatory columns.)** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – **Samples 19/20 Aroclor 1242 and Aroclor 1254 results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) - **RPD exceeded QC limit (40%) for Aroclor 1260 results in samples 02, 05, 06, 09, 14, 18, 19, and 20; Aroclor 1260 results for these samples are considered estimates (J qualified).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 05, 06, 09, 12-14, 16, 19, and 20, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 07, 10, 11, and 15, all results reported from diluted runs (20, 20, 100, and 50x), with RLs raised. RLs for all ND results below PALs (maximum of 6.2 mg/kg for PCBs in sample 11; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809134

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-545-090618 0-3ft | PCBs | Aroclor 1260 | 0.2 | mg/kg | **0.2 J** | DC |
| B-82-090618 6ft | PCBs | Aroclor 1260 | 0.3 | mg/kg | **0.3 J** | DC |
| B-83-090618 6ft | PCBs | Aroclor 1260 | 0.4 | mg/kg | **0.4 J** | DC |
| B-86-090618 6ft | PCBs | Aroclor 1260 | 0.5 | mg/kg | **0.5 J** | DC |
| B-91-090618 6ft | PCBs | Aroclor 1260 | 0.7 | mg/kg | **0.7 J** | DC |
| B-95-090618 6ft | PCBs | Aroclor 1260 | 0.2 | mg/kg | **0.2 J** | DC |
| B-96-090618 6ft | PCBs | Aroclor 1242 | 2.2 | mg/kg | **2.2 J** | DU |
| | | Aroclor 1254 | 4.9 | mg/kg | **4.9 J** | DU, BM, MR |
| | | Aroclor 1260 | 0.5 | mg/kg | **0.5 J** | DC |
| B-96-1-090618 6ft | PCBs | Aroclor 1242 | 0.2 | mg/kg | **0.2 J** | DU |
| | | Aroclor 1254 | 3.1 | mg/kg | **3.1 J** | DU, BM, MR |
| | | Aroclor 1260 | 0.5 | mg/kg | **0.5 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809135**; Report Issued **November 12, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-308-090618 5-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-01 | ☒ PCB (8082A) |
| SW-310-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-02 | ☒ PCB (8082A) |
| SW-312-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-03 | ☒ PCB (8082A) |
| SW-314-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-04 | ☒ PCB (8082A) |
| SW-316-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-05 | ☒ PCB (8082A) |
| SW-317-090618 0-4ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-06 | ☒ PCB (8082A) |
| SW-318-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-07 | ☒ PCB (8082A) |
| SW-320-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-08 | ☒ PCB (8082A) |
| SW-322-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-09 | ☒ PCB (8082A) |
| SW-323-090618 0-4ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-10 | ☒ PCB (8082A) |
| SW-324-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-11 | ☒ PCB (8082A) |
| SW-85-090618 0-4ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-12 | ☒ PCB (8082A) |
| SW-90-090618 4-6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-13 | ☒ PCB (8082A) |
| SW-95-090618 1-5ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-14 | ☒ PCB (8082A) |
| SW-80-090618 4-6ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809135-15 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries – Surrogates for samples 03, 06, 10, and 12 (primary runs) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 02, and 13, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 03, 06, 10, and 12, all results reported from diluted runs (20, 50, 20 and 20x), with RLs raised. RLs for all ND results below PALs (maximum of 2.6 mg/kg for PCBs in sample 06; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809135

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809136**; Report Issued **November 12, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-294-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809136-01 | ☒ PCB (8082A) |
| SW-296-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809136-02 | ☒ PCB (8082A) |
| SW-298-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809136-03 | ☒ PCB (8082A) |
| SW-298-090618-1 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809136-04 | ☒ PCB (8082A) |
| SW-300-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809136-05 | ☒ PCB (8082A) |
| SW-302-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809136-06 | ☒ PCB (8082A) |
| SW-303-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809136-07 | ☒ PCB (8082A) |
| SW-304-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809136-08 | ☒ PCB (8082A) |
| SW-306-090618 4-7ft | 9/6/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809136-09 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For sample 07, only reporting limit raised was for detected Aroclor. No impact on data sensitivity. RLs for all ND results below PALs. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809136

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809178**; Report Issued **October 27, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-620-090718 3ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-01 | ☒ PCB (8082A) |
| SW-413-090718 0-3ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-02 | ☒ PCB (8082A) |
| SW-418-090718 0-3ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-03 | ☒ PCB (8082A) |
| B-813-090718 6ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-04 | ☒ PCB (8082A) |
| B-807-090718 6ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-05 | ☒ PCB (8082A) |
| B-801-090718 6ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-06 | ☒ PCB (8082A) |
| B-797-090718 6ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-07 | ☒ PCB (8082A) |
| B-812-090718 6ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-08 | ☒ PCB (8082A) |
| B-806-090718 6ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-09 | ☒ PCB (8082A) |
| B-800-090718 6ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-10 | ☒ PCB (8082A) |
| B-811-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809178-11 | ☒ PCB (8082A) |
| B-811-090718-1 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-12 | ☒ PCB (8082A) |
| B-805-090718 6ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-13 | ☒ PCB (8082A) |
| B-799-090718 6ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-14 | ☒ PCB (8082A) |
| B-795-090718 6ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-15 | ☒ PCB (8082A) |
| B-821-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-16 | ☒ PCB (8082A) |
| B-817-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-17 | ☒ PCB (8082A) |
| B-820-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809178-18 | ☒ PCB (8082A) |
| B-816-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809178-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) – Two LCS/LCSD sets analyzed (two batches), with all LCS and LCSD recoveries within QC limit; however, because the LCS recoveries were significantly lower than the LCSD recoveries, all the RPDs exceeded the RPD limit of 30%. Given that there is no USEPA National or New England guidance on LCS/LCSD RPDs (just recoveries), validator evaluated batch data quality based on the native sample MS/MSD performed on sample 19; as these results were within the acceptable RPD limit, no data qualification was made. |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – Sample 11 submitted for MS/MSD analysis, but spiked concentrations diluted below detectable range due to high dilution factor required for native sample analysis (5,000x DF); laboratory did not report results within batch QC. No qualification to data.<br>Sample 19 submitted for MS/MSD analysis. Aroclor 1016 recoveries (both columns) above QC limit (potential positive bias); however, as no concentrations were detected in native sample, no qualification to data is applicable. RPDs were below maximum QC limit. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) - Case narrative notes C810224-CCV1 and CCV3 %D for DCB surrogate below control limit; however, these samples from this work order did not start until after CCV5, and therefore all of this package samples analyzed between acceptable calibrations. No qualification indicated. |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – Sulfur removal by copper cleanup (CC) method performed on samples 06, 09, 10, 13, 16, 19. Method blank and LCS/LCS CC analyzed in batch with these samples. Results acceptable. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 03, 04, 05, 07, 15, 16, and 19, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 08, 11, 12, 17, and 18, all results reported from diluted runs (500, 5,000, 5,000, 50, and 500x), with RLs raised. RLs for all ND results for sample 17 were below PALs (RL 4.7 mg/kg for PCBs in sample 17; PAL = 25 mg/kg). RLs for sample 08 (30.8 mg/kg), sample 11 (304 mg/kg), sample 12 (318 mg/kg), and sample 18 (33.1 mg/kg) were above the PAL, and therefore there was an impact on data sensitivity. **However, given that the elevated concentrations in these samples required additional excavation, and as a result new confirmatory samples were collected, this does not indicate an impact on final confirmatory sample data sensitivity.** |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809178

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809179**; Report Issued **November 13, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-816-1-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-01 | ☒ PCB (8082A) |
| B-810-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-02 | ☒ PCB (8082A) |
| B-804-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-03 | ☒ PCB (8082A) |
| B-798-090718 6ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-04 | ☒ PCB (8082A) |
| B-819-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-05 | ☒ PCB (8082A) |
| B-815-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-06 | ☒ PCB (8082A) |
| B-809-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-07 | ☒ PCB (8082A) |
| B-803-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-08 | ☒ PCB (8082A) |
| B-818-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-09 | ☒ PCB (8082A) |
| B-814-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-10 | ☒ PCB (8082A) |
| B-808-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-11 | ☒ PCB (8082A) |
| B-802-090718 5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-12 | ☒ PCB (8082A) |
| B-794-090718 6ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-13 | ☒ PCB (8082A) |
| B-610-090718 3ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-14 | ☒ PCB (8082A) |
| SW-398-090718 0-3ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-15 | ☒ PCB (8082A) |
| SW-403-090718 0-3ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-16 | ☒ PCB (8082A) |
| B-796-090718 6ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-17 | ☒ PCB (8082A) |
| 33B 1-2ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-18 | ☒ PCB (8082A) |
| 33B 2-2.5ft | 9/7/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809179-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 02, 04-11, and 13 (primary runs) diluted below MRL. (No qualification indicated). For sample 03, undiluted run, TMX surrogate recovery for primary column above QC limit. As the only detected concentration for sample was reported from the diluted analytical run (with acceptable surrogate recoveries), no qualification is indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) – Sample 01 is field duplicate of sample 1809178-19 (evaluated in that package). |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) - **RPD exceeded QC limit (40%) for sample 05 Aroclor 1248; the Aroclor 1248 result for sample 05 is considered an estimate (J qualified).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – Sulfur removal by copper cleanup (CC) method performed on samples 01 and 17 (twice). Method blank and LCS/LCS analyzed in batch with these samples. Results acceptable. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 03, 12, 14, and 16, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 02, 04-11, and 13, all results reported from diluted runs (100, 500, 20, 500, 5,000, 500, 20, 20, 20, and 20x), with RLs raised. RLs for all ND results for samples 02, 05, 09-11, and 13 were below PALs (maximum RL 1.8 mg/kg for PCBs in samples 05 and 13; PAL = 25 mg/kg). RLs for sample 04 (29.2 mg/kg), sample 06 (35.7 mg/kg), sample 07 (2,250 mg/kg), and sample 08 (34.3 mg/kg) were above the PAL, and therefore there was an impact on data sensitivity. **However, given that the elevated concentrations in these samples required additional excavation, and as a result new confirmatory samples were collected, this does not indicate an impact on final confirmatory sample data sensitivity.** |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809179

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-802-090718 5ft | PCBs | Aroclor 1248 | 3.2 | mg/kg | **3.2 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809213**; Report Issued **November 13, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-564-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-01 | ☒ PCB (8082A) |
| SW-565-091018 5-6ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-02 | ☒ PCB (8082A) |
| SW-567-091018 5-6ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-03 | ☒ PCB (8082A) |
| SW-566-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-04 | ☒ PCB (8082A) |
| SW-569-091018 5-6ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-05 | ☒ PCB (8082A) |
| SW-568-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-06 | ☒ PCB (8082A) |
| SW-573-091018 5-6ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-07 | ☒ PCB (8082A) |
| SW-572-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-08 | ☒ PCB (8082A) |
| SW-571-091018 5-6ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-09 | ☒ PCB (8082A) |
| SW-570-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-10 | ☒ PCB (8082A) |
| SW-575-091018 5-6ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-11 | ☒ PCB (8082A) |
| SW-574-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-12 | ☒ PCB (8082A) |
| SW-577-091018 5-6ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-13 | ☒ PCB (8082A) |
| SW-576-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-14 | ☒ PCB (8082A) |
| SW-579-091018 5-6ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-15 | ☒ PCB (8082A) |
| SW-578-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-16 | ☒ PCB (8082A) |
| SW-580-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-17 | ☒ PCB (8082A) |
| B-867-091018-A 2ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-18 | ☒ PCB (8082A) |
| SW-691-091018-A 0-2ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809213-19 | ☒ PCB (8082A) |
| SW-547-091018-A 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809213-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 02, 05, 16, and 19 (primary runs) diluted below MRL. (No qualification indicated). For sample 09, undiluted run, TMX surrogate recovery for primary column above QC limit. As the only detected concentration for sample was reported from the diluted analytical run (with acceptable surrogate recoveries), no qualification is indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – Although not specifically requested, the laboratory ran an MS/MSD analysis on sample 20; recoveries for Aroclor 1016 MS and MSD, primary column only, were above QC limit. However, as this indicates a positive bias and the native result was non-detect, no qualification is indicated. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) - **RPD exceeded QC limit (40%) for sample 09 Aroclor 1254; the Aroclor 1254 result for sample 09 is considered an estimate (J qualified).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 12, 17, and 18, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 02, 05, 16, and 19, all results reported from diluted runs (200, 20, 50 and 50x), with RLs raised. RLs for all ND results for samples 02, 05, 16, and 19 were below PALs (maximum RL 10.8 mg/kg for PCBs in sample 02; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809213

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-571-091018 5-6ft | PCBs | Aroclor 1254 | 0.3 | mg/kg | **0.3 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809214**; Report Issued **October 27, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-585-091018 5-6ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-01 | ☒ PCB (8082A) |
| SW-584-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-02 | ☒ PCB (8082A) |
| SW-684-091018 5-6ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-03 | ☒ PCB (8082A) |
| SW-683-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809214-04 | ☒ PCB (8082A) |
| SW-683-091018-1 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-05 | ☒ PCB (8082A) |
| SW-552-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-06 | ☒ PCB (8082A) |
| SW-553-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-07 | ☒ PCB (8082A) |
| SW-554-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-08 | ☒ PCB (8082A) |
| SW-555-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-09 | ☒ PCB (8082A) |
| SW-583-091018 5-6ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-10 | ☒ PCB (8082A) |
| SW-582-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-11 | ☒ PCB (8082A) |
| SW-556-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-12 | ☒ PCB (8082A) |
| SW-558-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-13 | ☒ PCB (8082A) |
| SW-559-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-14 | ☒ PCB (8082A) |
| SW-557-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-15 | ☒ PCB (8082A) |
| SW-560-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-16 | ☒ PCB (8082A) |
| SW-561-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-17 | ☒ PCB (8082A) |
| SW-562-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-18 | ☒ PCB (8082A) |
| SW-563-091018 0-4ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809214-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 04-12, and 15-17 (primary runs) diluted below MRL. (No qualification indicated). **For sample 18, TMX surrogate recovery for primary column above QC limit. Aroclor 1248 detected concentration for sample 18 is considered an estimate (J qualified).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – Sample 04 was submitted for MS/MSD analysis; however, the laboratory did not report this analysis due to high concentration of target analytes in sample (high native concentration results in necessity for high dilution, precluding usable MS/MSD results.) No qualification indicated. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 04-12 and 15-17, all results reported from diluted runs (ranging from 20x to 500x), with RLs raised. RLs for all ND results for samples 04, 05, 07-12, and 15-17 were below PALs (maximum RL 10.8 mg/kg for PCBs in sample 02; PAL = 25 mg/kg). RLs for sample 06 were slightly above the PAL, at 26.6 mg/kg, impacting data sensitivity. **However, given that the elevated concentration in this sample required additional excavation, and as a result new confirmatory samples were collected, this does not indicate an impact on final confirmatory sample data sensitivity.** |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809214

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-562-091018 0-4ft | PCBs | Aroclor 1248 | 0.5 | mg/kg | **0.5 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809215**; Report Issued **November 13, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| W-14A 0-2ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809215-01 | ☒ PCB (8082A) |
| W-17A 0-2ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809215-02 | ☒ PCB (8082A) |
| W-17B 0-2ft | 9/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809215-03 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for sample 01 (primary run) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For sample 03, only reporting limit raised was for a detected Aroclor. No impact on data sensitivity. For sample 01, all results were reported from diluted run (20x), with RLs raised. RLs for all ND results below PALs (maximum of 1.1 mg/kg for PCBs in sample 01; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809215

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809249**; Report Issued **November 13, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-462-091118-A 3ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-01 | ☒ PCB (8082A) |
| B-463-091118-A 3ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-02 | ☒ PCB (8082A) |
| B-464-091118-A 3ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-03 | ☒ PCB (8082A) |
| B-472-091118-A 3ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-04 | ☒ PCB (8082A) |
| B-478-091118-A 3ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-05 | ☒ PCB (8082A) |
| B-479-091118-A 3ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-06 | ☒ PCB (8082A) |
| SW-641-091118-A 0-2ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-07 | ☒ PCB (8082A) |
| SW-642-091118-A 0-2ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-08 | ☒ PCB (8082A) |
| SW-644-091118-A 0-2ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-09 | ☒ PCB (8082A) |
| B-457-091118-A 3ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-10 | ☒ PCB (8082A) |
| SW-664-091118-A 0-3ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-11 | ☒ PCB (8082A) |
| SW-390-091118-A 0-3ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-12 | ☒ PCB (8082A) |
| SW-665-091118-A 0-3ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-13 | ☒ PCB (8082A) |
| SW-389-091118-A 0-3ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-14 | ☒ PCB (8082A) |
| B-473-091118-A 3ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-15 | ☒ PCB (8082A) |
| SW-669-091118-A 0-3ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809249-16 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 08, 09, 12, 13, 14, and 16 (primary runs) diluted below MRL. (No qualification indicated). **For sample 02, diluted run, TMX surrogate recovery for confirmation column above QC limit. As sample 02 Aroclor 1254 result was taken from diluted run confirmation column, this result is considered an estimate (J qualified.)** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 02, 07, and 11, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 08, 09, 12, 13, 14, and 16, all results reported from diluted runs (20, 20, 20, 20, 50, and 20x), with RLs raised. RLs for all ND results for samples 09, 12, 13, 14, and 16 were below PALs (maximum RL 2.9 mg/kg for PCBs in sample 14; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809249

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-463-091118-A 3ft | PCBs | Aroclor 1254 | 3.7 | mg/kg | **3.7 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809250**; Report Issued **November 13, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-748-091118-A 5ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809250-01 | ☒ PCB (8082A) |
| B-749-091118-A 5ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809250-02 | ☒ PCB (8082A) |
| B-750-091118-A 5ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809250-03 | ☒ PCB (8082A) |
| B-751-091118-A 5ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809250-04 | ☒ PCB (8082A) |
| B-753-091118-A 5ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809250-05 | ☒ PCB (8082A) |
| B-755-091118-A 5ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809250-06 | ☒ PCB (8082A) |
| B-758-091118-A 5ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809250-07 | ☒ PCB (8082A) |
| B-762-091118-A 5ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809250-08 | ☒ PCB (8082A) |
| B-763-091118-A 5ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809250-09 | ☒ PCB (8082A) |
| SW-504-091118-A 0-4ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809250-10 | ☒ PCB (8082A) |
| SW-506-091118-A 0-4ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809250-11 | ☒ PCB (8082A) |
| SW-507-091118-A 0-4ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809250-12 | ☒ PCB (8082A) |
| SW-508-091118-A 0-4ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809250-13 | ☒ PCB (8082A) |
| B-851-091118-A 4ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809250-14 | ☒ PCB (8082A) |
| B-858-091118-A 4ft | 9/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809250-15 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for sample 10 (primary runs) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - Although not specifically requested, the laboratory ran an MS/MSD analysis on sample 13; recoveries and RPDs within QC limits. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 06, and 11-13, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For sample 10, all results reported from diluted run (20x), with RLs raised. RLs for all ND results for sample 10 were below PAL (RL 1.2 mg/kg for PCBs in sample 10; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809250

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809282**; Report Issued **November 14, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-559-091218-A 4ft | 9/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809282-01 | ☒ PCB (8082A) |
| B-631-091218-A 4ft | 9/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809282-02 | ☒ PCB (8082A) |
| B-629-091218-A 4ft | 9/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809282-03 | ☒ PCB (8082A) |
| B-621-091218-A 4ft | 9/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809282-04 | ☒ PCB (8082A) |
| B-622-091218-A 4ft | 9/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809282-05 | ☒ PCB (8082A) |
| SW-430-091218-A 0-4ft | 9/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809282-06 | ☒ PCB (8082A) |
| SW-380-091218-A 0-3ft | 9/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809282-07 | ☒ PCB (8082A) |
| SW-377-091218-A 0-3ft | 9/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809282-08 | ☒ PCB (8082A) |
| SW-357-091218-A 3-7ft | 9/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809282-09 | ☒ PCB (8082A) |
| SW-358-091218-A 0-3ft | 9/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809282-10 | ☒ PCB (8082A) |
| SW-359-091218-A 3-7ft | 9/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809282-11 | ☒ PCB (8082A) |
| SW-360-091218-A 0-3ft | 9/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809282-12 | ☒ PCB (8082A) |
| B-535-091218-A 8ft | 9/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809282-13 | ☒ PCB (8082A) |
| B-523-091218-A 8ft | 9/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809282-14 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 01-03 and 13 and 14 (primary runs) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 06, and 11-13, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 01-03 and 13 and 14, all results reported from diluted runs (100, 50, 50, 50, and 20x), with RLs raised. RLs for all ND results for samples 01-03 and 13 and 14 were below PAL (maximum RL 6.0 mg/kg for PCBs in sample 01; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809282

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809330**; Report Issued **November 14, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-442-091318-A 8ft | 9/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809330-01 | ☒ PCB (8082A) |
| B-439-091318-A 8ft | 9/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809330-02 | ☒ PCB (8082A) |
| B-181-091318-A 3ft | 9/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809330-03 | ☒ PCB (8082A) |
| B-181-091318-A-1 3ft | 9/13/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809330-04 | ☒ PCB (8082A) |
| SW-98-091318-A 0-2ft | 9/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809330-05 | ☒ PCB (8082A) |
| SW-100-091318-A 0-2ft | 9/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809330-06 | ☒ PCB (8082A) |
| SW-692-091318-A 0-2ft | 9/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809330-07 | ☒ PCB (8082A) |
| SW-602-091318-A 0-4ft | 9/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809330-08 | ☒ PCB (8082A) |
| SW-400-091318-A 0-3ft | 9/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809330-09 | ☒ PCB (8082A) |
| SW-401-091318-A 0-3ft | 9/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809330-10 | ☒ PCB (8082A) |
| SW-387-091318-A 0-3ft | 9/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809330-11 | ☒ PCB (8082A) |
| SW-429-091318-A 0-4ft | 9/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809330-12 | ☒ PCB (8082A) |
| B-88-091318-A 7ft | 9/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809330-13 | ☒ PCB (8082A) |
| B-92-091318-A 7ft | 9/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809330-14 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 05-09, 13, and 14 (primary runs) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For sample 11, only reporting limit raised was for a detected Aroclor. No impact on data sensitivity. For samples 05-09, and 13 and 14, all results reported from diluted runs (ranging from 20x to 50x), with RLs raised. RLs for all ND results for samples 05-09, and 13 and 14 were below PALs (maximum RL 3.4 mg/kg for PCBs in sample 13; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809330

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809409**; Report Issued **November 14, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-602-091718 0-3FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-01 | Placed on hold/cancelled |
| SW-692-091718 0-2FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-02 | Placed on hold/cancelled |
| B-634-091718 3FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-03 | ☒ PCB (8082A) |
| SW-441-091718 0-3FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-04 | ☒ PCB (8082A) |
| B-618-091718 3FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809409-05 | ☒ PCB (8082A) |
| B-618-091718-1 3FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-06 | ☒ PCB (8082A) |
| SW-414-091718 0-3FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-07 | ☒ PCB (8082A) |
| SW-415-091718 0-3FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-08 | ☒ PCB (8082A) |
| SW-416-091718 0-3FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-09 | ☒ PCB (8082A) |
| SW-417-091718 0-3FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-10 | ☒ PCB (8082A) |
| SW-419-091718 0-3FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-11 | ☒ PCB (8082A) |
| SW-420-091718 0-3FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-12 | ☒ PCB (8082A) |
| B-619-091718 3FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-13 | ☒ PCB (8082A) |
| SW-529-091718-A 0-3FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-14 | ☒ PCB (8082A) |
| W-14a 0-1FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-15 | ☒ PCB (8082A) |
| W-14a 1-2FT | 9/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809409-16 | ☒ PCB (8082A) |

Sample data not reported in data package, per instructions from Project Manager.

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 03, 14, and 15 (primary runs) diluted below MRL. (No qualification indicated). |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 04, 08-10, 13, and 16, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 03, 14, and 15, all results reported from diluted runs (20x), with RLs raised. RLs for all ND results for samples 03, 14, and 15 were below PALs (maximum RL 1.2 mg/kg for PCBs in sample 14; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809409

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809440**; Report Issued **November 14, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-638-091818 1FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-01 | ☒ PCB (8082A) |
| SW-695-091818 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-02 | ☒ PCB (8082A) |
| SW-700-091818 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-03 | ☒ PCB (8082A) |
| B-450-091818 1FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-04 | ☒ PCB (8082A) |
| B-451-091818 1FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-05 | ☒ PCB (8082A) |
| B-452-091818 1FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-06 | ☒ PCB (8082A) |
| B-453-091818 1FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-07 | ☒ PCB (8082A) |
| SW-693-091818 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809440-08 | ☒ PCB (8082A) |
| SW-694-091818 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-09 | ☒ PCB (8082A) |
| SW-696-091818 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-10 | ☒ PCB (8082A) |
| SW-697-091818 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-11 | ☒ PCB (8082A) |
| SW-698-091818 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-12 | ☒ PCB (8082A) |
| SW-693-091818-1 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-13 | ☒ PCB (8082A) |
| SW-699-091818 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-14 | ☒ PCB (8082A) |
| B-903-091818 3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-15 | ☒ PCB (8082A) |
| B-905-091818 3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-16 | ☒ PCB (8082A) |
| B-789-091818-A 2FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809440-17 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 02, 03, and 05-14 (primary runs) diluted below MRL. (No qualification indicated). |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - Sample 08 was submitted for MS/MSD analysis; however, the results were poor due to high concentration of target analyte in sample (high native concentration results in necessity for high dilution, precluding usable MS/MSD results.) No qualification indicated. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 04, and 15-17, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 02, 03, and 05-14, all results reported from diluted runs (20x or 50x), with RLs raised. RLs for all ND results for samples 02, 03, and 05-14 were below PAL (maximum RL 2.8 mg/kg for PCBs in samples 06, 08, 09, and 13; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809440

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809441**; Report Issued **November 14, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-535-091818-A 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809441-01 | ☒ PCB (8082A) |
| SW-536-091818-A 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809441-02 | ☒ PCB (8082A) |
| SW-541-091818-A 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809441-03 | ☒ PCB (8082A) |
| SW-542-091818-A 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809441-04 | ☒ PCB (8082A) |
| SW-543-091818-A 0-2FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809441-05 | ☒ PCB (8082A) |
| B-776-091818-A 3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809441-06 | ☒ PCB (8082A) |
| SW-520-091818-A 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809441-07 | ☒ PCB (8082A) |
| SW-521-091818-A 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809441-08 | ☒ PCB (8082A) |
| SW-522-091818-A 0-3FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809441-09 | ☒ PCB (8082A) |
| B-637-091818 1FT | 9/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809441-10 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 02, 03, 06, and 10 (primary runs) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 04, and 07, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 02, 03, 06, and 10, all results reported from diluted runs (50, 20, 20, and 50x), with RLs raised. RLs for all ND results for samples 02, 03, 06, and 10 were below PAL (maximum RL 2.9 mg/kg for PCBs in sample 02; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809441

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809505**; Report Issued **November 14, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-328-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-01 | ☒ PCB (8082A) |
| B-329-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-02 | ☒ PCB (8082A) |
| B-383-091918 1ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809505-03 | ☒ PCB (8082A) |
| B-331-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-04 | ☒ PCB (8082A) |
| B-332-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-05 | ☒ PCB (8082A) |
| B-333-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-06 | ☒ PCB (8082A) |
| B-335-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-07 | ☒ PCB (8082A) |
| B-336-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-08 | ☒ PCB (8082A) |
| B-339-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-09 | ☒ PCB (8082A) |
| B-340-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-10 | ☒ PCB (8082A) |
| B-341-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-11 | ☒ PCB (8082A) |
| B-342-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-12 | ☒ PCB (8082A) |
| B-343-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-13 | ☒ PCB (8082A) |
| B-344-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-14 | ☒ PCB (8082A) |
| B-345-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-15 | ☒ PCB (8082A) |
| B-346-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-16 | ☒ PCB (8082A) |
| B-347-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-17 | ☒ PCB (8082A) |
| B-352-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-18 | ☒ PCB (8082A) |
| B-353-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-19 | ☒ PCB (8082A) |
| B-354-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809505-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Holding times/Sample preservation – The cooler temperature (13.1 °C) was not within the acceptance limit of < 6°C; however, samples were delivered to the laboratory on ice on the same day as collection. Given the limited time from collection and the contaminant persistence, no impact on the data quality is expected. |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 02, 03, 06, and 10 (primary runs) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – **For sample 03, MS recoveries were within QC limit, but MSD recovery for Aroclor 1260, confirmatory column only, was above QC limit. Detected result for Aroclor 1254 in sample 03 (reported from confirmatory column) is considered an estimate (J qualified). (No other detections, or results reported from confirmatory column, in sample).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) – Primary sample 1809505-03/FD Sample 1809507-06; Primary sample 1809505-12/ FD sample 1809507-08. RPDs within limits. |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 09, 14, 16, and 17, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 04, 05, 06, and 10, all results reported from diluted runs (50, 20, 20, and 20x), with RLs raised. RLs for all ND results for samples 04, 05, 06, and 10 were below PAL (maximum RL 3.1 mg/kg for PCBs in sample 04; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809505

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-383-091918 1ft | PCBs | Aroclor 1254 | 0.7 | mg/kg | **0.7 J** | AM |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809506**; Report Issued **November 14, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-355-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-01 | ☒ PCB (8082A) |
| B-364-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-02 | ☒ PCB (8082A) |
| B-365-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-03 | ☒ PCB (8082A) |
| B-393-091918 1ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809506-04 | ☒ PCB (8082A) |
| B-367-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-05 | ☒ PCB (8082A) |
| B-368-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-06 | ☒ PCB (8082A) |
| B-369-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-07 | ☒ PCB (8082A) |
| B-370-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-08 | ☒ PCB (8082A) |
| B-368N-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-09 | ☒ PCB (8082A) |
| B-375-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-10 | ☒ PCB (8082A) |
| B-376-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-11 | ☒ PCB (8082A) |
| B-377-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-12 | ☒ PCB (8082A) |
| B-378-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-13 | ☒ PCB (8082A) |
| B-379-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-14 | ☒ PCB (8082A) |
| B-380-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-15 | ☒ PCB (8082A) |
| B-381-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-16 | ☒ PCB (8082A) |
| B-386-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-17 | ☒ PCB (8082A) |
| B-387-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-18 | ☒ PCB (8082A) |
| B-388-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-19 | ☒ PCB (8082A) |
| B-389-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809506-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Holding times/Sample preservation – The cooler temperature (13.1 °C) was not within the acceptance limit of < 6°C; however, samples were delivered to the laboratory on ice on the same day as collection. Given the limited time from collection and the contaminant persistence, no impact on the data quality is expected. |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 07, 08, 15, and 16 (primary runs) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) – Primary sample 1809506-04/FD Sample 1809507-07. RPDs within limits. |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 06, 09, 13, 14, and 19, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 07, 08, 15, 16, and 20, all results reported from diluted runs (50, 50, 50, 50, and 20x), with RLs raised. RLs for all ND results for samples 07, 08, 15, 16, and 20 were below PAL (maximum RL 4.8 mg/kg for PCBs in sample 08; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809506

