Koon, Nancy

From: Koon, Nancy on behalf of Water Permit Application
Sent: Wednesday, November 3, 2021 10:21 AM
To: Koon, Nancy
Subject: FW: odor plan letter
Attachments: AR0001210_Letter Re Odor Control Plan_20210824.pdf; AFIN 02-00013 Permit AR0001210 GP Crossett Settling Basin Closure Request Letter.pdf; Attachment A - Ash Settling Basin Closure Plan Drawings by Terracon.pdf; Attachment B Beneficial Reuse Proposal Conditional Approval Dated Feb 2017 (DEQ Document No. 70998).pdf; Attachment C - Wood Ash Safety Data Sheet (SDS).pdf

Follow Up Flag: Follow up
Flag Status: Flagged

From: Leamons, Bryan
Sent: Thursday, October 28, 2021 4:06 PM
To: Water Permit Application
Subject: FW: odor plan letter

From: Ross, Sarah M [mailto:Sarah.Ross@GAPAC.com]
Sent: Thursday, October 28, 2021 4:02 PM
To: Leamons, Bryan
Subject: FW: odor plan letter

Mr. Leamons, due to the size of the attachment, the original submittal below just bounced back to me. I have removed one of the attachments and have provided the hyperlink to Attachment B Beneficial Use Proposal which is DEQ Document No. 70691 (17MB) - 70691.pdf (state.ar.us).

Sincerely,
Sarah Ross, GP Crossett Env & Compliance Leader
Sarah.Ross@gapac.com or (870) 415-6363

From: Ross, Sarah M
Sent: Thursday, October 28, 2021 3:56 PM
To: Leamons, Bryan <LEAMONS@adeq.state.ar.us>
Subject: RE: odor plan letter

AFIN 02-00013
NPDES Permit No. AR0001210
Facility: Georgia Pacific Consumer Operations LLC – Crossett Paper Operations

Mr. Leamons, please review the attached request to close both of our Ash Settling Basins. Please connect with me at (870) 415-6363 if you have any questions.

Attachments:

1. DEQ Letter Odor Control Plan August 24, 2021
2. **Cover Letter - GP Crossett Ash Settling Basins Closure Request Letter dated October 28, 2021**
3. Attachment A – Ash Settling Basin Closure Plan Drawings by Terracon
4. Attachment B – Beneficial Use Proposal dated Nov 2016 and corresponding Conditional Approval dated Feb 2017
5. Attachment C – Wood Ash Safety Data Sheet (SDS)

Sincerely,
Sarah Ross, GP Crossett Env & Compliance Leader
Sarah.Ross@gapac.com or (870) 415-6363

From: Leamons, Bryan <LEAMONS@adeq.state.ar.us>
Sent: Wednesday, August 11, 2021 1:45 PM
To: Ross, Sarah M <Sarah.Ross@GAPAC.com>
Subject: odor plan letter

Sent by an external sender

Hello Sarah,
Sorry I missed you by phone. If you have a few minutes to talk about the odor management letter, you can send me a time to call you tomorrow AM, or I should have time today after 4:30.
Thanks

Bryan Leamons, P.E. | Senior Operations Manager
Division of Environmental Quality | Office of Water Quality
Permitting and Compliance
5301 Northshore Drive | North Little Rock, AR 72118
t: 501.683.5406 | e: leamons@adeq.state.ar.us

Georgia-Pacific

Georgia-Pacific Consumer Operations LLC
Consumer Products

Crossett Paper Operations
100 Mill Supply Road
P.O. Box 3333
Crossett, AR 71635
(870) 567-8000
(870) 364-9076 (fax)
www.gp.com

October 28, 2021

Bryan Leamons, P.E.
Senior Operations Manager
Office of Water Quality
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

RE: **AFIN 02-00013,** NPDES Permit No. **AR0001210**
Georgia-Pacific Consumer Operations LLC - Crossett Paper Operations
Pond Closure Request for West and East Ash Settling Basins

Dear Mr. Leamons:

Georgia-Pacific Consumer Operations LLC (GP) reviewed your letter dated August 24, 2021. GP Crossett Paper Operations plans to permanently close the West and East Ash Settling Basins which were part of our wastewater treatment system but have been out of service since 2017. Please find Closure Plan request following the ADEQ Pond Closure Guidelines:

1. **Permitted facilities are required to notify the Department at least sixty (60) days prior of any planned removal, closure or abandonment of any waste storage or treatment structure containing waste or residuals from confined animal facilities, municipal water or wastewater treatment facilities, processing plants or other specified wastes.**
    a. GP is planning to permanently close both our West and East Ash Settling Basins that were idled the summer of 2017 as described in CAO LIS 19-002. Closure activities will not commence until at least 60 days following submittal of this plan in accordance with Department guidelines.

ARKANSAS
ENERGY & ENVIRONMENT

August 24, 2021

Tommy D. Smith, VP-MFG
Georgia-Pacific Crossett LLC
Crossett Paper Operations
100 Mill Supply Road
Crossett, AR 71635

RE: NPDES Permit No. AR0001210, AFIN 02-00013
Odor Control Measures

Dear Mr. Smith:

The Office of Water Quality (OWQ) has reviewed your correspondence dated July 30, 2021, regarding Georgia-Pacific Crossett LLC's (GP) process for evaluating and addressing the need for odor control measures in the future. Based on your correspondence, current conditions and planned activities indicate that additional odor control is not necessary at this time beyond continued proper operation and standard best management practices. Going forward, any planned changes to the wastewater treatment plant (WWTP) will be evaluated for odor control considerations as part of the facility management of change process.

It is additionally noted that a follow-up phone conversation was held between OWQ and GP staff on August 12, 2021. During that conversation, upcoming plans were discussed regarding the schedule for submittal of a closure plan for removal of the Ash Settling Basin. It was discussed that additional odor consideration is necessary and will be provided within that closure plan.

At this time, the OWQ has no additional comments on your July 30, 2021, correspondence. When submitting any planned changes to the WWTP, GP will need to include an analysis of the need for odor control measures following the procedures outlined in the correspondence.

If you have any questions, please contact Loretta Carstens, P.E. of the NPDES Permits Section at loretta.carstens@adeq.state.ar.us or at (501) 682-0612.

Sincerely,

Bryan Leamons

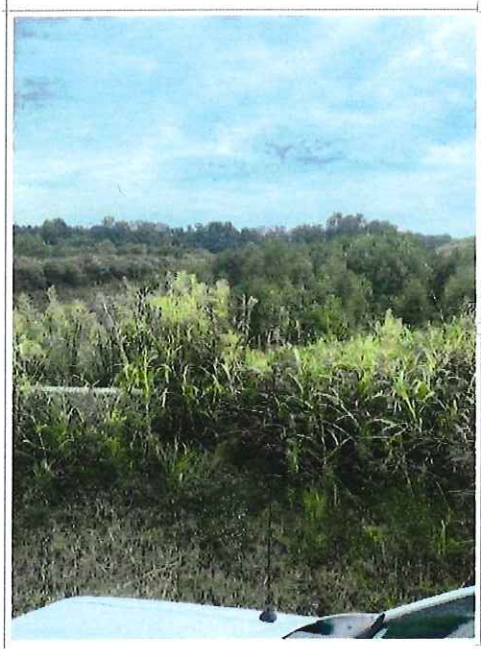
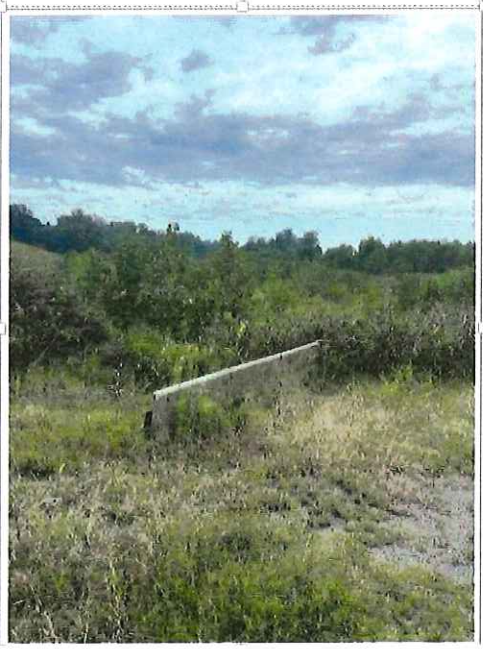
Bryan Leamons, P.E.
Senior Operations Manager, Office of Water Quality
Division of Environmental Quality
5301 Northshore Drive, North Little Rock, AR 72118-5317

cc: Alan York, Associate Director – Office of Water Quality
Richard Healey, Compliance Branch Manager – Office of Water Quality
Sarah Ross, Georgia-Pacific Crossett LLC (sarah.ross@gapac.com)

i.

2. **A closure plan must be submitted to the Department for approval prior to closure of the structure. The closure plan must be developed by the Natural Resources Conservation Service (NRCS), an Arkansas Soil and Water Conservation District water quality technician or a professional engineer registered in the State of Arkansas.**
    a. Professional engineers registered in the State of Arkansas have developed the proposed Ash Settling Basins Closure Plan.
    b. The closure project will be monitored by an Arkansas Professional Engineer or their designated field personnel during the closure process to ensure that the activities are conducted in a manner consistent with this Closure Plan.
    c. A copy of the approved updated Closure Plan will be permanently maintained in the facility's Permanent Operating Record (POR) as required.
    d. A closure survey shall be performed by an Arkansas Registered Professional Surveyor to document final elevations and a copy of the final survey shall be provided to AE&E.
    e. A permanent notice will be filed with the property deed to notify the location of the basin closure.

3. **A closure plan must contain the following information:**
   a. **Permittee name, type of permit and permit number.**
      i. **Permittee name:** Georgia-Pacific Consumer Operations LLC
      ii. **Type of Permit:** NPDES
      iii. **Permit No.** AR0001210
   b. **Facility location, type of facility and county.**
      i. **Facility location:** 100 Mill Supply Road
      ii. **Type of facility:** Paper Mill (NAICS 322121)
      iii. **County:** Ashley County
      iv. **Description:** Georgia-Pacific Consumer Operations LLC (GP) owns and operates a mill in Crossett, Arkansas that produces paper goods. The facility has a permitted wastewater treatment system, located southwest of the mill, which treats wastewater prior to discharge into Coffee Creek and thence into the Ouachita River.
   c. **Type and size of waste storage structure to be closed (pond, concrete tank, etc.)**
      i. Each Ash Settling Basin is ~170ft x 730ft. The West Basin is approximately 3.5 acres and the East basin is approximately 4 acres.
      ii. **ATTACHMENT A** drawings show the existing conditions and the planned improvements to this area.
   d. **Quality and quantity of waste contained in waste storage structure.**
      i. West Basin has approximately 8,500 yd^3 of ash and East Basin has approximately 3,600 yd^3 of ash from the mill's onsite wood fired boilers. Currently, both basins are relatively dry and growing vegetation heavy vegetation.
      ii. Pictures of basins standing on the north ends looking south:
      iii.

West Ash Settling Basin	East Ash Settling Basin
	

e. **Method of waste disposal.**
   i. Based on comprehensive residual reuse study submitted to ADEQ in 2016 (please see Appendix B), we plan to leave the boiler ash in place and beneficially reuse ash in the immediate area to fill in the basins.
   ii. The comprehensive residual reuse application was completed and submitted on November 28, 2016, to beneficially reuse wood ash, cellulose containing fiber and alkaline materials.
      1. REFERENCE ADEQ Document No. 70691.pdf (state.ar.us)
   iii. The Beneficial Reuse application received conditional ADEQ approval February 13, 2017. We do not plan to pursue the endeavor after the partial mill shutdown in 2019 and propose using this material to backfill the Ash Settling Basins.
      1. REFERENCE ADEQ Document No. 70998.pdf (state.ar.us).

f. **Final status of waste storage structure (i.e., destroyed, removed, remain in place, convert to freshwater pond, etc.).**
   i. Ash will remain in place.

4. **For earthen ponds and lagoons converted to freshwater ponds, a minimum of six (6) inches of soil must be removed from the bottom and inside levees of the pond. The disposal of this waste must be addressed in the closure plan.**
   a. Not applicable to the West and East Ash Settling Basins as they will be filled in.

5. **If remaining waste will be land applied, the following additional information is required:**
   a. **Legal description and identification of proposed waste application site.**
      i. A closure survey shall be performed by an Arkansas Registered Professional Surveyor to document final elevations and a copy of the final survey shall be provided to AE&E.
      ii. A permanent notice will be filed with the property deed to notify the location of the basin closure.
   b. **Permit status of proposed waste application site (i.e., is it included in the current permit?).**
      i. Please see Attachment B.
   c. **Solids content (%) of waste.**
      i. Not applicable to the West and East Ash Settling Basins as they will be filled in.
   d. **Plant Available Nitrogen (PAN) of waste.**
      i. Not applicable to the West and East Ash Settling Basins as they will be filled in.
   e. **Waste application rate.**
      i. Not applicable to the West and East Ash Settling Basins as they will be filled in.
   f. **Cover crop at waste application site and the corresponding nutrient uptake rate.**
      i. Not applicable to the West and East Ash Settling Basins as they will be filled in.

g. **Total number of acres required for disposal of remaining waste.**
    i. Both basins will be filled in and graded. The West Basin is approximately 3.5 acres and the East basin is approximately 4 acres.

h. **Any waste disposal methods other than land application must be described in sufficient detail and include the final destination of the waste.**
    i. Not applicable to the West and East Ash Settling Basins as they will be filled in.

6. **Closure Method**

a. Prior to work beginning, Best Management Practices (BMP's) will be initiated according to the stormwater construction permit. A notice of intent (NOI) and stormwater permit application will be submitted since the disturbed area will be over 5 acres. Although the effluent stream between the ash settling basins flows to the Aeration Stabilization Basin (ASB), every effort will be made to minimize the potential for sediment from the closure activities from getting into the effluent stream. The effluent stream between the two ash settling basins will be straightened such that there will be a more direct flow to the ASB.

b. The vegetative layer (top 6-12 inches) will be removed and stockpiled after the BMP's for the disturbed areas are installed. The existing concrete structures will be removed. This concrete material will be used to armor the downstream earthen conveyance. The non-concrete material will be removed from the area and taken to an approved landfill. The ash and soil will be used to grade the existing area with uniform slopes to prevent accumulation of water in this area as shown on Drawing 3 in ATTACHMENT A. The ash and soil from the basins that will be used for backfilling will be tested for the RCRA 8 metals by the toxicity characteristic leaching procedure (TCLP). The testing will be performed at a minimum of 1 sample per 20,000 yd^3 of the basin material. The material will be placed in a maximum 12-inch-thick lifts. The subgrade will be density tested at least 1 per 10,000ft^2 prior to placement of the vegetated soil that was previously stockpiled. The structural fill material will be compacted to a minimum 95% of standard proctor density. The final contours and testing frequencies are shown on Drawing 3 in Attachment A. The construction area will be graded and vegetated upon completion of the earthwork.

c. After the effluent stream and Ash Settling Basin area improvements are performed, the silt fencing and additional erosion protection will be installed as shown on Drawing 5 in ATTACHMENT A. This will protect the effluent stream during the closure of both basins. The erosion control of the area will be performed by using BMPs. The BMPs may include hydroseeding, silt fencing, rock check dams, interceptor swales, erosion control blankets, etc. as needed during the project. A Stormwater Pollution Prevention Plan (SWPPP) will be developed and submitted for approval as required.

d. SCHEDULE: The Ash Settling Basin closure activities described above can be completed within a year of DEQ approval, weather permitting.

Odor Considerations

As communicated in our July 30, 2021, letter regarding Odor Control Measures and noted in the ADEQ follow-up letter dated August 24, 2021, based on current process knowledge and regular observations of the wastewater treatment system, odor control measures are not currently necessary. Furthermore, odor is not expected to be a concern with the proposed closure activities. While the ash settling basins were in operation and filled with process wastewater, anaerobic conditions in the basins caused them to be a source of hydrogen sulfide that was released from the wastewater treatment system downstream. By removing the wastewater more than 4 years ago and eliminating the low oxygen environment, this mechanism for odor generation is no longer present.

Despite the low probability of odor generation during the closure of the Ash Settling Basins, field observations of the area will be conducted routinely and if warranted, other measurements/monitoring conducted. If localized odors are detected, work will stop and the work plan will be reassessed with appropriate mitigation efforts implemented (i.e., water would be pumped to the effluent stream during daylight hours for treatment and observation and area would be allowed to dry).

In summary, ADEQ approved the Consent Administrative Order (CAO) that allowed the Ash Basins to be removed from service, first granted on July 19, 2017, to continue until a decision on GP's Permit renewal became effective. Since the 2019 partial closure of the GP Crossett Paper Operations included elimination of solid fuel firing, both Ash Settling Basins can be permanently closed.

Please contact Sarah Ross, Environmental and Compliance Leader, for additional information.

Sincerely,

Tommy D. Smith, VP - Manufacturing
GP Consumer Operations LLC – Crossett Paper Ops

ATTACHMENTS:

Attachment A – Ash Settling Basin Closure Plan Drawings by Terracon
Attachment B – Beneficial Use Proposal dated November 2016
Attachment C – Wood Ash Safety Data Sheet (SDS)

REFERENCES:

1. ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY, STATE PERMITS BRANCH, WATER DIVISION, WASTE STORAGE POND CLOSURE GUIDELINES
2. Executed Consent Administrative Order (CAO) LIS 19-002

POND CLOSURE AND EFFLUENT CHANNEL DESIGN CONSTRUCTION DRAWINGS FOR

GEORGIA-PACIFIC CONSUMER OPERATIONS, LLC.
ASH SETTLING BASINS
CROSSETT, ARKANSAS

SEPTEMBER 2021

PROJECT NO. 35207292

PROFESSIONAL ENGINEER'S CERTIFICATION

"I CERTIFY TO THE BEST OF MY PROFESSIONAL JUDGMENT THAT THIS DRAWING SET PROPERLY ADHERE TO ESTABLISHED, SOUND ENGINEERING PRACTICES. THIS CERTIFICATION IS CONTINGENT ON THE FACT THAT ALL INFORMATION SUPPLIED TO THE SIGNATORY AUTHORITY, UP TO THE DATE OF THIS CERTIFICATION, IS UNQUESTIONABLY ACCURATE AND WAS PROVIDED IN GOOD FAITH."

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No.9199 DAVID C. McCORMICK

CERTIFICATE OF AUTHORIZATION TERRACON CONSULTANTS, INC. No.223 ARKANSAS

9/2/2021

PREPARED FOR:

GEORGIA-PACIFIC CONSUMER OPERATIONS, LLC.
100 SUPPLY RD.
CROSSETT, AR 71635-8333
(870) 567-8365

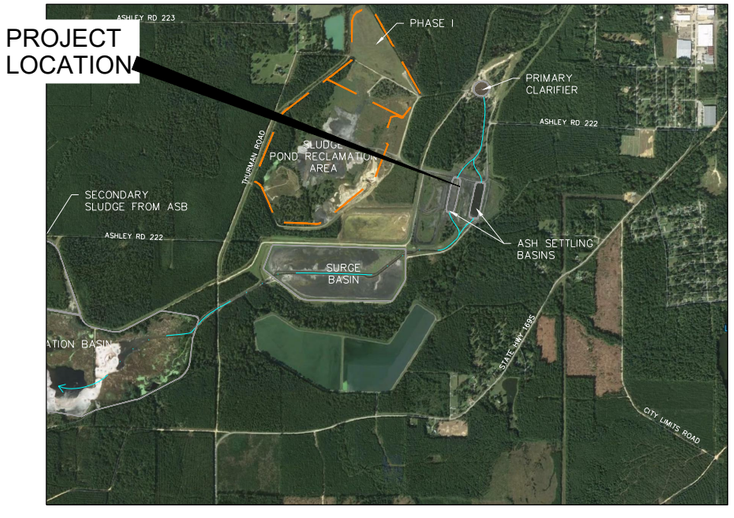
VICINITY MAP
N.T.S.

Know what's below. Call before you dig.

PREPARED BY:

Terracon
Consulting Engineers and Scientists

25809 I-30 SOUTH BRYANT, AR 72022
PH. (501) 847-9292 FAX. (501) 847-9210



SITE LOCATION MAP
SCALE: N.T.S.

EXISTING SITE CONDITIONS

POND CLOSURE AND EFFLUENT CHANNEL DESIGN

GEORGIA-PACIFIC CONSUMER OPERATIONS LLC

ASH SETTLING BASINS

CROSSETT ARKANSAS

DRAWING 2	
DESIGNED BY:	DCM
DRAWN BY:	KHJ/TLB
APPV'D. BY:	DCM
SCALE:	SEE BAR/SCALE
DATE:	SEPTEMBER 202
JOB NO.	031-001.35207292
ACAD NO.	002
SHEET NO.:	2 OF 7

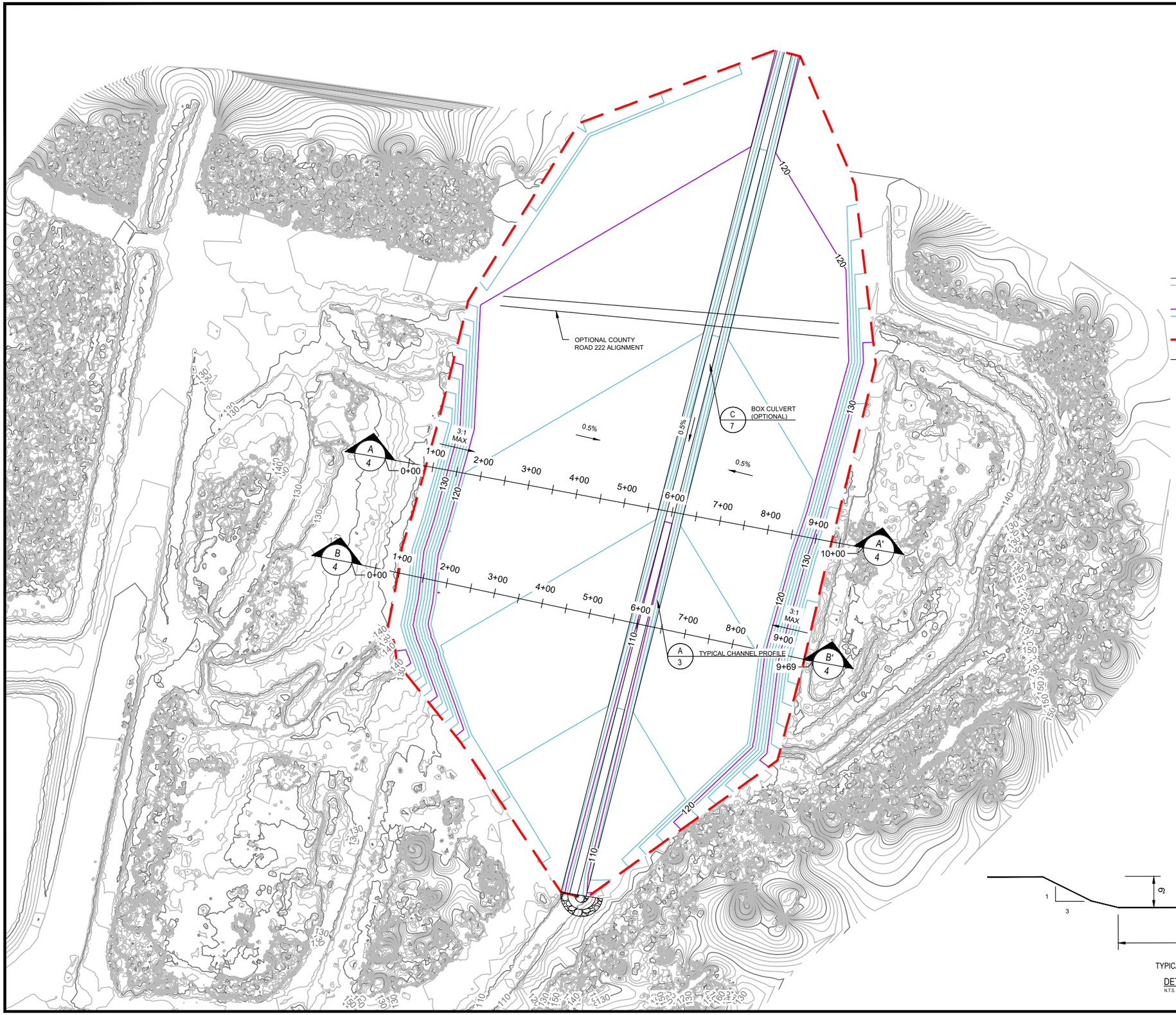
Terracon
Consulting Engineers and Scientists
25809 INTERSTATE 30 S BRYANT, ARKANSAS 72022
PH. (501) 847-9292 FAX: (501) 847-9210

REV.	DATE	BY	DESCRIPTION

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No.9199
DAVID C. McCORMICK

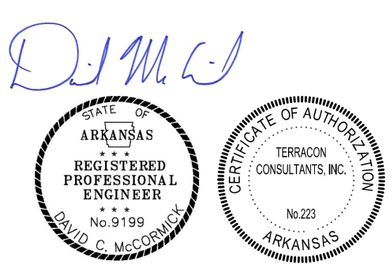
CERTIFICATE OF AUTHORIZATION
TERRACON CONSULTANTS, INC.
No.223
ARKANSAS

9/2/2021

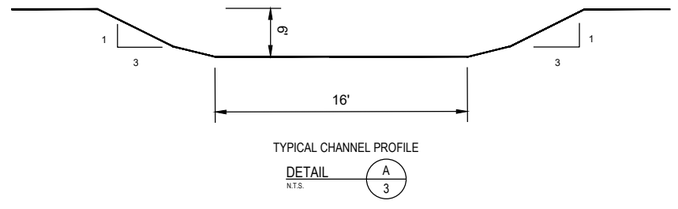


NOTES:

1. STORMWATER CONTROLS WILL BE INSTALLED PRIOR TO BEGINNING CONSTRUCTION.
2. TOPSOIL WILL BE REMOVED AND STOCKPILED FOR LATER USE.
3. THE ASH WILL BE TESTED FOR THE RCRA 8 METALS BY THE TOXICITY CHARACTERISTICS LEACHING PROCEDURE (TCLP) PRIOR TO USING FOR CONSTRUCTION. THE TESTING FREQUENCY WILL BE 1/20,000 CY.
4. THE SUBGRADE WILL BE TESTED FOR 95% OF STANDARD COMPACTION EVERY 10,000 SF PRIOR TO PLACING TOPSOIL
5. GENERAL CHANNEL PROFILE - SEE DRAWING 4.



9/2/2021



TYPICAL CHANNEL PROFILE

DETAIL A/3 N.T.S.

DRAWING 3

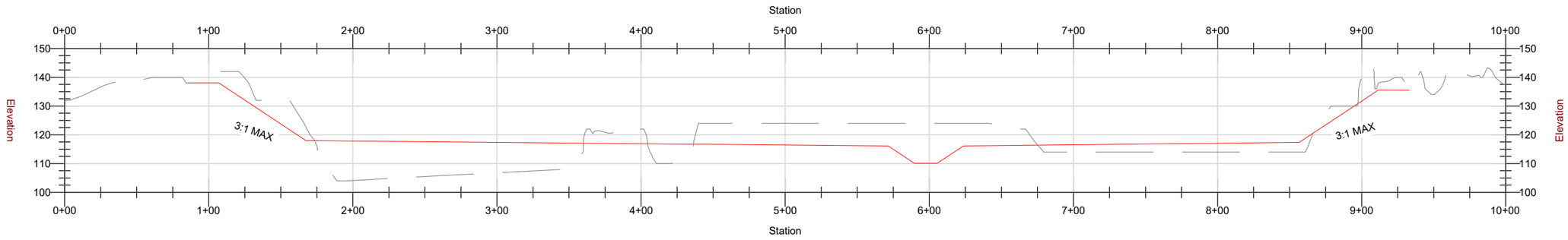
DESIGNED BY:	DCM
DRAWN BY:	KHJ/TLB
APPV'D. BY:	DCM
SCALE:	SEE BARSCALE
DATE:	SEPTEMBER 202
JOB NO.	031-001-35207292
ACAD NO.	003
SHEET NO.:	3 OF 7

POND CLOSURE AND DITCH GRADING

POND CLOSURE AND EFFLUENT CHANNEL DESIGN
GEORGIA-PACIFIC CONSUMER OPERATIONS LLC
ASH SETTLING BASINS
CROSSETT ARKANSAS

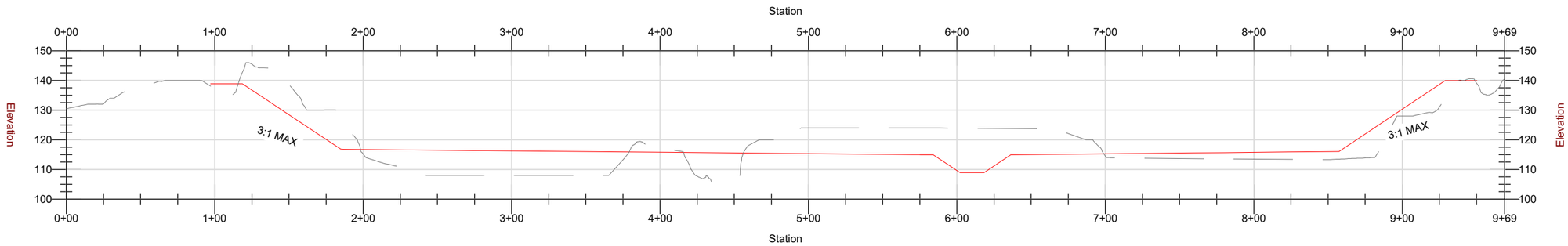
Terracon
Consulting Engineers and Scientists
25809 INTERSTATE 30 S BRYANT, ARKANSAS 72022
PH. (501) 847-9292 FAX. (501) 847-9210

REV.	DATE	BY	DESCRIPTION
1	5/12/21	TLB	ADDED NOTES



ALIGN - A-A'

SECTION A / 4



ALIGN - B-B'

SECTION B / 4

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No.9199
DAVID C. McCORMICK

CERTIFICATE OF AUTHORIZATION
TERRACON CONSULTANTS, INC.
No.223
ARKANSAS

9/2/2021

LEGEND:

EXISTING GRADE

PROPOSED POND AND CHANNEL GRADING

SCALES:
1" = 80' (HORIZONTAL)
1" = 40' (VERTICAL)
VERTICAL EXAGGERATION = x 2

DRAWING 4

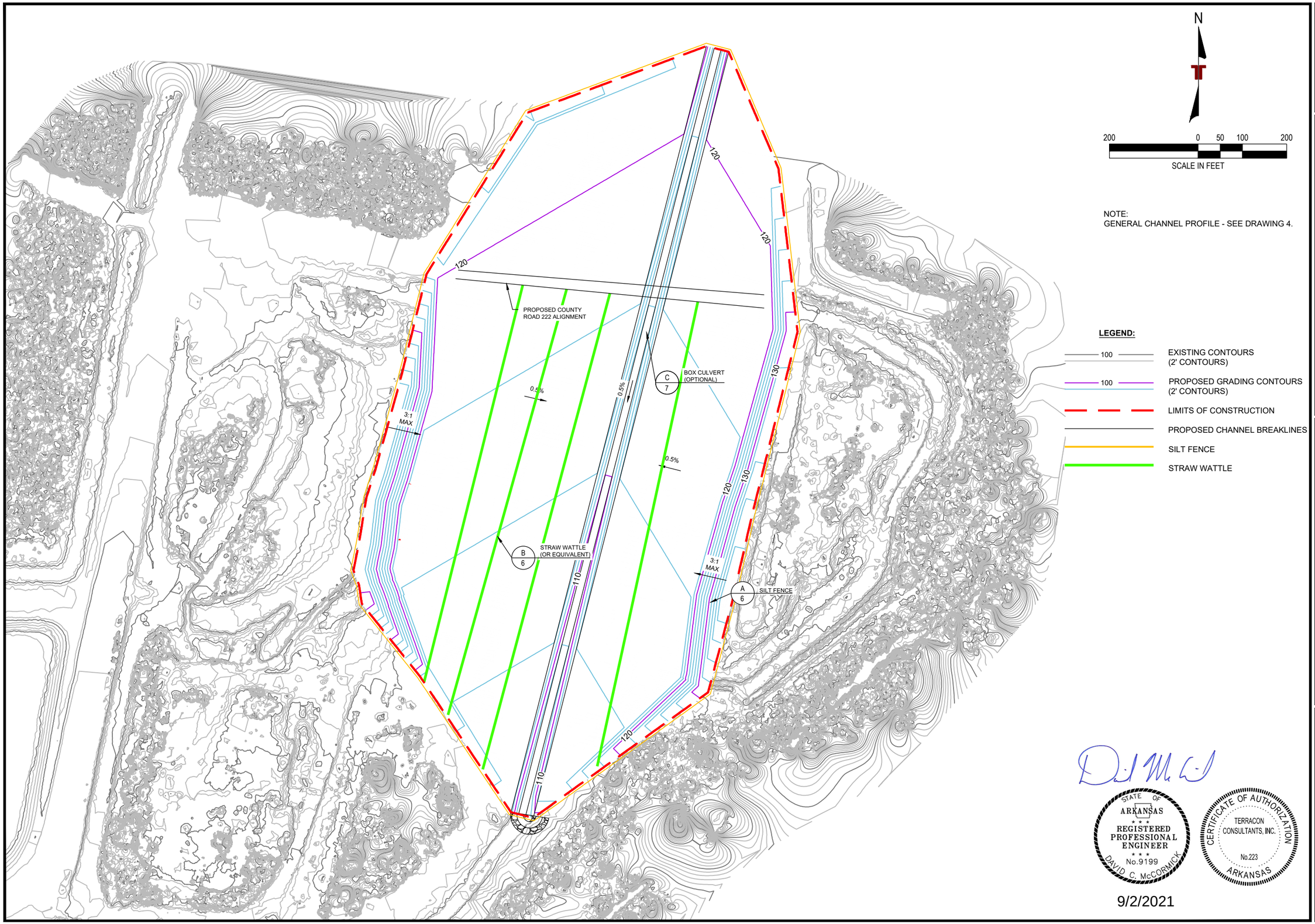
DESIGNED BY:	DCM
DRAWN BY:	KHJ/TLB
APPV'D. BY:	DCM
SCALE:	SEE BARSCALE
DATE:	SEPTEMBER 202
JOB NO.	031-001.35207292
ACAD NO.	003
SHEET NO.:	4 OF 7

CROSS SECTIONS

POND CLOSURE AND EFFLUENT CHANNEL DESIGN
GEORGIA-PACIFIC CONSUMER OPERATIONS LLC
ASH SETTLING BASINS
CROSSETT ARKANSAS

Terracon
Consulting Engineers and Scientists
25809 INTERSTATE 30 S BRYANT, ARKANSAS 72022
PH. (501) 847-9292 FAX. (501) 847-9210

REV.	DATE	BY	DESCRIPTION
1	5/12/21	TLB	UPDATED TEXT



DRAWING 5

DESIGNED BY:	DCM
DRAWN BY:	KHJ/TLB
APPV'D. BY:	DCM
SCALE:	SEE BARSCALE
DATE:	SEPTEMBER 202
JOB NO.	031-001.35207292
ACAD NO.	005
SHEET NO.:	5 OF 7

EROSION AND SEDIMENT CONTROL PLAN

POND CLOSURE AND EFFLUENT CHANNEL DESIGN

GEORGIA-PACIFIC CONSUMER OPERATIONS LLC

ASH SETTLING BASINS

CROSSETT ARKANSAS

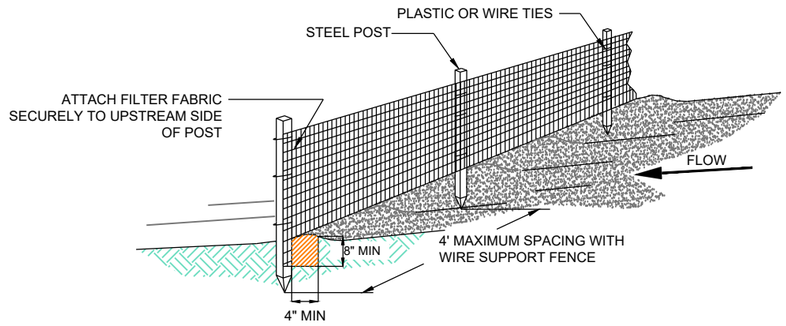
Terracon
Consulting Engineers and Scientists
25809 INTERSTATE 30 S BRYANT, ARKANSAS 72022
PH. (501) 847-9292 FAX. (501) 847-9210

REV.	DATE	BY	DESCRIPTION
1	5/12/21	TLB	UPDATED CALL OUTS

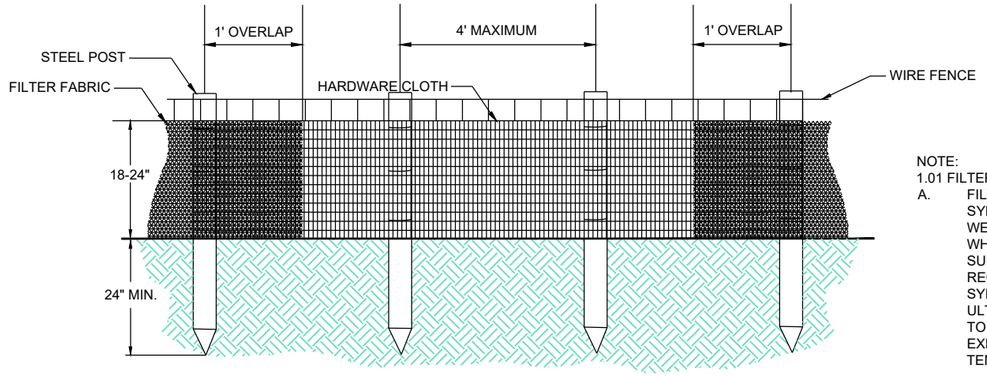
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No.9199
DAVID C. McCORMICK

CERTIFICATE OF AUTHORIZATION
TERRACON CONSULTANTS, INC.
No.223
ARKANSAS

9/2/2021



SILT FENCE TYPICAL INSTALLATION



SILT FENCE OUTLET FRONT VIEW

NOTE:
1.01 FILTER FABRIC

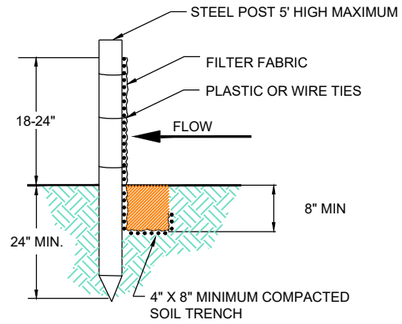
A. FILTER FABRIC FOR THIS PROJECT SHALL BE A SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D6461/D6461M-16A. SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120°F.

1.02 POSTS

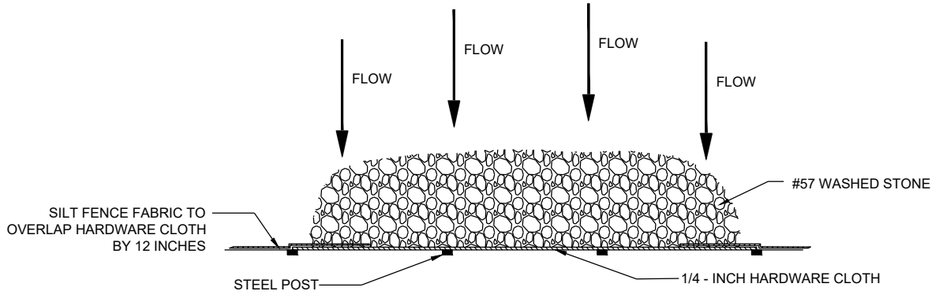
B. POST SHALL BE 1.25 LB/LINER AFT MINIMUM STEEL WITH A MINIMUM LENGTH OF 5 FEET. MAKE SURE STEEL POSTS HAVE PROJECTIONS TO FACILITY FASTING OF THE WIRE.
B. WHEN JOINTS ARE NECESSARY, SECURELY FASTEN THE FILTER FABRIC AT A SUPPORT POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST.

1.03 WIRE FENCING

C. WIRE REINFORCEMENT SHALL BE A MINIMUM 14 GAUGE AND HAVE A MAXIMUM MESH SPACING OF 6 INCHES.



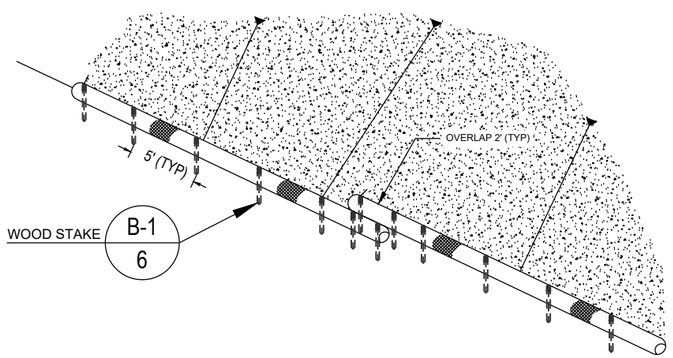
TYPICAL FENCE POST



SILT FENCE OUTLET PLAN VIEW

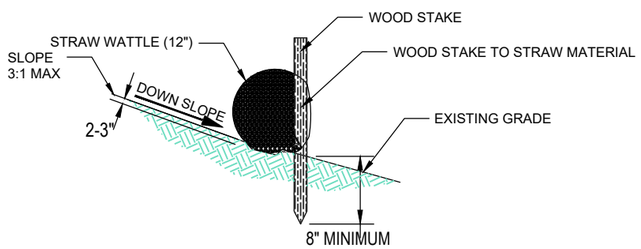
FILTER FABRIC SILT FENCE/SILT FENCE OUTLET

DETAIL A/6
SCALE: N.T.S.



STRAW WATTLES (OR EQUIVALENT)

DETAIL B/6
SCALE: N.T.S.



WOOD STAKE

DETAIL B-1/6
SCALE: N.T.S.

NOTE:
1.01 STRAW WATTLE

A. STRAW WATTLE SHALL BE AEC PREMIER STRAW WATTLES, AS MANUFACTURED BY AMERICAN EXCELSIOR COMPANY, ARLINGTON, TX (1-866-9FIBERS).

B. AEC PREMIER STRAW WATTLE CONSISTS OF CERTIFIED SEED FREE AGRICULTURAL STRAW INSIDE A FLEXIBLE AND DURABLE TUBULAR NETTING WITH METAL CLIPS OR KNOTTED ENDS. AEC PREMIER STRAW WATTLE IS DESIGNED TO PROVIDE INTIMATE CONTACT WITH THE SOIL, WHICH PREVENTS BLOWOUTS AND UNDERMINING. AEC PREMIER STRAW WATTLE MAY BE PLACED ACROSS CHANNEL BOTTOMS, ON HILLSLOPES, OR AROUND INLET STRUCTURES. AEC PREMIER STRAW WATTLE SHALL BE MANUFACTURED IN THE U.S.A.

C. STRAW WATTLE SHALL HAVE THE FOLLOWING NOMINAL MATERIAL CHARACTERISTICS.

D. PROPERTY MINIMUM DIAMETER=11.5 IN. WATTLE DENSITY(+OR- 10%)=(12 IN) 3.82 LB/FT3. WATTLE DIMENSIONS (W X L)(+OR- 10%)=12 IN X 10.0 FT.

E. STAKES SHALL BE WOODEN, 1 1/8 IN WIDE X 1 1/8 IN THICK BY A MINIMUM OF 30 IN LONG FOR 9 IN AND 12 IN AEC PREMIER STRAW WATTLES AND 48 IN LONG FOR 20 IN AEC PREMIER STRAW WATTLE. STAKES SHALL NOT EXTEND ABOVE THE STRAW WATTLE MORE THAN 2 IN.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No.9199
DAVID C. McCORMICK

CERTIFICATE OF AUTHORIZATION
TERRACON CONSULTANTS, INC.
No.223
ARKANSAS

9/2/2021

DRAWING 6

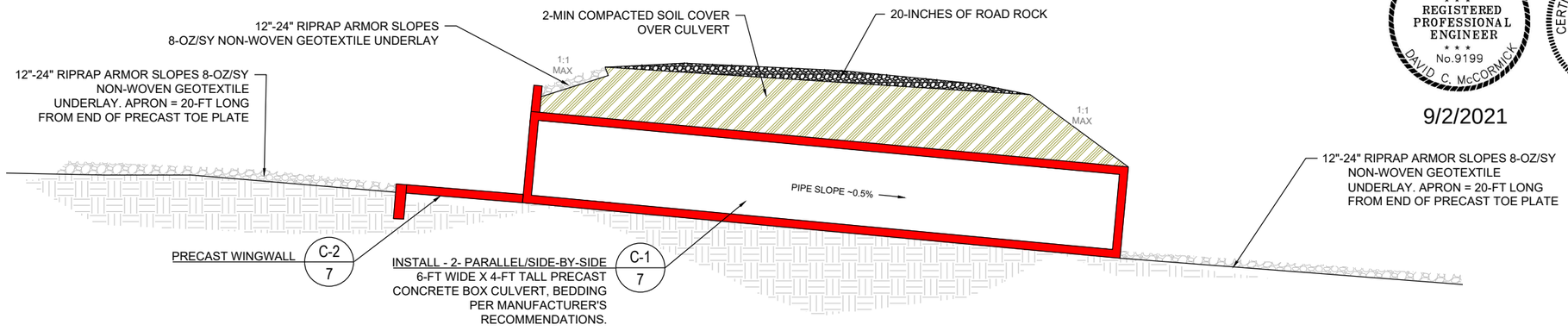
DESIGNED BY:	DCM
DRAWN BY:	KHJ/TLB
APPV'D. BY:	DCM
SCALE:	SEE BARSCALE
DATE:	SEPTEMBER 202
JOB NO.	031-001.35207292
ACAD NO.	006-007
SHEET NO.:	6 OF 7

EROSION AND SEDIMENT CONTROL DETAILS

POND CLOSURE AND EFFLUENT CHANNEL DESIGN
GEORGIA-PACIFIC CONSUMER OPERATIONS LLC
ASH SETTLING BASINS
CROSSETT ARKANSAS

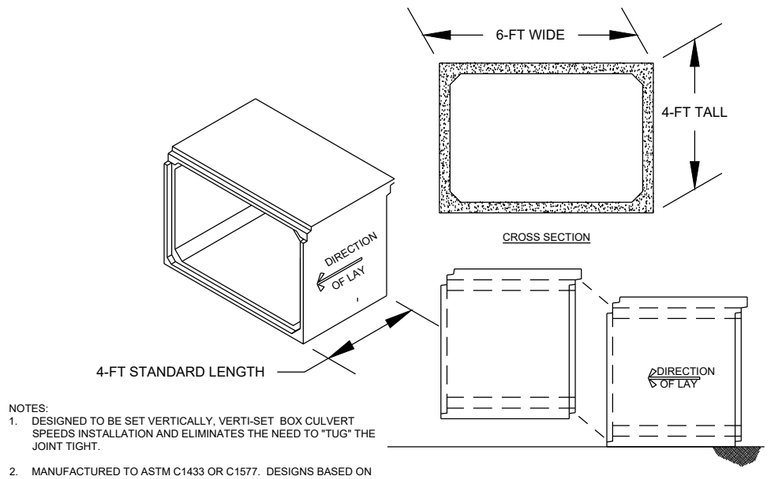
Terracon
Consulting Engineers and Scientists
25809 INTERSTATE 30 S
PH. (501) 847-9292
BRYANT, ARKANSAS 72022
FAX. (501) 847-9210

REV.	DATE	BY	DESCRIPTION



TYPICAL PRECAST CONCRETE BOX CULVERT ELEVATION (OPTIONAL)

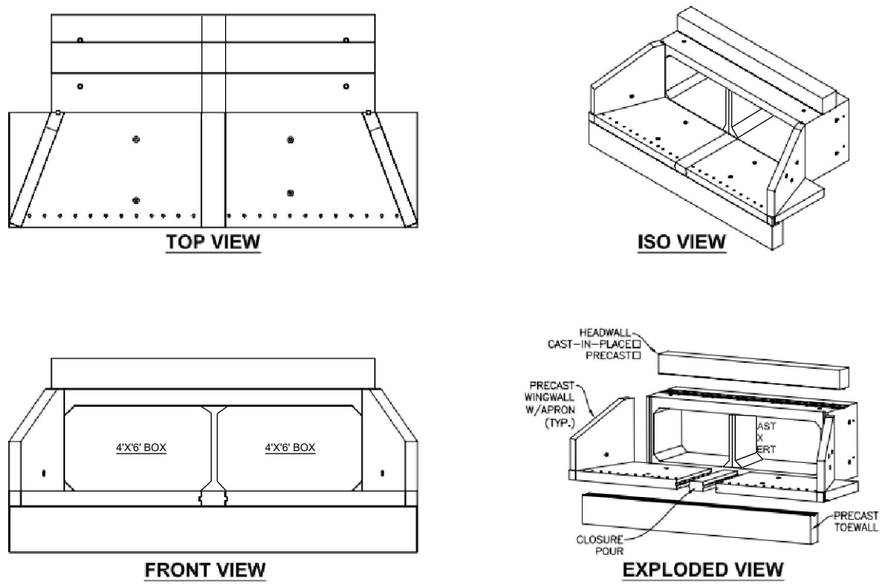
DETAIL C 7
N.T.S



NOTES:
1. DESIGNED TO BE SET VERTICALLY, VERTI-SET BOX CULVERT SPEEDS INSTALLATION AND ELIMINATES THE NEED TO "TUG" THE JOINT TIGHT.
2. MANUFACTURED TO ASTM C1433 OR C1577. DESIGNS BASED ON SPECIAL LOADING CONDITIONS ARE AVAILABLE UPON REQUEST

TYPICAL BOX CULVERT SECTION (OPTIONAL)

DETAIL C-1 7
N.T.S



DETAIL SOURCE: KISTNER PRECAST PRODUCTS, INC.

TYPICAL PRECAST CONCRETE BOX CULVERT WINGWALL (OPTIONAL)

DETAIL C-2 7
N.T.S

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No.9199
DAVID C. McCORMICK

CERTIFICATE OF AUTHORIZATION
TERRACON CONSULTANTS, INC.
No.223
ARKANSAS

9/2/2021

DRAWING 7

DESIGNED BY:	DCM
DRAWN BY:	KHJ/TLB
APPV'D. BY:	DCM
SCALE:	SEE BARSCALE
DATE:	SEPTEMBER 202
JOB NO.	031-001.35207292
ACAD NO.	006-007
SHEET NO.:	7 OF 7

BOX CULVERT DETAILS

POND CLOSURE AND EFFLUENT CHANNEL DESIGN
GEORGIA-PACIFIC CONSUMER OPERATIONS LLC
ASH SETTLING BASINS
CROSSETT ARKANSAS

Terracon
Consulting Engineers and Scientists
25809 INTERSTATE 30 S BRYANT, ARKANSAS 72022
PH. (501) 847-9292 FAX. (501) 847-9210

REV.	DATE	BY	DESCRIPTION
1	5/12/21	TLB	UPDATED CALL OUTS

SAFETY DATA SHEET

1. Identification

Product identifier	**Wood Ash**
Product list	Wood Fly Ash Wood Bottom Ash Combined- 30% Fly and 70% Bottom Ash
Other means of identification	None.
Recommended use	This product has been approved to use as an Agricultural Soil Amendment.
Recommended restrictions	Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust, respirable crystalline silica, and respirable titanium dioxide as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations. Consider ash as a combustible dust unless explosibility testing determines the ash is not combustible.

Manufacturer/Importer/Supplier/Distributor information

Company name	Georgia-Pacific LLC	
Address	133 Peachtree Street, NE Atlanta, GA 30303	
Telephone	(M)SDS Request	404.652.5119
E-mail	MSDSREQ@GAPAC.com	
Emergency phone number	Chemtrec - Emergency	800.424.9300

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion	Category 1
	Serious eye damage	Category 1
	Carcinogenicity	Category 1A
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, repeated exposure	Category 1 (lung)
Environmental hazards	Not classified.	
OSHA defined hazards	Combustible dust	

Label elements

Signal word	Danger
Hazard statement	Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation. May cause cancer. Causes damage to organs (lung) through prolonged or repeated exposure. Dried product may form combustible dust concentrations in air.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Prevent dust accumulation to minimize explosion hazard. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Do not breathe dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
Response	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Wash contaminated clothing before reuse.

Storage	Store in a well-ventilated place. Store away from acids and oxidizing agents.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
SILICA, AMORPHOUS		7631-86-9	15 - 40
CALCIUM CARBONATE		471-34-1	10 - 30
CALCIUM OXIDE		1305-78-8	10 - 30
ALUMINUM OXIDE, NON-FIBROUS		1344-28-1	5 - 10
MAGNESIUM OXIDE		1309-48-4	5 - 10
POTASSIUM OXIDE		12136-45-7	5 - 10
CRYSTALLINE SILICA (QUARTZ)		14808-60-7	1 - 5
IRON OXIDE		1309-37-1	1 - 5
MANGANESE DIOXIDE		1313-13-9	1 - 5
PHOSPHORUS PENTOXIDE		1314-56-3	1 - 5
SODIUM OXIDE (NA2O)		1313-59-3	1 - 5
TITANIUM DIOXIDE		13463-67-7	0.5 - 1.5
SILICA, CRISTOBALITE		14464-46-1	0.1 - 1
COPPER OXIDE		1317-38-0	0 - 0.1
Other components below reportable levels			1 - 5

The specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Discomfort in the chest. Shortness of breath. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Apply extinguishing media carefully to avoid creating airborne dust. Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	None known.

Specific hazards arising from the chemical	Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential flash fire and dust explosion hazard. During fire, gases hazardous to health may be formed. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Fire fighting techniques: Use diffuser nozzles on hoses, no direct dust pile hits with high pressure water or other extinguishing media and use low-pressure medium fog streams. Apply water and extinguishing media gently with a waving action to avoid dust clouds. Use standard fire fighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released or suspended into the atmosphere in sufficient concentration. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not breathe dust. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	Collect dust using a dust ignition proof vacuum cleaner equipped with HEPA filter. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). The product is immiscible with water and will sediment in water systems. Stop the flow of material, if this is without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth and place into containers. Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Avoid significant deposits of dust, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to flash fires or secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Air material separators (e.g. bag house) collecting and handling coal ash shall be properly protected for explosion with deflagration venting or chemical suppression. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Explosion-proof general and local exhaust ventilation. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Wear appropriate personal protective equipment.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Keep only in the original container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). If dusty conditions occur, the material should be dampened or covered. Ash silos and bins should be grounded to earth. Sluiced material stored in pond or storage basin should be surfaced treated to avoid wind erosion.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
ALUMINUM OXIDE, NON-FIBROUS (CAS 1344-28-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
CALCIUM CARBONATE (CAS 471-34-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
CALCIUM OXIDE (CAS 1305-78-8)	PEL	5 mg/m3	
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust.
IRON OXIDE (CAS 1309-37-1)	PEL	10 mg/m3	Fume.
MAGNESIUM OXIDE (CAS 1309-48-4)	PEL	15 mg/m3	Total particulate.
SILICA, CRISTOBALITE (CAS 14464-46-1)	PEL	0.05 mg/m3	Respirable dust.
TITANIUM DIOXIDE (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value
SILICA, AMORPHOUS (CAS 7631-86-9)	TWA	2.7 mg/m3

ACGIH

Components	Type	Value	Form
CALCIUM CARBONATE (CAS 471-34-1)	TWA	3 mg/m3	Respirable particles.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
CALCIUM CARBONATE (CAS 471-34-1)	TWA	10 mg/m3	Inhalable particles.
CALCIUM OXIDE (CAS 1305-78-8)	TWA	2 mg/m3	
COPPER OXIDE (CAS 1317-38-0)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
IRON OXIDE (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
MAGNESIUM OXIDE (CAS 1309-48-4)	TWA	10 mg/m3	Inhalable fraction.
SILICA, CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction.
TITANIUM DIOXIDE (CAS 13463-67-7)	TWA	10 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
CALCIUM CARBONATE (CAS 471-34-1)	TWA	5 mg/m3	Respirable.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
		10 mg/m3	Total
CALCIUM OXIDE (CAS 1305-78-8)	TWA	2 mg/m3	
COPPER OXIDE (CAS 1317-38-0)	TWA	0.1 mg/m3	Fume.
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
IRON OXIDE (CAS 1309-37-1)	TWA	5 mg/m3	Dust and fume.
SILICA, AMORPHOUS (CAS 7631-86-9)	TWA	6 mg/m3	
SILICA, CRISTOBALITE (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable dust.

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.
Exposure limits for Amorphous, including natural diatomaceous earth - The US OSHA exposure limits 8 hour TWA for Amorphous, including natural diatomaceous earth is calculated from the following equations: 80/(%SiO2) mg/m3.

Appropriate engineering controls When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Safety shower/eye wash fountain must be readily available in the workplace area (29 CFR 1910.151(c)).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).

Respiratory protection A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form Powder (Solid)

Color Dark Brown to Black

Odor Not available.

Odor threshold Not available.

pH 11.5 - 12

Melting point/freezing point 4085.46 °F (2251.92 °C) estimated

Initial boiling point and boiling range 4994.26 °F (2756.81 °C) estimated

Flash point Not available.

Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	11.5 - 12 @ 50%

10. Stability and reactivity

Reactivity	Reacts violently with strong acids. This product may react with oxidizing agents.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Do not mix with other chemicals. Keep away from heat, sparks and open flame. Minimize dust generation and accumulation.
Incompatible materials	Oxidizing agents. Acids.
Hazardous decomposition products	May include oxides of carbon, silicon, calcium, aluminum, magnesium.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. Dust may irritate respiratory system.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns. Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Discomfort in the chest. Shortness of breath.

Information on toxicological effects

Acute toxicity Harmful if swallowed. May cause respiratory irritation.

Product	Species	Test Results
Wood Ash		
Acute		
Inhalation		
Dust		
ATEmix		24.64 mg/l

Product	Species	Test Results
Oral		
ATEmix		1809 mg/kg

Components	Species	Test Results
ALUMINUM OXIDE, NON-FIBROUS (CAS 1344-28-1)		
Acute		
Oral		
LD50	Rat	5000 mg/kg
CALCIUM CARBONATE (CAS 471-34-1)		
Acute		
Oral		
LD50	Rat	> 2000 mg/kg
CALCIUM OXIDE (CAS 1305-78-8)		
Acute		
Dermal		
LD50	Rabbit	> 2500 mg/m3
Oral		
LD50	Rat	> 2000 mg/kg
IRON OXIDE (CAS 1309-37-1)		
Acute		
Oral		
LD50	Rat	> 10000 mg/kg
MAGNESIUM OXIDE (CAS 1309-48-4)		
Acute		
Oral		
LD50	Rat	3870 mg/kg
MANGANESE DIOXIDE (CAS 1313-13-9)		
Acute		
Oral		
LD50	Rat	> 3480 mg/kg
POTASSIUM OXIDE (CAS 12136-45-7)		
Acute		
Oral		
LD50	Rat	273 mg/kg
SILICA, AMORPHOUS (CAS 7631-86-9)		
Acute		
Inhalation		
Dust		
LC50	Rat	> 2 mg/l
Oral		
LD50	Rat	> 22500 mg/kg
TITANIUM DIOXIDE (CAS 13463-67-7)		
Acute		
Oral		
LD50	Rat	> 10000 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

Respirable titanium dioxide from occupational sources has been classified by IARC as a possible lung carcinogen to humans. Human studies do not suggest an association between occupational exposure to titanium dioxide and an increased risk for cancer. Evidence showed that high concentrations caused respiratory tract cancer in rats exposed by inhalation and intratracheal instillation.

Sulfur trioxide has not been classified for carcinogenic effects. However, IARC concluded that occupational exposure to strong inorganic mists containing sulfuric acid, formed from sulfur trioxide reacted with water, is carcinogenic to humans. The ACGIH has classified strong inorganic acid mist containing sulfuric acid as a suspected human carcinogen. Exposure to inorganic acid mist (sulfuric acid mist) in this product will not occur because inorganic acid is not generated under normal conditions of use of this material.

IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	1 Carcinogenic to humans.
IRON OXIDE (CAS 1309-37-1)	3 Not classifiable as to carcinogenicity to humans.
SILICA, AMORPHOUS (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.
SILICA, CRISTOBALITE (CAS 14464-46-1)	1 Carcinogenic to humans.
TITANIUM DIOXIDE (CAS 13463-67-7)	2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	Cancer

US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	Known To Be Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Causes damage to organs (lung) through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effects Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Large quantities of this product may be harmful to aquatic life due to high pH.