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809507**; Report Issued **November 14, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-411-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-01 | ☒ PCB (8082A) |
| B-372-091918 1ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809507-02 | ☒ PCB (8082A) |
| B-330-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-03 | ☒ PCB (8082A) |
| B-366-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-04 | ☒ PCB (8082A) |
| B-372-091918-1 1ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-05 | ☒ PCB (8082A) |
| B-383-091918-1 1ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-06 | ☒ PCB (8082A) |
| B-393-091918-1 1ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-07 | ☒ PCB (8082A) |
| B-342-091918-1 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-08 | ☒ PCB (8082A) |
| B-390-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-09 | ☒ PCB (8082A) |
| B-391-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-10 | ☒ PCB (8082A) |
| B-397-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-11 | ☒ PCB (8082A) |
| B-398-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-12 | ☒ PCB (8082A) |
| B-399-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-13 | ☒ PCB (8082A) |
| B-400-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-14 | ☒ PCB (8082A) |
| B-401-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-15 | ☒ PCB (8082A) |
| B-408-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-16 | ☒ PCB (8082A) |
| B-409-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-17 | ☒ PCB (8082A) |
| B-410-091918 6ft | 9/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809507-18 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Holding times/Sample preservation – The cooler temperature (13.1 °C) was not within the acceptance limit of < 6°C; however, samples were delivered to the laboratory on ice on the same day as collection. Given the limited time from collection and the contaminant persistence, no impact on the data quality is expected. |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 09, 10, and 14-18 (primary runs) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) - Primary sample 1809507-02/FD Sample 1809507-05. RPDs within limits. FD samples 1809507-06, 07, and 08 results are evaluated with primary samples in DVRs for 1809505 and1809506. |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) - Case narrative notes C810430-CCV3 %D for DCB surrogate below control limit; however, as the CCV surrogate %D was acceptable on one of two columns, the methodology considers this CCV acceptable. No qualification indicated. |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 04, 12, and 13, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 09, 10, and 14-18, all results reported from diluted runs (all 20x), with RLs raised. RLs for all ND results for samples 09, 10, and 14-18 were below PAL (maximum RL 1.4 mg/kg for PCBs in samples 10 and 15; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809507

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809528**; Report Issued **November 14, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-389-092018-B 0-3ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809528-01 | ☒ PCB (8082A) |
| B-559-092018-B 6ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809528-02 | ☒ PCB (8082A) |
| B-629-092018-B 6ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809528-03 | ☒ PCB (8082A) |
| SW-356-092018-A 2-6ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809528-04 | ☒ PCB (8082A) |
| SW-508-092018-B 0-5ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809528-05 | ☒ PCB (8082A) |
| SW-507-092018-B 0-5ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809528-06 | ☒ PCB (8082A) |
| SW-506-092018-B 0-4ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809528-07 | ☒ PCB (8082A) |
| SW-505-092018-A 0-4ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809528-08 | ☒ PCB (8082A) |
| SW-82-092018-A 4-6ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809528-09 | ☒ PCB (8082A) |
| SW-78-092018-A 4-6ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809528-10 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 01-04, and 08 (primary runs) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) –For samples 01-04, and 08, all results reported from diluted runs (50, 100, 20, 50, and 20x), with RLs raised. RLs for all ND results for samples 01-04, and 08 were below PAL (maximum RL 5.7 mg/kg for PCBs in sample 02; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809528

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809529**; Report Issued **November 15, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-97-092018-A 2-6ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809529-01 | ☒ PCB (8082A) |
| SW-96-092018-A 2-6ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809529-02 | ☒ PCB (8082A) |
| SW-94-092018-A 2-6ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809529-03 | ☒ PCB (8082A) |
| B-755-092018-B 7ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809529-04 | ☒ PCB (8082A) |
| SW-502-092018-A 0-4ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809529-05 | ☒ PCB (8082A) |
| SW-503-092018-A 0-5ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809529-06 | ☒ PCB (8082A) |
| B-535-092018-B 10ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809529-07 | ☒ PCB (8082A) |
| SW-84-092018-A 4-6ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809529-08 | ☒ PCB (8082A) |
| B-88-092018-B 4ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809529-09 | ☒ PCB (8082A) |
| SW-135-092018-A 3-7ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809529-10 | ☒ PCB (8082A) |
| SW-504-092018-B 0-5ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809529-11 | ☒ PCB (8082A) |
| SW-134-092018-A 3-7ft | 9/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809529-12 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 03, 09, 10, and 12 (primary runs) diluted below MRL. (No qualification indicated). **For sample 07, TMX surrogate recovery for primary column above QC limit. As sample 07 Aroclor 1254 result was taken from primary column, this result is considered an estimate (J qualified.)** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 02 and 05, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 03, 09, 10, and 12, all results reported from diluted runs (20, 50, 50, and 50x), with RLs raised. RLs for all ND results for samples 03, 09, 10, and 12 were below PAL (maximum RL 3.2 mg/kg for PCBs in sample 09; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809529

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-535-092018-B 10ft | PCBs | Aroclor 1254 | 0.6 | mg/kg | **0.6 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809575**; Report Issued **November 15, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-413-092118-C | 9/21/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-01 | ☒ PCB (8082A) |
| B-732-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-02 | ☒ PCB (8082A) |
| B-733-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-03 | ☒ PCB (8082A) |
| B-734-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-04 | ☒ PCB (8082A) |
| B-735-092118-1 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-05 | ☒ PCB (8082A) |
| B-735-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809575-06 | ☒ PCB (8082A) |
| B-736-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-07 | ☒ PCB (8082A) |
| B-737-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-08 | ☒ PCB (8082A) |
| B-739-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-09 | ☒ PCB (8082A) |
| B-740-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-10 | ☒ PCB (8082A) |
| B-741-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-11 | ☒ PCB (8082A) |
| B-742-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-12 | ☒ PCB (8082A) |
| B-743-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-13 | ☒ PCB (8082A) |
| B-744-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-14 | ☒ PCB (8082A) |
| B-745-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-15 | ☒ PCB (8082A) |
| B-746-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-16 | ☒ PCB (8082A) |
| B-747-092118 4FT | 9/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809575-17 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 03 and 11 (primary runs) diluted below MRL. (No qualification indicated). |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 02 and 04, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 03 and 11, all results reported from diluted runs (20x for both), with RLs raised. RLs for all ND results for samples 03 and 11 were below PAL (maximum RL 1.2 mg/kg for PCBs in both samples; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809575

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809616**; Report Issued **November 15, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-701-092418 0-4FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809616-01 | ☒ PCB (8082A) |
| SW-493-092418 0-4FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-02 | ☒ PCB (8082A) |
| SW-494-092418 0-4FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-03 | ☒ PCB (8082A) |
| SW-495-092418 0-4FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-04 | ☒ PCB (8082A) |
| SW-509-092418 0-4FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-05 | ☒ PCB (8082A) |
| SW-510-092418 0-4FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-06 | ☒ PCB (8082A) |
| SW-511-092418 0-4FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-07 | ☒ PCB (8082A) |
| SW-512-092418 0-4FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-08 | ☒ PCB (8082A) |
| SW-513-092418 0-4FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-09 | ☒ PCB (8082A) |
| SW-514-092418 0-4FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-10 | ☒ PCB (8082A) |
| B-508-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-11 | ☒ PCB (8082A) |
| B-509-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-12 | ☒ PCB (8082A) |
| B-517-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-13 | ☒ PCB (8082A) |
| B-506-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-14 | ☒ PCB (8082A) |
| B-511-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-15 | ☒ PCB (8082A) |
| B-516-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-16 | ☒ PCB (8082A) |
| SW-493-092418-1 0-4FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809616-17 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 03, 11, 13, 16, and 17 (primary runs) diluted below MRL. (No qualification indicated). **For sample 01, diluted run (10x), primary column DCB surrogate is diluted below detectable level, but column 2 is over QC limit. Based upon this and MS/MSD results, the detected Aroclor 1254 concentration is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – **Sample 01 - All primary column and MS/MSD confirmation column recoveries over QC limit. Based upon the MS/MSD and surrogate recoveries in diluted run, the detected Aroclor 1254 concentration is considered an estimate (qualified with J).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – **Sample 02/17 Aroclor 1254 RPD above QC limit, is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 02, 04, 10, 12, and 15, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 03, 11, 13, 16, and 17, all results reported from diluted runs (50, 50, 20, 20 and 50x), with RLs raised. RLs for all ND results for samples 03, 11, 13, 16, and 17 were below PAL (maximum RL 2.9 mg/kg for PCBs in sample 03; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809616

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-701-092418 0-4FT | PCBs | Aroclor 1254 | 3.9 | mg/kg | **3.9 J** | SA, AM |
| SW-493-092418 0-4FT | PCBs | Aroclor 1254 | 4.6 | mg/kg | **4.6 J** | DU |
| SW-493-092418-1 0-4FT | PCBs | Aroclor 1254 | 20.7 | mg/kg | **20.7 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809651**; Report Issued **November 15, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-484-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-01 | ☒ PCB (8082A) |
| B-486-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-02 | ☒ PCB (8082A) |
| B-491-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-03 | ☒ PCB (8082A) |
| B-492-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-04 | ☒ PCB (8082A) |
| B-493-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-05 | ☒ PCB (8082A) |
| B-495-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-06 | ☒ PCB (8082A) |
| B-415-092518 1FT | 9/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-07 | ☒ PCB (8082A) |
| B-420-092518 1FT | 9/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809651-08 | ☒ PCB (8082A) |
| B-420-092518-1 1FT | 9/25/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-09 | ☒ PCB (8082A) |
| B-425-092518 1FT | 9/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-10 | ☒ PCB (8082A) |
| B-430-092518 1FT | 9/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-11 | ☒ PCB (8082A) |
| SW-520-092518-B 0-3FT | 9/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-12 | ☒ PCB (8082A) |
| SW-521-092518-B 0-3FT | 9/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-13 | ☒ PCB (8082A) |
| B-414-092518 1FT | 9/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-14 | ☒ PCB (8082A) |
| B-417-092518 1FT | 9/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-15 | ☒ PCB (8082A) |
| B-418-092518 1FT | 9/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-16 | ☒ PCB (8082A) |
| B-421-092518 1FT | 9/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-17 | ☒ PCB (8082A) |
| B-426-092518 1FT | 9/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809651-18 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 07 and 14 (primary runs) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – **Samples 08/09 Aroclor 1242 results are considered estimates (qualified with UJ/J).** |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 02-06, 10, 15, 17, and 18, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 07 and 14, all results reported from diluted runs (50x for both samples), with RLs raised. RLs for all ND results for samples 07 and 14 were below PAL (RL 3.0 mg/kg for PCBs in both samples; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809651

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-420-092518 1FT | PCBs | Aroclor 1242 | 0.06 U | mg/kg | 0.06 UJ | DU |
| B-420-092518-1 1FT | PCBs | Aroclor 1242 | 0.4 | mg/kg | **0.4 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809681**; Report Issued **November 15, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-645-092418 0-2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-01 | ☒ PCB (8082A) |
| SW-648-092418 0-2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-02 | ☒ PCB (8082A) |
| SW-649-092418 0-2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809681-03 | ☒ PCB (8082A) |
| SW-649-092418-1 0-2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-04 | ☒ PCB (8082A) |
| SW-650-092418 0-2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-05 | ☒ PCB (8082A) |
| SW-651-092418 0-2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-06 | ☒ PCB (8082A) |
| SW-652-092418 0-2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-07 | ☒ PCB (8082A) |
| SW-653-092418 0-2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-08 | ☒ PCB (8082A) |
| SW-654-092418 0-2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-09 | ☒ PCB (8082A) |
| SW-656-092418 0-2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-10 | ☒ PCB (8082A) |
| B-458-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-11 | ☒ PCB (8082A) |
| B-459-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-12 | ☒ PCB (8082A) |
| B-460-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-13 | ☒ PCB (8082A) |
| B-461-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-14 | ☒ PCB (8082A) |
| B-468-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-15 | ☒ PCB (8082A) |
| B-476-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1809681-16 | ☒ PCB (8082A) |
| B-477-092418 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-17 | ☒ PCB (8082A) |
| B-476-092418-1 2FT | 9/24/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1809681-18 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 01, 02, 06, 08, and 10-14 (primary runs) diluted below MRL. (No qualification indicated). For samples 03 and 15, the DCB surrogate recovery for the confirmatory column in the undiluted sample runs were above QC limits; as no concentrations were reported from the undiluted runs, no qualification to the data is indicated. (All detections in those samples were reported from diluted sample runs, for which acceptable surrogate recoveries were achieved.) |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – **For sample 03, MS recoveries for Aroclors 1016 and 1260 and MSD recovery (primary column) for Aroclor 1260 were greater than QC limit, with most RPDs above maximum QC limit. For sample 16, MSD recoveries for Aroclor 1016 and 1260 were greater than QC limit, with most RPDs above maximum QC limit. Per DV protocol and professional judgment, detected concentrations of Aroclor 1254 in samples 03 and 16 are considered estimates (qualified with "J").** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 03-05, 07, 10, and 15-18, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 01, 02, 06, 08, and 10-14, all results reported from diluted runs (20, 50, 20, 20, 20, 50, 100, 200, and 100x), with RLs raised. RLs for all ND results for samples 01, 02, 06, 08, and 10-14 were below PAL (maximum RL 12.2 mg/kg for PCBs in sample 13; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809681

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-649-092418 0-2FT | PCBs | Aroclor 1254 | 4.5 | mg/kg | **4.5 J** | AM, MR |
| B-476-092418 2FT | PCBs | Aroclor 1254 | 1.3 | mg/kg | **1.3 J** | AM, MR |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809724**; Report Issued **November 15, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-169-092718 2FT | 9/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-01 | ☒ PCB (8082A) |
| B-466-092718 2FT | 9/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-02 | ☒ PCB (8082A) |
| B-165-092718 2FT | 9/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-03 | ☒ PCB (8082A) |
| B-171-092718 2FT | 9/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-04 | ☒ PCB (8082A) |
| B-173-092718 2FT | 9/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-05 | ☒ PCB (8082A) |
| B-174-092718 2FT | 9/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-06 | ☒ PCB (8082A) |
| B-176-092718 2FT | 9/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-07 | ☒ PCB (8082A) |
| B-170-092718 2FT | 9/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-08 | ☒ PCB (8082A) |
| B-175-092718 2FT | 9/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-09 | ☒ PCB (8082A) |
| SW-145-092718 0-2FT | 9/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-10 | ☒ PCB (8082A) |
| SW-146-092718 0-2FT | 9/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-11 | ☒ PCB (8082A) |
| SW-147-092718 0-2FT | 9/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-12 | ☒ PCB (8082A) |
| SW-148-092718 0-2FT | 9/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-13 | ☒ PCB (8082A) |
| SW-149-092718 0-2FT | 9/27/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-14 | ☒ PCB (8082A) |
| SW-150-092718 0-2FT | 9/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-15 | ☒ PCB (8082A) |
| SW-152-092718 0-2FT | 9/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-16 | ☒ PCB (8082A) |
| B-910-092718 1FT | 9/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-17 | ☒ PCB (8082A) |
| B-920-092718 1FT | 9/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-18 | ☒ PCB (8082A) |
| SW-536-092518-B 0-2FT | 9/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809724-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 01-06, 08, 09, and 15 (primary runs) diluted below MRL. (No qualification indicated). For sample 07, the DCB surrogate recovery for the confirmatory column in the undiluted sample run was above QC limits; as no concentrations were reported from the undiluted run, no qualification to the data is indicated. (The only detection in that sample was reported from the diluted sample run, for which acceptable surrogate recoveries were achieved.) |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) - Case narrative notes C8J0014-CCV3 %D for DCB surrogate below control limit; however, as the CCV surrogate %D was acceptable on one of two columns, the methodology considers this CCV acceptable. No qualification indicated. |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 07, 10, 16, 17, and 19, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 01-06, 08, 09, and 15, all results reported from diluted runs (20, 50, 20, 20, 20, 50, 50, 20, and 20x), with RLs raised. RLs for all ND results in samples 01-06, 08, 09, and 15 were below PAL (maximum RL 10.3 mg/kg for PCBs in sample 02; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809724

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1809780**; Report Issued **November 15, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-160-092818 0-2FT | 9/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809780-01 | ☒ VOC (8260B) |
| SW-164-092818 0-2FT | 9/28/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809780-02 | ☒ VOC (8260B) |
| SW-167-092818 0-2FT | 9/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809780-03 | ☒ VOC (8260B) |
| SW-174-092818 0-2FT | 9/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809780-04 | ☒ VOC (8260B) |
| SW-177-092818 0-2FT | 9/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809780-05 | ☒ VOC (8260B) |
| SW-182-092818 0-2FT | 9/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809780-06 | ☒ VOC (8260B) |
| B-218-092818 2FT | 9/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809780-07 | ☒ VOC (8260B) |
| B-241-092818 2FT | 9/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1809780-08 | ☒ VOC (8260B) |
| TB | 9/28/2018 | ☐ Soil ☒ Solid | ☐ FD ☐ MS/MSD ☐ EB ☒ TB | 1809780-09 | ☒ VOC (8260B) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☒ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) – **LCS/LCSD RPD exceeded laboratory QC limit for 1,4-dioxane (recoveries within QC limits). Qualify all 1,4-dioxane results (samples 01-08) with UJ.** |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☐ | ☒ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☒ | ☐ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☐ | ☒ | ☐ | Sulfur Removal (pesticide and PCB aroclors only). |
| ☒ | ☐ | ☐ | Percent solids |
| ☒ | ☐ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☒ | ☐ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1809780

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-160-092818 0-2FT | VOCs | 1,4-Dioxane | 0.0595 U | mg/kg | 0.0595 UJ | CS |
| SW-164-092818 0-2FT | VOCs | 1,4-Dioxane | 0.0787 U | mg/kg | 0.0787 UJ | CS |
| SW-167-092818 0-2FT | VOCs | 1,4-Dioxane | 0.0816 U | mg/kg | 0.0816 UJ | CS |
| SW-174-092818 0-2FT | VOCs | 1,4-Dioxane | 0.0693 U | mg/kg | 0.0693 UJ | CS |
| SW-177-092818 0-2FT | VOCs | 1,4-Dioxane | 0.0681 U | mg/kg | 0.0681 UJ | CS |
| SW-182-092818 0-2FT | VOCs | 1,4-Dioxane | 0.0730 U | mg/kg | 0.0730 UJ | CS |
| B-218-092818 2FT | VOCs | 1,4-Dioxane | 0.0765 U | mg/kg | 0.0765 UJ | CS |
| B-241-092818 2FT | VOCs | 1,4-Dioxane | 0.0662 U | mg/kg | 0.0662 UJ | CS |
| TB | VOCs | 1,4-Dioxane | 0.100 U | mg/kg | 0.100 UJ | CS |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810069**; Report Issued **November 19, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-77-100218 6FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-01 | ☒ PCB (8082A) |
| B-78-100218 6FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-02 | ☒ PCB (8082A) |
| B-79-100218 6FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-03 | ☒ PCB (8082A) |
| B-80-100218 6FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-04 | ☒ PCB (8082A) |
| SW-64-100218 4-6FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-05 | ☒ PCB (8082A) |
| SW-65-100218 4-6FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-06 | ☒ PCB (8082A) |
| SW-67-100218 4-6FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-07 | ☒ PCB (8082A) |
| SW-69-100218 4-6FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-08 | ☒ PCB (8082A) |
| SW-71-100218 4-6FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-09 | ☒ PCB (8082A) |
| SW-73-100218 4-6FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-10 | ☒ PCB (8082A) |
| SW-77-100218 4-6FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-11 | ☒ PCB (8082A) |
| SW-75-100218 4-6FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-12 | ☒ PCB (8082A) |
| B-115-100218 3FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-13 | ☒ PCB (8082A) |
| B-120-100218 3FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-14 | ☒ PCB (8082A) |
| B-125-100218 3FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-15 | ☒ PCB (8082A) |
| B-130-100218 3FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-16 | ☒ PCB (8082A) |
| B-135-100218 3FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-17 | ☒ PCB (8082A) |
| B-140-100218 3FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-18 | ☒ PCB (8082A) |
| SW-715-100218 0-4FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-19 | ☒ PCB (8082A) |
| SW-70-100218 0-4FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810069-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 05, 06, 08, 09, 11, 12, 14, 15, and 18-20 (primary runs) diluted below MRL. (No qualification indicated). For sample 16, the DCB surrogate recovery for the primary column in the undiluted sample run was above QC limits; as no concentrations were reported from the undiluted run, and the surrogate recoveries were within QC limits in the diluted run, no qualification to the data is indicated. **For sample 01, the DCB surrogate recovery for the confirmation column in the diluted run was above QC limits; as the only detected result was reported from the confirmation column of the diluted run, the Aroclor 1254 detected result for sample 01 is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) - Case narrative notes C8J0077-CCV8 and C8J0077-CCVC %D's for DCB surrogate below control limit; however, as the CCV surrogate %D's were acceptable on one of two columns, the methodology considers these CCV's acceptable. No qualification indicated. |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-03, 07, 10, 13,16, and 17, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 05, 06, 08, 09, 11, 12, 14, 15, and 18-20, all results reported from diluted runs (20 or 50x diluted runs), with RLs raised. RLs for all ND results in samples 05, 06, 08, 09, 11, 12, 14, 15, and 18-20 were below PAL (maximum RL 3.2 mg/kg for PCBs in sample 18; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810069

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-77-100218 6FT | PCBs | Aroclor 1254 | 7.0 | mg/kg | **7.0 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810120**; Report Issued **November 19, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-113-100218 3FT | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810120-01 | ☒ PCB (8082A) |
| B-114-100218 3FT | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810120-02 | ☒ PCB (8082A) |
| B-116-100218 3FT | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810120-03 | ☒ PCB (8082A) |
| B-116-100218-1 3FT | 10/2/18 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810120-04 | ☒ PCB (8082A) |
| B-117-100218 3FT | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810120-05 | ☒ PCB (8082A) |
| B-117-100218-1 3FT | 10/2/18 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810120-06 | ☒ PCB (8082A) |
| B-118-100218 3FT | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810120-07 | ☒ PCB (8082A) |
| B-119-100218 3FT | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810120-08 | ☒ PCB (8082A) |
| B-119-100218-1 3FT | 10/2/18 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810120-09 | ☒ PCB (8082A) |
| B-121-100218 3FT | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810120-10 | ☒ PCB (8082A) |
| B-121-100218-1 3FT | 10/2/18 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810120-11 | ☒ PCB (8082A) |
| B-122-100218 3FT | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810120-12 | ☒ PCB (8082A) |
| B-123-100218 3FT | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810120-13 | ☒ PCB (8082A) |
| B-124-100218 3FT | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810120-14 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 01-14 (primary runs) diluted below MRL. (No qualification indicated). |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – Samples 03, 05, 08, and 10 all run for MS/MSD QC analysis. All samples contained elevated PCB concentrations requiring dilution. All MS and MSD recoveries above QC limit as the result of co-elution. Given the elevated PCB concentrations, these QC results are not valid for sample evaluation. Evaluation defers to the field duplicate results. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) Case narrative notes C8J0138-CCV1 %D for DCB surrogate below control limit; however, as the CCV surrogate %D was acceptable on one of two columns, the methodology considers this CCV acceptable. No qualification indicated. |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-14, all results reported from diluted runs (20 or 50x), with RLs raised. RLs for all ND results for samples 01-14 were below PAL (maximum RL 2.9 mg/kg for PCBs in samples 01 and 03; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810120

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810121**; Report Issued **November 19, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-648-100218-A 0-4FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810121-01 | ☒ PCB (8082A) |
| B-459-100218-A 4FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810121-02 | ☒ PCB (8082A) |
| B-460-100218-A 4FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810121-03 | ☒ PCB (8082A) |
| B-559-100218-C 6.5FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810121-04 | ☒ PCB (8082A) |
| SW-714-100218 0-4FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810121-05 | ☒ PCB (8082A) |
| SW-66-100218 0-4FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810121-06 | ☒ PCB (8082A) |
| SW-68-100218 0-4FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810121-07 | ☒ PCB (8082A) |
| SW-72-100218 0-4FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810121-08 | ☒ PCB (8082A) |
| SW-74-100218 0-4FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810121-09 | ☒ PCB (8082A) |
| SW-76-100218 0-4FT | 10/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810121-10 | ☒ PCB (8082A) |
| SW-110-100318 0-3FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810121-11 | ☒ PCB (8082A) |
| SW-115-100318 0-3FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810121-12 | ☒ PCB (8082A) |
| SW-120-100318 0-3FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810121-13 | ☒ PCB (8082A) |
| SW-125-100318 0-3FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810121-14 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 02-05, and 08-10 (primary runs) diluted below MRL. (No qualification indicated). For sample 01, the DCB surrogate recovery for the confirmation column in the diluted sample run diluted below MRL; as the diluted run concentration was reported from the primary column, and the surrogate recoveries were within QC limits for the primary column in the diluted run, no qualification to the data is indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 06, 07, 11-13, and 14, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 02-05, and 08-10, all results reported from diluted runs (200, 200, 50, 20, 20, 20, and 50x), with RLs raised. RLs for all ND results in samples 02-05, and 08-10 were below PAL (maximum RL 12.1 mg/kg for PCBs in sample 02; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810121

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810152**; Report Issued **November 19, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-126-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-01 | ☒ PCB (8082A) |
| B-127-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-02 | ☒ PCB (8082A) |
| B-128-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-03 | ☒ PCB (8082A) |
| B-129-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-04 | ☒ PCB (8082A) |
| B-131-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-05 | ☒ PCB (8082A) |
| B-132-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-06 | ☒ PCB (8082A) |
| B-133-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-07 | ☒ PCB (8082A) |
| B-134-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-08 | ☒ PCB (8082A) |
| B-136-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-09 | ☒ PCB (8082A) |
| B-136-100218-1 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-10 | ☒ PCB (8082A) |
| B-137-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-11 | ☒ PCB (8082A) |
| B-138-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-12 | ☒ PCB (8082A) |
| B-139-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-13 | ☒ PCB (8082A) |
| B-141-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-14 | ☒ PCB (8082A) |
| B-141-100218-1 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-15 | ☒ PCB (8082A) |
| B-142-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-16 | ☒ PCB (8082A) |
| B-143-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-17 | ☒ PCB (8082A) |
| B-144-100218 3ft | 10/2/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-18 | ☒ PCB (8082A) |
| SW-110-100318 0-3ft | 10/3/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-19 | ☒ PCB (8082A) |
| SW-111-100318 0-3ft | 10/3/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810152-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 03, 05-07, 09, 10, 13-15, and 20 (primary runs) diluted below MRL. (No qualification indicated). DCB surrogate recovery above QC limit for undiluted runs of sample 02 (primary column), 08, 11, and 16 (secondary columns); as no detected concentrations reported from undiluted runs of these samples, no qualification to the data is indicated (for potential positive bias). **For sample 19, the DCB surrogate recovery for the confirmation column in the diluted run was above QC limits; as the only detected result was reported from the confirmation column of the diluted run, the Aroclor 1254 detected result for sample 19 is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 02, 04, 08, 11, 12, and 16-19, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 03, 05-07, 09, 10, 13-15, and 20, all results reported from diluted runs (20, 20, 50, 100, 20, 20, 20, 50, 50, and 50x), with RLs raised. RLs for all ND results for samples 03, 05-07, 09, 10, 13-15, and 20 were below PAL (maximum RL 6.0 mg/kg for PCBs in sample 07; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810152

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-110-100318 0-3ft | PCBs | Aroclor 1254 | 6.6 | mg/kg | **6.6 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810153**; Report Issued **November 28, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-113-100318 0-3FT | 10/3/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-01 | ☒ PCB (8082A) |
| SW-114-100318 0-3FT | 10/3/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-02 | ☒ PCB (8082A) |
| SW-120-100318 0-3FT | 10/3/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-03 | ☒ PCB (8082A) |
| SW-122-100318 0-3FT | 10/3/18 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810153-04 | ☒ PCB (8082A) |
| SW-122-100318-1 0-3FT | 10/3/18 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-05 | ☒ PCB (8082A) |
| SW-123-100318 0-3FT | 10/3/18 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810153-06 | ☒ PCB (8082A) |
| SW-123-100318-1 0-3FT | 10/3/18 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-07 | ☒ PCB (8082A) |
| SW-128-100318 0-3FT | 10/3/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-08 | ☒ PCB (8082A) |
| B-404-100418 0.5FT | 10/4/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-09 | ☒ PCB (8082A) |
| B-405-100418 1FT | 10/4/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-10 | ☒ PCB (8082A) |
| B-406-100418 1FT | 10/4/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-11 | ☒ PCB (8082A) |
| B-407-100418 1FT | 10/4/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-12 | ☒ PCB (8082A) |
| B-394-100418 1FT | 10/4/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-13 | ☒ PCB (8082A) |
| B-395-100418 1FT | 10/4/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-14 | ☒ PCB (8082A) |
| B-384-100418 1FT | 10/4/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-15 | ☒ PCB (8082A) |
| B-373-100418 1FT | 10/4/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-16 | ☒ PCB (8082A) |
| B-362-100418 1FT | 10/4/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-17 | ☒ PCB (8082A) |
| B-361-100418 1FT | 10/4/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810153-18 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 01 and 05 (primary runs) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – MS/MSD analyzed on sample 04: MS recoveries above QC limit for A. 1016 and 1260, MSD recoveries above QC limit for A. 1260, RPDs for A. 1260 above QC limit. MS/MSD analysis run on undiluted sample in which elevated A. 1254 present in unspiked sample (5.1 mg/kg). The elevated concentration in an undiluted sample interfered with resolution in the calculation of A. 1016 and 1260 concentrations, and thus the MS/MSD results are not valid. MS/MSD analyzed on sample 06, with similar results (recoveries for A. 1016 and 1260 all above QC limits, A. 1254 at 8.5 mg/kg in unspiked sample); therefore MS/MSD results are similarly invalid. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – **RPD for Aroclor 1254 in samples 04/05 above QC limit; samples 04/05 Aroclor 1254 results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 02, 04, and 06-09, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 01 and 05, all results reported from diluted runs (20x for both), with RLs raised. RLs for all ND results for samples 01 and 05 were below PAL (maximum RL 1.2 mg/kg for PCBs in both samples; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810153

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-123-100318 0-3FT | PCBs | Aroclor 1254 | 5.1 | mg/kg | **5.1 J** | DU |
| SW-123-100318-1 0-3FT | PCBs | Aroclor 1254 | 11.7 | mg/kg | **11.7 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810154**; Report Issued **November 29, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-403-100418 3FT | 10/4/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810154-01 | ☒ PCB (8082A) |
| SW-129-100318 0-3FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810154-02 | ☒ PCB (8082A) |
| SW-112-100318 0-3FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810154-03 | ☒ PCB (8082A) |
| B-896-100118 0-2FT | 10/1/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810154-04 | ☒ SVOC (8270D) |
| B-896-100118 2-4FT | 10/1/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810154-05 | ☒ SVOC (8270D) |
| B-897-100118 0-2FT | 10/1/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810154-06 | ☒ SVOC (8270D) |
| B-897-100118 2-4FT | 10/1/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810154-07 | ☒ SVOC (8270D) |
| B-898-100118 0-2FT | 10/1/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810154-08 | ☒ PCB (8082A) ☒ SVOC (8270D) |
| B-898-100118 2-4FT | 10/1/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810154-09 | ☒ PCB (8082A) ☒ SVOC (8270D) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 02 and 03 (PCB primary runs) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☒ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) – For PCBs: Case narrative notes C8J0138-CCV1 %D for DCB surrogate below control limit; however, as the CCV surrogate %D was acceptable on one of two columns, the methodology considers this CCV acceptable. No qualification indicated.<br>**- For SVOCs: CCV %D outside EPA Region 1 QC limit (+25%) includes Benzoic Acid and Pentachlorophenol for samples 04-07 and Pentachlorophenol for samples 08 and 09; these results are considered estimates (qualified with UJ).** |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – PCBs: For samples 01, 06, 07, 11-13, and 14, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 02-05, and 08-10, all results reported from diluted runs (200, 200, 50, 20, 20, 20, and 50x), with RLs raised. RLs for all ND results in samples 02-05, and 08-10 were below PAL (maximum RL 12.1 mg/kg for PCBs in sample 02; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810154