Product		Species	Test Results
Wood Ash			
Aquatic			
Crustacea	EC50	Daphnia	25813.4629 mg/L, 48 Hours estimated
Acute			
Fish	LC50	Fish	182.3744 mg/l, 96 hours estimated

Components		Species	Test Results
CALCIUM OXIDE (CAS 1305-78-8)			
Aquatic			
Acute			
Fish	LC50	Fish	50.6 mg/l, 96 hours
Chronic			
Crustacea	LC50	Invertebrates (Invertebrates)	53.1 mg/l, 14 days

Components		Species	Test Results
COPPER OXIDE (CAS 1317-38-0)			
Aquatic			
Crustacea	EC50	Daphnia	0.03, 48 Hours
Fish	LC50	Western mosquitofish (Gambusia affinis)	> 56000 mg/l, 96 hours
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)			
Aquatic			
Acute			
Fish	LC50	Zebra danio (Danio rerio)	> 10000 mg/l, 96 Hours OECD SIDS
PHOSPHORUS PENTOXIDE (CAS 1314-56-3)			
Aquatic			
Acute			
Crustacea	EC50	Invertebrates (Invertebrates)	70.7 mg/l, 48 hours
SILICA, AMORPHOUS (CAS 7631-86-9)			
Aquatic			
Algae	IC50	Algae	440 mg/L, 72 Hours
Crustacea	EC50	Daphnia	7600 mg/L, 48 Hours
TITANIUM DIOXIDE (CAS 13463-67-7)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

General information This product is not regulated as a hazardous material by the United States (DOT) transportation regulations for highway transport.

This product would potentially be regulated as a hazardous material by the Air transportation regulation.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

COPPER OXIDE (CAS 1317-38-0)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	Cancer lung effects immune system effects kidney effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical	Yes
Classified hazard categories	Combustible dust Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eye damage or eye irritation Carcinogenicity Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	Contains component(s) regulated under the Safe Drinking Water Act.

US state regulations

California Proposition 65

WARNING: This product can expose you to chemicals including CRYSTALLINE SILICA (QUARTZ), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	Listed: October 1, 1988
NICKEL OXIDE (CAS 1313-99-1)	Listed: October 1, 1989
TITANIUM DIOXIDE (CAS 13463-67-7)	Listed: September 2, 2011

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)
SILICA, CRISTOBALITE (CAS 14464-46-1)
TITANIUM DIOXIDE (CAS 13463-67-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	December-03-2015
Revision date	June-10-2020
Version #	06

HMIS® ratings	Health: 3* Flammability: 2 Physical hazard: 0
NFPA ratings	Health: 3 Flammability: 2 Instability: 0
Disclaimer	This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.

Georgia-Pacific Crossett LLC
Consumer Products

Crossett Paper Operations
100 Mill Supply Road
P.O. Box 3333
Crossett, AR 71635
(870) 567-8000
(870) 364-9076 (fax)
www.gp.com

November 29, 2016

Annette Cusher Engineer PE, Branch Manager
ADEQ – Solid Waste Management Division
5301 Northshore Drive
North Little Rock, AR 72118-5317

RE: Beneficial Use Proposal
Georgia Pacific Crossett LLC, Crossett Paper Operations
AFIN: 02-00013

Dear Ms. Cusher:

As discussed in our phone conversation on October 13th 2016, Georgia-Pacific Crossett LLC, Crossett Paper Operations is respectfully submitting for Departmental approval documentation to the concerning a proposed project to beneficially reuse wood ash, cellulose containing fiber and alkaline materials.

Please find attached a detailed description of the project, professional recommendation and analytical data for the proposed project.

If you have any questions or concerns, please contact me at (870) 567-8670 and Sarah.Ross@gapac.com or Richard Freeman, Environmental Engineer, at (870) 567-8177 and rjfreema@gapac.com.

Sincerely,

Sarah M. Ross
Environmental Manager
Georgia-Pacific Crossett, LLC - Crossett Paper Operations

w/attachment

Georgia-Pacific

Georgia-Pacific Crossett LLC
Consumer Products

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Sincerely,

Sarah M. Ross
Environmental Manager
Georgia-Pacific Crossett, LLC - Crossett Paper Operations

w/attachment

E. D. Black

Land Treatment • By-Product Utilization • Soil Remediation • Wetlands • Biofiltration

December 2, 2016

Arkansas Department of Environmental Quality
Solid Waste Management Division
Hazardous Waste
5301 Northshore Dr.
North Little Rock, AR 72118-5317

Attention: Annette Cusher

Dear Ms. Cusher;

As a qualified soil scientist with more than 25 years of experience using industrial by-products in agriculture as soil amendments, fertilizers and limes, I recommend the use of GroLime from the Georgia-Pacific Crossett LLC- Crossett Paper Operations in Crossett, AR as a soil amendment and liming material.

The recommendation for the GroLime is based on the beneficial characteristics, the recognized agricultural lime and organic matter value, and the low metal content. It will replace the lime that farmers currently use.

The GroLime will be registered with the Arkansas Plant Board as a Soil Amendment and Lime Material. GroLime will be regulated by the Arkansas Plant Board.

It will be monitored, distributed and spread at agronomic rates based on its liming value. The anticipated application rate is approximately 4 dry tons/ac every two to three years for acidic soils with a lime requirement of 1 ton/ac.

Because GroLime contains low or nondetectable concentrations of regulated metals and will be applied at very low rates (4 dry tons per acre), the risk of potential long-term effects from the by-product will have on the surface water, groundwater, human health and the environment in and around the fields that receive the GroLime is very low.

The GroLime analysis and program is described in great detail in the attached GroLime report.

Sincerely:

Elwood Black, Ph.D.- Soils
NCLSS – License #1162

P.O. Box 3244 • Cary, NC 27519-3244 • 919-859-3805 • FAX 919-859-1219

Executive Summary

Georgia-Pacific Crossett LLC- Crossett Paper Operations in Crossett, AR proposes to sell a liming material and/or soil amendment called GroLime. It will replace the agricultural lime that farmers use. GroLime will be registered with, and meet the requirements of the Arkansas State Plant Board. It consists of wood ash, cellulose-containing fiber, and alkaline materials, contains non-detected or low levels of metals and organics, and is well suited for recovered material – beneficial use status. Three to four dry tons of GroLime have the same liming effect as one ton of agricultural lime; this is the basis for the proposed spreading rate. It is recommended for both agricultural and silvicultural use.

1. Purpose

Georgia-Pacific Crossett LLC - Crossett Paper Operations (GP) is requesting that the Arkansas Department of Environmental Quality (ADEQ) approve the use of GroLime, a wood ash, cellulose-containing fiber, alkaline materials blend, for beneficial use as a soil amendment in accordance with the ADEQ's Guidance for Determining Beneficial Use. GP further seeks confirmation such that this proposed use will not constitute disposal of a solid waste or otherwise be subject to the solid waste disposal requirements set forth in Regulation 22.

2. Approach

GroLime will be a blend of the mill wood ash, cellulose-containing fiber, and alkaline materials with 50% or greater wood ash based on dry weight. The alkaline materials are lime mud ($CaCO_3$), green liquor dregs, slaker grit, and reject lime. These materials are by-products that form GroLime.

The justification for the GroLime Recycled Material classification is based on its beneficial characteristics, the recognized agricultural value of wood ash and lime by-products, and the anticipated farmer demand for the wood ash blend. Wood ash contains lime, potassium, phosphorus and other nutrients. The cellulosic fiber contains organic matter and lime. The lime mud, reject lime, green liquor dregs, and slaker grit contain lime also. GroLime will replace all or a portion of the lime, organic matter and nutrients that farmers purchase for soil amending purposes. As set forth below, the proposed GroLime Beneficial Use Program meets the requirements stated in the ADEQ "Guidance for Determining Beneficial Use" (Appendix A).

Information to support the agricultural use of GroLime is furnished in this report. Estimated production and respective percentage of wood ash, cellulosic fiber, lime

mud, reject lime, slaker grit and green liquor dregs and analyses for each by-product are provided in the report. A blend consisting of the wood ash, cellulosic fiber, lime mud, green liquor dregs, reject lime, and slaker grit (based on the estimated annual production of each by-product) is provided for field application evaluation.

The GroLime will be sold. The majority of the GroLime will be sold as a registered Liming Material. However, a market may exist for woodlands where the appeal is for a Soil Amendment. Therefore, it is likely that the GroLime will be registered as a Liming Material and as a Soil Amendment. Regardless of the specific registration, the GroLime characteristics will be the same.

3. Historical use

The beneficial characteristics of pulp and paper mill alkaline by-products have been known for many years (USDA, 1938). Research projects demonstrating the beneficial characteristics of the pulp and paper mill by-products are extensive (Hakkila and Hikalaja, 1983; Lerner and Utzinger, 1986; Magdoff et al., 1983; Naylor and Schmidt, 1985; Pepin and Coleman, 1984; Weber et al., 1985; and Zebilske and Clapham, 1986). In the US Department of Agriculture 1938 Yearbook of Agriculture (USDA, 1938) wood ash is noted as a potassium fertilizer with lime and magnesium value.

The most common mill material for use as a lime by-product is wood ash. It is commonly applied to farm fields as a lime material and potassium nutrient. Where the by-product is spread to row crops with precision agriculture management, the wood ash is mixed with mill alkaline materials to provide a consistent liming material. Good quality wood ashes are sold.

In North Carolina, a mill blends wood ash and selected mill alkaline materials for a Department of Agriculture registered liming material. This by-product is sold to local farms in place of the agricultural lime that the farmers would purchase. A Virginia mill distributes a by-product to pasture and row crop farms. In Georgia, a Weyerhaeuser mill sells wood ash to eastern Georgia farmers. It is spread on corn, cotton, soybean, wheat, and grass farms. A Louisiana mill also distributes an alkaline by-product to local farm fields.

4. Arkansas case histories

Several Arkansas mills have selected agricultural by-product programs for mill wood ashes and alkaline by-products. At Fordyce AR, Georgia-Pacific Wood Products LLC (GPWP) elected to utilize the wood ash from an on-site scrubber pond as a liming material for distribution to off-site farms. GPWP received a "beneficial use of wood ash" status approval from the ADEQ. The value of the wood ash was recognized by the ADEQ and use of the wood ash at the pasture farm was not

viewed as a disposal. No permit was required for the wood ash by-product program. The wood ash was registered with the Plant Board as a Liming Material.

Domtar's Ashdown, AR Mill (ADEQ reference R. Payne, 1998) distributes a wood ash and lime by-product material to local farms in southwestern Arkansas. This program has operated since 1998. A contractor removes the wood ash from an on-site stockpile and hauls the by-product to the farms. The wood ash is used as a liming material and is registered with the Plant Board.

The Del-Tin Fiber Mill at El dorado, AR uses wood ash for an off-site gravel pit mine reclamation. In a 2004 letter from the ADEQ (Document Identification # 24851) reference was made to the fact that ADEQ –Solid Waste Management Division only regulates uses that constitute disposal. Besides the pit reclamation, the wood ash was proposed for use in levee and road construction.

Prior to 2008, the Georgia-Pacific – Gurdon Plywood and Lumber Complex was owned by International Paper. In the 1990s, the International Paper wood ash was used in an off-site mine reclamation project. In a 1995 letter from ADEQ, then operating as the Department of Pollution Control and Ecology, Mike Hood, Technical Manager states "... it is our determination that the use of wood ash as a soil amendment is allowable provided that the practice results in benefit to the soil or crop ...". The use of the wood ash as a soil amendment lasted until the reclamation project was completed.

5. Benefit

GroLime contains calcium carbonate which, when added to strongly acidic soils, can aid in the availability of certain nutrients that benefit the crop and increase the activity of soil microorganisms. As soil pH decreases from near neutral pH and becomes more acidic, the availability of phosphorus decreases and crop yield decreases. Adding agricultural lime in the correct amount to acidic soils increases the soil pH and increases the plant availability of the soil phosphorus, a major plant nutrient.

Soybeans have a symbiotic relationship with nitrogen-fixing bacteria that enables soybeans to obtain all of the necessary nitrogen from the air for the crop growth and function. The nitrogen-fixing bacterium is more effective at a near neutral soil pH. Maintaining a near neutral soil pH can result in greater soybean yields. The GroLime can be used to maintain the proper soil pH.

Also, adding calcium carbonate to strongly acidic soils can lower the toxic effect of native soluble aluminum. Soils with a soil pH of less than 4.5 may have levels of soluble aluminum in concentrations that are toxic to crops. By adding lime to these soils, the soil pH is increased and the soluble aluminum is converted to an insoluble

form that is not toxic to crops. GroLime can be used to reduce the toxic effects of aluminum.

The wood fibers have characteristics that enable the GroLime to be used as a soil amendment. GroLime contains organic matter. The soil health of farmed and woodland soils may be improved by the addition of organic matter as part of an overall conservation, crop rotation, nutrient management, and erosion control program. The addition of organic matter to the soil has commonly been associated with a decrease in bulk density and an increase in soil aeration, root penetration, macro-pore space, and biological activity.

GroLime will be added at a controlled rate to Arkansas farms and woodlands that can benefit from organic matter and calcium carbonate. It will replace the currently used agricultural lime that farmers routinely purchase in the Crossett area.

6. Location

GroLime is produced at the Georgia-Pacific Crossett LLC – Crossett Paper Operations Mill in Crossett, AR (Fig.6.1). Only material from this mill will be used to form the GroLime. The address is:

Georgia-Pacific Crossett LLC
Crossett Paper Operations
100 Mill Supply Rd.
Crossett, AR 71635 Location 33 8.345'N, 91 57.926'W

7. GroLime components

Six by-products (wood ash, cellulose-containing fiber, green liquor dregs, slaker grit, lime mud and reject lime) comprise the GroLime. For the purposes of this report, the green liquor dregs will be referred to as the dregs and the lime mud/reject lime as the lime. The annual GroLime production is estimated at approximately 67,000 dry tons/yr. The component produced in the largest amount based on dry tons is the wood ash at 54%; next is the fiber at 29%; almost equal amounts of dregs (8.8%) and lime (5.8%) are produced (Table 7.1). The percentages are based on historical data and some variation is anticipated as part of normal mill operation. Very small quantities of reject kiln lime at 600 dry tons/yr and slaker grit at 410 dry tons/yr are also produced. Only by-products from the GP mill will be used to form the GroLime.

Wood ash is derived from the use of biomass fuels in two power boilers located at the Mill. The large ash particles are removed in an intermediate settling pond where the heavier particles settle out, are dewatered, collected, and sent to an on-site Class 3 landfill. The remaining ash is conveyed in a process ditch that flows directly into

Fig. 6.1 - Georgia-Pacific Crossett LLC – Crossett Paper Operations Mill in Crossett, AR.

one of two ash settling basins. Once this ash has settled out, it is mechanically removed. The estimated total wood ash production is 36,500 dry tons/yr.

In the GroLime Program, the wood ash would be transported to the GroLime blending area, dewatered in place, and used to form the GroLime. The location of the GroLime Blending Station is noted on a mill map (Fig. 7.1). Any surface water runoff from the GroLime Blending Station would be collected in the Mill Waste Water Treatment System.

Fiber consists mainly of wood fiber with a small amount of solids from the paper machines, pulping operations, recovery, and wood yard operations. The fiber is collected in a clarifier and then dewatered using screw presses. The fiber production is estimated at 20,000 dry tons/yr.

In the GroLime Program, the fiber will be collected from the screw press facility. It will be transported by truck to the Blending Station for use in the GroLime product.

Residual green liquor from the process is routed to the green liquor clarifier. Undissolved particles in the green liquor (otherwise known as dregs) are settled and removed from the bottom of the green liquor clarifiers. The dregs are then filtered and washed on a vacuum filter to remove residual green liquor and increase the solids content of discharged cake. A small slipstream of wet lime is applied to the filter at startup as required to maintain a coating on the vacuum filter. The discharged dregs cake is then sent to the blending station. The estimated dregs production is 5,900 dry tons/yr.

Table 7.1 – GroLime and component annual production and percentage.

By-Product	Production Dry tons/yr	Percent of Annual Production
Wood ash	36,500	54.2
Fiber	20,000	29.7
Green liquor dregs	5,900	8.80
Slaker grits	413	0.614
Reject lime	600	0.891
Lime mud	3,890	5.78
Total	67,303	

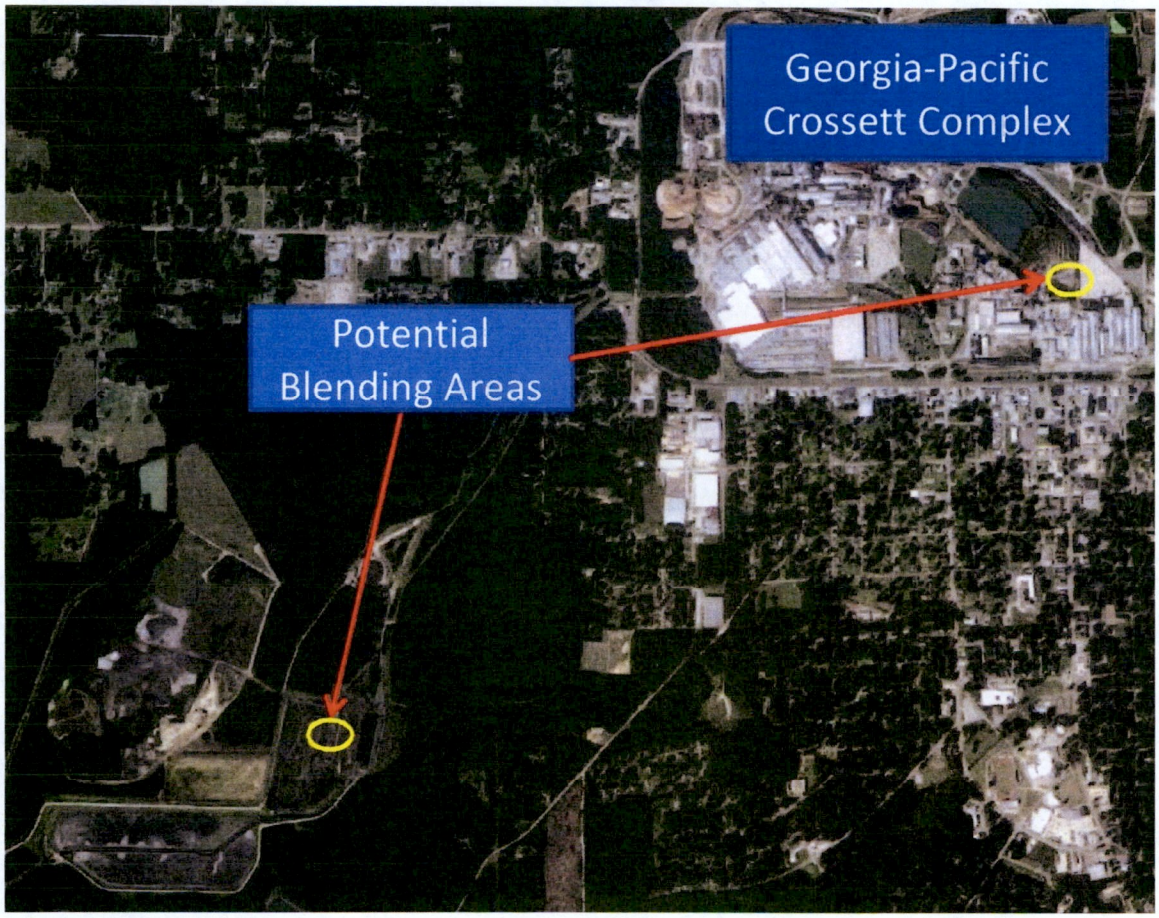

Fig. 7.1 – Georgia-Pacific Crossett complex aerial site view with potential blending areas.

During the recausticizing process, lime mud settles out in one of two white liquor clarifiers. This lime mud is then pumped to the mud washer to reclaim the soda from the mud (this chemical, weak wash, is used to make green liquor). The "washed" mud (calcium carbonate) is then sent to one of two mud storage tanks and across one of the two lime mud filters and into the lime kiln for processing. In the kiln, the lime mud is heated and the carbon dioxide is released converting the calcium carbonate into calcium oxide. This is then sent to one of two storage bins where it is used to convert green liquor into white liquor.

Any calcium oxide that is not sent to the storage bins for downstream use is referred to as reject lime. As it is exposed to the moisture in the air, the calcium oxide converts to calcium hydroxide. It is the calcium hydroxide that will be transported to the blending station.

During lime kiln upsets, the lime mud from the lime mud filters is diverted from the lime kiln. This dried lime mud is then dropped onto a conveyor belt. The dried lime mud is transported to the blending station. The estimated lime production is 3,890 dry tons/yr.

8. Chemical analysis support for Beneficial Use

The wood ash, cellulosic fiber, lime mud, slaker grit, reject lime and green liquor dregs that form the GroLime are well suited for use as a blended liming material and/or soil amendment. The by-products, based on the collected samples and standard chemical analyses, are below detection limits or at very low concentrations for regulated pollutants. The complete laboratory report is contained in Appendix B. The components are nonhazardous based on USEPA criteria for hazardous waste. Common volatile and semivolatile organics are at nondetect except for p-isopropyltoluene in the wood ash sample. US EPA Methods 8260B and 8270C were not conducted on the slaker grits and the lime mud. Due to process knowledge and slaker grit and lime mud test results from other mills, GP has no reason to believe slaker grits or lime mud would contain detectable levels. Total metals are reported at nondetect or very low levels. The carbon to nitrogen (C:N), Na, and calcium carbonate contents are similar to levels found in pulp and paper mill by-products that have been used in successful agricultural by-product programs.

Samples of GroLime were collected by Mill Environmental staff familiar with the collection of samples for regulated analysis. Samples were prepared, labeled, and bottled or packaged according to laboratory instructions. Samples for total metals and volatile and semivolatile organics were shipped in an iced cooler for overnight delivery with a chain-of-custody (Appendix B) to Ana-Lab. Agronomic samples were shipped at ambient temperature through 3 – 5 day mail to Waters Agricultural

Laboratory (Appendix C). Ana-Lab Laboratory subcontracted the pathogen analysis to Biological Consulting Services (Appendix D).

The wood ash, cellulosic fiber, lime mud, slaker grit and green liquor dregs can be characterized as nonhazardous materials based on the TCLP metal, volatile organics, semivolatile organics and pesticide/herbicides results (Appendix B). The organics analysis using SW8270B, semivolatile organics using SW8260C and volatile organics, reported organics at Below Detection Limits except for p-isopropyltoluene in the wood ash.

The volatile organic p-isopropyltoluene was found at 1,120 ug/kg. The detection limit was reported at 98.8 ug/kg. When blended with the other six components, mixed into the field, and applied at the by-product rate, the soil mixture concentration is expected to be less than the detection limits. At the observed concentration, it is not anticipated to impact the crop, soil ecosystem, or adjacent environment.

The concentrations of twenty-one metals were determined in the by-products. These metals are Al, An, As, Ba, B, Cd, Cr, Co, Cu, Fe, Pb, Hg, Mo, Ni, Se, Ag, Tl, Sn, Tl, V, and Zn.

The ADEQ biosolids land application program is based, in part, on USEPA 40 CFR 503.13 Pollutant Limits for metals. Biosolids for land application must meet the metals limits for As, Cd, Cu, Pb. Hg, Mo, Ni, Se, and Zn. The standard metals limits pertain to Ceiling Concentrations, Pollutant Concentrations – Monthly Average, Annual Pollutant Loading rates, and Cumulative Pollutant Loading.

By-products for agricultural use need to meet the same limits. For these regulated metals, the wood ash, cellulosic fiber, lime mud, reject lime, slaker grit and green liquor dregs total metals concentrations are well below the Ceiling Concentration Limits for regulated metals in ADEQ Biosolids in Land Application Programs (Table 8.1). By-products meeting the metals limits are accepted as having an unlikely negative impact on the crop, human health, and the environment. Therefore a blend of the wood ash, fiber, lime, and dregs would be well suited as GroLime.

The wood ash, cellulose fiber, lime mud, reject lime, slaker grits and green liquor dreg samples meet ADEQ Pollutant Concentration Monthly Average limits for As, Cd, Cr, Cu, Pb, Hg, Ni, Se and Zn (Table 8.2). All sample results are less than the accepted limits. This further supports the contention that a blend of the wood ash, fiber, limes and dregs would be well suited for agricultural use.

Table 8.1 – Metals concentrations for ADEQ - Ceiling concentrations and the respective GroLime metals concentrations.

Metal	Ceiling Conc.	Wood ash	Lime mud	Dregs	Reject kiln lime	Slaker grits	Fibers
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
As	75	1.53	<0.565	<0.479	<0.481	<0.495	<1.29
Cd	85	2.08	0.613	5.43	1.03	0.443	<0.646
Cu	4,300	46.4	1.31	262	15.9	2.92	5.07
Pb	840	13.6	1.85	15.1	3.49	1.39	2.01
Hg	57	<0.0381	<0.0236	<0.0363	<0.0196	<0.0226	<0.0686
Mo	75	1.64	<0.848	0.796	<0.240	<0.744	0.729
Ni	420	18.6	11.4	155	28.8	16.7	3.18
Se	100	<1.26	<0.848	<0.721	<0.721	<0.744	<1.94
Zn	7,500	526	2.49	571	78.5	17.3	23.1

Table 8.2 – ADEQ Metals monthly average concentrations and the respective GroLime metals concentrations.

Metal	Pollutant Conc. monthly ave	Wood Ash	Lime mud	Dregs	Reject kiln lime	Slaker grits	Fibers
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
As	41	1.53	<0.565	<0.479	<0.481	<0.495	<1.29
Cd	39	2.08	0.613	5.43	1.03	0.443	<0.646
Cr	1,200	24.600	13.4	44.9	17.6	11.9	19.780
Cu	1,500	46.4	1.31	262	15.9	2.92	5.07
Pb	300	13.6	1.85	15.1	3.49	1.39	2.01
Hg	17	<0.0381	<0.0236	<0.0363	<0.0196	<0.0226	<0.0686
Ni	420	18.6	11.4	155	28.8	16.7	3.18
Se	36	<1.26	<0.848	<0.721	<0.721	<0.744	<1.94
Zn	2,800	526	2.49	571	78.5	17.3	23.1

Based on an application rate of 4 dry tons/ac, the GroLime meets the ADEQ – Annual Pollutant Loading Rates for all metals (Table 8.3). The annual metals loading was based on the application of 4 dry tons/ac and the blending of the by-products as described in Table 7.1. The estimated application rate is 3.6 dry tons/ac. This supports the use of the GroLime as a liming material and/or soil amendment.

The cumulative metal loading will not be equaled for over thousands of years (Table 8.4). This calculation is primarily for dedicated sites that receive biosolids year after year. It estimates the number of years that a site can be used without exceeding a cumulative metals loading rate.

Because the GroLime contains calcium carbonate and will be sold as a liming material, the GroLime will not be applied in consecutive years. This is in contrast to biosolids and dedicated sites that have the by-product applied every year to the same field. Based on similar projects, the by-product will only be spread to the same field once every 3 years. Therefore, the site life calculation is multiplied by a factor of three to include the once every three-year application.

Modern agricultural by-products have been demonstrated to pose a low risk to human and animal health and the environment when used as true agronomic by-products and applied at controlled rates. Current laboratory procedures allow by-products to be examined beyond the regulatory metals list to further demonstrate the safe and wise use of by-products in agriculture. In addition to the regulated metals, As, Cd, Cr, Cu, Pb, Hg, Mo, Ni, Se, and Zn, expanded metals evaluations can easily include Al, An, Ba, Co, Fe, Ag, Tl, Sn, Tl, and V for a total of 20 metals.

Metals concentrations for the wood ash, cellulosic fiber, lime, slaker grit, lime mud and green liquor dregs can be compared to reported soil levels and for modern by-products that have been extensively studied and reported in refereed journals (Tables 8.5 to 8.10). USDA has proposed metal limits for gypsum by-products derived from gas desulfurization (FGD) systems (USDA-NRCS, 2015). These guidelines are proposed for the reclamation of sodium-impacted lands and are designed for the annual application of gypsum at reclamation rates for extended periods. The FGD gypsum program adds much greater total loadings than the proposed GroLime.

Rufus Chaney (2014), a USDA soils research scientist, has offered metals limits for spent foundry sand (SFS) used for manufactured soil blends. The mix could contain from 5% to 50% foundry sand. In comparison, the GroLime will only compose 0.2% of the field soil at the farm that receives the GroLime. End use of the manufactured SFS soils includes landscaping and gardens were greater human contact is anticipated. A comparison between the recommended metals for SFS and the GroLime is provided in Tables 8.5 – 8.10.

US soils metal levels are also available from the USGS. These references are compared to the GroLime to demonstrate the safe use of the GroLime in Arkansas agriculture (Tables 8.5-8.10).

Table 8.3 – ADEQ Annual Pollutant Loading Rates Limits and respective GroLime annual metals loading rates.

Metal	Annual Loading Rate #/ac	GroLime loading #/ac
As	1.8	0.0104
Cd	1.7	0.0155
Cr	134	0.120
Cu	67	0.410
Pb	13	0.0903
Hg	0.76	0.000381
Ni	19	0.226
Se	4.5	0.0116
Zn	125	2.80

Table 8.4 – ADEQ Cumulative Pollutant Loading Rates, respective GroLime annual metals loading rates, and farm life use based on metal loadings.

Metal	Cumulative Loading Rate #/ac	GroLime loading #/ac	Farm metal years*
As	37	0.0104	10,700
Cd	35	0.0155	6,770
Cr	2,677	0.120	66,900
Cu	1,339	0.410	9,800
Pb	268	0.0903	8,900
Hg	15	0.000381	118,000
Ni	375	0.226	4,980
Se	89	0.0116	23,000
Zn	2,500	2.80	2,680

* Based on once every three years of application

Table 8.5 – Metals concentrations of Wood Ash, USGS soils (Soils), and guidelines for Spent Foundry Sands (SFS), and proposed guidelines for USDA gas desulfurization gypsum (FGD)

Metal	Wood ash	Soils	SFS	FGD
	mg/kg	mg/kg	mg/kg	mg/kg
Al	8040	7,980	1,600	NL
As	1.53	13.1	6.44	13.1
Cd	2.08	0.7	0.20	1.0
Cr	14.1	73	109	100
Co	9.49	21.2	5.99	20
Cu	46.4	43.3	107	95
Fe	8160	45,600	57,100	NL
Pb	13.6	44.5	15.3	30
Hg	<0.0381	0.10	NL	2.5
Mo	1.64	2.27	21.8	10
Ni	18.6	38.5	102	100
Se	<1.26	0.80	0.20	50
Ag	<0.419	<1.0	NL	NL
Tl	<0.419	0.80	0.09	1.0
Sn	<20.9	3.1	NL	NL
V	11.5	136	9.90	136
Zn	526	125	72.1	125

Table 8.6 – Metals concentrations of Cellulose Fiber, USGS soils (Soils), and guidelines for Spent Foundry Sands (SFS), and proposed guidelines for USDA gas desulfurization gypsum (FGD)

Metal	Fiber	Soils	SFS	FGD
	mg/kg	mg/kg	mg/kg	mg/kg
Al	229	7,980	1,600	NL
As	<2.29	13.1	6.44	13.1
Cd	<0.646	0.7	0.20	1.0
Cr	2.91	73	109	100
Co	<0.646	21.2	5.99	20
Cu	5.07	43.3	107	95
Fe	436	45,600	57,100	NL
Pb	2.01	44.5	15.3	30
Hg	<0.0686	0.10	NL	2.5
Mo	0.729	2.27	21.8	10
Ni	3.18	38.5	102	100
Se	<1.94	0.80	0.20	50
Ag	<0.646	<1.0	NL	NL
Tl	<0.646	0.80	0.09	1.0
Sn	<32.4	3.1	NL	NL
V	<0.646	136	9.90	136
Zn	23.1	125	72.1	125

Table 8.7 – Metals concentrations of Lime, USGS soils (Soils), and guidelines for Spent Foundry Sands (SFS), and proposed guidelines for USDA gas desulfurization gypsum (FGD)

Metal	Lime	Soils	SFS	FGD
	mg/kg	mg/kg	mg/kg	mg/kg
Al	346	7,980	1,600	NL
As	<0.481	13.1	6.44	13.1
Cd	1.03	0.7	0.20	1.0
Cr	17.6	73	109	100
Co	3.93	21.2	5.99	20
Cu	15.9	43.3	107	95
Fe	703	45,600	57,100	NL
Pb	3.49	44.5	15.3	30
Hg	<0.0196	0.10	NL	2.5
Mo	<0.240	2.27	21.8	10
Ni	28.8	38.5	102	100
Se	<0.721	0.80	0.20	50
Ag	<0.240	<1.0	NL	NL
Tl	<0.240	0.80	0.09	1.0
Sn	<12.0	3.1	NL	NL
V	1.25	136	9.90	136
Zn	78.5	125	72.1	125

Table 8.8 – Metals concentrations of Dregs, USGS soils (Soils), and guidelines for Spent Foundry Sands (SFS), and proposed guidelines for USDA gas desulfurization gypsum (FGD)

Metal	GroLime	Soils	SFS	FGD
	mg/kg	mg/kg	mg/kg	mg/kg
Al	2880	7,980	1,600	NL
As	<0.479	13.1	6.44	13.1
Cd	5.43	0.7	0.20	1.0
Cr	44.9	73	109	100
Co	19.7	21.2	5.99	20
Cu	262	43.3	107	95
Fe	4460	45,600	57,100	NL
Pb	15.1	44.5	15.3	30
Hg	<0.0363	0.10	NL	2.5
Mo	0.796	2.27	21.8	10
Ni	155	38.5	102	100
Se	<0.721	0.80	0.20	50
Ag	1.45	<1.0	NL	NL
Tl	<0.240	0.80	0.09	1.0
Sn	<12.0	3.1	NL	NL
V	0.800	136	9.90	136
Zn	571	125	72.1	125

Table 8.9 – Metals concentrations of Grits, USGS soils (Soils), and guidelines for Spent Foundry Sands (SFS), and proposed guidelines for USDA gas desulfurization gypsum (FGD)

Metal	Grits	Soils	SFS	FGD
	mg/kg	mg/kg	mg/kg	mg/kg
Al	3180	7,980	1,600	NL
Sb	0.285			
As	<0.475	13.1	6.44	13.1
Ba	357			
B	<24.8			
Cd	0.443	0.7	0.20	1.0
Cr	11.9	73	109	100
Co	3.83	21.2	5.99	20
Cu	2.92	43.3	107	95
Fe	1,110	45,600	57,100	NL
Pb	1.39	44.5	15.3	30
Hg	<0.0226	0.10	NL	2.5
Mo	<0.744	2.27	21.8	10
Ni	16.7	38.5	102	100
Se	<0.744	0.80	0.20	50
Ag	<0.248	<1.0	NL	NL
Tl	<0.248	0.80	0.09	1.0
Sn	<12.4	3.1	NL	NL
V	6.22	136	9.90	136
Zn	17.3	125	72.1	125

Table 8.10 – Metals concentrations of Lime mud, USGS soils (Soils), and guidelines for Spent Foundry Sands (SFS), and proposed guidelines for USDA gas desulfurization gypsum (FGD)

Metal	Lime mud	Soils	SFS	FGD
	Mg/kg	mg/kg	mg/kg	mg/kg
Al	125	7,980	1,600	NL
Sb	<0.283			
As	<0.565	13.1	6.44	13.1
Ba	377			
B	<28.3			
Cd	0.613	0.7	0.20	1.0
Cr	13.4	73	109	100
Co	1.96	21.2	5.99	20
Cu	1.31	43.3	107	95
Fe	285	45,600	57,100	NL
Pb	1.85	44.5	15.3	30
Hg	<0.0236	0.10	NL	2.5
Mo	<0.848	2.27	21.8	10
Ni	11.4	38.5	102	100
Se	<0.848	0.80	0.20	50
Ag	<0.283	<1.0	NL	NL
Tl	<0.283	0.80	0.09	1.0
Sn	<14.1	3.1	NL	NL
V	0.861	136	9.90	136
Zn	2.49	125	72.1	125

The cellulosic fiber and lime samples had metals concentrations similar to the soils, spent foundry sands, and gypsum. The lime mud and the slaker grit had similar values except for Al and Cd which were slightly greater in the slaker grit and Cd and Co which were slightly greater in the lime mud than the spent foundry sands limits. These two materials combined contain less than 7% of the GroLime.

The wood ash had similar metals values compared to these by-products, except for Cd and Zn which were higher in the wood ash sample. Since the wood ash comprises 54.4% of the GroLime, the concentration would be lower in the GroLime. As a mix with the wood ash at 54.4%, the Cd level would be lower and similar to these by-products. Zinc would still be higher, but the total Zn application is low. Since the GroLime application rate is 3 to 4 dry tons/ac and the wood ash portion is 54.4%, the annual Zn application is less than 3 lb/ac which is suitable for peanuts, the most sensitive Zn crop, on normal soils.

The dregs contained greater amounts of Cd, Cu, Ni, Ag, and Zn than the soils, spent foundry sands, and gypsum. Although the dregs contain a greater amount of these metals, the actual application rate to farms for the dregs is small considering that it composes approximately 9% of the GroLime. This equates to only 0.352 dry ton/ac. Therefore the metal impact is anticipated to be very small. Also, because the dregs are a lime component, the solubility of the metals will be reduced and the impact on the soil is anticipated to be minimal.

The agricultural value of the GroLime is its liming characteristic. Agronomic results for the GroLime samples are available from the Waters Agricultural Laboratory (Appendix C). Common agricultural parameters for the by-products are presented in Table 8.11. Compared to other mill by-products from similar processes, the by-products range from bone dry to moist. By-products typically contain 25 to 55% solids with the majority of by-products in the 35 to 50% solids content range.

The wood ash, fiber, and dregs have solids contents that will allow normal management practices. The lime is very dry and may require dust control practice such as water spraying at the GP blending facility.

The GroLime solids content is estimated at 38% solids. This is based on the total as is production and on the solids reported for the by-products. This is within the solids content for agricultural by-products and, based on experience with other by-products, normal screening, blending and spreading operations are anticipated.

The agricultural value of the by-products is their liming property as noted by the calcium carbonate equivalence (CCE), expressed in %. Note that this is different from another soil term called cation exchange capacity (CEC) that was used in biosolids programs related to metal loadings. The wood ash which is produced in the greatest amount (54.2% dry weight basis) of the by-products has a 24.8 % CCE

based on dry weight. This is normal for southern wood ashes. Agricultural lime normally contains 90% CCE.

The fiber, which is produced in the second largest amount, contains the lowest lime content at 6.9% CCE. The dregs are reported to contain 56% CCE and the lime contains the highest reported CCE at 125%. Blending of the by-products will produce a GroLime with an estimated CCE of approximately 28%. Although low compared to agricultural lime, the CCE value for the GroLime is within the acceptable range for lime by-products applied to farms. Advanced Residuals Management distributes approximately 300,000 tons/yr of by-products with similar CCE values.

Table 8.11– Agricultural characteristics of wood ash, fiber, lime, and dregs by-products

Agricultural vale	Wood ash*	Fiber	Reject Lime	Grit	Lime mud	Dregs
Solids (%)	58.73	24.85	99.96	86.2	82.7	52.25
CCE (%)	24.76	6.88	125.00	82.7	86.2	56.250
N total (%)	NA	0.14	NA	ND	ND	NA
P_2O_5 (%)	0.15	0.03	1.25	0.76	0.81	0.30
K_2O (%)	0.56	0.04	0.04	0.02	0.03	0.20
C:N	NA	159.17:1	NA	NA	NA	NA
Na (%)	0.150	0.060	0.950	0.210	0.580	1.29

* Average of two samples

From an agricultural perspective, approximately 4 dry tons of GroLime need to be applied per acre to equal one ton equivalent of agricultural lime. This value is within the range observed for mill-blended by-products (Personal Experience). This application rate is normal for by-products applied to farm fields and should be suitable for selling to farmers and registration with the Plant Board as a Liming Material.

Unlike biosolids, the six by-products do not contain levels of nitrogen sufficient to be either beneficial to crops or of environmental concern. Any ammonia nitrogen will likely volatilize because of the alkaline by-products. Due to the high C:N of the fiber, the soil microorganisms will likely immobilize any ammonia nitrogen remaining and nitrate nitrogen. Because of the high C:N associated with the fiber, it is anticipated that farmers will need to apply an additional 5 to 10lb of nitrogen per dry ton of applied GroLime to corn, grass, wheat and cotton fields. Soybeans do not require nitrogen fertilizers and, as a result, are not impacted by the nitrogen immobilization.

Since the major agronomic crop in Ashley and Chicot counties is soybean, this will likely be a minor impact.

Other components commonly associated with wood ash such as potassium (K) and sulfur (S) are reported at low levels. Potash is also low in the fiber, lime, and dregs. Phosphorus is also low in all by-products. At these levels, no important nutrient benefit will be obtained from the GroLime and no environmental impact is anticipated.

Although sodium (Na) is not a major plant nutrient, the addition of large amounts of Na can impact the soil through the development of massive soil structure, which would result in a decreased soil water conductivity and salt toxicity for the crop especially for seed germination. All the by-products had low levels of Na and no impact on the crop or soil is anticipated. The by-product with the highest Na is the dregs at 1.29%, but the GroLime only contains 8.80% dregs. A loading of 4 dry tons per ac of GroLime would add an estimated 20 lbs Na per acre that is not anticipated to impact normal soils.

Pathogen results for Fecal coliforms, Salmonella and Helminth Ora supported the safe use of the GroLime. The fiber was the only by-product analyzed because the other processes are very unlikely to contain pathogens based on the unfavorable conditions for pathogens to exist. Two samples were collected at different sampling events. The results are presented in order of sample collection date.

All pathogen analyses were reported at below detection limits except for one sample. The Fecal coliforms results were <4.7 and <8.8 fecal coliforms/dry g. This compares to the Biosolids Class A limit of <1,000 Most Probable Number/PN/g. The samples contained a reported <0.7 and <1.3 Salmonella Most Probable Number/4 g. Whereas the limit for Class A Biosolids is < 3 Most Probable Number/4 g. The sample analyses reported Coliphage content of <0.3 and <1.7 Plaque Forming Units/dry gm. The Helminth Ova results were reported at <0.2 and <0.4 potentially viable Ascaris/4 g. Cultural Cytopathic Enteric Viruses were below the detection limits and reported as <0.2 and <0.4 Most Probable Number/4 dry gm. Results for the Fecal Enterococci/Streptococci, an indicator analysis, was 493 microorganisms Most Probable Number/ml in the first sample and <8.8 microorganisms in the second sample.

9. Arkansas Department of Agriculture Registration

A Liming Materials and Soil Amendment registration will be requested from the Plant Board by GP for the GroLime. Because the GroLime will be marketed to both agricultural and woodlands customers, a dual registration will be requested to aid the marketing program. The Liming Material label will have three brands to address slight variations in the production and lime content of the by-products. Brands typically have a five to ten percent difference in CCE.

A copy of this report will be submitted with the completed Plant Board forms. The submittal will contain a Liming Material label and a Soil Amendment label. Both labels will contain guarantees specific for the Liming Material and the Soil Amendment. GroLime will be required to meet all guarantees.

The Plant Board will regulate the GroLime Program. It has the authority to sample the GroLime at any place and at any time. The Plant Board can analyze for any component it deems important for the use of the GroLime. If the sample results fail to meet the guarantees or negatively impact the crop growth or function, the Plant Board can issue an immediate "Stop Order".

The registration is annual and annual tonnage reports are provided to the Plant Board.

10. Design production

It is anticipated that 67,100 dry tons/yr will be available for the GroLime program.

11. Spread rate

The spread rate will be 3 to 4 dry tons/ac based on supplying one-equivalent ton of agricultural lime. The application rate will be selected by the GP contractor and will be based on the actual material delivered to the field and agricultural lime requirement.

12. Management Plan

The mill will contract the GroLime Program to a contractor who will operate a turnkey program for the GroLime. This will include marketing, regulatory interface, blending and mixing, screening, trucking, spreading, farmer follow-up, QA/QC, storage, and records. A portion of the trucking may be subcontracted as part of the normal operation or on an as needed basis. The contractor will have agronomic/soils technical support through company staff or a consultant.

The GroLime will be marketed through meetings in formal settings, in the field with individual farmers and foresters, mailings, and web based information. For a program this size, it is typical to have a full time marketing person. Normal practices include formal meetings with farmers developed through contacts with the county Cooperative Extension Service Offices. These offices have been contacted in the surrounding counties of Ashley, Bradley, Chicot, Drew, and Union. Another farm organization that has contact with local farmers is the Farm Bureau. Local

county Farm Bureau Offices have regular meetings with farmers and ARM will request an opportunity to discuss the GroLime program at a meeting.

Individual farmers will also be contacted through the field meetings. A postcard with GroLime information will be mailed to local farmers. A website will be set up with GroLime information, company history, Plant Board labels, GroLime agronomic analysis, and contact information.

Farmers interested in the GroLime will be required to enter into an agreement on a "Lime Contract" form (LC). The agreement will identify the source of the GroLime, the contractor, the label, the spread rate, the cost and the conditions for use, i.e. N fertilizer requirement for corn, cotton, wheat and grass. Farmers will be required to follow normal agronomic practices for the crop. Either the landowner or the farmer will sign the LC.

Farmers with signed LCs will have their requested fields scheduled for GroLime application. Fields will be assigned a project #, such as GPC-1. The field will be identified on a mapping program such as Google Earth. Approximate boundaries, sensitive areas, the field access and the staging area will be marked and the land area estimated based on the mapping software.

In the mill, the by-products will be brought to an area of the Blending Area and unloaded at a designated location. Only mill by-products will be used for the GroLime. Each location will be marked with the name of the by-product. This area will be at least three acres with access during all weather conditions. The by-products will remain in place until screening or blending.

The by-products may be screened prior to blending. The by-products will then be blended based on the production and label requirements. If prescreening has not occurred, the blended by-products will be screened. The finished GroLime will be placed into a pile.

The by-product will be prepared to meet the label requirements for the GroLime. Depending on the by-product characteristics, a specific GroLime brand will be selected. The by-product will be sampled to determine the specific calcium carbonate content and particle size. Three samples of the GroLime will be collected each week and delivered to an agricultural laboratory familiar with by-products for lime and other agronomic analyses. The wood ash and fiber will be sampled three times per week, the dregs once per week, and the lime once every two weeks. The differences in sampling frequency are based on experience with by-product CCE and solids variations.

The GroLime will be stockpiled at the mill until laboratory results document that the blended material meets GroLime Plant Board label requirements. Then it will be loaded directly into trucks for transport to the field or remain in place until sold. The GroLime Program will be operated throughout the year.

Several types of trucks may be used to transport the GroLime. Trucks are selected based on haul distance, field access, and loads. An example of trucks used on another by-product project is provided in Fig. 12-1. The truck will carry the label for the GroLime. Truckers will have smart phones that will provide directions to the field and a map of the field. All trucks will be tracked.

The GroLime will be sold to the farmer and plantation woodlands operators. The added N fertilizer cost will be the responsibility of the farmer. Delivery and spreading will be included in the cost for the GroLime. The farmer will receive an electronic invoice with the GroLime label, contracted tons, and field identification.

The GroLime will be unloaded in the field at a designated staging area. The Operations Manager will select the staging area. The GroLime will then be loaded into the spreader with the aid of a front-end loader. Several types of spreaders may be used for the project. An example of one type of spreader is displayed in Fig. 12-2.

The spreader shown in Fig. 12-2 is a Case Spreader IH. It is a rear discharge spreader equipped with a spinner expeller. Depending on the moisture content of the by-product, the spread pattern will range from 40 to 80 ft. wide. The spreader will be equipped with GPS guidance system to plot the spread. Based on the planned tonnage for the GroLime Program, two spreaders will be used on the project. The spreader will be calibrated at least once per month.

9. Monitoring

The GroLime will be monitored for agronomic and environmental parameters to maintain the long-term sustainability of the beneficial use program. Three samples of the GroLime will be collected per week and delivered to an agricultural laboratory familiar with by-products for lime and other agronomic analyses. The wood ash and fiber will be sampled three times per week, the dregs once per week and the lime once every two weeks. Currently Waters Agricultural Laboratory is used for the agricultural analysis and it is likely that this laboratory will be used for ongoing agricultural analysis.

Environmental analysis will be conducted on a composite sample of the GroLime every four months, in April, August, and December. The analysis will consist of the following metals: Al, Sb, As, Be, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Ag, Tl, Sn, V, and Zn and volatile and semi volatile organics. Pathogen analysis will be conducted every six months.

Fig. 12-1. Example of trucks that have been used by ARM on similar agricultural by-product programs.

Fig. 12-2. Example of spreader typically used for mill by-products. The spreader shown is a Case.

Summary

Georgia-Pacific Crossett LLC – Crossett Paper Operations proposes to operate a beneficial use program for the by-products generated at the Crossett Mill. The proposed beneficial use program would divert almost 200,000 tons from the landfill. It will contribute to Georgia-Pacific's sustainability and efforts to reduce landfill disposal. The local farm and forestry community would benefit from a low cost lime and soil amendment.

The by-products mix would be called GroLime and would be registered with the Arkansas Department of Agriculture – Arkansas State Plant Board (Plant Board) as a Liming Material and/or Soil amendment. It will be offered to the agricultural and silvicultural markets as a substitute for agricultural liming material and/or as a soil amendment. It will be sold.

The GroLime will be a mixture of mill wood ash and reject wood fibers blended with mill lime materials and limited amounts of paper fines produced from the daily mill operation. Arkansas farms need lime and the GroLime is well suited as a replacement for agricultural lime that is used on farm fields. The GroLime contains wood fiber that can contribute organic matter to the soil. All of the GroLime (100%) will be distributed to farms or woodlands throughout the year.

Once approved for beneficial reuse by ADEQ, GP will submit an application for registration to the Plant Board. A copy of this report will be provided to the Plant Board. Approval by the Plant Board is anticipated based on the extensive use of wood ash in agriculture, previous Plant Board registration of wood ash and wood ash mixes, and the favorable characteristics of the GroLime.

The Plant Board will regulate the GroLime as a registered Liming Material and/or Soil Amendment. As a condition of the registration, the GroLime will be required to maintain its guaranteed lime material and/or soil amendment properties. The Plant Board has the authority to sample the GroLime at any time and at any location and to analyze it for any component deemed necessary by the Plant Board. Failure to meet the requirements of a Liming Material and/or Soil Amendment can result in fines, an immediate "Stop Order," and the loss of registration.

Twenty one metals are reported below detection limits (BDL) or at very low levels compared to limits and guidelines for agricultural by-products and other materials applied to farms. GroLime passes TCLP organics and metals guidelines. Sample volatile organics and semi-volatile organics, a total of 100 organic compounds, are at BDL or near BDL. Indicator pathogens are within accepted limits.

GroLime will be distributed to local farms and/or woodlands in the Crossett area of Ashley, Bradley, Chicot, Drew, and Union Counties, AR. The Mill Contractor will

operate a turnkey by-product program. The Mill Contractor will conduct the marketing, transport, spreading, monitoring, record collection, regulatory interface, and QA/QC. The estimated farmland in Ashley County is 77,000 ac with an estimated 232,000 ac of farmland in the adjoining county of Chicot and an additional 70,000 ac in Drew. GroLime will be applied at the rate of 3 to 4 dry tons/ac depending on the soil pH and the calcium carbonate content of the GroLime. At this spread rate, an estimated 21,400 ac of farmland will be required for the GroLime Program.

GroLime will be applied once every three years to farm fields. Except for coastal Bermuda hay fields managed at very high levels or very strongly acidic soils, agricultural lime is typically applied once every three years. Because the beneficial characteristics will last three years for the majority of the local farm fields, GroLime will not be applied to farm fields every year as is common with other by-products.

Major agronomic crops such as cotton, corn, soybeans, wheat, sorghum, and grass can benefit from the addition of GroLime. It will be top dressed to all fields. On conventional fields, the farmer will incorporate the GroLime into the soil. For no-till, hay and pasture fields, the GroLime will not be incorporated into the soil as is the common agricultural practice.

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Appendix A

Guidance for Determining Beneficial Use

Arkansas Dept. of Environmental Quality
Solid Waste Management Division

Solid Waste Management Division (SWMD) staff recognizes that the final use of certain materials may provide benefits to the environment and may offer a cost effective management alternative to disposal. However, the environmental risks associated with the disposition of materials of concern must be fully taken into account prior to final placement or use. Documentation must be developed showing that the material has beneficial use as a soil amendment, road base or other application will have no potential short or long-term environmental impacts and/or threats to the environment. In some cases, a satisfactory operations plan must be developed for handling, storing and applying the material. Should these conditions not be met satisfactorily, the material may be classified as a waste and would be required to be properly disposed in accordance with Regulation 22.

The following is only a general guideline for determining the beneficial use of any non-inert waste stream, and for demonstrating that the use of the material will not constitute disposal of a solid waste. Please direct specific questions on specific materials to the Solid Waste Management Division.

1. For SWMD approval of land application of a material, the waste stream must be certified as a having a beneficial use as a product. If no beneficial use of the material as a soil amendment can be demonstrated, the material will be classified as a waste and must be properly disposed in a permitted facility.

2. The beneficial use certification must include testing and written documentation from a qualified soil scientist or agronomist that describes in detail the beneficial use of the material. The person certifying that the waste stream is acceptable for land application or use as a soil amendment must determine and comment on the potential long-term effects the material will have on surface water, ground water, human health and the environment in and around the land application site(s). The certification must include the recommended loading rates for the material in allowable quantities per acre based on existing soil conditions and the waste stream analysis.

3. Analytical results must show what compounds or nutrients are present in the material, the concentrations of those elements on a per weight basis, and describing the beneficial characteristics of the constituents.

4. The petitioner must also submit a Beneficial Use Plan that would address the details of storage prior to the implementation of the Beneficial Use. For example, the plan may include, but not be limited to, storage pond liners; surface runoff controls at storage, staging areas and disposal areas; how the material is transported to the Beneficial Use site; how the material is applied; what equipment is utilized; determination of appropriate buffer zones; locations of proposed land application areas; the proposed number of acres available for land application; property ownership records and right-of-entry documentation; any site restrictions; etc.

5. Authorization allowing beneficial use is not a release from any environmental liability. Any unauthorized waste or waste disposal shall be subject to penalties as defined by the Arkansas Code Annotated 8-6-204 et seq., and the Arkansas Solid Waste Management Regulation 22.

E:\TechnicalBr\PERM-FRM\20Guideline for Determining Beneficial Use.doc

Appendix B

ANA-LAB CORP.® THE COMPLETE SERVICE LAB

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 e-Mail corp@ana-lab.com LELAP-accredited #02008

Employee Owned Integrity Caring Continual Improvement

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Report

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Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

Account	*Project*
GPDR -L	**746941**

Ash Ditch/Primary Clarifier

This report consists of this Table of Contents and the following pages:

ANA-LAB CORP. THE COMPLETE SERVICE LAB

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

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Employee Owned Integrity Caring Continual Improvement

Results

Printed: 07/07/2016

Ash Ditch/Primary Clarifier

Account	*Project*
GPDR-L	**746941**

Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

Results

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
1505110 Primary Clarifier Solids						*Received:* 05/25/2016	
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape			05/24/2016 08:40:00	
Supplement to Test Report 1494125							
	Prepared:	***664786***	*05/31/2016*			*10:30:00*	
EPA 6010C		Analyzed	*LPS 05/31/2016*		*17:03:00*	*QCgroup 664917*	
N **Total Iron**	**436 ***	**mg/Kg**	16.2			**7439-89-6**	15
EPA 6010C		Analyzed	*LPS 06/01/2016*		*13:15:00*	*QCgroup 665084*	
N **Boron**	**<64.6 ***	**mg/kg**	64.6			**7440-42-8**	15
N **Tin, Total**	**<32.4 ***	**mg/kg**	32.4			**7440-31-5**	15
* Dry Weight Basis							
	Prepared:	***664618***	*05/27/2016*			*10:45:00*	
EPA 6020A		Analyzed	*CLK 05/27/2016*		*17:13:00*	*QCgroup 664755*	
N **TCLP Arsenic**	**<0.050**	**mg/L**	0.050		5.00	**7440-38-2**	09
N **TCLP Barium**	**0.679**	**mg/L**	0.050		100	**7440-39-3**	09
N **TCLP Cadmium**	**<0.005**	**mg/L**	0.005		1.00	**7440-43-9**	09
N **TCLP Chromium**	**<0.050**	**mg/L**	0.050		5.00	**7440-47-3**	09
N **TCLP Lead**	**<0.050**	**mg/L**	0.050		5.00	**7439-92-1**	09
N **TCLP Selenium**	**<0.050**	**mg/L**	0.050		1.00	**7782-49-2**	09
N **TCLP Silver**	**<0.050**	**mg/L**	0.050		5.00	**7440-22-4**	09
	Prepared:	***664786***	*05/31/2016*			*10:30:00*	
EPA 6020A		Analyzed	*CLK 05/31/2016*		*17:51:00*	*QCgroup 664937*	
N **Aluminum, Total**	**229 ***	**mg/kg**	3.24			**7429-90-5**	15
N **Antimony, Total**	**0.836 ***	**mg/kg**	0.646			**7440-36-0**	15
N **Arsenic, Total**	**<1.29 ***	**mg/kg**	1.29		41.0	**7440-38-2**	15
N **Barium**	**93.2 ***	**mg/kg**	1.94			**7440-39-3**	15
N **Cadmium, Total**	**<0.646 ***	**mg/kg**	0.646		39.0	**7440-43-9**	15
N **Chromium, Total**	**2.91 ***	**mg/kg**	0.646			**7440-47-3**	15
N **Cobalt**	**<0.646 ***	**mg/kg**	0.646			**7440-48-4**	15
N **Copper, Total**	**5.07 ***	**mg/kg**	0.646		1500	**7440-50-8**	15
N **Lead, Total**	**2.01 ***	**mg/kg**	0.646		300	**7439-92-1**	15
N **Molybdenum**	**0.729 ***	**mg/kg**	0.646		49.1	**7439-98-7**	15
N **Nickel, Total**	**3.18 ***	**mg/kg**	0.646		420	**7440-02-0**	15
N **Selenium, Total**	**<1.94 ***	**mg/kg**	1.94		100	**7782-49-2**	15
N **Silver, Total**	**<0.646 ***	**mg/kg**	0.646			**7440-22-4**	15
N **Thallium, Total**	**<0.646 ***	**mg/kg**	0.646			**7440-28-0**	15
N **Vanadium**	**<0.646 ***	**mg/kg**	0.646			**7440-62-2**	15
N **Zinc, Total**	**23.1 ***	**mg/kg**	3.24		2800	**7440-66-6**	15
* Dry Weight Basis							
	Prepared:	***664578***	*05/27/2016*			*11:10:00*	
EPA 7470A		Analyzed	*CLK 05/27/2016*		*15:55:00*	*QCgroup 664684*	

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Results

Printed: 07/07/2016

Results

	Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
1505110	**Primary Clarifier Solids**						*Received:* 05/25/2016	
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape				05/24/2016 08:40:00	
Supplement to Test Report 1494125								
EPA 7470A			Analyzed	*CLK 05/27/2016*		*15:55:00*	*QCgroup*	*664684*
N	**TCLP Mercury**	**<0.002**	**mg/L**	0.002		0.200	**7439-97-6**	08
	Prepared:	***664734***		*05/31/2016*		*08:00:00*		
EPA 7471A			Analyzed	*CLK 05/31/2016*		*12:35:00*	*QCgroup*	*664850*
N	**Mercury**	**<0.0686 ***	**mg/kg**	0.0686		17.0	**7439-97-6**	13
	* Dry Weight Basis							
	Prepared:	***665008***		*06/01/2016*		*07:00:00*		
EPA 8081A			Analyzed	*KJS 06/01/2016*		*22:23:00*	*QCgroup*	*665231*
N	**TCLP Chlordane**	**<0.00005**	**mg/L**	0.00005		0.030	**57-74-9**	19
N	**TCLP Endrin**	**<0.00005**	**mg/L**	0.00005		0.020	**72-20-8**	19
N	**TCLP gamma-BHC (Lindane)**	**<0.00005**	**mg/L**	0.00005		0.400	**58-89-9**	19
N	**TCLP Heptachlor**	**<0.00005**	**mg/L**	0.00005		0.008	**76-44-8**	19
N	**TCLP Heptachlor Epoxide**	**<0.00005**	**mg/L**	0.00005		0.008	**1024-57-3**	19
N	**TCLP Methoxychlor**	**<0.00005**	**mg/L**	0.00005		10.0	**72-43-5**	19
N	**TCLP Toxaphene**	**<0.00005**	**mg/L**	0.00005		0.500	**8001-35-2**	19
	Prepared:	***665036***		*06/01/2016*		*11:00:00*		
EPA 8151			Analyzed	*EMT 06/01/2016*		*18:37:00*	*QCgroup*	*665510*
N	**TCLP 2,4 D**	**<0.500**	**mg/L**	0.500		10.0	**94-75-7**	20
N	**TCLP 2,4,5-TP (Silvex)**	**<0.300**	**mg/L**	0.300		1.00	**93-72-1**	20
	Prepared:	***664874***		*05/31/2016*		*14:50:00*		
EPA 8260B			Analyzed	*DWL 06/01/2016*		*17:54:00*	*QCgroup*	*665168*
N	**TCLP 1,1-Dichloroethene**	**<0.010**	**mg/L**	0.010		0.700	**75-35-4**	17
N	**TCLP 1,2-Dichloroethane**	**<0.010**	**mg/L**	0.010		0.500	**107-06-2**	17
N	**TCLP 1,4 Dichlorobenzene**	**<0.010**	**mg/L**	0.010		7.50	**106-46-7**	17
N	**TCLP Benzene**	**<0.010**	**mg/L**	0.010		0.500	**71-43-2**	17
N	**TCLP Carbon tetrachloride**	**<0.010**	**mg/L**	0.010		0.500	**56-23-5**	17
N	**TCLP Chlorobenzene**	**<0.010**	**mg/L**	0.010		100	**108-90-7**	17
N	**TCLP Chloroform**	**<0.010**	**mg/L**	0.010		6.00	**67-66-3**	17
N	**TCLP MEK**	**<0.020**	**mg/L**	0.020		200	**78-93-3**	17
N	**TCLP Tetrachloroethylene**	**<0.010**	**mg/L**	0.010		0.700	**127-18-4**	17
N	**TCLP Trichloroethylene**	**<0.010**	**mg/L**	0.010		0.500	**79-01-6**	17
N	**TCLP Vinyl chloride**	**<0.010**	**mg/L**	0.010		0.200	**75-01-4**	17
	Prepared:	***664957***		*05/31/2016*		*13:31:00*		
EPA 8260B			Analyzed	*JRH 05/31/2016*		*13:31:00*	*QCgroup*	*664957*
N	**1,1,1,2-Tetrachloroethane**	**<179 ***	**ug/kg**	179	(	1420	**630-20-6**	04
N	**1,1,1-Trichloroethane**	**<179 ***	**ug/kg**	179	(	1620	**71-55-6**	04
N	**1,1,2,2-Tetrachloroethane**	**<179 ***	**ug/kg**	179	(	23.1	**79-34-5**	04
N	**1,1,2-Trichloroethane**	**<179 ***	**ug/kg**	179	(	20.1	**79-00-5**	04
N	**1,1-Dichloroethane**	**<179 ***	**ug/kg**	179	(	9250	**75-34-3**	04
N	**1,1-Dichloroethylene**	**<179 ***	**ug/kg**	179	(	50.1	**75-35-4**	04
N	**1,1-Dichloropropene**	**<179 ***	**ug/kg**	179	(	5.00	**563-58-6**	04
N	**1,2,3-Trichlorobenzene**	**<357 ***	**ug/kg**	357	(	4800	**87-61-6**	04

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Results

Printed: 07/07/2016

Results

1505110 Primary Clarifier Solids *Received:* 05/25/2016

olid & Chemical Material *Collected by:* Client *Affiliation:* Georgia Pacific Pape 05/24/2016 08:40:00

Supplement to Test Report 1494125

Parameter		Results	Units	RL	Flags	MAL	CAS	Bottle
EPA 8260B			Analyzed	*JRH 05/31/2016*		*13:31:00 QCgroup*	*664957*	
N	1,2,3-Trichloropropane	<357 *	ug/kg	357	(	2.28	96-18-4	04
N	1,2,4-Trichlorobenzene	<179 *	ug/kg	179	(	4800	120-82-1	04
N	1,2,4-Trimethylbenzene	<179 *	ug/kg	179	(	26000	95-63-6	04
N	1,2-Dibromo-3-chloropropane	<179 *	ug/kg	179	(	1.75	96-12-8	04
N	1,2-Dibromoethane	<179 *	ug/kg	179	(	0.210	106-93-4	04
N	1,2-Dichloroethane	<357 *	ug/kg	357	(	13.7	107-06-2	04
N	1,2-Dichloropropane	<179 *	ug/kg	179	(	22.8	78-87-5	04
N	1,3,5-Trimethylbenzene	<179 *	ug/kg	179	(	45000	108-67-8	04
N	1,3-Dichloropropane	<179 *	ug/kg	179	(	5.00	142-28-9	04
N	2,2-Dichloropropane	<179 *	ug/kg	179	(	5.00	594-20-7	04
N	2-Chloroethylvinyl ether	<179 *	ug/kg	179	(	5.00	110-75-8	04
N	2-Chlorotoluene	<179 *	ug/kg	179	(	1000000	95-49-8	04
N	4-Chlorotoluene	<179 *	ug/kg	179	(	1000000	106-43-4	04
N	Acetone	<893 *	ug/kg	893	(	4750	67-64-1	04
N	Acrolein	<357 *	ug/kg	357	(	947	107-02-8	04
N	Acrylonitrile	<179 *	ug/kg	179	(	7500	107-13-1	04
N	Benzene	<179 *	ug/kg	179	(	26.0	71-43-2	04
N	Bromobenzene	<179 *	ug/kg	179	(	5.00	108-86-1	04
N	Bromochloromethane	<179 *	ug/kg	179	(	5.00	74-97-5	04
N	Bromodichloromethane	<179 *	ug/kg	179	(	440	75-27-4	04
N	Bromoform	<179 *	ug/kg	179	(	546	75-25-2	04
N	Bromomethane (Methyl Bromi	<446 *	ug/kg	446	(	131	74-83-9	04
N	Carbon Tetrachloride	<179 *	ug/kg	179	(	61.9	56-23-5	04
N	Chlorobenzene	<179 *	ug/kg	179	(	1090	108-90-7	04
N	Chloroethane	<357 *	ug/kg	357	(	30900	75-00-3	04
N	Chloroform	<179 *	ug/kg	179	(	417	67-66-3	04
N	Chloromethane	<179 *	ug/kg	179	(	405	74-87-3	04
N	cis-1,2-Dichloroethylene	<179 *	ug/kg	179	(	248	156-59-2	04
N	cis-1,3-Dichloropropene	<179 *	ug/kg	179	(	22.0	10061-01-5	04
N	Dibromochloromethane	<179 *	ug/kg	179	(	445	124-48- 1	04
N	Dibromomethane	<179 *	ug/kg	179	(	5.00	74-95-3	04
N	Dichlorodifluoromethane	<179 *	ug/kg	179	(	239000	75-71-8	04
N	Dichloromethane	<357 *	ug/kg	357	(	13.1	75-09-2	04
N	Ethylbenzene	<179 *	ug/kg	179	(	7600	100-41-4	04
N	Hexachlorobutadiene	<179 *	ug/kg	179	(	1400	87-68-3	04
N	Isopropylbenzene (Cumene)	<179 *	ug/kg	179	(	347000	98-82-8	04
N	m- and p-Xylene	<179 *	ug/kg	179	(	0	ARC-mpXyl	04
N	m-Dichlorobenzene	<179 *	ug/kg	179	(	5.00	541-73-1	04
N	Methyl ethyl ketone (Butanone)	<893 *	ug/kg	893	(	29300	78-93-3	04
N	Methyl Isobutyl Ketone	<179 *	ug/kg	179	(	4950	108-10-1	04
N	Naphthalene	<357 *	ug/kg	357	(	31000	91-20-3	04
N	n-Butylbenzene	<179 *	ug/kg	179	(	45000	104-51-8	04
N	n-Propylbenzene	<179 *	ug/kg	179	(	45000	103-65-1	04
N	o-Dichlorobenzene	<179 *	ug/kg	179	(	5.00	95-50-1	04
N	o-Xylene	<179 *	ug/kg	179	(	0	95-47-6	04

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Results

Printed: 07/07/2016

Results

Parameter		Results	Units	RL	Flags	MAL	CAS	Bottle
1505110	**Primary Clarifier Solids**							

Received: 05/25/2016

olid & Chemical Material *Collected by:* Client *Affiliation:* Georgia Pacific Pape 05/24/2016 08:40:00

Supplement to Test Report 1494125

EPA 8260B			Analyzed	*JRH 05/31/2016*	*13:31:00*	*QCgroup*	*664957*	
N	p-Dichlorobenzene	<179 *	ug/kg	179	(	5.00	106-46-7	04
N	p-Isopropyltoluene	<179 *	ug/kg	179	(		99-87-6	04
N	sec-Butylbenzene	<179 *	ug/kg	179	(	45000	135-98-8	04
N	Styrene	<179 *	ug/kg	179	(	3250	100-42-5	04
N	tert-Butylbenzene	<179 *	ug/kg	179	(	45000	98-06-6	04
N	tert-Butylmethylether (MTBE)	<179 *	ug/kg	179	(	620	1634-04-4	04
N	Tetrachloroethylene	<179 *	ug/kg	179	(	50.2	127-18-4	04
N	Toluene	<179 *	ug/kg	179	(X	8200	108-88-3	04
N	trans-1,2-Dichloroethylene	<179 *	ug/kg	179	(	490	156-60-5	04
N	trans-1,3-Dichloropropene	<179 *	ug/kg	179	(	5.00	10061-02-6	04
N	Trichloroethylene	<179 *	ug/kg	179	(	33.6	79-01-6	04
N	Trichlorofluoromethane	<179 *	ug/kg	179	(	128000	75-69-4	04
N	Vinyl chloride	<179 *	ug/kg	179	(	22.3	75-01-4	04
EPA 8260B			Calculated	*CAL 06/01/2016*	*13:18:14*	*QCgroup*	*664957*	
N	Xylenes, Total	<179 *	ug/kg	179		120000	1330-20-7	04

* Dry Weight Basis

	Prepared:	*664797*		*05/31/2016*		*08:00:00*		
EPA 8270C			Analyzed	*SLC 06/02/2016*	*14:50:00*	*QCgroup*	*665495*	
N	TCLP 2,4,5-Trichlorophenol	<0.010	mg/L	0.010		1.00	95-95-4	14
N	TCLP 2,4,6-Trichlorophenol	<0.010	mg/L	0.010		2.00	88-06-2	14
N	TCLP 2,4-Dinitrotoluene	<0.010	mg/L	0.010		0.130	121-14-2	14
N	TCLP 2-Methylphenol (o-Cresol)	<0.010	mg/L	0.010		200		14
N	TCLP 3&4-Methylphenol (m&p-Creso	<0.010	mg/L	0.010		200		14
N	TCLP bis(2-Chloroethyl)ether	<0.010	mg/L	0.010		0.100	111-44-4	14
N	TCLP Hexachlorobenzene	<0.010	mg/L	0.010		0.130	118-74-1	14
N	TCLP Hexachlorobutadiene	<0.010	mg/L	0.010		0.500	87-68-3	14
N	TCLP Hexachloroethane	<0.010	mg/L	0.010		3.00	67-72-1	14
N	TCLP Nitrobenzene	<0.010	mg/L	0.010		2.00	98-95-3	14
N	TCLP Pentachlorophenol	<0.010	mg/L	0.010		100	87-86-5	14
N	TCLP Pyridine (Reg. Limit 5)	<0.010	mg/L	0.010		5.00	110-86-1	14
EPA 8270C			Calculated	*CAL 06/06/2016*	*08:48:42*	*QCgroup*	*665495*	
N	TCLP Total Cresols (Reg Lim 200)	<0.010	mg/L	0.010		200	108-39-4,ect.	14
	Prepared:	*664981*		*05/31/2016*		*10:45:00*		
EPA 8270C			Analyzed	*SLC 06/03/2016*	*16:56:00*	*QCgroup*	*665712*	
N	1,2,4-Trichlorobenzene	<1190 *	ug/kg	1190		4790	120-82-1	18
N	1,2-Dichlorobenzene	<1190 *	ug/kg	1190		17900	95-50-1	18
N	1,2-DPH (as azobenzene)	<1190 *	ug/kg	1190		32.3	122-66-7	18
N	1,3-Dichlorobenzene	<1190 *	ug/kg	1190		439000	541-73-1	18
N	1,4-Dichlorobenzene	<1190 *	ug/kg	1190		2100	106-46-7	18
N	2,4,5-Trichlorophenol	<1190 *	ug/kg	1190		33800	95-95-4	18
N	2,4,6-Trichlorophenol	<1190 *	ug/kg	1190		594	88-06-2	18
N	2,4-Dichlorophenol	<1190 *	ug/kg	1190		352	120-83-2	18
N	2,4-Dimethylphenol	<24300 *	ug/kg	24300		3230	105-67-9	18
N	2,4-Dinitrophenol	<5960 *	ug/kg	5960		93.7	51-28-5	18

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Results

Printed: 07/07/2016

Results

1505110 Primary Clarifier Solids *Received:* 05/25/2016

olid & Chemical Material *Collected by:* Client *Affiliation:* Georgia Pacific Pape 05/24/2016 08:40:00

Supplement to Test Report 1494125

	Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
EPA 8270C			Analyzed	*SLC 06/03/2016*		*16:56:00 QCgroup*	*665712*	
N	2,4-Dinitrotoluene	<8320 *	ug/kg	8320		5.32	121-14-2	18
N	2,6-Dichlorophenol	<29800 *	ug/kg	29800			87-65-0	18
N	2,6-Dinitrotoluene	<8320 *	ug/kg	8320		4.81	606-20-2	18
N	2-Chloronaphthalene	<1190 *	ug/kg	1190		670000	91-58-7	18
N	2-Chlorophenol	<1190 *	ug/kg	1190		1630	95-57-8	18
N	2-Methylphenol (o-Cresol)	<5960 *	ug/kg	5960		7120	95-48-7	18
N	2-Nitrophenol	<7140 *	ug/kg	7140		787	88-75-5	18
N	3&4-Methylphenol (m&p-Cresol)	<5960 *	ug/kg	5960		632	MEPH34	18
N	3,3'-Dichlorobenzidine	<4750 *	ug/kg	4750		62.6	91-94-1	18
N	4,6-Dinitro-2-methylphenol	<5960 *	ug/kg	5960		130000	534-52-1	18
N	4-Bromophenyl phenyl ether	<1190 *	ug/kg	1190		1.89	101-55-3	18
N	4-Chlorophenyl phenyl ethe	<1190 *	ug/kg	1190		4.23	7005-72-3	18
N	4-Nitrophenol	<14300 *	ug/kg	14300		947	100-02-7	18
N	Acenaphthene	<1190 *	ug/kg	1190		236000	83-32-9	18
N	Acenaphthylene	<1190 *	ug/kg	1190		409000	208-96-8	18
N	Anthracene	<2380 *	ug/kg	2380		6890000	120-12-7	18
N	Benzidine	<1190 *	ug/kg	1190		0.011	92-87-5	18
N	Benzo(a)anthracene	<1190 *	ug/kg	1190		17700	56-55-3	18
N	Benzo(a)pyrene	<1190 *	ug/kg	1190		7640	50-32-8	18
N	Benzo(b)fluoranthene	<1190 *	ug/kg	1190		60100	205-99-2	18
N	Benzo(ghi)perylene	<1190 *	ug/kg	1190		0	191-24-2	18
N	Benzo(k)fluoranthene	<1190 *	ug/kg	1190		615000	207-08-9	18
N	Benzyl Butyl phthalate	<1190 *	ug/kg	1190		2700000	85-68-7	18
N	Bis(2-chloroethoxy)methane	<1190 *	ug/kg	1190		20.0	111-91-1	18
N	Bis(2-chloroethyl)ether	<1190 *	ug/kg	1190		2.11	111-44-4	18
N	Bis(2-chloroisopropyl)ether	<8320 *	ug/kg	8320		190	39638-32-9	18
N	Bis(2-ethylhexyl)phthalate	<5960 *	ug/kg	5960		164000	117-81-7	18
N	Chrysene (Benzo(a)phenanthrene)	<1190 *	ug/kg	1190		1550000	218-01-9	18
N	Dibenz(a,h)anthracene	<1190 *	ug/kg	1190		15200	53-70-3	18
N	Diethyl phthalate	<1190 *	ug/kg	1190		156000	84-66-2	18
N	Dimethyl phthalate	<1190 *	ug/kg	1190	D	243000	131-11-3	18
N	Di-n-butylphthalate	<2380 *	ug/kg	2380		2.47	84-74-2	18
N	Di-n-octylphthalate	<1190 *	ug/kg	1190		0	117-84-0	18
N	Fluoranthene(Benzo(j,k)fluorene)	<1190 *	ug/kg	1190		1920000	206-44-0	18
N	Fluorene	<1190 *	ug/kg	1190		299000	86-73-7	18
N	Hexachlorobenzene	<1190 *	ug/kg	1190		1100	118-74-1	18
N	Hexachlorobutadiene	<1190 *	ug/kg	1190		1370	87-68-3	18
N	Hexachlorocyclopentadiene	<4750 *	ug/kg	4750		19300	77-47-4	18
N	Hexachloroethane	<2380 *	ug/kg	2380		1840	67-72-1	18
N	Indeno(1,2,3-cd)pyrene	<1190 *	ug/kg	1190		173000	193-39-5	18
N	Isophorone	<1190 *	ug/kg	1190		3000	78-59-1	18
N	Naphthalene	<1190 *	ug/kg	1190		31000	91-20-3	18
N	Nitrobenzene	<1190 *	ug/kg	1190		87.9	98-95-3	18
N	N-Nitrosodimethylamine	<9540 *	ug/kg	9540		0.037	62-75-9	18
N	N-Nitrosodi-n-propylamine	<1190 *	ug/kg	1190		0.350	621-64-7	18

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Results

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Results

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
1505110 Primary Clarifier Solids						*Received:* 05/25/2016	
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape			05/24/2016 08:40:00	
Supplement to Test Report 1494125							
EPA 8270C		Analyzed	*SLC 06/03/2016*	*16:56:00*	*QCgroup*	*665712*	
N N-Nitrosodiphenylamine (as DPA	<1190 *	ug/kg	1190		2820	86-30-6	18
N p-Chloro-m-Cresol (4-Chloro-3-me	<1190 *	ug/kg	1190		330000	59-50-7	18
N Pentachlorophenol	<10700 *	ug/kg	10700		3.58	87-86-5	18
N Phenanthrene	<1190 *	ug/kg	1190		420000	85-01-8	18
N Phenol	<1190 *	ug/kg	1190		38300	108-95-2	18
N Pyrene	<1190 *	ug/kg	1190		1120000	129-00-0	18
N Pyridine	<2380 *	ug/kg	2380		69.0	110-86-1	18
* Dry Weight Basis							
	Prepared: *664778*		*05/27/2016*	*19:16:00*			
SM2540 G-1997 /MOD		Analyzed	*KBP 05/27/2016*	*19:16:00*	*QCgroup*	*664778*	
N Total Solids for Dry Wt	28.0	%	0.010				01
1505120 Ash Ditch WWTS						*Received:* 05/25/2016	
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape			05/24/2016 09:00:00	
Supplement to Test Report 1494126							
	Prepared: *664786*		*05/31/2016*	*10:30:00*			
EPA 6010C		Analyzed	*LPS 05/31/2016*	*17:07:00*	*QCgroup*	*664917*	
N Total Iron	8160 *	mg/Kg	10.5			7439-89-6	18
EPA 6010C		Analyzed	*LPS 06/01/2016*	*13:19:00*	*QCgroup*	*665084*	
N Boron	<41.9 *	mg/kg	41.9			7440-42-8	18
N Tin, Total	<20.9 *	mg/kg	20.9			7440-31-5	18
* Dry Weight Basis							
	Prepared: *664622*		*05/27/2016*	*10:45:00*			
EPA 6020A		Analyzed	*CLK 05/27/2016*	*17:58:00*	*QCgroup*	*664755*	
N TCLP Arsenic	<0.050	mg/L	0.050		5.00	7440-38-2	11
N TCLP Barium	1.82	mg/L	0.050		100	7440-39-3	11
N TCLP Cadmium	0.00876	mg/L	0.005		1.00	7440-43-9	11
N TCLP Chromium	<0.050	mg/L	0.050		5.00	7440-47-3	11
N TCLP Lead	<0.050	mg/L	0.050		5.00	7439-92-1	11
N TCLP Selenium	<0.050	mg/L	0.050		1.00	7782-49-2	11
N TCLP Silver	<0.050	mg/L	0.050		5.00	7440-22-4	11
	Prepared: *664786*		*05/31/2016*	*10:30:00*			
EPA 6020A		Analyzed	*CLK 05/31/2016*	*17:54:00*	*QCgroup*	*664937*	
N Aluminum, Total	8040 *	mg/kg	2.09			7429-90-5	18
N Antimony, Total	2.81 *	mg/kg	0.419			7440-36-0	18
N Arsenic, Total	1.53 *	mg/kg	0.838		41.0	7440-38-2	18
N Barium	638 *	mg/kg	1.26			7440-39-3	18
N Cadmium, Total	2.08 *	mg/kg	0.419		39.0	7440-43-9	18
N Chromium, Total	14.1 *	mg/kg	0.419			7440-47-3	18
N Cobalt	9.49 *	mg/kg	0.419			7440-48-4	18
N Copper, Total	46.4 *	mg/kg	0.419		1500	7440-50-8	18
N Lead, Total	13.6 *	mg/kg	0.419		300	7439-92-1	18

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Results

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Results

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
1505120 Ash Ditch WWTS						*Received:* 05/25/2016	
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape			05/24/2016 09:00:00	
Supplement to Test Report 1494126							
EPA 6020A			Analyzed *CLK 05/31/2016*		*17:54:00*	*QCgroup 664937*	
N **Molybdenum**	**1.64 ***	**mg/kg**	0.419		49.1	**7439-98-7**	18
N **Nickel, Total**	**18.6 ***	**mg/kg**	0.419		420	**7440-02-0**	18
N **Selenium, Total**	**<1.26 ***	**mg/kg**	1.26		100	**7782-49-2**	18
N **Silver, Total**	**<0.419 ***	**mg/kg**	0.419			**7440-22-4**	18
N **Thallium, Total**	**<0.419 ***	**mg/kg**	0.419			**7440-28-0**	18
N **Vanadium**	**11.5 ***	**mg/kg**	0.419			**7440-62-2**	18
N **Zinc, Total**	**526 ***	**mg/kg**	2.09		2800	**7440-66-6**	18
* Dry Weight Basis							
	Prepared:	***664598***	*05/27/2016*		*11:30:00*		
EPA 7470A			Analyzed *CLK 05/27/2016*		*16:03:00*	*QCgroup 664684*	
N **TCLP Mercury**	**<0.002**	**mg/L**	0.002		0.200	**7439-97-6**	08
	Prepared:	***664734***	*05/31/2016*		*08:00:00*		
EPA 7471A			Analyzed *CLK 05/31/2016*		*12:36:00*	*QCgroup 664850*	
N **Mercury**	**<0.0381 ***	**mg/kg**	0.0381		17.0	**7439-97-6**	15
* Dry Weight Basis							
	Prepared:	***665008***	*06/01/2016*		*07:00:00*		
EPA 8081A			Analyzed *KJS 06/01/2016*		*23:16:00*	*QCgroup 665231*	
N **TCLP Chlordane**	**<0.00005**	**mg/L**	0.00005		0.030	**57-74-9**	22
N **TCLP Endrin**	**<0.00005**	**mg/L**	0.00005		0.020	**72-20-8**	22
N **TCLP gamma-BHC (Lindane)**	**<0.00005**	**mg/L**	0.00005		0.400	**58-89-9**	22
N **TCLP Heptachlor**	**<0.00005**	**mg/L**	0.00005		0.008	**76-44-8**	22
N **TCLP Heptachlor Epoxide**	**<0.00005**	**mg/L**	0.00005		0.008	**1024-57-3**	22
N **TCLP Methoxychlor**	**<0.00005**	**mg/L**	0.00005		10.0	**72-43-5**	22
N **TCLP Toxaphene**	**<0.00005**	**mg/L**	0.00005		0.500	**8001-35-2**	22
	Prepared:	***665036***	*06/01/2016*		*11:00:00*		
EPA 8151			Analyzed *EMT 06/02/2016*		*11:26:00*	*QCgroup 665510*	
N **TCLP 2,4 D**	**<0.500**	**mg/L**	0.500		10.0	**94-75-7**	23
N **TCLP 2,4,5-TP (Silvex)**	**<0.300**	**mg/L**	0.300		1.00	**93-72-1**	23
	Prepared:	***664874***	*05/31/2016*		*14:50:00*		
EPA 8260B			Analyzed *DWL 06/01/2016*		*18:16:00*	*QCgroup 665168*	
N **TCLP 1,1-Dichloroethene**	**<0.010**	**mg/L**	0.010		0.700	**75-35-4**	20
N **TCLP 1,2-Dichloroethane**	**<0.010**	**mg/L**	0.010		0.500	**107-06-2**	20
N **TCLP 1,4 Dichlorobenzene**	**<0.010**	**mg/L**	0.010		7.50	**106-46-7**	20
N **TCLP Benzene**	**<0.010**	**mg/L**	0.010		0.500	**71-43-2**	20
N **TCLP Carbon tetrachloride**	**<0.010**	**mg/L**	0.010		0.500	**56-23-5**	20
N **TCLP Chlorobenzene**	**<0.010**	**mg/L**	0.010		100	**108-90-7**	20
N **TCLP Chloroform**	**<0.010**	**mg/L**	0.010		6.00	**67-66-3**	20
N **TCLP MEK**	**<0.020**	**mg/L**	0.020		200	**78-93-3**	20
N **TCLP Tetrachloroethylene**	**<0.010**	**mg/L**	0.010		0.700	**127-18-4**	20
N **TCLP Trichloroethylene**	**<0.010**	**mg/L**	0.010		0.500	**79-01-6**	20
N **TCLP Vinyl chloride**	**<0.010**	**mg/L**	0.010		0.200	**75-01-4**	20

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Results

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Results

1505120 Ash Ditch WWTS *Received:* 05/25/2016

olid & Chemical Material *Collected by:* Client *Affiliation:* Georgia Pacific Pape 05/24/2016 09:00:00

Supplement to Test Report 1494126

Prepared: **664957** *05/31/2016* *13:59:00*

EPA 8260B Analyzed *JRH 05/31/2016* *13:59:00* *QCgroup* *664957*

	Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
N	1,1,1,2-Tetrachloroethane	<98.8 *	ug/kg	98.8	(	1420	630-20-6	04
N	1,1,1-Trichloroethane	<98.8 *	ug/kg	98.8	(	1620	71-55-6	04
N	1,1,2,2-Tetrachloroethane	<98.8 *	ug/kg	98.8	(	23.1	79-34-5	04
N	1,1,2-Trichloroethane	<98.8 *	ug/kg	98.8	(	20.1	79-00-5	04
N	1,1-Dichloroethane	<98.8 *	ug/kg	98.8	(	9250	75-34-3	04
N	1,1-Dichloroethylene	<98.8 *	ug/kg	98.8	(	50.1	75-35-4	04
N	1,1-Dichloropropene	<98.8 *	ug/kg	98.8	(	5.00	563-58-6	04
N	1,2,3-Trichlorobenzene	<198 *	ug/kg	198	(	4800	87-61-6	04
N	1,2,3-Trichloropropane	<198 *	ug/kg	198	(	2.28	96-18-4	04
N	1,2,4-Trichlorobenzene	<98.8 *	ug/kg	98.8	(	4800	120-82-1	04
N	1,2,4-Trimethylbenzene	<98.8 *	ug/kg	98.8	(	26000	95-63-6	04
N	1,2-Dibromo-3-chloropropane	<98.8 *	ug/kg	98.8	(	1.75	96-12-8	04
N	1,2-Dibromoethane	<98.8 *	ug/kg	98.8	(	0.210	106-93-4	04
N	1,2-Dichloroethane	<198 *	ug/kg	198	(	13.7	107-06-2	04
N	1,2-Dichloropropane	<98.8 *	ug/kg	98.8	(	22.8	78-87-5	04
N	1,3,5-Trimethylbenzene	<98.8 *	ug/kg	98.8	(	45000	108-67-8	04
N	1,3-Dichloropropane	<98.8 *	ug/kg	98.8	(	5.00	142-28-9	04
N	2,2-Dichloropropane	<98.8 *	ug/kg	98.8	(	5.00	594-20-7	04
N	2-Chloroethylvinyl ether	<98.8 *	ug/kg	98.8	(	5.00	110-75-8	04
N	2-Chlorotoluene	<98.8 *	ug/kg	98.8	(	1000000	95-49-8	04
N	4-Chlorotoluene	<98.8 *	ug/kg	98.8	(	1000000	106-43-4	04
N	Acetone	<494 *	ug/kg	494	(	4750	67-64-1	04
N	Acrolein	<198 *	ug/kg	198	(	947	107-02-8	04
N	Acrylonitrile	<98.8 *	ug/kg	98.8	(	7500	107-13-1	04
N	Benzene	<98.8 *	ug/kg	98.8	(	26.0	71-43-2	04
N	Bromobenzene	<98.8 *	ug/kg	98.8	(	5.00	108-86-1	04
N	Bromochloromethane	<98.8 *	ug/kg	98.8	(	5.00	74-97-5	04
N	Bromodichloromethane	<98.8 *	ug/kg	98.8	(	440	75-27-4	04
N	Bromoform	<98.8 *	ug/kg	98.8	(	546	75-25-2	04
N	Bromomethane (Methyl Bromi	<247 *	ug/kg	247	(	131	74-83-9	04
N	Carbon Tetrachloride	<98.8 *	ug/kg	98.8	(	61.9	56-23-5	04
N	Chlorobenzene	<98.8 *	ug/kg	98.8	(	1090	108-90-7	04
N	Chloroethane	<198 *	ug/kg	198	(	30900	75-00-3	04
N	Chloroform	<98.8 *	ug/kg	98.8	(	417	67-66-3	04
N	Chloromethane	<98.8 *	ug/kg	98.8	(	405	74-87-3	04
N	cis-1,2-Dichloroethylene	<98.8 *	ug/kg	98.8	(	248	156-59-2	04
N	cis-1,3-Dichloropropene	<98.8 *	ug/kg	98.8	(	22.0	10061-01-5	04
N	Dibromochloromethane	<98.8 *	ug/kg	98.8	(	445	124-48-1	04
N	Dibromomethane	<98.8 *	ug/kg	98.8	(	5.00	74-95-3	04
N	Dichlorodifluoromethane	<98.8 *	ug/kg	98.8	(	239000	75-71-8	04
N	Dichloromethane	<198 *	ug/kg	198	(	13.1	75-09-2	04
N	Ethylbenzene	<98.8 *	ug/kg	98.8	(	7600	100-41-4	04
N	Hexachlorobutadiene	<98.8 *	ug/kg	98.8	(	1400	87-68-3	04
N	Isopropylbenzene (Cumene)	<98.8 *	ug/kg	98.8	(	347000	98-82-8	04

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Results

Printed: 07/07/2016

Results

Parameter		Results	Units	RL	Flags	MAL	CAS	Bottle
1505120	**Ash Ditch WWTS**						*Received:* 05/25/2016	
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape				05/24/2016 09:00:00	
Supplement to Test Report 1494126								
EPA 8260B			Analyzed	*JRH 05/31/2016*		*13:59:00*	*QCgroup 664957*	
N	**m- and p-Xylene**	**<98.8 ***	**ug/kg**	98.8	(	0	**ARC-mpXyl**	04
N	**m-Dichlorobenzene**	**<98.8 ***	**ug/kg**	98.8	(	5.00	**541-73-1**	04
N	**Methyl ethyl ketone (Butanone)**	**<494 ***	**ug/kg**	494	(	29300	**78-93-3**	04
N	**Methyl Isobutyl Ketone**	**<98.8 ***	**ug/kg**	98.8	(	4950	**108-10-1**	04
N	**Naphthalene**	**<198 ***	**ug/kg**	198	(	31000	**91-20-3**	04
N	**n-Butylbenzene**	**<98.8 ***	**ug/kg**	98.8	(	45000	**104-51-8**	04
N	**n-Propylbenzene**	**<98.8 ***	**ug/kg**	98.8	(	45000	**103-65-1**	04
N	**o-Dichlorobenzene**	**<98.8 ***	**ug/kg**	98.8	(	5.00	**95-50-1**	04
N	**o-Xylene**	**<98.8 ***	**ug/kg**	98.8	(	0	**95-47-6**	04
N	**p-Dichlorobenzene**	**<98.8 ***	**ug/kg**	98.8	(	5.00	**106-46-7**	04
N	**p-Isopropyltoluene**	**1120 ***	**ug/kg**	98.8	(		**99-87-6**	04
N	**sec-Butylbenzene**	**<98.8 ***	**ug/kg**	98.8	(	45000	**135-98-8**	04
N	**Styrene**	**<98.8 ***	**ug/kg**	98.8	(	3250	**100-42-5**	04
N	**tert-Butylbenzene**	**<98.8 ***	**ug/kg**	98.8	(	45000	**98-06-6**	04
N	**tert-Butylmethylether (MTBE)**	**<98.8 ***	**ug/kg**	98.8	(	620	**1634-04-4**	04
N	**Tetrachloroethylene**	**<98.8 ***	**ug/kg**	98.8	(	50.2	**127-18-4**	04
N	**Toluene**	**<98.8 ***	**ug/kg**	98.8	(X	8200	**108-88-3**	04
N	**trans-1,2-Dichloroethylene**	**<98.8 ***	**ug/kg**	98.8	(	490	**156-60-5**	04
N	**trans-1,3-Dichloropropene**	**<98.8 ***	**ug/kg**	98.8	(	5.00	**10061-02-6**	04
N	**Trichloroethylene**	**<98.8 ***	**ug/kg**	98.8	(	33.6	**79-01-6**	04
N	**Trichlorofluoromethane**	**<98.8 ***	**ug/kg**	98.8	(	128000	**75-69-4**	04
N	**Vinyl chloride**	**<98.8 ***	**ug/kg**	98.8	(	22.3	**75-01-4**	04
EPA 8260B			Calculated	*CAL 06/01/2016*		*13:18:14*	*QCgroup 664957*	
N	**Xylenes, Total**	**<98.8 ***	**ug/kg**	98.8		120000	**1330-20-7**	04
	* Dry Weight Basis							
	Prepared:	***664797***		*05/31/2016*		*08:00:00*		
EPA 8270C			Analyzed	*SLC 06/02/2016*		*16:57:00*	*QCgroup 665495*	
N	**TCLP 2,4,5-Trichlorophenol**	**<0.010**	**mg/L**	0.010		1.00	**95-95-4**	16
N	**TCLP 2,4,6-Trichlorophenol**	**<0.010**	**mg/L**	0.010		2.00	**88-06-2**	16
N	**TCLP 2,4-Dinitrotoluene**	**<0.010**	**mg/L**	0.010		0.130	**121-14-2**	16
N	**TCLP 2-Methylphenol (o-Cresol)**	**<0.010**	**mg/L**	0.010		200		16
N	**TCLP 3&4-Methylphenol (m&p-Creso**	**<0.010**	**mg/L**	0.010		200		16
N	**TCLP bis(2-Chloroethyl)ether**	**<0.010**	**mg/L**	0.010		0.100	**111-44-4**	16
N	**TCLP Hexachlorobenzene**	**<0.010**	**mg/L**	0.010		0.130	**118-74-1**	16
N	**TCLP Hexachlorobutadiene**	**<0.010**	**mg/L**	0.010		0.500	**87-68-3**	16
N	**TCLP Hexachloroethane**	**<0.010**	**mg/L**	0.010		3.00	**67-72-1**	16
N	**TCLP Nitrobenzene**	**<0.010**	**mg/L**	0.010		2.00	**98-95-3**	16
N	**TCLP Pentachlorophenol**	**<0.010**	**mg/L**	0.010		100	**87-86-5**	16
N	**TCLP Pyridine (Reg. Limit 5)**	**<0.010**	**mg/L**	0.010		5.00	**110-86-1**	16
EPA 8270C			Calculated	*CAL 06/06/2016*		*08:48:42*	*QCgroup 665495*	
N	**TCLP Total Cresols (Reg Lim 200)**	**<0.010**	**mg/L**	0.010		200	**108-39-4,ect.**	16
	Prepared:	***664981***		*05/31/2016*		*10:45:00*		
EPA 8270C			Analyzed	*SLC 06/03/2016*		*17:28:00*	*QCgroup 665712*	
N	**1,2,4-Trichlorobenzene**	**<658 ***	**ug/kg**	658		4790	**120-82-1**	21

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Results

Printed: 07/07/2016

Results

1505120 Ash Ditch WWTS *Received:* 05/25/2016

olid & Chemical Material *Collected by:* Client *Affiliation:* Georgia Pacific Pape 05/24/2016 09:00:00

Supplement to Test Report 1494126

	Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
EPA 8270C			Analyzed	*SLC 06/03/2016*	*17:28:00*	*QCgroup*	*665712*	
N	1,2-Dichlorobenzene	<658 *	ug/kg	658		17900	95-50-1	21
N	1,2-DPH (as azobenzene)	<658 *	ug/kg	658		32.3	122-66-7	21
N	1,3-Dichlorobenzene	<658 *	ug/kg	658		439000	541-73-1	21
N	1,4-Dichlorobenzene	<658 *	ug/kg	658		2100	106-46-7	21
N	2,4,5-Trichlorophenol	<658 *	ug/kg	658		33800	95-95-4	21
N	2,4,6-Trichlorophenol	<658 *	ug/kg	658		594	88-06-2	21
N	2,4-Dichlorophenol	<658 *	ug/kg	658		352	120-83-2	21
N	2,4-Dimethylphenol	<13400 *	ug/kg	13400		3230	105-67-9	21
N	2,4-Dinitrophenol	<3300 *	ug/kg	3300		93.7	51-28-5	21
N	2,4-Dinitrotoluene	<4600 *	ug/kg	4600		5.32	121-14-2	21
N	2,6-Dichlorophenol	<16500 *	ug/kg	16500			87-65-0	21
N	2,6-Dinitrotoluene	<4600 *	ug/kg	4600		4.81	606-20-2	21
N	2-Chloronaphthalene	<658 *	ug/kg	658		670000	91-58-7	21
N	2-Chlorophenol	<658 *	ug/kg	658		1630	95-57-8	21
N	2-Methylphenol (o-Cresol)	<3300 *	ug/kg	3300		7120	95-48-7	21
N	2-Nitrophenol	<3950 *	ug/kg	3950		787	88-75-5	21
N	3&4-Methylphenol (m&p-Cresol)	<3300 *	ug/kg	3300		632	MEPH34	21
N	3,3'-Dichlorobenzidine	<2630 *	ug/kg	2630		62.6	91-94-1	21
N	4,6-Dinitro-2-methylphenol	<3300 *	ug/kg	3300		130000	534-52-1	21
N	4-Bromophenyl phenyl ether	<658 *	ug/kg	658		1.89	101-55-3	21
N	4-Chlorophenyl phenyl ethe	<658 *	ug/kg	658		4.23	7005-72-3	21
N	4-Nitrophenol	<7910 *	ug/kg	7910		947	100-02-7	21
N	Acenaphthene	<658 *	ug/kg	658		236000	83-32-9	21
N	Acenaphthylene	<658 *	ug/kg	658		409000	208-96-8	21
N	Anthracene	<1320 *	ug/kg	1320		6890000	120-12-7	21
N	Benzidine	<658 *	ug/kg	658		0.011	92-87-5	21
N	Benzo(a)anthracene	<658 *	ug/kg	658		17700	56-55-3	21
N	Benzo(a)pyrene	<658 *	ug/kg	658		7640	50-32-8	21
N	Benzo(b)fluoranthene	<658 *	ug/kg	658		60100	205-99-2	21
N	Benzo(ghi)perylene	<658 *	ug/kg	658		0	191-24-2	21
N	Benzo(k)fluoranthene	<658 *	ug/kg	658		615000	207-08-9	21
N	Benzyl Butyl phthalate	<658 *	ug/kg	658		2700000	85-68-7	21
N	Bis(2-chloroethoxy)methane	<658 *	ug/kg	658		20.0	111-91-1	21
N	Bis(2-chloroethyl)ether	<658 *	ug/kg	658		2.11	111-44-4	21
N	Bis(2-chloroisopropyl)ether	<4600 *	ug/kg	4600		190	39638-32-9	21
N	Bis(2-ethylhexyl)phthalate	<3300 *	ug/kg	3300		164000	117-81-7	21
N	Chrysene (Benzo(a)phenanthrene)	<658 *	ug/kg	658		1550000	218-01-9	21
N	Dibenz(a,h)anthracene	<658 *	ug/kg	658		15200	53-70-3	21
N	Diethyl phthalate	<658 *	ug/kg	658		156000	84-66-2	21
N	Dimethyl phthalate	<658 *	ug/kg	658	D	243000	131-11-3	21
N	Di-n-butylphthalate	<1320 *	ug/kg	1320		2.47	84-74-2	21
N	Di-n-octylphthalate	<658 *	ug/kg	658		0	117-84-0	21
N	Fluoranthene(Benzo(j,k)fluorene)	<658 *	ug/kg	658		1920000	206-44-0	21
N	Fluorene	<658 *	ug/kg	658		299000	86-73-7	21
N	Hexachlorobenzene	<658 *	ug/kg	658		1100	118-74-1	21

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Results

Printed: 07/07/2016

Results

Parameter		Results	Units	RL	Flags	MAL	CAS	Bottle

1505120 Ash Ditch WWTS *Received:* 05/25/2016

olid & Chemical Material *Collected by:* Client *Affiliation:* Georgia Pacific Pape 05/24/2016 09:00:00

Supplement to Test Report 1494126

EPA 8270C			Analyzed	*SLC 06/03/2016*	*17:28:00*	*QCgroup*	*665712*	
N	**Hexachlorobutadiene**	**<658 ***	**ug/kg**	658	1370	**87-68-3**		21
N	**Hexachlorocyclopentadiene**	**<2630 ***	**ug/kg**	2630	19300	**77-47-4**		21
N	**Hexachloroethane**	**<1320 ***	**ug/kg**	1320	1840	**67-72-1**		21
N	**Indeno(1,2,3-cd)pyrene**	**<658 ***	**ug/kg**	658	173000	**193-39-5**		21
N	**Isophorone**	**<658 ***	**ug/kg**	658	3000	**78-59-1**		21
N	**Naphthalene**	**<658 ***	**ug/kg**	658	31000	**91-20-3**		21
N	**Nitrobenzene**	**<658 ***	**ug/kg**	658	87.9	**98-95-3**		21
N	**N-Nitrosodimethylamine**	**<5280 ***	**ug/kg**	5280	0.037	**62-75-9**		21
N	**N-Nitrosodi-n-propylamine**	**<658 ***	**ug/kg**	658	0.350	**621-64-7**		21
N	**N-Nitrosodiphenylamine (as DPA**	**<658 ***	**ug/kg**	658	2820	**86-30-6**		21
N	**p-Chloro-m-Cresol (4-Chloro-3-me**	**<658 ***	**ug/kg**	658	330000	**59-50-7**		21
N	**Pentachlorophenol**	**<5930 ***	**ug/kg**	5930	3.58	**87-86-5**		21
N	**Phenanthrene**	**<658 ***	**ug/kg**	658	420000	**85-01-8**		21
N	**Phenol**	**<658 ***	**ug/kg**	658	38300	**108-95-2**		21
N	**Pyrene**	**<658 ***	**ug/kg**	658	1120000	**129-00-0**		21
N	**Pyridine**	**<1320 ***	**ug/kg**	1320	69.0	**110-86-1**		21

* Dry Weight Basis

	Prepared:	***664778***		*05/27/2016*	*19:16:00*			
SM2540 G-1997 /MOD			Analyzed	*KBP 05/27/2016*	*19:16:00*	*QCgroup*	*664778*	
N	**Total Solids for Dry Wt**	**50.6**	**%**	0.010				01

Sample Preparation

1505110 Primary Clarifier Solids *Received:* 05/25/2016

	Prepared:			*07/07/2016*	*14:10:02*			
Calculation			Calculated	*CAL 07/07/2016*	*14:10:02*	*QCgroup*		
	As Received to Dry Weight Basis	**Calculated**						
	Prepared:	***664420***		*05/26/2016*	*14:45:00*			
EPA 3510C			Analyzed	*MCC 05/31/2016*	*08:00:00*	*QCgroup*	*664797*	
	TCLP Liquid-Liquid Extract	**1/100**	**ml**					07
EPA 3510C			Analyzed	*MCC 06/01/2016*	*07:00:00*	*QCgroup*	*665008*	
	TCLP Liq-Liq Extr. W/Hex Exch.	**10/200**	**ml**					07
	Prepared:	***664420***		*05/26/2016*	*14:45:00*			
EPA 1311			Analyzed	*TDD 05/26/2016*	*14:45:00*	*QCgroup*	*664420*	
N	**TCLP Extraction Non-Volatile**	**SOLID EXT 1**						01
	Prepared:	***664874***		*05/31/2016*	*14:50:00*			
EPA 1311ZHE			Analyzed	*TDD 05/31/2016*	*14:50:00*	*QCgroup*	*664874*	
N	**TCLP Extraction ZHE Volatiles**	**100.0% SOLID**						01

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Results

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Sample Preparation

1505110 Primary Clarifier Solids *Received:* 05/25/2016

		Prepared:		***664786***		*05/31/2016*		*10:30:00*	
EPA 200.2 2.8					Analyzed	*TES 05/31/2016*	*10:30:00*	*QCgroup*	*664786*
N	**Solid Metals Digestion**		**50/1.38**		**grams**				02
		Prepared:		***664420***		*05/26/2016*		*14:45:00*	
EPA 3005A					Analyzed	*TES 05/27/2016*	*10:45:00*	*QCgroup*	*664618*
N	**Metals Digestion TCLP Extract**		**50/10**		**ml**				06
		Prepared:		***664981***		*05/31/2016*		*10:45:00*	
EPA 3550B					Analyzed	*MCC 05/31/2016*	*10:45:00*	*QCgroup*	*664981*
N	**Sonic Extraction**		**1/30**		**grams**				04
		Prepared:		***664523***		*05/26/2016*		*13:00:00*	
EPA 5035					Analyzed	*DWL 05/26/2016*	*13:00:00*	*QCgroup*	*664523*
N	**VOC 5035 High Level Extraction**		**done**		**grams**				04
		Prepared:		***664420***		*05/26/2016*		*14:45:00*	
EPA 7470A					Analyzed	*ALB 05/27/2016*	*11:10:00*	*QCgroup*	*664578*
N	**Metals Digestion TCLP 7470**		**50/2.5**		**ml**				06
		Prepared:		***664734***		*05/31/2016*		*08:00:00*	
EPA 7471A					Analyzed	*ALB 05/31/2016*	*08:00:00*	*QCgroup*	*664734*
N	**Solid Metals Digestion Hg**		**50/0.5210**		**grams**				01
		Prepared:		***665008***		*06/01/2016*		*07:00:00*	
EPA 8081A					Analyzed	*KJS 06/01/2016*	*22:23:00*	*QCgroup*	*665231*
N	**GC TCLP Pesticide**		**Entered**						19
		Prepared:		***665036***		*06/01/2016*		*11:00:00*	
EPA 8151					Analyzed	*EMT 06/01/2016*	*18:37:00*	*QCgroup*	*665510*
N	**GC TCLP Herbicide**		**Entered**						20
		Prepared:		***664420***		*05/26/2016*		*14:45:00*	
EPA 8151A (Prep)					Analyzed	*MCC 06/01/2016*	*11:00:00*	*QCgroup*	*665036*
N	**Esterification of TCLP Extract**		**10/1**		**ml**				07
		Prepared:		***664874***		*05/31/2016*		*14:50:00*	
EPA 8260B					Analyzed	*DWL 06/01/2016*	*17:54:00*	*QCgroup*	*665168*
N	**MS TCLP Volatile Analysis**		**Entered**						17
		Prepared:		***664957***		*05/31/2016*		*13:31:00*	
EPA 8260B					Analyzed	*JRH 05/31/2016*	*13:31:00*	*QCgroup*	*664957*
N	**Volatiles by GC/MS**		**Entered**						04
		Prepared:		***664797***		*05/31/2016*		*08:00:00*	
EPA 8270C					Analyzed	*SLC 06/02/2016*	*14:50:00*	*QCgroup*	*665495*
N	**MS TCLP Semivolatile Analysis**		**Entered**						14
		Prepared:		***664981***		*05/31/2016*		*10:45:00*	

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Results

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Sample Preparation

1505110 Primary Clarifier Solids *Received:* 05/25/2016

EPA 8270C			Analyzed	*SLC 06/03/2016*	*16:56:00*	*QCgroup*	*665712*
N	**Semivolatile Hydrocarbons**	**Entered**					18
	Prepared:	***664695***		***05/27/2016***	***17:51:46***		
SM 2540 G-1997			Analyzed	*KBP 05/27/2016*	*17:51:46*	*QCgroup*	*664695*
N	**Total Solids Start Code**	**Started**					

1505120 Ash Ditch WWTS *Received:* 05/25/2016

	Prepared:			***07/07/2016***	***14:10:03***		
Calculation			Calculated	*CAL 07/07/2016*	*14:10:03*	*QCgroup*	
	As Received to Dry Weight Basis	**Calculated**					
	Prepared:	***664421***		***05/26/2016***	***14:45:00***		
EPA 3510C			Analyzed	*MCC 05/31/2016*	*08:00:00*	*QCgroup*	*664797*
	TCLP Liquid-Liquid Extract	**1/100**	**ml**				07
EPA 3510C			Analyzed	*MCC 06/01/2016*	*07:00:00*	*QCgroup*	*665008*
	TCLP Liq-Liq Extr. W/Hex Exch.	**10/200**	**ml**				07
	Prepared:	***664421***		***05/26/2016***	***14:45:00***		
EPA 1311			Analyzed	*TDD 05/26/2016*	*14:45:00*	*QCgroup*	*664421*
N	**TCLP Extraction Non-Volatile**	**SOLID EXT 2**					01
	Prepared:	***664874***		***05/31/2016***	***14:50:00***		
EPA 1311ZHE			Analyzed	*TDD 05/31/2016*	*14:50:00*	*QCgroup*	*664874*
N	**TCLP Extraction ZHE Volatiles**	**100.0% SOLID**					01
	Prepared:	***664786***		***05/31/2016***	***10:30:00***		
EPA 200.2 2.8			Analyzed	*TES 05/31/2016*	*10:30:00*	*QCgroup*	*664786*
N	**Solid Metals Digestion**	**50/1.18**	**grams**				02
	Prepared:	***664421***		***05/26/2016***	***14:45:00***		
EPA 3005A			Analyzed	*TES 05/27/2016*	*10:45:00*	*QCgroup*	*664622*
N	**Metals Digestion TCLP Extract**	**50/10**	**ml**				06
	Prepared:	***664981***		***05/31/2016***	***10:45:00***		
EPA 3550B			Analyzed	*MCC 05/31/2016*	*10:45:00*	*QCgroup*	*664981*
N	**Sonic Extraction**	**1/30**	**grams**				04
	Prepared:	***664523***		***05/26/2016***	***13:00:00***		
EPA 5035			Analyzed	*DWL 05/26/2016*	*13:00:00*	*QCgroup*	*664523*
N	**VOC 5035 High Level Extraction**	**done**	**grams**				04
	Prepared:	***664421***		***05/26/2016***	***14:45:00***		
EPA 7470A			Analyzed	*ALB 05/27/2016*	*11:30:00*	*QCgroup*	*664598*

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Sample Preparation

1505120 Ash Ditch WWTS *Received:* 05/25/2016

EPA 7470A				Analyzed	*ALB 05/27/2016*	*11:30:00*	*QCgroup*	*664598*
N	**Metals Digestion TCLP 7470**	**50/2.5**		**ml**				06
	Prepared:		***664734***		***05/31/2016***	***08:00:00***		
EPA 7471A				Analyzed	*ALB 05/31/2016*	*08:00:00*	*QCgroup*	*664734*
N	**Solid Metals Digestion Hg**	**50/0.5178**		**grams**				01
	Prepared:		***665008***		***06/01/2016***	***07:00:00***		
EPA 8081A				Analyzed	*KJS 06/01/2016*	*23:16:00*	*QCgroup*	*665231*
N	**GC TCLP Pesticide**	**Entered**						22
	Prepared:		***665036***		***06/01/2016***	***11:00:00***		
EPA 8151				Analyzed	*EMT 06/02/2016*	*11:26:00*	*QCgroup*	*665510*
N	**GC TCLP Herbicide**	**Entered**						23
	Prepared:		***664421***		***05/26/2016***	***14:45:00***		
EPA 8151A (Prep)				Analyzed	*MCC 06/01/2016*	*11:00:00*	*QCgroup*	*665036*
N	**Esterification of TCLP Extract**	**10/1**		**ml**				07
	Prepared:		***664874***		***05/31/2016***	***14:50:00***		
EPA 8260B				Analyzed	*DWL 06/01/2016*	*18:16:00*	*QCgroup*	*665168*
N	**MS TCLP Volatile Analysis**	**Entered**						20
	Prepared:		***664957***		***05/31/2016***	***13:59:00***		
EPA 8260B				Analyzed	*JRH 05/31/2016*	*13:59:00*	*QCgroup*	*664957*
N	**Volatiles by GC/MS**	**Entered**						04
	Prepared:		***664797***		***05/31/2016***	***08:00:00***		
EPA 8270C				Analyzed	*SLC 06/02/2016*	*16:57:00*	*QCgroup*	*665495*
N	**MS TCLP Semivolatile Analysis**	**Entered**						16
	Prepared:		***664981***		***05/31/2016***	***10:45:00***		
EPA 8270C				Analyzed	*SLC 06/03/2016*	*17:28:00*	*QCgroup*	*665712*
N	**Semivolatile Hydrocarbons**	**Entered**						21
	Prepared:		***664695***		***05/27/2016***	***17:51:46***		
SM 2540 G-1997				Analyzed	*KBP 05/27/2016*	*17:51:46*	*QCgroup*	*664695*
N	**Total Solids Start Code**	**Started**						

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Printed: 07/07/2016

Results

Qualifiers:

D - Duplicate RPD was higher than expected (- Sample from Bulk Container
X - Standard reads higher than desired.

We report results on an 'As Received' or wet basis unless marked 'Dry Weight'. Unless otherwise noted, testing was performed at Ana-lab's corporate laboratory that holds the following Federal and State certificates: Texas Department of Health Lead Firm Certificate 2110076, US Department of Agriculture Soil Import Permit S-37592, Texas Commisson on Environmental Quality Drinking Water Laboratory Certificate TX219, Texas Commission on Environmental Quality NELAP T104704201, Oklahoma Department of Environmental Quality Drinking Water Certification Lab ID# D9913, EPA Lab Number TX00063, USEPA Approved Perchlorate Testing Lab, Oklahoma Department of Environmental Quality Laboratory Certificate 8125, Arkansas Department of Environmental Quality Certification #03-070-0, Louisiana Department of Environmental Quality Laboratory Certification (NELAP, LELAP) #02008, Louisiana Department of Health and Hospitals Drinking Water (NELAP) # LA030020, US Department of Energy Approved, State of Kansas Department of Health and Environment Waste Water and Solid/Hazardous Waste Cert. E-10365. The Accredited column designates accreditation by N -- NELAC, or z -- not covered under NELAC scope of accreditation.

These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of Ana-Lab Corp. Unless otherwise specified, these test results meet the requirements of NELAC.
RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.