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-896-100118 0-2FT | SVOC | Benzoic Acid | 1.84 U | mg/kg | 1.84 UJ | CCV |
| | | Pentachlorophenol | 1.84 U | mg/kg | 1.84 UJ | CCV |
| B-896-100118 2-4FT | SVOC | Benzoic Acid | 1.71 U | mg/kg | 1.71 UJ | CCV |
| | | Pentachlorophenol | 1.71 U | mg/kg | 1.71 UJ | CCV |
| B-897-100118 0-2FT | SVOC | Benzoic Acid | 1.72 U | mg/kg | 1.72 UJ | CCV |
| | | Pentachlorophenol | 1.72 U | mg/kg | 1.72 UJ | CCV |
| B-897-100118 2-4FT | SVOC | Benzoic Acid | 1.97 U | mg/kg | 1.97 UJ | CCV |
| | | Pentachlorophenol | 1.97 U | mg/kg | 1.97 UJ | CCV |
| B-898-100118 0-2FT | SVOC | Pentachlorophenol | 1.92 U | mg/kg | 1.92 UJ | CCV |
| B-898-100118 2-4FT | SVOC | Pentachlorophenol | 1.81 U | mg/kg | 1.81 UJ | CCV |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810213**; Report Issued **November 19, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-944-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-01 | ☒ PCB (8082A) |
| B-945-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-02 | ☒ PCB (8082A) |
| B-946-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-03 | ☒ PCB (8082A) |
| SW-693-092518-A 0-3FT | 9/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-04 | ☒ PCB (8082A) |
| SW-311-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-05 | ☒ PCB (8082A) |
| SW-313-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-06 | ☒ PCB (8082A) |
| SW-315-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-07 | ☒ PCB (8082A) |
| SW-317-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-08 | ☒ PCB (8082A) |
| SW-319-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-09 | ☒ PCB (8082A) |
| SW-321-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-10 | ☒ PCB (8082A) |
| SW-323-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-11 | ☒ PCB (8082A) |
| SW-325-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-12 | ☒ PCB (8082A) |
| SW-295-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-13 | ☒ PCB (8082A) |
| SW-297-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-14 | ☒ PCB (8082A) |
| SW-299-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-15 | ☒ PCB (8082A) |
| SW-301-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-16 | ☒ PCB (8082A) |
| SW-303-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-17 | ☒ PCB (8082A) |
| SW-305-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-18 | ☒ PCB (8082A) |
| SW-307-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-19 | ☒ PCB (8082A) |
| SW-309-100518 0-3FT | 10/5/18 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810213-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Holding times/Sample preservation – **Sample 04 was extracted 11 days after collection (submitted to lab 10 days after collection). While the extraction was within the method hold time (unspecified for extraction), extraction was performed beyond the QAPP 7-day hold time; therefore, results are considered estimates (qualified J/UJ).** |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 04, 12 and 14 (primary runs) diluted below MRL. No qualification indicated. For samples 15 and 17, the DCB surrogate recovery for the primary column was above QC limit (potential positive bias), but the only detected result was reported from the secondary column; therefore no qualification is indicated. **For samples 01, 02, 05, 06, and 16, one or both surrogates recovered above QC limits in the primary column; therefore, the detected results from samples 01, 02, 05, 06, and 16 (all Aroclor 1254 reported from the primary column) are considered estimates (qualified J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01 and 03-20, all results reported from diluted runs (20x for sample 12, 50x for samples 04 and 14, and 10x for remainder), with RLs raised. RLs for all ND results in samples 01 and 03-20 were below PAL (maximum RL 2.8 mg/kg for PCBs in samples 04 and 14; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810213

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-944-100318 2FT | PCBs | Aroclor 1254 | 10.3 | mg/kg | **10.3 J** | SA |
| B-945-100318 2FT | PCBs | Aroclor 1254 | 0.3 | mg/kg | **0.3 J** | SA |
| SW-693-092518-A 0-3FT | PCBs | Aroclor 1254 | 25.6 | mg/kg | **25.6 J** | HT |
| | | All remaining aroclors | 2.8 U | mg/kg | 2.8 UJ | HT |
| SW-311-100518 0-3FT | PCBs | Aroclor 1254 | 4.6 | mg/kg | **4.6 J** | SA |
| SW-313-100518 0-3FT | PCBs | Aroclor 1254 | 4.5 | mg/kg | **4.5 J** | SA |
| SW-301-100518 0-3FT | PCBs | Aroclor 1254 | 8.4 | mg/kg | **8.4 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810214**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-923-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-01 | ☒ PCB (8082A) |
| B-924-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-02 | ☒ PCB (8082A) |
| B-925-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-03 | ☒ PCB (8082A) |
| B-927-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-04 | ☒ PCB (8082A) |
| B-928-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-05 | ☒ PCB (8082A) |
| B-929-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-06 | ☒ PCB (8082A) |
| B-931-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-07 | ☒ PCB (8082A) |
| B-932-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-08 | ☒ PCB (8082A) |
| B-933-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-09 | ☒ PCB (8082A) |
| B-935-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-10 | ☒ PCB (8082A) |
| B-936-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-11 | ☒ PCB (8082A) |
| B-937-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-12 | ☒ PCB (8082A) |
| B-938-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-13 | ☒ PCB (8082A) |
| B-939-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-14 | ☒ PCB (8082A) |
| B-940-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-15 | ☒ PCB (8082A) |
| B-941-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810214-16 | ☒ PCB (8082A) |
| B-941-100318-1 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-17 | ☒ PCB (8082A) |
| B-942-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-18 | ☒ PCB (8082A) |
| B-943-100318 2FT | 10/3/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810214-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries - For sample 04, the DCB surrogate recovery from the secondary column was above QC limits, but the only detected result was reported from the primary column (with acceptable surrogate recoveries); no qualification to data. For samples 05 and 07, one or more surrogate recoveries were above QC limits (potential positive bias), but no detected concentrations were reported in sample; no qualification to data. For samples 08, 14, 15, and 16, the DCB surrogate recovery for the primary columns were above QC limits, but the only detected results were reported from the secondary columns (with acceptable surrogate recoveries); no qualification to data.<br>**For sample 02, the DCB surrogate recovery in the primary column diluted below detectable levels, but not in the secondary column (surrogate concentration is typically detectable in a 10x dilution sample). Based on professional judgment, the detected result for Aroclor 1254 is considered an estimate (qualified with J).**<br>**For sample 11, the TMX surrogate recovery in the secondary column was above QC limits; the Aroclor 1254 result (reported from same column) is considered an estimate (qualified with J).**<br>**For samples 06, 09, and 12, the DCB surrogate recoveries in the primary columns were above QC limits; the Aroclor 1254 results (reported from the sample columns) are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - MS/MSD analyzed on sample 16: MS and MSD recoveries above QC limit for A. 1260. MS/MSD analysis run on undiluted sample in which elevated A. 1254 present in unspiked sample (4.7 mg/kg). The elevated concentration in an undiluted sample interfered with resolution in the calculation of A. 1260 concentrations, and thus the MS/MSD results are not valid. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Dual column RPD for sample 13 Aroclor 1254 results above 40% QC limit (not marked on lab Certificate of Analysis). Sample 13 Aroclor 1254 result is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-04, 08, and 11 through 19, all results reported from diluted runs (10x for all listed samples), with RLs raised. RLs for all ND results in samples 01-04, 08, and 11-19 were below PAL (maximum RL 0.6 mg/kg; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810214

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-924-100318 2FT | PCBs | Aroclor 1254 | 7.6 | mg/kg | **7.6 J** | SA |
| B-929-100318 2FT | PCBs | Aroclor 1254 | 0.9 | mg/kg | **0.9 J** | SA |
| B-933-100318 2FT | PCBs | Aroclor 1254 | 0.4 | mg/kg | **0.4 J** | SA |
| B-936-100318 2FT | PCBs | Aroclor 1254 | 6.5 | mg/kg | **6.5 J** | SA |
| B-937-100318 2FT | PCBs | Aroclor 1254 | 3.3 | mg/kg | **3.3 J** | SA |
| B-938-100318 2FT | PCBs | Aroclor 1254 | 2.1 | mg/kg | **2.1 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810256**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-364-100818 0-4 | 10/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-01 | ☒ PCB (8082A) |
| SW-687-100818 0-4 | 10/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-02 | ☒ PCB (8082A) |
| SW-331-100818 0-4 | 10/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-03 | ☒ PCB (8082A) |
| SW-333-100818 0-4 | 10/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-04 | ☒ PCB (8082A) |
| SW-335-100818 0-4 | 10/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-05 | ☒ PCB (8082A) |
| SW-337-100818 0-4 | 10/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-06 | ☒ PCB (8082A) |
| SW-344-100818 0-4 | 10/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-07 | ☒ PCB (8082A) |
| SW-346-100818 0-4 | 10/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-08 | ☒ PCB (8082A) |
| SW-348-100818 0-4 | 10/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-09 | ☒ PCB (8082A) |
| SW-352-100818 0-4 | 10/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-10 | ☒ PCB (8082A) |
| SW-354-100818 0-4 | 10/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-11 | ☒ PCB (8082A) |
| B-350-100818 1FT | 10/8/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-12 | ☒ PCB (8082A) |
| B-363-100818 1FT | 10/8/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-13 | ☒ PCB (8082A) |
| B-374-100818 1FT | 10/8/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-14 | ☒ PCB (8082A) |
| B-385-100818 1FT | 10/8/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-15 | ☒ PCB (8082A) |
| B-412-100818 1FT | 10/8/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-16 | ☒ PCB (8082A) |
| B-382-100818 1FT | 10/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-17 | ☒ PCB (8082A) |
| B-371-100818 1FT | 10/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-18 | ☒ PCB (8082A) |
| B-360-100818 1FT | 10/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810256-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 02, 09, 18, and 19 (primary runs) diluted below MRL. No qualification indicated. **For sample 10, the DCB surrogate recovery was above QC limits in the secondary column; the Aroclor 1254 detected result from sample 10 (reported from secondary column) is considered an estimate (qualified J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 02, 04-11, and 17-19, all results reported from diluted runs (20x for samples 09, 18, and 19, 50x for sample 02, and 10x for remainder), with RLs raised. RLs for all ND results in samples 01, 02, 04-11, and 17-19 were below PAL (maximum RL 2.9 mg/kg for PCBs in sample 02; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810256

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-352-100818 0-4 | PCBs | Aroclor 1254 | 3.0 | mg/kg | **3.0 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810257**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-402-100918 4FT | 10/9/2018 | ☐ Soil ☒ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810257-01 | ☒ PCB (8082A) |
| B-402-100918-1 4FT | 10/9/2018 | ☐ Soil ☒ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-02 | ☒ PCB (8082A) |
| B-392-100918 4FT | 10/9/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-03 | ☒ PCB (8082A) |
| B-359-100918 4FT | 10/9/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-04 | ☒ PCB (8082A) |
| B-349-100918 4FT | 10/9/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-05 | ☒ PCB (8082A) |
| B-256-100918 0.5FT | 10/9/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-06 | ☒ PCB (8082A) |
| B-255-100918 0.5FT | 10/9/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-07 | ☒ PCB (8082A) |
| B-254-100918 0.5FT | 10/9/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-08 | ☒ PCB (8082A) |
| B-250-100918 2FT | 10/9/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-09 | ☒ PCB (8082A) |
| B-244-100918 2FT | 10/9/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-10 | ☒ PCB (8082A) |
| B-238-100918 2FT | 10/9/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-11 | ☒ PCB (8082A) |
| B-912-100518 2FT | 10/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810257-12 | ☒ PCB (8082A) |
| B-912-100518-1 2FT | 10/5/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-13 | ☒ PCB (8082A) |
| SW-704-100518 0-0.5FT | 10/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-14 | ☒ PCB (8082A) |
| SW-713-100518 0-1FT | 10/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-15 | ☒ PCB (8082A) |
| SW-703-100518 0-0.5FT | 10/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-16 | ☒ PCB (8082A) |
| SW-702-100518 0-0.5FT | 10/5/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810257-17 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 16 and 17 (primary runs) diluted below MRL. No qualification indicated. |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - **MS/MSD analyzed on sample 01: MS/MSD RPDs above QC limit. Detected Aroclor 1254 result for sample 01 is considered an estimate (qualified with J).**<br>**MS/MSD analyzed on sample 12: MS/MSD recoveries for A.1016 (primary column) and A.1260 (secondary column) above QC limits. Aroclor 1254 result for sample 12 is considered an estimate (qualified with J).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) - **RPD for Aroclor 1254 in samples 12/13 above QC limit; samples 12/13 Aroclor 1254 results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 04, 05, 09, 10, and 12-17, all results reported from diluted runs (20x for samples 18 and 19, 10x for remaining samples), with RLs raised. RLs for all ND results in samples 04, 05, 09, 10, and 12-17 were below PAL (maximum RL 1.2 mg/kg in sample 17; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810257

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-402-100918 4FT | PCBs | Aroclor 1254 | 0.2 | mg/kg | **0.2 J** | AM |
| B-912-100518 2FT | PCBs | Aroclor 1254 | 1.1 | mg/kg | **1.1 J** | AM, DU |
| B-912-100518-1 2FT | PCBs | Aroclor 1254 | 0.6 | mg/kg | **0.6 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery or RPD above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810258**; Report Issued **January 28, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-899-100818 1FT | 10/8/2018 | ☒ Soil | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810258-01 | ☒ VOC (8260B Low) |
| B-900-100818 1FT | 10/8/2018 | ☒ Soil | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810258-02 | ☒ VOC (8260B Low) |
| B-902-100818 1FT | 10/8/2018 | ☒ Soil | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810258-03 | ☒ VOC (8260B Low) |
| B-901-100818 1FT | 10/8/2018 | ☒ Soil | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810258-04 | ☒ VOC (8260B Low) |
| B-899-100818 0-4FT | 10/8/2018 | ☒ Soil | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810258-05 | ☒ PCB ☒ SVOC ☒ Pesticide ☒ Metals ☒ Cn |
| B-900-100818 0-4FT | 10/8/2018 | ☒ Soil | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810258-06 | ☒ PCB ☒ SVOC ☒ Pesticide ☒ Metals ☒ Cn |
| B-902-100818 0-4FT | 10/8/2018 | ☒ Soil | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810258-07 | ☒ PCB ☒ SVOC ☒ Pesticide ☒ Metals ☒ Cn |
| B-901-100818 0-4FT | 10/8/2018 | ☒ Soil | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810258-08 | ☒ PCB ☒ SVOC ☒ Pesticide ☒ Metals ☒ Cn |
| TB | n/a | ☒ SOLID | ☐ FD ☐ MS/MSD ☐ EB ☒ TB | 1810258-09 | ☒ VOC (8260B Low) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness – Low-level VOA vials were frozen by laboratory on 10/9/2018. |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☒ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) – **SVOCs: LCS and LCSD recoveries for Benzoic Acid below QC limits; samples 05-08 non-detect results considered estimates (qualified with UJ).** All RPDs within QC limits. |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Pesticides: RPD > 40% for Sample 05 Endrin result; result considered an estimate (qualified with J). In addition, laboratory noted that presence of PCBs in sample may cause analyte to be biased high.** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☒ | ☐ | ☐ | Trip blank results |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☒ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) – **SVOCs: %D below QC limits for 2,4-Dinitrotoluene, 4,6-Dinitro-2-methylphenol, Benzoic Acid, and Hexachlorocyclopentadiene; samples 05-08 results (all ND) considered estimates (qualified with UJ). %D above QC limits for Fluoranthene; samples 06 and 08 detected results considered estimates (qualified with J).** %D above QC limits for 4-Nitrophenol and Carbazole; as associated sample results are ND, no qualification is given to data. |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☒ | ☐ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☒ | ☐ | ☐ | Internal standard performance (GC/MS only) |
| ☒ | ☐ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) – No MS or Serial Dilution analysis performed with ICP metals. |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 13 and 15 high-level VOC analysis, the only reporting limits raised were for the detections of 2-chlrotoluene. No impact on data sensitivity.<br>SVOCs: For sample 06, all results were reported from diluted run (2x), with RLs raised. All raised RLs equal to or below the PALs listed in QAPP (page 13 & 14).<br>PCBs: For sample 05, all results reported from diluted run (10x), with RLs raised. RLs for all ND results in sample 05 were below PAL (RL 0.6 mg/kg; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810258

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-899-100818 0-4FT | SVOCs | 2,4-Dinitrophenol | 1.84 U | mg/kg | 1.84 UJ | CCV |
| | | 4,6-Dinitro-2-Methylphenol | 1.84 U | mg/kg | 1.84 UJ | CCV |
| | | Benzoic Acid | 1.84 U | mg/kg | 1.84 UJ | CS, CCV |
| | | Hexachlorocyclopentadiene | 1.84 U | mg/kg | 1.84 UJ | CCV |
| | Pesticides | Endrin | 0.0059 | mg/kg | **0.0059 J** | DC |
| B-900-100818 0-4FT | SVOCs | 2,4-Dinitrophenol | 3.51 U | mg/kg | 3.51 UJ | CCV |
| | | 4,6-Dinitro-2-Methylphenol | 3.51 U | mg/kg | 3.51 UJ | CCV |
| | | Benzoic Acid | 3.51 U | mg/kg | 3.51 UJ | CS, CCV |
| | | Fluoranthene | 0.958 | mg/kg | **0.958 J** | CCV |
| | | Hexachlorocyclopentadiene | 3.51 U | mg/kg | 3.51 UJ | CCV |
| B-902-100818 0-4FT | SVOCs | 2,4-Dinitrophenol | 1.82 U | mg/kg | 1.82 UJ | CCV |
| | | 4,6-Dinitro-2-Methylphenol | 1.82 U | mg/kg | 1.82 UJ | CCV |
| | | Benzoic Acid | 1.82 U | mg/kg | 1.82 UJ | CS, CCV |
| | | Hexachlorocyclopentadiene | 1.82 U | mg/kg | 1.82 UJ | CCV |
| B-901-100818 0-4FT | SVOCs | 2,4-Dinitrophenol | 1.86 U | mg/kg | 1.86 UJ | CCV |
| | | 4,6-Dinitro-2-Methylphenol | 1.86 U | mg/kg | 1.86 UJ | CCV |
| | | Benzoic Acid | 1.86 U | mg/kg | 1.86 UJ | CS, CCV |
| | | Fluoranthene | 0.458 | mg/kg | **0.458 J** | CCV |
| | | Hexachlorocyclopentadiene | 1.86 U | mg/kg | 1.86 UJ | CCV |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810303**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-215-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-01 | ☒ PCB (8082A) |
| B-209-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-02 | ☒ PCB (8082A) |
| B-221-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-03 | ☒ PCB (8082A) |
| B-227-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-04 | ☒ PCB (8082A) |
| B-239-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-05 | ☒ PCB (8082A) |
| B-233-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-06 | ☒ PCB (8082A) |
| B-245-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-07 | ☒ PCB (8082A) |
| B-251-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-08 | ☒ PCB (8082A) |
| B-210-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-09 | ☒ PCB (8082A) |
| B-216-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-10 | ☒ PCB (8082A) |
| B-228-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-11 | ☒ PCB (8082A) |
| B-222-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-12 | ☒ PCB (8082A) |
| B-234-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-13 | ☒ PCB (8082A) |
| B-240-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-14 | ☒ PCB (8082A) |
| B-252-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-15 | ☒ PCB (8082A) |
| B-246-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-16 | ☒ PCB (8082A) |
| B-211-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-17 | ☒ PCB (8082A) |
| B-212-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-18 | ☒ PCB (8082A) |
| B-217-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-19 | ☒ PCB (8082A) |
| B-218-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810303-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) - **Dual column RPD for sample 14 Aroclor 1254 result above 40% QC limit (not marked on lab Certificate of Analysis). Sample 14 Aroclor 1254 result is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 09 and 10, all results reported from diluted runs (10x for both samples), with RLs raised. RLs for all ND results in samples 09 and 10 were below PAL (RL 0.6 mg/kg for PCBs in samples 09 and 10; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810303

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-240-101018 7FT | PCBs | Aroclor 1254 | 0.2 | mg/kg | **0.2 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810304**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-223-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-01 | ☒ PCB (8082A) |
| B-224-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-02 | ☒ PCB (8082A) |
| B-230-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-03 | ☒ PCB (8082A) |
| B-253-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-04 | ☒ PCB (8082A) |
| B-229-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810304-05 | ☒ PCB (8082A) |
| B-229-101018-1 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-06 | ☒ PCB (8082A) |
| B-213-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-07 | ☒ PCB (8082A) |
| B-214-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-08 | ☒ PCB (8082A) |
| B-219-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-09 | ☒ PCB (8082A) |
| B-220-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-10 | ☒ PCB (8082A) |
| B-231-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-11 | ☒ PCB (8082A) |
| B-232-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-12 | ☒ PCB (8082A) |
| B-242-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-13 | ☒ PCB (8082A) |
| B-248-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-14 | ☒ PCB (8082A) |
| B-235-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-15 | ☒ PCB (8082A) |
| B-225-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-16 | ☒ PCB (8082A) |
| B-226-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-17 | ☒ PCB (8082A) |
| B-237-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-18 | ☒ PCB (8082A) |
| B-243-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810304-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – MS/MSD analysis run on sample 05. All MS/MSD recoveries within QC limits. RPD for A. 1016 primary column above QC limit; however, given the acceptable results for MS/MSD A.1260 and the field duplicate run on sample 05/06 with good (0%) RPD, no qualification is made as a result of the MS/MSD RPD, based on professional judgment. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – Sulfur removal by copper cleanup (CC) method performed on samples 01, 05, 06, 13, 15, and 17-19. Method blank and LCS/LCS analyzed in batch with these samples. Results acceptable. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – No dilutions and no raised RLs. No potential data sensitivity issues. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810304

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810305**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-249-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-01 | ☒ PCB (8082A) |
| B-247-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-02 | ☒ PCB (8082A) |
| B-241-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-03 | ☒ PCB (8082A) |
| B-236-101018 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810305-04 | ☒ PCB (8082A) |
| B-236-101018-1 7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-05 | ☒ PCB (8082A) |
| SW-159-101018 4-7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-06 | ☒ PCB (8082A) |
| SW-161-101018 4-7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-07 | ☒ PCB (8082A) |
| SW-158-101018 0-4FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810305-08 | ☒ PCB (8082A) |
| SW-158-101018-1 0-4FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-09 | ☒ PCB (8082A) |
| SW-160-101018 0-4FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-10 | ☒ PCB (8082A) |
| SW-165-101018 4-7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-11 | ☒ PCB (8082A) |
| SW-163-101018 4-7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-12 | ☒ PCB (8082A) |
| SW-162-101018 0-4FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-13 | ☒ PCB (8082A) |
| SW-164-101018 0-4FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-14 | ☒ PCB (8082A) |
| SW-167-101018 4-7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-15 | ☒ PCB (8082A) |
| SW-169-101018 4-7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-16 | ☒ PCB (8082A) |
| SW-166-101018 0-4FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-17 | ☒ PCB (8082A) |
| SW-168-101018 0-4FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810305-18 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – **MS/MSD analyzed on sample 04: MS recoveries for A.1016 above QC limit. Detected Aroclor 1254 result for sample 04 is considered an estimate (qualified with J).**<br>**MS/MSD analyzed on sample 08: MS recoveries for A.1016 and A.1260 (and MSD recovery for A. 1260 secondary column)above QC limits. Aroclor 1254 result for sample 08 is considered an estimate (qualified with J).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 02, 13, and 17, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810305

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-236-101018 7FT | PCBs | Aroclor 1254 | 0.2 | mg/kg | **0.2 J** | AM |
| SW-158-101018 0-4FT | PCBs | Aroclor 1254 | 1.0 | mg/kg | **1.0 J** | AM |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810306**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-171-101018 4-7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810306-01 | ☒ PCB (8082A) |
| SW-173-101018 4-7FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810306-02 | ☒ PCB (8082A) |
| SW-170-101018 0-4FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810306-03 | ☒ PCB (8082A) |
| SW-172-101018 0-4FT | 10/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810306-04 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 02 and 03, all results reported from diluted runs (10x for both samples), with RLs raised. RLs for all ND results in samples 02 and 03 were below PAL (RL 0.5 mg/kg for PCBs in samples 02 and 03; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810306

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810361**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-202-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-01 | ☒ PCB (8082A) |
| SW-204-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-02 | ☒ PCB (8082A) |
| SW-203-101118 4-7FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-03 | ☒ PCB (8082A) |
| SW-205-101118 4-7FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-04 | ☒ PCB (8082A) |
| SW-206-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-05 | ☒ PCB (8082A) |
| SW-208-101118 4-7FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-06 | ☒ PCB (8082A) |
| SW-207-101118 4-7FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-07 | ☒ PCB (8082A) |
| SW-209-101118 4-7FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-08 | ☒ PCB (8082A) |
| SW-212-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-09 | ☒ PCB (8082A) |
| SW-213-101118 4-7FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-10 | ☒ PCB (8082A) |
| SW-188-101118 0-0.5FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-11 | ☒ PCB (8082A) |
| SW-190-101118 0-0.5FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-12 | ☒ PCB (8082A) |
| SW-192-101118 0-0.5FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-13 | ☒ PCB (8082A) |
| B-320-101118 4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-14 | ☒ PCB (8082A) |
| B-321-101118 4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-15 | ☒ PCB (8082A) |
| B-322-101118 4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-16 | ☒ PCB (8082A) |
| B-323-101118 4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-17 | ☒ PCB (8082A) |
| B-324-101118 4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-18 | ☒ PCB (8082A) |
| B-325-101118 4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-19 | ☒ PCB (8082A) |
| B-326-101118 4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810361-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 11-14, 18, and 20, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810361

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810362**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-174-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-01 | ☒ PCB (8082A) |
| SW-176-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-02 | ☒ PCB (8082A) |
| SW-175-101118 4-7FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-03 | ☒ PCB (8082A) |
| SW-177-101118 4-7FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-04 | ☒ PCB (8082A) |
| SW-194-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-05 | ☒ PCB (8082A) |
| SW-196-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-06 | ☒ PCB (8082A) |
| SW-195-101118 4-7FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-07 | ☒ PCB (8082A) |
| SW-197-101118 4-7FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-08 | ☒ PCB (8082A) |
| SW-198-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-09 | ☒ PCB (8082A) |
| SW-200-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810362-10 | ☒ PCB (8082A) |
| SW-200-101118-1 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-11 | ☒ PCB (8082A) |
| SW-199-101118 4-7FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-12 | ☒ PCB (8082A) |
| SW-178-101118 0-0.5FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810362-13 | ☒ PCB (8082A) |
| SW-178-101118-1 0-0.5FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-14 | ☒ PCB (8082A) |
| SW-180-101118 0-0.5FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-15 | ☒ PCB (8082A) |
| SW-182-101118 0-0.5FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-16 | ☒ PCB (8082A) |
| SW-184-101118 0-0.5FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-17 | ☒ PCB (8082A) |
| SW-186-101118 0-0.5FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810362-18 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 13-15 (primary runs) diluted below MRL. No qualification indicated. **For sample 18, the DCB surrogate recovery was above QC limits in the secondary column; the Aroclor 1254 detected result from sample 18 (reported from secondary column) is considered an estimate (qualified J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – MS/MSD analyzed on sample 13: MS and MSD recoveries above QC limit for both Aroclors and RPDs for A. 1260 above QC limit. MS/MSD analysis run on undiluted sample in which elevated A. 1254 present in unspiked sample (9.3 mg/kg). The elevated concentration in an undiluted sample interfered with resolution in the calculation of A. 1260 concentrations, and thus the MS/MSD results are not valid.<br>**MS/MSD analyzed on sample 10: MS and MSD recoveries for A.1016 (primary column) and A.1260 (both columns) above QC limits. Aroclor 1254 result for sample 10 is considered an estimate (qualified with J).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-03, 05, 08, and 16-18, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 13, 14, and 15, all results reported from diluted runs (20x for all listed samples), with RLs raised. RLs for all ND results in samples 13, 14, and 15 were below PAL (maximum RL 1.1 mg/kg; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810362

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-200-101118 0-4FT | PCBs | Aroclor 1254 | 0.8 | mg/kg | **0.8 J** | AM |
| SW-186-101118 0-0.5FT | PCBs | Aroclor 1254 | 3.5 | mg/kg | **3.5 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810363**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-327-101118 4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810363-01 | ☒ PCB (8082A) |
| SW-263-101118 4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810363-02 | ☒ PCB (8082A) |
| SW-265-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810363-03 | ☒ PCB (8082A) |
| SW-266-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810363-04 | ☒ PCB (8082A) |
| SW-267-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810363-05 | ☒ PCB (8082A) |
| SW-268-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810363-06 | ☒ PCB (8082A) |
| SW-269-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810363-07 | ☒ PCB (8082A) |
| SW-270-101118 0-4FT | 10/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810363-08 | ☒ PCB (8082A) |
| B-911-101118 0.5FT | 10/11/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810363-09 | ☒ PCB (8082A) |
| B-915-101118 0.5FT | 10/11/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810363-10 | ☒ PCB (8082A) |
| B-916-101118 0.5FT | 10/11/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810363-11 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - **For the diluted run of sample 06, the DCB surrogate recovery (primary column) and the TMX recovery (secondary column) were above QC limits; the Aroclor 1254 detected result from sample 06 (reported from secondary column of the diluted run) is considered an estimate (qualified J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01 and 06, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810363

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-268-101118 0-4FT | PCBs | Aroclor 1254 | 6.7 | mg/kg | **6.7 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810409**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-514-C-101218 0-5FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-01 | ☒ PCB (8082A) |
| SW-505-B-101218 0-5FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-02 | ☒ PCB (8082A) |
| SW-507-C-101218 0-6FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-03 | ☒ PCB (8082A) |
| B-806-A-101218 8FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-04 | ☒ PCB (8082A) |
| B-809-A-101218 7FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-05 | ☒ PCB (8082A) |
| B-810-A-101218 7FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-06 | ☒ PCB (8082A) |
| B-811-A-101218 8FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-07 | ☒ PCB (8082A) |
| B-812-A-101218 8FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-08 | ☒ PCB (8082A) |
| B-815-A-101218 7FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-09 | ☒ PCB (8082A) |
| B-820-A-101218 7FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-10 | ☒ PCB (8082A) |
| B-803-A-101218 7FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-11 | ☒ PCB (8082A) |
| B-843-A-101218 8FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-12 | ☒ PCB (8082A) |
| B-842-101218 8FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-13 | ☒ PCB (8082A) |
| B-841-101218 8FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-14 | ☒ PCB (8082A) |
| B-840-101218 8FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-15 | ☒ PCB (8082A) |
| B-794-A-101218 8FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-16 | ☒ PCB (8082A) |
| B-795-A-101218 8FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-17 | ☒ PCB (8082A) |
| B-798-A-101218 8FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-18 | ☒ PCB (8082A) |
| B-839-101218 8FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810409-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – Sulfur removal by copper cleanup (CC) method performed on samples 04-08, 10-14, and19. Method blank and LCS/LCS analyzed in batch with these samples. Results acceptable. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 08, 10, and 18, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 04, 07, 09, 11, 13-15, and 17, all results reported from diluted runs (sample 13=20x; samples 04, 07, 14=50x; sample 11=100x; samples 15 and 17=200x; sample 09=1,000x), with RLs raised. RLs for all ND results in samples 04, 07, 11, 13-15, and 17 were below PAL (maximum RL 21.3 mg/kg for sample 17; PAL = 25 mg/kg). The RLs for sample 09 (132 mg/kg) were above the PAL, and therefore there was an impact on data sensitivity. **However, given that the elevated concentration in this sample required additional excavation, and as a result a new confirmatory sample was collected, this does not indicate an impact on final confirmatory sample data sensitivity.** |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810409