Paul Zhang, Ph.D., Quality Director

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Ash Ditch/Primary Clarifier

Account	Project
GPDR -L	**746941**

Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

664778 Solid & Chemical Materials — SM2540 G-1997 /MOD

ControlBlk

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
Total Solids for Dry Wt	664778	0.0000			grams	116575301	

Duplicate

Parameter	Sample	Type	Result	Unknown	Unit	RPD	Out	Limit%
Total Solids for Dry Wt	1493505	Duplicate	66.2	66.7	%	0.752		20.0
Total Solids for Dry Wt	1494126	Duplicate	49.3	50.6	%	2.60		20.0
Total Solids for Dry Wt	1494941	Duplicate	100	100	%	0		20.0

664684 Solid & Chemical Materials — EPA 7470A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Mercury	664578	ND	0.00006840.0001		mg/L	116572984	
TCLP Mercury	664598	ND	0.00006840.0001		mg/L	116572992	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Mercury	0.00512	0.005	mg/L	102	90.0 - 110		116572983
TCLP Mercury	0.00517	0.005	mg/L	103	90.0 - 110		116572990
TCLP Mercury	0.00519	0.005	mg/L	104	90.0 - 110		116572999

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Mercury	0.0196	0.02	mg/L	98.0	90.0 - 110		116572971

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Mercury	0.00523	0.005	mg/L	105	90.0 - 110		116572970

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP Mercury	664578	0.00516	0.005	mg/L	103	86.7 - 116	116572985	
TCLP Mercury	664598	0.00523	0.005	mg/L	105	86.7 - 116	116572993	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP Mercury	664578	0.00516	0.00527	0.005	86.7 - 116	103	105	mg/L	2.11	20.0
TCLP Mercury	664598	0.00523	0.00525	0.005	86.7 - 116	105	105	mg/L	0.382	20.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Mercury	1493584	0.106	0	ND	0.100	83.3 - 120	106		mg/L		15.0
TCLP Mercury	1494126	0.105	0	ND	0.100	83.3 - 120	105		mg/L		15.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%

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MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Mercury	1493584	0.106	0.105	ND	0.100	83.3 - 120	106	105	mg/L	0.948	15.0
TCLP Mercury	1494126	0.105	0.104	ND	0.100	83.3 - 120	105	104	mg/L	0.957	15.0

664755 Solid & Chemical Materials

EPA 6020A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Arsenic	664618	ND	0.010	0.010	mg/L	116574931	
TCLP Arsenic	664622	ND	0.010	0.010	mg/L	116574942	
TCLP Barium	664618	ND	0.010	0.010	mg/L	116574931	
TCLP Barium	664622	ND	0.010	0.010	mg/L	116574942	
TCLP Cadmium	664618	ND	0.001	0.001	mg/L	116574931	
TCLP Cadmium	664622	ND	0.001	0.001	mg/L	116574942	
TCLP Chromium	664618	ND	0.010	0.010	mg/L	116574931	
TCLP Chromium	664622	ND	0.010	0.010	mg/L	116574942	
TCLP Lead	664618	ND	0.010	0.010	mg/L	116574931	
TCLP Lead	664622	ND	0.010	0.010	mg/L	116574942	
TCLP Selenium	664618	ND	0.010	0.010	mg/L	116574931	
TCLP Selenium	664622	ND	0.010	0.010	mg/L	116574942	
TCLP Silver	664618	ND	0.010	0.010	mg/L	116574931	
TCLP Silver	664622	ND	0.010	0.010	mg/L	116574942	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Arsenic	0.0475	0.05	mg/L	95.0	90.0 - 110		116574930
TCLP Arsenic	0.0474	0.05	mg/L	94.8	90.0 - 110		116574941
TCLP Arsenic	0.0472	0.05	mg/L	94.4	90.0 - 110		116574949
TCLP Barium	0.0491	0.05	mg/L	98.2	90.0 - 110		116574930
TCLP Barium	0.0483	0.05	mg/L	96.6	90.0 - 110		116574941
TCLP Barium	0.0481	0.05	mg/L	96.2	90.0 - 110		116574949
TCLP Cadmium	0.0478	0.05	mg/L	95.6	90.0 - 110		116574930
TCLP Cadmium	0.048	0.05	mg/L	96.0	90.0 - 110		116574941
TCLP Cadmium	0.048	0.05	mg/L	96.0	90.0 - 110		116574949
TCLP Chromium	0.0499	0.05	mg/L	99.8	90.0 - 110		116574930
TCLP Chromium	0.0498	0.05	mg/L	99.6	90.0 - 110		116574941
TCLP Chromium	0.0495	0.05	mg/L	99.0	90.0 - 110		116574949
TCLP Lead	0.0484	0.05	mg/L	96.8	90.0 - 110		116574930
TCLP Lead	0.0484	0.05	mg/L	96.8	90.0 - 110		116574941
TCLP Lead	0.0485	0.05	mg/L	97.0	90.0 - 110		116574949
TCLP Selenium	0.0483	0.05	mg/L	96.6	90.0 - 110		116574930
TCLP Selenium	0.0489	0.05	mg/L	97.8	90.0 - 110		116574941
TCLP Selenium	0.0494	0.05	mg/L	98.8	90.0 - 110		116574949
TCLP Silver	0.0489	0.05	mg/L	97.8	90.0 - 110		116574930
TCLP Silver	0.0483	0.05	mg/L	96.6	90.0 - 110		116574941
TCLP Silver	0.0483	0.05	mg/L	96.6	90.0 - 110		116574949

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Arsenic	0.0513	0.05	mg/L	103	90.0 - 110		116574895
TCLP Barium	0.0513	0.05	mg/L	103	90.0 - 110		116574895
TCLP Cadmium	0.0519	0.05	mg/L	104	90.0 - 110		116574895
TCLP Chromium	0.0525	0.05	mg/L	105	90.0 - 110		116574895

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ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Lead	0.0514	0.05	mg/L	103	90.0 - 110		116574895
TCLP Selenium	0.0517	0.05	mg/L	103	90.0 - 110		116574895
TCLP Silver	0.0521	0.05	mg/L	104	90.0 - 110		116574895

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP Arsenic	664618	0.469	0.500	mg/L	93.8	84.1 - 115	116574932	
TCLP Arsenic	664622	0.478	0.500	mg/L	95.6	84.1 - 115	116574943	
TCLP Barium	664618	0.468	0.500	mg/L	93.6	85.5 - 111	116574932	
TCLP Barium	664622	0.462	0.500	mg/L	92.4	85.5 - 111	116574943	
TCLP Cadmium	664618	0.237	0.250	mg/L	94.8	87.2 - 114	116574932	
TCLP Cadmium	664622	0.246	0.250	mg/L	98.4	87.2 - 114	116574943	
TCLP Chromium	664618	0.479	0.500	mg/L	95.8	82.8 - 113	116574932	
TCLP Chromium	664622	0.491	0.500	mg/L	98.2	82.8 - 113	116574943	
TCLP Lead	664618	0.472	0.500	mg/L	94.4	84.5 - 115	116574932	
TCLP Lead	664622	0.490	0.500	mg/L	98.0	84.5 - 115	116574943	
TCLP Selenium	664618	0.477	0.500	mg/L	95.4	86.3 - 119	116574932	
TCLP Selenium	664622	0.501	0.500	mg/L	100	86.3 - 119	116574943	
TCLP Silver	664618	0.093	0.100	mg/L	93.0	83.6 - 112	116574932	
TCLP Silver	664622	0.0964	0.100	mg/L	96.4	83.6 - 112	116574943	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP Arsenic	664618	0.469	0.465	0.500	84.1 - 115	93.8	93.0	mg/L	0.857	14.0
TCLP Arsenic	664622	0.478	0.473	0.500	84.1 - 115	95.6	94.6	mg/L	1.05	14.0
TCLP Barium	664618	0.468	0.469	0.500	85.5 - 111	93.6	93.8	mg/L	0.213	14.0
TCLP Barium	664622	0.462	0.464	0.500	85.5 - 111	92.4	92.8	mg/L	0.432	14.0
TCLP Cadmium	664618	0.237	0.237	0.250	87.2 - 114	94.8	94.8	mg/L	0	14.0
TCLP Cadmium	664622	0.246	0.244	0.250	87.2 - 114	98.4	97.6	mg/L	0.816	14.0
TCLP Chromium	664618	0.479	0.476	0.500	82.8 - 113	95.8	95.2	mg/L	0.628	14.0
TCLP Chromium	664622	0.491	0.487	0.500	82.8 - 113	98.2	97.4	mg/L	0.818	14.0
TCLP Lead	664618	0.472	0.473	0.500	84.5 - 115	94.4	94.6	mg/L	0.212	14.0
TCLP Lead	664622	0.490	0.493	0.500	84.5 - 115	98.0	98.6	mg/L	0.610	14.0
TCLP Selenium	664618	0.477	0.476	0.500	86.3 - 119	95.4	95.2	mg/L	0.210	14.0
TCLP Selenium	664622	0.501	0.498	0.500	86.3 - 119	100	99.6	mg/L	0.601	14.0
TCLP Silver	664618	0.093	0.0929	0.100	83.6 - 112	93.0	92.9	mg/L	0.108	14.0
TCLP Silver	664622	0.0964	0.095	0.100	83.6 - 112	96.4	95.0	mg/L	1.46	14.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Arsenic	1494125	2.31	0	ND	2.50	87.7 - 115	92.4		mg/L		20.0
TCLP Barium	1494125	2.93	0	0.679	2.50	78.8 - 112	90.0		mg/L		20.0
TCLP Cadmium	1494125	1.18	0	ND	1.25	89.5 - 111	94.4		mg/L		20.0
TCLP Chromium	1494125	2.38	0	ND	2.50	79.9 - 112	95.2		mg/L		20.0
TCLP Lead	1494125	2.36	0	ND	2.50	83.6 - 112	94.4		mg/L		20.0
TCLP Selenium	1494125	2.37	0	ND	2.50	87.5 - 117	94.8		mg/L		20.0
TCLP Silver	1494125	0.459	0	ND	0.500	85.5 - 110	91.8		mg/L		20.0
TCLP Arsenic	1494126	2.29	0	ND	2.50	87.7 - 115	91.6		mg/L		20.0
TCLP Barium	1494126	3.98	0	1.82	2.50	78.8 - 112	86.4		mg/L		20.0
TCLP Cadmium	1494126	1.20	0	0.00876	1.25	89.5 - 111	95.3		mg/L		20.0
TCLP Chromium	1494126	2.40	0	ND	2.50	79.9 - 112	96.0		mg/L		20.0
TCLP Lead	1494126	2.39	0	ND	2.50	83.6 - 112	95.6		mg/L		20.0

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MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Selenium	1494126	2.39	0	ND	2.50	87.5 - 117	95.6		mg/L		20.0
TCLP Silver	1494126	0.459	0	ND	0.500	85.5 - 110	91.8		mg/L		20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Arsenic	1494125	2.31	2.32	ND	2.50	87.7 - 115	92.4	92.8	mg/L	0.432	20.0
TCLP Barium	1494125	2.93	2.95	0.679	2.50	78.8 - 112	90.0	90.8	mg/L	0.885	20.0
TCLP Cadmium	1494125	1.18	1.17	ND	1.25	89.5 - 111	94.4	93.6	mg/L	0.851	20.0
TCLP Chromium	1494125	2.38	2.39	ND	2.50	79.9 - 112	95.2	95.6	mg/L	0.419	20.0
TCLP Lead	1494125	2.36	2.35	ND	2.50	83.6 - 112	94.4	94.0	mg/L	0.425	20.0
TCLP Selenium	1494125	2.37	2.38	ND	2.50	87.5 - 117	94.8	95.2	mg/L	0.421	20.0
TCLP Silver	1494125	0.459	0.456	ND	0.500	85.5 - 110	91.8	91.2	mg/L	0.656	20.0
TCLP Arsenic	1494126	2.29	2.29	ND	2.50	87.7 - 115	91.6	91.6	mg/L	0	20.0
TCLP Barium	1494126	3.98	4.02	1.82	2.50	78.8 - 112	86.4	88.0	mg/L	1.83	20.0
TCLP Cadmium	1494126	1.20	1.20	0.00876	1.25	89.5 - 111	95.3	95.3	mg/L	0	20.0
TCLP Chromium	1494126	2.40	2.40	ND	2.50	79.9 - 112	96.0	96.0	mg/L	0	20.0
TCLP Lead	1494126	2.39	2.38	ND	2.50	83.6 - 112	95.6	95.2	mg/L	0.419	20.0
TCLP Selenium	1494126	2.39	2.37	ND	2.50	87.5 - 117	95.6	94.8	mg/L	0.840	20.0
TCLP Silver	1494126	0.459	0.459	ND	0.500	85.5 - 110	91.8	91.8	mg/L	0	20.0

664850 Solid & Chemical Materials

EPA 7471A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
Mercury	664734	ND	0.00004340.0002		mg/kg	116576375	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Mercury	0.00502	0.005	mg/kg	100	90.0 - 110		116576374
Mercury	0.00492	0.005	mg/kg	98.4	90.0 - 110		116576385
Mercury	0.0049	0.005	mg/kg	98.0	90.0 - 110		116576387
Mercury	0.00507	0.005	mg/kg	101	90.0 - 110		116576388

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Mercury	0.0195	0.02	mg/kg	97.5	90.0 - 110		116576373

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Mercury	0.0052	0.005	mg/kg	104	90.0 - 110		116576372

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Mercury	664734	0.00858	0.010	mg/kg	85.8	78.0 - 106	116576376	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Mercury	664734	0.00858	0.00854	0.010	78.0 - 106	85.8	85.4	mg/kg	0.467	20.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Mercury	1494935	1.34	0	0.617	0.962	70.1 - 110	75.2		mg/kg		25.0

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MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Mercury	1494935	1.34	1.35	0.617	0.949	70.1 - 110	75.2	76.2	mg/kg	1.37	25.0

664917 Solid & Chemical Materials — EPA 6010C

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
Total Iron	664786	ND	0.0035	0.025	mg/Kg	116577542	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Iron	2.54	2.50	mg/Kg	102	90.0 - 110		116577541
Total Iron	2.55	2.50	mg/Kg	102	90.0 - 110		116577544
Total Iron	2.62	2.50	mg/Kg	105	90.0 - 110		116577554

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Iron	5.00	5.00	mg/Kg	100	95.0 - 105		116577526

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Iron	2.39	2.50	mg/Kg	95.6	90.0 - 110		116577530

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Total Iron	664786	2.52	2.50	mg/Kg	101	83.5 - 121	116577543	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Total Iron	664786	2.52	2.65	2.50	83.5 - 121	101	106	mg/Kg	5.03	25.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Total Iron	1493585	3340	0	3380	75.3	84.3 - 121	0 *		mg/Kg		25.0
Total Iron	1493980	6060	0	5820	120	84.3 - 121	200 *		mg/Kg		25.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Total Iron	1493585	3340	3580	3380	77.6	84.3 - 121	-53.1 *	266 *	mg/Kg	300 *	25.0
Total Iron	1493980	6060	6000	5820	119	84.3 - 121	200 *	150 *	mg/Kg	28.6 *	25.0

664937 Solid & Chemical Materials — EPA 6020A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units		File	Out
Aluminum, Total	664786	0.00318	0.000592	0.005	mg/kg	*	116577873	
Antimony, Total	664786	0.000579	0.000494	0.001	mg/kg		116577873	
Arsenic, Total	664786	ND	0.000869	0.002	mg/kg		116577873	
Barium	664786	ND	0.00241	0.003	mg/kg		116577873	
Cadmium, Total	664786	ND	0.000187	0.001	mg/kg		116577873	
Chromium, Total	664786	ND	0.000264	0.001	mg/kg		116577873	
Cobalt	664786	ND	0.00003260	0.001	mg/kg		116577873	
Copper, Total	664786	0.000249	0.000134	0.001	mg/kg		116577873	
Lead, Total	664786	0.0000578	0.00004460	0.001	mg/kg		116577873	
Molybdenum	664786	ND	0.000186	0.001	mg/kg		116577873	
Nickel, Total	664786	ND	0.000441	0.001	mg/kg		116577873	

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Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
Selenium, Total	664786	ND	0.00194	0.003	mg/kg	116577873	
Silver, Total	664786	ND	0.0000256	0.001	mg/kg	116577873	
Thallium, Total	664786	ND	0.0000247	0.001	mg/kg	116577873	
Vanadium	664786	ND	0.000585	0.001	mg/kg	116577873	
Zinc, Total	664786	0.00133	0.0011	0.005	mg/kg	116577873	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Aluminum, Total	0.049	0.05	mg/kg	98.0	90.0 - 110		116577872
Aluminum, Total	0.0506	0.05	mg/kg	101	90.0 - 110		116577881
Aluminum, Total	0.0492	0.05	mg/kg	98.4	90.0 - 110		116577892
Antimony, Total	0.0511	0.05	mg/kg	102	90.0 - 110		116577872
Antimony, Total	0.0514	0.05	mg/kg	103	90.0 - 110		116577881
Antimony, Total	0.0507	0.05	mg/kg	101	90.0 - 110		116577892
Arsenic, Total	0.051	0.05	mg/kg	102	90.0 - 110		116577872
Arsenic, Total	0.0511	0.05	mg/kg	102	90.0 - 110		116577881
Arsenic, Total	0.0504	0.05	mg/kg	101	90.0 - 110		116577892
Barium	0.053	0.05	mg/kg	106	90.0 - 110		116577872
Barium	0.0531	0.05	mg/kg	106	90.0 - 110		116577881
Barium	0.0522	0.05	mg/kg	104	90.0 - 110		116577892
Cadmium, Total	0.0509	0.05	mg/kg	102	90.0 - 110		116577872
Cadmium, Total	0.0512	0.05	mg/kg	102	90.0 - 110		116577881
Cadmium, Total	0.0505	0.05	mg/kg	101	90.0 - 110		116577892
Chromium, Total	0.0509	0.05	mg/kg	102	90.0 - 110		116577872
Chromium, Total	0.0506	0.05	mg/kg	101	90.0 - 110		116577881
Chromium, Total	0.0508	0.05	mg/kg	102	90.0 - 110		116577892
Cobalt	0.051	0.05	mg/kg	102	90.0 - 110		116577872
Cobalt	0.050	0.05	mg/kg	100	90.0 - 110		116577881
Cobalt	0.0506	0.05	mg/kg	101	90.0 - 110		116577892
Copper, Total	0.052	0.05	mg/kg	104	90.0 - 110		116577872
Copper, Total	0.0526	0.05	mg/kg	105	90.0 - 110		116577881
Copper, Total	0.0514	0.05	mg/kg	103	90.0 - 110		116577892
Lead, Total	0.050	0.05	mg/kg	100	90.0 - 110		116577872
Lead, Total	0.0495	0.05	mg/kg	99.0	90.0 - 110		116577881
Lead, Total	0.0501	0.05	mg/kg	100	90.0 - 110		116577892
Molybdenum	0.0502	0.05	mg/kg	100	90.0 - 110		116577872
Molybdenum	0.0502	0.05	mg/kg	100	90.0 - 110		116577881
Molybdenum	0.0507	0.05	mg/kg	101	90.0 - 110		116577892
Nickel, Total	0.0517	0.05	mg/kg	103	90.0 - 110		116577872
Nickel, Total	0.051	0.05	mg/kg	102	90.0 - 110		116577881
Nickel, Total	0.0516	0.05	mg/kg	103	90.0 - 110		116577892
Selenium, Total	0.0507	0.05	mg/kg	101	90.0 - 110		116577872
Selenium, Total	0.0509	0.05	mg/kg	102	90.0 - 110		116577881
Selenium, Total	0.0518	0.05	mg/kg	104	90.0 - 110		116577892
Silver, Total	0.0512	0.05	mg/kg	102	90.0 - 110		116577872
Silver, Total	0.0518	0.05	mg/kg	104	90.0 - 110		116577881
Silver, Total	0.0509	0.05	mg/kg	102	90.0 - 110		116577892
Thallium, Total	0.0496	0.05	mg/kg	99.2	90.0 - 110		116577872
Thallium, Total	0.0495	0.05	mg/kg	99.0	90.0 - 110		116577881
Thallium, Total	0.0501	0.05	mg/kg	100	90.0 - 110		116577892
Vanadium	0.0501	0.05	mg/kg	100	90.0 - 110		116577872

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Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Vanadium	0.0501	0.05	mg/kg	100	90.0 - 110		116577881
Vanadium	0.0502	0.05	mg/kg	100	90.0 - 110		116577892
Zinc, Total	0.0518	0.05	mg/kg	104	90.0 - 110		116577872
Zinc, Total	0.0518	0.05	mg/kg	104	90.0 - 110		116577881
Zinc, Total	0.0512	0.05	mg/kg	102	90.0 - 110		116577892

Dir. SPKD

Parameter	Sample	DSPK	DSPKD	UNK	Known	Limits%	DSPK%	DSPKD%	Units	RPD	Limit%
Aluminum, Total	1493980	7770	7790	7280	579	80.0 - 120	84.6	88.1	mg/kg	0.257	20.0
Antimony, Total	1493980	479	481	0.565	579	80.0 - 120	82.6	83.0	mg/kg	0.417	20.0
Arsenic, Total	1493980	464	465	1.83	579	80.0 - 120 *	79.8 *	80.0	mg/kg	0.215	20.0
Barium	1493980	1280	1280	818	579	80.0 - 120 * *	79.8 *	79.8 *	mg/kg	0	20.0
Cadmium, Total	1493980	244	242	1.02	289	80.0 - 120	84.1	83.4	mg/kg	0.823	20.0
Chromium, Total	1493980	469	471	9.78	579	80.0 - 120 * *	79.3 *	79.7 *	mg/kg	0.426	20.0
Cobalt	1493980	465	469	5.17	579	80.0 - 120 *	79.4 *	80.1	mg/kg	0.857	20.0
Copper, Total	1493980	502	497	27.8	579	80.0 - 120	81.9	81.0	mg/kg	1.00	20.0
Lead, Total	1493980	485	488	6.92	579	80.0 - 120	82.6	83.1	mg/kg	0.617	20.0
Molybdenum	1493980	505	500	1.27	579	80.0 - 120	87.0	86.1	mg/kg	0.995	20.0
Nickel, Total	1493980	475	477	11.5	579	80.0 - 120	80.1	80.4	mg/kg	0.420	20.0
Selenium, Total	1493980	447	447	0.123	579	80.0 - 120 * *	77.2 *	77.2 *	mg/kg	0	20.0
Silver, Total	1493980	90.2	86.7	0.096	116	80.0 - 120 * *	77.7 *	74.7 *	mg/kg	3.96	20.0
Thallium, Total	1493980	464	468	0.0558	579	80.0 - 120	80.1	80.8	mg/kg	0.858	20.0
Vanadium	1493980	472	473	12.3	579	80.0 - 120 * *	79.4 *	79.6 *	mg/kg	0.212	20.0
Zinc, Total	1493980	590	589	128	579	80.0 - 120 * *	79.8 *	79.6 *	mg/kg	0.170	20.0

Direct SPK

Parameter	Sample	DSPK	UNK	Known	Limits%	DSPK%	Units	
Aluminum, Total	1493980	7770	7280	579	80.0 - 120	84.6	mg/kg	20.0
Antimony, Total	1493980	479	0.565	579	80.0 - 120	82.6	mg/kg	20.0
Arsenic, Total	1493980	464	1.83	579	80.0 - 120	79.8 *	mg/kg	20.0
Barium	1493980	1280	818	579	80.0 - 120	79.8 *	mg/kg	20.0
Cadmium, Total	1493980	244	1.02	289	80.0 - 120	84.1	mg/kg	20.0
Chromium, Total	1493980	469	9.78	579	80.0 - 120	79.3 *	mg/kg	20.0
Cobalt	1493980	465	5.17	579	80.0 - 120	79.4 *	mg/kg	20.0
Copper, Total	1493980	502	27.8	579	80.0 - 120	81.9	mg/kg	20.0
Lead, Total	1493980	485	6.92	579	80.0 - 120	82.6	mg/kg	20.0
Molybdenum	1493980	505	1.27	579	80.0 - 120	87.0	mg/kg	20.0
Nickel, Total	1493980	475	11.5	579	80.0 - 120	80.1	mg/kg	20.0
Selenium, Total	1493980	447	0.123	579	80.0 - 120	77.2 *	mg/kg	20.0
Silver, Total	1493980	90.2	0.096	116	80.0 - 120	77.7 *	mg/kg	20.0
Thallium, Total	1493980	464	0.0558	579	80.0 - 120	80.1	mg/kg	20.0
Vanadium	1493980	472	12.3	579	80.0 - 120	79.4 *	mg/kg	20.0
Zinc, Total	1493980	590	128	579	80.0 - 120	79.8 *	mg/kg	20.0

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Aluminum, Total	0.0498	0.05	mg/kg	99.6	90.0 - 110		116577867
Antimony, Total	0.0514	0.05	mg/kg	103	90.0 - 110		116577867
Arsenic, Total	0.051	0.05	mg/kg	102	90.0 - 110		116577867
Barium	0.0508	0.05	mg/kg	102	90.0 - 110		116577867
Cadmium, Total	0.0506	0.05	mg/kg	101	90.0 - 110		116577867
Chromium, Total	0.0508	0.05	mg/kg	102	90.0 - 110		116577867

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ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Cobalt	0.0506	0.05	mg/kg	101	90.0 - 110		116577867
Copper, Total	0.0525	0.05	mg/kg	105	90.0 - 110		116577867
Lead, Total	0.0509	0.05	mg/kg	102	90.0 - 110		116577867
Molybdenum	0.0506	0.05	mg/kg	101	90.0 - 110		116577867
Nickel, Total	0.0516	0.05	mg/kg	103	90.0 - 110		116577867
Selenium, Total	0.0515	0.05	mg/kg	103	90.0 - 110		116577867
Silver, Total	0.0512	0.05	mg/kg	102	90.0 - 110		116577867
Thallium, Total	0.0509	0.05	mg/kg	102	90.0 - 110		116577867
Vanadium	0.0505	0.05	mg/kg	101	90.0 - 110		116577867
Zinc, Total	0.0531	0.05	mg/kg	106	90.0 - 110		116577867

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Aluminum, Total	664786	2.35	2.50	mg/kg	94.0	80.5 - 116	116577874	
Antimony, Total	664786	2.48	2.50	mg/kg	99.2	89.2 - 110	116577874	
Arsenic, Total	664786	2.43	2.50	mg/kg	97.2	87.9 - 110	116577874	
Barium	664786	2.38	2.50	mg/kg	95.2	88.6 - 110	116577874	
Cadmium, Total	664786	1.21	1.25	mg/kg	96.8	89.2 - 109	116577874	
Chromium, Total	664786	2.37	2.50	mg/kg	94.8	84.7 - 112	116577874	
Cobalt	664786	2.36	2.50	mg/kg	94.4	83.8 - 111	116577874	
Copper, Total	664786	2.46	2.50	mg/kg	98.4	85.4 - 109	116577874	
Lead, Total	664786	2.42	2.50	mg/kg	96.8	86.4 - 111	116577874	
Molybdenum	664786	4.98	5.00	mg/kg	99.6	90.1 - 116	116577874	
Nickel, Total	664786	2.40	2.50	mg/kg	96.0	82.4 - 110	116577874	
Selenium, Total	664786	2.35	2.50	mg/kg	94.0	83.6 - 111	116577874	
Silver, Total	664786	0.473	0.500	mg/kg	94.6	87.0 - 113	116577874	
Thallium, Total	664786	2.31	2.50	mg/kg	92.4	79.7 - 105	116577874	
Vanadium	664786	2.33	2.50	mg/kg	93.2	86.6 - 110	116577874	
Zinc, Total	664786	2.40	2.50	mg/kg	96.0	82.9 - 113	116577874	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Aluminum, Total	664786	2.35	2.35	2.50	80.5 - 116	94.0	94.0	mg/kg	0	20.0
Antimony, Total	664786	2.48	2.51	2.50	89.2 - 110	99.2	100	mg/kg	1.20	20.0
Arsenic, Total	664786	2.43	2.42	2.50	87.9 - 110	97.2	96.8	mg/kg	0.412	20.0
Barium	664786	2.38	2.38	2.50	88.6 - 110	95.2	95.2	mg/kg	0	20.0
Cadmium, Total	664786	1.21	1.22	1.25	89.2 - 109	96.8	97.6	mg/kg	0.823	20.0
Chromium, Total	664786	2.37	2.39	2.50	84.7 - 112	94.8	95.6	mg/kg	0.840	20.0
Cobalt	664786	2.36	2.35	2.50	83.8 - 111	94.4	94.0	mg/kg	0.425	20.0
Copper, Total	664786	2.46	2.43	2.50	85.4 - 109	98.4	97.2	mg/kg	1.23	20.0
Lead, Total	664786	2.42	2.43	2.50	86.4 - 111	96.8	97.2	mg/kg	0.412	20.0
Molybdenum	664786	4.98	4.94	5.00	90.1 - 116	99.6	98.8	mg/kg	0.806	20.0
Nickel, Total	664786	2.40	2.39	2.50	82.4 - 110	96.0	95.6	mg/kg	0.418	20.0
Selenium, Total	664786	2.35	2.36	2.50	83.6 - 111	94.0	94.4	mg/kg	0.425	20.0
Silver, Total	664786	0.473	0.473	0.500	87.0 - 113	94.6	94.6	mg/kg	0	20.0
Thallium, Total	664786	2.31	2.33	2.50	79.7 - 105	92.4	93.2	mg/kg	0.862	20.0
Vanadium	664786	2.33	2.37	2.50	86.6 - 110	93.2	94.8	mg/kg	1.70	20.0
Zinc, Total	664786	2.40	2.39	2.50	82.9 - 113	96.0	95.6	mg/kg	0.418	20.0

LDR

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Aluminum, Total	104	100	mg/kg	104	90.0 - 110		116577868

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LDR

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Antimony, Total	0.966	1	mg/kg	96.6	90.0 - 110		116577871
Arsenic, Total	9.44	10	mg/kg	94.4	90.0 - 110		116577871
Barium	9.50	10	mg/kg	95.0	90.0 - 110		116577871
Cadmium, Total	9.71	10	mg/kg	97.1	90.0 - 110		116577871
Chromium, Total	9.40	10	mg/kg	94.0	90.0 - 110		116577871
Cobalt	9.24	10	mg/kg	92.4	90.0 - 110		116577871
Copper, Total	9.53	10	mg/kg	95.3	90.0 - 110		116577871
Lead, Total	9.47	10	mg/kg	94.7	90.0 - 110		116577871
Molybdenum	9.62	10	mg/kg	96.2	90.0 - 110		116577871
Nickel, Total	9.47	10	mg/kg	94.7	90.0 - 110		116577871
Selenium, Total	9.37	10	mg/kg	93.7	90.0 - 110		116577871
Thallium, Total	9.23	10	mg/kg	92.3	90.0 - 110		116577871
Vanadium	9.34	10	mg/kg	93.4	90.0 - 110		116577871
Zinc, Total	9.57	10	mg/kg	95.7	90.0 - 110		116577871

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Aluminum, Total	1493585	1640	0	1600	75.3	70.0 - 130	53.1 *		mg/kg		20.0
Antimony, Total	1493585	65.2	0	0.385	75.3	3.01 - 158	86.1		mg/kg		20.0
Arsenic, Total	1493585	70.3	0	0.902	75.3	71.2 - 118	92.2		mg/kg		20.0
Barium	1493585	134	0	61.3	75.3	0.100 - 235	96.5		mg/kg		20.0
Cadmium, Total	1493585	37.3	0	0.217	37.7	89.0 - 109	98.4		mg/kg		20.0
Chromium, Total	1493585	77.4	0	5.94	75.3	62.8 - 120	94.9		mg/kg		20.0
Cobalt	1493585	73.7	0	2.21	75.3	69.4 - 115	94.9		mg/kg		20.0
Copper, Total	1493585	163	0	97.1	75.3	50.0 - 125	87.5		mg/kg		20.0
Lead, Total	1493585	78.3	0	6.69	75.3	51.4 - 133	95.1		mg/kg		20.0
Molybdenum	1493585	138	0	1.53	151	66.9 - 133	90.4		mg/kg		20.0
Nickel, Total	1493585	76.6	0	4.23	75.3	62.7 - 113	96.1		mg/kg		20.0
Selenium, Total	1493585	68.9	0	1.07	75.3	64.2 - 118	90.1		mg/kg		20.0
Silver, Total	1493585	15.2	0	0.825	15.1	80.5 - 114	95.2		mg/kg		20.0
Thallium, Total	1493585	65.2	0	0.0288	75.3	71.8 - 103	86.5		mg/kg		20.0
Vanadium	1493585	72.8	0	1.97	75.3	47.8 - 141	94.1		mg/kg		20.0
Zinc, Total	1493585	218	0	158	75.3	48.0 - 127	79.7		mg/kg		20.0
Aluminum, Total	1493980	7020	0	6930	120	70.0 - 130	75.0		mg/kg		20.0
Antimony, Total	1493980	78.2	0	0.538	120	3.01 - 158	64.7		mg/kg		20.0
Arsenic, Total	1493980	109	0	1.70	120	71.2 - 118	89.4		mg/kg		20.0
Barium	1493980	877	0	776	120	0.100 - 235	84.2		mg/kg		20.0
Cadmium, Total	1493980	57.4	0	1.18	60.1	89.0 - 109	93.5		mg/kg		20.0
Chromium, Total	1493980	118	0	9.21	120	62.8 - 120	90.7		mg/kg		20.0
Cobalt	1493980	111	0	4.81	120	69.4 - 115	88.5		mg/kg		20.0
Copper, Total	1493980	131	0	24.7	120	50.0 - 125	88.6		mg/kg		20.0
Lead, Total	1493980	119	0	6.58	120	51.4 - 133	93.7		mg/kg		20.0
Molybdenum	1493980	210	0	1.14	240	66.9 - 133	87.0		mg/kg		20.0
Nickel, Total	1493980	115	0	10.4	120	62.7 - 113	87.2		mg/kg		20.0
Selenium, Total	1493980	99.4	0	0.276	120	64.2 - 118	82.6		mg/kg		20.0
Silver, Total	1493980	21.3	0	0.0866	24.0	80.5 - 114	88.4		mg/kg		20.0
Thallium, Total	1493980	67.5	0	0.0704	120	71.8 - 103	56.2 *		mg/kg		20.0
Vanadium	1493980	122	0	11.7	120	47.8 - 141	91.9		mg/kg		20.0
Zinc, Total	1493980	200	0	112	120	48.0 - 127	73.3		mg/kg		20.0

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MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Aluminum, Total	1493585	1640	1750	1600	77.6	70.0 - 130	53.1 *	199 *	mg/kg	116 *	20.0
Antimony, Total	1493585	65.2	67.8	0.385	77.6	3.01 - 158	86.1	89.5	mg/kg	3.93	20.0
Arsenic, Total	1493585	70.3	73.7	0.902	77.6	71.2 - 118	92.2	96.7	mg/kg	4.78	20.0
Barium	1493585	134	141	61.3	77.6	0.100 - 235	96.5	106	mg/kg	9.19	20.0
Cadmium, Total	1493585	37.3	39.1	0.217	38.8	89.0 - 109	98.4	103	mg/kg	4.74	20.0
Chromium, Total	1493585	77.4	81.1	5.94	77.6	62.8 - 120	94.9	99.8	mg/kg	5.05	20.0
Cobalt	1493585	73.7	77.5	2.21	77.6	69.4 - 115	94.9	100	mg/kg	5.18	20.0
Copper, Total	1493585	163	171	97.1	77.6	50.0 - 125	87.5	98.1	mg/kg	11.4	20.0
Lead, Total	1493585	78.3	82.0	6.69	77.6	51.4 - 133	95.1	100	mg/kg	5.04	20.0
Molybdenum	1493585	138	144	1.53	155	66.9 - 133	90.4	94.4	mg/kg	4.30	20.0
Nickel, Total	1493585	76.6	80.6	4.23	77.6	62.7 - 113	96.1	101	mg/kg	5.38	20.0
Selenium, Total	1493585	68.9	72.4	1.07	77.6	64.2 - 118	90.1	94.7	mg/kg	5.03	20.0
Silver, Total	1493585	15.2	16.0	0.825	15.5	80.5 - 114	95.2	100	mg/kg	5.41	20.0
Thallium, Total	1493585	65.2	68.4	0.0288	77.6	71.8 - 103	86.5	90.8	mg/kg	4.79	20.0
Vanadium	1493585	72.8	76.3	1.97	77.6	47.8 - 141	94.1	98.7	mg/kg	4.82	20.0
Zinc, Total	1493585	218	229	158	77.6	48.0 - 127	79.7	94.3	mg/kg	16.8	20.0
Aluminum, Total	1493980	7020	7340	6930	119	70.0 - 130	75.0	342 *	mg/kg	128 *	20.0
Antimony, Total	1493980	78.2	78.1	0.538	119	3.01 - 158	64.7	64.6	mg/kg	0.129	20.0
Arsenic, Total	1493980	109	106	1.70	119	71.2 - 118	89.4	86.9	mg/kg	2.84	20.0
Barium	1493980	877	966	776	119	0.100 - 235	84.2	158	mg/kg	61.2 *	20.0
Cadmium, Total	1493980	57.4	56.4	1.18	59.5	89.0 - 109	93.5	91.9	mg/kg	1.79	20.0
Chromium, Total	1493980	118	115	9.21	119	62.8 - 120	90.7	88.2	mg/kg	2.80	20.0
Cobalt	1493980	111	108	4.81	119	69.4 - 115	88.5	86.0	mg/kg	2.87	20.0
Copper, Total	1493980	131	131	24.7	119	50.0 - 125	88.6	88.6	mg/kg	0	20.0
Lead, Total	1493980	119	117	6.58	119	51.4 - 133	93.7	92.0	mg/kg	1.80	20.0
Molybdenum	1493980	210	205	1.14	238	66.9 - 133	87.0	84.9	mg/kg	2.42	20.0
Nickel, Total	1493980	115	112	10.4	119	62.7 - 113	87.2	84.7	mg/kg	2.91	20.0
Selenium, Total	1493980	99.4	97.2	0.276	119	64.2 - 118	82.6	80.8	mg/kg	2.24	20.0
Silver, Total	1493980	21.3	20.9	0.0866	23.8	80.5 - 114	88.4	86.7	mg/kg	1.90	20.0
Thallium, Total	1493980	67.5	63.3	0.0704	119	71.8 - 103	56.2 *	52.7 *	mg/kg	6.43	20.0
Vanadium	1493980	122	119	11.7	119	47.8 - 141	91.9	89.4	mg/kg	2.76	20.0
Zinc, Total	1493980	200	206	112	119	48.0 - 127	73.3	78.3	mg/kg	6.59	20.0

665084 Solid & Chemical Materials **EPA 6010C**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
Boron	664786	ND	0.00876	0.100	mg/kg	116580204	
Tin, Total	664786	0.00265	0.00255	0.050	mg/kg	116580204	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Boron	4.98	5.00	mg/kg	99.6	90.0 - 110		116580200
Boron	4.77	5.00	mg/kg	95.4	90.0 - 110		116580209
Boron	4.66	5.00	mg/kg	93.2	90.0 - 110		116580217
Tin, Total	0.510	0.500	mg/kg	102	90.0 - 110		116580200
Tin, Total	0.511	0.500	mg/kg	102	90.0 - 110		116580209
Tin, Total	0.498	0.500	mg/kg	99.6	90.0 - 110		116580217

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Boron	10.1	10.0	mg/kg	101	95.0 - 105		116580198

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Quality Control

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Tin, Total	1.02	1.00	mg/kg	102	95.0 - 105		116580198

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Boron	4.93	5.00	mg/kg	98.6	90.0 - 110		116580199
Tin, Total	0.508	0.500	mg/kg	102	90.0 - 110		116580199

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Boron	664786	4.89	5.00	mg/kg	97.8	85.5 - 112	116580205	
Tin, Total	664786	2.41	2.50	mg/kg	96.4	80.5 - 108	116580205	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Boron	664786	4.89	4.73	5.00	85.5 - 112	97.8	94.6	mg/kg	3.33	25.0
Tin, Total	664786	2.41	2.33	2.50	80.5 - 108	96.4	93.2	mg/kg	3.38	25.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Boron	1493585	160	0	8.91	151	37.2 - 140	100		mg/kg		25.0
Tin, Total	1493585	77.2	0	3.58	75.3	79.3 - 107	97.8		mg/kg		25.0
Boron	1493980	275	0	44.0	240	37.2 - 140	96.2		mg/kg		25.0
Tin, Total	1493980	108	0	0.699	120	79.3 - 107	89.4		mg/kg		25.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Boron	1493585	160	167	8.91	155	37.2 - 140	100	105	mg/kg	4.53	25.0
Tin, Total	1493585	77.2	79.8	3.58	77.6	79.3 - 107	97.8	101	mg/kg	3.47	25.0
Boron	1493980	275	266	44.0	238	37.2 - 140	96.2	92.5	mg/kg	3.97	25.0
Tin, Total	1493980	108	103	0.699	119	79.3 - 107	89.4	85.3	mg/kg	4.77	25.0

664957 Solid & Chemical Materials

EPA 8260B

BFB

Parameter	Sample	RefMass	Reading	%	Limits%	Out	File
BFB Mass 173	664957	174	0	0.0	0 - 2.00		116578253
BFB Mass 174	664957	95.0	2318	65.0	50.0 - 100		116578253
BFB Mass 175	664957	174	157	6.8	5.00 - 9.00		116578253
BFB Mass 176	664957	174	2273	98.1	95.0 - 101		116578253
BFB Mass 177	664957	176	158	7.0	5.00 - 9.00		116578253
BFB Mass 50	664957	95.0	870	24.4	15.0 - 40.0		116578253
BFB Mass 75	664957	95.0	1997	56.0	30.0 - 60.0		116578253
BFB Mass 95	664957	95.0	3564	100.0	100 - 100		116578253
BFB Mass 96	664957	95.0	249	7.0	5.00 - 9.00		116578253

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
1,1,1,2-Tetrachloroethane	664957	ND	0.169	1.00	ug/kg	116578257	
1,1,1-Trichloroethane	664957	ND	0.229	1.00	ug/kg	116578257	
1,1,2,2-Tetrachloroethane	664957	ND	0.205	1.00	ug/kg	116578257	
1,1,2-Trichloroethane	664957	ND	0.197	1.00	ug/kg	116578257	
1,1-Dichloroethane	664957	ND	0.257	1.00	ug/kg	116578257	
1,1-Dichloroethylene	664957	ND	0.393	1.00	ug/kg	116578257	
1,1-Dichloropropene	664957	ND	0.320	1.00	ug/kg	116578257	

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Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
1,2,3-Trichlorobenzene	664957	ND	2.00	2.00	ug/kg	116578257	
1,2,3-Trichloropropane	664957	ND	1.01	2.00	ug/kg	116578257	
1,2,4-Trichlorobenzene	664957	ND	0.396	1.00	ug/kg	116578257	
1,2,4-Trimethylbenzene	664957	ND	0.173	1.00	ug/kg	116578257	
1,2-Dibromo-3-chloropropane	664957	ND	0.636	1.00	ug/kg	116578257	
1,2-Dibromoethane	664957	ND	0.388	1.00	ug/kg	116578257	
1,2-Dichloroethane	664957	ND	1.59	2.00	ug/kg	116578257	
1,2-Dichloropropane	664957	ND	0.368	1.00	ug/kg	116578257	
1,3,5-Trimethylbenzene	664957	ND	0.217	1.00	ug/kg	116578257	
1,3-Dichloropropane	664957	ND	0.249	1.00	ug/kg	116578257	
2,2-Dichloropropane	664957	ND	0.493	1.00	ug/kg	116578257	
2-Chloroethylvinyl ether	664957	ND	0.713	1.00	ug/kg	116578257	
2-Chlorotoluene	664957	ND	0.253	1.00	ug/kg	116578257	
4-Chlorotoluene	664957	ND	0.304	1.00	ug/kg	116578257	
Acetone	664957	ND	0.911	5.00	ug/kg	116578257	
Acrolein	664957	ND	1.92	2.00	ug/kg	116578257	
Acrylonitrile	664957	ND	0.835	1.00	ug/kg	116578257	
Benzene	664957	ND	0.186	1.00	ug/kg	116578257	
Bromobenzene	664957	ND	0.209	1.00	ug/kg	116578257	
Bromochloromethane	664957	ND	0.569	1.00	ug/kg	116578257	
Bromodichloromethane	664957	ND	0.240	1.00	ug/kg	116578257	
Bromoform	664957	ND	0.312	1.00	ug/kg	116578257	
Bromomethane (Methyl Bromi	664957	ND	2.22	2.50	ug/kg	116578257	
Carbon Tetrachloride	664957	ND	0.527	1.00	ug/kg	116578257	
Chlorobenzene	664957	ND	0.166	1.00	ug/kg	116578257	
Chloroethane	664957	ND	1.04	2.00	ug/kg	116578257	
Chloroform	664957	ND	0.209	1.00	ug/kg	116578257	
Chloromethane	664957	ND	0.154	1.00	ug/kg	116578257	
cis-1,2-Dichloroethylene	664957	ND	0.241	1.00	ug/kg	116578257	
cis-1,3-Dichloropropene	664957	ND	0.430	1.00	ug/kg	116578257	
Dibromochloromethane	664957	ND	0.309	1.00	ug/kg	116578257	
Dibromomethane	664957	ND	0.614	1.00	ug/kg	116578257	
Dichlorodifluoromethane	664957	ND	0.270	1.00	ug/kg	116578257	
Dichloromethane	664957	ND	1.01	2.00	ug/kg	116578257	
Ethylbenzene	664957	ND	0.127	1.00	ug/kg	116578257	
Hexachlorobutadiene	664957	ND	0.648	1.00	ug/kg	116578257	
Isopropylbenzene (Cumene)	664957	ND	0.223	1.00	ug/kg	116578257	
m- and p-Xylene	664957	ND	0.405	1.00	ug/kg	116578257	
m-Dichlorobenzene	664957	ND	0.264	1.00	ug/kg	116578257	
Methyl ethyl ketone (Butanone)	664957	ND	2.52	5.00	ug/kg	116578257	
Methyl Isobutyl Ketone	664957	ND	0.358	1.00	ug/kg	116578257	
Naphthalene	664957	ND	0.766	2.00	ug/kg	116578257	
n-Butylbenzene	664957	ND	0.214	1.00	ug/kg	116578257	
n-Propylbenzene	664957	ND	0.212	1.00	ug/kg	116578257	
o-Dichlorobenzene	664957	ND	0.268	1.00	ug/kg	116578257	
o-Xylene	664957	ND	0.157	1.00	ug/kg	116578257	
p-Dichlorobenzene	664957	ND	0.165	1.00	ug/kg	116578257	
p-Isopropyltoluene	664957	ND	0.162	1.00	ug/kg	116578257	

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Quality Control

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Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
sec-Butylbenzene	664957	ND	0.159	1.00	ug/kg	116578257	
Styrene	664957	ND	0.189	1.00	ug/kg	116578257	
tert-Butylbenzene	664957	ND	0.190	1.00	ug/kg	116578257	
tert-Butylmethylether (MTBE)	664957	ND	0.354	1.00	ug/kg	116578257	
Tetrachloroethylene	664957	ND	0.265	1.00	ug/kg	116578257	
Toluene	664957	ND	0.182	1.00	ug/kg	116578257	
trans-1,2-Dichloroethylene	664957	ND	0.386	1.00	ug/kg	116578257	
trans-1,3-Dichloropropene	664957	ND	0.181	1.00	ug/kg	116578257	
Trichloroethylene	664957	ND	0.226	1.00	ug/kg	116578257	
Trichlorofluoromethane	664957	ND	0.277	1.00	ug/kg	116578257	
Vinyl chloride	664957	ND	0.834	1.00	ug/kg	116578257	

CCC

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
1,1-Dichloroethylene	22.1	20.00	ug/kg	110	80.0 - 120		116578254
1,2-Dichloropropane	22.5	20.00	ug/kg	112	80.0 - 120		116578254
Chloroform	20.9	20.00	ug/kg	104	80.0 - 120		116578254
Ethylbenzene	20.5	20.00	ug/kg	102	80.0 - 120		116578254
Toluene	21.8	20.00	ug/kg	109	80.0 - 120		116578254
Vinyl chloride	22.2	20.00	ug/kg	111	80.0 - 120		116578254

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
1,1,1,2-Tetrachloroethane	21.6	20.0	ug/kg	108	80.0 - 120		116578254
1,1,1-Trichloroethane	21.9	20.0	ug/kg	110	80.0 - 120		116578254
1,1,2,2-Tetrachloroethane	17.0	20.0	ug/kg	85.0	80.0 - 120		116578254
1,1,2-Trichloroethane	19.6	20.0	ug/kg	98.0	80.0 - 120		116578254
1,1-Dichloroethane	22.8	20.0	ug/kg	114	80.0 - 120		116578254
1,1-Dichloroethylene	22.1	20.0	ug/kg	110	80.0 - 120		116578254
1,1-Dichloropropene	22.5	20.0	ug/kg	112	80.0 - 120		116578254
1,2,3-Trichlorobenzene	18.4	20.0	ug/kg	92.0	80.0 - 120		116578254
1,2,3-Trichloropropane	18.0	20.0	ug/kg	90.0	80.0 - 120		116578254
1,2,4-Trichlorobenzene	20.3	20.0	ug/kg	102	80.0 - 120		116578254
1,2,4-Trimethylbenzene	19.5	20.0	ug/kg	97.5	80.0 - 120		116578254
1,2-Dibromo-3-chloropropane	16.8	20.0	ug/kg	84.0	80.0 - 120		116578254
1,2-Dibromoethane	17.9	20.0	ug/kg	89.5	80.0 - 120		116578254
1,2-Dichloroethane	19.6	20.0	ug/kg	98.0	80.0 - 120		116578254
1,2-Dichloropropane	22.5	20.0	ug/kg	112	80.0 - 120		116578254
1,3,5-Trimethylbenzene	19.8	20.0	ug/kg	99.0	80.0 - 120		116578254
1,3-Dichloropropane	19.7	20.0	ug/kg	98.5	80.0 - 120		116578254
2,2-Dichloropropane	22.5	20.0	ug/kg	112	80.0 - 120		116578254
2-Chloroethylvinyl ether	20.6	20.0	ug/kg	103	80.0 - 120		116578254
2-Chlorotoluene	18.8	20.0	ug/kg	94.0	80.0 - 120		116578254
4-Chlorotoluene	18.8	20.0	ug/kg	94.0	80.0 - 120		116578254
Acetone	21.8	20.0	ug/kg	109	80.0 - 120		116578254
Acrolein	35.3	40.0	ug/kg	88.2	80.0 - 120		116578254
Acrylonitrile	42.4	40.0	ug/kg	106	80.0 - 120		116578254
Benzene	23.1	20.0	ug/kg	116	80.0 - 120		116578254
Bromobenzene	20.0	20.0	ug/kg	100	80.0 - 120		116578254
Bromochloromethane	22.9	20.0	ug/kg	114	80.0 - 120		116578254

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CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
Bromodichloromethane	20.1	20.0	ug/kg	100	80.0 - 120		116578254
Bromoform	20.0	20.0	ug/kg	100	80.0 - 120		116578254
Bromomethane (Methyl Bromi	20.6	20.0	ug/kg	103	80.0 - 120		116578254
Carbon Tetrachloride	22.2	20.0	ug/kg	111	80.0 - 120		116578254
Chlorobenzene	20.5	20.0	ug/kg	102	80.0 - 120		116578254
Chloroethane	22.7	20.0	ug/kg	114	80.0 - 120		116578254
Chloroform	20.9	20.0	ug/kg	104	80.0 - 120		116578254
Chloromethane	21.4	20.0	ug/kg	107	80.0 - 120		116578254
cis-1,2-Dichloroethylene	21.5	20.0	ug/kg	108	80.0 - 120		116578254
cis-1,3-Dichloropropene	20.5	20.0	ug/kg	102	80.0 - 120		116578254
Dibromochloromethane	19.5	20.0	ug/kg	97.5	80.0 - 120		116578254
Dibromomethane	20.5	20.0	ug/kg	102	80.0 - 120		116578254
Dichlorodifluoromethane	17.4	20.0	ug/kg	87.0	80.0 - 120		116578254
Dichloromethane	22.4	20.0	ug/kg	112	80.0 - 120		116578254
Ethylbenzene	20.5	20.0	ug/kg	102	80.0 - 120		116578254
Hexachlorobutadiene	21.8	20.0	ug/kg	109	80.0 - 120		116578254
Isopropylbenzene (Cumene)	21.5	20.0	ug/kg	108	80.0 - 120		116578254
m- and p-Xylene	41.9	40.0	ug/kg	105	80.0 - 120		116578254
m-Dichlorobenzene	20.4	20.0	ug/kg	102	80.0 - 120		116578254
Methyl ethyl ketone (Butanone)	23.0	20.0	ug/kg	115	80.0 - 120		116578254
Methyl Isobutyl Ketone	20.4	20.0	ug/kg	102	80.0 - 120		116578254
Naphthalene	17.1	20.0	ug/kg	85.5	80.0 - 120		116578254
n-Butylbenzene	20.7	20.0	ug/kg	104	80.0 - 120		116578254
n-Propylbenzene	20.5	20.0	ug/kg	102	80.0 - 120		116578254
o-Dichlorobenzene	19.6	20.0	ug/kg	98.0	80.0 - 120		116578254
o-Xylene	20.4	20.0	ug/kg	102	80.0 - 120		116578254
p-Dichlorobenzene	20.2	20.0	ug/kg	101	80.0 - 120		116578254
p-Isopropyltoluene	20.8	20.0	ug/kg	104	80.0 - 120		116578254
sec-Butylbenzene	21.0	20.0	ug/kg	105	80.0 - 120		116578254
Styrene	18.3	20.0	ug/kg	91.5	80.0 - 120		116578254
tert-Butylbenzene	21.2	20.0	ug/kg	106	80.0 - 120		116578254
tert-Butylmethylether (MTBE)	20.4	20.0	ug/kg	102	80.0 - 120		116578254
Tetrachloroethylene	23.0	20.0	ug/kg	115	80.0 - 120		116578254
Toluene	21.8	20.0	ug/kg	109	80.0 - 120		116578254
trans-1,2-Dichloroethylene	22.6	20.0	ug/kg	113	80.0 - 120		116578254
trans-1,3-Dichloropropene	18.4	20.0	ug/kg	92.0	80.0 - 120		116578254
Trichloroethylene	22.6	20.0	ug/kg	113	80.0 - 120		116578254
Trichlorofluoromethane	20.5	20.0	ug/kg	102	80.0 - 120		116578254
Vinyl chloride	22.2	20.0	ug/kg	111	80.0 - 120		116578254

IS Areas

Parameter	*Sample*	*Type*	*Reading*	*CCVISM*	*Low*	*High*	*Out*	*File*	*PrepSet*
1,4-DichlorobenzeneD4 (ISTD)	664957	CCV	31820	31820	15910	47730		116578254	664957
1,4-DichlorobenzeneD4 (ISTD)	664957	LCS	30830	31820	15910	47730		116578255	664957
1,4-DichlorobenzeneD4 (ISTD)	664957	LCS Dup	30800	31820	15910	47730		116578256	664957
1,4-DichlorobenzeneD4 (ISTD)	664957	Blank	29780	31820	15910	47730		116578257	664957

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Quality Control

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
ChlorobenzeneD5 (ISTD)	664957	CCV	80880	80880	40440	121300		116578254	664957
ChlorobenzeneD5 (ISTD)	664957	LCS	78870	80880	40440	121300		116578255	664957
ChlorobenzeneD5 (ISTD)	664957	LCS Dup	80440	80880	40440	121300		116578256	664957
ChlorobenzeneD5 (ISTD)	664957	Blank	80820	80880	40440	121300		116578257	664957
1,4-DichlorobenzeneD4 (ISTD)	1493986	MS	27990	31820	15910	47730		116578262	664957
1,4-DichlorobenzeneD4 (ISTD)	1493986	MSD	29220	31820	15910	47730		116578263	664957
ChlorobenzeneD5 (ISTD)	1493986	MS	70280	80880	40440	121300		116578262	664957
ChlorobenzeneD5 (ISTD)	1493986	MSD	70820	80880	40440	121300		116578263	664957

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	664957	CCV	14.40	14.40	14.34	14.46		116578254	664957
1,4-DichlorobenzeneD4 (ISTD)	664957	LCS	14.41	14.40	14.34	14.46		116578255	664957
1,4-DichlorobenzeneD4 (ISTD)	664957	LCS Dup	14.41	14.40	14.34	14.46		116578256	664957
1,4-DichlorobenzeneD4 (ISTD)	664957	Blank	14.41	14.40	14.34	14.46		116578257	664957
ChlorobenzeneD5 (ISTD)	664957	CCV	10.72	10.72	10.66	10.78		116578254	664957
ChlorobenzeneD5 (ISTD)	664957	LCS	10.72	10.72	10.66	10.78		116578255	664957
ChlorobenzeneD5 (ISTD)	664957	LCS Dup	10.72	10.72	10.66	10.78		116578256	664957
ChlorobenzeneD5 (ISTD)	664957	Blank	10.72	10.72	10.66	10.78		116578257	664957
1,4-DichlorobenzeneD4 (ISTD)	1493986	MS	14.41	14.40	14.34	14.46		116578262	664957
1,4-DichlorobenzeneD4 (ISTD)	1493986	MSD	14.40	14.40	14.34	14.46		116578263	664957
ChlorobenzeneD5 (ISTD)	1493986	MS	10.72	10.72	10.66	10.78		116578262	664957
ChlorobenzeneD5 (ISTD)	1493986	MSD	10.72	10.72	10.66	10.78		116578263	664957

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
1,1,1,2-Tetrachloroethane	664957	21.2	20.0	ug/kg	106	77.5 - 133	116578255	
1,1,1-Trichloroethane	664957	22.6	20.0	ug/kg	113	74.3 - 136	116578255	
1,1,2,2-Tetrachloroethane	664957	16.1	20.0	ug/kg	80.5	65.9 - 137	116578255	
1,1,2-Trichloroethane	664957	20.5	20.0	ug/kg	102	79.2 - 123	116578255	
1,1-Dichloroethane	664957	22.6	20.0	ug/kg	113	75.8 - 126	116578255	
1,1-Dichloroethylene	664957	22.0	20.0	ug/kg	110	71.1 - 128	116578255	
1,1-Dichloropropene	664957	23.4	20.0	ug/kg	117	77.5 - 128	116578255	
1,2,3-Trichlorobenzene	664957	20.9	20.0	ug/kg	104	69.7 - 137	116578255	
1,2,3-Trichloropropane	664957	18.6	20.0	ug/kg	93.0	71.6 - 135	116578255	
1,2,4-Trichlorobenzene	664957	20.9	20.0	ug/kg	104	73.4 - 126	116578255	
1,2,4-Trimethylbenzene	664957	20.5	20.0	ug/kg	102	79.1 - 118	116578255	
1,2-Dibromo-3-chloropropane	664957	15.3	20.0	ug/kg	76.5	56.5 - 141	116578255	
1,2-Dibromoethane	664957	18.5	20.0	ug/kg	92.5	79.9 - 132	116578255	
1,2-Dichloroethane	664957	19.2	20.0	ug/kg	96.0	72.7 - 142	116578255	
1,2-Dichloropropane	664957	23.2	20.0	ug/kg	116	76.5 - 129	116578255	
1,3,5-Trimethylbenzene	664957	20.3	20.0	ug/kg	102	79.3 - 118	116578255	
1,3-Dichloropropane	664957	18.6	20.0	ug/kg	93.0	78.1 - 120	116578255	
2,2-Dichloropropane	664957	21.9	20.0	ug/kg	110	57.9 - 163	116578255	
2-Chloroethylvinyl ether	664957	15.8	20.0	ug/kg	79.0	23.2 - 155	116578255	

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Quality Control

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LCS

Parameter	*PrepSet*	*Reading*	*Known*	*Units*	*Recover%*	*Limits*	*File*	*Out*
2-Chlorotoluene	664957	19.9	20.0	ug/kg	99.5	74.5 - 132	116578255	
4-Chlorotoluene	664957	19.9	20.0	ug/kg	99.5	76.9 - 132	116578255	
Acetone	664957	19.7	20.0	ug/kg	98.5	0.100 - 248	116578255	
Acrolein	664957	65.9	40.0	ug/kg	165	0.100 - 263	116578255	
Acrylonitrile	664957	46.1	40.0	ug/kg	115	60.0 - 144	116578255	
Benzene	664957	22.6	20.0	ug/kg	113	74.4 - 122	116578255	
Bromobenzene	664957	21.4	20.0	ug/kg	107	79.3 - 123	116578255	
Bromochloromethane	664957	22.5	20.0	ug/kg	112	78.7 - 135	116578255	
Bromodichloromethane	664957	20.6	20.0	ug/kg	103	74.3 - 130	116578255	
Bromoform	664957	20.6	20.0	ug/kg	103	64.2 - 134	116578255	
Bromomethane (Methyl Bromi	664957	14.9	20.0	ug/kg	74.5	45.1 - 150	116578255	
Carbon Tetrachloride	664957	22.5	20.0	ug/kg	112	70.8 - 131	116578255	
Chlorobenzene	664957	20.5	20.0	ug/kg	102	78.4 - 123	116578255	
Chloroethane	664957	23.9	20.0	ug/kg	120	70.4 - 134	116578255	
Chloroform	664957	21.3	20.0	ug/kg	106	75.8 - 128	116578255	
Chloromethane	664957	14.4	20.0	ug/kg	72.0	46.8 - 138	116578255	
cis-1,2-Dichloroethylene	664957	21.4	20.0	ug/kg	107	76.4 - 118	116578255	
cis-1,3-Dichloropropene	664957	18.6	20.0	ug/kg	93.0	68.9 - 112	116578255	
Dibromochloromethane	664957	19.2	20.0	ug/kg	96.0	71.9 - 130	116578255	
Dibromomethane	664957	17.9	20.0	ug/kg	89.5	79.9 - 129	116578255	
Dichlorodifluoromethane	664957	9.28	20.0	ug/kg	46.4	34.8 - 120	116578255	
Dichloromethane	664957	21.3	20.0	ug/kg	106	75.0 - 121	116578255	
Ethylbenzene	664957	21.2	20.0	ug/kg	106	79.8 - 125	116578255	
Hexachlorobutadiene	664957	22.0	20.0	ug/kg	110	72.3 - 131	116578255	
Isopropylbenzene (Cumene)	664957	20.0	20.0	ug/kg	100	70.5 - 130	116578255	
m- and p-Xylene	664957	42.9	40.0	ug/kg	107	81.5 - 117	116578255	
m-Dichlorobenzene	664957	20.8	20.0	ug/kg	104	78.3 - 129	116578255	
Methyl ethyl ketone (Butanone)	664957	16.4	20.0	ug/kg	82.0	31.5 - 165	116578255	
Methyl Isobutyl Ketone	664957	16.0	20.0	ug/kg	80.0	48.2 - 132	116578255	
Naphthalene	664957	21.8	20.0	ug/kg	109	68.4 - 136	116578255	
n-Butylbenzene	664957	22.3	20.0	ug/kg	112	78.1 - 125	116578255	
n-Propylbenzene	664957	21.5	20.0	ug/kg	108	76.3 - 138	116578255	
o-Dichlorobenzene	664957	19.9	20.0	ug/kg	99.5	76.1 - 128	116578255	
o-Xylene	664957	20.0	20.0	ug/kg	100	79.3 - 121	116578255	
p-Dichlorobenzene	664957	20.6	20.0	ug/kg	103	82.0 - 118	116578255	
p-Isopropyltoluene	664957	21.7	20.0	ug/kg	108	80.6 - 128	116578255	
sec-Butylbenzene	664957	20.7	20.0	ug/kg	104	72.8 - 132	116578255	
Styrene	664957	18.4	20.0	ug/kg	92.0	76.9 - 117	116578255	
tert-Butylbenzene	664957	21.8	20.0	ug/kg	109	75.3 - 132	116578255	
tert-Butylmethylether (MTBE)	664957	23.4	20.0	ug/kg	117	68.5 - 126	116578255	
Tetrachloroethylene	664957	24.6	20.0	ug/kg	123	61.7 - 147	116578255	
Toluene	664957	23.2	20.0	ug/kg	116	82.9 - 115	116578255	*
trans-1,2-Dichloroethylene	664957	25.0	20.0	ug/kg	125	75.7 - 125	116578255	
trans-1,3-Dichloropropene	664957	17.8	20.0	ug/kg	89.0	71.7 - 133	116578255	
Trichloroethylene	664957	22.7	20.0	ug/kg	114	75.9 - 133	116578255	
Trichlorofluoromethane	664957	16.0	20.0	ug/kg	80.0	50.2 - 132	116578255	
Vinyl chloride	664957	16.0	20.0	ug/kg	80.0	45.9 - 125	116578255	

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LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,1,1,2-Tetrachloroethane	664957	21.2	22.5	20.0	77.5 - 133	106	112	ug/kg	5.50	30.0
1,1,1-Trichloroethane	664957	22.6	21.9	20.0	74.3 - 136	113	110	ug/kg	2.69	30.0
1,1,2,2-Tetrachloroethane	664957	16.1	16.6	20.0	65.9 - 137	80.5	83.0	ug/kg	3.06	30.0
1,1,2-Trichloroethane	664957	20.5	19.6	20.0	79.2 - 123	102	98.0	ug/kg	4.00	30.0
1,1-Dichloroethane	664957	22.6	22.7	20.0	75.8 - 126	113	114	ug/kg	0.881	30.0
1,1-Dichloroethylene	664957	22.0	21.1	20.0	71.1 - 128	110	106	ug/kg	3.70	30.0
1,1-Dichloropropene	664957	23.4	22.9	20.0	77.5 - 128	117	114	ug/kg	2.60	30.0
1,2,3-Trichlorobenzene	664957	20.9	21.3	20.0	69.7 - 137	104	106	ug/kg	1.90	30.0
1,2,3-Trichloropropane	664957	18.6	17.9	20.0	71.6 - 135	93.0	89.5	ug/kg	3.84	30.0
1,2,4-Trichlorobenzene	664957	20.9	20.9	20.0	73.4 - 126	104	104	ug/kg	0	30.0
1,2,4-Trimethylbenzene	664957	20.5	20.3	20.0	79.1 - 118	102	102	ug/kg	0	30.0
1,2-Dibromo-3-chloropropane	664957	15.3	17.1	20.0	56.5 - 141	76.5	85.5	ug/kg	11.1	30.0
1,2-Dibromoethane	664957	18.5	18.5	20.0	79.9 - 132	92.5	92.5	ug/kg	0	30.0
1,2-Dichloroethane	664957	19.2	18.6	20.0	72.7 - 142	96.0	93.0	ug/kg	3.17	30.0
1,2-Dichloropropane	664957	23.2	22.2	20.0	76.5 - 129	116	111	ug/kg	4.41	30.0
1,3,5-Trimethylbenzene	664957	20.3	20.5	20.0	79.3 - 118	102	102	ug/kg	0	30.0
1,3-Dichloropropane	664957	18.6	17.8	20.0	78.1 - 120	93.0	89.0	ug/kg	4.40	30.0
2,2-Dichloropropane	664957	21.9	21.1	20.0	57.9 - 163	110	106	ug/kg	3.70	30.0
2-Chloroethylvinyl ether	664957	15.8	15.3	20.0	23.2 - 155	79.0	76.5	ug/kg	3.22	30.0
2-Chlorotoluene	664957	19.9	18.7	20.0	74.5 - 132	99.5	93.5	ug/kg	6.22	30.0
4-Chlorotoluene	664957	19.9	18.7	20.0	76.9 - 132	99.5	93.5	ug/kg	6.22	30.0
Acetone	664957	19.7	18.4	20.0	0.100 - 248	98.5	92.0	ug/kg	6.82	30.0
Acrolein	664957	65.9	68.6	40.0	0.100 - 263	165	172	ug/kg	4.15	30.0
Acrylonitrile	664957	46.1	42.3	40.0	60.0 - 144	115	106	ug/kg	8.14	30.0
Benzene	664957	22.6	22.2	20.0	74.4 - 122	113	111	ug/kg	1.79	30.0
Bromobenzene	664957	21.4	20.6	20.0	79.3 - 123	107	103	ug/kg	3.81	30.0
Bromochloromethane	664957	22.5	21.4	20.0	78.7 - 135	112	107	ug/kg	4.57	30.0
Bromodichloromethane	664957	20.6	19.2	20.0	74.3 - 130	103	96.0	ug/kg	7.04	30.0
Bromoform	664957	20.6	20.8	20.0	64.2 - 134	103	104	ug/kg	0.966	30.0
Bromomethane (Methyl Bromi	664957	14.9	15.3	20.0	45.1 - 150	74.5	76.5	ug/kg	2.65	30.0
Carbon Tetrachloride	664957	22.5	21.3	20.0	70.8 - 131	112	106	ug/kg	5.50	30.0
Chlorobenzene	664957	20.5	20.8	20.0	78.4 - 123	102	104	ug/kg	1.94	30.0
Chloroethane	664957	23.9	22.3	20.0	70.4 - 134	120	112	ug/kg	6.90	30.0
Chloroform	664957	21.3	20.8	20.0	75.8 - 128	106	104	ug/kg	1.90	30.0
Chloromethane	664957	14.4	14.4	20.0	46.8 - 138	72.0	72.0	ug/kg	0	30.0
cis-1,2-Dichloroethylene	664957	21.4	20.9	20.0	76.4 - 118	107	104	ug/kg	2.84	30.0
cis-1,3-Dichloropropene	664957	18.6	17.2	20.0	68.9 - 112	93.0	86.0	ug/kg	7.82	30.0
Dibromochloromethane	664957	19.2	18.5	20.0	71.9 - 130	96.0	92.5	ug/kg	3.71	30.0
Dibromomethane	664957	17.9	20.6	20.0	79.9 - 129	89.5	103	ug/kg	14.0	30.0
Dichlorodifluoromethane	664957	9.28	8.94	20.0	34.8 - 120	46.4	44.7	ug/kg	3.73	30.0
Dichloromethane	664957	21.3	21.5	20.0	75.0 - 121	106	108	ug/kg	1.87	30.0
Ethylbenzene	664957	21.2	21.3	20.0	79.8 - 125	106	106	ug/kg	0	30.0
Hexachlorobutadiene	664957	22.0	21.9	20.0	72.3 - 131	110	110	ug/kg	0	30.0
Isopropylbenzene (Cumene)	664957	20.0	20.5	20.0	70.5 - 130	100	102	ug/kg	1.98	30.0
m- and p-Xylene	664957	42.9	42.6	40.0	81.5 - 117	107	106	ug/kg	0.939	30.0
m-Dichlorobenzene	664957	20.8	20.2	20.0	78.3 - 129	104	101	ug/kg	2.93	30.0
Methyl ethyl ketone (Butanone)	664957	16.4	15.4	20.0	31.5 - 165	82.0	77.0	ug/kg	6.29	30.0
Methyl Isobutyl Ketone	664957	16.0	15.2	20.0	48.2 - 132	80.0	76.0	ug/kg	5.13	30.0

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Quality Control

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Naphthalene	664957	21.8	20.7	20.0	68.4 - 136	109	104	ug/kg	4.69	30.0
n-Butylbenzene	664957	22.3	21.3	20.0	78.1 - 125	112	106	ug/kg	5.50	30.0
n-Propylbenzene	664957	21.5	21.1	20.0	76.3 - 138	108	106	ug/kg	1.87	30.0
o-Dichlorobenzene	664957	19.9	19.7	20.0	76.1 - 128	99.5	98.5	ug/kg	1.01	30.0
o-Xylene	664957	20.0	19.9	20.0	79.3 - 121	100	99.5	ug/kg	0.501	30.0
p-Dichlorobenzene	664957	20.6	20.0	20.0	82.0 - 118	103	100	ug/kg	2.96	30.0
p-Isopropyltoluene	664957	21.7	21.4	20.0	80.6 - 128	108	107	ug/kg	0.930	30.0
sec-Butylbenzene	664957	20.7	20.2	20.0	72.8 - 132	104	101	ug/kg	2.93	30.0
Styrene	664957	18.4	17.8	20.0	76.9 - 117	92.0	89.0	ug/kg	3.31	30.0
tert-Butylbenzene	664957	21.8	21.4	20.0	75.3 - 132	109	107	ug/kg	1.85	30.0
tert-Butylmethylether (MTBE)	664957	23.4	22.6	20.0	68.5 - 126	117	113	ug/kg	3.48	30.0
Tetrachloroethylene	664957	24.6	24.8	20.0	61.7 - 147	123	124	ug/kg	0.810	30.0
Toluene	664957	23.2	21.9	20.0	82.9 - 115	116 *	110	ug/kg	5.31	30.0
trans-1,2-Dichloroethylene	664957	25.0	24.7	20.0	75.7 - 125	125	124	ug/kg	0.803	30.0
trans-1,3-Dichloropropene	664957	17.8	17.5	20.0	71.7 - 133	89.0	87.5	ug/kg	1.70	30.0
Trichloroethylene	664957	22.7	22.0	20.0	75.9 - 133	114	110	ug/kg	3.57	30.0
Trichlorofluoromethane	664957	16.0	15.4	20.0	50.2 - 132	80.0	77.0	ug/kg	3.82	30.0
Vinyl chloride	664957	16.0	15.6	20.0	45.9 - 125	80.0	78.0	ug/kg	2.53	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,1,1,2-Tetrachloroethane	1493986	218	0	ND	200	79.0 - 121	109		ug/kg		30.0
1,1,1-Trichloroethane	1493986	237	0	ND	200	80.0 - 114	118 *		ug/kg		30.0
1,1,2,2-Tetrachloroethane	1493986	189	0	ND	200	76.0 - 131	94.5		ug/kg		30.0
1,1,2-Trichloroethane	1493986	207	0	ND	200	90.0 - 112	104		ug/kg		30.0
1,1-Dichloroethane	1493986	244	0	ND	200	83.0 - 118	122 *		ug/kg		30.0
1,1-Dichloroethylene	1493986	226	0	ND	200	88.0 - 130	113		ug/kg		30.0
1,1-Dichloropropene	1493986	249	0	ND	200	80.0 - 118	124 *		ug/kg		30.0
1,2,3-Trichlorobenzene	1493986	204	0	ND	200	65.0 - 139	102		ug/kg		30.0
1,2,3-Trichloropropane	1493986	197	0	ND	200	74.0 - 132	98.5		ug/kg		30.0
1,2,4-Trichlorobenzene	1493986	216	0	ND	200	69.0 - 134	108		ug/kg		30.0
1,2,4-Trimethylbenzene	1493986	1280	0	1140	200	77.0 - 118	70.0 *		ug/kg		30.0
1,2-Dibromo-3-chloropropane	1493986	159	0	7.10	200	61.0 - 128	76.0		ug/kg		30.0
1,2-Dibromoethane	1493986	188	0	ND	200	80.0 - 119	94.0		ug/kg		30.0
1,2-Dichloroethane	1493986	208	0	ND	200	80.0 - 110	104		ug/kg		30.0
1,2-Dichloropropane	1493986	240	0	ND	200	84.0 - 112	120 *		ug/kg		30.0
1,3,5-Trimethylbenzene	1493986	449	0	277	200	83.0 - 121	86.0		ug/kg		30.0
1,3-Dichloropropane	1493986	194	0	ND	200	81.0 - 114	97.0		ug/kg		30.0
2,2-Dichloropropane	1493986	217	0	ND	200	74.0 - 131	108		ug/kg		30.0
2-Chloroethylvinyl ether	1493986	150	0	ND	200	57.0 - 120	75.0		ug/kg		30.0
2-Chlorotoluene	1493986	156	0	104	200	83.0 - 120	26.0 *		ug/kg		30.0
4-Chlorotoluene	1493986	156	0	104	200	85.0 - 122	26.0 *		ug/kg		30.0
Acetone	1493986	680	0	471	200	71.0 - 156	104		ug/kg		30.0
Acrolein	1493986	644	0	77.2	400	0.100 - 1490	142		ug/kg		30.0
Acrylonitrile	1493986	434	0	19.0	400	74.0 - 124	104		ug/kg		30.0
Benzene	1493986	391	0	165	200	87.0 - 111	113 *		ug/kg		30.0
Bromobenzene	1493986	216	0	ND	200	85.0 - 120	108		ug/kg		30.0
Bromochloromethane	1493986	224	0	ND	200	80.0 - 129	112		ug/kg		30.0
Bromodichloromethane	1493986	212	0	ND	200	79.0 - 108	106		ug/kg		30.0

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Quality Control

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MS

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
Bromoform	1493986	206	0	ND	200	69.0 - 127	103		ug/kg		30.0
Bromomethane (Methyl Bromi	1493986	155	0	ND	200	56.0 - 126	77.5		ug/kg		30.0
Carbon Tetrachloride	1493986	227	0	ND	200	81.0 - 115	114		ug/kg		30.0
Chlorobenzene	1493986	218	0	ND	200	84.0 - 111	109		ug/kg		30.0
Chloroethane	1493986	236	0	ND	200	71.0 - 136	118		ug/kg		30.0
Chloroform	1493986	220	0	ND	200	83.0 - 118	110		ug/kg		30.0
Chloromethane	1493986	151	0	ND	200	59.0 - 130	75.5		ug/kg		30.0
cis-1,2-Dichloroethylene	1493986	217	0	ND	200	81.0 - 121	108		ug/kg		30.0
cis-1,3-Dichloropropene	1493986	176	0	3.70	200	76.0 - 107	86.2		ug/kg		30.0
Dibromochloromethane	1493986	194	0	33.5	200	76.0 - 120	80.2		ug/kg		30.0
Dibromomethane	1493986	216	0	ND	200	85.0 - 115	108		ug/kg		30.0
Dichlorodifluoromethane	1493986	101	0	ND	200	56.0 - 128	50.5 *		ug/kg		30.0
Dichloromethane	1493986	1040	0	935	200	83.0 - 126	52.5 *		ug/kg		30.0
Ethylbenzene	1493986	609	0	399	200	82.0 - 111	105		ug/kg		30.0
Hexachlorobutadiene	1493986	196	0	ND	200	72.0 - 139	98.0		ug/kg		30.0
Isopropylbenzene (Cumene)	1493986	226	0	13.8	200	89.0 - 126	106		ug/kg		30.0
m- and p-Xylene	1493986	2440	0	2100	400	79.0 - 115	85.0		ug/kg		30.0
m-Dichlorobenzene	1493986	215	0	ND	200	90.0 - 115	108		ug/kg		30.0
Methyl ethyl ketone (Butanone)	1493986	213	0	55.1	200	66.0 - 139	79.0		ug/kg		30.0
Methyl Isobutyl Ketone	1493986	170	0	ND	200	67.0 - 125	85.0		ug/kg		30.0
Naphthalene	1493986	767	0	460	200	62.0 - 150	154 *		ug/kg		30.0
n-Butylbenzene	1493986	246	0	31.4	200	84.0 - 128	107		ug/kg		30.0
n-Propylbenzene	1493986	287	0	70.2	200	87.0 - 123	108		ug/kg		30.0
o-Dichlorobenzene	1493986	213	0	ND	200	89.0 - 118	106		ug/kg		30.0
o-Xylene	1493986	1160	0	992	200	84.0 - 114	84.0		ug/kg		30.0
p-Dichlorobenzene	1493986	209	0	ND	200	92.0 - 117	104		ug/kg		30.0
p-Isopropyltoluene	1493986	210	0	10.9	200	86.0 - 123	99.6		ug/kg		30.0
sec-Butylbenzene	1493986	210	0	2.70	200	85.0 - 122	104		ug/kg		30.0
Styrene	1493986	231	0	33.0	200	81.0 - 113	99.0		ug/kg		30.0
tert-Butylbenzene	1493986	198	0	151	200	84.0 - 123	23.5 *		ug/kg		30.0
tert-Butylmethylether (MTBE)	1493986	237	0	ND	200	76.0 - 136	118		ug/kg		30.0
Tetrachloroethylene	1493986	247	0	ND	200	84.0 - 113	124 *		ug/kg		30.0
Toluene	1493986	1560	0	1440	200	88.0 - 111	60.0 *		ug/kg		30.0
trans-1,2-Dichloroethylene	1493986	250	0	ND	200	89.0 - 130	125		ug/kg		30.0
trans-1,3-Dichloropropene	1493986	204	0	28.5	200	81.0 - 117	87.8		ug/kg		30.0
Trichloroethylene	1493986	225	0	ND	200	86.0 - 111	112 *		ug/kg		30.0
Trichlorofluoromethane	1493986	169	0	ND	200	65.0 - 123	84.5		ug/kg		30.0
Vinyl chloride	1493986	165	0	ND	200	86.0 - 139	82.5 *		ug/kg		30.0

MSD

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
1,1,1,2-Tetrachloroethane	1493986	218	205	ND	200	79.0 - 121	109	102	ug/kg	6.15	30.0
1,1,1-Trichloroethane	1493986	237	223	ND	200	80.0 - 114	118 *	112	ug/kg	6.09	30.0
1,1,2,2-Tetrachloroethane	1493986	189	172	ND	200	76.0 - 131	94.5	86.0	ug/kg	9.42	30.0
1,1,2-Trichloroethane	1493986	207	203	ND	200	90.0 - 112	104	102	ug/kg	1.95	30.0
1,1-Dichloroethane	1493986	244	233	ND	200	83.0 - 118	122 *	116	ug/kg	4.61	30.0
1,1-Dichloroethylene	1493986	226	215	ND	200	88.0 - 130	113	108	ug/kg	4.99	30.0
1,1-Dichloropropene	1493986	249	234	ND	200	80.0 - 118	124 *	117	ug/kg	6.21	30.0
1,2,3-Trichlorobenzene	1493986	204	212	ND	200	65.0 - 139	102	106	ug/kg	3.85	30.0

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MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,2,3-Trichloropropane	1493986	197	172	ND	200	74.0 - 132	98.5	86.0	ug/kg	13.6	30.0
1,2,4-Trichlorobenzene	1493986	216	208	ND	200	69.0 - 134	108	104	ug/kg	3.77	30.0
1,2,4-Trimethylbenzene	1493986	1280	1190	1140	200	77.0 - 118	70.0 *	25.0 *	ug/kg	94.7 *	30.0
1,2-Dibromo-3-chloropropane	1493986	159	178	7.10	200	61.0 - 128	76.0	85.4	ug/kg	11.8	30.0
1,2-Dibromoethane	1493986	188	181	ND	200	80.0 - 119	94.0	90.5	ug/kg	3.79	30.0
1,2-Dichloroethane	1493986	208	196	ND	200	80.0 - 110	104	98.0	ug/kg	5.94	30.0
1,2-Dichloropropane	1493986	240	225	ND	200	84.0 - 112	120 *	112	ug/kg	6.45	30.0
1,3,5-Trimethylbenzene	1493986	449	431	277	200	83.0 - 121	86.0	77.0 *	ug/kg	11.0	30.0
1,3-Dichloropropane	1493986	194	192	ND	200	81.0 - 114	97.0	96.0	ug/kg	1.04	30.0
2,2-Dichloropropane	1493986	217	205	ND	200	74.0 - 131	108	102	ug/kg	5.69	30.0
2-Chloroethylvinyl ether	1493986	150	148	ND	200	57.0 - 120	75.0	74.0	ug/kg	1.34	30.0
2-Chlorotoluene	1493986	156	270	104	200	83.0 - 120	26.0 *	83.0	ug/kg	105 *	30.0
4-Chlorotoluene	1493986	156	270	104	200	85.0 - 122	26.0 *	83.0 *	ug/kg	105 *	30.0
Acetone	1493986	680	633	471	200	71.0 - 156	104	81.0	ug/kg	25.3	30.0
Acrolein	1493986	644	608	77.2	400	0.100 - 1490	142	133	ug/kg	6.56	30.0
Acrylonitrile	1493986	434	436	19.0	400	74.0 - 124	104	104	ug/kg	0.481	30.0
Benzene	1493986	391	374	165	200	87.0 - 111	113 *	104	ug/kg	7.82	30.0
Bromobenzene	1493986	216	211	ND	200	85.0 - 120	108	106	ug/kg	2.34	30.0
Bromochloromethane	1493986	224	228	ND	200	80.0 - 129	112	114	ug/kg	1.77	30.0
Bromodichloromethane	1493986	212	201	ND	200	79.0 - 108	106	100	ug/kg	5.33	30.0
Bromoform	1493986	206	194	ND	200	69.0 - 127	103	97.0	ug/kg	6.00	30.0
Bromomethane (Methyl Bromi	1493986	155	158	ND	200	56.0 - 126	77.5	79.0	ug/kg	1.92	30.0
Carbon Tetrachloride	1493986	227	219	ND	200	81.0 - 115	114	110	ug/kg	3.59	30.0
Chlorobenzene	1493986	218	206	ND	200	84.0 - 111	109	103	ug/kg	5.66	30.0
Chloroethane	1493986	236	233	ND	200	71.0 - 136	118	116	ug/kg	1.28	30.0
Chloroform	1493986	220	212	ND	200	83.0 - 118	110	106	ug/kg	3.70	30.0
Chloromethane	1493986	151	146	ND	200	59.0 - 130	75.5	73.0	ug/kg	3.37	30.0
cis-1,2-Dichloroethylene	1493986	217	209	ND	200	81.0 - 121	108	104	ug/kg	3.76	30.0
cis-1,3-Dichloropropene	1493986	176	171	3.70	200	76.0 - 107	86.2	83.6	ug/kg	2.94	30.0
Dibromochloromethane	1493986	194	181	33.5	200	76.0 - 120	80.2	73.8 *	ug/kg	8.44	30.0
Dibromomethane	1493986	216	213	ND	200	85.0 - 115	108	106	ug/kg	1.40	30.0
Dichlorodifluoromethane	1493986	101	95.9	ND	200	56.0 - 128	50.5 *	48.0 *	ug/kg	5.18	30.0
Dichloromethane	1493986	1040	1000	935	200	83.0 - 126	52.5 *	32.5 *	ug/kg	47.1 *	30.0
Ethylbenzene	1493986	609	581	399	200	82.0 - 111	105	91.0	ug/kg	14.3	30.0
Hexachlorobutadiene	1493986	196	212	ND	200	72.0 - 139	98.0	106	ug/kg	7.84	30.0
Isopropylbenzene (Cumene)	1493986	226	206	13.8	200	89.0 - 126	106	96.1	ug/kg	9.89	30.0
m- and p-Xylene	1493986	2440	2370	2100	400	79.0 - 115	85.0	67.5 *	ug/kg	23.0	30.0
m-Dichlorobenzene	1493986	215	199	ND	200	90.0 - 115	108	99.5	ug/kg	7.73	30.0
Methyl ethyl ketone (Butanone)	1493986	213	211	55.1	200	66.0 - 139	79.0	78.0	ug/kg	1.27	30.0
Methyl Isobutyl Ketone	1493986	170	160	ND	200	67.0 - 125	85.0	80.0	ug/kg	6.06	30.0
Naphthalene	1493986	767	829	460	200	62.0 - 150	154 *	184 *	ug/kg	18.3	30.0
n-Butylbenzene	1493986	246	240	31.4	200	84.0 - 128	107	104	ug/kg	2.84	30.0
n-Propylbenzene	1493986	287	275	70.2	200	87.0 - 123	108	102	ug/kg	5.69	30.0
o-Dichlorobenzene	1493986	213	198	ND	200	89.0 - 118	106	99.0	ug/kg	7.30	30.0
o-Xylene	1493986	1160	1150	992	200	84.0 - 114	84.0	79.0 *	ug/kg	6.13	30.0
p-Dichlorobenzene	1493986	209	201	ND	200	92.0 - 117	104	100	ug/kg	3.90	30.0
p-Isopropyltoluene	1493986	210	202	10.9	200	86.0 - 123	99.6	95.6	ug/kg	4.10	30.0
sec-Butylbenzene	1493986	210	202	2.70	200	85.0 - 122	104	99.6	ug/kg	3.94	30.0

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MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Styrene	1493986	231	221	33.0	200	81.0 - 113	99.0	94.0	ug/kg	5.18	30.0
tert-Butylbenzene	1493986	198	193	151	200	84.0 - 123	23.5 *	21.0 *	ug/kg	11.2	30.0
tert-Butylmethylether (MTBE)	1493986	237	228	ND	200	76.0 - 136	118	114	ug/kg	3.87	30.0
Tetrachloroethylene	1493986	247	234	ND	200	84.0 - 113	124 *	117 *	ug/kg	5.41	30.0
Toluene	1493986	1560	1520	1440	200	88.0 - 111	60.0 *	40.0 *	ug/kg	40.0 *	30.0
trans-1,2-Dichloroethylene	1493986	250	249	ND	200	89.0 - 130	125	124	ug/kg	0.401	30.0
trans-1,3-Dichloropropene	1493986	204	197	28.5	200	81.0 - 117	87.8	84.2	ug/kg	4.07	30.0
Trichloroethylene	1493986	225	222	ND	200	86.0 - 111	112 *	111	ug/kg	1.34	30.0
Trichlorofluoromethane	1493986	169	162	ND	200	65.0 - 123	84.5	81.0	ug/kg	4.23	30.0
Vinyl chloride	1493986	165	158	ND	200	86.0 - 139	82.5 *	79.0 *	ug/kg	4.33	30.0

SPCC

Parameter	Sample	RF	Minimum	File
1,1,2,2-Tetrachloroethane	664957	17.0	0.300	116578254
1,1-Dichloroethane	664957	22.8	0.100	116578254
Bromoform	664957	20.0	0.100	116578254
Chlorobenzene	664957	20.5	0.300	116578254
Chloromethane	664957	21.4	0.100	116578254

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1,2-DCA-d4 (SURR)	664957	CCV	17.8	20.0	ug/kg	89.0	52.7 - 150	116578254
1,2-DCA-d4 (SURR)	664957	LCS	16.7	20.0	ug/kg	83.5	52.7 - 150	116578255
1,2-DCA-d4 (SURR)	664957	LCS Dup	16.3	20.0	ug/kg	81.5	52.7 - 150	116578256
1,2-DCA-d4 (SURR)	664957	Blank	16.2	20.0	ug/kg	81.0	52.7 - 150	116578257
Bromofluorobenzene (SURR)	664957	CCV	18.5	20.0	ug/kg	92.5	79.4 - 114	116578254
Bromofluorobenzene (SURR)	664957	LCS	18.2	20.0	ug/kg	91.0	79.4 - 114	116578255
Bromofluorobenzene (SURR)	664957	LCS Dup	19.1	20.0	ug/kg	95.5	79.4 - 114	116578256
Bromofluorobenzene (SURR)	664957	Blank	18.1	20.0	ug/kg	90.5	79.4 - 114	116578257
Dibromofluoromethane (SURR)	664957	CCV	20.1	20.0	ug/kg	100	68.7 - 124	116578254
Dibromofluoromethane (SURR)	664957	LCS	19.6	20.0	ug/kg	98.0	68.7 - 124	116578255
Dibromofluoromethane (SURR)	664957	LCS Dup	19.4	20.0	ug/kg	97.0	68.7 - 124	116578256
Dibromofluoromethane (SURR)	664957	Blank	18.4	20.0	ug/kg	92.0	68.7 - 124	116578257
TolueneD8 (SURR)	664957	CCV	20.0	20.0	ug/kg	100	76.0 - 118	116578254
TolueneD8 (SURR)	664957	LCS	20.7	20.0	ug/kg	104	76.0 - 118	116578255
TolueneD8 (SURR)	664957	LCS Dup	19.8	20.0	ug/kg	99.0	76.0 - 118	116578256
TolueneD8 (SURR)	664957	Blank	19.4	20.0	ug/kg	97.0	76.0 - 118	116578257
1,2-DCA-d4 (SURR)	1493986	MS	17.8	20.0	ug/kg	89.0	52.7 - 150	116578262
1,2-DCA-d4 (SURR)	1493986	MSD	17.7	20.0	ug/kg	88.5	52.7 - 150	116578263
Bromofluorobenzene (SURR)	1493986	MS	18.4	20.0	ug/kg	92.0	79.4 - 114	116578262
Bromofluorobenzene (SURR)	1493986	MSD	17.9	20.0	ug/kg	89.5	79.4 - 114	116578263
Dibromofluoromethane (SURR)	1493986	MS	19.6	20.0	ug/kg	98.0	68.7 - 124	116578262

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Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Dibromofluoromethane (SURR)	1493986	MSD	19.2	20.0	ug/kg	96.0	68.7 - 124	116578263
TolueneD8 (SURR)	1493986	MS	20.4	20.0	ug/kg	102	76.0 - 118	116578262
TolueneD8 (SURR)	1493986	MSD	20.1	20.0	ug/kg	100	76.0 - 118	116578263

665168 Solid & Chemical Materials **EPA 8260B**

BFB

Parameter	Sample	RefMass	Reading	%	Limits%	Out	File
BFB Mass 173	665168	174	51	0.6	0 - 2.00		116581792
BFB Mass 174	665168	95.0	8694	76.8	50.0 - 100		116581792
BFB Mass 175	665168	174	628	7.2	5.00 - 9.00		116581792
BFB Mass 176	665168	174	8767	100.8	95.0 - 101		116581792
BFB Mass 177	665168	176	553	6.3	5.00 - 9.00		116581792
BFB Mass 50	665168	95.0	2773	24.5	15.0 - 40.0		116581792
BFB Mass 75	665168	95.0	5968	52.7	30.0 - 60.0		116581792
BFB Mass 95	665168	95.0	11326	100.0	100 - 100		116581792
BFB Mass 96	665168	95.0	814	7.2	5.00 - 9.00		116581792

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP 1,1-Dichloroethene	665168	ND	0.000192	0.001	mg/L	116581796	
TCLP 1,1-Dichloroethene	665168	ND	0.000192	0.001	mg/L	116581797	
TCLP 1,2-Dichloroethane	665168	ND	0.000411	0.001	mg/L	116581796	
TCLP 1,2-Dichloroethane	665168	ND	0.000411	0.001	mg/L	116581797	
TCLP 1,4 Dichlorobenzene	665168	ND	0.000295	0.001	mg/L	116581796	
TCLP 1,4 Dichlorobenzene	665168	ND	0.000295	0.001	mg/L	116581797	
TCLP Benzene	665168	ND	0.000187	0.001	mg/L	116581796	
TCLP Benzene	665168	ND	0.000187	0.001	mg/L	116581797	
TCLP Carbon tetrachloride	665168	ND	0.000246	0.001	mg/L	116581796	
TCLP Carbon tetrachloride	665168	ND	0.000246	0.001	mg/L	116581797	
TCLP Chlorobenzene	665168	ND	0.000242	0.001	mg/L	116581796	
TCLP Chlorobenzene	665168	ND	0.000242	0.001	mg/L	116581797	
TCLP Chloroform	665168	ND	0.000213	0.001	mg/L	116581796	
TCLP Chloroform	665168	ND	0.000213	0.001	mg/L	116581797	
TCLP MEK	665168	ND	0.00121	0.002	mg/L	116581796	
TCLP MEK	665168	ND	0.00121	0.002	mg/L	116581797	
TCLP Tetrachloroethylene	665168	ND	0.000123	0.001	mg/L	116581796	
TCLP Tetrachloroethylene	665168	ND	0.000123	0.001	mg/L	116581797	
TCLP Trichloroethylene	665168	ND	0.000275	0.001	mg/L	116581796	
TCLP Trichloroethylene	665168	ND	0.000275	0.001	mg/L	116581797	
TCLP Vinyl chloride	665168	ND	0.000159	0.001	mg/L	116581796	
TCLP Vinyl chloride	665168	ND	0.000159	0.001	mg/L	116581797	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP 1,1-Dichloroethene	0.0201	0.020	mg/L	100	70.0 - 130		116581793
TCLP 1,2-Dichloroethane	0.0196	0.020	mg/L	98.0	70.0 - 130		116581793
TCLP 1,4 Dichlorobenzene	0.0198	0.020	mg/L	99.0	70.0 - 130		116581793
TCLP Benzene	0.0197	0.020	mg/L	98.5	70.0 - 130		116581793
TCLP Carbon tetrachloride	0.0205	0.020	mg/L	102	70.0 - 130		116581793
TCLP Chlorobenzene	0.0196	0.020	mg/L	98.0	70.0 - 130		116581793

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Quality Control

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Chloroform	0.0198	0.020	mg/L	99.0	70.0 - 130		116581793
TCLP MEK	0.0194	0.020	mg/L	97.0	70.0 - 130		116581793
TCLP Tetrachloroethylene	0.0208	0.020	mg/L	104	70.0 - 130		116581793
TCLP Trichloroethylene	0.0184	0.020	mg/L	92.0	70.0 - 130		116581793
TCLP Vinyl chloride	0.0204	0.020	mg/L	102	70.0 - 130		116581793

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	665168	CCV	193100	193100	135200	251000		116581793	665168
1,4-DichlorobenzeneD4 (ISTD)	665168	LCS	185600	193100	135200	251000		116581794	665168
1,4-DichlorobenzeneD4 (ISTD)	665168	LCS Dup	191600	193100	135200	251000		116581795	665168
1,4-DichlorobenzeneD4 (ISTD)	665168	Blank	159600	193100	135200	251000		116581796	665168
1,4-DichlorobenzeneD4 (ISTD)	665168	Blank	157500	193100	135200	251000		116581797	665168
ChlorobenzeneD5 (ISTD)	665168	CCV	337100	337100	236000	438200		116581793	665168
ChlorobenzeneD5 (ISTD)	665168	LCS	326800	337100	236000	438200		116581794	665168
ChlorobenzeneD5 (ISTD)	665168	LCS Dup	341200	337100	236000	438200		116581795	665168
ChlorobenzeneD5 (ISTD)	665168	Blank	321700	337100	236000	438200		116581796	665168
ChlorobenzeneD5 (ISTD)	665168	Blank	337000	337100	236000	438200		116581797	665168
1,4-DichlorobenzeneD4 (ISTD)	1493584	MS	176600	193100	135200	251000		116581802	664874
1,4-DichlorobenzeneD4 (ISTD)	1493584	MSD	175400	193100	135200	251000		116581803	664874
ChlorobenzeneD5 (ISTD)	1493584	MS	309200	337100	236000	438200		116581802	664874
ChlorobenzeneD5 (ISTD)	1493584	MSD	315200	337100	236000	438200		116581803	664874

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	665168	LCS	11.22	11.22	11.16	11.28		116581794	665168
1,4-DichlorobenzeneD4 (ISTD)	665168	LCS Dup	11.22	11.22	11.16	11.28		116581795	665168
1,4-DichlorobenzeneD4 (ISTD)	665168	Blank	11.22	11.22	11.16	11.28		116581796	665168
1,4-DichlorobenzeneD4 (ISTD)	665168	Blank	11.22	11.22	11.16	11.28		116581797	665168
ChlorobenzeneD5 (ISTD)	665168	LCS	8.860	8.854	8.794	8.914		116581794	665168
ChlorobenzeneD5 (ISTD)	665168	LCS Dup	8.854	8.854	8.794	8.914		116581795	665168
ChlorobenzeneD5 (ISTD)	665168	Blank	8.860	8.854	8.794	8.914		116581796	665168
ChlorobenzeneD5 (ISTD)	665168	Blank	8.860	8.854	8.794	8.914		116581797	665168
1,4-DichlorobenzeneD4 (ISTD)	1493584	MS	11.22	11.22	11.16	11.28		116581802	664874
1,4-DichlorobenzeneD4 (ISTD)	1493584	MSD	11.22	11.22	11.16	11.28		116581803	664874
ChlorobenzeneD5 (ISTD)	1493584	MS	8.860	8.854	8.794	8.914		116581802	664874
ChlorobenzeneD5 (ISTD)	1493584	MSD	8.854	8.854	8.794	8.914		116581803	664874

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 1,1-Dichloroethene	665168	0.0222	0.020	mg/L	111	70.7 - 131	116581794	
TCLP 1,2-Dichloroethane	665168	0.021	0.020	mg/L	105	71.2 - 129	116581794	
TCLP 1,4 Dichlorobenzene	665168	0.0196	0.020	mg/L	98.0	78.4 - 121	116581794	

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LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP Benzene	665168	0.0206	0.020	mg/L	103	76.2 - 123	116581794	
TCLP Carbon tetrachloride	665168	0.0216	0.020	mg/L	108	68.3 - 131	116581794	
TCLP Chlorobenzene	665168	0.0199	0.020	mg/L	99.5	79.1 - 121	116581794	
TCLP Chloroform	665168	0.0214	0.020	mg/L	107	75.2 - 123	116581794	
TCLP MEK	665168	0.0189	0.020	mg/L	94.5	43.0 - 150	116581794	
TCLP Tetrachloroethylene	665168	0.0217	0.020	mg/L	108	74.8 - 130	116581794	
TCLP Trichloroethylene	665168	0.0192	0.020	mg/L	96.0	77.5 - 121	116581794	
TCLP Vinyl chloride	665168	0.0147	0.020	mg/L	73.5	43.0 - 134	116581794	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP 1,1-Dichloroethene	665168	0.0222	0.0195	0.020	70.7 - 131	111	97.5	mg/L	12.9	30.0
TCLP 1,2-Dichloroethane	665168	0.021	0.0199	0.020	71.2 - 129	105	99.5	mg/L	5.38	30.0
TCLP 1,4 Dichlorobenzene	665168	0.0196	0.0187	0.020	78.4 - 121	98.0	93.5	mg/L	4.70	30.0
TCLP Benzene	665168	0.0206	0.0196	0.020	76.2 - 123	103	98.0	mg/L	4.98	30.0
TCLP Carbon tetrachloride	665168	0.0216	0.0208	0.020	68.3 - 131	108	104	mg/L	3.77	30.0
TCLP Chlorobenzene	665168	0.0199	0.0192	0.020	79.1 - 121	99.5	96.0	mg/L	3.58	30.0
TCLP Chloroform	665168	0.0214	0.0195	0.020	75.2 - 123	107	97.5	mg/L	9.29	30.0
TCLP MEK	665168	0.0189	0.0193	0.020	43.0 - 150	94.5	96.5	mg/L	2.09	30.0
TCLP Tetrachloroethylene	665168	0.0217	0.0201	0.020	74.8 - 130	108	100	mg/L	7.69	30.0
TCLP Trichloroethylene	665168	0.0192	0.0183	0.020	77.5 - 121	96.0	91.5	mg/L	4.80	30.0
TCLP Vinyl chloride	665168	0.0147	0.0135	0.020	43.0 - 134	73.5	67.5	mg/L	8.51	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 1,1-Dichloroethene	1493584	0.207	0	ND	0.200	61.3 - 136	104		mg/L		30.0
TCLP 1,2-Dichloroethane	1493584	0.206	0	ND	0.200	62.1 - 133	103		mg/L		30.0
TCLP 1,4 Dichlorobenzene	1493584	0.197	0	ND	0.200	74.1 - 123	98.5		mg/L		30.0
TCLP Benzene	1493584	0.211	0	ND	0.200	66.5 - 130	106		mg/L		30.0
TCLP Carbon tetrachloride	1493584	0.218	0	ND	0.200	60.3 - 136	109		mg/L		30.0
TCLP Chlorobenzene	1493584	0.200	0	ND	0.200	75.1 - 127	100		mg/L		30.0
TCLP Chloroform	1493584	0.208	0	0.0041	0.200	62.3 - 133	102		mg/L		30.0
TCLP MEK	1493584	0.208	0	0.0214	0.200	5.29 - 184	93.3		mg/L		30.0
TCLP Tetrachloroethylene	1493584	0.210	0	ND	0.200	71.3 - 130	105		mg/L		30.0
TCLP Trichloroethylene	1493584	0.182	0	ND	0.200	65.2 - 128	91.0		mg/L		30.0
TCLP Vinyl chloride	1493584	0.141	0	ND	0.200	26.9 - 140	70.5		mg/L		30.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 1,1-Dichloroethene	1493584	0.207	0.202	ND	0.200	61.3 - 136	104	101	mg/L	2.44	30.0
TCLP 1,2-Dichloroethane	1493584	0.206	0.206	ND	0.200	62.1 - 133	103	103	mg/L	0	30.0
TCLP 1,4 Dichlorobenzene	1493584	0.197	0.192	ND	0.200	74.1 - 123	98.5	96.0	mg/L	2.57	30.0
TCLP Benzene	1493584	0.211	0.203	ND	0.200	66.5 - 130	106	102	mg/L	3.86	30.0
TCLP Carbon tetrachloride	1493584	0.218	0.202	ND	0.200	60.3 - 136	109	101	mg/L	7.62	30.0
TCLP Chlorobenzene	1493584	0.200	0.193	ND	0.200	75.1 - 127	100	96.5	mg/L	3.56	30.0
TCLP Chloroform	1493584	0.208	0.207	0.0041	0.200	62.3 - 133	102	101	mg/L	0.492	30.0
TCLP MEK	1493584	0.208	0.217	0.0214	0.200	5.29 - 184	93.3	97.8	mg/L	4.71	30.0
TCLP Tetrachloroethylene	1493584	0.210	0.214	ND	0.200	71.3 - 130	105	107	mg/L	1.89	30.0
TCLP Trichloroethylene	1493584	0.182	0.179	ND	0.200	65.2 - 128	91.0	89.5	mg/L	1.66	30.0
TCLP Vinyl chloride	1493584	0.141	0.139	ND	0.200	26.9 - 140	70.5	69.5	mg/L	1.43	30.0

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Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1,2-DCA-d4 (SURR)	665168	CCV	0.0218	0.020	mg/L	109	41.4 - 147	116581793
1,2-DCA-d4 (SURR)	665168	LCS	0.0219	0.020	mg/L	110	41.4 - 147	116581794
1,2-DCA-d4 (SURR)	665168	LCS Dup	0.0216	0.020	mg/L	108	41.4 - 147	116581795
1,2-DCA-d4 (SURR)	665168	Blank	0.0222	0.020	mg/L	111	41.4 - 147	116581796
1,2-DCA-d4 (SURR)	665168	Blank	0.0202	0.020	mg/L	101	41.4 - 147	116581797
Bromofluorobenzene (SURR)	665168	CCV	0.0206	0.020	mg/L	103	71.5 - 121	116581793
Bromofluorobenzene (SURR)	665168	LCS	0.0209	0.020	mg/L	104	71.5 - 121	116581794
Bromofluorobenzene (SURR)	665168	LCS Dup	0.0214	0.020	mg/L	107	71.5 - 121	116581795
Bromofluorobenzene (SURR)	665168	Blank	0.0203	0.020	mg/L	102	71.5 - 121	116581796
Bromofluorobenzene (SURR)	665168	Blank	0.0211	0.020	mg/L	106	71.5 - 121	116581797
Dibromofluoromethane (SURR)	665168	CCV	0.0222	0.020	mg/L	111	57.9 - 122	116581793
Dibromofluoromethane (SURR)	665168	LCS	0.0216	0.020	mg/L	108	57.9 - 122	116581794
Dibromofluoromethane (SURR)	665168	LCS Dup	0.0219	0.020	mg/L	110	57.9 - 122	116581795
Dibromofluoromethane (SURR)	665168	Blank	0.0216	0.020	mg/L	108	57.9 - 122	116581796
Dibromofluoromethane (SURR)	665168	Blank	0.0201	0.020	mg/L	100	57.9 - 122	116581797
TolueneD8 (SURR)	665168	CCV	0.021	0.020	mg/L	105	75.5 - 118	116581793
TolueneD8 (SURR)	665168	LCS	0.0211	0.020	mg/L	106	75.5 - 118	116581794
TolueneD8 (SURR)	665168	LCS Dup	0.0204	0.020	mg/L	102	75.5 - 118	116581795
TolueneD8 (SURR)	665168	Blank	0.0197	0.020	mg/L	98.5	75.5 - 118	116581796
TolueneD8 (SURR)	665168	Blank	0.0202	0.020	mg/L	101	75.5 - 118	116581797
1,2-DCA-d4 (SURR)	1493584	MS	0.0218	0.020	mg/L	109	41.4 - 147	116581802
1,2-DCA-d4 (SURR)	1493584	MSD	0.0212	0.020	mg/L	106	41.4 - 147	116581803
Bromofluorobenzene (SURR)	1493584	MS	0.0209	0.020	mg/L	104	71.5 - 121	116581802
Bromofluorobenzene (SURR)	1493584	MSD	0.0208	0.020	mg/L	104	71.5 - 121	116581803
Dibromofluoromethane (SURR)	1493584	MS	0.0216	0.020	mg/L	108	57.9 - 122	116581802
Dibromofluoromethane (SURR)	1493584	MSD	0.0222	0.020	mg/L	111	57.9 - 122	116581803
TolueneD8 (SURR)	1493584	MS	0.0207	0.020	mg/L	104	75.5 - 118	116581802
TolueneD8 (SURR)	1493584	MSD	0.0206	0.020	mg/L	103	75.5 - 118	116581803

665231 Solid & Chemical Materials **EPA 8081A**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Chlordane	664420	ND	0.00000180	0.00001	mg/L	116583271	
TCLP Endrin	664420	ND	0.00000850	0.00001	mg/L	116583271	
TCLP gamma-BHC (Lindane)	664420	ND	0.00000890	0.00001	mg/L	116583271	
TCLP Heptachlor	664420	ND	0.00000140	0.00001	mg/L	116583271	
TCLP Heptachlor Epoxide	664420	ND	0.00000120	0.00001	mg/L	116583271	
TCLP Methoxychlor	664420	ND	0.00000560	0.00001	mg/L	116583271	
TCLP Toxaphene	664420	ND	0.00000370	0.00001	mg/L	116583271	
TCLP Chlordane	664421	ND	0.00000180	0.00001	mg/L	116583270	

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Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Endrin	664421	ND	0.00000850	0.00001	mg/L	116583270	
TCLP gamma-BHC (Lindane)	664421	ND	0.00000890	0.00001	mg/L	116583270	
TCLP Heptachlor	664421	ND	0.00000140	0.00001	mg/L	116583270	
TCLP Heptachlor Epoxide	664421	ND	0.00000120	0.00001	mg/L	116583270	
TCLP Methoxychlor	664421	ND	0.00000560	0.00001	mg/L	116583270	
TCLP Toxaphene	664421	ND	0.00000370	0.00001	mg/L	116583270	
TCLP Chlordane	665008	ND	0.00000180	0.00001	mg/L	116583266	
TCLP Endrin	665008	ND	0.00000850	0.00001	mg/L	116583266	
TCLP gamma-BHC (Lindane)	665008	ND	0.00000890	0.00001	mg/L	116583266	
TCLP Heptachlor	665008	ND	0.00000140	0.00001	mg/L	116583266	
TCLP Heptachlor Epoxide	665008	ND	0.00000120	0.00001	mg/L	116583266	
TCLP Methoxychlor	665008	ND	0.00000560	0.00001	mg/L	116583266	
TCLP Toxaphene	665008	ND	0.00000370	0.00001	mg/L	116583266	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Endrin	0.104	0.100	mg/L	104	80.0 - 120		116583259
TCLP Endrin	0.104	0.100	mg/L	104	80.0 - 120		116583282
TCLP gamma-BHC (Lindane)	0.101	0.100	mg/L	101	80.0 - 120		116583259
TCLP gamma-BHC (Lindane)	0.0982	0.100	mg/L	98.2	80.0 - 120		116583282
TCLP Heptachlor	0.102	0.100	mg/L	102	80.0 - 120		116583259
TCLP Heptachlor	0.0987	0.100	mg/L	98.7	80.0 - 120		116583282
TCLP Heptachlor Epoxide	0.105	0.100	mg/L	105	80.0 - 120		116583259
TCLP Heptachlor Epoxide	0.109	0.100	mg/L	109	80.0 - 120		116583282
TCLP Methoxychlor	0.113	0.100	mg/L	113	80.0 - 120		116583259
TCLP Methoxychlor	0.115	0.100	mg/L	115	80.0 - 120		116583282

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP Endrin	665008	0.000843	0.001	mg/L	84.3	42.0 - 136	116583267	
TCLP gamma-BHC (Lindane)	665008	0.000758	0.001	mg/L	75.8	33.6 - 125	116583267	
TCLP Heptachlor	665008	0.000719	0.001	mg/L	71.9	19.4 - 121	116583267	
TCLP Heptachlor Epoxide	665008	0.000863	0.001	mg/L	86.3	43.4 - 123	116583267	
TCLP Methoxychlor	665008	0.000908	0.001	mg/L	90.8	32.1 - 143	116583267	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP Endrin	665008	0.000843	0.000803	0.001	42.0 - 136	84.3	80.3	mg/L	4.86	30.0
TCLP gamma-BHC (Lindane)	665008	0.000758	0.000741	0.001	33.6 - 125	75.8	74.1	mg/L	2.27	30.0
TCLP Heptachlor	665008	0.000719	0.00071	0.001	19.4 - 121	71.9	71.0	mg/L	1.26	30.0
TCLP Heptachlor Epoxide	665008	0.000863	0.000809	0.001	43.4 - 123	86.3	80.9	mg/L	6.46	30.0
TCLP Methoxychlor	665008	0.000908	0.000874	0.001	32.1 - 143	90.8	87.4	mg/L	3.82	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Endrin	1493980	0.00428	0	ND	0.005	21.4 - 154	85.6		mg/L		30.0
TCLP gamma-BHC (Lindane)	1493980	0.00381	0	ND	0.005	13.4 - 137	76.2		mg/L		30.0

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MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Heptachlor	1493980	0.00361	0	ND	0.005	6.35 - 126	72.2		mg/L		30.0
TCLP Heptachlor Epoxide	1493980	0.00422	0	ND	0.005	26.2 - 133	84.4		mg/L		30.0
TCLP Methoxychlor	1493980	0.00469	0	ND	0.005	3.85 - 178	93.8		mg/L		30.0
TCLP Endrin	1493988	0.00472	0	ND	0.005	21.4 - 154	94.4		mg/L		30.0
TCLP gamma-BHC (Lindane)	1493988	0.00457	0	ND	0.005	13.4 - 137	91.4		mg/L		30.0
TCLP Heptachlor	1493988	0.00354	0	ND	0.005	6.35 - 126	70.8		mg/L		30.0
TCLP Heptachlor Epoxide	1493988	0.00494	0	ND	0.005	26.2 - 133	98.8		mg/L		30.0
TCLP Methoxychlor	1493988	0.00542	0	ND	0.005	3.85 - 178	108		mg/L		30.0
TCLP Endrin	1494425	0.00373	0	ND	0.005	21.4 - 154	74.6		mg/L		30.0
TCLP gamma-BHC (Lindane)	1494425	0.00325	0	ND	0.005	13.4 - 137	65.0		mg/L		30.0
TCLP Heptachlor	1494425	0.00314	0	ND	0.005	6.35 - 126	62.8		mg/L		30.0
TCLP Heptachlor Epoxide	1494425	0.00363	0	ND	0.005	26.2 - 133	72.6		mg/L		30.0
TCLP Methoxychlor	1494425	0.00432	0	ND	0.005	3.85 - 178	86.4		mg/L		30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Decachlorobiphenyl	577520	CCV	0.107	0.100	mg/L	107	10.0 - 150	116583259
Decachlorobiphenyl	577520	CCV	0.104	0.100	mg/L	104	10.0 - 150	116583282
Tetrachloro-m-Xylene (Surr)	577520	CCV	0.105	0.100	mg/L	105	10.0 - 150	116583259
Tetrachloro-m-Xylene (Surr)	577520	CCV	0.105	0.100	mg/L	105	10.0 - 150	116583282
Decachlorobiphenyl	664420	Blank	0.0836	0.100	mg/L	83.6	10.0 - 150	116583271
Tetrachloro-m-Xylene (Surr)	664420	Blank	0.0349	0.100	mg/L	34.9	10.0 - 150	116583271
Decachlorobiphenyl	664421	Blank	0.0838	0.100	mg/L	83.8	10.0 - 150	116583270
Tetrachloro-m-Xylene (Surr)	664421	Blank	0.0399	0.100	mg/L	39.9	10.0 - 150	116583270
Decachlorobiphenyl	665008	Blank	0.0633	0.100	mg/L	63.3	10.0 - 150	116583266
Decachlorobiphenyl	665008	LCS	0.0798	0.100	mg/L	79.8	10.0 - 150	116583267
Decachlorobiphenyl	665008	LCS Dup	0.0802	0.100	mg/L	80.2	10.0 - 150	116583268
Tetrachloro-m-Xylene (Surr)	665008	Blank	0.0355	0.100	mg/L	35.5	10.0 - 150	116583266
Tetrachloro-m-Xylene (Surr)	665008	LCS	0.0692	0.100	mg/L	69.2	10.0 - 150	116583267
Tetrachloro-m-Xylene (Surr)	665008	LCS Dup	0.0675	0.100	mg/L	67.5	10.0 - 150	116583268
Decachlorobiphenyl	1493980	MS	0.00404	0.005	mg/L	80.8	10.0 - 150	116583279
Tetrachloro-m-Xylene (Surr)	1493980	MS	0.00315	0.005	mg/L	63.0	10.0 - 150	116583279
Decachlorobiphenyl	1493988	MS	0.00249	0.005	mg/L	49.8	10.0 - 150	116583276
Tetrachloro-m-Xylene (Surr)	1493988	MS	0.00376	0.005	mg/L	75.2	10.0 - 150	116583276
Decachlorobiphenyl	1494425	MS	0.00327	0.005	mg/L	65.4	10.0 - 150	116583273
Tetrachloro-m-Xylene (Surr)	1494425	MS	0.00283	0.005	mg/L	56.6	10.0 - 150	116583273

665495 Solid & Chemical Materials **EPA 8270C**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP 2,4,5-Trichlorophenol	664420	ND	0.000201	0.001	mg/L	116587576	
TCLP 2,4,6-Trichlorophenol	664420	ND	0.000308	0.001	mg/L	116587576	
TCLP 2,4-Dinitrotoluene	664420	ND	0.000282	0.001	mg/L	116587576	
TCLP 2-Methylphenol (o-Cresol)	664420	ND	0.00033	0.001	mg/L	116587576	
TCLP 3&4-Methylphenol (m&p-Creso	664420	ND	0.000297	0.001	mg/L	116587576	
TCLP bis(2-Chloroethyl)ether	664420	ND	0.000443	0.001	mg/L	116587576	
TCLP Hexachlorobenzene	664420	ND	0.000292	0.001	mg/L	116587576	

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Quality Control

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Hexachlorobutadiene	664420	ND	0.000276	0.001	mg/L	116587576	
TCLP Hexachloroethane	664420	ND	0.000258	0.001	mg/L	116587576	
TCLP Nitrobenzene	664420	ND	0.00038	0.001	mg/L	116587576	
TCLP Pentachlorophenol	664420	ND	0.000332	0.001	mg/L	116587576	
TCLP Pyridine (Reg. Limit 5)	664420	ND	0.000492	0.001	mg/L	116587576	
TCLP 2,4,5-Trichlorophenol	664421	ND	0.000201	0.001	mg/L	116587577	
TCLP 2,4,6-Trichlorophenol	664421	ND	0.000308	0.001	mg/L	116587577	
TCLP 2,4-Dinitrotoluene	664421	ND	0.000282	0.001	mg/L	116587577	
TCLP 2-Methylphenol (o-Cresol)	664421	ND	0.00033	0.001	mg/L	116587577	
TCLP 3&4-Methylphenol (m&p-Creso	664421	ND	0.000297	0.001	mg/L	116587577	
TCLP bis(2-Chloroethyl)ether	664421	ND	0.000443	0.001	mg/L	116587577	
TCLP Hexachlorobenzene	664421	ND	0.000292	0.001	mg/L	116587577	
TCLP Hexachlorobutadiene	664421	ND	0.000276	0.001	mg/L	116587577	
TCLP Hexachloroethane	664421	ND	0.000258	0.001	mg/L	116587577	
TCLP Nitrobenzene	664421	ND	0.00038	0.001	mg/L	116587577	
TCLP Pentachlorophenol	664421	ND	0.000332	0.001	mg/L	116587577	
TCLP Pyridine (Reg. Limit 5)	664421	ND	0.000492	0.001	mg/L	116587577	
TCLP 2,4,5-Trichlorophenol	664797	ND	0.000201	0.001	mg/L	116587573	
TCLP 2,4,6-Trichlorophenol	664797	ND	0.000308	0.001	mg/L	116587573	
TCLP 2,4-Dinitrotoluene	664797	ND	0.000282	0.001	mg/L	116587573	
TCLP 2-Methylphenol (o-Cresol)	664797	ND	0.00033	0.001	mg/L	116587573	
TCLP 3&4-Methylphenol (m&p-Creso	664797	ND	0.000297	0.001	mg/L	116587573	
TCLP bis(2-Chloroethyl)ether	664797	ND	0.000443	0.001	mg/L	116587573	
TCLP Hexachlorobenzene	664797	ND	0.000292	0.001	mg/L	116587573	
TCLP Hexachlorobutadiene	664797	ND	0.000276	0.001	mg/L	116587573	
TCLP Hexachloroethane	664797	ND	0.000258	0.001	mg/L	116587573	
TCLP Nitrobenzene	664797	ND	0.00038	0.001	mg/L	116587573	
TCLP Pentachlorophenol	664797	ND	0.000332	0.001	mg/L	116587573	
TCLP Pyridine (Reg. Limit 5)	664797	ND	0.000492	0.001	mg/L	116587573	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP 2,4,5-Trichlorophenol	48.3	50.0	mg/L	96.6	70.0 - 130		116587572
TCLP 2,4,6-Trichlorophenol	49.6	50.0	mg/L	99.2	70.0 - 130		116587572
TCLP 2,4-Dinitrotoluene	48.6	50.0	mg/L	97.2	70.0 - 130		116587572
TCLP 2-Methylphenol (o-Cresol)	45.4	50.0	mg/L	90.8	70.0 - 130		116587572
TCLP 3&4-Methylphenol (m&p-Creso	45.9	50.0	mg/L	91.8	70.0 - 130		116587572
TCLP bis(2-Chloroethyl)ether	50.5	50.0	mg/L	101	70.0 - 130		116587572
TCLP Hexachlorobenzene	49.1	50.0	mg/L	98.2	70.0 - 130		116587572
TCLP Hexachlorobutadiene	45.2	50.0	mg/L	90.4	70.0 - 130		116587572
TCLP Hexachloroethane	45.9	50.0	mg/L	91.8	70.0 - 130		116587572
TCLP Nitrobenzene	43.8	50.0	mg/L	87.6	70.0 - 130		116587572
TCLP Pentachlorophenol	42.9	50.0	mg/L	85.8	70.0 - 130		116587572

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Pyridine (Reg. Limit 5)	41.0	50.0	mg/L	82.0	70.0 - 130		116587572

DFTPP

Parameter		RefMass	Reading	%	Limits%	Out	File
DFTPP Mass 127	577951	198	51342	53.2	40.0 - 60.0		116587571
DFTPP Mass 197	577951	198	0	0.0	0 - 1.00		116587571
DFTPP Mass 198	577951	198	96453	100.0	100 - 100		116587571
DFTPP Mass 199	577951	198	6423	6.7	5.00 - 9.00		116587571
DFTPP Mass 275	577951	198	22701	23.5	10.0 - 30.0		116587571
DFTPP Mass 365	577951	198	2489	2.6	1.00 - 100		116587571
DFTPP Mass 441	577951	443	11220	77.8	0 - 100		116587571
DFTPP Mass 442	577951	198	75029	77.8	40.0 - 100		116587571
DFTPP Mass 443	577951	442	14423	19.2	17.0 - 23.0		116587571
DFTPP Mass 51	577951	198	36043	37.4	30.0 - 60.0		116587571
DFTPP Mass 68	577951	69.0	0	0.0	0 - 2.00		116587571
DFTPP Mass 69	577951	198	43787	45.4	0 - 100		116587571
DFTPP Mass 70	577951	69.0	162	0.4	0 - 2.00		116587571

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	578179	CCV	229800	229800	114900	344700		116587572	578179
Acenaphthene-d10-ISTD	578179	CCV	494000	494000	247000	741000		116587572	578179
Naphthalene-d8-ISTD	578179	CCV	888900	888900	444500	1333000		116587572	578179
Phenanthrene-d10-ISTD	578179	CCV	682600	682600	341300	1024000		116587572	578179
1,4-Dichlorobenzene-d4-ISTD	664420	Blank	196500	229800	114900	344700		116587576	664420
Acenaphthene-d10-ISTD	664420	Blank	413500	494000	247000	741000		116587576	664420
Naphthalene-d8-ISTD	664420	Blank	757700	888900	444500	1333000		116587576	664420
Phenanthrene-d10-ISTD	664420	Blank	543600	682600	341300	1024000		116587576	664420
1,4-Dichlorobenzene-d4-ISTD	664421	Blank	202400	229800	114900	344700		116587577	664421
Acenaphthene-d10-ISTD	664421	Blank	408000	494000	247000	741000		116587577	664421
Naphthalene-d8-ISTD	664421	Blank	758000	888900	444500	1333000		116587577	664421
Phenanthrene-d10-ISTD	664421	Blank	502200	682600	341300	1024000		116587577	664421
1,4-Dichlorobenzene-d4-ISTD	664797	Blank	206200	229800	114900	344700		116587573	664797
1,4-Dichlorobenzene-d4-ISTD	664797	LCS	193000	229800	114900	344700		116587574	664797
1,4-Dichlorobenzene-d4-ISTD	664797	LCS Dup	196900	229800	114900	344700		116587575	664797
Acenaphthene-d10-ISTD	664797	Blank	409100	494000	247000	741000		116587573	664797
Acenaphthene-d10-ISTD	664797	LCS	401600	494000	247000	741000		116587574	664797
Acenaphthene-d10-ISTD	664797	LCS Dup	418200	494000	247000	741000		116587575	664797
Naphthalene-d8-ISTD	664797	Blank	768100	888900	444500	1333000		116587573	664797
Naphthalene-d8-ISTD	664797	LCS	744700	888900	444500	1333000		116587574	664797
Naphthalene-d8-ISTD	664797	LCS Dup	760800	888900	444500	1333000		116587575	664797
Phenanthrene-d10-ISTD	664797	Blank	517500	682600	341300	1024000		116587573	664797
Phenanthrene-d10-ISTD	664797	LCS	540100	682600	341300	1024000		116587574	664797
Phenanthrene-d10-ISTD	664797	LCS Dup	568300	682600	341300	1024000		116587575	664797
1,4-Dichlorobenzene-d4-ISTD	1493988	MS	205400	229800	114900	344700		116587579	664797
Acenaphthene-d10-ISTD	1493988	MS	424000	494000	247000	741000		116587579	664797

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IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
Naphthalene-d8-ISTD	1493988	MS	777500	888900	444500	1333000		116587579	664797
Phenanthrene-d10-ISTD	1493988	MS	562800	682600	341300	1024000		116587579	664797
1,4-Dichlorobenzene-d4-ISTD	1494126	MS	190500	229800	114900	344700		116587584	664797
Acenaphthene-d10-ISTD	1494126	MS	393100	494000	247000	741000		116587584	664797
Naphthalene-d8-ISTD	1494126	MS	727600	888900	444500	1333000		116587584	664797
Phenanthrene-d10-ISTD	1494126	MS	521300	682600	341300	1024000		116587584	664797