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810454**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-565-101218-A 4-8FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-01 | ☒ PCB (8082A) |
| SW-556-101218-A 0-4FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-02 | ☒ PCB (8082A) |
| SW-554-101218-A 0-4FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-03 | ☒ PCB (8082A) |
| SW-553-101218-A 0-4FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-04 | ☒ PCB (8082A) |
| SW-552-101218-A 0-4FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-05 | ☒ PCB (8082A) |
| SW-582-101218-A 0-4FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-06 | ☒ PCB (8082A) |
| SW-580-101218-A 0-4FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-07 | ☒ PCB (8082A) |
| SW-583-101218-A 4-7FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-08 | ☒ PCB (8082A) |
| SW-578-101218-A 0-4FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-09 | ☒ PCB (8082A) |
| SW-579-101218-A 4-7FT | 10/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-10 | ☒ PCB (8082A) |
| SW-687-101518-A 0-2FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-11 | ☒ PCB (8082A) |
| SW-75-101518-A 4-6FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-12 | ☒ PCB (8082A) |
| SW-64-101518-A 4-6FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-13 | ☒ PCB (8082A) |
| SW-77-101518-A 4-6FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-14 | ☒ PCB (8082A) |
| SW-91-101518-A 0-1FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-15 | ☒ PCB (8082A) |
| SW-93-101518-A 0-1FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-16 | ☒ PCB (8082A) |
| SW-89-101518-A 0-4FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-17 | ☒ PCB (8082A) |
| SW-87-101518-A 0-4FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-18 | ☒ PCB (8082A) |
| SW-79-101518-A 0-4FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-19 | ☒ PCB (8082A) |
| SW-81-101518-A 0-4FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810454-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries - **For the diluted run of sample 01, the DCB surrogate recoveries (both columns) were above QC limits; the Aroclor 1254 detected result from sample 01 is considered an estimate (qualified J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – Sulfur removal by copper cleanup (CC) method performed on samples 01, 02, and 05. Method blank and LCS/LCS analyzed in batch with these samples. Results acceptable. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 02, 10, 11, 16, and 18, only reporting limits raised were for detected Aroclors. No impact on data sensitivity. For samples 08, and 12-15, all results reported from diluted runs (samples 08, 12, and 15=20x; sample 14=50x; sample 13=100x), with RLs raised. RLs for all ND results in samples 08, and 12-15 were below PAL (maximum RL 5.7 mg/kg for sample 13; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810454

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-565-101218-A 4-8FT | PCBs | Aroclor 1254 | 2.9 | mg/kg | **2.9 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810473**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-125-101518-A 4FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-01 | ☒ PCB (8082A) |
| B-113-101518-A 4FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-02 | ☒ PCB (8082A) |
| B-140-101518-A 4FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-03 | ☒ PCB (8082A) |
| SW-111-101518-A 0-3FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-04 | ☒ PCB (8082A) |
| SW-693-101518-B 0-3FT | 10/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-05 | ☒ PCB (8082A) |
| B-200-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810473-06 | ☒ PCB (8082A) |
| B-200-101618-1 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-07 | ☒ PCB (8082A) |
| B-205-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-08 | ☒ PCB (8082A) |
| B-732-101618-A 5FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-09 | ☒ PCB (8082A) |
| B-736-101618-A 5FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-10 | ☒ PCB (8082A) |
| B-744-101618-A 5FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-11 | ☒ PCB (8082A) |
| B-733-101618-A 5FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-12 | ☒ PCB (8082A) |
| B-741-101618-A 5FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-13 | ☒ PCB (8082A) |
| B-734-101618-A 5FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-14 | ☒ PCB (8082A) |
| SW-701-101618-A 0-5FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-15 | ☒ PCB (8082A) |
| SW-493-101618-A 0-5FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-16 | ☒ PCB (8082A) |
| SW-512-101618-A 0-1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-17 | ☒ PCB (8082A) |
| SW-510-101618-A 0-1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-18 | ☒ PCB (8082A) |
| SW-494-101618-A 0-5FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810473-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness – COC mark up has a "-A" in the sample ID for sample 06; this was not added to the sample log-in ID. |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 02, 03, 06, and 07 (primary runs) diluted below MRL. No qualification indicated. **For sample 08, the DCB surrogate recovery was above QC limits in the secondary column; the Aroclor 1254 detected result from sample 08 (reported from secondary column) is considered an estimate (qualified J).**<br>**For sample 01, diluted run, the DCB surrogate recovery was above QC limits in the secondary column; the Aroclor 1254 detected result from sample 01 (reported from diluted run, secondary column) is considered an estimate (qualified J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – MS/MSD analyzed on sample 06: MS and MSD recoveries above QC limit for both Aroclors and RPD for A. 1260 (primary column) above QC limit. MS/MSD analysis run on undiluted sample in which elevated A. 1254 present in unspiked sample (20.4 mg/kg). The elevated concentration in an undiluted sample interfered with resolution in the calculation of A. 1260 concentrations, and thus the MS/MSD results are not valid. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For sample 01, only reporting limit raised was for the detected Aroclor. No impact on data sensitivity. For samples 02-08, 10, 14, and 17-19, all results reported from diluted runs (samples 04, 05, 08, 10, 14, 17, 18, and 19 =10x; samples 02, 03, 06, and 07=50x), with RLs raised. RLs for all ND results in samples 02-08, 10, 14, and 17-19 were below PAL (maximum RL 3.0 mg/kg for sample 02; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810473

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-125-101518-A 4FT | PCBs | Aroclor 1254 | 2.0 | mg/kg | **2.0 J** | SA |
| B-205-101618 1FT | PCBs | Aroclor 1254 | 1.8 | mg/kg | **1.8 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810474**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-495-101618-A 0-1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-01 | ☒ PCB (8082A) |
| SW-514-101618-A 0-1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-02 | ☒ PCB (8082A) |
| B-195-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-03 | ☒ PCB (8082A) |
| B-193-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-04 | ☒ PCB (8082A) |
| B-194-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-05 | ☒ PCB (8082A) |
| B-196-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-06 | ☒ PCB (8082A) |
| B-197-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-07 | ☒ PCB (8082A) |
| B-198-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-08 | ☒ PCB (8082A) |
| B-199-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-09 | ☒ PCB (8082A) |
| B-201-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-10 | ☒ PCB (8082A) |
| B-203-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-11 | ☒ PCB (8082A) |
| B-204-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-12 | ☒ PCB (8082A) |
| B-206-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-13 | ☒ PCB (8082A) |
| B-207-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-14 | ☒ PCB (8082A) |
| B-208-101618 1FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-15 | ☒ PCB (8082A) |
| SW-50-101618-A 0-3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-16 | ☒ PCB (8082A) |
| SW-55-101618-A 0-3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-17 | ☒ PCB (8082A) |
| SW-370-101618-A 0-3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-18 | ☒ PCB (8082A) |
| B-70-101618 3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-19 | ☒ PCB (8082A) |
| B-555-101618 3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810474-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 02-06, 08, 09, and 12-15 (primary runs) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-20, all results reported from diluted runs (samples 01, 07, 10, 11, and 16-20=10x; sample 02=20x; samples 03-06, 08, 09, and 12-15=50x), with RLs raised. RLs for all ND results in samples 01-20 were below PAL (maximum RL 3.0 mg/kg for sample 05; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810474

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810511**; Report Issued **December 19, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-422-092518 1FT | 09/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-01 | ☒ PCB (8082A) |
| B-320-101718-A 5FT | 10/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-02 | ☒ PCB (8082A) |
| B-324-101718-A 5FT | 10/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-03 | ☒ PCB (8082A) |
| B-326-101718-A 5FT | 10/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-04 | ☒ PCB (8082A) |
| B-327-101718-A 5FT | 10/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-05 | ☒ PCB (8082A) |
| SW-53-101618 0-3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-06 | ☒ PCB (8082A) |
| SW-54-101618 0-3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-07 | ☒ PCB (8082A) |
| SW-56-101618 0-3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-08 | ☒ PCB (8082A) |
| B-71-101618 3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810511-09 | ☒ PCB (8082A) |
| B-554-101618 3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810511-10 | ☒ PCB (8082A) |
| B-556-101618 3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-11 | ☒ PCB (8082A) |
| SW-366-101618 0-3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810511-12 | ☒ PCB (8082A) |
| SW-366-101618-1 0-3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-13 | ☒ PCB (8082A) |
| B-71-101618-1 3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-14 | ☒ PCB (8082A) |
| B-554-101618-1 3FT | 10/16/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-15 | ☒ PCB (8082A) |
| B-520-101718 3FT | 10/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-16 | ☒ PCB (8082A) |
| SW-328-101718 0-3FT | 10/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-17 | ☒ PCB (8082A) |
| B-518-101718 3FT | 10/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-18 | ☒ PCB (8082A) |
| B-521-101718 3FT | 10/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-19 | ☒ PCB (8082A) |
| SW-228-101718 0-3FT | 10/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-20 | ☒ PCB (8082A) |
| SW-329-101718 0-3FT | 10/17/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810511-21 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☒ | Holding times/Sample preservation – **Sample 01 was extracted 22 days after collection (submitted to lab 22 days after collection). While the extraction was within the method hold time (unspecified for extraction), extraction was performed beyond the QAPP 7-day hold time; therefore, results are considered estimates (qualified J/UJ).** |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 06, 09, 10, 13, 15, 17, 20, and 21 (primary runs) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – MS/MSD analyzed on sample 09: MS and MSD recoveries above QC limit for both Aroclors. MS/MSD analysis run on undiluted sample in which elevated A. 1254 present in unspiked sample (10.7 mg/kg). The elevated concentration in an undiluted sample interfered with resolution in the calculation of A. 1260 concentrations, and thus the MS/MSD results are not valid.<br>MS/MSD analyzed on sample 10: MS and MSD recoveries above QC limit for both Aroclors. MS/MSD analysis run on undiluted sample in which elevated A. 1254 present in unspiked sample (9.7 mg/kg). The elevated concentration in an undiluted sample interfered with resolution in the calculation of A. 1260 concentrations, and thus the MS/MSD results are not valid.<br>**MS/MSD analyzed on sample 12: MS and MSD recoveries for Aroclor 1260 above QC limit. Sample 12 Aroclor 1254 result is considered an estimate (qualified with J).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) - **RPDs for Aroclor 1242 and 1254 in samples 09/14 and for Aroclor 1254 in samples 10/15 and 12/13 above QC limit; these results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **RPD for Aroclor 1260 in sample 01 above 40% QC limit; result is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 07, 08, 11, 12, 14, 18, and 19, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 06, 09, 10, 13, 15, 17, 20, and 21, all results reported from diluted runs (samples 09, 10, 13, 17, 20, and 21 =20x; samples 06 and 15=50x), with RLs raised. RLs for all ND results in samples 06, 09, 10, 13, 15, 17, 20, and 21 were below PAL (maximum RL 2.8 mg/kg for sample 06; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810511

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-422-092518 1FT | PCBs | Aroclor 1248 | 1.7 | mg/kg | **1.7 J** | HT |
| | | Aroclor 1260 | 0.1 | mg/kg | **0.1 J** | HT, DC |
| | | All remaining aroclors | 0.06 U | mg/kg | 0.06 UJ | HT |
| B-71-101618 3FT | PCBs | Aroclor 1242 | 1.1 U | mg/kg | 1.1 UJ | DU |
| | | Aroclor 1254 | 10.7 | mg/kg | **10.7 J** | DU |
| B-554-101618 3FT | PCBs | Aroclor 1254 | 9.7 | mg/kg | **9.7 J** | DU |
| SW-366-101618 0-3FT | PCBs | Aroclor 1254 | 5.0 | mg/kg | **5.0 J** | DU, AM |
| SW-366-101618-1 0-3FT | PCBs | Aroclor 1254 | 9.6 | mg/kg | **9.6 J** | DU |
| B-71-101618-1 3FT | PCBs | Aroclor 1242 | 1.4 | mg/kg | **1.4 J** | DU |
| | | Aroclor 1254 | 4.4 | mg/kg | **4.4 J** | DU |
| B-554-101618-1 3FT | PCBs | Aroclor 1254 | 18.8 | mg/kg | **18.8 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810533**; Report Issued **November 20, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-399-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-01 | ☒ PCB (8082A) |
| B-389-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-02 | ☒ PCB (8082A) |
| B-379-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-03 | ☒ PCB (8082A) |
| B-368N-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-04 | ☒ PCB (8082A) |
| B-408-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-05 | ☒ PCB (8082A) |
| B-398-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-06 | ☒ PCB (8082A) |
| B-388-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-07 | ☒ PCB (8082A) |
| B-378-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-08 | ☒ PCB (8082A) |
| B-368-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-09 | ☒ PCB (8082A) |
| B-346-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-10 | ☒ PCB (8082A) |
| B-347-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-11 | ☒ PCB (8082A) |
| B-339-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-12 | ☒ PCB (8082A) |
| B-331-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-13 | ☒ PCB (8082A) |
| B-332-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-14 | ☒ PCB (8082A) |
| B-333-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-15 | ☒ PCB (8082A) |
| B-334-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-16 | ☒ PCB (8082A) |
| B-340-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-17 | ☒ PCB (8082A) |
| B-400-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-18 | ☒ PCB (8082A) |
| SW-515-101818-A 0-1FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810533-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 01-06, 10-16, 18, and 19 (primary runs) diluted below MRL. No qualification indicated.<br>**The DCB surrogate recoveries for sample 07 primary columns in the undiluted and diluted sample runs were above QC limits; the detected Aroclor 1242 result for sample 07 (taken from primary column) is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-06 and 10-19, all results reported from diluted runs (sample 17=10x; samples 01-04 and 10-12=20x; samples 05, 06, 14-16, 18 and 19=50x; sample 13=100x), with RLs raised. RLs for all ND results in samples 01-06 and 10-19 were below PAL (maximum RL 5.6 mg/kg for sample 13; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810533

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-388-101818-A 7FT | PCBs | Aroclor 1242 | 3.1 | mg/kg | **3.1 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810534**; Report Issued **November 29, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-411-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810534-01 | ☒ PCB (8082A) |
| B-401-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810534-02 | ☒ PCB (8082A) |
| B-391-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810534-03 | ☒ PCB (8082A) |
| B-381-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810534-04 | ☒ PCB (8082A) |
| B-370-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810534-05 | ☒ PCB (8082A) |
| B-410-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810534-06 | ☒ PCB (8082A) |
| B-390-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810534-07 | ☒ PCB (8082A) |
| B-380-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810534-08 | ☒ PCB (8082A) |
| B-369-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810534-09 | ☒ PCB (8082A) |
| B-409-101818-A 7FT | 10/18/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810534-10 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 03 and 05-10 (primary runs) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 02, and 04, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 03 and 05-10, all results reported from diluted runs (samples 03, 05, and 07-10=20x; sample 06=50x), with RLs raised. RLs for all ND results in samples 03 and 05-10 were below PAL (maximum RL 3.3 mg/kg for sample 06; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810534

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810580**; Report Issued **December 19, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-271-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-01 | ☒ PCB (8082A) |
| B-272-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-02 | ☒ PCB (8082A) |
| B-273-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-03 | ☒ PCB (8082A) |
| B-274-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-04 | ☒ PCB (8082A) |
| B-275-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-05 | ☒ PCB (8082A) |
| B-276-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-06 | ☒ PCB (8082A) |
| B-925-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810580-07 | ☒ PCB (8082A) |
| B-277-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-08 | ☒ PCB (8082A) |
| B-278-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-09 | ☒ PCB (8082A) |
| B-290-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-10 | ☒ PCB (8082A) |
| B-291-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-11 | ☒ PCB (8082A) |
| B-344-101918-A 7FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-12 | ☒ PCB (8082A) |
| B-366-101918-A 7FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-13 | ☒ PCB (8082A) |
| B-367-101918-A 7FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-14 | ☒ PCB (8082A) |
| B-375-101918-A 7FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-15 | ☒ PCB (8082A) |
| B-382-101918-A 7FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-16 | ☒ PCB (8082A) |
| B-371-101918-A 7FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-17 | ☒ PCB (8082A) |
| B-360-101918-A 7FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-18 | ☒ PCB (8082A) |
| B-404-101918-A 7FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810580-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 16-18 (primary runs) diluted below MRL. No qualification indicated.<br>**The DCB surrogate recoveries for sample 15 (both columns) were above QC limits; the detected Aroclor 1268 result for sample 15 is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - **MS/MSD analyzed on sample 07: MS and MSD recoveries and RPDs for Aroclor 1260 above QC limit. Sample 07 Aroclor 1254 result is considered an estimate (qualified with J).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **RPD for Aroclor 1254 in sample 19 above 40% QC limit; result is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – Sulfur removal by copper cleanup (CC) method performed on sample 15. Method blank and LCS/LCS analyzed in batch with these samples. Results acceptable. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 02-04 and 07-10, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 16, 17, and 18, all results reported from diluted runs (20x for all samples), with RLs raised. RLs for all ND results in samples 16, 17, and 18 were below PAL (maximum RL 1.2 mg/kg for samples 16 and 18; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810580

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-925-101918 2FT | PCBs | Aroclor 1254 | 1.4 | mg/kg | **1.4 J** | AM |
| B-375-101918-A 7FT | PCBs | Aroclor 1268 | 0.4 | mg/kg | **0.4 J** | SA |
| B-404-101918-A 7FT | PCBs | Aroclor 1254 | 0.2 | mg/kg | **0.2 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810581**; Report Issued **November 29, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-926-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810581-01 | ☒ PCB (8082A) |
| B-279-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810581-02 | ☒ PCB (8082A) |
| B-927-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810581-03 | ☒ PCB (8082A) |
| B-280-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810581-04 | ☒ PCB (8082A) |
| B-280-101918-1 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810581-05 | ☒ PCB (8082A) |
| B-281-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810581-06 | ☒ PCB (8082A) |
| B-300-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810581-07 | ☒ PCB (8082A) |
| B-300-101918-1 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810581-08 | ☒ PCB (8082A) |
| B-282-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810581-09 | ☒ PCB (8082A) |
| B-286-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810581-10 | ☒ PCB (8082A) |
| B-283-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810581-11 | ☒ PCB (8082A) |
| B-287-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810581-12 | ☒ PCB (8082A) |
| B-284-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810581-13 | ☒ PCB (8082A) |
| B-288-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810581-14 | ☒ PCB (8082A) |
| B-285-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810581-15 | ☒ PCB (8082A) |
| B-289-101918 2FT | 10/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810581-16 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 03, 07, and 08 (primary runs) diluted below MRL. No qualification indicated. |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - MS/MSD analyzed on sample 01: MS and MSD recoveries and RPDs for Aroclor 1016 within QC limits; MS/MSD results for A. 1260 not calculated as the native concentration in the sample was significantly greater than the spiked concentration, making the QC result invalid.<br>MS/MSD analyzed on samples 03 and 07: most or all of the MS and MSD recoveries above QC limit for both Aroclors. MS/MSD analyses were run on undiluted samples in which elevated A. 1254 was present in unspiked samples (9.5 and 16.1 mg/kg, respectively). The elevated concentrations in an undiluted samples interfered with resolution in the calculation of A. 1260 concentrations, and thus the MS/MSD results are not valid.<br>**MS/MSD analyzed on sample 04: MS and MSD recoveries for Aroclor 1260, and MS primary column recovery for Aroclor 1016, above QC limit. Sample 04 Aroclor 1254 result is considered an estimate (qualified with J).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 02, 04-06, and 09-13, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 03, 07, and 08, all results reported from diluted runs (20x for all samples), with RLs raised. RLs for all ND results in samples 03, 07, and 08 were below PAL (maximum RL 1.2 mg/kg for samples 07 and 08; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810581

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-280-101918 2FT | PCBs | Aroclor 1254 | 2.6 | mg/kg | **2.6 J** | AM |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810626**; Report Issued **November 29, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-309-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-01 | ☒ PCB (8082A) |
| B-292-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-02 | ☒ PCB (8082A) |
| B-310-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-03 | ☒ PCB (8082A) |
| B-293-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-04 | ☒ PCB (8082A) |
| B-311-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-05 | ☒ PCB (8082A) |
| B-294-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-06 | ☒ PCB (8082A) |
| B-312-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-07 | ☒ PCB (8082A) |
| B-295-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-08 | ☒ PCB (8082A) |
| B-313-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-09 | ☒ PCB (8082A) |
| B-314-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-10 | ☒ PCB (8082A) |
| B-296-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-11 | ☒ PCB (8082A) |
| B-315-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-12 | ☒ PCB (8082A) |
| B-297-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-13 | ☒ PCB (8082A) |
| B-316-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-14 | ☒ PCB (8082A) |
| B-930-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-15 | ☒ PCB (8082A) |
| B-298-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-16 | ☒ PCB (8082A) |
| B-317-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-17 | ☒ PCB (8082A) |
| B-299-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-18 | ☒ PCB (8082A) |
| B-318-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-19 | ☒ PCB (8082A) |
| B-301-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810626-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 01 and 19 (primary runs) diluted below MRL. No qualification indicated.<br>**The DCB and TMX surrogate recoveries, both columns, for sample 15 in the diluted sample run were above QC limits; the detected Aroclor 1254 result for sample 15 (taken from diluted run) is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 02-05, 07-11, 13-18, and 20, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 01 and 19, all results reported from diluted runs (20x for both samples), with RLs raised. RLs for all ND results in samples 01 and19 were below PAL (maximum RL 1.1 mg/kg for both samples; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810626

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-930-102218 2FT | PCBs | Aroclor 1254 | 4.7 | mg/kg | **4.7 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810627**; Report Issued **November 29, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-319-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-01 | ☒ PCB (8082A) |
| B-302-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-02 | ☒ PCB (8082A) |
| B-303-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-03 | ☒ PCB (8082A) |
| B-923-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810627-04 | ☒ PCB (8082A) |
| B-304-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-05 | ☒ PCB (8082A) |
| B-924-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-06 | ☒ PCB (8082A) |
| B-305-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-07 | ☒ PCB (8082A) |
| B-928-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-08 | ☒ PCB (8082A) |
| B-306-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-09 | ☒ PCB (8082A) |
| B-929-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-10 | ☒ PCB (8082A) |
| B-307-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-11 | ☒ PCB (8082A) |
| B-308-102218 2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-12 | ☒ PCB (8082A) |
| SW-236-102218 0-2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-13 | ☒ PCB (8082A) |
| SW-237-102218 0-2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-14 | ☒ PCB (8082A) |
| SW-238-102218 0-2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-15 | ☒ PCB (8082A) |
| SW-239-102218 0-2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-16 | ☒ PCB (8082A) |
| SW-241-102218 0-2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-17 | ☒ PCB (8082A) |
| SW-242-102218 0-2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810627-18 | ☒ PCB (8082A) |
| SW-240-102218 0-2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810627-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness - Sample 1810628-01 is a field duplicate of sample 1810627-19; duplicate evaluation reported below. |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for sample 12 (primary run) diluted below MRL. No qualification indicated.<br>DCB surrogate recoveries for samples 11 and 13 (primary column) was above QC limits; however, as the Aroclor 1254 detected results were reported from the secondary column for both samples (with acceptable surrogate recoveries), no qualification to data is indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - MS/MSD analyzed on samples 04 and 19: all of the MS and MSD Aroclor 1260 percent recoveries above QC limit for sample 04, and all MS percent recoveries in MS and all Aroclor 1260 recoveries in the MSD above QC limit for sample 19. MS/MSD analyses were run on undiluted samples in which elevated Aroclor 1254 concentrations were present in unspiked samples (2.3 and 8.9 mg/kg, respectively). The elevated concentrations in the undiluted samples interfered with resolution in the calculation of MS/MSD concentrations, and thus the MS/MSD results are not valid. (All MS/MSD RPD within QC limit for both samples.) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) - Sample 1810628-01 is field duplicate of sample 1810659-16; duplicate evaluation finds acceptable results. |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-06, 08, and 10-19, all results reported from diluted runs (50x for sample 12, and 10x for all remaining samples), with RLs raised. RLs for all ND results in samples 01-06, 08, and 10-19 were below PAL (maximum RL 2.9 mg/kg for sample 12; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810627

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810628**; Report Issued **November 29, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-240-102218-1 0-2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810628-01 | ☒ PCB (8082A) |
| SW-243-102218 0-2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810628-02 | ☒ PCB (8082A) |
| SW-244-102218 0-2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810628-03 | ☒ PCB (8082A) |
| SW-20-102218 0-3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810628-04 | ☒ PCB (8082A) |
| SW-395-102218 0-3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810628-05 | ☒ PCB (8082A) |
| B-605-102218 3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810628-06 | ☒ PCB (8082A) |
| SW-512-102218-B 0-4FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810628-07 | ☒ PCB (8082A) |
| B-734-102218-B 6FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810628-08 | ☒ PCB (8082A) |
| SW-514-102218-B 0-4FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810628-09 | ☒ PCB (8082A) |
| B-24-102218 3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810628-10 | ☒ PCB (8082A) |
| B-606-102218 3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810628-11 | ☒ PCB (8082A) |
| B-607-102218 3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810628-12 | ☒ PCB (8082A) |
| SW-393-102218 0-3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810628-13 | ☒ PCB (8082A) |
| SW-394-102218 0-3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810628-14 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness – MS/MSD requested on COC for sample SW-240-102218 0-2FT; as this native sample is reported in data package 1810627, the MS/MSD analysis is also reported in that package. Field duplicate sample 1810628-01 is duplicate of sample 1810627-19; duplicate evaluation reported in validation report for data package 1810627. |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for sample 06 (primary run) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - MS/MSD analyzed on sample 13: all of the MS and MSD percent recoveries above QC limit. MS/MSD analyses were run on undiluted sample in which an elevated Aroclor 1254 concentration was present in unspiked sample (8.9 mg/kg). The elevated concentration in the undiluted sample interfered with resolution in the calculation of MS/MSD sample concentrations, and thus the MS/MSD results are not valid. (All MS/MSD RPDs within QC limit.) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) - Sample 1810628-01 is field duplicate of sample 1810627-19; duplicate evaluation reported in report for 1810627. |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **RPD for Aroclor 1254 in sample 07 above 40% QC limit; result is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – Sulfur removal by copper cleanup (CC) method performed on sample 08. Method blank and LCS/LCS analyzed in batch with these samples. Results acceptable. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 02, 04-07, and 10-14, all results reported from diluted runs (50x for sample 06, and 10x for all remaining samples), with RLs raised. RLs for all ND results in samples 01, 02, 04-07, and 10-14 were below PAL (maximum RL 2.9 mg/kg for sample 06; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810628

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-512-102218-B 0-4FT | PCBs | Aroclor 1254 | 0.5 | mg/kg | **0.5 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810629**; Report Issued **November 29, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-736-102218-B 6FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810629-01 | ☒ PCB (8082A) |
| SW-494-102218-B 0-2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810629-02 | ☒ PCB (8082A) |
| SW-495-102218-B 0-2FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810629-03 | ☒ PCB (8082A) |
| SW-17-102218 0-3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810629-04 | ☒ PCB (8082A) |
| SW-18-102218 0-3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810629-05 | ☒ PCB (8082A) |
| SW-22-102218 0-3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810629-06 | ☒ PCB (8082A) |
| SW-23-102218 0-3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810629-07 | ☒ PCB (8082A) |
| SW-24-102218 0-3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810629-08 | ☒ PCB (8082A) |
| B-22-102218 3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810629-09 | ☒ PCB (8082A) |
| B-23-102218 3FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810629-10 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 02 and 03 (primary run) diluted below MRL. No qualification indicated.<br>**The DCB surrogate recoveries, both columns, for sample 10 were above QC limits; the detected Aroclor 1254 result for sample 10 is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 02-06 and 08-10, all results reported from diluted runs (50x for samples 02 and 03, and 10x for remaining samples), with RLs raised. RLs for all ND results in samples 02-06 and 08-10 were below PAL (maximum RL 3.0 mg/kg for sample 02; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810629

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-23-102218 3FT | PCBs | Aroclor 1254 | 1.5 | mg/kg | **1.5 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810658**; Report Issued **November 29, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-731-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-01 | ☒ PCB (8082A) |
| B-931-102318 2FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-02 | ☒ PCB (8082A) |
| B-932-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-03 | ☒ PCB (8082A) |
| B-933-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810658-04 | ☒ PCB (8082A) |
| B-934-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-05 | ☒ PCB (8082A) |
| B-935-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-06 | ☒ PCB (8082A) |
| B-936-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-07 | ☒ PCB (8082A) |
| B-937-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-08 | ☒ PCB (8082A) |
| B-938-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-09 | ☒ PCB (8082A) |
| B-716-102318-1 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-10 | ☒ PCB (8082A) |
| B-933-102318-1 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-11 | ☒ PCB (8082A) |
| B-145-102318-A 10FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-12 | ☒ PCB (8082A) |
| B-149-102318-A 10FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-13 | ☒ PCB (8082A) |
| B-146-102318-A 10FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-14 | ☒ PCB (8082A) |
| B-154-102318-A 10FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-15 | ☒ PCB (8082A) |
| B-155-102318-A 10FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-16 | ☒ PCB (8082A) |
| B-152-102318-A 10FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-17 | ☒ PCB (8082A) |
| SW-133-102318-A 0-2FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810658-18 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness – MS/MSD requested on COC for sample B-716-102318 4FT; as this native sample is reported in data package 1810659, the MS/MSD analysis is also reported in that package. Field duplicate sample 1810658-10 is duplicate of sample 1810659-16; duplicate evaluation reported in validation report for data package 1810659. |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 12, 13, and 15-18 (primary runs) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - **MS/MSD analyzed on sample 04: MS and MSD recoveries for Aroclor 1260 above QC limit, likely due to elevated concentration of Aroclor 1254 in unspiked sample. Sample 04 Aroclor 1254 result is considered an estimate (qualified with J).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) – Sample 1810658-10 is field duplicate of sample 1810659-16; duplicate evaluation reported in report for 1810659. Field duplicate evaluation of 1810658-04/11 indicates acceptable results. |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) –For samples 01, 04-06, 09, and 11-18, all results reported from diluted runs (10x for samples 01, 04-06, 09, 11, and 14; 50x for samples 12, 16, and 18; 100x for samples 13, 15, and 17), with RLs raised. RLs for all ND results in samples 01, 04-06, 09, and 11-18 were below PAL (maximum RL 6.8 mg/kg for samples 15 and 17; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810658

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-933-102318 4FT | PCBs | Aroclor 1254 | 0.9 | mg/kg | **0.9 J** | AM |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810659**; Report Issued **November 29, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-113-102218-B 6FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-01 | ☒ PCB (8082A) |
| B-140-102218-B 6FT | 10/22/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-02 | ☒ PCB (8082A) |
| SW-64-102318-B 4-6FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-03 | ☒ PCB (8082A) |
| SW-77-102318-B 4-6FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-04 | ☒ PCB (8082A) |
| B-193-102318-A 2FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-05 | ☒ PCB (8082A) |
| B-706-102318 1FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-06 | ☒ PCB (8082A) |
| B-707-102318 1FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-07 | ☒ PCB (8082A) |
| B-708-102318 1FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-08 | ☒ PCB (8082A) |
| B-709-102318 1FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-09 | ☒ PCB (8082A) |
| B-710-102318 1FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-10 | ☒ PCB (8082A) |
| B-711-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-11 | ☒ PCB (8082A) |
| B-712-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-12 | ☒ PCB (8082A) |
| B-713-102318 1FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-13 | ☒ PCB (8082A) |
| B-714-102318 1FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-14 | ☒ PCB (8082A) |
| B-715-102318 1FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-15 | ☒ PCB (8082A) |
| B-716-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810659-16 | ☒ PCB (8082A) |
| B-717-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-17 | ☒ PCB (8082A) |
| B-718-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-18 | ☒ PCB (8082A) |
| B-719-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-19 | ☒ PCB (8082A) |
| B-720-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810659-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness – Sample 1810658-10 is a field duplicate of sample 1810659-16; duplicate evaluation reported below. |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 02-05 (primary runs) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - **MS/MSD analyzed on sample 16: MSD recoveries for Aroclor 1260 above QC limit (and RPD for A. 1260 2C). Sample 16 Aroclor 1254 result is considered an estimate (qualified with J).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) – Sample 1810658-10 is field duplicate of sample 1810659-16; duplicate evaluation finds acceptable results. |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01-05, 07, 10, 13, and 14, all results reported from diluted runs (10x for samples 01, 07, 10, 13, and 14; 50x for samples 03-05; 100x for sample 02), with RLs raised. RLs for all ND results in samples 01-05, 07, 10, 13, and 14 were below PAL (maximum RL 5.8 mg/kg for sample 02; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810659

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-716-102318 4FT | PCBs | Aroclor 1254 | 0.5 | mg/kg | **0.5 J** | AM |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810660**; Report Issued **November 29, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-721-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810660-01 | ☒ PCB (8082A) |
| B-722-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810660-02 | ☒ PCB (8082A) |
| B-723-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810660-03 | ☒ PCB (8082A) |
| B-724-102318 2FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810660-04 | ☒ PCB (8082A) |
| B-725-102318 2FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810660-05 | ☒ PCB (8082A) |
| B-726-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810660-06 | ☒ PCB (8082A) |
| B-727-102318 1FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810660-07 | ☒ PCB (8082A) |
| B-728-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810660-08 | ☒ PCB (8082A) |
| B-729-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810660-09 | ☒ PCB (8082A) |
| B-730-102318 4FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810660-10 | ☒ PCB (8082A) |
| B-88-102318-C 10FT | 10/23/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810660-11 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for sample 11 (primary run) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 04, 05, 09, and 11, all results reported from diluted runs (10x for samples 04, 05, and 09; 50x for sample 11), with RLs raised. RLs for all ND results in samples 04, 05, 09, and 11 were below PAL (maximum RL 2.9 mg/kg for sample 11; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810660

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810703**; Report Issued **November 29, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-641-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-01 | ☒ PCB (8082A) |
| B-642-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-02 | ☒ PCB (8082A) |
| B-643-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-03 | ☒ PCB (8082A) |
| B-644-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-04 | ☒ PCB (8082A) |
| B-645-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-05 | ☒ PCB (8082A) |
| B-646-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-06 | ☒ PCB (8082A) |
| B-647-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-07 | ☒ PCB (8082A) |
| B-648-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-08 | ☒ PCB (8082A) |
| B-649-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-09 | ☒ PCB (8082A) |
| B-650-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-10 | ☒ PCB (8082A) |
| B-705-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-11 | ☒ PCB (8082A) |
| B-939-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-12 | ☒ PCB (8082A) |
| B-940-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-13 | ☒ PCB (8082A) |
| SW-447-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-14 | ☒ PCB (8082A) |
| SW-448-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-15 | ☒ PCB (8082A) |
| SW-449-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-16 | ☒ PCB (8082A) |
| SW-450-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-17 | ☒ PCB (8082A) |
| SW-451-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-18 | ☒ PCB (8082A) |
| SW-452-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-19 | ☒ PCB (8082A) |
| SW-453-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810703-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - **The TMX surrogate recoveries for samples 11, 18, and 19 (primary columns) were above QC limits; the detected Aroclor 1254 results for sample 11, 18, and 19 are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **RPDs for Aroclor 1248 in samples 02 and 05 above 40% QC limit; results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 03, 07, 08, 11-13, and 16-20, all results reported from diluted runs (10x for all samples), with RLs raised. RLs for all ND results in samples 03, 07, 08, 11-13, and 16-20 were below PAL (maximum RL 0.6 mg/kg for samples 03 and 08; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810703

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-642-102418 2FT | PCBs | Aroclor 1248 | 0.1 | mg/kg | **0.1 J** | DC |
| B-645-102418 2FT | PCBs | Aroclor 1248 | 0.2 | mg/kg | **0.2 J** | DC |
| B-705-102418 2FT | PCBs | Aroclor 1254 | 1.4 | mg/kg | **1.4 J** | SA |
| SW-451-102418 0-2FT | PCBs | Aroclor 1254 | 4.2 | mg/kg | **4.2 J** | SA |
| SW-452-102418 0-2FT | PCBs | Aroclor 1254 | 2.9 | mg/kg | **2.9 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810704**; Report Issued **November 29, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-454-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-01 | ☒ PCB (8082A) |
| SW-455-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-02 | ☒ PCB (8082A) |
| SW-456-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-03 | ☒ PCB (8082A) |
| SW-457-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-04 | ☒ PCB (8082A) |
| SW-458-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-05 | ☒ PCB (8082A) |
| SW-459-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-06 | ☒ PCB (8082A) |
| SW-460-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810704-07 | ☒ PCB (8082A) |
| SW-460-102418-1 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-08 | ☒ PCB (8082A) |
| SW-461-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-09 | ☒ PCB (8082A) |
| SW-462-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-10 | ☒ PCB (8082A) |
| SW-463-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-11 | ☒ PCB (8082A) |
| SW-464-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-12 | ☒ PCB (8082A) |
| SW-472-102418 0-4FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-13 | ☒ PCB (8082A) |
| SW-473-102418 0-4FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-14 | ☒ PCB (8082A) |
| SW-474-102418 0-4FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-15 | ☒ PCB (8082A) |
| SW-475-102418 0-4FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-16 | ☒ PCB (8082A) |
| SW-465-102418 0-2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-17 | ☒ PCB (8082A) |
| SW-476-102418 0-4FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-18 | ☒ PCB (8082A) |
| SW-477-102418 0-4FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810704-19 | ☒ PCB (8082A) |
| SW-477-102418-1 0-4FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810704-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for sample 18 (primary run) diluted below MRL. No qualification indicated.<br>The TMX surrogate recovery for sample 02 (primary column) was above QC limits; however, as this indicates potential positive bias and no PCBs were detected in the sample, no qualifications are indicated. The DCB surrogate recovery for sample 19 (primary column) was above QC limits; however, as the Aroclor 1254 detected result was reported from the secondary column (with acceptable surrogate recovery), no qualification to data is indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - **MS/MSD analyzed on sample 07: MSD recoveries and RPDs for Aroclor 1016 and MS and MSD recoveries and Primary column RPD for Aroclor 1260 above QC limits. Sample 07 Aroclor 1254 result is considered an estimate (qualified with J).**<br>**MS/MSD analyzed on sample 19: MSD recovery (secondary column) for Aroclor 1016 and MS and MSD recoveries for Aroclor 1260 above QC limits. Sample 19 Aroclor 1254 result is considered an estimate (qualified with J).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) - **RPD for Aroclor 1254 in samples 07/08 and RPD for Aroclor 1254 in samples 19/20 above QC limit; these results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01, 03-11, 14, 15, and 18-20, all results reported from diluted runs (50x for sample 18; 10x for all remaining samples), with RLs raised. RLs for all ND results in samples 01, 03-11, 14, 15, and 18-20 were below PAL (maximum RL 2.7 mg/kg for sample 18; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810704

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-460-102418 0-2FT | PCBs | Aroclor 1254 | 0.8 | mg/kg | **0.8 J** | DU, AM |
| SW-460-102418-1 0-2FT | PCBs | Aroclor 1254 | 3.3 | mg/kg | **3.3 J** | DU |
| SW-477-102418 0-4FT | PCBs | Aroclor 1254 | 1.7 | mg/kg | **1.7 J** | DU, AM |
| SW-477-102418-1 0-4FT | PCBs | Aroclor 1254 | 0.8 | mg/kg | **0.8 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810705**; Report Issued **November 29, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-687-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-01 | ☒ PCB (8082A) |
| B-688-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-02 | ☒ PCB (8082A) |
| B-689-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-03 | ☒ PCB (8082A) |
| B-690-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-04 | ☒ PCB (8082A) |
| B-691-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-05 | ☒ PCB (8082A) |
| B-692-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-06 | ☒ PCB (8082A) |
| B-693-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-07 | ☒ PCB (8082A) |
| B-694-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-08 | ☒ PCB (8082A) |
| B-695-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-09 | ☒ PCB (8082A) |
| B-696-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-10 | ☒ PCB (8082A) |
| B-697-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-11 | ☒ PCB (8082A) |
| B-698-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-12 | ☒ PCB (8082A) |
| B-699-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-13 | ☒ PCB (8082A) |
| B-700-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810705-14 | ☒ PCB (8082A) |
| B-700-102418-1 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-15 | ☒ PCB (8082A) |
| B-701-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-16 | ☒ PCB (8082A) |
| B-702-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-17 | ☒ PCB (8082A) |
| B-703-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-18 | ☒ PCB (8082A) |
| B-704-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810705-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) - **RPD for Aroclor 1254 in samples 14/15 above QC limit (results very close to RL); these results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 10, 12, and 16, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810705

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-700-102418 2FT | PCBs | Aroclor 1254 | 0.2 | mg/kg | **0.2 J** | DU |
| B-700-102418-1 2FT | PCBs | Aroclor 1254 | 0.1 | mg/kg | **0.1 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810706**; Report Issued **December 4, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-669-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-01 | ☒ PCB (8082A) |
| B-670-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-02 | ☒ PCB (8082A) |
| B-671-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-03 | ☒ PCB (8082A) |
| B-672-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-04 | ☒ PCB (8082A) |
| B-673-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-05 | ☒ PCB (8082A) |
| B-674-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-06 | ☒ PCB (8082A) |
| B-675-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-07 | ☒ PCB (8082A) |
| B-676-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-08 | ☒ PCB (8082A) |
| B-677-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-09 | ☒ PCB (8082A) |
| B-678-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-10 | ☒ PCB (8082A) |
| B-679-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-11 | ☒ PCB (8082A) |
| B-680-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810706-12 | ☒ PCB (8082A) |
| B-680-102418-1 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-13 | ☒ PCB (8082A) |
| B-681-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-14 | ☒ PCB (8082A) |
| B-682-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-15 | ☒ PCB (8082A) |
| B-683-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-16 | ☒ PCB (8082A) |
| B-684-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-17 | ☒ PCB (8082A) |
| B-685-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-18 | ☒ PCB (8082A) |
| B-686-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810706-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - **MS/MSD analyzed on sample 12: MS and MSD recoveries for Aroclor 1016 above QC limits. Sample 12 Aroclor 1248 and 1254 results are considered estimates (qualified with J).** (All RPDs within QC limit.) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **RPD for Aroclor 1254 in sample 02 above 40% QC limit; result is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 03, 05, 07, 08, and 09, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810706

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-670-102418 2FT | PCBs | Aroclor 1254 | 0.07 | mg/kg | **0.07 J** | DC |
| B-680-102418 2FT | PCBs | Aroclor 1248 | 0.9 | mg/kg | **0.9 J** | AM |
| | | Aroclor 1254 | 0.4 | mg/kg | **0.4 J** | AM |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810707**; Report Issued **December 4, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-651-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-01 | ☒ PCB (8082A) |
| B-652-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-02 | ☒ PCB (8082A) |
| B-653-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-03 | ☒ PCB (8082A) |
| B-654-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-04 | ☒ PCB (8082A) |
| B-655-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-05 | ☒ PCB (8082A) |
| B-656-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-06 | ☒ PCB (8082A) |
| B-657-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-07 | ☒ PCB (8082A) |
| B-658-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-08 | ☒ PCB (8082A) |
| B-659-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-09 | ☒ PCB (8082A) |
| B-660-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810707-10 | ☒ PCB (8082A) |
| B-660-102418-1 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-11 | ☒ PCB (8082A) |
| B-661-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-12 | ☒ PCB (8082A) |
| B-662-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-13 | ☒ PCB (8082A) |
| B-663-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-14 | ☒ PCB (8082A) |
| B-664-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-15 | ☒ PCB (8082A) |
| B-665-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-16 | ☒ PCB (8082A) |
| B-666-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-17 | ☒ PCB (8082A) |
| B-667-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-18 | ☒ PCB (8082A) |
| B-668-102418 2FT | 10/24/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810707-19 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - **MS/MSD analyzed on sample 10: MS recovery, primary column for Aroclor 1016, above QC limits. Sample 10 Aroclor 1248 result, reported from primary column, is considered an estimate (qualified with J).** Aroclor 1254 result reported from secondary column (acceptable recoveries); no qualification to data. All RPDs within QC limit. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) - **RPDs for Aroclor 1248 and 1254 in samples 10/11 above QC limit; these results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 04, 06, 16, and 19, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For sample 05, all results reported from the diluted run (20x), with RLs raised. RLs for all ND results in sample 05 were below PAL (RL 1.1 mg/kg for sample 05; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810707

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-660-102418 2FT | PCBs | Aroclor 1248 | 0.2 | mg/kg | **0.2 J** | AM, DU |
| | | Aroclor 1254 | 0.2 | mg/kg | **0.2 J** | DU |
| B-660-102418-1 2FT | PCBs | Aroclor 1248 | 0.05 U | mg/kg | 0.05 UJ | DU |
| | | Aroclor 1254 | 0.5 | mg/kg | **0.5 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810745**; Report Issued **December 4, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-265-102518 4FT | 10/25/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-01 | ☒ PCB (8082A) |
| B-266-102518 4FT | 10/25/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-02 | ☒ PCB (8082A) |
| B-267-102518 0.5FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-03 | ☒ PCB (8082A) |
| B-268-102518 0.5FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-04 | ☒ PCB (8082A) |
| B-269-102518 0.5FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-05 | ☒ PCB (8082A) |
| B-270-102518 0.5FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-06 | ☒ PCB (8082A) |
| SW-214-102518 0-3FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-07 | ☒ PCB (8082A) |
| SW-215-102518 0-3FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-08 | ☒ PCB (8082A) |
| SW-216-102518 0-3FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-09 | ☒ PCB (8082A) |
| SW-217-102518 0-0.5FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-10 | ☒ PCB (8082A) |
| SW-218-102518 0-0.5FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-11 | ☒ PCB (8082A) |
| SW-219-102518 0-0.5FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-12 | ☒ PCB (8082A) |
| SW-220-102518 0-0.5FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-13 | ☒ PCB (8082A) |
| SW-221-102518 0-0.5FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-14 | ☒ PCB (8082A) |
| SW-222-102518 0-0.5FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-15 | ☒ PCB (8082A) |
| SW-223-102518 4FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-16 | ☒ PCB (8082A) |
| SW-224-102518 4FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-17 | ☒ PCB (8082A) |
| B-738-102518 1FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810745-18 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 04-06, 08-12, 15, 17, and 18 (primary run) diluted below MRL. No qualification indicated. **The DCB and TMX surrogate recoveries for sample 01 (both columns) were below QC limits; all sample 01 results (all ND) are considered estimates (qualified with UJ).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 03, 07, 13, 14, and 16, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 04-06, 08-12, 15, 17, and 18, all results reported from diluted runs (50x for samples 15 and 18; 20x for all remaining samples), with RLs raised. RLs for all ND results in samples 04-06, 08-12, 15, 17, and 18 were below PAL (maximum RL 2.7 mg/kg for sample 15; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810745

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-265-102518 4FT | PCBs | All PCB analytes | 0.1 U | mg/kg | 0.1 UJ | SB |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810746**; Report Issued **December 10, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-257-102518 3FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810746-01 | ☒ PCB (8082A) |
| B-258-102518 4FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810746-02 | ☒ PCB (8082A) |
| B-259-102518 3FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810746-03 | ☒ PCB (8082A) |
| B-260-102518 4FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810746-04 | ☒ PCB (8082A) |
| B-260-102518-1 4FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810746-05 | ☒ PCB (8082A) |
| B-261-102518 4FT | 10/25/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810746-06 | ☒ PCB (8082A) |
| B-262-102518 4FT | 10/25/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810746-07 | ☒ PCB (8082A) |
| B-263-102518 3FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810746-08 | ☒ PCB (8082A) |
| B-264-102518 4FT | 10/25/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810746-09 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 01, 02, 08, and 09 (primary runs) diluted below MRL. No qualification indicated. Sample 03 DCB surrogate recoveries from secondary column (undiluted and diluted run) were below QC limits; all sample results reported from primary column (with acceptable recoveries); no data qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – **MS/MSD analyzed on sample 04: MS and MSD recoveries (all) above QC limits. Sample 04 Aroclor 1254 result is considered an estimate (qualified with J).**. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) - **RPD for Aroclor 1254 in samples 04/05 above QC limit; Aroclor 1254 results for samples 04 and 05 are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 03 and 04, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For sample 01, 02, 08, and 09, all results reported from the diluted run (50x for sample 2 and 20x for remaining samples), with RLs raised. RLs for all ND results in samples 01, 02, 08, and 09 were below PAL (maximum RL 2.7 mg/kg for sample 02; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810746

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-260-102518 4FT | PCBs | Aroclor 1254 | 6.8 | mg/kg | **6.8 J** | AM, DU |
| B-260-102518-1 4FT | PCBs | Aroclor 1254 | 12.8 | mg/kg | **1.8 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810784**; Report Issued **December 10, 2018**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-842-102618-A 10FT | 10/26/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810784-01 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for sample 01 (primary run) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For sample 01, all results reported from diluted run (20x), with RLs raised. RLs for all ND results in sample 01 were below PAL (RL 1.4 mg/kg for sample 01; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810784

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810825**; Report Issued **January 2, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-840-102918-A 13FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-01 | ☒ PCB (8082A) |
| B-794-102918-B 13FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-02 | ☒ PCB (8082A) |
| B-798-102918-B 13FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-03 | ☒ PCB (8082A) |
| B-841-102918-A 13FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-04 | ☒ PCB (8082A) |
| B-795-102918-B 13FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-05 | ☒ PCB (8082A) |
| B-812-102918-B 13FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-06 | ☒ PCB (8082A) |
| B-811-102918-B 13FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-07 | ☒ PCB (8082A) |
| B-806-102918-B 13FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-08 | ☒ PCB (8082A) |
| B-803-102918-B 13FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-09 | ☒ PCB (8082A) |
| B-815-102918-B 13FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-10 | ☒ PCB (8082A) |
| SW-716-102918 0-2FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-11 | ☒ PCB (8082A) |
| SW-717-102918 0-2FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-12 | ☒ PCB (8082A) |
| SW-718-102918 0-2FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-13 | ☒ PCB (8082A) |
| SW-719-102918 0-2FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-14 | ☒ PCB (8082A) |
| SW-720-102918 0-2FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-15 | ☒ PCB (8082A) |
| SW-721-102918 0-2FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-16 | ☒ PCB (8082A) |
| SW-722-102918 0-2FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-17 | ☒ PCB (8082A) |
| SW-723-102918 0-2FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-18 | ☒ PCB (8082A) |
| SW-724-102918 0-2FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-19 | ☒ PCB (8082A) |
| SW-725-102918 0-2FT | 10/29/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810825-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 01, 06, and 17 (primary runs) diluted below MRL. No qualifications indicated. DCB surrogate recoveries for primary column in undiluted sample runs for 18, 19, and 20 were above QC limit (potential positive bias). For samples 18 and 20, there were no detected concentrations reported from undiluted samples runs (no qualifications indicated). For sample 19, as the detected Aroclor 1254 concentration was reported from secondary column (with acceptable surrogate recoveries), no qualifications are indicated. For sample 20, the DCB surrogate recovery for the primary column in the diluted sample run was above the QC limit. However, as the detected Aroclor 1254 concentration was reported from secondary column (with acceptable surrogate recoveries), no qualification is indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – Sulfur removal by copper cleanup (CC) method performed on sample 10. Method blank and LCS/LCS analyzed in batch with these samples. Results acceptable. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 02-04, 12, 13, 15, 18, and 20 the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 01, 06, and 17, all results reported from diluted runs (100x, 500x, and 50x, respectively), with RLs raised. RLs for all ND results for samples 01 and 17 were below PALs (maximum RL 9.1 mg/kg for PCBs in sample 01; PAL = 25 mg/kg). RLs for sample 06 (38.2 mg/kg) were above the PAL, and therefore there was an impact on data sensitivity. **However, given that the elevated concentration in the sample required additional excavation, and as a result new confirmatory samples were collected, this does not indicate an impact on final confirmatory sample data sensitivity.** |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810825

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810863**; Report Issued **January 2, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-671-103018-A 7FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-01 | ☒ PCB (8082A) |
| B-680-103018-A 7FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-02 | ☒ PCB (8082A) |
| B-647-103018-A 5FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-03 | ☒ PCB (8082A) |
| B-648-103018-A 5FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-04 | ☒ PCB (8082A) |
| B-654-103018-A 6FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-05 | ☒ PCB (8082A) |
| B-655-103018-A 6FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-06 | ☒ PCB (8082A) |
| B-656-103018-A 6FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-07 | ☒ PCB (8082A) |
| B-657-103018-A 6FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-08 | ☒ PCB (8082A) |
| B-675-103018-A 5FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-09 | ☒ PCB (8082A) |
| B-676-103018-A 5FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-10 | ☒ PCB (8082A) |
| B-673-103018-A 5FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-11 | ☒ PCB (8082A) |
| B-696-103018-A 6FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-12 | ☒ PCB (8082A) |
| B-698-103018-A 5FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-13 | ☒ PCB (8082A) |
| B-701-103018-A 7FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-14 | ☒ PCB (8082A) |
| B-702-103018-A 7FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-15 | ☒ PCB (8082A) |
| B-705-103018-A 6FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-16 | ☒ PCB (8082A) |
| B-140-103018-C 8FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1810863-17 | ☒ PCB (8082A) |
| B-140-103018-C-1 8FT | 10/30/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1810863-18 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries – **TMX surrogate recovery, primary column, in sample 16 above QC limit. Sample 16 Aroclor 1254 result, reported from primary column, is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - **MS/MSD analyzed on sample 18: MS and MSD recoveries for Aroclor 1260 above QC limits. Sample 18 Aroclor 1254 result, is considered an estimate (qualified with J).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) - **RPD for Aroclor 1254 in samples 17/18 above QC limit; Aroclor 1254 results in samples 17 and 18 are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – Sulfur removal by copper cleanup (CC) method performed on sample 12. Method blank and LCS/LCS analyzed in batch with these samples. Results acceptable. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 11 and 18, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810863

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-705-103018-A 6FT | PCBs | Aroclor 1254 | 0.5 | mg/kg | **0.5 J** | SA |
| B-140-103018-C 8FT | PCBs | Aroclor 1254 | 1.0 | mg/kg | **1.0 J** | DU, AM |
| B-140-103018-C-1 8FT | PCBs | Aroclor 1254 | 1.7 | mg/kg | **1.7 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1810901**; Report Issued **January 2, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-152-103118-B 10.5FT | 10/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810901-01 | ☒ PCB (8082A) |
| B-155-103118-B 10.5FT | 10/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810901-02 | ☒ PCB (8082A) |
| B-154-103118-B 10.5FT | 10/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810901-03 | ☒ PCB (8082A) |
| B-149-103118-B 10.5FT | 10/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810901-04 | ☒ PCB (8082A) |
| B-145-103118-B 10.5FT | 10/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810901-05 | ☒ PCB (8082A) |
| B-700-103118-A 6FT | 10/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810901-06 | ☒ PCB (8082A) |
| B-665-103118-A 6FT | 10/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810901-07 | ☒ PCB (8082A) |
| B-934-103118-A 6FT | 10/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810901-08 | ☒ PCB (8082A) |
| B-935-103118-A 6FT | 10/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810901-09 | ☒ PCB (8082A) |
| B-938-103118-A 6FT | 10/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810901-10 | ☒ PCB (8082A) |
| SW-476-103118-A 0-4FT | 10/31/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1810901-11 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 01 through 05 (primary runs) diluted below MRL. No qualifications indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For sample 08 the only reporting limits raised were for the detected Aroclor. No impact on data sensitivity. For samples 01 through 05, all results reported from diluted runs (100x for sample 04, 50x for remainder), with RLs raised. RLs for all ND results for samples 01 through 05 were below PALs (maximum RL 6.6 mg/kg for PCBs in sample 04; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1810901

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811019**; Report Issued **January 2, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-460-110118-B 6.5FT | 11/1/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811019-01 | ☒ PCB (8082A) |
| B-366-110118-B 9FT | 11/1/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811019-02 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for sample 01 (primary run) diluted below MRL. No qualifications indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For sample 01, all results reported from diluted run (100x), with RLs raised. RLs for all ND results in sample 01 were below PAL (RL 6.5 mg/kg for PCBs in sample 01; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811019

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811063**; Report Issued **January 4, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-698-110218-B 7FT | 11/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811063-01 | ☒ PCB (8082A) |
| B-673-110218-B 5.5FT | 11/2/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811063-02 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For sample 02, only reporting limit raised was for detected Aroclor. No impact on data sensitivity. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811063

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811097**; Report Issued **January 4, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-296-110518-A 3FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-01 | ☒ PCB (8082A) |
| B-297-110518-A 3FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-02 | ☒ PCB (8082A) |
| B-292-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-03 | ☒ PCB (8082A) |
| B-293-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-04 | ☒ PCB (8082A) |
| B-294-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-05 | ☒ PCB (8082A) |
| B-295-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-06 | ☒ PCB (8082A) |
| B-302-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-07 | ☒ PCB (8082A) |
| B-303-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-08 | ☒ PCB (8082A) |
| B-304-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-09 | ☒ PCB (8082A) |
| B-310-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-10 | ☒ PCB (8082A) |
| B-311-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-11 | ☒ PCB (8082A) |
| B-312-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-12 | ☒ PCB (8082A) |
| B-313-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-13 | ☒ PCB (8082A) |
| B-314-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-14 | ☒ PCB (8082A) |
| B-285-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-15 | ☒ PCB (8082A) |
| B-286-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-16 | ☒ PCB (8082A) |
| B-287-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-17 | ☒ PCB (8082A) |
| B-319-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-18 | ☒ PCB (8082A) |
| B-923-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-19 | ☒ PCB (8082A) |
| B-924-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811097-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - **DCB surrogate recoveries in sample 13 above QC limit. Sample 13 Aroclor 1268 result is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811097

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-313-110518-A 5FT | PCBs | Aroclor 1268 | 0.9 | mg/kg | **0.9 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811098**; Report Issued **January 28, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-928-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811098-01 | ☒ PCB (8082A) |
| B-929-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811098-02 | ☒ PCB (8082A) |
| B-930-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811098-03 | ☒ PCB (8082A) |
| B-290-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811098-04 | ☒ PCB (8082A) |
| B-283-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811098-05 | ☒ PCB (8082A) |
| B-284-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811098-06 | ☒ PCB (8082A) |
| B-277-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811098-07 | ☒ PCB (8082A) |
| B-278-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811098-08 | ☒ PCB (8082A) |
| B-272-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811098-09 | ☒ PCB (8082A) |
| B-273-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811098-10 | ☒ PCB (8082A) |
| B-559-110518-D 6FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811098-11 | ☒ PCB (8082A) |
| B-459-110518-B 8FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811098-12 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 11 and 12 (primary runs) diluted below MRL. No qualifications indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) - **RPDs for Aroclor 1254 in samples 05, 07, and 09 above 40% QC limit; results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 04, 06, and 08, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 11 and 12, all results reported from the diluted runs (100x and 20x, respectively), with RLs raised. RLs for all ND results in samples 11 and 12 were below PAL (maximum RL 6.4 mg/kg for sample 11; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811098

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-283-110518-A 5FT | PCBs | Aroclor 1254 | 0.2 | mg/kg | **0.2 J** | DC |
| B-277-110518-A 5FT | PCBs | Aroclor 1254 | 0.09 | mg/kg | **0.09 J** | DC |
| B-272-110518-A 5FT | PCBs | Aroclor 1254 | 0.08 | mg/kg | **0.08 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811099**; Report Issued **January 4, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-274-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1811099-01 | ☒ PCB (8082A) |
| B-274-110518-A-1 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811099-02 | ☒ PCB (8082A) |
| B-279-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1811099-03 | ☒ PCB (8082A) |
| B-279-110518-A-1 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811099-04 | ☒ PCB (8082A) |
| B-280-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811099-05 | ☒ PCB (8082A) |
| B-281-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811099-06 | ☒ PCB (8082A) |
| B-301-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811099-07 | ☒ PCB (8082A) |
| B-926-110518-A 5FT | 11/05/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811099-08 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness – COC did not indicate a requested analysis for samples 07 and 08; presumed correct based on jar labels. |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - **MS/MSD analyzed on sample 01: MS recoveries for Aroclor 1016, and RPDs for Aroclor 1016 and 1260 above QC limits. Sample 01 Aroclor 1254 result is considered an estimate (qualified with J).**<br>**MS/MSD analyzed on sample 03: MS recovery for Aroclor 1016 (Primary column), and MS and MSD recoveries for Aroclor 1260 (secondary column) above QC limits. Sample 02 Aroclor 1254 result is considered an estimate (qualified with J).** |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) - **RPD for Aroclor 1254 in samples 01/02 above QC limit; Aroclor 1254 results in samples 01 and 02 are considered estimates (qualified with J).**<br>**RPD for Aroclor 1254 in samples 03/04 above QC limit; Aroclor 1254 results in samples 03 and 04 are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For sample 01, the only reporting limit raised was for the detected Aroclor. No impact on data sensitivity. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811099

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-274-110518-A 5FT | PCBs | Aroclor 1254 | 3.8 | mg/kg | **3.8 J** | DU, AM |
| B-274-110518-A-1 5FT | PCBs | Aroclor 1254 | 1.1 | mg/kg | **1.1 J** | DU |
| B-279-110518-A 5FT | PCBs | Aroclor 1254 | 0.8 | mg/kg | **0.8 J** | DU, AM |
| B-279-110518-A-1 5FT | PCBs | Aroclor 1254 | 0.2 | mg/kg | **0.2 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811126**; Report Issued **January 4, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-842-110618-B 15FT | 11/06/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811126-01 | ☒ PCB (8082A) |
| B-841-110618-B 15FT | 11/06/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811126-02 | ☒ PCB (8082A) |
| B-840-110618-B 15FT | 11/06/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811126-03 | ☒ PCB (8082A) |
| B-794-110618-C 15FT | 11/06/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811126-04 | ☒ PCB (8082A) |
| B-798-110618-C 15FT | 11/06/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811126-05 | ☒ PCB (8082A) |
| B-812-110618-C 15FT | 11/06/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811126-06 | ☒ PCB (8082A) |
| B-460-110618-C 8FT | 11/06/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811126-07 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for sample 01 (primary run) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 03, 05, and 05, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For sample 01, all results reported from diluted run (50x), with RLs raised. RLs for all ND results in sample 01 were below PAL (RL 4.1 mg/kg; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811126