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	578179	CCV	6.210	6.210	6.150	6.270		116587572	578179
Acenaphthene-d10-ISTD	578179	CCV	11.97	11.97	11.91	12.03		116587572	578179
Naphthalene-d8-ISTD	578179	CCV	8.280	8.280	8.220	8.340		116587572	578179
Phenanthrene-d10-ISTD	578179	CCV	15.20	15.20	15.14	15.26		116587572	578179
1,4-Dichlorobenzene-d4-ISTD	664420	Blank	6.200	6.210	6.150	6.270		116587576	664420
Acenaphthene-d10-ISTD	664420	Blank	11.96	11.97	11.91	12.03		116587576	664420
Naphthalene-d8-ISTD	664420	Blank	8.260	8.280	8.220	8.340		116587576	664420
Phenanthrene-d10-ISTD	664420	Blank	15.19	15.20	15.14	15.26		116587576	664420
1,4-Dichlorobenzene-d4-ISTD	664421	Blank	6.210	6.210	6.150	6.270		116587577	664421
Acenaphthene-d10-ISTD	664421	Blank	11.96	11.97	11.91	12.03		116587577	664421
Naphthalene-d8-ISTD	664421	Blank	8.260	8.280	8.220	8.340		116587577	664421
Phenanthrene-d10-ISTD	664421	Blank	15.19	15.20	15.14	15.26		116587577	664421
1,4-Dichlorobenzene-d4-ISTD	664797	Blank	6.210	6.210	6.150	6.270		116587573	664797
1,4-Dichlorobenzene-d4-ISTD	664797	LCS	6.210	6.210	6.150	6.270		116587574	664797
1,4-Dichlorobenzene-d4-ISTD	664797	LCS Dup	6.210	6.210	6.150	6.270		116587575	664797
Acenaphthene-d10-ISTD	664797	Blank	11.96	11.97	11.91	12.03		116587573	664797
Acenaphthene-d10-ISTD	664797	LCS	11.96	11.97	11.91	12.03		116587574	664797
Acenaphthene-d10-ISTD	664797	LCS Dup	11.96	11.97	11.91	12.03		116587575	664797
Naphthalene-d8-ISTD	664797	Blank	8.260	8.280	8.220	8.340		116587573	664797
Naphthalene-d8-ISTD	664797	LCS	8.270	8.280	8.220	8.340		116587574	664797
Naphthalene-d8-ISTD	664797	LCS Dup	8.260	8.280	8.220	8.340		116587575	664797
Phenanthrene-d10-ISTD	664797	Blank	15.19	15.20	15.14	15.26		116587573	664797
Phenanthrene-d10-ISTD	664797	LCS	15.19	15.20	15.14	15.26		116587574	664797
Phenanthrene-d10-ISTD	664797	LCS Dup	15.19	15.20	15.14	15.26		116587575	664797
1,4-Dichlorobenzene-d4-ISTD	1493988	MS	6.210	6.210	6.150	6.270		116587579	664797
Acenaphthene-d10-ISTD	1493988	MS	11.96	11.97	11.91	12.03		116587579	664797
Naphthalene-d8-ISTD	1493988	MS	8.270	8.280	8.220	8.340		116587579	664797
Phenanthrene-d10-ISTD	1493988	MS	15.19	15.20	15.14	15.26		116587579	664797
1,4-Dichlorobenzene-d4-ISTD	1494126	MS	6.210	6.210	6.150	6.270		116587584	664797
Acenaphthene-d10-ISTD	1494126	MS	11.96	11.97	11.91	12.03		116587584	664797
Naphthalene-d8-ISTD	1494126	MS	8.270	8.280	8.220	8.340		116587584	664797
Phenanthrene-d10-ISTD	1494126	MS	15.19	15.20	15.14	15.26		116587584	664797

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 2,4,5-Trichlorophenol	664797	0.0185	0.025	mg/L	74.0	40.4 - 118	116587574	

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LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 2,4,6-Trichlorophenol	664797	0.0193	0.025	mg/L	77.2	39.2 - 114	116587574	
TCLP 2,4-Dinitrotoluene	664797	0.0192	0.025	mg/L	76.8	36.9 - 133	116587574	
TCLP 2-Methylphenol (o-Cresol)	664797	0.0128	0.025	mg/L	51.2	11.7 - 103	116587574	
TCLP 3&4-Methylphenol (m&p-Creso	664797	0.0118	0.025	mg/L	47.2	0.100 - 132	116587574	
TCLP bis(2-Chloroethyl)ether	664797	0.0159	0.025	mg/L	63.6	24.1 - 122	116587574	
TCLP Hexachlorobenzene	664797	0.0196	0.025	mg/L	78.4	38.7 - 126	116587574	
TCLP Hexachlorobutadiene	664797	0.0124	0.025	mg/L	49.6	10.2 - 95.4	116587574	
TCLP Hexachloroethane	664797	0.0124	0.025	mg/L	49.6	10.6 - 94.1	116587574	
TCLP Nitrobenzene	664797	0.0177	0.025	mg/L	70.8	27.5 - 120	116587574	
TCLP Pentachlorophenol	664797	0.0159	0.025	mg/L	63.6	17.3 - 132	116587574	
TCLP Pyridine (Reg. Limit 5)	664797	0.00509	0.025	mg/L	20.4	5.47 - 83.4	116587574	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP 2,4,5-Trichlorophenol	664797	0.0185	0.0176	0.025	40.4 - 118	74.0	70.4	mg/L	4.99	30.0
TCLP 2,4,6-Trichlorophenol	664797	0.0193	0.018	0.025	39.2 - 114	77.2	72.0	mg/L	6.97	30.0
TCLP 2,4-Dinitrotoluene	664797	0.0192	0.0182	0.025	36.9 - 133	76.8	72.8	mg/L	5.35	30.0
TCLP 2-Methylphenol (o-Cresol)	664797	0.0128	0.0135	0.025	11.7 - 103	51.2	54.0	mg/L	5.32	30.0
TCLP 3&4-Methylphenol (m&p-Creso	664797	0.0118	0.0127	0.025	0.100 - 132	47.2	50.8	mg/L	7.35	30.0
TCLP bis(2-Chloroethyl)ether	664797	0.0159	0.0179	0.025	24.1 - 122	63.6	71.6	mg/L	11.8	30.0
TCLP Hexachlorobenzene	664797	0.0196	0.0177	0.025	38.7 - 126	78.4	70.8	mg/L	10.2	30.0
TCLP Hexachlorobutadiene	664797	0.0124	0.012	0.025	10.2 - 95.4	49.6	48.0	mg/L	3.28	30.0
TCLP Hexachloroethane	664797	0.0124	0.0123	0.025	10.6 - 94.1	49.6	49.2	mg/L	0.810	30.0
TCLP Nitrobenzene	664797	0.0177	0.017	0.025	27.5 - 120	70.8	68.0	mg/L	4.03	30.0
TCLP Pentachlorophenol	664797	0.0159	0.0161	0.025	17.3 - 132	63.6	64.4	mg/L	1.25	30.0
TCLP Pyridine (Reg. Limit 5)	664797	0.00509	0.00508	0.025	5.47 - 83.4	20.4	20.3	mg/L	0.491	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 2,4,5-Trichlorophenol	1493988	0.182	0	ND	0.250	18.3 - 144	72.8		mg/L		30.0
TCLP 2,4,6-Trichlorophenol	1493988	0.193	0	ND	0.250	21.3 - 139	77.2		mg/L		30.0
TCLP 2,4-Dinitrotoluene	1493988	0.185	0	ND	0.250	19.7 - 161	74.0		mg/L		30.0
TCLP 2-Methylphenol (o-Cresol)	1493988	0.139	0	ND	0.250	6.97 - 119	55.6		mg/L		30.0
TCLP 3&4-Methylphenol (m&p-Creso	1493988	0.132	0	ND	0.250	0.100 - 230	52.8		mg/L		30.0
TCLP bis(2-Chloroethyl)ether	1493988	0.144	0	ND	0.250	11.0 - 128	57.6		mg/L		30.0
TCLP Hexachlorobenzene	1493988	0.188	0	ND	0.250	28.1 - 147	75.2		mg/L		30.0
TCLP Hexachlorobutadiene	1493988	0.120	0	ND	0.250	0.100 - 94.9	48.0		mg/L		30.0
TCLP Hexachloroethane	1493988	0.113	0	ND	0.250	0.100 - 101	45.2		mg/L		30.0
TCLP Nitrobenzene	1493988	0.169	0	ND	0.250	15.6 - 129	67.6		mg/L		30.0
TCLP Pentachlorophenol	1493988	0.185	0	ND	0.250	3.96 - 159	74.0		mg/L		30.0
TCLP Pyridine (Reg. Limit 5)	1493988	0.0386	0	0.0182	0.250	0.100 - 90.0	8.16		mg/L		30.0
TCLP 2,4,5-Trichlorophenol	1494126	0.182	0	ND	0.250	18.3 - 144	72.8		mg/L		30.0
TCLP 2,4,6-Trichlorophenol	1494126	0.199	0	ND	0.250	21.3 - 139	79.6		mg/L		30.0

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Quality Control

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 2,4-Dinitrotoluene	1494126	0.183	0	ND	0.250	19.7 - 161	73.2		mg/L		30.0
TCLP 2-Methylphenol (o-Cresol)	1494126	0.146	0	ND	0.250	6.97 - 119	58.4		mg/L		30.0
TCLP 3&4-Methylphenol (m&p-Creso	1494126	0.138	0	ND	0.250	0.100 - 230	55.2		mg/L		30.0
TCLP bis(2-Chloroethyl)ether	1494126	0.156	0	ND	0.250	11.0 - 128	62.4		mg/L		30.0
TCLP Hexachlorobenzene	1494126	0.197	0	ND	0.250	28.1 - 147	78.8		mg/L		30.0
TCLP Hexachlorobutadiene	1494126	0.122	0	ND	0.250	0.100 - 94.9	48.8		mg/L		30.0
TCLP Hexachloroethane	1494126	0.119	0	ND	0.250	0.100 - 101	47.6		mg/L		30.0
TCLP Nitrobenzene	1494126	0.181	0	ND	0.250	15.6 - 129	72.4		mg/L		30.0
TCLP Pentachlorophenol	1494126	0.166	0	ND	0.250	3.96 - 159	66.4		mg/L		30.0
TCLP Pyridine (Reg. Limit 5)	1494126	0.0473	0	ND	0.250	0.100 - 90.0	18.9		mg/L		30.0

SPCC

Parameter	Sample	RF	Minimum	File
TCLP 2,4-Dinitrophenol	578179	46.8	0.050	116587572
TCLP 4-Nitrophenol	578179	52.2	0.050	116587572
TCLP Hexachlorocyclopentadiene	578179	45.0	0.050	116587572
TCLP N-Nitroso-n-propylamine	578179	40.6	0.050	116587572

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	578179	CCV	46.7	100	mg/L	46.7	4.84 - 133	116587572
2-Fluorobiphenyl-SURR	578179	CCV	51.4	50.0	mg/L	103	3.58 - 121	116587572
2-Fluorophenol-SURR	578179	CCV	45.3	100	mg/L	45.3	0.100 - 90.1	116587572
4-Terphenyl-d14-SURR	578179	CCV	50.0	50.0	mg/L	100	0.100 - 148	116587572
Nitrobenzene-d5-SURR	578179	CCV	44.6	50.0	mg/L	89.2	0.100 - 130	116587572
Phenol-d6-SURR	578179	CCV	44.4	100	mg/L	44.4	0.100 - 84.9	116587572
2,4,6-Tribromophenol	664420	Blank	1.81	3.33	mg/L	54.4	4.84 - 133	116587576
2-Fluorobiphenyl-SURR	664420	Blank	14.9	50.0	mg/L	29.8	3.58 - 121	116587576
2-Fluorophenol-SURR	664420	Blank	36.2	100	mg/L	36.2	0.100 - 90.1	116587576
4-Terphenyl-d14-SURR	664420	Blank	18.7	50.0	mg/L	37.4	0.100 - 148	116587576
Nitrobenzene-d5-SURR	664420	Blank	16.8	50.0	mg/L	33.6	0.100 - 130	116587576
Phenol-d6-SURR	664420	Blank	25.0	100	mg/L	25.0	0.100 - 84.9	116587576
2,4,6-Tribromophenol	664421	Blank	1.63	3.33	mg/L	48.9	4.84 - 133	116587577
2-Fluorobiphenyl-SURR	664421	Blank	15.3	50.0	mg/L	30.6	3.58 - 121	116587577
2-Fluorophenol-SURR	664421	Blank	38.7	100	mg/L	38.7	0.100 - 90.1	116587577
4-Terphenyl-d14-SURR	664421	Blank	20.3	50.0	mg/L	40.6	0.100 - 148	116587577
Nitrobenzene-d5-SURR	664421	Blank	17.4	50.0	mg/L	34.8	0.100 - 130	116587577
Phenol-d6-SURR	664421	Blank	25.7	100	mg/L	25.7	0.100 - 84.9	116587577
2,4,6-Tribromophenol	664797	Blank	1.42	3.33	mg/L	42.6	4.84 - 133	116587573
2,4,6-Tribromophenol	664797	LCS	1.72	3.33	mg/L	51.7	4.84 - 133	116587574
2,4,6-Tribromophenol	664797	LCS Dup	1.68	3.33	mg/L	50.5	4.84 - 133	116587575
2-Fluorobiphenyl-SURR	664797	Blank	14.0	50.0	mg/L	28.0	3.58 - 121	116587573
2-Fluorobiphenyl-SURR	664797	LCS	16.3	50.0	mg/L	32.6	3.58 - 121	116587574
2-Fluorobiphenyl-SURR	664797	LCS Dup	14.6	50.0	mg/L	29.2	3.58 - 121	116587575
2-Fluorophenol-SURR	664797	Blank	37.6	100	mg/L	37.6	0.100 - 90.1	116587573
2-Fluorophenol-SURR	664797	LCS	33.7	100	mg/L	33.7	0.100 - 90.1	116587574
2-Fluorophenol-SURR	664797	LCS Dup	36.1	100	mg/L	36.1	0.100 - 90.1	116587575

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Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
4-Terphenyl-d14-SURR	664797	Blank	18.2	50.0	mg/L	36.4	0.100 - 148	116587573
4-Terphenyl-d14-SURR	664797	LCS	20.3	50.0	mg/L	40.6	0.100 - 148	116587574
4-Terphenyl-d14-SURR	664797	LCS Dup	16.4	50.0	mg/L	32.8	0.100 - 148	116587575
Nitrobenzene-d5-SURR	664797	Blank	16.6	50.0	mg/L	33.2	0.100 - 130	116587573
Nitrobenzene-d5-SURR	664797	LCS	17.4	50.0	mg/L	34.8	0.100 - 130	116587574
Nitrobenzene-d5-SURR	664797	LCS Dup	16.7	50.0	mg/L	33.4	0.100 - 130	116587575
Phenol-d6-SURR	664797	Blank	26.2	100	mg/L	26.2	0.100 - 84.9	116587573
Phenol-d6-SURR	664797	LCS	22.4	100	mg/L	22.4	0.100 - 84.9	116587574
Phenol-d6-SURR	664797	LCS Dup	24.2	100	mg/L	24.2	0.100 - 84.9	116587575
2,4,6-Tribromophenol	1493988	MS	0.530	1.00	mg/L	53.0	4.84 - 133	116587579
2-Fluorobiphenyl-SURR	1493988	MS	0.152	0.500	mg/L	30.4	3.58 - 121	116587579
2-Fluorophenol-SURR	1493988	MS	0.338	1.00	mg/L	33.8	0.100 - 90.1	116587579
4-Terphenyl-d14-SURR	1493988	MS	0.164	0.500	mg/L	32.8	0.100 - 148	116587579
Nitrobenzene-d5-SURR	1493988	MS	0.163	0.500	mg/L	32.6	0.100 - 130	116587579
Phenol-d6-SURR	1493988	MS	0.236	1.00	mg/L	23.6	0.100 - 84.9	116587579
2,4,6-Tribromophenol	1494126	MS	0.533	1.00	mg/L	53.3	4.84 - 133	116587584
2-Fluorobiphenyl-SURR	1494126	MS	0.152	0.500	mg/L	30.4	3.58 - 121	116587584
2-Fluorophenol-SURR	1494126	MS	0.372	1.00	mg/L	37.2	0.100 - 90.1	116587584
4-Terphenyl-d14-SURR	1494126	MS	0.194	0.500	mg/L	38.8	0.100 - 148	116587584
Nitrobenzene-d5-SURR	1494126	MS	0.176	0.500	mg/L	35.2	0.100 - 130	116587584
Phenol-d6-SURR	1494126	MS	0.261	1.00	mg/L	26.1	0.100 - 84.9	116587584

665510 Solid & Chemical Materials **EPA 8151**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP 2,4 D	664420	ND	0.000159	0.0005	mg/L	116588311	
TCLP 2,4,5-TP (Silvex)	664420	ND	0.00008930	0.0003	mg/L	116588311	
TCLP 2,4 D	665036	ND	0.000159	0.0005	mg/L	116587864	
TCLP 2,4,5-TP (Silvex)	665036	ND	0.00008930	0.0003	mg/L	116587864	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP 2,4 D	0.161	0.150	mg/L	107	70.0 - 130		116587863
TCLP 2,4 D	0.151	0.150	mg/L	101	70.0 - 130		116587869
TCLP 2,4 D	0.165	0.150	mg/L	110	70.0 - 130		116588320
TCLP 2,4,5-TP (Silvex)	0.151	0.150	mg/L	101	70.0 - 130		116587863
TCLP 2,4,5-TP (Silvex)	0.139	0.150	mg/L	92.7	70.0 - 130		116587869
TCLP 2,4,5-TP (Silvex)	0.155	0.150	mg/L	103	70.0 - 130		116588320

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 2,4 D	665036	0.000706	0.001	mg/L	70.6	2.84 - 180	116587865	
TCLP 2,4,5-TP (Silvex)	665036	0.000648	0.001	mg/L	64.8	9.90 - 162	116587865	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP 2,4 D	665036	0.000706	0.000818	0.001	2.84 - 180	70.6	81.8	mg/L	14.7	30.0
TCLP 2,4,5-TP (Silvex)	665036	0.000648	0.000763	0.001	9.90 - 162	64.8	76.3	mg/L	16.3	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 2,4 D	1493584	0.999	0	ND	1.00	6.45 - 184	99.9		mg/L		30.0

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MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 2,4,5-TP (Silvex)	1493584	0.939	0	ND	1.00	9.18 - 181	93.9		mg/L		30.0
TCLP 2,4 D	1494425	0.840	0	ND	1.00	6.45 - 184	84.0		mg/L		30.0
TCLP 2,4,5-TP (Silvex)	1494425	0.786	0	ND	1.00	9.18 - 181	78.6		mg/L		30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4-Dichlorophenylacetic Acid		CCV	0.138	0.100	mg/L	138	9.92 - 234	116587863
2,4-Dichlorophenylacetic Acid		CCV	0.130	0.100	mg/L	130	9.92 - 234	116587869
2,4-Dichlorophenylacetic Acid		CCV	0.136	0.100	mg/L	136	9.92 - 234	116588320
2,4-Dichlorophenylacetic Acid	664420	Blank	0.0692	0.100	mg/L	69.2	9.92 - 234	116588311
2,4-Dichlorophenylacetic Acid	665036	Blank	0.0503	0.100	mg/L	50.3	9.92 - 234	116587864
2,4-Dichlorophenylacetic Acid	665036	LCS	0.0772	0.100	mg/L	77.2	9.92 - 234	116587865
2,4-Dichlorophenylacetic Acid	665036	LCS Dup	0.0852	0.100	mg/L	85.2	9.92 - 234	116587866
2,4-Dichlorophenylacetic Acid	1493584	MS	1.01	1.00	mg/L	101	9.92 - 234	116588313
2,4-Dichlorophenylacetic Acid	1493584	UNKNOWN	0.438	1.00	mg/L	43.8	9.92 - 234	116588312
2,4-Dichlorophenylacetic Acid	1494425	MS	0.900	1.00	mg/L	90.0	9.92 - 234	116587868
2,4-Dichlorophenylacetic Acid	1494425	UNKNOWN	0.598	1.00	mg/L	59.8	9.92 - 234	116587867

665712 Solid & Chemical Materials — EPA 8270C

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
1,2,4-Trichlorobenzene	664981	ND	10.5	33.3	ug/kg	116592091	
1,2-Dichlorobenzene	664981	ND	19.7	33.3	ug/kg	116592091	
1,2-DPH (as azobenzene)	664981	ND	13.9	33.3	ug/kg	116592091	
1,3-Dichlorobenzene	664981	ND	23.6	33.3	ug/kg	116592091	
1,4-Dichlorobenzene	664981	ND	26.4	33.3	ug/kg	116592091	
2,4,5-Trichlorophenol	664981	ND	12.6	33.3	ug/kg	116592091	
2,4,6-Trichlorophenol	664981	ND	22.7	33.3	ug/kg	116592091	
2,4-Dichlorophenol	664981	ND	13.5	33.3	ug/kg	116592091	
2,4-Dimethylphenol	664981	ND	679	679	ug/kg	116592091	
2,4-Dinitrophenol	664981	ND	112	166	ug/kg	116592091	
2,4-Dinitrotoluene	664981	ND	218	233	ug/kg	116592091	
2,6-Dichlorophenol	664981	ND	819	832	ug/kg	116592091	
2,6-Dinitrotoluene	664981	ND	210	233	ug/kg	116592091	
2-Chloronaphthalene	664981	ND	9.86	33.3	ug/kg	116592091	
2-Chlorophenol	664981	ND	27.1	33.3	ug/kg	116592091	
2-Methylphenol (o-Cresol)	664981	ND	81.2	166	ug/kg	116592091	
2-Nitrophenol	664981	ND	175	200	ug/kg	116592091	
3&4-Methylphenol (m&p-Cresol)	664981	ND	89.2	166	ug/kg	116592091	
3,3'-Dichlorobenzidine	664981	ND	114	133	ug/kg	116592091	
4,6-Dinitro-2-methylphenol	664981	ND	155	166	ug/kg	116592091	
4-Bromophenyl phenyl ether	664981	ND	12.4	33.3	ug/kg	116592091	

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Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
4-Chlorophenyl phenyl ethe	664981	ND	9.69	33.3	ug/kg	116592091	
4-Nitrophenol	664981	ND	380	400	ug/kg	116592091	
Acenaphthene	664981	ND	8.19	33.3	ug/kg	116592091	
Acenaphthylene	664981	ND	21.3	33.3	ug/kg	116592091	
Anthracene	664981	ND	50.0	66.6	ug/kg	116592091	
Benzidine	664981	ND	25.0	33.3	ug/kg	116592091	
Benzo(a)anthracene	664981	ND	13.6	33.3	ug/kg	116592091	
Benzo(a)pyrene	664981	ND	20.1	33.3	ug/kg	116592091	
Benzo(b)fluoranthene	664981	ND	13.1	33.3	ug/kg	116592091	
Benzo(ghi)perylene	664981	ND	18.5	33.3	ug/kg	116592091	
Benzo(k)fluoranthene	664981	ND	15.2	33.3	ug/kg	116592091	
Benzyl Butyl phthalate	664981	ND	14.9	33.3	ug/kg	116592091	
Bis(2-chloroethoxy)methane	664981	ND	9.22	33.3	ug/kg	116592091	
Bis(2-chloroethyl)ether	664981	ND	14.1	33.3	ug/kg	116592091	
Bis(2-chloroisopropyl)ether	664981	ND	225	233	ug/kg	116592091	
Bis(2-ethylhexyl)phthalate	664981	ND	51.6	166	ug/kg	116592091	
Chrysene (Benzo(a)phenanthrene)	664981	ND	9.49	33.3	ug/kg	116592091	
Dibenz(a,h)anthracene	664981	ND	16.4	33.3	ug/kg	116592091	
Diethyl phthalate	664981	ND	6.69	33.3	ug/kg	116592091	
Dimethyl phthalate	664981	ND	8.86	33.3	ug/kg	116592091	
Di-n-butylphthalate	664981	ND	40.3	66.6	ug/kg	116592091	
Di-n-octylphthalate	664981	ND	17.5	33.3	ug/kg	116592091	
Fluoranthene(Benzo(j,k)fluor ene)	664981	ND	10.8	33.3	ug/kg	116592091	
Fluorene	664981	ND	9.76	33.3	ug/kg	116592091	
Hexachlorobenzene	664981	ND	13.8	33.3	ug/kg	116592091	
Hexachlorobutadiene	664981	ND	14.3	33.3	ug/kg	116592091	
Hexachlorocyclopentadiene	664981	ND	122	133	ug/kg	116592091	
Hexachloroethane	664981	ND	58.6	66.6	ug/kg	116592091	
Indeno(1,2,3-cd)pyrene	664981	ND	15.9	33.3	ug/kg	116592091	
Isophorone	664981	ND	9.46	33.3	ug/kg	116592091	
Naphthalene	664981	ND	9.19	33.3	ug/kg	116592091	
Nitrobenzene	664981	ND	12.9	33.3	ug/kg	116592091	
N-Nitrosodimethylamine	664981	ND	247	266	ug/kg	116592091	
N-Nitrosodi-n-propylamine	664981	ND	8.49	33.3	ug/kg	116592091	
N-Nitrosodiphenylamine (as DPA	664981	ND	18.5	33.3	ug/kg	116592091	
p-Chloro-m-Cresol (4-Chloro-3-me	664981	ND	23.0	33.3	ug/kg	116592091	
Pentachlorophenol	664981	ND	280	300	ug/kg	116592091	
Phenanthrene	664981	ND	8.79	33.3	ug/kg	116592091	
Phenol	664981	ND	13.2	33.3	ug/kg	116592091	
Pyrene	664981	ND	16.5	33.3	ug/kg	116592091	
Pyridine	664981	ND	57.4	66.6	ug/kg	116592091	

CCC

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
1,4-Dichlorobenzene	54600	50000.0	ug/kg	109	80.0 - 120		116592090
2,4,6-Trichlorophenol	50600	50000.0	ug/kg	101	80.0 - 120		116592090
2,4-Dichlorophenol	55000	50000.0	ug/kg	110	80.0 - 120		116592090
2-Nitrophenol	50900	50000.0	ug/kg	102	80.0 - 120		116592090

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CCC

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
Acenaphthene	52900	50000.0	ug/kg	106	80.0 - 120		116592090
Benzo(a)pyrene	52000	50000.0	ug/kg	104	80.0 - 120		116592090
Di-n-octylphthalate	52800	50000.0	ug/kg	106	80.0 - 120		116592090
Fluoranthene(Benzo(j,k)fluor ene)	53600	50000.0	ug/kg	107	80.0 - 120		116592090
Hexachlorobutadiene	53000	50000.0	ug/kg	106	80.0 - 120		116592090
N-Nitrosodiphenylamine (as DPA	57100	50000.0	ug/kg	114	80.0 - 120		116592090
p-Chloro-m-Cresol (4-Chloro-3-me	48100	50000.0	ug/kg	96.2	80.0 - 120		116592090
Pentachlorophenol	51800	50000.0	ug/kg	104	80.0 - 120		116592090
Phenol	51000	50000.0	ug/kg	102	80.0 - 120		116592090

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
1,2,4-Trichlorobenzene	55200	50000	ug/kg	110	80.0 - 120		116592090
1,2-Dichlorobenzene	52000	50000	ug/kg	104	80.0 - 120		116592090
1,2-DPH (as azobenzene)	49100	50000	ug/kg	98.2	80.0 - 120		116592090
1,3-Dichlorobenzene	54000	50000	ug/kg	108	80.0 - 120		116592090
1,4-Dichlorobenzene	54600	50000	ug/kg	109	80.0 - 120		116592090
2,4,5-Trichlorophenol	54200	50000	ug/kg	108	80.0 - 120		116592090
2,4,6-Trichlorophenol	50600	50000	ug/kg	101	80.0 - 120		116592090
2,4-Dichlorophenol	55000	50000	ug/kg	110	80.0 - 120		116592090
2,4-Dimethylphenol	53100	50000	ug/kg	106	80.0 - 120		116592090
2,4-Dinitrophenol	49300	50000	ug/kg	98.6	80.0 - 120		116592090
2,4-Dinitrotoluene	49400	50000	ug/kg	98.8	80.0 - 120		116592090
2,6-Dichlorophenol	56200	50000	ug/kg	112	80.0 - 120		116592090
2,6-Dinitrotoluene	51500	50000	ug/kg	103	80.0 - 120		116592090
2-Chloronaphthalene	57800	50000	ug/kg	116	80.0 - 120		116592090
2-Chlorophenol	53900	50000	ug/kg	108	80.0 - 120		116592090
2-Methylphenol (o-Cresol)	55100	50000	ug/kg	110	80.0 - 120		116592090
2-Nitrophenol	50900	50000	ug/kg	102	80.0 - 120		116592090
3&4-Methylphenol (m&p-Cresol)	51200	50000	ug/kg	102	80.0 - 120		116592090
3,3'-Dichlorobenzidine	52300	50000	ug/kg	105	80.0 - 120		116592090
4,6-Dinitro-2-methylphenol	49000	50000	ug/kg	98.0	80.0 - 120		116592090
4-Bromophenyl phenyl ether	56900	50000	ug/kg	114	80.0 - 120		116592090
4-Chlorophenyl phenyl ethe	53700	50000	ug/kg	107	80.0 - 120		116592090
4-Nitrophenol	44300	50000	ug/kg	88.6	80.0 - 120		116592090
Acenaphthene	52900	50000	ug/kg	106	80.0 - 120		116592090
Acenaphthylene	52900	50000	ug/kg	106	80.0 - 120		116592090
Anthracene	53200	50000	ug/kg	106	80.0 - 120		116592090
Benzidine	47700	50000	ug/kg	95.4	80.0 - 120		116592090
Benzo(a)anthracene	47700	50000	ug/kg	95.4	80.0 - 120		116592090
Benzo(a)pyrene	52000	50000	ug/kg	104	80.0 - 120		116592090
Benzo(b)fluoranthene	48600	50000	ug/kg	97.2	80.0 - 120		116592090
Benzo(ghi)perylene	49100	50000	ug/kg	98.2	80.0 - 120		116592090
Benzo(k)fluoranthene	46800	50000	ug/kg	93.6	80.0 - 120		116592090
Benzyl Butyl phthalate	51500	50000	ug/kg	103	80.0 - 120		116592090
Bis(2-chloroethoxy)methane	54500	50000	ug/kg	109	80.0 - 120		116592090
Bis(2-chloroethyl)ether	49400	50000	ug/kg	98.8	80.0 - 120		116592090
Bis(2-chloroisopropyl)ether	44100	50000	ug/kg	88.2	80.0 - 120		116592090

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Bis(2-ethylhexyl)phthalate	54200	50000	ug/kg	108	80.0 - 120		116592090
Chrysene (Benzo(a)phenanthrene)	53900	50000	ug/kg	108	80.0 - 120		116592090
Dibenz(a,h)anthracene	53700	50000	ug/kg	107	80.0 - 120		116592090
Diethyl phthalate	53400	50000	ug/kg	107	80.0 - 120		116592090
Dimethyl phthalate	53700	50000	ug/kg	107	80.0 - 120		116592090
Di-n-butylphthalate	55400	50000	ug/kg	111	80.0 - 120		116592090
Di-n-octylphthalate	52800	50000	ug/kg	106	80.0 - 120		116592090
Fluoranthene(Benzo(j,k)fluorene)	53600	50000	ug/kg	107	80.0 - 120		116592090
Fluorene	55200	50000	ug/kg	110	80.0 - 120		116592090
Hexachlorobenzene	53900	50000	ug/kg	108	80.0 - 120		116592090
Hexachlorobutadiene	53000	50000	ug/kg	106	80.0 - 120		116592090
Hexachlorocyclopentadiene	49000	50000	ug/kg	98.0	80.0 - 120		116592090
Hexachloroethane	53000	50000	ug/kg	106	80.0 - 120		116592090
Indeno(1,2,3-cd)pyrene	49200	50000	ug/kg	98.4	80.0 - 120		116592090
Isophorone	44800	50000	ug/kg	89.6	80.0 - 120		116592090
Naphthalene	52100	50000	ug/kg	104	80.0 - 120		116592090
Nitrobenzene	42200	50000	ug/kg	84.4	80.0 - 120		116592090
N-Nitrosodimethylamine	53400	50000	ug/kg	107	80.0 - 120		116592090
N-Nitrosodi-n-propylamine	41200	50000	ug/kg	82.4	80.0 - 120		116592090
N-Nitrosodiphenylamine (as DPA	57100	50000	ug/kg	114	80.0 - 120		116592090
p-Chloro-m-Cresol (4-Chloro-3-me	48100	50000	ug/kg	96.2	80.0 - 120		116592090
Pentachlorophenol	51800	50000	ug/kg	104	80.0 - 120		116592090
Phenanthrene	52200	50000	ug/kg	104	80.0 - 120		116592090
Phenol	51000	50000	ug/kg	102	80.0 - 120		116592090
Pyrene	54100	50000	ug/kg	108	80.0 - 120		116592090
Pyridine	55800	50000	ug/kg	112	80.0 - 120		116592090

DFTPP

Parameter		RefMass	Reading	%	Limits%	Out	File
DFTPP Mass 127	577366	198	21194	56.7	40.0 - 60.0		116592089
DFTPP Mass 197	577366	198	0	0.0	0 - 1.00		116592089
DFTPP Mass 198	577366	198	37376	100.0	100 - 100		116592089
DFTPP Mass 199	577366	198	2537	6.8	5.00 - 9.00		116592089
DFTPP Mass 275	577366	198	7100	19.0	10.0 - 30.0		116592089
DFTPP Mass 365	577366	198	825	2.2	1.00 - 100		116592089
DFTPP Mass 441	577366	443	3702	81.7	0 - 100		116592089
DFTPP Mass 442	577366	198	23639	63.2	40.0 - 100		116592089
DFTPP Mass 443	577366	442	4530	19.2	17.0 - 23.0		116592089
DFTPP Mass 51	577366	198	15876	42.5	30.0 - 60.0		116592089
DFTPP Mass 68	577366	69.0	0	0.0	0 - 2.00		116592089
DFTPP Mass 69	577366	198	17759	47.5	0 - 100		116592089
DFTPP Mass 70	577366	69.0	61	0.3	0 - 2.00		116592089

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-IST D	664981	Blank	112800	106800	53390	160200		116592091	664981
1,4-Dichlorobenzene-d4-IST D	664981	LCS	142700	106800	53390	160200		116592092	664981

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Quality Control

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	664981	LCS Dup	134100	106800	53390	160200		116592093	664981
Acenaphthene-d10-ISTD	664981	Blank	231600	163700	81850	245500		116592091	664981
Acenaphthene-d10-ISTD	664981	LCS	261000	163700	81850	245500	*	116592092	664981
Acenaphthene-d10-ISTD	664981	LCS Dup	267600	163700	81850	245500	*	116592093	664981
Chrysene-d12-ISTD	664981	Blank	162900	79460	39730	119200	*	116592091	664981
Chrysene-d12-ISTD	664981	LCS	163400	79460	39730	119200	*	116592092	664981
Chrysene-d12-ISTD	664981	LCS Dup	170400	79460	39730	119200	*	116592093	664981
Naphthalene-d8-ISTD	664981	Blank	438300	350500	175200	525700		116592091	664981
Naphthalene-d8-ISTD	664981	LCS	532100	350500	175200	525700	*	116592092	664981
Naphthalene-d8-ISTD	664981	LCS Dup	513000	350500	175200	525700		116592093	664981
Perylene-d12-ISTD	664981	Blank	101300	53180	26590	79760	*	116592091	664981
Perylene-d12-ISTD	664981	LCS	101900	53180	26590	79760	*	116592092	664981
Perylene-d12-ISTD	664981	LCS Dup	90580	53180	26590	79760	*	116592093	664981
Phenanthrene-d10-ISTD	664981	Blank	297800	192700	96370	289100	*	116592091	664981
Phenanthrene-d10-ISTD	664981	LCS	309500	192700	96370	289100	*	116592092	664981
Phenanthrene-d10-ISTD	664981	LCS Dup	340100	192700	96370	289100	*	116592093	664981

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	664981	Blank	5.250	5.260	5.200	5.320		116592091	664981
1,4-Dichlorobenzene-d4-ISTD	664981	LCS	5.250	5.260	5.200	5.320		116592092	664981
1,4-Dichlorobenzene-d4-ISTD	664981	LCS Dup	5.250	5.260	5.200	5.320		116592093	664981
Acenaphthene-d10-ISTD	664981	Blank	7.740	7.750	7.690	7.810		116592091	664981
Acenaphthene-d10-ISTD	664981	LCS	7.750	7.750	7.690	7.810		116592092	664981
Acenaphthene-d10-ISTD	664981	LCS Dup	7.750	7.750	7.690	7.810		116592093	664981
Chrysene-d12-ISTD	664981	Blank	12.05	12.05	11.99	12.11		116592091	664981
Chrysene-d12-ISTD	664981	LCS	12.05	12.05	11.99	12.11		116592092	664981
Chrysene-d12-ISTD	664981	LCS Dup	12.05	12.05	11.99	12.11		116592093	664981
Naphthalene-d8-ISTD	664981	Blank	6.280	6.290	6.230	6.350		116592091	664981
Naphthalene-d8-ISTD	664981	LCS	6.290	6.290	6.230	6.350		116592092	664981
Naphthalene-d8-ISTD	664981	LCS Dup	6.290	6.290	6.230	6.350		116592093	664981
Perylene-d12-ISTD	664981	Blank	15.28	15.28	15.22	15.34		116592091	664981
Perylene-d12-ISTD	664981	LCS	15.28	15.28	15.22	15.34		116592092	664981
Perylene-d12-ISTD	664981	LCS Dup	15.28	15.28	15.22	15.34		116592093	664981
Phenanthrene-d10-ISTD	664981	Blank	8.990	9.000	8.940	9.060		116592091	664981
Phenanthrene-d10-ISTD	664981	LCS	9.000	9.000	8.940	9.060		116592092	664981
Phenanthrene-d10-ISTD	664981	LCS Dup	9.000	9.000	8.940	9.060		116592093	664981

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
1,2,4-Trichlorobenzene	664981	629	832	ug/kg	75.6	16.6 - 141	116592092	
1,2-Dichlorobenzene	664981	584	832	ug/kg	70.2	41.4 - 122	116592092	
1,2-DPH (as azobenzene)	664981	771	832	ug/kg	92.6	44.2 - 128	116592092	
1,3-Dichlorobenzene	664981	612	832	ug/kg	73.5	26.7 - 125	116592092	
1,4-Dichlorobenzene	664981	610	832	ug/kg	73.3	13.0 - 145	116592092	
2,4,5-Trichlorophenol	664981	574	832	ug/kg	68.9	30.8 - 137	116592092	
2,4,6-Trichlorophenol	664981	620	832	ug/kg	74.5	26.0 - 135	116592092	
2,4-Dichlorophenol	664981	591	832	ug/kg	71.0	37.7 - 130	116592092	

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LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
2,4-Dimethylphenol	664981	253	832	ug/kg	30.4	0.100 - 119	116592092	
2,4-Dinitrophenol	664981	798	832	ug/kg	95.9	5.37 - 134	116592092	
2,4-Dinitrotoluene	664981	694	832	ug/kg	83.4	27.7 - 153	116592092	
2,6-Dichlorophenol	664981	672	832	ug/kg	80.7	40.5 - 121	116592092	
2,6-Dinitrotoluene	664981	595	832	ug/kg	71.5	45.1 - 134	116592092	
2-Chloronaphthalene	664981	620	832	ug/kg	74.5	28.6 - 134	116592092	
2-Chlorophenol	664981	627	832	ug/kg	75.3	37.7 - 125	116592092	
2-Methylphenol (o-Cresol)	664981	529	832	ug/kg	63.5	0.100 - 124	116592092	
2-Nitrophenol	664981	747	832	ug/kg	89.7	34.7 - 126	116592092	
3&4-Methylphenol (m&p-Cresol)	664981	582	832	ug/kg	69.9	0.100 - 116	116592092	
3,3'-Dichlorobenzidine	664981	213	832	ug/kg	25.6	0.100 - 123	116592092	
4,6-Dinitro-2-methylphenol	664981	819	832	ug/kg	98.4	15.8 - 139	116592092	
4-Bromophenyl phenyl ether	664981	692	832	ug/kg	83.1	50.4 - 124	116592092	
4-Chlorophenyl phenyl ethe	664981	732	832	ug/kg	87.9	47.6 - 127	116592092	
4-Nitrophenol	664981	814	832	ug/kg	97.8	0.100 - 163	116592092	
Acenaphthene	664981	602	832	ug/kg	72.3	31.8 - 133	116592092	
Acenaphthylene	664981	595	832	ug/kg	71.5	44.9 - 114	116592092	
Anthracene	664981	655	832	ug/kg	78.7	48.3 - 118	116592092	
Benzo(a)anthracene	664981	592	832	ug/kg	71.1	49.4 - 125	116592092	
Benzo(a)pyrene	664981	553	832	ug/kg	66.4	50.2 - 124	116592092	
Benzo(b)fluoranthene	664981	584	832	ug/kg	70.2	41.0 - 137	116592092	
Benzo(ghi)perylene	664981	579	832	ug/kg	69.5	35.6 - 146	116592092	
Benzo(k)fluoranthene	664981	560	832	ug/kg	67.3	42.2 - 147	116592092	
Benzyl Butyl phthalate	664981	620	832	ug/kg	74.5	18.6 - 163	116592092	
Bis(2-chloroethoxy)methane	664981	633	832	ug/kg	76.0	45.3 - 123	116592092	
Bis(2-chloroethyl)ether	664981	597	832	ug/kg	71.7	12.1 - 143	116592092	
Bis(2-chloroisopropyl)ether	664981	680	832	ug/kg	81.7	21.3 - 146	116592092	
Bis(2-ethylhexyl)phthalate	664981	622	832	ug/kg	74.7	39.7 - 168	116592092	
Chrysene (Benzo(a)phenanthrene)	664981	615	832	ug/kg	73.9	52.8 - 121	116592092	
Dibenz(a,h)anthracene	664981	557	832	ug/kg	66.9	46.1 - 136	116592092	
Diethyl phthalate	664981	594	832	ug/kg	71.4	25.7 - 144	116592092	
Dimethyl phthalate	664981	646	832	ug/kg	77.6	0.100 - 157	116592092	
Di-n-butylphthalate	664981	738	832	ug/kg	88.6	23.3 - 173	116592092	
Di-n-octylphthalate	664981	611	832	ug/kg	73.4	17.2 - 174	116592092	
Fluoranthene(Benzo(j,k)fluorene)	664981	731	832	ug/kg	87.8	52.0 - 135	116592092	
Fluorene	664981	703	832	ug/kg	84.4	52.2 - 125	116592092	
Hexachlorobenzene	664981	628	832	ug/kg	75.4	52.1 - 124	116592092	
Hexachlorobutadiene	664981	620	832	ug/kg	74.5	16.3 - 138	116592092	
Hexachlorocyclopentadiene	664981	790	832	ug/kg	94.9	0.100 - 149	116592092	
Hexachloroethane	664981	606	832	ug/kg	72.8	18.8 - 131	116592092	
Indeno(1,2,3-cd)pyrene	664981	579	832	ug/kg	69.5	44.3 - 138	116592092	
Isophorone	664981	707	832	ug/kg	84.9	44.3 - 123	116592092	
Naphthalene	664981	546	832	ug/kg	65.6	41.0 - 122	116592092	
Nitrobenzene	664981	574	832	ug/kg	68.9	42.1 - 122	116592092	
N-Nitrosodimethylamine	664981	571	832	ug/kg	68.6	0.100 - 211	116592092	
N-Nitrosodi-n-propylamine	664981	676	832	ug/kg	81.2	18.1 - 159	116592092	
N-Nitrosodiphenylamine (as DPA	664981	564	832	ug/kg	67.7	40.2 - 126	116592092	

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LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
p-Chloro-m-Cresol (4-Chloro-3-me	664981	620	832	ug/kg	74.5	42.6 - 131	116592092	
Pentachlorophenol	664981	627	832	ug/kg	75.3	9.29 - 146	116592092	
Phenanthrene	664981	660	832	ug/kg	79.3	49.1 - 127	116592092	
Phenol	664981	532	832	ug/kg	63.9	0.100 - 142	116592092	
Pyrene	664981	645	832	ug/kg	77.5	15.6 - 154	116592092	
Pyridine	664981	449	832	ug/kg	53.9	17.0 - 80.0	116592092	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,2,4-Trichlorobenzene	664981	629	578	832	16.6 - 141	75.6	69.4	ug/kg	8.55	30.0
1,2-Dichlorobenzene	664981	584	551	832	41.4 - 122	70.2	66.2	ug/kg	5.87	30.0
1,2-DPH (as azobenzene)	664981	771	654	832	44.2 - 128	92.6	78.6	ug/kg	16.4	30.0
1,3-Dichlorobenzene	664981	612	583	832	26.7 - 125	73.5	70.0	ug/kg	4.88	30.0
1,4-Dichlorobenzene	664981	610	575	832	13.0 - 145	73.3	69.1	ug/kg	5.90	30.0
2,4,5-Trichlorophenol	664981	574	536	832	30.8 - 137	68.9	64.4	ug/kg	6.75	30.0
2,4,6-Trichlorophenol	664981	620	504	832	26.0 - 135	74.5	60.5	ug/kg	20.7	30.0
2,4-Dichlorophenol	664981	591	531	832	37.7 - 130	71.0	63.8	ug/kg	10.7	30.0
2,4-Dimethylphenol	664981	253	277	832	0.100 - 119	30.4	33.3	ug/kg	9.11	30.0
2,4-Dinitrophenol	664981	798	747	832	5.37 - 134	95.9	89.7	ug/kg	6.68	30.0
2,4-Dinitrotoluene	664981	694	697	832	27.7 - 153	83.4	83.7	ug/kg	0.359	30.0
2,6-Dichlorophenol	664981	672	622	832	40.5 - 121	80.7	74.7	ug/kg	7.72	30.0
2,6-Dinitrotoluene	664981	595	631	832	45.1 - 134	71.5	75.8	ug/kg	5.84	30.0
2-Chloronaphthalene	664981	620	566	832	28.6 - 134	74.5	68.0	ug/kg	9.12	30.0
2-Chlorophenol	664981	627	594	832	37.7 - 125	75.3	71.4	ug/kg	5.32	30.0
2-Methylphenol (o-Cresol)	664981	529	557	832	0.100 - 124	63.5	66.9	ug/kg	5.21	30.0
2-Nitrophenol	664981	747	705	832	34.7 - 126	89.7	84.7	ug/kg	5.73	30.0
3&4-Methylphenol (m&p-Cresol)	664981	582	580	832	0.100 - 116	69.9	69.7	ug/kg	0.287	30.0
3,3'-Dichlorobenzidine	664981	213	205	832	0.100 - 123	25.6	24.6	ug/kg	3.98	30.0
4,6-Dinitro-2-methylphenol	664981	819	777	832	15.8 - 139	98.4	93.3	ug/kg	5.32	30.0
4-Bromophenyl phenyl ether	664981	692	554	832	50.4 - 124	83.1	66.5	ug/kg	22.2	30.0
4-Chlorophenyl phenyl ethe	664981	732	675	832	47.6 - 127	87.9	81.1	ug/kg	8.05	30.0
4-Nitrophenol	664981	814	751	832	0.100 - 163	97.8	90.2	ug/kg	8.09	30.0
Acenaphthene	664981	602	559	832	31.8 - 133	72.3	67.1	ug/kg	7.46	30.0
Acenaphthylene	664981	595	545	832	44.9 - 114	71.5	65.5	ug/kg	8.76	30.0
Anthracene	664981	655	516	832	48.3 - 118	78.7	62.0	ug/kg	23.7	30.0
Benzo(a)anthracene	664981	592	523	832	49.4 - 125	71.1	62.8	ug/kg	12.4	30.0
Benzo(a)pyrene	664981	553	530	832	50.2 - 124	66.4	63.7	ug/kg	4.15	30.0
Benzo(b)fluoranthene	664981	584	596	832	41.0 - 137	70.2	71.6	ug/kg	1.97	30.0
Benzo(ghi)perylene	664981	579	484	832	35.6 - 146	69.5	58.1	ug/kg	17.9	30.0
Benzo(k)fluoranthene	664981	560	569	832	42.2 - 147	67.3	68.3	ug/kg	1.47	30.0
Benzyl Butyl phthalate	664981	620	584	832	18.6 - 163	74.5	70.2	ug/kg	5.94	30.0
Bis(2-chloroethoxy)methane	664981	633	563	832	45.3 - 123	76.0	67.6	ug/kg	11.7	30.0
Bis(2-chloroethyl)ether	664981	597	579	832	12.1 - 143	71.7	69.5	ug/kg	3.12	30.0
Bis(2-chloroisopropyl)ether	664981	680	662	832	21.3 - 146	81.7	79.5	ug/kg	2.73	30.0
Bis(2-ethylhexyl)phthalate	664981	622	587	832	39.7 - 168	74.7	70.5	ug/kg	5.79	30.0
Chrysene (Benzo(a)phenanthrene)	664981	615	526	832	52.8 - 121	73.9	63.2	ug/kg	15.6	30.0
Dibenz(a,h)anthracene	664981	557	452	832	46.1 - 136	66.9	54.3	ug/kg	20.8	30.0
Diethyl phthalate	664981	594	593	832	25.7 - 144	71.4	71.2	ug/kg	0.281	30.0
Dimethyl phthalate	664981	646	468	832	0.100 - 157	77.6	56.2	ug/kg	32.0 *	30.0

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Di-n-butylphthalate	664981	738	605	832	23.3 - 173	88.6	72.7	ug/kg	19.7	30.0
Di-n-octylphthalate	664981	611	668	832	17.2 - 174	73.4	80.2	ug/kg	8.85	30.0
Fluoranthene(Benzo(j,k)fluorene)	664981	731	641	832	52.0 - 135	87.8	77.0	ug/kg	13.1	30.0
Fluorene	664981	703	649	832	52.2 - 125	84.4	78.0	ug/kg	7.88	30.0
Hexachlorobenzene	664981	628	559	832	52.1 - 124	75.4	67.1	ug/kg	11.6	30.0
Hexachlorobutadiene	664981	620	556	832	16.3 - 138	74.5	66.8	ug/kg	10.9	30.0
Hexachlorocyclopentadiene	664981	790	732	832	0.100 - 149	94.9	87.9	ug/kg	7.66	30.0
Hexachloroethane	664981	606	598	832	18.8 - 131	72.8	71.8	ug/kg	1.38	30.0
Indeno(1,2,3-cd)pyrene	664981	579	503	832	44.3 - 138	69.5	60.4	ug/kg	14.0	30.0
Isophorone	664981	707	652	832	44.3 - 123	84.9	78.3	ug/kg	8.09	30.0
Naphthalene	664981	546	554	832	41.0 - 122	65.6	66.5	ug/kg	1.36	30.0
Nitrobenzene	664981	574	574	832	42.1 - 122	68.9	68.9	ug/kg	0	30.0
N-Nitrosodimethylamine	664981	571	517	832	0.100 - 211	68.6	62.1	ug/kg	9.95	30.0
N-Nitrosodi-n-propylamine	664981	676	681	832	18.1 - 159	81.2	81.8	ug/kg	0.736	30.0
N-Nitrosodiphenylamine (as DPA	664981	564	569	832	40.2 - 126	67.7	68.3	ug/kg	0.882	30.0
p-Chloro-m-Cresol (4-Chloro-3-me	664981	620	588	832	42.6 - 131	74.5	70.6	ug/kg	5.38	30.0
Pentachlorophenol	664981	627	626	832	9.29 - 146	75.3	75.2	ug/kg	0.133	30.0
Phenanthrene	664981	660	534	832	49.1 - 127	79.3	64.1	ug/kg	21.2	30.0
Phenol	664981	532	500	832	0.100 - 142	63.9	60.1	ug/kg	6.13	30.0
Pyrene	664981	645	561	832	15.6 - 154	77.5	67.4	ug/kg	13.9	30.0
Pyridine	664981	449	432	832	17.0 - 80.0	53.9	51.9	ug/kg	3.78	30.0

SPCC

Parameter	Sample	RF	Minimum	File
2,4-Dinitrophenol	578235	49300	0.050	116592090
4-Nitrophenol	578235	44300	0.050	116592090
Hexachlorocyclopentadiene	578235	49000	0.050	116592090
N-Nitrosodi-n-propylamine	578235	41200	0.050	116592090

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	578235	CCV	55100	100000	ug/kg	55.1	36.6 - 112	116592090
2-Fluorobiphenyl-SURR	578235	CCV	48600	50000	ug/kg	97.2	29.5 - 105	116592090
2-Fluorophenol-SURR	578235	CCV	52900	100000	ug/kg	52.9	0.734 - 98.4	116592090
4-Terphenyl-d14-SURR	578235	CCV	56700	50000	ug/kg	113	33.1 - 118	116592090
Nitrobenzene-d5-SURR	578235	CCV	54300	50000	ug/kg	109 *	35.6 - 103	116592090
Phenol-d6-SURR	578235	CCV	52200	100000	ug/kg	52.2	0.100 - 110	116592090
2,4,6-Tribromophenol	664981	Blank	2000	3330	ug/kg	60.1	36.6 - 112	116592091
2,4,6-Tribromophenol	664981	LCS	1900	3330	ug/kg	57.1	36.6 - 112	116592092
2,4,6-Tribromophenol	664981	LCS Dup	2010	3330	ug/kg	60.4	36.6 - 112	116592093
2-Fluorobiphenyl-SURR	664981	Blank	19200	50000	ug/kg	38.4	29.5 - 105	116592091
2-Fluorobiphenyl-SURR	664981	LCS	16000	50000	ug/kg	32.0	29.5 - 105	116592092
2-Fluorobiphenyl-SURR	664981	LCS Dup	14900	50000	ug/kg	29.8	29.5 - 105	116592093
2-Fluorophenol-SURR	664981	Blank	51900	100000	ug/kg	51.9	0.734 - 98.4	116592091
2-Fluorophenol-SURR	664981	LCS	48000	100000	ug/kg	48.0	0.734 - 98.4	116592092
2-Fluorophenol-SURR	664981	LCS Dup	45100	100000	ug/kg	45.1	0.734 - 98.4	116592093
4-Terphenyl-d14-SURR	664981	Blank	14600	50000	ug/kg	29.2 *	33.1 - 118	116592091
4-Terphenyl-d14-SURR	664981	LCS	14800	50000	ug/kg	29.6 *	33.1 - 118	116592092
4-Terphenyl-d14-SURR	664981	LCS Dup	13600	50000	ug/kg	27.2 *	33.1 - 118	116592093

ANA-LAB CORP. THE COMPLETE SERVICE LAB

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

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Quality Control

Printed 07/07/2016

Surrogate

Parameter	*Sample*	*Type*	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Nitrobenzene-d5-SURR	664981	Blank	20500	50000	ug/kg	41.0	35.6 - 103	116592091
Nitrobenzene-d5-SURR	664981	LCS	18400	50000	ug/kg	36.8	35.6 - 103	116592092
Nitrobenzene-d5-SURR	664981	LCS Dup	17300	50000	ug/kg	34.6 *	35.6 - 103	116592093
Phenol-d6-SURR	664981	Blank	64800	100000	ug/kg	64.8	0.100 - 110	116592091
Phenol-d6-SURR	664981	LCS	54500	100000	ug/kg	54.5	0.100 - 110	116592092
Phenol-d6-SURR	664981	LCS Dup	50700	100000	ug/kg	50.7	0.100 - 110	116592093

RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100% Recover% is Recovery Percent: result / known * 100%

Blank - Method Blank; LCS - Laboratory Control Sample; CCV - Continuing Calibration Verification; MS - Matrix Spike; ICV - Initial Calibration Verification; LDR - Linear Dynamic Range Standard; CCC - Calibration Check Compound; BFB - GC/MS Tuning Compound; DFTPP - GC/MS Tuning Compound

746941 CoC Print Group 001 of 001

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Chain of Custody

05/20/2016 Page 1 of 3

Report To

GPDR

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

119

Phone 870/567-8177
Fax 870/364-9076

Solid Samples

Accredited	Test	Name	Method

Matrix: Solid & Chemical Materials

Sampler Printed Name RICHARD FREEMAN *Sampler Affiliation* GEORGIA PACIFIC *Sampler Signature*

	1	Glass Qt w/Teflon lined lid	
N	*TCL	TCLP Extraction Non-Volatile	EPA 1311
N	TVOX	TCLP Extraction ZHE Volatiles	EPA 1311ZHE
N	*AsT	TCLP Arsenic	EPA 6020A
N	*BaT	TCLP Barium	EPA 6020A
N	*CdT	TCLP Cadmium	EPA 6020A
N	*CrT	TCLP Chromium	EPA 6020A
N	*PbT	TCLP Lead	EPA 6020A
N	*SeT	TCLP Selenium	EPA 6020A
N	*AgT	TCLP Silver	EPA 6020A
N	*Hg*	TCLP Mercury	EPA 7470A
N	TG80	GC TCLP Pesticide	EPA 8081A
N	TG50	GC TCLP Herbicide	EPA 8151
N	TVOA	MS TCLP Volatile Analysis	EPA 8260B
N	TABN	MS TCLP Semivolatile Analysis	EPA 8270C

	2	Glass 4 oz w/Teflon lined lid	
N	Reac	Reactivity	
	RH2O	Reactivity with Water	
	RS=	Sulfide Screen	ASTM D 4978-95/SW 9031
N	#Ign	Ignitability	EPA 1030
N	301S	Solid Metals Digestion	EPA 200.2 2.8
N	*Bl	Boron	EPA 6010C
N	*SnI	Tin, Total	EPA 6010C
N	*FeI	Total Iron	EPA 6010C
N	*AlM	Aluminum, Total	EPA 6020A
N	*SbM	Antimony, Total	EPA 6020A
N	*AsM	Arsenic, Total	EPA 6020A
N	*BaM	Barium	EPA 6020A
N	*CdM	Cadmium, Total	EPA 6020A
N	*CrM	Chromium, Total	EPA 6020A
N	*CoM	Cobalt	EPA 6020A

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Chain of Custody

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Report To

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GPDR

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Phone 870/567-8177
Fax 870/364-9076

Solid Samples

N	^CuM	Copper, Total	EPA 6020A
N	^PbM	Lead, Total	EPA 6020A
N	^MoM	Molybdenum	EPA 6020A
N	^NiM	Nickel, Total	EPA 6020A
N	^SeM	Selenium, Total	EPA 6020A
N	^AgM	Silver, Total	EPA 6020A
N	^TlM	Thallium, Total	EPA 6020A
N	^VM	Vanadium	EPA 6020A
N	^ZnM	Zinc, Total	EPA 6020A
N	^HgS	Mercury	EPA 7471A
N	747S	Solid Metals Digestion Hg	EPA 7471A
N	IABN	Semivolatile Hydrocarbons	EPA 8270C
N	RCN	Total Cyanide	EPA 9014
N	CorS	Corrosivity (Solids by pH)	EPA 9045D
N	pHLS	pH Measured in Water	EPA 9045D
N	TS%	Total Solids for Dry Wt	SM2540 G-1997 /MOD

0 ZI-Administrative use only: no bottle required

ARDW As Received to Dry Weight Basis Calculation

1 5035 Sampling Kit

N IVOA Volatiles by GC/MS EPA 8260B

Ana-Lab #	Sample ID	Bottles	Date	Time	Notes
1494125	PRIMARY CLARIFIER SOLIDS (PCS)	4	5/24/16	8:40AM	
1494126	ASH DITCH WWTS	4	5/24/16	9:00AM	

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Chain of Custody

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Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

GPDR

119

Phone 870/567-8177
Fax 870/364-9076

Solid Samples

Ambient Conditions/Comments

Date	Time	Relinquished	Received
5/24/16	4:30pm	Printed Name RICHARD FREEMAN Affiliation GEORGIA-PACIFIC	Printed Name Fed Ex Affiliation
		Signature	Signature
5/25/16	0720	Printed Name Fed Ex Affiliation	Printed Name Lavon Rand Affiliation Ana-Lab
		Signature	Signature
		Printed Name Affiliation	Printed Name Affiliation
		Signature	Signature
		Printed Name Affiliation	Printed Name Affiliation
		Signature	Signature

Sample Recieved on Ice? ☑ Yes ☐ No **Method of Shipment:** ☐ UPS ☐ Bus ☑ FedEx ☐ Lone Star ☐ Hand Delivered ☐ Other

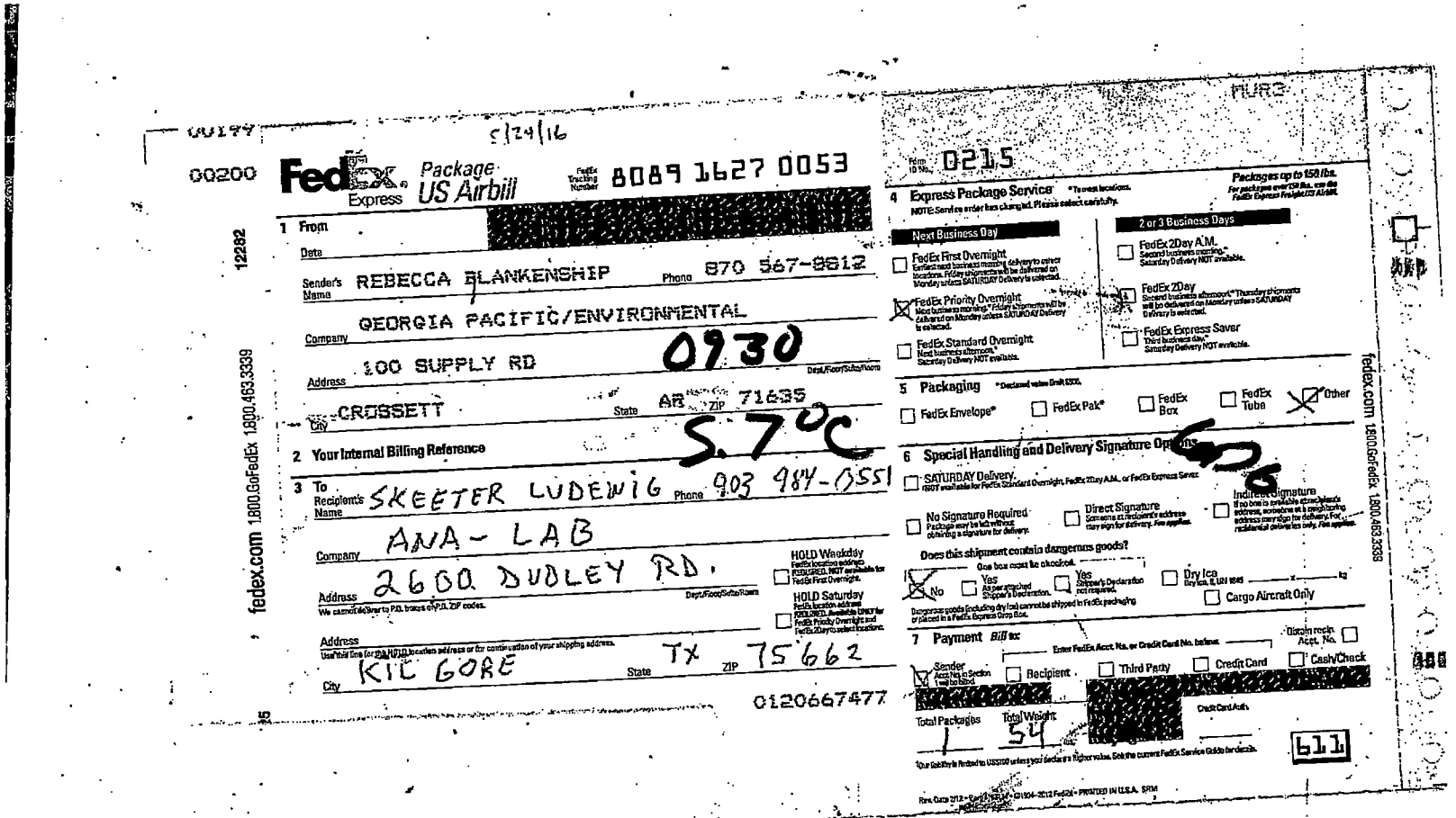
Cooler/Sample Secure? ☑ Yes ☐ No **Tracking/Shipping #** 8089 1627 0058

The accredited column designates accreditation by A - A2LA, N - NELAC, or z - not listed under scope of accreditation. Unless otherwise specified, ANA-LAB shall provide these ordered services pursuant to our Standard Terms & Conditions Agreement (available for download from the welcome page at <http://www.ana-lab.com>). Ana-Lab personnel collect samples as specified by Ana-Lab SOP #000323.

Comments

5.7 °C

005057 ☐ CF____
005661 ☑ CF 6.0
003688 ☐ CF____



5/24/16

00200 FedEx Express Package US Airbill FedEx Tracking Number 8089 1627 0053

Form ID No. 0215

1 From
Date
Sender's Name REBECCA BLANKENSHIP Phone 870 567-8812
Company GEORGIA PACIFIC/ENVIRONMENTAL
Address 100 SUPPLY RD 0930 Dept./Floor/Suite/Room
City CROSSETT State AR ZIP 71635
5.7°C

2 Your Internal Billing Reference

3 To
Recipient's Name SKEETER LUDEWIG Phone 903 984-0551
Company ANA-LAB
Address 2600 DUDLEY RD. Dept./Floor/Suite/Room
We cannot deliver to P.O. boxes or P.O. ZIP codes.
Address Use this line for the HOLD location address or for continuation of your shipping address.
City KILGORE State TX ZIP 75662

0120667477

4 Express Package Service *To most locations.
NOTE: Service order has changed. Please select carefully.
Packages up to 150 lbs.
For packages over 150 lbs., use the FedEx Express Freight/1Fr Airbill.

Next Business Day
- FedEx First Overnight — Earliest next business morning* delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected. [X]
- FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days
- FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected. [X]
- FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.
FedEx Envelope* | FedEx Pak* | FedEx Box | FedEx Tube | Other [X]

6 Special Handling and Delivery Signature Options
SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
No Signature Required — Package may be left without obtaining a signature for delivery.
Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.
Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential delivery only. Fee applies.
HOLD Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.
HOLD Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods?
One box must be checked.
No [X] | Yes As per attached Shipper's Declaration. | Yes Shipper's Declaration not required. | Dry Ice, UN 1845 ____ x ____ kg
Cargo Aircraft Only
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment Bill to:
Enter FedEx Acct. No. or Credit Card No. below.
Sender [X] | Recipient | Third Party | Credit Card | Cash/Check
Obtain recip. Acct. No.
Credit Card Auth.
Total Packages 1 Total Weight 54 lbs.
611

*Your liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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RUR2

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Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

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Employee Owned Integrity Caring Continual Improvement

Report

Printed 07/07/2016 Page 1 of 1

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Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

Account	*Project*
GPDR -L	**746945**

Ash 10A

This report consists of this Table of Contents and the following pages:

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Employee Owned Integrity Caring Continual Improvement

Results

Printed: 07/07/2016

Ash 10A

Account	*Project*
GPDR-L	**746945**

Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

Results

	Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
1505121	**Ash 10A**							

Received: 05/25/2016

olid & Chemical Material *Collected by:* Client *Affiliation:* Georgia Pacific Pape 05/24/2016 09:40:00

Supplement to Test Report 1493980

	Prepared:	***665008***	*06/01/2016*	*22:41:00*				
EPA 8081A			Analyzed	*KJS 06/01/2016*	*22:41:00*	*QCgroup*	*665231*	
N	**TCLP Chlordane**	**<0.00005**	**mg/L**	0.00005	0.030	**57-74-9**		23
N	**TCLP Endrin**	**<0.00005**	**mg/L**	0.00005	0.020	**72-20-8**		23
N	**TCLP gamma-BHC (Lindane)**	**<0.00005**	**mg/L**	0.00005	0.400	**58-89-9**		23
N	**TCLP Heptachlor Epoxide**	**<0.00005**	**mg/L**	0.00005	0.008	**1024-57-3**		23
N	**TCLP Methoxychlor**	**<0.00005**	**mg/L**	0.00005	10.0	**72-43-5**		23
N	**TCLP Toxaphene**	**<0.00005**	**mg/L**	0.00005	0.500	**8001-35-2**		23
	Prepared:	***665036***	*06/02/2016*	*10:45:00*				
EPA 8151			Analyzed	*EMT 06/02/2016*	*10:45:00*	*QCgroup*	*665510*	
N	**TCLP 2,4 D**	**<0.500**	**mg/L**	0.500	10.0	**94-75-7**		25
N	**TCLP 2,4,5-TP (Silvex)**	**<0.300**	**mg/L**	0.300	1.00	**93-72-1**		25
	Prepared:	***664797***	*06/02/2016*	*16:15:00*				
EPA 8270C			Analyzed	*SLC 06/02/2016*	*16:15:00*	*QCgroup*	*665495*	
N	**TCLP 2,4,5-Trichlorophenol**	**<0.010**	**mg/L**	0.010	1.00	**95-95-4**		14
N	**TCLP 2,4,6-Trichlorophenol**	**<0.010**	**mg/L**	0.010	2.00	**88-06-2**		14
N	**TCLP 2,4-Dinitrotoluene**	**<0.010**	**mg/L**	0.010	0.130	**121-14-2**		14
N	**TCLP 2-Methylphenol (o-Cresol)**	**<0.010**	**mg/L**	0.010	200			14
N	**TCLP 3&4-Methylphenol (m&p-Creso**	**<0.010**	**mg/L**	0.010	200			14
N	**TCLP bis(2-Chloroethyl)ether**	**<0.010**	**mg/L**	0.010	0.100	**111-44-4**		14
N	**TCLP Hexachlorobenzene**	**<0.010**	**mg/L**	0.010	0.130	**118-74-1**		14
N	**TCLP Hexachlorobutadiene**	**<0.010**	**mg/L**	0.010	0.500	**87-68-3**		14
N	**TCLP Hexachloroethane**	**<0.010**	**mg/L**	0.010	3.00	**67-72-1**		14
N	**TCLP Nitrobenzene**	**<0.010**	**mg/L**	0.010	2.00	**98-95-3**		14
N	**TCLP Pentachlorophenol**	**<0.010**	**mg/L**	0.010	100	**87-86-5**		14
N	**TCLP Pyridine (Reg. Limit 5)**	**<0.010**	**mg/L**	0.010	5.00	**110-86-1**		14
	Prepared:	***664981***	*06/03/2016*	*15:19:00*				
EPA 8270C			Analyzed	*SLC 06/03/2016*	*15:19:00*	*QCgroup*	*665712*	
N	**1,2,4-Trichlorobenzene**	**<44.2 ***	**ug/kg**	44.2	4790	**120-82-1**		20
N	**1,2-Dichlorobenzene**	**<44.2 ***	**ug/kg**	44.2	17900	**95-50-1**		20
N	**1,2-DPH (as azobenzene)**	**<42.9 ***	**ug/kg**	42.9	32.3	**122-66-7**		20
N	**1,3-Dichlorobenzene**	**<44.2 ***	**ug/kg**	44.2	439000	**541-73-1**		20
N	**1,4-Dichlorobenzene**	**<44.2 ***	**ug/kg**	44.2	2100	**106-46-7**		20
N	**2,4,5-Trichlorophenol**	**<44.2 ***	**ug/kg**	44.2	33800	**95-95-4**		20
N	**2,4,6-Trichlorophenol**	**<44.2 ***	**ug/kg**	44.2	594	**88-06-2**		20
N	**2,4-Dichlorophenol**	**<44.2 ***	**ug/kg**	44.2	352	**120-83-2**		20
N	**2,4-Dimethylphenol**	**<903 ***	**ug/kg**	903	3230	**105-67-9**		20

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Results

Printed: 07/07/2016

Results

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
1505121 Ash 10A						*Received:* 05/25/2016	
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape			05/24/2016 09:40:00	
Supplement to Test Report 1493980							
EPA 8270C		Analyzed	*SLC 06/03/2016*		*15:19:00 QCgroup*	*665712*	
N 2,4-Dinitrophenol	<222 *	ug/kg	222		93.7	51-28-5	20
N 2,4-Dinitrotoluene	<309 *	ug/kg	309		5.32	121-14-2	20
N 2,6-Dichlorophenol	<1110 *	ug/kg	1110			87-65-0	20
N 2,6-Dinitrotoluene	<309 *	ug/kg	309		4.81	606-20-2	20
N 2-Chloronaphthalene	<44.2 *	ug/kg	44.2		670000	91-58-7	20
N 2-Chlorophenol	<44.2 *	ug/kg	44.2		1630	95-57-8	20
N 2-Methylphenol (o-Cresol)	<222 *	ug/kg	222		7120	95-48-7	20
N 2-Nitrophenol	<266 *	ug/kg	266		787	88-75-5	20
N 3&4-Methylphenol (m&p-Cresol)	<222 *	ug/kg	222		632	MEPH34	20
N 3,3'-Dichlorobenzidine	<177 *	ug/kg	177		62.6	91-94-1	20
N 4,6-Dinitro-2-methylphenol	<222 *	ug/kg	222		130000	534-52-1	20
N 4-Bromophenyl phenyl ether	<44.2 *	ug/kg	44.2		1.89	101-55-3	20
N 4-Chlorophenyl phenyl ethe	<44.2 *	ug/kg	44.2		4.23	7005-72-3	20
N 4-Nitrophenol	<531 *	ug/kg	531		947	100-02-7	20
N Acenaphthene	<44.2 *	ug/kg	44.2		236000	83-32-9	20
N Acenaphthylene	<44.2 *	ug/kg	44.2		409000	208-96-8	20
N Anthracene	<88.6 *	ug/kg	88.6		6890000	120-12-7	20
N Benzidine	<44.2 *	ug/kg	44.2		0.011	92-87-5	20
N Benzo(a)anthracene	<44.2 *	ug/kg	44.2		17700	56-55-3	20
N Benzo(a)pyrene	<44.2 *	ug/kg	44.2		7640	50-32-8	20
N Benzo(b)fluoranthene	<44.2 *	ug/kg	44.2		60100	205-99-2	20
N Benzo(ghi)perylene	<44.2 *	ug/kg	44.2		0	191-24-2	20
N Benzo(k)fluoranthene	<44.2 *	ug/kg	44.2		615000	207-08-9	20
N Benzyl Butyl phthalate	<44.2 *	ug/kg	44.2		2700000	85-68-7	20
N Bis(2-chloroethoxy)methane	<44.2 *	ug/kg	44.2		20.0	111-91-1	20
N Bis(2-chloroethyl)ether	<44.2 *	ug/kg	44.2		2.11	111-44-4	20
N Bis(2-chloroisopropyl)ether	<309 *	ug/kg	309		190	39638-32-9	20
N Bis(2-ethylhexyl)phthalate	<222 *	ug/kg	222		164000	117-81-7	20
N Chrysene (Benzo(a)phenanthrene)	<44.2 *	ug/kg	44.2		1550000	218-01-9	20
N Dibenz(a,h)anthracene	<44.2 *	ug/kg	44.2		15200	53-70-3	20
N Diethyl phthalate	<44.2 *	ug/kg	44.2		156000	84-66-2	20
N Dimethyl phthalate	<44.2 *	ug/kg	44.2	D	243000	131-11-3	20
N Di-n-butylphthalate	<88.6 *	ug/kg	88.6		2.47	84-74-2	20
N Di-n-octylphthalate	<44.2 *	ug/kg	44.2		0	117-84-0	20
N Fluoranthene(Benzo(j,k)fluorene)	<44.2 *	ug/kg	44.2		1920000	206-44-0	20
N Fluorene	<44.2 *	ug/kg	44.2		299000	86-73-7	20
N Hexachlorobenzene	<44.2 *	ug/kg	44.2		1100	118-74-1	20
N Hexachlorobutadiene	<44.2 *	ug/kg	44.2		1370	87-68-3	20
N Hexachlorocyclopentadiene	<177 *	ug/kg	177		19300	77-47-4	20
N Hexachloroethane	<88.6 *	ug/kg	88.6		1840	67-72-1	20
N Indeno(1,2,3-cd)pyrene	<44.2 *	ug/kg	44.2		173000	193-39-5	20
N Isophorone	<44.2 *	ug/kg	44.2		3000	78-59-1	20
N Naphthalene	<44.2 *	ug/kg	44.2		31000	91-20-3	20
N Nitrobenzene	<44.2 *	ug/kg	44.2		87.9	98-95-3	20
N N-Nitrosodimethylamine	<355 *	ug/kg	355		0.037	62-75-9	20

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Results

Printed: 07/07/2016

Results

Parameter		Results	Units	RL	Flags	MAL	CAS	Bottle
1505121	**Ash 10A**						*Received:* 05/25/2016	
olid & Chemical Material	*Collected by:* Client	*Affiliation:*	Georgia Pacific Pape	05/24/2016	09:40:00			
Supplement to Test Report 1493980								
EPA 8270C			Analyzed	*SLC 06/03/2016*	*15:19:00*	*QCgroup*	*665712*	
N	**N-Nitrosodi-n-propylamine**	**<44.2 ***	**ug/kg**	44.2		0.350	**621-64-7**	20
N	**N-Nitrosodiphenylamine (as DPA**	**<44.2 ***	**ug/kg**	44.2		2820	**86-30-6**	20
N	**p-Chloro-m-Cresol (4-Chloro-3-me**	**<44.2 ***	**ug/kg**	44.2		330000	**59-50-7**	20
N	**Pentachlorophenol**	**<398 ***	**ug/kg**	398		3.58	**87-86-5**	20
N	**Phenanthrene**	**<44.2 ***	**ug/kg**	44.2		420000	**85-01-8**	20
N	**Phenol**	**<44.2 ***	**ug/kg**	44.2		38300	**108-95-2**	20
N	**Pyrene**	**<44.2 ***	**ug/kg**	44.2		1120000	**129-00-0**	20
N	**Pyridine**	**<88.6 ***	**ug/kg**	88.6		69.0	**110-86-1**	20

* Dry Weight Basis

Qualifiers:

D - Duplicate RPD was higher than expected

We report results on an 'As Received' or wet basis unless marked 'Dry Weight'. Unless otherwise noted, testing was performed at Ana-lab's corporate laboratory that holds the following Federal and State certificates: Texas Department of Health Lead Firm Certificate 2110076, US Department of Agriculture Soil Import Permit S-37592, Texas Commisson on Environmental Quality Drinking Water Laboratory Certificate TX219, Texas Commission on Environmental Quality NELAP T104704201, Oklahoma Department of Environmental Quality Drinking Water Certification Lab ID# D9913, EPA Lab Number TX00063, USEPA Approved Perchlorate Testing Lab, Oklahoma Department of Environmental Quality Laboratory Certificate 8125, Arkansas Department of Environmental Quality Certification #03-070-0, Louisiana Department of Environmental Quality Laboratory Certification (NELAP, LELAP) #02008, Louisiana Department of Health and Hospitals Drinking Water (NELAP) # LA030020, US Department of Energy Approved, State of Kansas Department of Health and Environment Waste Water and Solid/Hazardous Waste Cert. E-10365. The Accredited column designates accreditation by N -- NELAC, or z -- not covered under NELAC scope of accreditation.

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RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.

Paul Zhang, Ph.D., Quality Director

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Quality Control

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Ash 10A

Account	*Project*
GPDR -L	**746945**

Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

665231 Solid & Chemical Materials **EPA 8081A**

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*	*Out*
TCLP Chlordane	665008	ND	0.0000018	0.00001	mg/L	116583266	
TCLP Endrin	665008	ND	0.0000085	0.00001	mg/L	116583266	
TCLP gamma-BHC (Lindane)	665008	ND	0.0000089	0.00001	mg/L	116583266	
TCLP Heptachlor	665008	ND	0.0000014	0.00001	mg/L	116583266	
TCLP Heptachlor Epoxide	665008	ND	0.0000012	0.00001	mg/L	116583266	
TCLP Methoxychlor	665008	ND	0.0000056	0.00001	mg/L	116583266	
TCLP Toxaphene	665008	ND	0.0000037	0.00001	mg/L	116583266	

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
TCLP Endrin	0.104	0.100	mg/L	104	80.0 - 120		116583259
TCLP Endrin	0.104	0.100	mg/L	104	80.0 - 120		116583282
TCLP gamma-BHC (Lindane)	0.101	0.100	mg/L	101	80.0 - 120		116583259
TCLP gamma-BHC (Lindane)	0.0982	0.100	mg/L	98.2	80.0 - 120		116583282
TCLP Heptachlor	0.102	0.100	mg/L	102	80.0 - 120		116583259
TCLP Heptachlor	0.0987	0.100	mg/L	98.7	80.0 - 120		116583282
TCLP Heptachlor Epoxide	0.105	0.100	mg/L	105	80.0 - 120		116583259
TCLP Heptachlor Epoxide	0.109	0.100	mg/L	109	80.0 - 120		116583282
TCLP Methoxychlor	0.113	0.100	mg/L	113	80.0 - 120		116583259
TCLP Methoxychlor	0.115	0.100	mg/L	115	80.0 - 120		116583282

LCS

Parameter	*PrepSet*	*Reading*	*Known*	*Units*	*Recover%*	*Limits*	*File*	*Out*
TCLP Endrin	665008	0.000843	0.001	mg/L	84.3	42.0 - 136	116583267	
TCLP gamma-BHC (Lindane)	665008	0.000758	0.001	mg/L	75.8	33.6 - 125	116583267	
TCLP Heptachlor	665008	0.000719	0.001	mg/L	71.9	19.4 - 121	116583267	
TCLP Heptachlor Epoxide	665008	0.000863	0.001	mg/L	86.3	43.4 - 123	116583267	
TCLP Methoxychlor	665008	0.000908	0.001	mg/L	90.8	32.1 - 143	116583267	

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
TCLP Endrin	665008	0.000843	0.000803	0.001	42.0 - 136	84.3	80.3	mg/L	4.86	30.0
TCLP gamma-BHC (Lindane)	665008	0.000758	0.000741	0.001	33.6 - 125	75.8	74.1	mg/L	2.27	30.0
TCLP Heptachlor	665008	0.000719	0.00071	0.001	19.4 - 121	71.9	71.0	mg/L	1.26	30.0
TCLP Heptachlor Epoxide	665008	0.000863	0.000809	0.001	43.4 - 123	86.3	80.9	mg/L	6.46	30.0
TCLP Methoxychlor	665008	0.000908	0.000874	0.001	32.1 - 143	90.8	87.4	mg/L	3.82	30.0

MS

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
TCLP Endrin	1493980	0.00428	0	ND	0.005	21.4 - 154	85.6		mg/L		30.0

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MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP gamma-BHC (Lindane)	1493980	0.00381	0	ND	0.005	13.4 - 137	76.2		mg/L		30.0
TCLP Heptachlor	1493980	0.00361	0	ND	0.005	6.35 - 126	72.2		mg/L		30.0
TCLP Heptachlor Epoxide	1493980	0.00422	0	ND	0.005	26.2 - 133	84.4		mg/L		30.0
TCLP Methoxychlor	1493980	0.00469	0	ND	0.005	3.85 - 178	93.8		mg/L		30.0
TCLP Endrin	1493988	0.00472	0	ND	0.005	21.4 - 154	94.4		mg/L		30.0
TCLP gamma-BHC (Lindane)	1493988	0.00457	0	ND	0.005	13.4 - 137	91.4		mg/L		30.0
TCLP Heptachlor	1493988	0.00354	0	ND	0.005	6.35 - 126	70.8		mg/L		30.0
TCLP Heptachlor Epoxide	1493988	0.00494	0	ND	0.005	26.2 - 133	98.8		mg/L		30.0
TCLP Methoxychlor	1493988	0.00542	0	ND	0.005	3.85 - 178	108		mg/L		30.0
TCLP Endrin	1494425	0.00373	0	ND	0.005	21.4 - 154	74.6		mg/L		30.0
TCLP gamma-BHC (Lindane)	1494425	0.00325	0	ND	0.005	13.4 - 137	65.0		mg/L		30.0
TCLP Heptachlor	1494425	0.00314	0	ND	0.005	6.35 - 126	62.8		mg/L		30.0
TCLP Heptachlor Epoxide	1494425	0.00363	0	ND	0.005	26.2 - 133	72.6		mg/L		30.0
TCLP Methoxychlor	1494425	0.00432	0	ND	0.005	3.85 - 178	86.4		mg/L		30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Decachlorobiphenyl	577520	CCV	0.107	0.100	mg/L	107	10.0 - 150	116583259
Decachlorobiphenyl	577520	CCV	0.104	0.100	mg/L	104	10.0 - 150	116583282
Tetrachloro-m-Xylene (Surr)	577520	CCV	0.105	0.100	mg/L	105	10.0 - 150	116583259
Tetrachloro-m-Xylene (Surr)	577520	CCV	0.105	0.100	mg/L	105	10.0 - 150	116583282
Decachlorobiphenyl	665008	Blank	0.0633	0.100	mg/L	63.3	10.0 - 150	116583266
Decachlorobiphenyl	665008	LCS	0.0798	0.100	mg/L	79.8	10.0 - 150	116583267
Decachlorobiphenyl	665008	LCS Dup	0.0802	0.100	mg/L	80.2	10.0 - 150	116583268
Tetrachloro-m-Xylene (Surr)	665008	Blank	0.0355	0.100	mg/L	35.5	10.0 - 150	116583266
Tetrachloro-m-Xylene (Surr)	665008	LCS	0.0692	0.100	mg/L	69.2	10.0 - 150	116583267
Tetrachloro-m-Xylene (Surr)	665008	LCS Dup	0.0675	0.100	mg/L	67.5	10.0 - 150	116583268
Decachlorobiphenyl	1493980	MS	0.00404	0.005	mg/L	80.8	10.0 - 150	116583279
Tetrachloro-m-Xylene (Surr)	1493980	MS	0.00315	0.005	mg/L	63.0	10.0 - 150	116583279
Decachlorobiphenyl	1493988	MS	0.00249	0.005	mg/L	49.8	10.0 - 150	116583276
Tetrachloro-m-Xylene (Surr)	1493988	MS	0.00376	0.005	mg/L	75.2	10.0 - 150	116583276
Decachlorobiphenyl	1494425	MS	0.00327	0.005	mg/L	65.4	10.0 - 150	116583273
Tetrachloro-m-Xylene (Surr)	1494425	MS	0.00283	0.005	mg/L	56.6	10.0 - 150	116583273

665495 Solid & Chemical Materials **EPA 8270C**

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Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP 2,4,5-Trichlorophenol	664797	ND	0.000201	0.001	mg/L	116587573	
TCLP 2,4,6-Trichlorophenol	664797	ND	0.000308	0.001	mg/L	116587573	
TCLP 2,4-Dinitrotoluene	664797	ND	0.000282	0.001	mg/L	116587573	
TCLP 2-Methylphenol (o-Cresol)	664797	ND	0.00033	0.001	mg/L	116587573	
TCLP 3&4-Methylphenol (m&p-Creso	664797	ND	0.000297	0.001	mg/L	116587573	
TCLP bis(2-Chloroethyl)ether	664797	ND	0.000443	0.001	mg/L	116587573	
TCLP Hexachlorobenzene	664797	ND	0.000292	0.001	mg/L	116587573	
TCLP Hexachlorobutadiene	664797	ND	0.000276	0.001	mg/L	116587573	
TCLP Hexachloroethane	664797	ND	0.000258	0.001	mg/L	116587573	
TCLP Nitrobenzene	664797	ND	0.00038	0.001	mg/L	116587573	

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Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Pentachlorophenol	664797	ND	0.000332	0.001	mg/L	116587573	
TCLP Pyridine (Reg. Limit 5)	664797	ND	0.000492	0.001	mg/L	116587573	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP 2,4,5-Trichlorophenol	48.3	50.0	mg/L	96.6	70.0 - 130		116587572
TCLP 2,4,6-Trichlorophenol	49.6	50.0	mg/L	99.2	70.0 - 130		116587572
TCLP 2,4-Dinitrotoluene	48.6	50.0	mg/L	97.2	70.0 - 130		116587572
TCLP 2-Methylphenol (o-Cresol)	45.4	50.0	mg/L	90.8	70.0 - 130		116587572
TCLP 3&4-Methylphenol (m&p-Creso	45.9	50.0	mg/L	91.8	70.0 - 130		116587572
TCLP bis(2-Chloroethyl)ether	50.5	50.0	mg/L	101	70.0 - 130		116587572
TCLP Hexachlorobenzene	49.1	50.0	mg/L	98.2	70.0 - 130		116587572
TCLP Hexachlorobutadiene	45.2	50.0	mg/L	90.4	70.0 - 130		116587572
TCLP Hexachloroethane	45.9	50.0	mg/L	91.8	70.0 - 130		116587572
TCLP Nitrobenzene	43.8	50.0	mg/L	87.6	70.0 - 130		116587572
TCLP Pentachlorophenol	42.9	50.0	mg/L	85.8	70.0 - 130		116587572
TCLP Pyridine (Reg. Limit 5)	41.0	50.0	mg/L	82.0	70.0 - 130		116587572

DFTPP

Parameter		RefMass	Reading	%	Limits%	Out	File
DFTPP Mass 127	577951	198	51342	53.2	40.0 - 60.0		116587571
DFTPP Mass 197	577951	198	0	0.0	0 - 1.00		116587571
DFTPP Mass 198	577951	198	96453	100.0	100 - 100		116587571
DFTPP Mass 199	577951	198	6423	6.7	5.00 - 9.00		116587571
DFTPP Mass 275	577951	198	22701	23.5	10.0 - 30.0		116587571
DFTPP Mass 365	577951	198	2489	2.6	1.00 - 100		116587571
DFTPP Mass 441	577951	443	11220	77.8	0 - 100		116587571
DFTPP Mass 442	577951	198	75029	77.8	40.0 - 100		116587571
DFTPP Mass 443	577951	442	14423	19.2	17.0 - 23.0		116587571
DFTPP Mass 51	577951	198	36043	37.4	30.0 - 60.0		116587571
DFTPP Mass 68	577951	69.0	0	0.0	0 - 2.00		116587571
DFTPP Mass 69	577951	198	43787	45.4	0 - 100		116587571
DFTPP Mass 70	577951	69.0	162	0.4	0 - 2.00		116587571

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	578179	CCV	229800	229800	114900	344700		116587572	578179
Acenaphthene-d10-ISTD	578179	CCV	494000	494000	247000	741000		116587572	578179
Naphthalene-d8-ISTD	578179	CCV	888900	888900	444500	1333000		116587572	578179
Phenanthrene-d10-ISTD	578179	CCV	682600	682600	341300	1024000		116587572	578179
1,4-Dichlorobenzene-d4-ISTD	664797	Blank	206200	229800	114900	344700		116587573	664797
1,4-Dichlorobenzene-d4-ISTD	664797	LCS	193000	229800	114900	344700		116587574	664797
1,4-Dichlorobenzene-d4-ISTD	664797	LCS Dup	196900	229800	114900	344700		116587575	664797
Acenaphthene-d10-ISTD	664797	Blank	409100	494000	247000	741000		116587573	664797
Acenaphthene-d10-ISTD	664797	LCS	401600	494000	247000	741000		116587574	664797

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Quality Control

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
Acenaphthene-d10-ISTD	664797	LCS Dup	418200	494000	247000	741000		116587575	664797
Naphthalene-d8-ISTD	664797	Blank	768100	888900	444500	1333000		116587573	664797
Naphthalene-d8-ISTD	664797	LCS	744700	888900	444500	1333000		116587574	664797
Naphthalene-d8-ISTD	664797	LCS Dup	760800	888900	444500	1333000		116587575	664797
Phenanthrene-d10-ISTD	664797	Blank	517500	682600	341300	1024000		116587573	664797
Phenanthrene-d10-ISTD	664797	LCS	540100	682600	341300	1024000		116587574	664797
Phenanthrene-d10-ISTD	664797	LCS Dup	568300	682600	341300	1024000		116587575	664797
1,4-Dichlorobenzene-d4-ISTD	1493988	MS	205400	229800	114900	344700		116587579	664797
Acenaphthene-d10-ISTD	1493988	MS	424000	494000	247000	741000		116587579	664797
Naphthalene-d8-ISTD	1493988	MS	777500	888900	444500	1333000		116587579	664797
Phenanthrene-d10-ISTD	1493988	MS	562800	682600	341300	1024000		116587579	664797
1,4-Dichlorobenzene-d4-ISTD	1494126	MS	190500	229800	114900	344700		116587584	664797
Acenaphthene-d10-ISTD	1494126	MS	393100	494000	247000	741000		116587584	664797
Naphthalene-d8-ISTD	1494126	MS	727600	888900	444500	1333000		116587584	664797
Phenanthrene-d10-ISTD	1494126	MS	521300	682600	341300	1024000		116587584	664797

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	578179	CCV	6.210	6.210	6.150	6.270		116587572	578179
Acenaphthene-d10-ISTD	578179	CCV	11.97	11.97	11.91	12.03		116587572	578179
Naphthalene-d8-ISTD	578179	CCV	8.280	8.280	8.220	8.340		116587572	578179
Phenanthrene-d10-ISTD	578179	CCV	15.20	15.20	15.14	15.26		116587572	578179
1,4-Dichlorobenzene-d4-ISTD	664797	Blank	6.210	6.210	6.150	6.270		116587573	664797
1,4-Dichlorobenzene-d4-ISTD	664797	LCS	6.210	6.210	6.150	6.270		116587574	664797
1,4-Dichlorobenzene-d4-ISTD	664797	LCS Dup	6.210	6.210	6.150	6.270		116587575	664797
Acenaphthene-d10-ISTD	664797	Blank	11.96	11.97	11.91	12.03		116587573	664797
Acenaphthene-d10-ISTD	664797	LCS	11.96	11.97	11.91	12.03		116587574	664797
Acenaphthene-d10-ISTD	664797	LCS Dup	11.96	11.97	11.91	12.03		116587575	664797
Naphthalene-d8-ISTD	664797	Blank	8.260	8.280	8.220	8.340		116587573	664797
Naphthalene-d8-ISTD	664797	LCS	8.270	8.280	8.220	8.340		116587574	664797
Naphthalene-d8-ISTD	664797	LCS Dup	8.260	8.280	8.220	8.340		116587575	664797
Phenanthrene-d10-ISTD	664797	Blank	15.19	15.20	15.14	15.26		116587573	664797
Phenanthrene-d10-ISTD	664797	LCS	15.19	15.20	15.14	15.26		116587574	664797
Phenanthrene-d10-ISTD	664797	LCS Dup	15.19	15.20	15.14	15.26		116587575	664797
1,4-Dichlorobenzene-d4-ISTD	1493988	MS	6.210	6.210	6.150	6.270		116587579	664797
Acenaphthene-d10-ISTD	1493988	MS	11.96	11.97	11.91	12.03		116587579	664797
Naphthalene-d8-ISTD	1493988	MS	8.270	8.280	8.220	8.340		116587579	664797
Phenanthrene-d10-ISTD	1493988	MS	15.19	15.20	15.14	15.26		116587579	664797
1,4-Dichlorobenzene-d4-ISTD	1494126	MS	6.210	6.210	6.150	6.270		116587584	664797
Acenaphthene-d10-ISTD	1494126	MS	11.96	11.97	11.91	12.03		116587584	664797
Naphthalene-d8-ISTD	1494126	MS	8.270	8.280	8.220	8.340		116587584	664797
Phenanthrene-d10-ISTD	1494126	MS	15.19	15.20	15.14	15.26		116587584	664797

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 2,4,5-Trichlorophenol	664797	0.0185	0.025	mg/L	74.0	40.4 - 118	116587574	

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Quality Control

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 2,4,6-Trichlorophenol	664797	0.0193	0.025	mg/L	77.2	39.2 - 114	116587574	
TCLP 2,4-Dinitrotoluene	664797	0.0192	0.025	mg/L	76.8	36.9 - 133	116587574	
TCLP 2-Methylphenol (o-Cresol)	664797	0.0128	0.025	mg/L	51.2	11.7 - 103	116587574	
TCLP 3&4-Methylphenol (m&p-Creso	664797	0.0118	0.025	mg/L	47.2	0.100 - 132	116587574	
TCLP bis(2-Chloroethyl)ether	664797	0.0159	0.025	mg/L	63.6	24.1 - 122	116587574	
TCLP Hexachlorobenzene	664797	0.0196	0.025	mg/L	78.4	38.7 - 126	116587574	
TCLP Hexachlorobutadiene	664797	0.0124	0.025	mg/L	49.6	10.2 - 95.4	116587574	
TCLP Hexachloroethane	664797	0.0124	0.025	mg/L	49.6	10.6 - 94.1	116587574	
TCLP Nitrobenzene	664797	0.0177	0.025	mg/L	70.8	27.5 - 120	116587574	
TCLP Pentachlorophenol	664797	0.0159	0.025	mg/L	63.6	17.3 - 132	116587574	
TCLP Pyridine (Reg. Limit 5)	664797	0.00509	0.025	mg/L	20.4	5.47 - 83.4	116587574	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP 2,4,5-Trichlorophenol	664797	0.0185	0.0176	0.025	40.4 - 118	74.0	70.4	mg/L	4.99	30.0
TCLP 2,4,6-Trichlorophenol	664797	0.0193	0.018	0.025	39.2 - 114	77.2	72.0	mg/L	6.97	30.0
TCLP 2,4-Dinitrotoluene	664797	0.0192	0.0182	0.025	36.9 - 133	76.8	72.8	mg/L	5.35	30.0
TCLP 2-Methylphenol (o-Cresol)	664797	0.0128	0.0135	0.025	11.7 - 103	51.2	54.0	mg/L	5.32	30.0
TCLP 3&4-Methylphenol (m&p-Creso	664797	0.0118	0.0127	0.025	0.100 - 132	47.2	50.8	mg/L	7.35	30.0
TCLP bis(2-Chloroethyl)ether	664797	0.0159	0.0179	0.025	24.1 - 122	63.6	71.6	mg/L	11.8	30.0
TCLP Hexachlorobenzene	664797	0.0196	0.0177	0.025	38.7 - 126	78.4	70.8	mg/L	10.2	30.0
TCLP Hexachlorobutadiene	664797	0.0124	0.012	0.025	10.2 - 95.4	49.6	48.0	mg/L	3.28	30.0
TCLP Hexachloroethane	664797	0.0124	0.0123	0.025	10.6 - 94.1	49.6	49.2	mg/L	0.810	30.0
TCLP Nitrobenzene	664797	0.0177	0.017	0.025	27.5 - 120	70.8	68.0	mg/L	4.03	30.0
TCLP Pentachlorophenol	664797	0.0159	0.0161	0.025	17.3 - 132	63.6	64.4	mg/L	1.25	30.0
TCLP Pyridine (Reg. Limit 5)	664797	0.00509	0.00508	0.025	5.47 - 83.4	20.4	20.3	mg/L	0.491	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 2,4,5-Trichlorophenol	1493988	0.182	0	ND	0.250	18.3 - 144	72.8		mg/L		30.0
TCLP 2,4,6-Trichlorophenol	1493988	0.193	0	ND	0.250	21.3 - 139	77.2		mg/L		30.0
TCLP 2,4-Dinitrotoluene	1493988	0.185	0	ND	0.250	19.7 - 161	74.0		mg/L		30.0
TCLP 2-Methylphenol (o-Cresol)	1493988	0.139	0	ND	0.250	6.97 - 119	55.6		mg/L		30.0
TCLP 3&4-Methylphenol (m&p-Creso	1493988	0.132	0	ND	0.250	0.100 - 230	52.8		mg/L		30.0
TCLP bis(2-Chloroethyl)ether	1493988	0.144	0	ND	0.250	11.0 - 128	57.6		mg/L		30.0
TCLP Hexachlorobenzene	1493988	0.188	0	ND	0.250	28.1 - 147	75.2		mg/L		30.0
TCLP Hexachlorobutadiene	1493988	0.120	0	ND	0.250	0.100 - 94.9	48.0		mg/L		30.0
TCLP Hexachloroethane	1493988	0.113	0	ND	0.250	0.100 - 101	45.2		mg/L		30.0
TCLP Nitrobenzene	1493988	0.169	0	ND	0.250	15.6 - 129	67.6		mg/L		30.0
TCLP Pentachlorophenol	1493988	0.185	0	ND	0.250	3.96 - 159	74.0		mg/L		30.0
TCLP Pyridine (Reg. Limit 5)	1493988	0.0386	0	0.0182	0.250	0.100 - 90.0	8.16		mg/L		30.0
TCLP 2,4,5-Trichlorophenol	1494126	0.182	0	ND	0.250	18.3 - 144	72.8		mg/L		30.0
TCLP 2,4,6-Trichlorophenol	1494126	0.199	0	ND	0.250	21.3 - 139	79.6		mg/L		30.0

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MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 2,4-Dinitrotoluene	1494126	0.183	0	ND	0.250	19.7 - 161	73.2		mg/L		30.0
TCLP 2-Methylphenol (o-Cresol)	1494126	0.146	0	ND	0.250	6.97 - 119	58.4		mg/L		30.0
TCLP 3&4-Methylphenol (m&p-Creso	1494126	0.138	0	ND	0.250	0.100 - 230	55.2		mg/L		30.0
TCLP bis(2-Chloroethyl)ether	1494126	0.156	0	ND	0.250	11.0 - 128	62.4		mg/L		30.0
TCLP Hexachlorobenzene	1494126	0.197	0	ND	0.250	28.1 - 147	78.8		mg/L		30.0
TCLP Hexachlorobutadiene	1494126	0.122	0	ND	0.250	0.100 - 94.9	48.8		mg/L		30.0
TCLP Hexachloroethane	1494126	0.119	0	ND	0.250	0.100 - 101	47.6		mg/L		30.0
TCLP Nitrobenzene	1494126	0.181	0	ND	0.250	15.6 - 129	72.4		mg/L		30.0
TCLP Pentachlorophenol	1494126	0.166	0	ND	0.250	3.96 - 159	66.4		mg/L		30.0
TCLP Pyridine (Reg. Limit 5)	1494126	0.0473	0	ND	0.250	0.100 - 90.0	18.9		mg/L		30.0

SPCC

Parameter	Sample	RF	Minimum	File
TCLP 2,4-Dinitrophenol	578179	46.8	0.050	116587572
TCLP 4-Nitrophenol	578179	52.2	0.050	116587572
TCLP Hexachlorocyclopentadiene	578179	45.0	0.050	116587572
TCLP N-Nitroso-n-propylamine	578179	40.6	0.050	116587572

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	578179	CCV	46.7	100	mg/L	46.7	4.84 - 133	116587572
2-Fluorobiphenyl-SURR	578179	CCV	51.4	50.0	mg/L	103	3.58 - 121	116587572
2-Fluorophenol-SURR	578179	CCV	45.3	100	mg/L	45.3	0.100 - 90.1	116587572
4-Terphenyl-d14-SURR	578179	CCV	50.0	50.0	mg/L	100	0.100 - 148	116587572
Nitrobenzene-d5-SURR	578179	CCV	44.6	50.0	mg/L	89.2	0.100 - 130	116587572
Phenol-d6-SURR	578179	CCV	44.4	100	mg/L	44.4	0.100 - 84.9	116587572
2,4,6-Tribromophenol	664797	Blank	1.42	3.33	mg/L	42.6	4.84 - 133	116587573
2,4,6-Tribromophenol	664797	LCS	1.72	3.33	mg/L	51.7	4.84 - 133	116587574
2,4,6-Tribromophenol	664797	LCS Dup	1.68	3.33	mg/L	50.5	4.84 - 133	116587575
2-Fluorobiphenyl-SURR	664797	Blank	14.0	50.0	mg/L	28.0	3.58 - 121	116587573
2-Fluorobiphenyl-SURR	664797	LCS	16.3	50.0	mg/L	32.6	3.58 - 121	116587574
2-Fluorobiphenyl-SURR	664797	LCS Dup	14.6	50.0	mg/L	29.2	3.58 - 121	116587575
2-Fluorophenol-SURR	664797	Blank	37.6	100	mg/L	37.6	0.100 - 90.1	116587573
2-Fluorophenol-SURR	664797	LCS	33.7	100	mg/L	33.7	0.100 - 90.1	116587574
2-Fluorophenol-SURR	664797	LCS Dup	36.1	100	mg/L	36.1	0.100 - 90.1	116587575
4-Terphenyl-d14-SURR	664797	Blank	18.2	50.0	mg/L	36.4	0.100 - 148	116587573
4-Terphenyl-d14-SURR	664797	LCS	20.3	50.0	mg/L	40.6	0.100 - 148	116587574
4-Terphenyl-d14-SURR	664797	LCS Dup	16.4	50.0	mg/L	32.8	0.100 - 148	116587575
Nitrobenzene-d5-SURR	664797	Blank	16.6	50.0	mg/L	33.2	0.100 - 130	116587573
Nitrobenzene-d5-SURR	664797	LCS	17.4	50.0	mg/L	34.8	0.100 - 130	116587574
Nitrobenzene-d5-SURR	664797	LCS Dup	16.7	50.0	mg/L	33.4	0.100 - 130	116587575
Phenol-d6-SURR	664797	Blank	26.2	100	mg/L	26.2	0.100 - 84.9	116587573
Phenol-d6-SURR	664797	LCS	22.4	100	mg/L	22.4	0.100 - 84.9	116587574
Phenol-d6-SURR	664797	LCS Dup	24.2	100	mg/L	24.2	0.100 - 84.9	116587575
2,4,6-Tribromophenol	1493988	MS	0.530	1.00	mg/L	53.0	4.84 - 133	116587579
2-Fluorobiphenyl-SURR	1493988	MS	0.152	0.500	mg/L	30.4	3.58 - 121	116587579
2-Fluorophenol-SURR	1493988	MS	0.338	1.00	mg/L	33.8	0.100 - 90.1	116587579

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Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
4-Terphenyl-d14-SURR	1493988	MS	0.164	0.500	mg/L	32.8	0.100 - 148	116587579
Nitrobenzene-d5-SURR	1493988	MS	0.163	0.500	mg/L	32.6	0.100 - 130	116587579
Phenol-d6-SURR	1493988	MS	0.236	1.00	mg/L	23.6	0.100 - 84.9	116587579
2,4,6-Tribromophenol	1494126	MS	0.533	1.00	mg/L	53.3	4.84 - 133	116587584
2-Fluorobiphenyl-SURR	1494126	MS	0.152	0.500	mg/L	30.4	3.58 - 121	116587584
2-Fluorophenol-SURR	1494126	MS	0.372	1.00	mg/L	37.2	0.100 - 90.1	116587584
4-Terphenyl-d14-SURR	1494126	MS	0.194	0.500	mg/L	38.8	0.100 - 148	116587584
Nitrobenzene-d5-SURR	1494126	MS	0.176	0.500	mg/L	35.2	0.100 - 130	116587584
Phenol-d6-SURR	1494126	MS	0.261	1.00	mg/L	26.1	0.100 - 84.9	116587584

665510 Solid & Chemical Materials

EPA 8151

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP 2,4 D	665036	ND	0.000159	0.0005	mg/L	116587864	
TCLP 2,4,5-TP (Silvex)	665036	ND	0.0000893	0.0003	mg/L	116587864	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP 2,4 D	0.161	0.150	mg/L	107	70.0 - 130		116587863
TCLP 2,4 D	0.151	0.150	mg/L	101	70.0 - 130		116587869
TCLP 2,4 D	0.165	0.150	mg/L	110	70.0 - 130		116588320
TCLP 2,4,5-TP (Silvex)	0.151	0.150	mg/L	101	70.0 - 130		116587863
TCLP 2,4,5-TP (Silvex)	0.139	0.150	mg/L	92.7	70.0 - 130		116587869
TCLP 2,4,5-TP (Silvex)	0.155	0.150	mg/L	103	70.0 - 130		116588320

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 2,4 D	665036	0.000706	0.001	mg/L	70.6	2.84 - 180	116587865	
TCLP 2,4,5-TP (Silvex)	665036	0.000648	0.001	mg/L	64.8	9.90 - 162	116587865	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP 2,4 D	665036	0.000706	0.000818	0.001	2.84 - 180	70.6	81.8	mg/L	14.7	30.0
TCLP 2,4,5-TP (Silvex)	665036	0.000648	0.000763	0.001	9.90 - 162	64.8	76.3	mg/L	16.3	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 2,4 D	1493584	0.999	0	ND	1.00	6.45 - 184	99.9		mg/L		30.0
TCLP 2,4,5-TP (Silvex)	1493584	0.939	0	ND	1.00	9.18 - 181	93.9		mg/L		30.0
TCLP 2,4 D	1494425	0.840	0	ND	1.00	6.45 - 184	84.0		mg/L		30.0
TCLP 2,4,5-TP (Silvex)	1494425	0.786	0	ND	1.00	9.18 - 181	78.6		mg/L		30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4-Dichlorophenylacetic Acid		CCV	0.138	0.100	mg/L	138	9.92 - 234	116587863
2,4-Dichlorophenylacetic Acid		CCV	0.130	0.100	mg/L	130	9.92 - 234	116587869
2,4-Dichlorophenylacetic Acid		CCV	0.136	0.100	mg/L	136	9.92 - 234	116588320
2,4-Dichlorophenylacetic Acid	665036	Blank	0.0503	0.100	mg/L	50.3	9.92 - 234	116587864
2,4-Dichlorophenylacetic Acid	665036	LCS	0.0772	0.100	mg/L	77.2	9.92 - 234	116587865

ANA-LAB CORP. THE COMPLETE SERVICE LAB

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com **LELAP-accredited #02008**

Employee Owned Integrity Caring Continual Improvement

Quality Control

Printed 07/07/2016

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4-Dichlorophenylacetic Acid	665036	LCS Dup	0.0852	0.100	mg/L	85.2	9.92 - 234	116587866
2,4-Dichlorophenylacetic Acid	1493584	MS	1.01	1.00	mg/L	101	9.92 - 234	116588313
2,4-Dichlorophenylacetic Acid	1493584	UNKNOWN	0.438	1.00	mg/L	43.8	9.92 - 234	116588312
2,4-Dichlorophenylacetic Acid	1494425	MS	0.900	1.00	mg/L	90.0	9.92 - 234	116587868
2,4-Dichlorophenylacetic Acid	1494425	UNKNOWN	0.598	1.00	mg/L	59.8	9.92 - 234	116587867

665712 Solid & Chemical Materials **EPA 8270C**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
1,2,4-Trichlorobenzene	664981	ND	10.5	33.3	ug/kg	116592091	
1,2-Dichlorobenzene	664981	ND	19.7	33.3	ug/kg	116592091	
1,2-DPH (as azobenzene)	664981	ND	13.9	33.3	ug/kg	116592091	
1,3-Dichlorobenzene	664981	ND	23.6	33.3	ug/kg	116592091	
1,4-Dichlorobenzene	664981	ND	26.4	33.3	ug/kg	116592091	
2,4,5-Trichlorophenol	664981	ND	12.6	33.3	ug/kg	116592091	
2,4,6-Trichlorophenol	664981	ND	22.7	33.3	ug/kg	116592091	
2,4-Dichlorophenol	664981	ND	13.5	33.3	ug/kg	116592091	
2,4-Dimethylphenol	664981	ND	679	679	ug/kg	116592091	
2,4-Dinitrophenol	664981	ND	112	166	ug/kg	116592091	
2,4-Dinitrotoluene	664981	ND	218	233	ug/kg	116592091	
2,6-Dichlorophenol	664981	ND	819	832	ug/kg	116592091	
2,6-Dinitrotoluene	664981	ND	210	233	ug/kg	116592091	
2-Chloronaphthalene	664981	ND	9.86	33.3	ug/kg	116592091	
2-Chlorophenol	664981	ND	27.1	33.3	ug/kg	116592091	
2-Methylphenol (o-Cresol)	664981	ND	81.2	166	ug/kg	116592091	
2-Nitrophenol	664981	ND	175	200	ug/kg	116592091	
3&4-Methylphenol (m&p-Cresol)	664981	ND	89.2	166	ug/kg	116592091	
3,3'-Dichlorobenzidine	664981	ND	114	133	ug/kg	116592091	
4,6-Dinitro-2-methylphenol	664981	ND	155	166	ug/kg	116592091	
4-Bromophenyl phenyl ether	664981	ND	12.4	33.3	ug/kg	116592091	
4-Chlorophenyl phenyl ethe	664981	ND	9.69	33.3	ug/kg	116592091	
4-Nitrophenol	664981	ND	380	400	ug/kg	116592091	
Acenaphthene	664981	ND	8.19	33.3	ug/kg	116592091	
Acenaphthylene	664981	ND	21.3	33.3	ug/kg	116592091	
Anthracene	664981	ND	50.0	66.6	ug/kg	116592091	
Benzidine	664981	ND	25.0	33.3	ug/kg	116592091	
Benzo(a)anthracene	664981	ND	13.6	33.3	ug/kg	116592091	
Benzo(a)pyrene	664981	ND	20.1	33.3	ug/kg	116592091	
Benzo(b)fluoranthene	664981	ND	13.1	33.3	ug/kg	116592091	
Benzo(ghi)perylene	664981	ND	18.5	33.3	ug/kg	116592091	
Benzo(k)fluoranthene	664981	ND	15.2	33.3	ug/kg	116592091	
Benzyl Butyl phthalate	664981	ND	14.9	33.3	ug/kg	116592091	
Bis(2-chloroethoxy)methane	664981	ND	9.22	33.3	ug/kg	116592091	
Bis(2-chloroethyl)ether	664981	ND	14.1	33.3	ug/kg	116592091	
Bis(2-chloroisopropyl)ether	664981	ND	225	233	ug/kg	116592091	
Bis(2-ethylhexyl)phthalate	664981	ND	51.6	166	ug/kg	116592091	

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Quality Control

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Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*	*Out*
Chrysene (Benzo(a)phenanthrene)	664981	ND	9.49	33.3	ug/kg	116592091	
Dibenz(a,h)anthracene	664981	ND	16.4	33.3	ug/kg	116592091	
Diethyl phthalate	664981	ND	6.69	33.3	ug/kg	116592091	
Dimethyl phthalate	664981	ND	8.86	33.3	ug/kg	116592091	
Di-n-butylphthalate	664981	ND	40.3	66.6	ug/kg	116592091	
Di-n-octylphthalate	664981	ND	17.5	33.3	ug/kg	116592091	
Fluoranthene(Benzo(j,k)fluor ene)	664981	ND	10.8	33.3	ug/kg	116592091	
Fluorene	664981	ND	9.76	33.3	ug/kg	116592091	
Hexachlorobenzene	664981	ND	13.8	33.3	ug/kg	116592091	
Hexachlorobutadiene	664981	ND	14.3	33.3	ug/kg	116592091	
Hexachlorocyclopentadiene	664981	ND	122	133	ug/kg	116592091	
Hexachloroethane	664981	ND	58.6	66.6	ug/kg	116592091	
Indeno(1,2,3-cd)pyrene	664981	ND	15.9	33.3	ug/kg	116592091	
Isophorone	664981	ND	9.46	33.3	ug/kg	116592091	
Naphthalene	664981	ND	9.19	33.3	ug/kg	116592091	
Nitrobenzene	664981	ND	12.9	33.3	ug/kg	116592091	
N-Nitrosodimethylamine	664981	ND	247	266	ug/kg	116592091	
N-Nitrosodi-n-propylamine	664981	ND	8.49	33.3	ug/kg	116592091	
N-Nitrosodiphenylamine (as DPA	664981	ND	18.5	33.3	ug/kg	116592091	
p-Chloro-m-Cresol (4-Chloro-3-me	664981	ND	23.0	33.3	ug/kg	116592091	
Pentachlorophenol	664981	ND	280	300	ug/kg	116592091	
Phenanthrene	664981	ND	8.79	33.3	ug/kg	116592091	
Phenol	664981	ND	13.2	33.3	ug/kg	116592091	
Pyrene	664981	ND	16.5	33.3	ug/kg	116592091	
Pyridine	664981	ND	57.4	66.6	ug/kg	116592091	

CCC

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
1,4-Dichlorobenzene	54600	50000.0	ug/kg	109	80.0 - 120		116592090
2,4,6-Trichlorophenol	50600	50000.0	ug/kg	101	80.0 - 120		116592090
2,4-Dichlorophenol	55000	50000.0	ug/kg	110	80.0 - 120		116592090
2-Nitrophenol	50900	50000.0	ug/kg	102	80.0 - 120		116592090
Acenaphthene	52900	50000.0	ug/kg	106	80.0 - 120		116592090
Benzo(a)pyrene	52000	50000.0	ug/kg	104	80.0 - 120		116592090
Di-n-octylphthalate	52800	50000.0	ug/kg	106	80.0 - 120		116592090
Fluoranthene(Benzo(j,k)fluor ene)	53600	50000.0	ug/kg	107	80.0 - 120		116592090
Hexachlorobutadiene	53000	50000.0	ug/kg	106	80.0 - 120		116592090
N-Nitrosodiphenylamine (as DPA	57100	50000.0	ug/kg	114	80.0 - 120		116592090
p-Chloro-m-Cresol (4-Chloro-3-me	48100	50000.0	ug/kg	96.2	80.0 - 120		116592090
Pentachlorophenol	51800	50000.0	ug/kg	104	80.0 - 120		116592090
Phenol	51000	50000.0	ug/kg	102	80.0 - 120		116592090

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
1,2,4-Trichlorobenzene	55200	50000	ug/kg	110	80.0 - 120		116592090
1,2-Dichlorobenzene	52000	50000	ug/kg	104	80.0 - 120		116592090

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Quality Control

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
1,2-DPH (as azobenzene)	49100	50000	ug/kg	98.2	80.0 - 120		116592090
1,3-Dichlorobenzene	54000	50000	ug/kg	108	80.0 - 120		116592090
1,4-Dichlorobenzene	54600	50000	ug/kg	109	80.0 - 120		116592090
2,4,5-Trichlorophenol	54200	50000	ug/kg	108	80.0 - 120		116592090
2,4,6-Trichlorophenol	50600	50000	ug/kg	101	80.0 - 120		116592090
2,4-Dichlorophenol	55000	50000	ug/kg	110	80.0 - 120		116592090
2,4-Dimethylphenol	53100	50000	ug/kg	106	80.0 - 120		116592090
2,4-Dinitrophenol	49300	50000	ug/kg	98.6	80.0 - 120		116592090
2,4-Dinitrotoluene	49400	50000	ug/kg	98.8	80.0 - 120		116592090
2,6-Dichlorophenol	56200	50000	ug/kg	112	80.0 - 120		116592090
2,6-Dinitrotoluene	51500	50000	ug/kg	103	80.0 - 120		116592090
2-Chloronaphthalene	57800	50000	ug/kg	116	80.0 - 120		116592090
2-Chlorophenol	53900	50000	ug/kg	108	80.0 - 120		116592090
2-Methylphenol (o-Cresol)	55100	50000	ug/kg	110	80.0 - 120		116592090
2-Nitrophenol	50900	50000	ug/kg	102	80.0 - 120		116592090
3&4-Methylphenol (m&p-Cresol)	51200	50000	ug/kg	102	80.0 - 120		116592090
3,3'-Dichlorobenzidine	52300	50000	ug/kg	105	80.0 - 120		116592090
4,6-Dinitro-2-methylphenol	49000	50000	ug/kg	98.0	80.0 - 120		116592090
4-Bromophenyl phenyl ether	56900	50000	ug/kg	114	80.0 - 120		116592090
4-Chlorophenyl phenyl ethe	53700	50000	ug/kg	107	80.0 - 120		116592090
4-Nitrophenol	44300	50000	ug/kg	88.6	80.0 - 120		116592090
Acenaphthene	52900	50000	ug/kg	106	80.0 - 120		116592090
Acenaphthylene	52900	50000	ug/kg	106	80.0 - 120		116592090
Anthracene	53200	50000	ug/kg	106	80.0 - 120		116592090
Benzidine	47700	50000	ug/kg	95.4	80.0 - 120		116592090
Benzo(a)anthracene	47700	50000	ug/kg	95.4	80.0 - 120		116592090
Benzo(a)pyrene	52000	50000	ug/kg	104	80.0 - 120		116592090
Benzo(b)fluoranthene	48600	50000	ug/kg	97.2	80.0 - 120		116592090
Benzo(ghi)perylene	49100	50000	ug/kg	98.2	80.0 - 120		116592090
Benzo(k)fluoranthene	46800	50000	ug/kg	93.6	80.0 - 120		116592090
Benzyl Butyl phthalate	51500	50000	ug/kg	103	80.0 - 120		116592090
Bis(2-chloroethoxy)methane	54500	50000	ug/kg	109	80.0 - 120		116592090
Bis(2-chloroethyl)ether	49400	50000	ug/kg	98.8	80.0 - 120		116592090
Bis(2-chloroisopropyl)ether	44100	50000	ug/kg	88.2	80.0 - 120		116592090
Bis(2-ethylhexyl)phthalate	54200	50000	ug/kg	108	80.0 - 120		116592090
Chrysene (Benzo(a)phenanthrene)	53900	50000	ug/kg	108	80.0 - 120		116592090
Dibenz(a,h)anthracene	53700	50000	ug/kg	107	80.0 - 120		116592090
Diethyl phthalate	53400	50000	ug/kg	107	80.0 - 120		116592090
Dimethyl phthalate	53700	50000	ug/kg	107	80.0 - 120		116592090
Di-n-butylphthalate	55400	50000	ug/kg	111	80.0 - 120		116592090
Di-n-octylphthalate	52800	50000	ug/kg	106	80.0 - 120		116592090
Fluoranthene(Benzo(j,k)fluorene)	53600	50000	ug/kg	107	80.0 - 120		116592090
Fluorene	55200	50000	ug/kg	110	80.0 - 120		116592090
Hexachlorobenzene	53900	50000	ug/kg	108	80.0 - 120		116592090
Hexachlorobutadiene	53000	50000	ug/kg	106	80.0 - 120		116592090
Hexachlorocyclopentadiene	49000	50000	ug/kg	98.0	80.0 - 120		116592090
Hexachloroethane	53000	50000	ug/kg	106	80.0 - 120		116592090
Indeno(1,2,3-cd)pyrene	49200	50000	ug/kg	98.4	80.0 - 120		116592090

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Quality Control

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Isophorone	44800	50000	ug/kg	89.6	80.0 - 120		116592090
Naphthalene	52100	50000	ug/kg	104	80.0 - 120		116592090
Nitrobenzene	42200	50000	ug/kg	84.4	80.0 - 120		116592090
N-Nitrosodimethylamine	53400	50000	ug/kg	107	80.0 - 120		116592090
N-Nitrosodi-n-propylamine	41200	50000	ug/kg	82.4	80.0 - 120		116592090
N-Nitrosodiphenylamine (as DPA	57100	50000	ug/kg	114	80.0 - 120		116592090
p-Chloro-m-Cresol (4-Chloro-3-me	48100	50000	ug/kg	96.2	80.0 - 120		116592090
Pentachlorophenol	51800	50000	ug/kg	104	80.0 - 120		116592090
Phenanthrene	52200	50000	ug/kg	104	80.0 - 120		116592090
Phenol	51000	50000	ug/kg	102	80.0 - 120		116592090
Pyrene	54100	50000	ug/kg	108	80.0 - 120		116592090
Pyridine	55800	50000	ug/kg	112	80.0 - 120		116592090