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811171**; Report Issued **January 4, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-738-110718-A 1.5FT | 11/07/2018 | ☐ Soil ☒ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1811171-01 | ☒ PCB (8082A) |
| B-738-110718-A-1 1.5FT | 11/07/2018 | ☐ Soil ☒ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-02 | ☒ PCB (8082A) |
| B-724-110718-A 2.5FT | 11/07/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-03 | ☒ PCB (8082A) |
| B-725-110718-A 2.5FT | 11/07/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-04 | ☒ PCB (8082A) |
| B-731-110718-A 4.5FT | 11/07/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-05 | ☒ PCB (8082A) |
| B-668-110718-A 2.5FT | 11/07/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-06 | ☒ PCB (8082A) |
| B-677-110718-A 2.5FT | 11/07/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-07 | ☒ PCB (8082A) |
| B-939-110718-A 2.5FT | 11/07/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-08 | ☒ PCB (8082A) |
| B-940-110718-A 2.5FT | 11/07/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-09 | ☒ PCB (8082A) |
| B-925-110718-A 2.5FT | 11/07/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-10 | ☒ PCB (8082A) |
| B-282-110718-A 2.5FT | 11/07/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-11 | ☒ PCB (8082A) |
| B-288-110718-A 2.5FT | 11/07/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-12 | ☒ PCB (8082A) |
| B-466-110718-A 2.5FT | 11/07/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-13 | ☒ PCB (8082A) |
| SW-565-110718-B 4-8FT | 11/07/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-14 | ☒ PCB (8082A) |
| SW-579-110718-B 4-7FT | 11/07/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-15 | ☒ PCB (8082A) |
| SW-583-110718-B 4-7FT | 11/07/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811171-16 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for sample 15 (primary run) diluted below MRL. No qualification indicated.<br>**DCB and TMX surrogate recoveries in sample 08 and 13 below QC limit. All results (and ND) in samples 08 and 13 are considered estimates (qualified with UJ). Note that laboratory re-extracted and re-analyzed both samples; same ND results, with TMX surrogates still below QC limit (confirming QC issue).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - **MS/MSD analyzed on sample 01: All MS recoveries below QC limits and all RPDs above QC limits. Sample 01 results considered estimates (qualified with J/UJ).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) - **RPD for Aroclor 1254 in samples 01/02 above QC limit; Aroclor 1254 results in samples 01 and 02 are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For sample 01, the only reporting limit raised was for the detected Aroclor. No impact on data sensitivity. For sample 15, all results reported from diluted run (100x), with RLs raised. RLs for all ND results in sample 01 were below PAL (RL 3.4 mg/kg; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811171

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-738-110718-A 1.5FT | PCBs | Aroclor 1254 | 7.0 | mg/kg | **7.0 J** | DU, BM, MR |
| | | All remaining aroclors | 0.1 U | mg/kg | 0.1 UJ | BM, MR |
| B-738-110718-A-1 1.5FT | PCBs | Aroclor 1254 | 0.5 | mg/kg | **0.5 J** | DU |
| B-939-110718-A 2.5FT | PCBs | All aroclors | 0.1 U | mg/kg | 0.1 UJ | SB |
| B-466-110718-A 2.5FT | PCBs | All aroclors | 0.1 U | mg/kg | 0.1 UJ | SB |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811209**; Report Issued **January 4, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-298-110818-A 2.5FT | 11/8/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811209-01 | ☒ PCB (8082A) |
| B-299-110818-A 2.5FT | 11/8/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811209-02 | ☒ PCB (8082A) |
| B-300-110818-A 2.5FT | 11/8/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811209-03 | ☒ PCB (8082A) |
| B-307-110818-A 2.5FT | 11/8/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811209-04 | ☒ PCB (8082A) |
| B-308-110818-A 2.5FT | 11/8/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811209-05 | ☒ PCB (8082A) |
| B-309-110818-A 2.5FT | 11/8/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811209-06 | ☒ PCB (8082A) |
| B-316-110818-A 2.5FT | 11/8/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811209-07 | ☒ PCB (8082A) |
| B-317-110818-A 2.5FT | 11/8/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811209-08 | ☒ PCB (8082A) |
| B-318-110818-A 2.5FT | 11/8/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811209-09 | ☒ PCB (8082A) |
| SW-635-110818 2-6FT | 11/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811209-10 | ☒ VOC (8260B) |
| SW-640-110818 2-6FT | 11/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1811209-11 | ☒ VOC (8260B) |
| SW-640-110818-1 2-6FT | 11/8/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811209-12 | ☒ VOC (8260B) |
| SW-620-110818 2-6FT | 11/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811209-13 | ☒ VOC (8260B) |
| SW-625-110818 2-6FT | 11/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811209-14 | ☒ VOC (8260B Low) |
| SW-630-110818 2-6FT | 11/8/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811209-15 | ☒ VOC (8260B) |
| TB | n/a | ☐ Soil ☒ SOLID | ☐ FD ☐ MS/MSD ☐ EB ☒ TB | 1811209-16 | ☒ VOC (8260B, 8260B Low) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Data completeness - **Several VOC results reported between MDL and MRL. These results considered estimates and qualified with J by lab, and qualifier carried over by validation.** |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Surrogate recoveries – PCBs: TMX surrogate for sample 02, primary column, below QC limit; As secondary column recoveries acceptable, and no concentrations detected in either column, no qualification to data is indicated. High-Level VOCs: Surrogates for sample 13 and 15, diluted runs (100x) above QC limits, due to dilution. As undiluted run surrogate recoveries were within limits, no qualification to data is indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) – Within low-level VOC analysis, LCS and LCSD recoveries for tetrahydrofuran, and LCSD recovery for Acetone were above QC limits; however, as these compounds were not detected within the associated samples, the potential positive bias indicated by the LCS and LCSD recoveries does not indicate a QC issue, and no qualification to sample data is indicated. All RPDs within QC limits. |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – MS/MSD analysis performed on sample 11 for high-level VOCs. MS recovery for 2-chlorotoluene above QC limit; however, as native sample result > 4X spike level, recovery as a QC result is not valid, and no qualification was applied to data. All other recoveries and all RPDs within QC limits. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☒ | ☐ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) – For PCBs: C8K0182-CCV2 %D for Aroclor 1016, secondary column, %D above maximum QC limit; however, as the CCV ended an analytical batch for QC samples only (method blank, LCS), no qualification to sample data is indicated. |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☒ | ☐ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☒ | ☐ | ☐ | Internal standard performance (GC/MS only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 13 and 15 high-level VOC analysis, the only reporting limits raised were for the detections of 2-chlrotoluene. No impact on data sensitivity. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811209

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-635-110818 2-6FT | VOCs | Toluene | 0.106 J | mg/kg | **0.106 J** | RL |
| | | o-Xylene | 0.0315 J | mg/kg | **0.0315 J** | RL |
| | | m,p-Xylenes | 0.0552 J | mg/kg | **0.0552 J** | RL |
| SW-640-110818 2-6FT | VOCs | o-Xylene | 0.0245 J | mg/kg | **0.0245 J** | RL |
| | | m,p-Xylenes | 0.0491 J | mg/kg | **0.0491 J** | RL |
| SW-640-110818-1 2-6FT | VOCs | o-Xylene | 0.0192 J | mg/kg | **0.0192 J** | RL |
| | | m,p-Xylenes | 0.0559 J | mg/kg | **0.0559 J** | RL |
| SW-620-110818 2-6FT | VOCs | Ethylbenzene | 0.0279 J | mg/kg | **0.0279 J** | RL |
| | | Toluene | 0.0156 J | mg/kg | **0.0156 J** | RL |
| | | o-Xylene | 0.124 J | mg/kg | **0.124 J** | RL |
| | | m,p-Xylenes | 0.293 J | mg/kg | **0.293 J** | RL |
| SW-630-110818 2-6FT | VOCs | 1,2-Dichlorobenzene | 0.0388 J | mg/kg | **0.0388 J** | RL |
| | | Ethylbenzene | 0.0275 J | mg/kg | **0.0275 J** | RL |
| | | Naphthalene | 0.126 J | mg/kg | **0.126 J** | RL |
| | | o-Xylene | 0.110 J | mg/kg | **0.110 J** | RL |
| | | m,p-Xylenes | 0.278 J | mg/kg | **0.278 J** | RL |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811261**; Report Issued **January 8, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-64-110918-C 4-6FT | 11/09/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811261-01 | ☒ PCB (8082A) |
| SW-77-110918-C 4-6FT | 11/09/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811261-02 | ☒ PCB (8082A) |
| B-559-110918-E 9.5FT | 11/09/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811261-03 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 01 and 02 (primary runs) diluted below MRL. No qualification indicated. DCB surrogate for sample 03, primary column, above QC limit, indicating potential positive bias. As the only detected result in the sample was taken from secondary column, no qualification is indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For samples 01 and 02, all results reported from diluted run (20x), with RLs raised. RLs for all ND results in samples 01 and 02 were below PAL (RL=0.6 mg/kg; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811261

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811303**; Report Issued **January 8, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| W-28-111218 0-2FT | 11/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811303-01 | ☒ PCB (8082A) |
| W-27-111218 0-2FT | 11/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811303-02 | ☒ PCB (8082A) |
| SW-244-111218-A 0-2FT | 11/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811303-03 | ☒ PCB (8082A) |
| SW-243-111218-A 0-2FT | 11/12/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811303-03 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – For sample 04, the only reporting limit raised was for the detected Aroclor. No impact on data sensitivity. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811303

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811314**; Report Issued **January 8, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-579-111318-C 4-7FT | 11/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811314-01 | ☒ PCB (8082A) |
| B-837-111318 4FT | 11/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811314-02 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811314

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811370**; Report Issued **January 8, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-73-111418 3FT | 11/14/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811370-01 | ☒ PCB (8082A) |
| B-74-111418 3FT | 11/14/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811370-02 | ☒ PCB (8082A) |
| B-75-111418 3FT | 11/14/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811370-03 | ☒ PCB (8082A) |
| B-76-111418 3FT | 11/14/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811370-04 | ☒ PCB (8082A) |
| SW-63-111418 0-3FT | 11/14/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811370-05 | ☒ PCB (8082A) |
| SW-61-111418 0-3FT | 11/14/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811370-06 | ☒ PCB (8082A) |
| SW-722-111418-A 0-2FT | 11/14/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811370-07 | ☒ PCB (8082A) |
| B-412-111418-A 4.5FT | 11/14/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811370-08 | ☒ PCB (8082A) |
| B-349-111418-A 4.5FT | 11/14/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811370-09 | ☒ PCB (8082A) |
| B-359-111418-A 4.5FT | 11/14/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811370-10 | ☒ PCB (8082A) |
| B-403-111418-A 5FT | 11/14/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811370-11 | ☒ PCB (8082A) |
| B-360-111418-B 5FT | 11/14/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811370-12 | ☒ PCB (8082A) |
| B-371-111418-B 5FT | 11/14/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811370-13 | ☒ PCB (8082A) |
| B-382-111418-B 5FT | 11/14/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811370-14 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 01-04, 06, 09, 13, and 14 (primary runs) diluted below MRL. No qualification indicated. DCB surrogate recoveries for secondary columns in undiluted sample runs for samples 05 and 07 were above QC limit (potential positive bias). However, the only detected results in these samples were taken from diluted runs, for which all surrogate recoveries were within limits. No qualification indicated. |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 05, 07, and 10, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 01-04, 06, 09, 13, and 14, all results reported from diluted runs (20x, 50x, 50x, 50x, 50x, 50x, 200x, and 20x), with RLs raised. RLs for all ND results in samples 01-04, 06, 09, 13, and 14 were below PAL (maximum RL 12.2 mg/kg for sample 13; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811370

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811407**; Report Issued **January 8, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-243-111518-B 0-2FT | 11/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811407-01 | ☒ PCB (8082A) |
| SW-494-111518-C 0-2FT | 11/15/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811407-02 | ☒ PCB (8082A) |
| SW-495-111518-C 0-2FT | 11/15/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811407-03 | ☒ PCB (8082A) |
| SW-515-111518-B 0-2FT | 11/15/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811407-04 | ☒ PCB (8082A) |
| B-738-111518-B 0-2FT | 11/15/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811407-05 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for sample 02 (primary run) diluted below MRL. No qualification indicated.<br>DCB surrogate recovery for secondary column in undiluted sample run for sample 03 was above QC limit (potential positive bias). However, the only detected result in this sample was taken from diluted run, for which all surrogate recoveries were within limits. No qualification indicated.<br>**DCB surrogate recovery for primary column in diluted sample run for sample 04 was above QC limit (potential positive bias). The only detected result in this sample was taken from diluted run primary column; detected Aroclor 1254 result for sample 04 is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 03 and 04, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For sample 02, all results reported from diluted run (50x), with RLs raised. RLs for all ND results in sample 02 were below PAL (1.4 mg/kg; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811407

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-515-111518-B 0-2FT | PCBs | Aroclor 1254 | 6.2 | mg/kg | **6.2 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811477**; Report Issued **January 16, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| W-21 0-2FT | 11/19/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811477-01 | ☒ PCB (8082A) |
| W-21-1 0-2FT | 11/19/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811477-02 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation – Sample temperature slightly elevated above 0-6 degree Celsius expected preservation range; however, the laboratory recorded temperature less than 2 hours after sample collection, and thus the samples were still cooling down (on ice). No qualification is indicated. |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for sample 02 (primary run) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – **Samples 01/02 Aroclor 1248 RPD above maximum QC limit; results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For sample 01, the only reporting limit raised was for the detected Aroclor. No impact on data sensitivity. For sample 02, all results reported from diluted run (20x), with RLs raised. RLs for all ND results in sample 02 were below PAL (0.6 mg/kg; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811477

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| W-21 0-2FT | PCBs | Aroclor 1248 | 6.2 | mg/kg | **6.2 J** | DU |
| W-21-1 0-2FT | PCBs | Aroclor 1248 | 10.5 | mg/kg | **10.5 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811519**; Report Issued **January 16, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-828-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811519-01 | ☒ PCB (8082A) |
| B-833-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811519-02 | ☒ PCB (8082A) |
| B-829-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1811519-03 | ☒ PCB (8082A) |
| B-829-112018-1 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811519-04 | ☒ PCB (8082A) |
| B-834-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1811519-05 | ☒ PCB (8082A) |
| B-834-112018-1 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811519-06 | ☒ PCB (8082A) |
| B-830-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1811519-07 | ☒ PCB (8082A) |
| B-830-112018-1 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811519-08 | ☒ PCB (8082A) |
| B-835-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1811519-09 | ☒ PCB (8082A) |
| B-835-112018-1 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811519-10 | ☒ PCB (8082A) |
| B-831-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1811519-11 | ☒ PCB (8082A) |
| B-831-112018-1 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811519-12 | ☒ PCB (8082A) |
| B-836-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1811519-13 | ☒ PCB (8082A) |
| B-836-112018-1 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811519-14 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for sample 02 (primary run) diluted below MRL. No qualification indicated. For sample 04, the diluted run DCB surrogate recovery for the secondary column was above QC limit, but as this sample is a field duplicate, and the primary sample surrogates were all within limits, with good RPDs between primary and field duplicate, no qualification is given to data based on duplicate sample surrogate recovery. **For samples 07, 08, 10, 11, and 12, the diluted runs DCB surrogate recovery for the secondary columns were all above QC limit. For each sample, the Aroclor 1260 results were reported from the diluted run, secondary column; samples 07, 08, 10, 11, and 12 Aroclor 1260 results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - Samples 03, 05, 07, 09, 11, and 13 were requested and run for MS/MSD analysis. The majority of results were marked by laboratory as "MT", indicating matrix spike analyte results masked due to high target values; therefore, these results were not valid as QC indicators. No qualifications indicated. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – RPDs for samples 03/04, 05/06, and 11/12 field duplicate pairs are all below the maximum QC limit. **RPDs exceeded the maximum QC limit for samples 09/10 Aroclors 1242, 1254, and 1260, and samples 13/14, Aroclor 1260; results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Dual column RPDs exceeded the 40% maximum limit for sample 03 Aroclor 1242 and sample 14 Aroclor 1260; results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) – Although there was one elevated %D in a CCV, it occurred after last CCV bracketing samples. No qualification indicated. |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 01 and 03-14, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For sample 02, all results reported from diluted run (50x), with RLs raised. RLs for all ND results in sample 02 were below PAL (2.9 mg/kg; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811519

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-829-112018 3FT | PCBs | Aroclor 1242 | 6.4 | mg/kg | **6.4 J** | DC |
| B-830-112018 3FT | PCBs | Aroclor 1260 | 4.9 | mg/kg | **4.9 J** | SA |
| B-830-112018-1 3FT | PCBs | Aroclor 1260 | 5.7 | mg/kg | **5.7 J** | SA |
| B-835-112018 3FT | PCBs | Aroclor 1242 | 2.2 | mg/kg | **2.2 J** | DU |
| | | Aroclor 1254 | 3.0 | mg/kg | **3.0 J** | DU |
| | | Aroclor 1260 | 2.1 | mg/kg | **2.1 J** | DU |
| B-835-112018-1 3FT | PCBs | Aroclor 1242 | 5.5 | mg/kg | **5.5 J** | DU |
| | | Aroclor 1254 | 5.2 | mg/kg | **5.2 J** | DU |
| | | Aroclor 1260 | 4.5 | mg/kg | **4.5 J** | DU, SA |
| B-831-112018 3FT | PCBs | Aroclor 1260 | 1.5 | mg/kg | **1.5 J** | SA |
| B-831-112018-1 3FT | PCBs | Aroclor 1260 | 1.2 | mg/kg | **1.2 J** | SA |
| B-836-112018 3FT | PCBs | Aroclor 1260 | 1.2 | mg/kg | **1.2 J** | DU |
| B-836-112018-1 3FT | PCBs | Aroclor 1260 | 0.3 | mg/kg | **0.3 J** | DC, DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811520**; Report Issued **January 16, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-832-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-01 | ☒ PCB (8082A) |
| B-838-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-02 | ☒ PCB (8082A) |
| B-824-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-03 | ☒ PCB (8082A) |
| B-822-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-04 | ☒ PCB (8082A) |
| B-825-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-05 | ☒ PCB (8082A) |
| B-823-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-06 | ☒ PCB (8082A) |
| B-826-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-07 | ☒ PCB (8082A) |
| B-827-112018 3FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-08 | ☒ PCB (8082A) |
| SW-592-112018 0-2FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-09 | ☒ PCB (8082A) |
| SW-591-112018 0-2FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-10 | ☒ PCB (8082A) |
| SW-590-112018 0-2FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-11 | ☒ PCB (8082A) |
| SW-589-112018 0-2FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-12 | ☒ PCB (8082A) |
| SW-588-112018 0-2FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-13 | ☒ PCB (8082A) |
| SW-587-112018 0-2FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-14 | ☒ PCB (8082A) |
| SW-586-112018 0-2FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-15 | ☒ PCB (8082A) |
| B-371-112018-C 7FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811520-16 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 03, 05, 07, 10, 11, and 13 (primary runs) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 01, 02, 04, 06, 09, and 16, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 03, 05, 07, 10, 11, and 13, all results reported from diluted runs (100x for sample 10, remainder at 20x), with RLs raised. RLs for all ND results in samples 03, 05, 07, 10, 11, and 13 were below PAL (maximum RL=5.9 mg/kg for sample 10; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811520

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811571**; Report Issued **January 16, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-49-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811571-01 | ☒ PCB (8082A) |
| B-50-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811571-02 | ☒ PCB (8082A) |
| B-55-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811571-03 | ☒ PCB (8082A) |
| B-60-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811571-04 | ☒ PCB (8082A) |
| SW-40-112118 0-2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811571-05 | ☒ PCB (8082A) |
| SW-45-112118 0-2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811571-06 | ☒ PCB (8082A) |
| B-25-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811571-07 | ☒ PCB (8082A) |
| B-30-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811571-08 | ☒ PCB (8082A) |
| B-35-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811571-09 | ☒ PCB (8082A) |
| B-40-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811571-10 | ☒ PCB (8082A) |
| B-65-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1811571-11 | ☒ PCB (8082A) |
| B-65-112118-1 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811571-12 | ☒ PCB (8082A) |
| B-349-112018-B 7FT | 11/20/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811571-13 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 01, 02, and 05-10 (primary runs) diluted below MRL. No qualification indicated.<br>For sample 11, the primary run DCB surrogate recovery for the secondary column was above QC limit; however, as the only detected result was reported from diluted run, with acceptable recoveries, no qualification is indicated.<br>**-For samples 03 and 13, the only analytical runs had all their DCB surrogate recoveries for the secondary columns above QC limit. For each sample, the Aroclor 1254 results were reported from the secondary column; therefore, the Aroclor 1254 detected concentrations for samples 03 and 13 are considered estimates (qualified with J).**<br>**-For sample 04, all surrogate recoveries were above the QC limit; therefore, the Aroclor 1254 detected concentration for sample 04 is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) - Sample 11 was requested and run for MS/MSD analysis. The majority of results were marked by laboratory as "MT", indicating matrix spike analyte results masked due to high target values (with recoveries reported above QC limits); therefore, these results were not valid as QC indicators. No qualifications indicated. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Dual column RPDs exceeded the 40% maximum limit for samples 03 and 04 Aroclor 1254 concentrations; therefore, results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☒ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) – **Based upon an a %Drift above QC limit in one batch CCV (secondary column), samples 03 and 13 detected concentrations for Aroclor 1254 are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 11 and 12, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 01, 02, and 04-10, all results reported from diluted runs (5x for sample 04, 50x for samples 07, 08, and 10, 20x for remainder), with RLs raised. RLs for all ND results in samples 07, 08, and 10 were below PAL (2.9 mg/kg; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811571

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-55-112118 2FT | PCBs | Aroclor 1254 | 0.9 | mg/kg | **0.9 J** | SA, DC, CCV |
| B-60-112118 2FT | PCBs | Aroclor 1254 | 4.9 | mg/kg | **4.9 J** | SA, DC |
| B-349-112018-B 7FT | PCBs | Aroclor 1254 | 0.5 | mg/kg | **0.5 J** | SA, CCV |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811612**; Report Issued **January 16, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-49-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-01 | ☒ PCB (8082A) |
| B-49-112118-1 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-02 | ☒ PCB (8082A) |
| B-51-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-03 | ☒ PCB (8082A) |
| B-52-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-04 | ☒ PCB (8082A) |
| B-52-112118-1 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-05 | ☒ PCB (8082A) |
| B-53-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-06 | ☒ PCB (8082A) |
| B-54-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-07 | ☒ PCB (8082A) |
| B-54-112118-1 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-08 | ☒ PCB (8082A) |
| B-56-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-09 | ☒ PCB (8082A) |
| B-57-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-10 | ☒ PCB (8082A) |
| B-56-112118-1 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-11 | ☒ PCB (8082A) |
| B-58-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-12 | ☒ PCB (8082A) |
| B-58-112118-1 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-13 | ☒ PCB (8082A) |
| B-59-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-14 | ☒ PCB (8082A) |
| B-61-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-15 | ☒ PCB (8082A) |
| B-62-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-16 | ☒ PCB (8082A) |
| B-62-112118-1 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-17 | ☒ PCB (8082A) |
| B-63-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-18 | ☒ PCB (8082A) |
| B-64-112118 2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-19 | ☒ PCB (8082A) |
| SW-38-112118 0-2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811612-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation – All samples in data set were collected on 11/21/2018, but not received by the laboratory until 11/26/2018 (following holiday weekend). Temperature upon receipt by laboratory was recorded as 13.9 degrees Celsius, above the standard 6 degree limit for sample storage/shipment preservation. Per both EPA Region I and National Data Validation Guidelines, "professional judgment should be used when the laboratory has reported transportation cooler temperatures that slightly exceed the upper limits of the preservation criteria." Per the laboratory, "samples were delivered on ice and therefore meet regulatory criteria." Given that the samples were delivered on ice, and the constituents of concern (PCBs) at the site, which were primary used because they are stable at high temperatures and prolonged the useful life of items they were added to, qualifications were not assigned to the data set based solely on the reported temperature upon delivery. |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 01-05, 11, and 15 (primary runs) diluted below MRL. No qualification indicated.<br>For samples 06, 09, 13, and 19, a surrogate recovery was above QC limit for one column; however, as the only detected result in each sample was reported from the other column, with acceptable recoveries, no qualification is indicated.<br>**-For samples 07, 08, 10, 12, 14, 16, 17, 18, and 20, one or more surrogates recovered above the QC limit. For each sample, the Aroclor 1254 results were reported from the column with the high recovery; therefore, the Aroclor 1254 detected concentrations for samples 07, 08, 10, 12, 14, 16, 17, 18, and 20are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) – Primary/field duplicate pairs 01/02, 04/05, 07/08, 09/11, 12/13, and 16/17. All RPDs below maximum QC limit. |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Dual column RPDs exceeded the 40% maximum limit for Aroclor 1254 concentrations in samples 06, 09, 10, 11, and 13; therefore, these results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☒ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) – **Based upon an a %Drift above QC limit in two batch CCVs bracketing one analytical batch (secondary column), samples 01, 02, 03, and 05 detected concentrations for Aroclor 1254 are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 01-05, 11, and 15, all results reported from diluted runs (50x for samples 01 and 02, and 20x for remainder), with RLs raised. RLs for all ND results in samples 01-05, 11, and 15 were below PAL (maximum of 2.9 mg/kg for samples 01 and 02; PAL = 25 mg/kg). |

Validator's Note: While several reported QC results indicated potential data quality issues, all the surrogate recoveries and the calibration issue specifically indicate potential positive bias to data (i.e., the reported concentrations may be higher than actually present). The dual column comparison indicates that the issue may also relate to inconsistent results between columns. However, all 6 primary/field duplicate comparisons indicated acceptable reproducibility to the data. Therefore, in regards to the overall program, results that have passed action limits are still considered acceptable for that purpose.

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811612

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-49-112118 2FT | PCBs | Aroclor 1254 | 20.4 | mg/kg | **20.4 J** | CCV |
| B-49-112118-1 2FT | PCBs | Aroclor 1254 | 21.0 | mg/kg | **21.0 J** | CCV |
| B-51-112118 2FT | PCBs | Aroclor 1254 | 11.6 | mg/kg | **11.6 J** | CCV |
| B-52-112118-1 2FT | PCBs | Aroclor 1254 | 12.6 | mg/kg | **12.6 J** | CCV |
| B-53-112118 2FT | PCBs | Aroclor 1254 | 3.3 | mg/kg | **3.3 J** | DC |
| B-54-112118 2FT | PCBs | Aroclor 1254 | 0.8 | mg/kg | **0.8 J** | SA |
| B-54-112118-1 2FT | PCBs | Aroclor 1254 | 1.0 | mg/kg | **1.0 J** | SA |
| B-56-112118 2FT | PCBs | Aroclor 1254 | 6.7 | mg/kg | **6.7 J** | DC |
| B-57-112118 2FT | PCBs | Aroclor 1254 | 1.2 | mg/kg | **1.2 J** | DC, SA |
| B-56-112118-1 2FT | PCBs | Aroclor 1254 | 6.9 | mg/kg | **6.9 J** | DC |
| B-58-112118 2FT | PCBs | Aroclor 1254 | 3.0 | mg/kg | **3.0 J** | SA |
| B-58-112118-1 2FT | PCBs | Aroclor 1254 | 1.9 | mg/kg | **1.9 J** | DC |
| B-59-112118 2FT | PCBs | Aroclor 1254 | 3.8 | mg/kg | **3.8 J** | SA |
| B-62-112118 2FT (16) | PCBs | Aroclor 1254 | 0.6 | mg/kg | **0.6 J** | SA |
| B-62-112118-1 2FT | PCBs | Aroclor 1254 | 0.4 | mg/kg | **0.4 J** | SA |
| B-63-112118 2FT | PCBs | Aroclor 1254 | 1.1 | mg/kg | **1.1 J** | SA |

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| SW-38-112118 0-2FT (20) | PCBs | Aroclor 1254 | 5.0 | mg/kg | **5.0 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811613**; Report Issued **January 16, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-39-112118 0-2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-01 | ☒ PCB (8082A) |
| SW-41-112118 0-2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-02 | ☒ PCB (8082A) |
| SW-42-112118 0-2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-03 | ☒ PCB (8082A) |
| SW-43-112118 0-2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-04 | ☒ PCB (8082A) |
| SW-44-112118 0-2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-05 | ☒ PCB (8082A) |
| SW-44-112118-1 0-2FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-06 | ☒ PCB (8082A) |
| B-26-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-07 | ☒ PCB (8082A) |
| B-27-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-08 | ☒ PCB (8082A) |
| B-26-112118-1 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-09 | ☒ PCB (8082A) |
| B-27-112118-1 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-10 | ☒ PCB (8082A) |
| B-28-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-11 | ☒ PCB (8082A) |
| B-29-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-12 | ☒ PCB (8082A) |
| B-29-112118-1 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-13 | ☒ PCB (8082A) |
| B-31-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-14 | ☒ PCB (8082A) |
| B-32-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-15 | ☒ PCB (8082A) |
| B-33-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-16 | ☒ PCB (8082A) |
| B-33-112118-1 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-17 | ☒ PCB (8082A) |
| B-34-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-18 | ☒ PCB (8082A) |
| B-36-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-19 | ☒ PCB (8082A) |
| B-36-112118-1 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811613-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation – All samples in data set were collected on 11/21/2018, but not received by the laboratory until 11/26/2018 (following holiday weekend). Temperature upon receipt by laboratory was recorded as 13.9 degrees Celsius, above the standard 6 degree limit for sample storage/shipment preservation. Per both EPA Region I and National Data Validation Guidelines, "professional judgment should be used when the laboratory has reported transportation cooler temperatures that slightly exceed the upper limits of the preservation criteria." Per the laboratory, "samples were delivered on ice and therefore meet regulatory criteria." Given that the samples were delivered on ice, and the constituents of concern (PCBs) at the site, which were primary used because they are stable at high temperatures and prolonged the useful life of items they were added to, qualifications were not assigned to the data set based solely on the reported temperature upon delivery. |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 01-20 (primary runs, all samples) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) – Primary/field duplicate pairs 05/06, 07/09, 08/10, 12/13, 16/17, and 19/20. All RPDs below maximum QC limit. |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 01-02, all results reported from diluted runs (20x for samples 02, 05, 06, 10, 11, 13, 14, 19, and 20, and 50x for remainder), with RLs raised. RLs for all ND results in all samples were below PAL (maximum of 1.6 mg/kg for samples 05 and17; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811613

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811646**; Report Issued **January 16, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-42-112718-1 4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-01 | ☒ PCB (8082A) |
| B-43-112718 4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-02 | ☒ PCB (8082A) |
| B-44-112718 4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-03 | ☒ PCB (8082A) |
| B-45-112718 4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-04 | ☒ PCB (8082A) |
| B-46-112718 4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-05 | ☒ PCB (8082A) |
| B-47-112718 4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-06 | ☒ PCB (8082A) |
| B-48-112718 4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-07 | ☒ PCB (8082A) |
| SW-27-112718 0-4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-08 | ☒ PCB (8082A) |
| SW-28-112718 0-4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-09 | ☒ PCB (8082A) |
| SW-29-112718 0-4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-10 | ☒ PCB (8082A) |
| SW-30-112718 0-4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-11 | ☒ PCB (8082A) |
| SW-31-112718 0-4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-12 | ☒ PCB (8082A) |
| SW-32-112718 0-4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-13 | ☒ PCB (8082A) |
| W-21-A | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-14 | ☒ PCB (8082A) |
| B-37-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811646-15 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Holding times/Sample preservation – **Sample 15 was extracted 8 days after collection (submitted to laboratory 6 days after collection). While the extractions were within the method hold time (unspecified for extraction), the extraction was performed beyond the QAPP 7-day hold time; therefore, the sample 15 results are considered estimates (qualified J/UJ).** |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 04, 06, 08, 09, and 15 (primary runs) diluted below MRL. No qualification indicated.<br>Samples 02, 05, 10, and 11 each had a surrogate recovery above QC limits for one column, but detected result reported from other column (with acceptable recoveries). No qualification to data.<br>**Samples 03, 07, 12, and 14 each had a surrogate recovery above QC limits in the run in which a concentration was reported from the same column; therefore, the detected concentrations in samples 03, 07, 12, and 14 are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) – Primary/field duplicate pairs 1811647-01/1811646-15 (field duplicate in this package). RPD below maximum QC limit. |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Dual column RPD exceeded the 40% maximum limit for sample 11 Aroclor 1254 concentration; therefore, this result is considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 02, 05, 10, 11, 13, and 14, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 04, 06, 08, 09, and 15, all results reported from diluted runs (50x for sample 15 and 20x for remainder), with RLs raised. RLs for all ND results in all samples were below PAL (maximum of 1.5 mg/kg for sample 15; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811646

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-44-112718 4FT | PCBs | Aroclor 1254 | 0.6 | mg/kg | **0.6 J** | SA |
| B-48-112718 4FT | PCBs | Aroclor 1254 | 1.2 | mg/kg | **1.2 J** | SA |
| SW-30-112718 0-4FT | PCBs | Aroclor 1254 | 3.8 | mg/kg | **3.8 J** | DC |
| SW-31-112718 0-4FT | PCBs | Aroclor 1254 | 0.5 | mg/kg | **0.5 J** | SA |
| W-21-A | PCBs | Aroclor 1248 | 6.4 | mg/kg | **6.4 J** | SA |
| B-37-112118 1FT | PCBs | Aroclor 1254 | 36.3 | mg/kg | **36.3** | HT |
| | | All remaining aroclors | 1.5 U | mg/kg | 1.5 UJ | HT |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811647**; Report Issued **January 16, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-38-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811647-01 | ☒ PCB (8082A) |
| B-38-112118-1 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811647-02 | ☒ PCB (8082A) |
| B-39-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811647-03 | ☒ PCB (8082A) |
| B-66-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811647-04 | ☒ PCB (8082A) |
| B-67-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811647-05 | ☒ PCB (8082A) |
| B-67-112118-1 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811647-06 | ☒ PCB (8082A) |
| B-68-112118 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811647-07 | ☒ PCB (8082A) |
| B-68-112118-1 1FT | 11/21/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811647-08 | ☒ PCB (8082A) |
| B-41-112718 4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811647-09 | ☒ PCB (8082A) |
| B-42-112718 4FT | 11/27/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811647-10 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 01-09 (primary runs) diluted below MRL. No qualification indicated. **Sample 10 DCB surrogate recoveries for both columns above QC limit; therefore, the detected concentration in sample 10 is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – Primary/field duplicate pairs 01/02, 05/06, and 07/08 were analyzed in this package. RPDs were below maximum QC limit for samples 01/02 and 05/06. **Primary/field duplicate RPD for Aroclor 1254 in samples 07/08 exceeded maximum QC limit; Aroclor 1254 results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Dual column RPD exceeded the 40% maximum limit for sample 10 Aroclor 1254 concentration; therefore, this result is considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☒ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) – **Based upon an a %Drift above QC limit in one batch CCV (secondary column), samples 01-09 detected concentrations are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 01-09, all results reported from diluted runs (100x for samples 04, 07, and 08 and 50x for remainder), with RLs raised. RLs for all ND results in all samples were below PAL (maximum of 3.1 mg/kg for samples 04 and 07; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811647

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-38-112118 1FT | PCBs | Aroclor 1254 | 32.9 | mg/kg | **32.9 J** | CCV |
| B-38-112118-1 1FT | PCBs | Aroclor 1254 | 29.8 | mg/kg | **29.8 J** | CCV |
| B-39-112118 1FT | PCBs | Aroclor 1254 | 39.4 | mg/kg | **39.4 J** | CCV |
| B-66-112118 1FT | PCBs | Aroclor 1254 | 62.7 | mg/kg | **62.7 J** | CCV |
| B-67-112118 1FT | PCBs | Aroclor 1254 | 36.2 | mg/kg | **36.2 J** | CCV |
| B-67-112118-1 1FT | PCBs | Aroclor 1254 | 29.2 | mg/kg | **29.2 J** | CCV |
| B-68-112118 1FT | PCBs | Aroclor 1254 | 68.1 | mg/kg | **68.1 J** | CCV, DU |
| B-68-112118-1 1FT | PCBs | Aroclor 1254 | 114 | mg/kg | **114 J** | CCV, DU |
| B-41-112718 4FT | PCBs | Aroclor 1254 | 19.5 | mg/kg | **19.5 J** | CCV |
| B-42-112718 4FT | PCBs | Aroclor 1254 | 0.6 | mg/kg | **0.6 J** | SA, DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811704**; Report Issued **January 16, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-823-112818-A 6FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-01 | ☒ PCB (8082A) |
| B-824-112818-A 6FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-02 | ☒ PCB (8082A) |
| B-825-112818-A 6FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-03 | ☒ PCB (8082A) |
| B-826-112818-A 6FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-04 | ☒ PCB (8082A) |
| B-828-112818-A 6FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-05 | ☒ PCB (8082A) |
| B-829-112818-A 6FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-06 | ☒ PCB (8082A) |
| B-830-112818-A 6FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-07 | ☒ PCB (8082A) |
| B-833-112818-A 6FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-08 | ☒ PCB (8082A) |
| B-835-112818-A 6FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-09 | ☒ PCB (8082A) |
| SW-587-112818-A 0-2FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-10 | ☒ PCB (8082A) |
| SW-588-112818-A 0-2FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-18 | ☒ PCB (8082A) |
| SW-589-112818-A 0-2FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-12 | ☒ PCB (8082A) |
| SW-590-112818-A 0-2FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-13 | ☒ PCB (8082A) |
| SW-591-112818-A 0-2FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-14 | ☒ PCB (8082A) |
| SW-494-112818-D 0-4FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-15 | ☒ PCB (8082A) |
| SW-495-112818-D 0-4FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1811704-16 | ☒ PCB (8082A) |
| SW-515-112818-C 0-4FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-17 | ☒ PCB (8082A) |
| SW-495-112818-D-1 0-4FT | 11/28/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811704-18 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 03-09 (primary runs) diluted below MRL. No qualification indicated. **Sample 01 surrogate recoveries for both columns below QC limit; therefore, the results for sample 01 are considered estimates (qualified with J/UJ).** **Sample 02 diluted run DCB surrogate recovery, primary column above QC limit (TMX secondary column surrogate diluted below MRL); therefore, the detected concentration in sample 02 (Aroclor 1248 taken from diluted run, primary column) is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – **Sample 16 MSD recoveries and RPDs above QC limit (Aroclor 1016 primary column, Aroclor 1260 secondary column); sample 16 detected Aroclor 1254 result is considered an estimate (qualified with J).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – **Primary/field duplicate RPD for Aroclor 1248 in samples 16/18 exceeded maximum QC limit; Aroclor 1248 results are considered estimates (qualified with J/UJ).** |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Dual column RPD exceeded the 40% maximum limit for sample 01 Aroclor 1248 concentration; therefore, this result is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 02, 12, 13, 16, and 18, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 03-09, all results reported from diluted runs (20x for sample 08; 50x for samples 03 and 05; 100x for samples 04; 200x for sample 07; 500x for sample 06, and 5,000x for sample 09), with RLs raised. RLs for all ND results in samples 03, 04, 05, 07, and 08 were below PAL (maximum RL 17.5 mg/kg for PCBs in sample 07; PAL = 25 mg/kg). RLs for sample 06 (45.3 mg/kg) and sample 09 (459 mg/kg) were above the PAL, and therefore there was an impact on data sensitivity. **However, given that the elevated concentration in each sample required additional excavation, and as a result new confirmatory samples were collected, this does not indicate an impact on final confirmatory sample data sensitivity.** |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811704

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-823-112818-A 6FT | PCBs | Aroclor 1248 | 0.4 | mg/kg | **0.4 J** | SB, DC |
| | | All remaining aroclors | 0.07 U | mg/kg | 0.07 UJ | SB |
| B-824-112818-A 6FT | PCBs | Aroclor 1248 | 7.5 | mg/kg | **7.5 J** | SA |
| SW-495-112818-D 0-4FT | PCBs | Aroclor 1248 | 0.06 U | mg/kg | 0.06 UJ | DU |
| | | Aroclor 1254 | 3.4 | mg/kg | **3.4 J** | AM, MR |
| SW-495-112818-D-1 0-4FT | PCBs | Aroclor 1248 | 2.1 | mg/kg | **2.1 J** | DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811746**; Report Issued **January 16, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-331-112918-B 10FT | 11/29/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811746-01 | ☒ PCB (8082A) |
| B-334-112918-A 10FT | 11/29/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811746-02 | ☒ PCB (8082A) |
| B-398-112918-B 10FT | 11/29/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811746-03 | ☒ PCB (8082A) |
| B-408-112918-B 10FT | 11/29/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811746-04 | ☒ PCB (8082A) |
| B-410-112918-B 10FT | 11/29/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811746-05 | ☒ PCB (8082A) |
| B-145-112918-C 10.5FT | 11/29/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811746-06 | ☒ PCB (8082A) |
| B-149-112918-C 10.5FT | 11/29/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811746-07 | ☒ PCB (8082A) |
| B-152-112918-C 10.5FT | 11/29/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811746-08 | ☒ PCB (8082A) |
| B-154-112918-C 10.5FT | 11/29/2018 | ☐ Soil ☒ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1811746-09 | ☒ PCB (8082A) |
| B-154-112918-C-1 10.5FT | 11/29/2018 | ☐ Soil ☒ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811746-10 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) – No sample dilutions; no raised reporting limits. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811746

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811789**; Report Issued **January 16, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-15-113018 5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-01 | ☒ PCB (8082A) |
| B-16-113018 5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-02 | ☒ PCB (8082A) |
| SW-1-113018 0-0.5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-03 | ☒ PCB (8082A) |
| SW-2-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-04 | ☒ PCB (8082A) |
| SW-3-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1811789-05 | ☒ PCB (8082A) |
| SW-4-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-06 | ☒ PCB (8082A) |
| SW-5-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-07 | ☒ PCB (8082A) |
| SW-6-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-08 | ☒ PCB (8082A) |
| SW-7-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-09 | ☒ PCB (8082A) |
| SW-8-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-10 | ☒ PCB (8082A) |
| SW-9-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-18 | ☒ PCB (8082A) |
| SW-10-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-12 | ☒ PCB (8082A) |
| SW-11-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-13 | ☒ PCB (8082A) |
| SW-12-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-14 | ☒ PCB (8082A) |
| SW-13-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-15 | ☒ PCB (8082A) |
| SW-14-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-16 | ☒ PCB (8082A) |
| SW-15-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-17 | ☒ PCB (8082A) |
| SW-16-113018 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-18 | ☒ PCB (8082A) |
| B-17-113018 5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-19 | ☒ PCB (8082A) |
| B-18-113018 5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811789-20 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 07 and 13 (primary runs) diluted below MRL. No qualification indicated. For samples 02, 11, 12, 15, 16, and 20, although a DCB surrogate recovery was above QC limits in the undiluted sample analysis primary column, the only detected result(s) were reported from the secondary column. No qualification indicated. **For samples 01, 03-06, 08, 09, 14, and 17, the DCB surrogate recovery was above QC limits in the analysis with the detected concentration(s) reported; therefore, the detected concentrations for sample 01 (A. 1254), sample 03 (A. 1242 & A. 1254), sample 04 (A. 1254), sample 05 (A. 1242), sample 06 (A. 1242 & A. 1254), sample 08 (A. 1242), sample 09 (A. 1254), sample 14 (A. 1254), and sample 17 (A. 1254) are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☒ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – **Sample 05 MS & MSD recoveries and RPDs for Aroclor 1016 were above QC limit (both columns); sample 05 detected Aroclor 1254 result is considered an estimate (qualified with J).** |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – **Sample 05/1811793-13: Aroclor 1242 RPD above maximum QC limit; results for both samples are considered estimates (qualified with J). (See package 1811793 for Table 1 qualifications for duplicate sample 1811793-13).** |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Dual column RPD exceeded the 40% maximum limit for the sample 01 Aroclor 1254 concentration; therefore, this result is considered an estimate (qualified with J).** Note that the report pages note sample 08 and 19 Aroclor 1254 concentrations as > 40% RPD; however, the dual column summary sheets report RPDs below 40%, so no qualification is given to the data based on dual column RPDs. |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 01, 04, 08, and 10, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 07 and 13, all results reported from diluted runs (20x for both samples), with RLs raised. RLs for all ND results in samples 07 and 13 were below PALs (RL 0.6 mg/kg for PCBs in both samples; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811789

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-15-113018 5FT | PCBs | Aroclor 1254 | 0.4 | mg/kg | **0.4 J** | SA, DC |
| SW-1-113018 0-0.5FT | PCBs | Aroclor 1242 | 0.5 | mg/kg | **0.5 J** | SA |
| | | Aroclor 1254 | 0.7 | mg/kg | **0.7 J** | SA |
| SW-2-113018 0-3FT | PCBs | Aroclor 1254 | 1.6 | mg/kg | **1.6 J** | SA |
| SW-3-113018 0-3FT | PCBs | Aroclor 1242 | 0.6 | mg/kg | **0.6 J** | SA, AM, DU |
| SW-4-113018 0-3FT | PCBs | Aroclor 1242 | 0.5 | mg/kg | **0.5 J** | SA |
| | | Aroclor 1254 | 0.3 | mg/kg | **0.3 J** | SA |
| SW-6-113018 0-3FT | PCBs | Aroclor 1242 | 3.8 | mg/kg | **3.8 J** | SA |
| SW-7-113018 0-3FT | PCBs | Aroclor 1254 | 0.2 | mg/kg | **0.2 J** | SA |
| SW-12-113018 0-3FT | PCBs | Aroclor 1254 | 6.2 | mg/kg | **6.2 J** | SA |
| SW-15-113018 0-3FT | PCBs | Aroclor 1254 | 0.4 | mg/kg | **0.4 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1811793**; Report Issued **January 16, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-5-113018 0.5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811793-01 | ☒ PCB (8082A) |
| B-6-113018 0.5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811793-02 | ☒ PCB (8082A) |
| B-7-113018 5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811793-03 | ☒ PCB (8082A) |
| B-8-113018 5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811793-04 | ☒ PCB (8082A) |
| B-9-113018 5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811793-05 | ☒ PCB (8082A) |
| B-10-113018 5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811793-06 | ☒ PCB (8082A) |
| B-11-113018 5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811793-07 | ☒ PCB (8082A) |
| B-12-113018 5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811793-08 | ☒ PCB (8082A) |
| B-13-113018 5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811793-09 | ☒ PCB (8082A) |
| B-14-113018 5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811793-10 | ☒ PCB (8082A) |
| B-19-113018 5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811793-11 | ☒ PCB (8082A) |
| B-20-113018 5FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1811793-12 | ☒ PCB (8082A) |
| SW-3-113018-1 0-3FT | 11/30/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1811793-13 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for sample 01 (primary run) diluted below MRL. No qualification indicated.<br>For samples 02, 03, 04 (diluted run), and 08, although a DCB surrogate recovery was above QC limits in the undiluted sample analysis primary column, the only detected results were reported from the secondary column (samples 02-04), or no detected results were reported (sample 08). No qualification indicated.<br>**For samples 06, 07, 11, 12, and 13, the DCB surrogate recovery was above QC limits in the primary column, and the detected Aroclor 1254 results were reported from that column; therefore, the detected Aroclor 1254 concentrations for samples 06, 07, 11, 12, and 13 are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☒ | Field duplicate RPDs (if collected) – **Sample 1811789-05/1811793-13: Aroclor 1242 RPD above maximum QC limit; results for both samples are considered estimates (qualified with J). (See package 1811789 for Table 1 qualifications for primary sample 1811789-05).** |
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Dual column RPD exceeded the 40% maximum limit for samples 06, 07, 11, and 13 Aroclor 1254 concentrations; therefore, these results are considered estimates (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 02 and 04, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For sample 01, all results reported from the diluted run (50x), with RLs raised. RLs for all ND results in sample 01 were below PALs (RL 2.7 mg/kg for PCBs; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1811793

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-10-113018 5FT | PCBs | Aroclor 1254 | 0.1 | mg/kg | **0.1 J** | SA, DC |
| B-11-113018 5FT | PCBs | Aroclor 1254 | 0.1 | mg/kg | **0.1 J** | SA, DC |
| B-19-113018 5FT | PCBs | Aroclor 1254 | 0.2 | mg/kg | **0.2 J** | SA, DC |
| B-20-113018 5FT | PCBs | Aroclor 1254 | 1.1 | mg/kg | **1.1 J** | SA |
| SW-3-113018-1 0-3FT | PCBs | Aroclor 1254 | 0.3 | mg/kg | **0.3 J** | SA, DC, DU |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1812016**; Report Issued **January 23, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-30-120318-A 3FT | 12/03/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812016-01 | ☒ PCB (8082A) |
| B-33-120318-A 3FT | 12/03/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812016-02 | ☒ PCB (8082A) |
| B-34-120318-A 3FT | 12/03/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812016-03 | ☒ PCB (8082A) |
| B-40-120318-A 3FT | 12/03/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812016-04 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☒ | Surrogate recoveries - Surrogates for samples 02 and 03 (primary runs) diluted below MRL. No qualification indicated. **For sample 04, the DCB surrogate recovery was above QC limits in the primary column, and the detected Aroclor 1254 result was reported from that column; therefore, the detected Aroclor 1254 concentration for samples 04 is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 02 and 03, all results reported from the diluted runs (20x and 50x, respectively), with RLs raised. RLs for all ND results in samples 02 and 03 were below the PAL (maximum RL=3.0 mg/kg for PCBs in sample 03; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1812016

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-40-120318-A 3FT | PCBs | Aroclor 1254 | 0.3 | mg/kg | **0.3 J** | SA |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1812086**; Report Issued **January 23, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-37-120418-A 3FT | 12/04/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1812086-01 | ☒ PCB (8082A) |
| B-37-120418-A-1 3FT | 12/04/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1812086-02 | ☒ PCB (8082A) |
| B-38-120418-A 3FT | 12/04/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812086-03 | ☒ PCB (8082A) |
| B-39-120418-A 3FT | 12/04/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812086-04 | ☒ PCB (8082A) |
| B-66-120418-A 4FT | 12/04/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812086-05 | ☒ PCB (8082A) |
| B-67-120418-A 4FT | 12/04/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812086-06 | ☒ PCB (8082A) |
| B-68-120418-A 4FT | 12/04/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812086-07 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for samples 03 and 07 (primary runs) diluted below MRL. No qualification indicated. DCB surrogate for undiluted run, secondary column, above QC limit for sample 04; as no detections were reported from undiluted run, and diluted run surrogates were within QC limits, no qualification indicated.<br>For samples 05 and 06, DCB surrogates from one column above QC limit; however, as the detected Aroclor 1254 results were reported from other column, with acceptable recoveries, no qualification is indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☒ | Dual Column RPDs (pesticide and PCB aroclors only) – **Dual column RPD exceeded the 40% maximum limit for the sample 05 Aroclor 1254 concentration; therefore, this result is considered an estimate (qualified with J).** |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 04 and 06, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. For samples 03 and 07, all results reported from the diluted runs (20x for both), with RLs raised. RLs for all ND results in samples 03 and 07 were below the PAL (RL=0.6 mg/kg for PCBs for both samples; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1812086

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| B-66-120418-A 4FT | PCBs | Aroclor 1254 | 0.2 | mg/kg | **0.2 J** | DC |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1812103**; Report Issued **January 23, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-5-120518-A 0.75FT | 12/05/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812103-01 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation – The cooler temperature (6.3 °C) was not within the acceptance limit of < 6°C; however, samples were delivered to the laboratory on ice on the same day as collection. Given the limited time from collection and the contaminant persistence, no impact on the data quality is expected. |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1812103

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1812237**; Report Issued **January 23, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| SW-5-121018-A 0-1FT | 12/10/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812237-01 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For sample 01, the only reporting limit raised was for the detected Aroclor taken from the diluted run. No impact on data sensitivity. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1812237

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1812257**; Report Issued **January 23, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-707-121118-A 4FT | 12/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812257-01 | ☒ PCB (8082A) |
| SW-473-121118-A 0-1FT | 12/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812257-02 | ☒ PCB (8082A) |
| SW-474-121118-A 0-1FT | 12/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812257-03 | ☒ PCB (8082A) |
| B-710-121118-A 3FT | 12/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812257-04 | ☒ PCB (8082A) |
| B-714-121118-A 3FT | 12/11/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812257-05 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☐ | ☒ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☐ | ☒ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For samples 02 and 03, the only reporting limits raised were for the detected Aroclors. No impact on data sensitivity. |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1812257

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1812355**; Report Issued **January 23, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-826-121318-B 13FT | 12/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812355-01 | ☒ PCB (8082A) |
| B-825-121318-B 13FT | 12/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812355-02 | ☒ PCB (8082A) |
| B-830-121318-B 13FT | 12/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812355-03 | ☒ PCB (8082A) |
| B-835-121318-B 13FT | 12/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812355-04 | ☒ PCB (8082A) |
| B-829-121318-B 13FT | 12/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812355-05 | ☒ PCB (8082A) |
| B-828-121318-B 13FT | 12/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812355-06 | ☒ PCB (8082A) |
| B-833-121318-B 13FT | 12/13/2018 | ☒ Soil ☐ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1812355-07 | ☒ PCB (8082A) |
| B-833-121318-B-1 13FT | 12/13/2018 | ☒ Soil ☐ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1812355-08 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for sample 01 (primary run) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) |
| ☒ | ☐ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) |
| ☒ | ☐ | ☐ | Method blank results |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – Sulfur removal by copper cleanup (CC) method performed on all samples (1812355-01 through 1812355-08). Method blank and LCS/LCS analyzed in batch with these samples. Results acceptable. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) - For sample 01, all results reported from the diluted run (20x), with RLs raised. RLs for all ND results in sample 01 were below the PAL (RL=0.6 mg/kg for PCBs; PAL = 25 mg/kg). |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1812355

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

ESS Laboratory – Laboratory Work Order Number **1812442**; Report Issued **January 23, 2019**
Summary of Samples Submitted to Laboratory:

| Sample ID | Date Collected | Media | QC Sample | Lab Sample ID | Analyses |
|---|---|---|---|---|---|
| B-947-121718 2 ft | 12/17/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812442-01 | ☒ PCB (8082A) |
| B-948-121718 2 ft | 12/17/2018 | ☐ Soil ☒ Concrete | ☐ FD ☐ MS/MSD ☐ EB ☐ TB | 1812442-02 | ☒ PCB (8082A) |
| B-949-121718 2 ft | 12/17/2018 | ☐ Soil ☒ Concrete | ☐ FD ☒ MS/MSD ☐ EB ☐ TB | 1812442-03 | ☒ PCB (8082A) |
| B-949-121718-1 2 ft | 12/17/2018 | ☐ Soil ☒ Concrete | ☒ FD ☐ MS/MSD ☐ EB ☐ TB | 1812442-04 | ☒ PCB (8082A) |

Analytical data were evaluated for the following criteria:

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☒ | ☐ | ☐ | Data completeness |
| ☒ | ☐ | ☐ | Holding times/Sample preservation |
| ☒ | ☐ | ☐ | Surrogate recoveries - Surrogates for sample 01 (primary run) diluted below MRL. No qualification indicated. |
| ☒ | ☐ | ☐ | Batch laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and relative percent differences (RPDs) |
| ☒ | ☐ | ☐ | Batch matrix spike/matrix spike duplicate (MS/MSD) recoveries and RPDs (if performed on project-specific sample) – The Aroclor 1016 MS recovery was below QC limits in the secondary column only; however, as the primary column recovery and the MSD recoveries for Aroclor 1016 and the MS/MSD for Aroclor 1260 were within QC limits, and there were no detections for either column in sample, no qualification to the data is indicated. RPDs were below the maximum QC limit. |
| ☐ | ☒ | ☐ | Laboratory duplicate RPDs (if performed) |
| ☒ | ☐ | ☐ | Field duplicate RPDs (if collected) – No sample detections |
| ☐ | ☒ | ☐ | Dual Column RPDs (pesticide and PCB aroclors only) – No sample detections |
| ☒ | ☐ | ☐ | Method blank results |
| ☐ | ☒ | ☐ | Field/equipment blank results (if collected) |

| Evaluated | Eval Not Required | Data Qualified | Evaluation Criteria |
|---|---|---|---|
| ☐ | ☒ | ☐ | Trip blank results |
| ☒ | ☐ | ☐ | Acceptable initial calibration performed on instrument (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Acceptable continuing calibration performed on instrument, and analytical sequence (evaluated for extreme QC failures) |
| ☒ | ☐ | ☐ | Sulfur Removal (pesticide and PCB aroclors only) – not performed/required on any sample in data set. |
| ☒ | ☐ | ☐ | Percent solids |
| ☐ | ☒ | ☐ | Mass spectrometer tuning (GC/MS only) |
| ☐ | ☒ | ☐ | Internal standard performance (GC/MS only) |
| ☐ | ☒ | ☐ | Interference check sample results (metals only) |
| ☐ | ☒ | ☐ | ICP serial dilution results (metals only) |
| ☒ | ☐ | ☐ | Reporting limits and sample results (limited to evaluating dilutions and reanalysis) |

Data Validation Performed and Documented by:

Veronica J. Champagne, Data Validator
AEI Consultants Environmental & Engineering Services

Table 1
Summary of Qualified Data
ESS Laboratory Report 1812442

| Sample | Analysis | Compound | Original Result | Units | Data Validation-Based Result | Reason Code |
|---|---|---|---|---|---|---|
| None | None | No data qualifications | | | | |

mg/kg = milligrams per kilogram or parts per million (ppm)
Bold indicates detected final concentration
Reason codes are defined within Table 2.

Table 2
Qualifier and Reason Code Definitions

| Qualifier Codes | Definition |
|---|---|
| J | Estimated detected result |
| UJ | Estimated reporting limit (non-detected result) |
| U | Non-detected result |
| R | Unusable result |
| Reason Codes | Definition |
| AM | MS or MSD recovery above QC limits |
| BM | MS or MSD recovery below QC limits (If associated with R qualifier, recovery was below 10%) |
| CCV | QC issue identified with Continuing Calibration Verification |
| CS | LCS or LCSD recovery or RPD outside QC limits |
| DC | Dual column RPD above QC limit. |
| DU | Field or laboratory duplicate results outside QC limits |
| EB | Equipment blank contamination |
| HT | Sample extracted or analyzed past holding time |
| ICC | QC issue identified with Initial Calibration |
| ICV | QC issue identified with Initial Calibration Verification |
| MB | Method blank contamination |
| MR | MS/MSD RPD above QC limit |
| OC | Concentration over instrument calibration range. Sample re-run at further dilution, with result within calibration range reported from secondary run. |
| PR | Preservation Issue |
| RL | Detected concentration above MDL but below Reporting Limit (as reported by laboratory) |
| SA | Surrogate recovery above QC limit |
| SB | Surrogate recovery below QC limit |
| TB | Trip blank contamination |

**APPENDIX I**

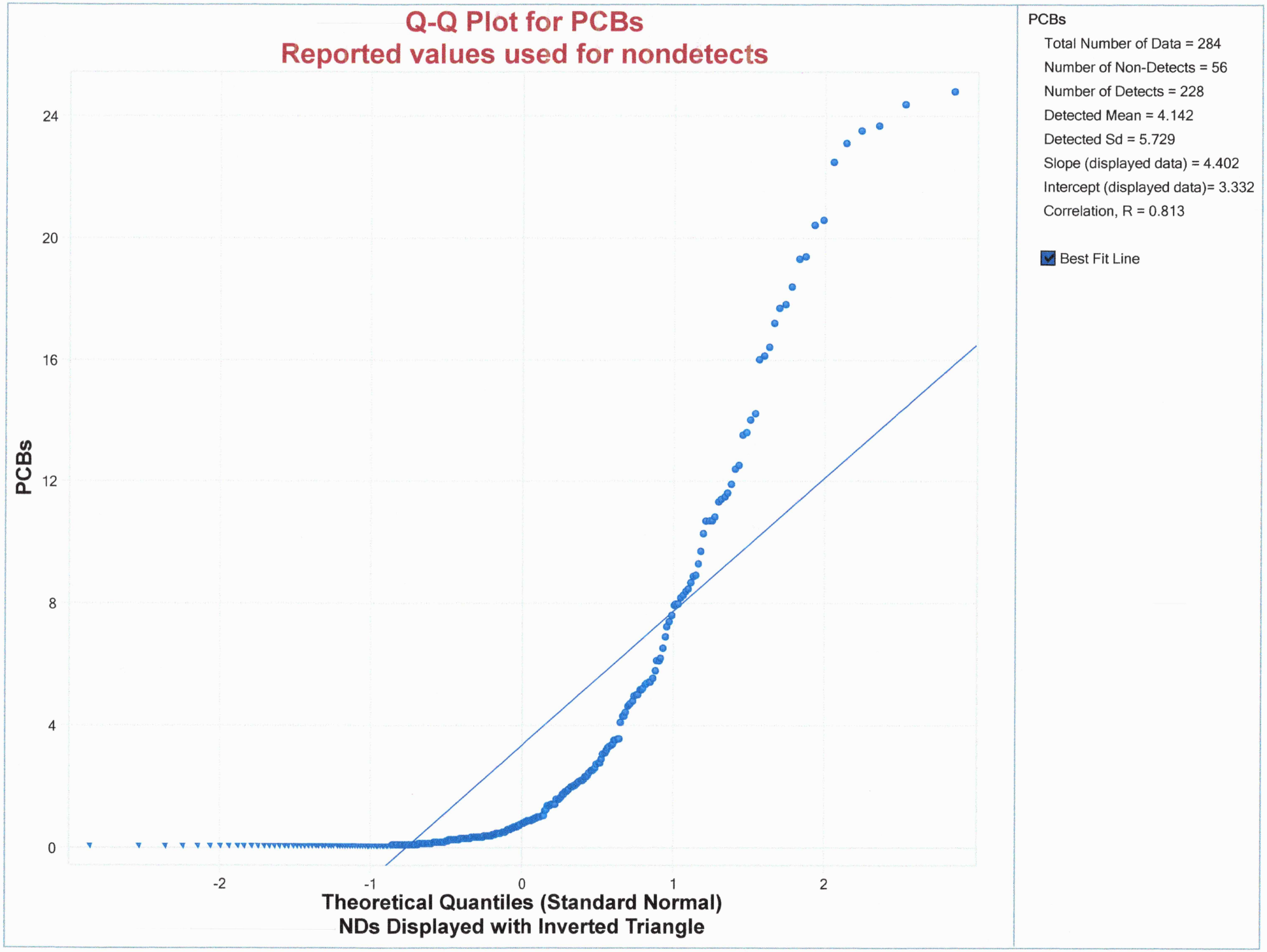
**Historical PCB Data Pro UCL Output Sheets, Histogram and Q-Q Plot (on CD)**

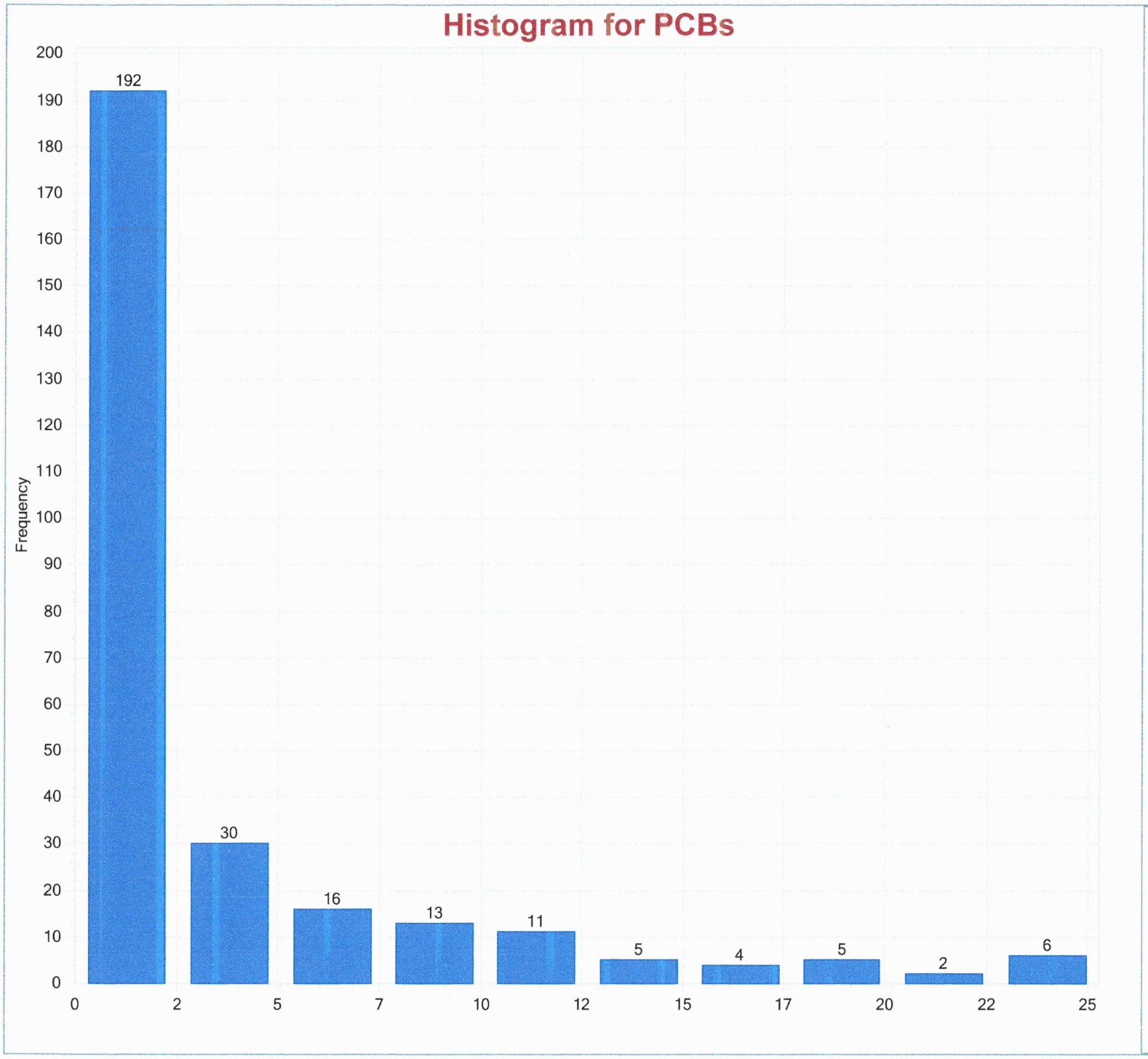
DRAFT

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | UCL Statistics for Data Sets with Non-Detects | | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | | | User Selected Options | | | | | | | | | |
| 4 | | | Date/Time of Computation | ProUCL 5.13/28/2019 2:19:45 PM | | | | | | | | |
| 5 | | | From File | WorkSheet.xls | | | | | | | | |
| 6 | | | Full Precision | OFF | | | | | | | | |
| 7 | | | Confidence Coefficient | 95% | | | | | | | | |
| 8 | | | Number of Bootstrap Operations | 2000 | | | | | | | | |
| 9 | | | | | | | | | | | | |
| 10 | PCBs | | | | | | | | | | | |
| 11 | | | | | | | | | | | | |
| 12 | | | | | | General Statistics | | | | | | |
| 13 | | | | | Total Number of Observations | 284 | | Number of Distinct Observations | | | 220 | |
| 14 | | | | | Number of Detects | 228 | | Number of Non-Detects | | | 56 | |
| 15 | | | | | Number of Distinct Detects | 211 | | Number of Distinct Non-Detects | | | 9 | |
| 16 | | | | | Minimum Detect | 0.059 | | Minimum Non-Detect | | | 0.025 | |
| 17 | | | | | Maximum Detect | 24.8 | | Maximum Non-Detect | | | 0.278 | |
| 18 | | | | | Variance Detects | 32.82 | | Percent Non-Detects | | | 19.72% | |
| 19 | | | | | Mean Detects | 4.142 | | SD Detects | | | 5.729 | |
| 20 | | | | | Median Detects | 1.58 | | CV Detects | | | 1.383 | |
| 21 | | | | | Skewness Detects | 1.877 | | Kurtosis Detects | | | 2.958 | |
| 22 | | | | | Mean of Logged Detects | 0.311 | | SD of Logged Detects | | | 1.682 | |
| 23 | | | | | | | | | | | | |
| 24 | | | | | | Normal GOF Test on Detects Only | | | | | | |
| 25 | | | | | Shapiro Wilk Test Statistic | 0.711 | | Normal GOF Test on Detected Observations Only | | | | |
| 26 | | | | | 5% Shapiro Wilk P Value | 0 | | Detected Data Not Normal at 5% Significance Level | | | | |
| 27 | | | | | Lilliefors Test Statistic | 0.238 | | Lilliefors GOF Test | | | | |
| 28 | | | | | 5% Lilliefors Critical Value | 0.0591 | | Detected Data Not Normal at 5% Significance Level | | | | |
| 29 | | | | | | Detected Data Not Normal at 5% Significance Level | | | | | | |
| 30 | | | | | | | | | | | | |
| 31 | | | | | | Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs | | | | | | |
| 32 | | | | | KM Mean | 3.331 | | KM Standard Error of Mean | | | 0.32 | |
| 33 | | | | | KM SD | 5.378 | | 95% KM (BCA) UCL | | | 3.847 | |
| 34 | | | | | 95% KM (t) UCL | 3.858 | | 95% KM (Percentile Bootstrap) UCL | | | 3.867 | |
| 35 | | | | | 95% KM (z) UCL | 3.857 | | 95% KM Bootstrap t UCL | | | 3.883 | |
| 36 | | | | | 90% KM Chebyshev UCL | 4.29 | | 95% KM Chebyshev UCL | | | 4.725 | |
| 37 | | | | | 97.5% KM Chebyshev UCL | 5.328 | | 99% KM Chebyshev UCL | | | 6.513 | |
| 38 | | | | | | | | | | | | |
| 39 | | | | | | Gamma GOF Tests on Detected Observations Only | | | | | | |
| 40 | | | | | A-D Test Statistic | 3.341 | | Anderson-Darling GOF Test | | | | |
| 41 | | | | | 5% A-D Critical Value | 0.815 | | Detected Data Not Gamma Distributed at 5% Significance Level | | | | |
| 42 | | | | | K-S Test Statistic | 0.0997 | | Kolmogorov-Smirnov GOF | | | | |
| 43 | | | | | 5% K-S Critical Value | 0.0636 | | Detected Data Not Gamma Distributed at 5% Significance Level | | | | |
| 44 | | | | | | Detected Data Not Gamma Distributed at 5% Significance Level | | | | | | |
| 45 | | | | | | | | | | | | |
| 46 | | | | | | Gamma Statistics on Detected Data Only | | | | | | |
| 47 | | | | | k hat (MLE) | 0.562 | | k star (bias corrected MLE) | | | 0.558 | |
| 48 | | | | | Theta hat (MLE) | 7.37 | | Theta star (bias corrected MLE) | | | 7.429 | |
| 49 | | | | | nu hat (MLE) | 256.3 | | nu star (bias corrected) | | | 254.3 | |
| 50 | | | | | Mean (detects) | 4.142 | | | | | | |
| 51 | | | | | | | | | | | | |
| 52 | | | | | | Gamma ROS Statistics using Imputed Non-Detects | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 53 | GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs | | | | | | | | | | | |
| 54 | GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20) | | | | | | | | | | | |
| 55 | For such situations, GROS method may yield incorrect values of UCLs and BTVs | | | | | | | | | | | |
| 56 | This is especially true when the sample size is small. | | | | | | | | | | | |
| 57 | For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates | | | | | | | | | | | |
| 58 | | | | | Minimum | 0.01 | | | | Mean | | 3.327 |
| 59 | | | | | Maximum | 24.8 | | | | Median | | 0.758 |
| 60 | | | | | SD | 5.389 | | | | CV | | 1.62 |
| 61 | | | | | k hat (MLE) | 0.36 | | | | k star (bias corrected MLE) | | 0.358 |
| 62 | | | | | Theta hat (MLE) | 9.248 | | | | Theta star (bias corrected MLE) | | 9.285 |
| 63 | | | | | nu hat (MLE) | 204.4 | | | | nu star (bias corrected) | | 203.5 |
| 64 | | | | | Adjusted Level of Significance (β) | 0.0492 | | | | | | |
| 65 | | | | | Approximate Chi Square Value (203.55, α) | 171.5 | | | | Adjusted Chi Square Value (203.55, β) | | 171.4 |
| 66 | | | | | 95% Gamma Approximate UCL (use when n>=50) | 3.948 | | | | 95% Gamma Adjusted UCL (use when n<50) | | 3.952 |
| 67 | | | | | | | | | | | | |
| 68 | | | | | **Estimates of Gamma Parameters using KM Estimates** | | | | | | | |
| 69 | | | | | Mean (KM) | 3.331 | | | | SD (KM) | | 5.378 |
| 70 | | | | | Variance (KM) | 28.92 | | | | SE of Mean (KM) | | 0.32 |
| 71 | | | | | k hat (KM) | 0.384 | | | | k star (KM) | | 0.382 |
| 72 | | | | | nu hat (KM) | 217.9 | | | | nu star (KM) | | 216.9 |
| 73 | | | | | theta hat (KM) | 8.683 | | | | theta star (KM) | | 8.722 |
| 74 | | | | | 80% gamma percentile (KM) | 5.344 | | | | 90% gamma percentile (KM) | | 9.483 |
| 75 | | | | | 95% gamma percentile (KM) | 14.06 | | | | 99% gamma percentile (KM) | | 25.63 |
| 76 | | | | | | | | | | | | |
| 77 | | | | | **Gamma Kaplan-Meier (KM) Statistics** | | | | | | | |
| 78 | | | | | Approximate Chi Square Value (216.91, α) | 183.8 | | | | Adjusted Chi Square Value (216.91, β) | | 183.7 |
| 79 | | | | | 95% Gamma Approximate KM-UCL (use when n>=50) | 3.93 | | | | 95% Gamma Adjusted KM-UCL (use when n<50) | | 3.933 |
| 80 | | | | | | | | | | | | |
| 81 | | | | | **Lognormal GOF Test on Detected Observations Only** | | | | | | | |
| 82 | | | | | Shapiro Wilk Approximate Test Statistic | 0.937 | | | | **Shapiro Wilk GOF Test** | | |
| 83 | | | | | 5% Shapiro Wilk P Value | 3.861E-12 | | | | Detected Data Not Lognormal at 5% Significance Level | | |
| 84 | | | | | Lilliefors Test Statistic | 0.0688 | | | | **Lilliefors GOF Test** | | |
| 85 | | | | | 5% Lilliefors Critical Value | 0.0591 | | | | Detected Data Not Lognormal at 5% Significance Level | | |
| 86 | | | | | Detected Data Not Lognormal at 5% Significance Level | | | | | | | |
| 87 | | | | | | | | | | | | |
| 88 | | | | | **Lognormal ROS Statistics Using Imputed Non-Detects** | | | | | | | |
| 89 | | | | | Mean in Original Scale | 3.334 | | | | Mean in Log Scale | | -0.415 |
| 90 | | | | | SD in Original Scale | 5.385 | | | | SD in Log Scale | | 2.129 |
| 91 | | | | | 95% t UCL (assumes normality of ROS data) | 3.861 | | | | 95% Percentile Bootstrap UCL | | 3.866 |
| 92 | | | | | 95% BCA Bootstrap UCL | 3.902 | | | | 95% Bootstrap t UCL | | 3.901 |
| 93 | | | | | 95% H-UCL (Log ROS) | 9.65 | | | | | | |
| 94 | | | | | | | | | | | | |
| 95 | | | | | **Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution** | | | | | | | |
| 96 | | | | | KM Mean (logged) | -0.475 | | | | KM Geo Mean | | 0.622 |
| 97 | | | | | KM SD (logged) | 2.187 | | | | 95% Critical H Value (KM-Log) | | 3.34 |
| 98 | | | | | KM Standard Error of Mean (logged) | 0.13 | | | | 95% H-UCL (KM -Log) | | 10.49 |
| 99 | | | | | KM SD (logged) | 2.187 | | | | 95% Critical H Value (KM-Log) | | 3.34 |
| 100 | | | | | KM Standard Error of Mean (logged) | 0.13 | | | | | | |
| 101 | | | | | | | | | | | | |
| 102 | | | | | **DL/2 Statistics** | | | | | | | |
| 103 | | | | | **DL/2 Normal** | | | | | **DL/2 Log-Transformed** | | |
| 104 | | | | | Mean in Original Scale | 3.329 | | | | Mean in Log Scale | | -0.589 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 105 | | | | | SD in Original Scale | 5.388 | | | | | SD in Log Scale | 2.366 |
| 106 | | | | 95% t UCL (Assumes normality) | | 3.856 | | | | | 95% H-Stat UCL | 15.02 |
| 107 | | | | DL/2 is not a recommended method, provided for comparisons and historical reasons | | | | | | | | |
| 108 | | | | | | | | | | | | |
| 109 | | | | | Nonparametric Distribution Free UCL Statistics | | | | | | | |
| 110 | | | | | Data do not follow a Discernible Distribution at 5% Significance Level | | | | | | | |
| 111 | | | | | | | | | | | | |
| 112 | | | | | Suggested UCL to Use | | | | | | | |
| 113 | | | | 95% KM (Chebyshev) UCL | | 4.725 | | | | | | |
| 114 | | | | | | | | | | | | |
| 115 | | | | | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | |
| 116 | | | | | Recommendations are based upon data size, data distribution, and skewness. | | | | | | | |
| 117 | | | | | These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). | | | | | | | |
| 118 | | | | | However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician. | | | | | | | |
| 119 | | | | | | | | | | | | |


Q-Q Plot for PCBs
Reported values used for nondetects
PCBs
24
20
16
12
8
4
0
-2
-1
0
1
2
Theoretical Quantiles (Standard Normal)
NDs Displayed with Inverted Triangle
PCBs
Total Number of Data = 284
Number of Non-Detects = 56
Number of Detects = 228
Detected Mean = 4.142
Detected Sd = 5.729
Slope (displayed data) = 4.402
Intercept (displayed data)= 3.332
Correlation, R = 0.813
Best Fit Line




PCBs

| | |
|---|---|
| Number of Values | 284 |
| Minimum | 0.03 |
| Maximum | 24.80 |
| SD | 5.39 |
| Skewness | 2.18 |
| Kurtosis | 4.35 |
| ☐ Mean | 3.33 |
| ☐ Median | 0.76 |
| ☐ Normal Distribution | |

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**APPENDIX J**

**Post Excavation PCB Data Pro UCL Output Sheets, Histogram and Q-Q Plot**

DRAFT

AEI Consultants

## UCL Statistics for Data Sets with Non-Detects

| | |
|---|---|
| User Selected Options | |
| Date/Time of Computation | ProUCL 5.13/28/2019 3:48:43 PM |
| From File | WorkSheet_a.xls |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**Post-Excavation PCBs**

**Former Ciba-Geigy Facility**

**180 Mill Street, Cranston, Rhode Island**

### General Statistics

| | | | |
|---|---|---|---|
| Total Number of Observations | 1579 | Number of Distinct Observations | 242 |
| Number of Detects | 1383 | Number of Non-Detects | 196 |
| Number of Distinct Detects | 236 | Number of Distinct Non-Detects | 8 |
| Minimum Detect | 0.06 | Minimum Non-Detect | 0.004 |
| Maximum Detect | 46.4 | Maximum Non-Detect | 1 |
| Variance Detects | 42.63 | Percent Non-Detects | 12.41% |
| Mean Detects | 5.821 | SD Detects | 6.529 |
| Median Detects | 2.9 | CV Detects | 1.122 |
| Skewness Detects | 1.28 | Kurtosis Detects | 1.256 |
| Mean of Logged Detects | 0.804 | SD of Logged Detects | 1.65 |

### Normal GOF Test on Detects Only

| | | |
|---|---|---|
| Shapiro Wilk Test Statistic | 0.818 | **Normal GOF Test on Detected Observations Only** |
| 5% Shapiro Wilk P Value | 0 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.189 | **Lilliefors GOF Test** |
| 5% Lilliefors Critical Value | 0.0241 | Detected Data Not Normal at 5% Significance Level |

**Detected Data Not Normal at 5% Significance Level**

### Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|---|---|---|---|
| KM Mean | 5.111 | KM Standard Error of Mean | 0.161 |
| KM SD | 6.393 | 95% KM (BCA) UCL | 5.361 |
| 95% KM (t) UCL | 5.376 | 95% KM (Percentile Bootstrap) UCL | 5.376 |
| 95% KM (z) UCL | 5.376 | 95% KM Bootstrap t UCL | 5.377 |
| 90% KM Chebyshev UCL | 5.594 | 95% KM Chebyshev UCL | 5.813 |
| 97.5% KM Chebyshev UCL | 6.116 | 99% KM Chebyshev UCL | 6.713 |

### Gamma GOF Tests on Detected Observations Only

| | | |
|---|---|---|
| A-D Test Statistic | 16.46 | **Anderson-Darling GOF Test** |
| 5% A-D Critical Value | 0.809 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.0887 | **Kolmogorov-Smirnov GOF** |
| 5% K-S Critical Value | 0.0272 | Detected Data Not Gamma Distributed at 5% Significance Level |

**Detected Data Not Gamma Distributed at 5% Significance Level**

### Gamma Statistics on Detected Data Only

| | | | |
|---|---|---|---|
| k hat (MLE) | 0.639 | k star (bias corrected MLE) | 0.639 |

| | | | |
|---|---|---|---|
| Theta hat (MLE) | 9.103 | Theta star (bias corrected MLE) | 9.116 |
| nu hat (MLE) | 1769 | nu star (bias corrected) | 1766 |
| Mean (detects) | 5.821 | | |

**Gamma ROS Statistics using Imputed Non-Detects**

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|---|---|---|
| Minimum | 0.06 | Mean | 5.153 |
| Maximum | 46.4 | Median | 1.9 |
| SD | 6.365 | CV | 1.235 |
| k hat (MLE) | 0.578 | k star (bias corrected MLE) | 0.577 |
| Theta hat (MLE) | 8.917 | Theta star (bias corrected MLE) | 8.928 |
| nu hat (MLE) | 1825 | nu star (bias corrected) | 1823 |
| Adjusted Level of Significance (β) | 0.0498 | | |
| Approximate Chi Square Value (N/A, α) | 1725 | Adjusted Chi Square Value (N/A, β) | 1725 |
| 95% Gamma Approximate UCL (use when n>=50) | 5.446 | 95% Gamma Adjusted UCL (use when n<50) | 5.447 |

**Estimates of Gamma Parameters using KM Estimates**

| | | | |
|---|---|---|---|
| Mean (KM) | 5.111 | SD (KM) | 6.393 |
| Variance (KM) | 40.88 | SE of Mean (KM) | 0.161 |
| k hat (KM) | 0.639 | k star (KM) | 0.638 |
| nu hat (KM) | 2018 | nu star (KM) | 2016 |
| theta hat (KM) | 7.997 | theta star (KM) | 8.007 |
| 80% gamma percentile (KM) | 8.42 | 90% gamma percentile (KM) | 13.11 |
| 95% gamma percentile (KM) | 17.99 | 99% gamma percentile (KM) | 29.72 |

**Gamma Kaplan-Meier (KM) Statistics**

| | | | |
|---|---|---|---|
| Approximate Chi Square Value (N/A, α) | 1913 | Adjusted Chi Square Value (N/A, β) | 1912 |
| 95% Gamma Approximate KM-UCL (use when n>=50) | 5.387 | 95% Gamma Adjusted KM-UCL (use when n<50) | 5.388 |

**Lognormal GOF Test on Detected Observations Only**

| | | |
|---|---|---|
| Shapiro Wilk Approximate Test Statistic | 0.922 | **Shapiro Wilk GOF Test** |
| 5% Shapiro Wilk P Value | 0 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.105 | **Lilliefors GOF Test** |
| 5% Lilliefors Critical Value | 0.0241 | Detected Data Not Lognormal at 5% Significance Level |

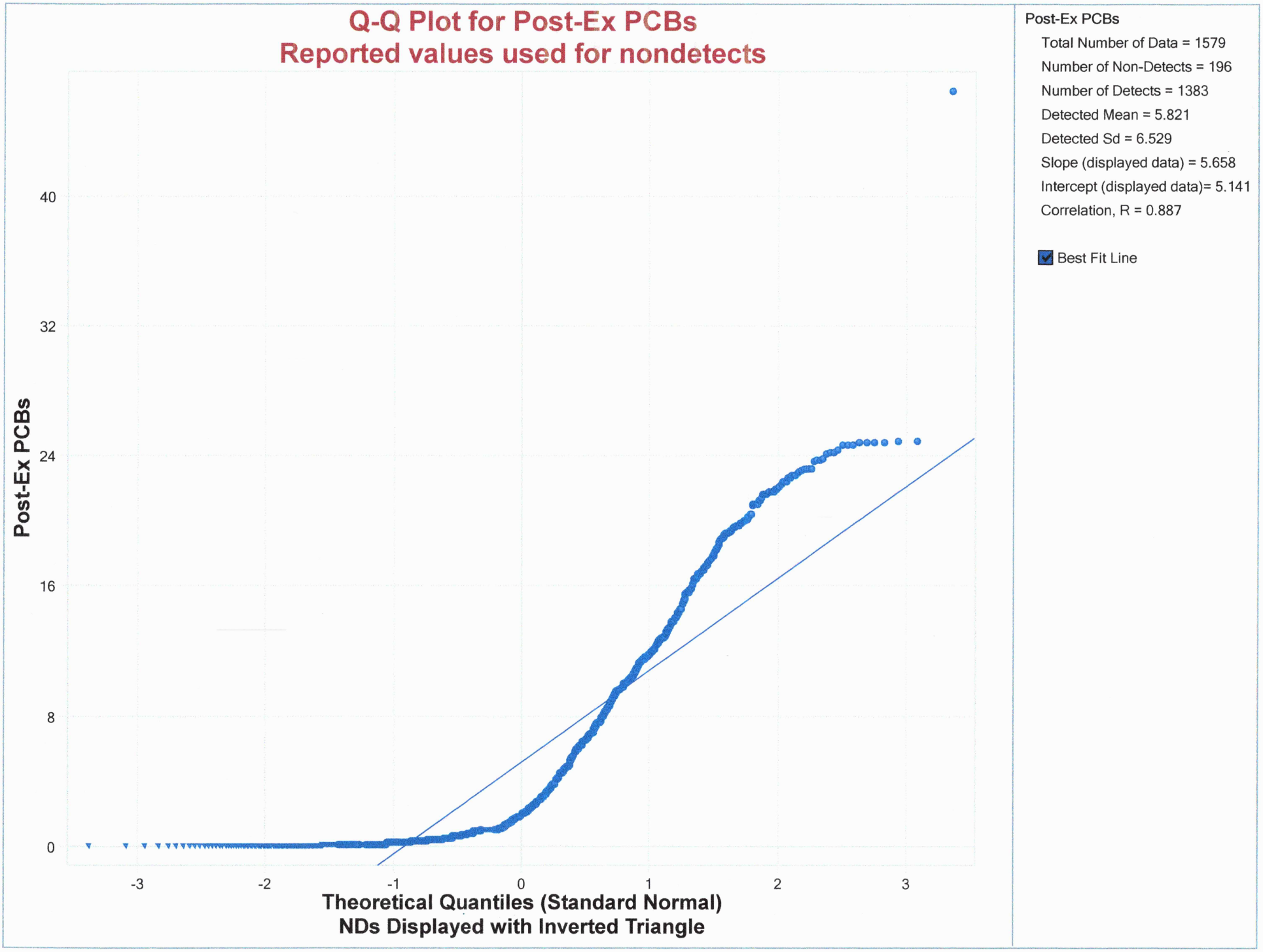
**Detected Data Not Lognormal at 5% Significance Level**

**Lognormal ROS Statistics Using Imputed Non-Detects**

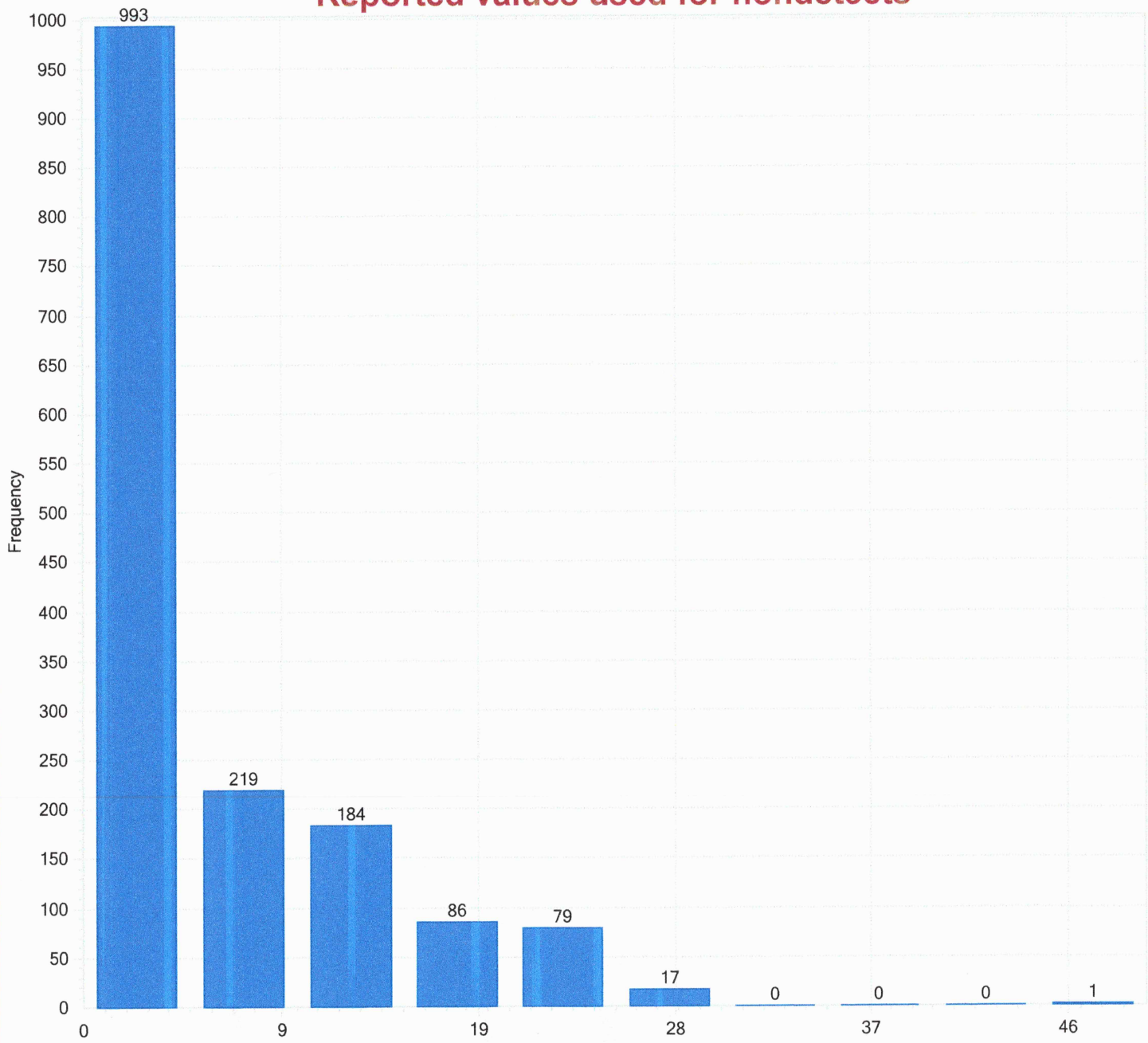
| | | | |
|---|---|---|---|
| Mean in Original Scale | 5.119 | Mean in Log Scale | 0.405 |
| SD in Original Scale | 6.389 | SD in Log Scale | 1.911 |
| 95% t UCL (assumes normality of ROS data) | 5.384 | 95% Percentile Bootstrap UCL | 5.386 |
| 95% BCA Bootstrap UCL | 5.393 | 95% Bootstrap t UCL | 5.388 |
| 95% H-UCL (Log ROS) | N/A | | |

**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**

| | | | |
|---|---|---|---|
| KM Mean (logged) | 0.157 | KM Geo Mean | 1.17 |


Q-Q Plot for Post-Ex PCBs
Reported values used for nondetects
Post-Ex PCBs
40
32
24
16
8
0
-3
-2
-1
0
1
2
3
Theoretical Quantiles (Standard Normal)
NDs Displayed with Inverted Triangle
Post-Ex PCBs
Total Number of Data = 1579
Number of Non-Detects = 196
Number of Detects = 1383
Detected Mean = 5.821
Detected Sd = 6.529
Slope (displayed data) = 5.658
Intercept (displayed data)= 5.141
Correlation, R = 0.887
Best Fit Line

# Histogram for Post-Ex PCBs
## Reported values used for nondetects




| Post-Ex PCBs | |
|---|---|
| Number of Values | 1,579 |
| Number of Detects | 1,383 |
| ☐ Minimum Nondetect Limit | 0.00 |
| ☐ Maximum Nondetect Limit | 1.00 |
| Minimum Detect | 0.06 |
| Maximum Detect | 46.40 |
| SD of Detects | 6.53 |
| Skewness of Detects | 1.28 |
| Kurtosis of Detects | 1.26 |
| ☐ Mean of Detects | 5.82 |
| ☐ Median of Detects | 2.90 |
| ☐ Normal Distribution | |

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