DFTPP

Parameter		RefMass	Reading	%	Limits%	Out	File
DFTPP Mass 127	577366	198	21194	56.7	40.0 - 60.0		116592089
DFTPP Mass 197	577366	198	0	0.0	0 - 1.00		116592089
DFTPP Mass 198	577366	198	37376	100.0	100 - 100		116592089
DFTPP Mass 199	577366	198	2537	6.8	5.00 - 9.00		116592089
DFTPP Mass 275	577366	198	7100	19.0	10.0 - 30.0		116592089
DFTPP Mass 365	577366	198	825	2.2	1.00 - 100		116592089
DFTPP Mass 441	577366	443	3702	81.7	0 - 100		116592089
DFTPP Mass 442	577366	198	23639	63.2	40.0 - 100		116592089
DFTPP Mass 443	577366	442	4530	19.2	17.0 - 23.0		116592089
DFTPP Mass 51	577366	198	15876	42.5	30.0 - 60.0		116592089
DFTPP Mass 68	577366	69.0	0	0.0	0 - 2.00		116592089
DFTPP Mass 69	577366	198	17759	47.5	0 - 100		116592089
DFTPP Mass 70	577366	69.0	61	0.3	0 - 2.00		116592089

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-IST D	664981	Blank	112800	106800	53390	160200		116592091	664981
1,4-Dichlorobenzene-d4-IST D	664981	LCS	142700	106800	53390	160200		116592092	664981
1,4-Dichlorobenzene-d4-IST D	664981	LCS Dup	134100	106800	53390	160200		116592093	664981
Acenaphthene-d10-ISTD	664981	Blank	231600	163700	81850	245500		116592091	664981
Acenaphthene-d10-ISTD	664981	LCS	261000	163700	81850	245500	*	116592092	664981
Acenaphthene-d10-ISTD	664981	LCS Dup	267600	163700	81850	245500	*	116592093	664981
Chrysene-d12-ISTD	664981	Blank	162900	79460	39730	119200	*	116592091	664981
Chrysene-d12-ISTD	664981	LCS	163400	79460	39730	119200	*	116592092	664981
Chrysene-d12-ISTD	664981	LCS Dup	170400	79460	39730	119200	*	116592093	664981
Naphthalene-d8-ISTD	664981	Blank	438300	350500	175200	525700		116592091	664981
Naphthalene-d8-ISTD	664981	LCS	532100	350500	175200	525700	*	116592092	664981
Naphthalene-d8-ISTD	664981	LCS Dup	513000	350500	175200	525700		116592093	664981
Perylene-d12-ISTD	664981	Blank	101300	53180	26590	79760	*	116592091	664981
Perylene-d12-ISTD	664981	LCS	101900	53180	26590	79760	*	116592092	664981
Perylene-d12-ISTD	664981	LCS Dup	90580	53180	26590	79760	*	116592093	664981
Phenanthrene-d10-ISTD	664981	Blank	297800	192700	96370	289100	*	116592091	664981
Phenanthrene-d10-ISTD	664981	LCS	309500	192700	96370	289100	*	116592092	664981

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IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
Phenanthrene-d10-ISTD	664981	LCS Dup	340100	192700	96370	289100	*	116592093	664981

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	664981	Blank	5.250	5.260	5.200	5.320		116592091	664981
1,4-Dichlorobenzene-d4-ISTD	664981	LCS	5.250	5.260	5.200	5.320		116592092	664981
1,4-Dichlorobenzene-d4-ISTD	664981	LCS Dup	5.250	5.260	5.200	5.320		116592093	664981
Acenaphthene-d10-ISTD	664981	Blank	7.740	7.750	7.690	7.810		116592091	664981
Acenaphthene-d10-ISTD	664981	LCS	7.750	7.750	7.690	7.810		116592092	664981
Acenaphthene-d10-ISTD	664981	LCS Dup	7.750	7.750	7.690	7.810		116592093	664981
Chrysene-d12-ISTD	664981	Blank	12.05	12.05	11.99	12.11		116592091	664981
Chrysene-d12-ISTD	664981	LCS	12.05	12.05	11.99	12.11		116592092	664981
Chrysene-d12-ISTD	664981	LCS Dup	12.05	12.05	11.99	12.11		116592093	664981
Naphthalene-d8-ISTD	664981	Blank	6.280	6.290	6.230	6.350		116592091	664981
Naphthalene-d8-ISTD	664981	LCS	6.290	6.290	6.230	6.350		116592092	664981
Naphthalene-d8-ISTD	664981	LCS Dup	6.290	6.290	6.230	6.350		116592093	664981
Perylene-d12-ISTD	664981	Blank	15.28	15.28	15.22	15.34		116592091	664981
Perylene-d12-ISTD	664981	LCS	15.28	15.28	15.22	15.34		116592092	664981
Perylene-d12-ISTD	664981	LCS Dup	15.28	15.28	15.22	15.34		116592093	664981
Phenanthrene-d10-ISTD	664981	Blank	8.990	9.000	8.940	9.060		116592091	664981
Phenanthrene-d10-ISTD	664981	LCS	9.000	9.000	8.940	9.060		116592092	664981
Phenanthrene-d10-ISTD	664981	LCS Dup	9.000	9.000	8.940	9.060		116592093	664981

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
1,2,4-Trichlorobenzene	664981	629	832	ug/kg	75.6	16.6 - 141	116592092	
1,2-Dichlorobenzene	664981	584	832	ug/kg	70.2	41.4 - 122	116592092	
1,2-DPH (as azobenzene)	664981	771	832	ug/kg	92.6	44.2 - 128	116592092	
1,3-Dichlorobenzene	664981	612	832	ug/kg	73.5	26.7 - 125	116592092	
1,4-Dichlorobenzene	664981	610	832	ug/kg	73.3	13.0 - 145	116592092	
2,4,5-Trichlorophenol	664981	574	832	ug/kg	68.9	30.8 - 137	116592092	
2,4,6-Trichlorophenol	664981	620	832	ug/kg	74.5	26.0 - 135	116592092	
2,4-Dichlorophenol	664981	591	832	ug/kg	71.0	37.7 - 130	116592092	
2,4-Dimethylphenol	664981	253	832	ug/kg	30.4	0.100 - 119	116592092	
2,4-Dinitrophenol	664981	798	832	ug/kg	95.9	5.37 - 134	116592092	
2,4-Dinitrotoluene	664981	694	832	ug/kg	83.4	27.7 - 153	116592092	
2,6-Dichlorophenol	664981	672	832	ug/kg	80.7	40.5 - 121	116592092	
2,6-Dinitrotoluene	664981	595	832	ug/kg	71.5	45.1 - 134	116592092	
2-Chloronaphthalene	664981	620	832	ug/kg	74.5	28.6 - 134	116592092	
2-Chlorophenol	664981	627	832	ug/kg	75.3	37.7 - 125	116592092	
2-Methylphenol (o-Cresol)	664981	529	832	ug/kg	63.5	0.100 - 124	116592092	
2-Nitrophenol	664981	747	832	ug/kg	89.7	34.7 - 126	116592092	
3&4-Methylphenol (m&p-Cresol)	664981	582	832	ug/kg	69.9	0.100 - 116	116592092	
3,3'-Dichlorobenzidine	664981	213	832	ug/kg	25.6	0.100 - 123	116592092	
4,6-Dinitro-2-methylphenol	664981	819	832	ug/kg	98.4	15.8 - 139	116592092	
4-Bromophenyl phenyl ether	664981	692	832	ug/kg	83.1	50.4 - 124	116592092	
4-Chlorophenyl phenyl ethe	664981	732	832	ug/kg	87.9	47.6 - 127	116592092	
4-Nitrophenol	664981	814	832	ug/kg	97.8	0.100 - 163	116592092	

ANA-LAB CORP. THE COMPLETE SERVICE LAB

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Quality Control

Printed 07/07/2016

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Acenaphthene	664981	602	832	ug/kg	72.3	31.8 - 133	116592092	
Acenaphthylene	664981	595	832	ug/kg	71.5	44.9 - 114	116592092	
Anthracene	664981	655	832	ug/kg	78.7	48.3 - 118	116592092	
Benzo(a)anthracene	664981	592	832	ug/kg	71.1	49.4 - 125	116592092	
Benzo(a)pyrene	664981	553	832	ug/kg	66.4	50.2 - 124	116592092	
Benzo(b)fluoranthene	664981	584	832	ug/kg	70.2	41.0 - 137	116592092	
Benzo(ghi)perylene	664981	579	832	ug/kg	69.5	35.6 - 146	116592092	
Benzo(k)fluoranthene	664981	560	832	ug/kg	67.3	42.2 - 147	116592092	
Benzyl Butyl phthalate	664981	620	832	ug/kg	74.5	18.6 - 163	116592092	
Bis(2-chloroethoxy)methane	664981	633	832	ug/kg	76.0	45.3 - 123	116592092	
Bis(2-chloroethyl)ether	664981	597	832	ug/kg	71.7	12.1 - 143	116592092	
Bis(2-chloroisopropyl)ether	664981	680	832	ug/kg	81.7	21.3 - 146	116592092	
Bis(2-ethylhexyl)phthalate	664981	622	832	ug/kg	74.7	39.7 - 168	116592092	
Chrysene (Benzo(a)phenanthrene)	664981	615	832	ug/kg	73.9	52.8 - 121	116592092	
Dibenz(a,h)anthracene	664981	557	832	ug/kg	66.9	46.1 - 136	116592092	
Diethyl phthalate	664981	594	832	ug/kg	71.4	25.7 - 144	116592092	
Dimethyl phthalate	664981	646	832	ug/kg	77.6	0.100 - 157	116592092	
Di-n-butylphthalate	664981	738	832	ug/kg	88.6	23.3 - 173	116592092	
Di-n-octylphthalate	664981	611	832	ug/kg	73.4	17.2 - 174	116592092	
Fluoranthene(Benzo(j,k)fluorene)	664981	731	832	ug/kg	87.8	52.0 - 135	116592092	
Fluorene	664981	703	832	ug/kg	84.4	52.2 - 125	116592092	
Hexachlorobenzene	664981	628	832	ug/kg	75.4	52.1 - 124	116592092	
Hexachlorobutadiene	664981	620	832	ug/kg	74.5	16.3 - 138	116592092	
Hexachlorocyclopentadiene	664981	790	832	ug/kg	94.9	0.100 - 149	116592092	
Hexachloroethane	664981	606	832	ug/kg	72.8	18.8 - 131	116592092	
Indeno(1,2,3-cd)pyrene	664981	579	832	ug/kg	69.5	44.3 - 138	116592092	
Isophorone	664981	707	832	ug/kg	84.9	44.3 - 123	116592092	
Naphthalene	664981	546	832	ug/kg	65.6	41.0 - 122	116592092	
Nitrobenzene	664981	574	832	ug/kg	68.9	42.1 - 122	116592092	
N-Nitrosodimethylamine	664981	571	832	ug/kg	68.6	0.100 - 211	116592092	
N-Nitrosodi-n-propylamine	664981	676	832	ug/kg	81.2	18.1 - 159	116592092	
N-Nitrosodiphenylamine (as DPA	664981	564	832	ug/kg	67.7	40.2 - 126	116592092	
p-Chloro-m-Cresol (4-Chloro-3-me	664981	620	832	ug/kg	74.5	42.6 - 131	116592092	
Pentachlorophenol	664981	627	832	ug/kg	75.3	9.29 - 146	116592092	
Phenanthrene	664981	660	832	ug/kg	79.3	49.1 - 127	116592092	
Phenol	664981	532	832	ug/kg	63.9	0.100 - 142	116592092	
Pyrene	664981	645	832	ug/kg	77.5	15.6 - 154	116592092	
Pyridine	664981	449	832	ug/kg	53.9	17.0 - 80.0	116592092	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,2,4-Trichlorobenzene	664981	629	578	832	16.6 - 141	75.6	69.4	ug/kg	8.55	30.0
1,2-Dichlorobenzene	664981	584	551	832	41.4 - 122	70.2	66.2	ug/kg	5.87	30.0
1,2-DPH (as azobenzene)	664981	771	654	832	44.2 - 128	92.6	78.6	ug/kg	16.4	30.0
1,3-Dichlorobenzene	664981	612	583	832	26.7 - 125	73.5	70.0	ug/kg	4.88	30.0
1,4-Dichlorobenzene	664981	610	575	832	13.0 - 145	73.3	69.1	ug/kg	5.90	30.0
2,4,5-Trichlorophenol	664981	574	536	832	30.8 - 137	68.9	64.4	ug/kg	6.75	30.0
2,4,6-Trichlorophenol	664981	620	504	832	26.0 - 135	74.5	60.5	ug/kg	20.7	30.0

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LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
2,4-Dichlorophenol	664981	591	531	832	37.7 - 130	71.0	63.8	ug/kg	10.7	30.0
2,4-Dimethylphenol	664981	253	277	832	0.100 - 119	30.4	33.3	ug/kg	9.11	30.0
2,4-Dinitrophenol	664981	798	747	832	5.37 - 134	95.9	89.7	ug/kg	6.68	30.0
2,4-Dinitrotoluene	664981	694	697	832	27.7 - 153	83.4	83.7	ug/kg	0.359	30.0
2,6-Dichlorophenol	664981	672	622	832	40.5 - 121	80.7	74.7	ug/kg	7.72	30.0
2,6-Dinitrotoluene	664981	595	631	832	45.1 - 134	71.5	75.8	ug/kg	5.84	30.0
2-Chloronaphthalene	664981	620	566	832	28.6 - 134	74.5	68.0	ug/kg	9.12	30.0
2-Chlorophenol	664981	627	594	832	37.7 - 125	75.3	71.4	ug/kg	5.32	30.0
2-Methylphenol (o-Cresol)	664981	529	557	832	0.100 - 124	63.5	66.9	ug/kg	5.21	30.0
2-Nitrophenol	664981	747	705	832	34.7 - 126	89.7	84.7	ug/kg	5.73	30.0
3&4-Methylphenol (m&p-Cresol)	664981	582	580	832	0.100 - 116	69.9	69.7	ug/kg	0.287	30.0
3,3'-Dichlorobenzidine	664981	213	205	832	0.100 - 123	25.6	24.6	ug/kg	3.98	30.0
4,6-Dinitro-2-methylphenol	664981	819	777	832	15.8 - 139	98.4	93.3	ug/kg	5.32	30.0
4-Bromophenyl phenyl ether	664981	692	554	832	50.4 - 124	83.1	66.5	ug/kg	22.2	30.0
4-Chlorophenyl phenyl ethe	664981	732	675	832	47.6 - 127	87.9	81.1	ug/kg	8.05	30.0
4-Nitrophenol	664981	814	751	832	0.100 - 163	97.8	90.2	ug/kg	8.09	30.0
Acenaphthene	664981	602	559	832	31.8 - 133	72.3	67.1	ug/kg	7.46	30.0
Acenaphthylene	664981	595	545	832	44.9 - 114	71.5	65.5	ug/kg	8.76	30.0
Anthracene	664981	655	516	832	48.3 - 118	78.7	62.0	ug/kg	23.7	30.0
Benzo(a)anthracene	664981	592	523	832	49.4 - 125	71.1	62.8	ug/kg	12.4	30.0
Benzo(a)pyrene	664981	553	530	832	50.2 - 124	66.4	63.7	ug/kg	4.15	30.0
Benzo(b)fluoranthene	664981	584	596	832	41.0 - 137	70.2	71.6	ug/kg	1.97	30.0
Benzo(ghi)perylene	664981	579	484	832	35.6 - 146	69.5	58.1	ug/kg	17.9	30.0
Benzo(k)fluoranthene	664981	560	569	832	42.2 - 147	67.3	68.3	ug/kg	1.47	30.0
Benzyl Butyl phthalate	664981	620	584	832	18.6 - 163	74.5	70.2	ug/kg	5.94	30.0
Bis(2-chloroethoxy)methane	664981	633	563	832	45.3 - 123	76.0	67.6	ug/kg	11.7	30.0
Bis(2-chloroethyl)ether	664981	597	579	832	12.1 - 143	71.7	69.5	ug/kg	3.12	30.0
Bis(2-chloroisopropyl)ether	664981	680	662	832	21.3 - 146	81.7	79.5	ug/kg	2.73	30.0
Bis(2-ethylhexyl)phthalate	664981	622	587	832	39.7 - 168	74.7	70.5	ug/kg	5.79	30.0
Chrysene (Benzo(a)phenanthrene)	664981	615	526	832	52.8 - 121	73.9	63.2	ug/kg	15.6	30.0
Dibenz(a,h)anthracene	664981	557	452	832	46.1 - 136	66.9	54.3	ug/kg	20.8	30.0
Diethyl phthalate	664981	594	593	832	25.7 - 144	71.4	71.2	ug/kg	0.281	30.0
Dimethyl phthalate	664981	646	468	832	0.100 - 157	77.6	56.2	ug/kg	32.0 *	30.0
Di-n-butylphthalate	664981	738	605	832	23.3 - 173	88.6	72.7	ug/kg	19.7	30.0
Di-n-octylphthalate	664981	611	668	832	17.2 - 174	73.4	80.2	ug/kg	8.85	30.0
Fluoranthene(Benzo(j,k)fluorene)	664981	731	641	832	52.0 - 135	87.8	77.0	ug/kg	13.1	30.0
Fluorene	664981	703	649	832	52.2 - 125	84.4	78.0	ug/kg	7.88	30.0
Hexachlorobenzene	664981	628	559	832	52.1 - 124	75.4	67.1	ug/kg	11.6	30.0
Hexachlorobutadiene	664981	620	556	832	16.3 - 138	74.5	66.8	ug/kg	10.9	30.0
Hexachlorocyclopentadiene	664981	790	732	832	0.100 - 149	94.9	87.9	ug/kg	7.66	30.0
Hexachloroethane	664981	606	598	832	18.8 - 131	72.8	71.8	ug/kg	1.38	30.0
Indeno(1,2,3-cd)pyrene	664981	579	503	832	44.3 - 138	69.5	60.4	ug/kg	14.0	30.0
Isophorone	664981	707	652	832	44.3 - 123	84.9	78.3	ug/kg	8.09	30.0
Naphthalene	664981	546	554	832	41.0 - 122	65.6	66.5	ug/kg	1.36	30.0
Nitrobenzene	664981	574	574	832	42.1 - 122	68.9	68.9	ug/kg	0	30.0
N-Nitrosodimethylamine	664981	571	517	832	0.100 - 211	68.6	62.1	ug/kg	9.95	30.0
N-Nitrosodi-n-propylamine	664981	676	681	832	18.1 - 159	81.2	81.8	ug/kg	0.736	30.0
N-Nitrosodiphenylamine (as DPA	664981	564	569	832	40.2 - 126	67.7	68.3	ug/kg	0.882	30.0

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Quality Control

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LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
p-Chloro-m-Cresol (4-Chloro-3-me	664981	620	588	832	42.6 - 131	74.5	70.6	ug/kg	5.38	30.0
Pentachlorophenol	664981	627	626	832	9.29 - 146	75.3	75.2	ug/kg	0.133	30.0
Phenanthrene	664981	660	534	832	49.1 - 127	79.3	64.1	ug/kg	21.2	30.0
Phenol	664981	532	500	832	0.100 - 142	63.9	60.1	ug/kg	6.13	30.0
Pyrene	664981	645	561	832	15.6 - 154	77.5	67.4	ug/kg	13.9	30.0
Pyridine	664981	449	432	832	17.0 - 80.0	53.9	51.9	ug/kg	3.78	30.0

SPCC

Parameter	Sample	RF	Minimum	File
2,4-Dinitrophenol	578235	49300	0.050	116592090
4-Nitrophenol	578235	44300	0.050	116592090
Hexachlorocyclopentadiene	578235	49000	0.050	116592090
N-Nitrosodi-n-propylamine	578235	41200	0.050	116592090

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	578235	CCV	55100	100000	ug/kg	55.1	36.6 - 112	116592090
2-Fluorobiphenyl-SURR	578235	CCV	48600	50000	ug/kg	97.2	29.5 - 105	116592090
2-Fluorophenol-SURR	578235	CCV	52900	100000	ug/kg	52.9	0.734 - 98.4	116592090
4-Terphenyl-d14-SURR	578235	CCV	56700	50000	ug/kg	113	33.1 - 118	116592090
Nitrobenzene-d5-SURR	578235	CCV	54300	50000	ug/kg	109 *	35.6 - 103	116592090
Phenol-d6-SURR	578235	CCV	52200	100000	ug/kg	52.2	0.100 - 110	116592090
2,4,6-Tribromophenol	664981	Blank	2000	3330	ug/kg	60.1	36.6 - 112	116592091
2,4,6-Tribromophenol	664981	LCS	1900	3330	ug/kg	57.1	36.6 - 112	116592092
2,4,6-Tribromophenol	664981	LCS Dup	2010	3330	ug/kg	60.4	36.6 - 112	116592093
2-Fluorobiphenyl-SURR	664981	Blank	19200	50000	ug/kg	38.4	29.5 - 105	116592091
2-Fluorobiphenyl-SURR	664981	LCS	16000	50000	ug/kg	32.0	29.5 - 105	116592092
2-Fluorobiphenyl-SURR	664981	LCS Dup	14900	50000	ug/kg	29.8	29.5 - 105	116592093
2-Fluorophenol-SURR	664981	Blank	51900	100000	ug/kg	51.9	0.734 - 98.4	116592091
2-Fluorophenol-SURR	664981	LCS	48000	100000	ug/kg	48.0	0.734 - 98.4	116592092
2-Fluorophenol-SURR	664981	LCS Dup	45100	100000	ug/kg	45.1	0.734 - 98.4	116592093
4-Terphenyl-d14-SURR	664981	Blank	14600	50000	ug/kg	29.2 *	33.1 - 118	116592091
4-Terphenyl-d14-SURR	664981	LCS	14800	50000	ug/kg	29.6 *	33.1 - 118	116592092
4-Terphenyl-d14-SURR	664981	LCS Dup	13600	50000	ug/kg	27.2 *	33.1 - 118	116592093
Nitrobenzene-d5-SURR	664981	Blank	20500	50000	ug/kg	41.0	35.6 - 103	116592091
Nitrobenzene-d5-SURR	664981	LCS	18400	50000	ug/kg	36.8	35.6 - 103	116592092
Nitrobenzene-d5-SURR	664981	LCS Dup	17300	50000	ug/kg	34.6 *	35.6 - 103	116592093
Phenol-d6-SURR	664981	Blank	64800	100000	ug/kg	64.8	0.100 - 110	116592091
Phenol-d6-SURR	664981	LCS	54500	100000	ug/kg	54.5	0.100 - 110	116592092
Phenol-d6-SURR	664981	LCS Dup	50700	100000	ug/kg	50.7	0.100 - 110	116592093

RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100% Recover% is Recovery Percent: result / known * 100%

Blank - Method Blank; LCS - Laboratory Control Sample; CCV - Continuing Calibration Verification; MS - Matrix Spike; DFTPP - GC/MS Tuning Compound; CCC - Calibration Check Compound

746945 CoC Print Group 001 of 001

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Chain of Custody

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Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

GPDR

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Phone 870/567-8177
Fax 870/364-9076

Solid Samples

Matrix: Solid & Chemical Materials

Sampler Printed Name RICHARD FREEMAN *Sampler Affiliation* GEORGIA PACIFIC *Sampler Signature*

Accredited	Test	Name	Method
	1	Glass Qt w/Teflon lined lid	
N	^TCL	TCLP Extraction Non-Volatile	EPA 1311
N	TVOX	TCLP Extraction ZHE Volatiles	EPA 1311ZHE
N	^AsT	TCLP Arsenic	EPA 6020A
N	^BaT	TCLP Barium	EPA 6020A
N	^CdT	TCLP Cadmium	EPA 6020A
N	^CrT	TCLP Chromium	EPA 6020A
N	^PbT	TCLP Lead	EPA 6020A
N	^SeT	TCLP Selenium	EPA 6020A
N	^AgT	TCLP Silver	EPA 6020A
N	^Hg^	TCLP Mercury	EPA 7470A
N	TG80	GC TCLP Pesticide	EPA 8081A
N	TG50	GC TCLP Herbicide	EPA 8151
N	TVOA	MS TCLP Volatile Analysis	EPA 8260B
N	TABN	MS TCLP Semivolatile Analysis	EPA 8270C
	2	Glass 4 oz w/Teflon lined lid	
N	Reac	Reactivity	
	RH2O	Reactivity with Water	
	RS=	Sulfide Screen	ASTM D 4978-95/SW 9031
N	#Ign	Ignitability	EPA 1030
N	3015	Solid Metals Digestion	EPA 200.2 2.8
N	^BI	Boron	EPA 6010C
N	^SnI	Tin, Total	EPA 6010C
N	^FeI	Total Iron	EPA 6010C
N	^AlM	Aluminum, Total	EPA 6020A
N	^SbM	Antimony, Total	EPA 6020A
N	^AsM	Arsenic, Total	EPA 6020A
N	^BaM	Barium	EPA 6020A
N	^CdM	Cadmium, Total	EPA 6020A
N	^CrM	Chromium, Total	EPA 6020A
N	^CoM	Cobalt	EPA 6020A

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Phone 870/567-8177
Fax 870/364-9076

Solid Samples

N	*CuM	Copper, Total	EPA 6020A
N	*PbM	Lead, Total	EPA 6020A
N	*MoM	Molybdenum	EPA 6020A
N	*NiM	Nickel, Total	EPA 6020A
N	*SeM	Selenium, Total	EPA 6020A
N	*AgM	Silver, Total	EPA 6020A
N	*TlM	Thallium, Total	EPA 6020A
N	*VM	Vanadium	EPA 6020A
N	*ZnM	Zinc, Total	EPA 6020A
N	*HgS	Mercury	EPA 7471A
N	747S	Solid Metals Digestion Hg	EPA 7471A
N	1ABN	Semivolatile Hydrocarbons	EPA 8270C
N	RCN	Total Cyanide	EPA 9014
N	CorS	Corrosivity (Solids by pH)	EPA 9045D
N	pHLS	pH Measured in Water	EPA 9045D
N	TS%	Total Solids for Dry Wt	SM2540 G-1997 /MOD
	0	ZI-Admistrative use only: no bottle required	
	ARDW	As Received to Dry Weight Basis	Calculation
	1	5035 Sampling Kit	
N	1VOA	Volatiles by GC/MS	EPA 8260B

Ana-Lab #	Sample ID	Bottles	Date	Time	Notes
1492980	ASH 10A	4	5/24/16	9:40 AM	

Corporate Shipping: 2600 Dudley Rd. Kilgore, TX 75662

Ark-La-Miss Region: 4720 Viking Dr. Suite A Bossier City LA 71111

ACCREDITED IN ACCORDANCE WITH NELAP

NBLAP-accredited #T104704201

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GPDR

119

Phone 870/567-8177
Fax 870/364-9076

Solid Samples

Ambient Conditions/Comments

Date	Time	Relinquished		Received	
5/24/16	4:30 PM	Printed Name	Affiliation GEORGIA PACIFIC	Printed Name Fedex	Affiliation
		Signature		Signature	
5-25-16	0930	Printed Name Fedex	Affiliation	Printed Name Tiffany Tarver	Affiliation Ana-Lab Corporation
		Signature		Signature	
		Printed Name	Affiliation	Printed Name	Affiliation
		Signature		Signature	
		Printed Name	Affiliation	Printed Name	Affiliation
		Signature		Signature	

Sample Recieved on Ice? [X] Yes [ ] No **Method of Shipment:** [ ] UPS [ ] Bus [X] FedEx [ ] Lone Star [ ] Hand Delivered [ ] Other

Cooler/Sample Secure? [X] Yes [ ] No **Tracking/Shipping #** 8089 1627 0042

The accredited column designates accreditation by A - A2LA, N - NELAC, or z - not listed under scope of accreditation. Unless otherwise specified, ANA-LAB shall provide these ordered services pursuant to our Standard Terms & Conditions Agreement (available for download from the welcome page at <http://www.ana-lab.com>). Ana-Lab personnel collect samples as specified by Ana-Lab SOP #000323.

Comments

005057 ☐ CF____
005661 ☒ CF 0.0
003688 ☐ CF____

6.5 °C

FedEx Express Package US Airbill

Date 5/24/16

Sender's Name REBECCA BLANKENSHIP Phone 870 547-8812

Company GEORGIA PACIFIC/ENVIRONMENTAL

Address 100 SUPPLY RD

City CROSSETT State AR ZIP 71635

2 Your Internal Billing Reference

3 To Recipients Name SKEETER LUAEWIG Phone 903 984-0551

Company AWA - LAB

Address 2600 DOBLEY RD.

City KILGORE State TX ZIP 75662

4a Express Package Service

Next Business Day

FedEx First Overnight

FedEx Priority Overnight

FedEx Standard Overnight

2 or 3 Business Days

FedEx 2Day

FedEx Express Saver

5 Packaging

FedEx Envelope

FedEx Pak

FedEx Box

FedEx Tube

Other

6 Special Handling and Delivery Signature Options

SATURDAY Delivery

No Signature Required

Direct Signature

Indirect Signature

Does this shipment contain dangerous goods?

No

Yes

Dry Ice

Cargo Aircraft Only

7 Payment Bill to

Sender

Recipient

Third Party

Credit Card

Cash/Check

Total Packages 1

Total Weight 27 lb

Total Declared Value

fedex.com 1800.GoFedEx 1800.463.3339

Report Page 23 of 23

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Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 e-Mail corp@ana-lab.com LELAP-accredited #02008

Employee Owned Integrity Caring Continual Improvement

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Report

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Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

Account	*Project*
GPDR -L	**746901**

DREGS

This report consists of this Table of Contents and the following pages:

ANA-LAB CORP. THE COMPLETE SERVICE LAB

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Employee Owned Integrity Caring Continual Improvement

Results

Printed: 07/07/2016

DREGS

Account	*Project*
GPDR-L	**746901**

Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

Results

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle

1505097 DREGS Filter Solid Samples *Received:* 06/21/2016

olid & Chemical Material *Collected by:* Client *Affiliation:* Georgia Pacific Pape 06/20/2016 14:00:00

Supplement to Test Report 1500893

		Prepared:	***668651***		*06/23/2016*		*15:00:00*		
EPA 6010C				Analyzed	*LPS 06/24/2016*	*11:28:00*	*QCgroup*	*668877*	
N	**Boron**	**<24.0 ***		**mg/kg**	24.0			**7440-42-8**	16
N	**Tin, Total**	**<12.0 ***		**mg/kg**	12.0	B		**7440-31-5**	16
EPA 6010C				Analyzed	*LPS 06/28/2016*	*11:26:00*	*QCgroup*	*669224*	
N	**Total Iron**	**4460 ***		**mg/Kg**	60.1			**7439-89-6**	16

* Dry Weight Basis

		Prepared:	***668441***		*06/22/2016*		*12:45:00*		
EPA 6020A				Analyzed	*CLK 06/22/2016*	*17:49:00*	*QCgroup*	*668514*	
N	**TCLP Arsenic**	**<0.050**		**mg/L**	0.050	5.00		**7440-38-2**	11
N	**TCLP Barium**	**1.29**		**mg/L**	0.050	100		**7440-39-3**	11
N	**TCLP Cadmium**	**<0.005**		**mg/L**	0.005	1.00		**7440-43-9**	11
N	**TCLP Chromium**	**<0.050**		**mg/L**	0.050	5.00		**7440-47-3**	11
N	**TCLP Lead**	**<0.050**		**mg/L**	0.050	5.00		**7439-92-1**	11
N	**TCLP Selenium**	**<0.050**		**mg/L**	0.050	1.00		**7782-49-2**	11
N	**TCLP Silver**	**<0.050**		**mg/L**	0.050	5.00		**7440-22-4**	11
		Prepared:	***668651***		*06/23/2016*		*15:00:00*		
EPA 6020A				Analyzed	*CLK 06/24/2016*	*14:23:00*	*QCgroup*	*668903*	
N	**Aluminum, Total**	**2880 ***		**mg/kg**	1.20			**7429-90-5**	16
N	**Antimony, Total**	**<0.240 ***		**mg/kg**	0.240			**7440-36-0**	16
N	**Arsenic, Total**	**<0.479 ***		**mg/kg**	0.479	41.0		**7440-38-2**	16
N	**Barium**	**1410 ***		**mg/kg**	0.721			**7440-39-3**	16
N	**Cadmium, Total**	**5.43 ***		**mg/kg**	0.240	39.0		**7440-43-9**	16
N	**Chromium, Total**	**44.9 ***		**mg/kg**	0.240			**7440-47-3**	16
N	**Cobalt**	**19.7 ***		**mg/kg**	0.240			**7440-48-4**	16
N	**Copper, Total**	**262 ***		**mg/kg**	0.240	1500		**7440-50-8**	16
N	**Lead, Total**	**15.1 ***		**mg/kg**	0.240	300		**7439-92-1**	16
N	**Molybdenum**	**0.796 ***		**mg/kg**	0.240	49.1		**7439-98-7**	16
N	**Nickel, Total**	**155 ***		**mg/kg**	0.240	420		**7440-02-0**	16
N	**Selenium, Total**	**<0.721 ***		**mg/kg**	0.721	100		**7782-49-2**	16
N	**Silver, Total**	**1.45 ***		**mg/kg**	0.240			**7440-22-4**	16
N	**Thallium, Total**	**<0.240 ***		**mg/kg**	0.240			**7440-28-0**	16
N	**Vanadium**	**0.800 ***		**mg/kg**	0.240			**7440-62-2**	16
N	**Zinc, Total**	**571 ***		**mg/kg**	1.20	2800		**7440-66-6**	16

* Dry Weight Basis

		Prepared:	***668323***		*06/22/2016*		*10:30:00*		
EPA 7470A				Analyzed	*CLK 06/22/2016*	*13:49:00*	*QCgroup*	*668399*	

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Results

Printed: 07/07/2016

Results

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
1505097 DREGS Filter Solid Samples							*Received:* 06/21/2016
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape			06/20/2016	14:00:00
Supplement to Test Report 1500893							
EPA 7470A		Analyzed	*CLK 06/22/2016*		*13:49:00*	*QCgroup*	*668399*
N **TCLP Mercury**	**<0.002**	**mg/L**	0.002		0.200	**7439-97-6**	08
	Prepared:	***668128***	*06/21/2016*		*13:40:00*		
EPA 7471A		Analyzed	*CLK 06/22/2016*		*12:43:00*	*QCgroup*	*668396*
N **Mercury**	**<0.0363 ***	**mg/kg**	0.0363		17.0	**7439-97-6**	03
* Dry Weight Basis							
	Prepared:	***668356***	*06/22/2016*		*11:49:34*		
EPA 8081A		Analyzed	*SLC 06/24/2016*		*17:23:00*	*QCgroup*	*669072*
N **TCLP Chlordane**	**<0.00005**	**mg/L**	0.00005		0.030	**57-74-9**	09
N **TCLP Endrin**	**<0.00005**	**mg/L**	0.00005		0.020	**72-20-8**	09
N **TCLP gamma-BHC (Lindane)**	**<0.00005**	**mg/L**	0.00005		0.400	**58-89-9**	09
N **TCLP Heptachlor**	**<0.00005**	**mg/L**	0.00005		0.008	**76-44-8**	09
N **TCLP Heptachlor Epoxide**	**<0.00005**	**mg/L**	0.00005		0.008	**1024-57-3**	09
N **TCLP Methoxychlor**	**<0.00005**	**mg/L**	0.00005		10.0	**72-43-5**	09
N **TCLP Toxaphene**	**<0.00005**	**mg/L**	0.00005		0.500	**8001-35-2**	09
	Prepared:	***668637***	*06/23/2016*		*12:40:00*		
EPA 8151		Analyzed	*EMT 06/27/2016*		*13:15:00*	*QCgroup*	*669047*
N **TCLP 2,4 D**	**<0.500**	**mg/L**	0.500	X	10.0	**94-75-7**	14
N **TCLP 2,4,5-TP (Silvex)**	**<0.300**	**mg/L**	0.300	X	1.00	**93-72-1**	14
	Prepared:	***668758***	*06/23/2016*		*19:14:00*		
EPA 8260B		Analyzed	*JRH 06/23/2016*		*19:14:00*	*QCgroup*	*668758*
N **1,1,1,2-Tetrachloroethane**	**<93.6 ***	**ug/kg**	93.6	(	1420	**630-20-6**	01
N **1,1,1-Trichloroethane**	**<93.6 ***	**ug/kg**	93.6	(	1620	**71-55-6**	01
N **1,1,2,2-Tetrachloroethane**	**<93.6 ***	**ug/kg**	93.6	(	23.1	**79-34-5**	01
N **1,1,2-Trichloroethane**	**<93.6 ***	**ug/kg**	93.6	(	20.1	**79-00-5**	01
N **1,1-Dichloroethane**	**<93.6 ***	**ug/kg**	93.6	(	9250	**75-34-3**	01
N **1,1-Dichloroethylene**	**<93.6 ***	**ug/kg**	93.6	(	50.1	**75-35-4**	01
N **1,1-Dichloropropene**	**<93.6 ***	**ug/kg**	93.6	(	5.00	**563-58-6**	01
N **1,2,3-Trichlorobenzene**	**<93.6 ***	**ug/kg**	93.6	(	4800	**87-61-6**	01
N **1,2,3-Trichloropropane**	**<93.6 ***	**ug/kg**	93.6	(	2.28	**96-18-4**	01
N **1,2,4-Trichlorobenzene**	**<93.6 ***	**ug/kg**	93.6	(	4800	**120-82-1**	01
N **1,2,4-Trimethylbenzene**	**<93.6 ***	**ug/kg**	93.6	(	26000	**95-63-6**	01
N **1,2-Dibromo-3-chloropropane**	**<93.6 ***	**ug/kg**	93.6	(	1.75	**96-12-8**	01
N **1,2-Dibromoethane**	**<93.6 ***	**ug/kg**	93.6	(	0.210	**106-93-4**	01
N **1,2-Dichloroethane**	**<93.6 ***	**ug/kg**	93.6	(	13.7	**107-06-2**	01
N **1,2-Dichloropropane**	**<93.6 ***	**ug/kg**	93.6	(	22.8	**78-87-5**	01
N **1,3,5-Trimethylbenzene**	**<93.6 ***	**ug/kg**	93.6	(	45000	**108-67-8**	01
N **1,3-Dichloropropane**	**<93.6 ***	**ug/kg**	93.6	(	5.00	**142-28-9**	01
N **2,2-Dichloropropane**	**<93.6 ***	**ug/kg**	93.6	(X	5.00	**594-20-7**	01
N **2-Chloroethylvinyl ether**	**<93.6 ***	**ug/kg**	93.6	(	5.00	**110-75-8**	01
N **2-Chlorotoluene**	**<93.6 ***	**ug/kg**	93.6	(	1000000	**95-49-8**	01
N **4-Chlorotoluene**	**<93.6 ***	**ug/kg**	93.6	(	1000000	**106-43-4**	01

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Results

Printed: 07/07/2016

Results

1505097 DREGS Filter Solid Samples *Received:* 06/21/2016

olid & Chemical Material *Collected by:* Client *Affiliation:* Georgia Pacific Pape 06/20/2016 14:00:00

Supplement to Test Report 1500893

	Parameter	Results	Units	RL		MAL	CAS	Bottle
EPA 8260B			Analyzed	*JRH 06/23/2016*		*19:14:00*	*QCgroup 668758*	
N	Acetone	<936 *	ug/kg	936	(	4750	67-64-1	01
N	Acrolein	<468 *	ug/kg	468	(	947	107-02-8	01
N	Acrylonitrile	<468 *	ug/kg	468	(	7500	107-13-1	01
N	Benzene	<34.1 *	ug/kg	34.1	(	26.0	71-43-2	01
N	Bromobenzene	<93.6 *	ug/kg	93.6	(	5.00	108-86-1	01
N	Bromochloromethane	<93.6 *	ug/kg	93.6	(	5.00	74-97-5	01
N	Bromodichloromethane	<93.6 *	ug/kg	93.6	(	440	75-27-4	01
N	Bromoform	<93.6 *	ug/kg	93.6	(	546	75-25-2	01
N	Bromomethane (Methyl Bromi	<93.6 *	ug/kg	93.6	(	131	74-83-9	01
N	Carbon Tetrachloride	<93.6 *	ug/kg	93.6	(	61.9	56-23-5	01
N	Chlorobenzene	<93.6 *	ug/kg	93.6	(	1090	108-90-7	01
N	Chloroethane	<93.6 *	ug/kg	93.6	(	30900	75-00-3	01
N	Chloroform	<93.6 *	ug/kg	93.6	(	417	67-66-3	01
N	Chloromethane	<93.6 *	ug/kg	93.6	(	405	74-87-3	01
N	cis-1,2-Dichloroethylene	<93.6 *	ug/kg	93.6	(	248	156-59-2	01
N	cis-1,3-Dichloropropene	<93.6 *	ug/kg	93.6	(	22.0	10061-01-5	01
N	Dibromochloromethane	<93.6 *	ug/kg	93.6	(	445	124-48- 1	01
N	Dibromomethane	<93.6 *	ug/kg	93.6	(	5.00	74-95-3	01
N	Dichlorodifluoromethane	<93.6 *	ug/kg	93.6	(	239000	75-71-8	01
N	Dichloromethane	<93.6 *	ug/kg	93.6	(	13.1	75-09-2	01
N	Ethylbenzene	<93.6 *	ug/kg	93.6	(	7600	100-41-4	01
N	Hexachlorobutadiene	<93.6 *	ug/kg	93.6	(	1400	87-68-3	01
N	Isopropylbenzene (Cumene)	<93.6 *	ug/kg	93.6	(	347000	98-82-8	01
N	m- and p-Xylene	<93.6 *	ug/kg	93.6	(	0	ARC-mpXyl	01
N	m-Dichlorobenzene	<93.6 *	ug/kg	93.6	(	5.00	541-73-1	01
N	Methyl ethyl ketone (Butanone)	<936 *	ug/kg	936	(	29300	78-93-3	01
N	Methyl Isobutyl Ketone	<93.6 *	ug/kg	93.6	(	4950	108-10-1	01
N	Naphthalene	<93.6 *	ug/kg	93.6	(	31000	91-20-3	01
N	n-Butylbenzene	<93.6 *	ug/kg	93.6	(	45000	104-51-8	01
N	n-Propylbenzene	<93.6 *	ug/kg	93.6	(	45000	103-65-1	01
N	o-Dichlorobenzene	<93.6 *	ug/kg	93.6	(	5.00	95-50-1	01
N	o-Xylene	<93.6 *	ug/kg	93.6	(	0	95-47-6	01
N	p-Dichlorobenzene	<93.6 *	ug/kg	93.6	(	5.00	106-46-7	01
N	p-Isopropyltoluene	<93.6 *	ug/kg	93.6	(		99-87-6	01
N	sec-Butylbenzene	<93.6 *	ug/kg	93.6	(	45000	135-98-8	01
N	Styrene	<93.6 *	ug/kg	93.6	(	3250	100-42-5	01
N	tert-Butylbenzene	<93.6 *	ug/kg	93.6	(	45000	98-06-6	01
N	tert-Butylmethylether (MTBE)	<281 *	ug/kg	281	(	620	1634-04-4	01
N	Tetrachloroethylene	<93.6 *	ug/kg	93.6	(	50.2	127-18-4	01
N	Toluene	<93.6 *	ug/kg	93.6	(	8200	108-88-3	01
N	trans-1,2-Dichloroethylene	<93.6 *	ug/kg	93.6	(	490	156-60-5	01
N	trans-1,3-Dichloropropene	<93.6 *	ug/kg	93.6	(	5.00	10061-02-6	01
N	Trichloroethylene	<93.6 *	ug/kg	93.6	(	33.6	79-01-6	01
N	Trichlorofluoromethane	<93.6 *	ug/kg	93.6	(	128000	75-69-4	01
N	Vinyl chloride	<93.6 *	ug/kg	93.6	(	22.3	75-01-4	01

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Results

Printed: 07/07/2016

Results

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle

1505097 DREGS Filter Solid Samples *Received:* 06/21/2016

olid & Chemical Material *Collected by:* Client *Affiliation:* Georgia Pacific Pape 06/20/2016 14:00:00

Supplement to Test Report 1500893

EPA 8260B			Calculated	*CAL 06/28/2016*	*14:42:33*	*QCgroup*	*668758*		
N	**Xylenes, Total**	<93.6 *	ug/kg	93.6		120000	**1330-20-7**		01
	Prepared:	***669613***		*06/29/2016*		*14:15:00*			
EPA 8260B			Analyzed	*JRH 06/29/2016*	*14:15:00*	*QCgroup*	*669613*		
N	**TCLP 1,1-Dichloroethene**	<0.010	mg/L	0.010		0.700	**75-35-4**		19
N	**TCLP 1,2-Dichloroethane**	<0.010	mg/L	0.010		0.500	**107-06-2**		19
N	**TCLP 1,4 Dichlorobenzene**	<0.010	mg/L	0.010		7.50	**106-46-7**		19
N	**TCLP Benzene**	<0.010	mg/L	0.010		0.500	**71-43-2**		19
N	**TCLP Carbon tetrachloride**	<0.010	mg/L	0.010		0.500	**56-23-5**		19
N	**TCLP Chlorobenzene**	<0.010	mg/L	0.010		100	**108-90-7**		19
N	**TCLP Chloroform**	<0.010	mg/L	0.010		6.00	**67-66-3**		19
N	**TCLP MEK**	<0.010	mg/L	0.010		200	**78-93-3**		19
N	**TCLP Tetrachloroethylene**	<0.010	mg/L	0.010		0.700	**127-18-4**		19
N	**TCLP Trichloroethylene**	<0.010	mg/L	0.010		0.500	**79-01-6**		19
N	**TCLP Vinyl chloride**	<0.010	mg/L	0.010		0.200	**75-01-4**		19

* Dry Weight Basis

	Prepared:	***668081***		*06/21/2016*		*08:30:00*			
EPA 8270C			Analyzed	*SLC 06/22/2016*	*22:49:00*	*QCgroup*	*668696*		
N	**1,2,4-Trichlorobenzene**	<62.4 *	ug/kg	62.4		4790	**120-82-1**		02
N	**1,2-Dichlorobenzene**	<62.4 *	ug/kg	62.4		17900	**95-50-1**		02
N	**1,2-DPH (as azobenzene)**	<60.5 *	ug/kg	60.5	S	32.3	**122-66-7**		02
N	**1,3-Dichlorobenzene**	<62.4 *	ug/kg	62.4		439000	**541-73-1**		02
N	**1,4-Dichlorobenzene**	<62.4 *	ug/kg	62.4		2100	**106-46-7**		02
N	**2,4,5-Trichlorophenol**	<62.4 *	ug/kg	62.4		33800	**95-95-4**		02
N	**2,4,6-Trichlorophenol**	<167 *	ug/kg	167		594	**88-06-2**		02
N	**2,4-Dichlorophenol**	<88.6 *	ug/kg	88.6		352	**120-83-2**		02
N	**2,4-Dimethylphenol**	<62.4 *	ug/kg	62.4		3230	**105-67-9**		02
N	**2,4-Dinitrophenol**	<131 *	ug/kg	131		93.7	**51-28-5**		02
N	**2,4-Dinitrotoluene**	<80.5 *	ug/kg	80.5		5.32	**121-14-2**		02
N	**2,6-Dichlorophenol**	<245 *	ug/kg	245			**87-65-0**		02
N	**2,6-Dinitrotoluene**	<106 *	ug/kg	106		4.81	**606-20-2**		02
N	**2-Chloronaphthalene**	<62.4 *	ug/kg	62.4		670000	**91-58-7**		02
N	**2-Chlorophenol**	<105 *	ug/kg	105		1630	**95-57-8**		02
N	**2-Methylphenol (o-Cresol)**	<624 *	ug/kg	624		7120	**95-48-7**		02
N	**2-Nitrophenol**	<227 *	ug/kg	227		787	**88-75-5**		02
N	**3&4-Methylphenol (m&p-Cresol)**	<165 *	ug/kg	165		632	**MEPH34**		02
N	**3,3'-Dichlorobenzidine**	<4060 *	ug/kg	4060		62.6	**91-94-1**		02
N	**4,6-Dinitro-2-methylphenol**	<283 *	ug/kg	283		130000	**534-52-1**		02
N	**4-Bromophenyl phenyl ether**	<62.4 *	ug/kg	62.4	S	1.89	**101-55-3**		02
N	**4-Chlorophenyl phenyl ethe**	<62.4 *	ug/kg	62.4		4.23	**7005-72-3**		02
N	**4-Nitrophenol**	<62.4 *	ug/kg	62.4		947	**100-02-7**		02
N	**Acenaphthene**	<62.4 *	ug/kg	62.4		236000	**83-32-9**		02
N	**Acenaphthylene**	<258 *	ug/kg	258		409000	**208-96-8**		02
N	**Anthracene**	<245 *	ug/kg	245		6890000	**120-12-7**		02
N	**Benzidine**	<62.4 *	ug/kg	62.4		0.011	**92-87-5**		02

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Results

Printed: 07/07/2016

Results

	Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle

1505097 DREGS Filter Solid Samples *Received:* 06/21/2016

olid & Chemical Material *Collected by:* Client *Affiliation:* Georgia Pacific Pape 06/20/2016 14:00:00

Supplement to Test Report 1500893

EPA 8270C Analyzed *SLC 06/22/2016 22:49:00 QCgroup 668696*

N	Benzo(a)anthracene	<62.4 *	ug/kg	62.4		17700	56-55-3	02
N	Benzo(a)pyrene	<245 *	ug/kg	245		7640	50-32-8	02
N	Benzo(b)fluoranthene	<642 *	ug/kg	642		60100	205-99-2	02
N	Benzo(ghi)perylene	<541 *	ug/kg	541		0	191-24-2	02
N	Benzo(k)fluoranthene	<631 *	ug/kg	631		615000	207-08-9	02
N	Benzyl Butyl phthalate	<62.4 *	ug/kg	62.4		2700000	85-68-7	02
N	Bis(2-chloroethoxy)methane	<62.4 *	ug/kg	62.4		20.0	111-91-1	02
N	Bis(2-chloroethyl)ether	<62.4 *	ug/kg	62.4		2.11	111-44-4	02
N	Bis(2-chloroisopropyl)ether	<62.4 *	ug/kg	62.4	S	190	39638-32-9	02
N	Bis(2-ethylhexyl)phthalate	<313 *	ug/kg	313		164000	117-81-7	02
N	Chrysene (Benzo(a)phenanthrene)	<62.4 *	ug/kg	62.4	S	1550000	218-01-9	02
N	Dibenz(a,h)anthracene	<449 *	ug/kg	449		15200	53-70-3	02
N	Diethyl phthalate	<62.4 *	ug/kg	62.4		156000	84-66-2	02
N	Dimethyl phthalate	<62.4 *	ug/kg	62.4		243000	131-11-3	02
N	Di-n-butylphthalate	<494 *	ug/kg	494		2.47	84-74-2	02
N	Di-n-octylphthalate	<624 *	ug/kg	624		0	117-84-0	02
N	Fluoranthene(Benzo(j,k)fluorene)	<62.4 *	ug/kg	62.4		1920000	206-44-0	02
N	Fluorene	<62.4 *	ug/kg	62.4	S	299000	86-73-7	02
N	Hexachlorobenzene	<62.4 *	ug/kg	62.4	S	1100	118-74-1	02
N	Hexachlorobutadiene	<62.4 *	ug/kg	62.4		1370	87-68-3	02
N	Hexachlorocyclopentadiene	<80.0 *	ug/kg	80.0		19300	77-47-4	02
N	Hexachloroethane	<62.4 *	ug/kg	62.4		1840	67-72-1	02
N	Indeno(1,2,3-cd)pyrene	<453 *	ug/kg	453		173000	193-39-5	02
N	Isophorone	<62.4 *	ug/kg	62.4		3000	78-59-1	02
N	Naphthalene	<62.4 *	ug/kg	62.4		31000	91-20-3	02
N	Nitrobenzene	<62.4 *	ug/kg	62.4		87.9	98-95-3	02
N	N-Nitrosodimethylamine	<62.4 *	ug/kg	62.4	X	0.037	62-75-9	02
N	N-Nitrosodi-n-propylamine	<62.4 *	ug/kg	62.4		0.350	621-64-7	02
N	N-Nitrosodiphenylamine (as DPA	<243 *	ug/kg	243		2820	86-30-6	02
N	p-Chloro-m-Cresol (4-Chloro-3-me	<104 *	ug/kg	104		330000	59-50-7	02
N	Pentachlorophenol	<73.6 *	ug/kg	73.6		3.58	87-86-5	02
N	Phenanthrene	<62.4 *	ug/kg	62.4		420000	85-01-8	02
N	Phenol	<63.7 *	ug/kg	63.7		38300	108-95-2	02
N	Pyrene	<62.4 *	ug/kg	62.4		1120000	129-00-0	02
N	Pyridine	<106 *	ug/kg	106		69.0	110-86-1	02

Prepared: *668522* *06/23/2016 07:20:00*

EPA 8270C Analyzed *SLC 06/24/2016 17:30:00 QCgroup 669124*

N	TCLP 2,4,5-Trichlorophenol	<0.010	mg/L	0.010		1.00	95-95-4	12
N	TCLP 2,4,6-Trichlorophenol	<0.010	mg/L	0.010		2.00	88-06-2	12
N	TCLP 2,4-Dinitrotoluene	<0.010	mg/L	0.010		0.130	121-14-2	12
N	TCLP 2-Methylphenol (o-Cresol)	<0.010	mg/L	0.010		200		12
N	TCLP 3&4-Methylphenol (m&p-Creso	<0.010	mg/L	0.010		200		12
N	TCLP bis(2-Chloroethyl)ether	<0.010	mg/L	0.010		0.100	111-44-4	12
N	TCLP Hexachlorobenzene	<0.010	mg/L	0.010		0.130	118-74-1	12
N	TCLP Hexachlorobutadiene	<0.010	mg/L	0.010		0.500	87-68-3	12

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Results

Printed: 07/07/2016

Results

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
1505097 DREGS Filter Solid Samples						*Received:* 06/21/2016	
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape			06/20/2016 14:00:00	
Supplement to Test Report 1500893							
EPA 8270C		Analyzed	*SLC 06/24/2016*		*17:30:00*	*QCgroup 669124*	
N **TCLP Hexachloroethane**	**<0.010**	**mg/L**	0.010		3.00	**67-72-1**	12
N **TCLP Nitrobenzene**	**<0.010**	**mg/L**	0.010		2.00	**98-95-3**	12
N **TCLP Pentachlorophenol**	**<0.010**	**mg/L**	0.010		100	**87-86-5**	12
EPA 8270C		Analyzed	*KJS 06/28/2016*		*19:12:00*	*QCgroup 669394*	
N **TCLP Pyridine (Reg. Limit 5)**	**<0.0135**	**mg/L**	0.0135	P	5.00	**110-86-1**	12
EPA 8270C		Calculated	*CAL 06/29/2016*		*10:13:26*	*QCgroup 669124*	
N **TCLP Total Cresols (Reg Lim 200)**	**<0.010**	**mg/L**	0.010		200	**108-39-4,ect.**	12
* Dry Weight Basis							
Prepared:	***669146***		*06/27/2016*		*16:36:00*		
SM2540 G-1997 /MOD		Analyzed	*KBP 06/27/2016*		*16:36:00*	*QCgroup 669146*	
N **Total Solids for Dry Wt**	**53.4**	**%**	0.010				01

Sample Preparation

1505097 DREGS Filter Solid Samples						*Received:* 06/21/2016	
Prepared:			*07/07/2016*		*13:39:58*		
Calculation		Calculated	*CAL 07/07/2016*		*13:39:58*	*QCgroup*	
As Received to Dry Weight Basis	**Calculated**						
Prepared:			*06/22/2016*		*17:00:00*		
Cooler Return		Analyzed	*MG3 06/22/2016*		*17:00:00*	*QCgroup*	
z **Return Cooler/No bottles Require**	**Returned/BRET-4**						
Prepared:	***668165***		*06/21/2016*		*14:55:00*		
EPA 3510C		Analyzed	*MGH 06/22/2016*		*11:49:34*	*QCgroup 668356*	
TCLP Liq-Liq Extr. W/Hex Exch.	**10/200**	**ml**					06
EPA 3510C		Analyzed	*CRG 06/23/2016*		*07:20:00*	*QCgroup 668522*	
TCLP Liquid-Liquid Extract	**1/100**	**ml**					06
Prepared:	***668165***		*06/21/2016*		*14:55:00*		
EPA 1311		Analyzed	*TDD 06/21/2016*		*14:55:00*	*QCgroup 668165*	
N **TCLP Extraction Non-Volatile**	**SOLID EXT 2**						01
Prepared:	***669092***		*06/27/2016*		*15:00:00*		
EPA 1311ZHE		Analyzed	*TDD 06/27/2016*		*15:00:00*	*QCgroup 669092*	
N **TCLP Extraction ZHE Volatiles**	**100.0% SOLID**	**ml**					01
Prepared:	***668165***		*06/21/2016*		*14:55:00*		
EPA 3005A		Analyzed	*TES 06/22/2016*		*12:45:00*	*QCgroup 668441*	
N **Metals Digestion TCLP Extract**	**50/10**	**ml**					05

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Results

Printed: 07/07/2016

Sample Preparation

1505097 DREGS Filter Solid Samples *Received:* 06/21/2016

		Prepared:	***668651***		*06/23/2016*	*15:00:00*		
EPA 3050B				Analyzed	*TES 06/23/2016*	*15:00:00*	*QCgroup*	*668651*
N	**Solid/Sludge/Soil/Sediment Metal**	**50/1.95**		**grams**				01
		Prepared:	***668081***		*06/21/2016*	*08:30:00*		
EPA 3550B				Analyzed	*MCC 06/21/2016*	*08:30:00*	*QCgroup*	*668081*
N	**Sonic Extraction**	**1/30**		**ml**				01
		Prepared:	***668165***		*06/21/2016*	*14:55:00*		
EPA 7470A				Analyzed	*ALB 06/22/2016*	*10:30:00*	*QCgroup*	*668323*
N	**Metals Digestion TCLP 7470**	**50/2.5**		**ml**				05
		Prepared:	***668128***		*06/21/2016*	*13:40:00*		
EPA 7471A				Analyzed	*ALB 06/21/2016*	*13:40:00*	*QCgroup*	*668128*
N	**Solid Metals Digestion Hg**	**50/0.5159**		**grams**				01
		Prepared:	***668356***		*06/22/2016*	*11:49:34*		
EPA 8081A				Analyzed	*SLC 06/24/2016*	*17:23:00*	*QCgroup*	*669072*
N	**GC TCLP Pesticide**	**Entered**						09
		Prepared:	***668637***		*06/23/2016*	*12:40:00*		
EPA 8151				Analyzed	*EMT 06/27/2016*	*13:15:00*	*QCgroup*	*669047*
N	**GC TCLP Herbicide**	**Entered**						14
		Prepared:	***668165***		*06/21/2016*	*14:55:00*		
EPA 8151A (Prep)				Analyzed	*CRG 06/23/2016*	*12:40:00*	*QCgroup*	*668637*
N	**Esterification of TCLP Extract**	**10/1.0**		**ml**				06
		Prepared:	***668758***		*06/23/2016*	*19:14:00*		
EPA 8260B				Analyzed	*JRH 06/23/2016*	*19:14:00*	*QCgroup*	*668758*
N	**Volatiles by GC/MS**	**Entered**						01
		Prepared:	***669613***		*06/29/2016*	*14:15:00*		
EPA 8260B				Analyzed	*JRH 06/29/2016*	*14:15:00*	*QCgroup*	*669613*
N	**MS TCLP Volatile Analysis**	**Entered**						19
		Prepared:	***668081***		*06/21/2016*	*08:30:00*		
EPA 8270C				Analyzed	*SLC 06/22/2016*	*22:49:00*	*QCgroup*	*668696*
N	**Semivolatile Hydrocarbons**	**Entered**						02
		Prepared:	***668522***		*06/23/2016*	*07:20:00*		
EPA 8270C				Analyzed	*KJS 06/28/2016*	*19:12:00*	*QCgroup*	*669394*
N	**MS TCLP Semivolatile Analysis**	**Entered**						12
		Prepared:	***668892***		*06/24/2016*	*14:50:34*		
SM 2540 G-1997				Analyzed	*KBP 06/24/2016*	*14:50:34*	*QCgroup*	*668892*
N	**Total Solids Start Code**	**Started**						

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Results

Qualifiers:

B - Analyte detected in the associated method blank (- Sample from Bulk Container
P - Spike recovery outside control limits due to matrix effects. X - Standard reads higher than desired.
S - Standard reads lower than desired

We report results on an 'As Received' or wet basis unless marked 'Dry Weight'. Unless otherwise noted, testing was performed at Ana-lab's corporate laboratory that holds the following Federal and State certificates: Texas Department of Health Lead Firm Certificate 2110076, US Department of Agriculture Soil Import Permit S-37592, Texas Commisson on Environmental Quality Drinking Water Laboratory Certificate TX219, Texas Commission on Environmental Quality NELAP T104704201, Oklahoma Department of Environmental Quality Drinking Water Certification Lab ID# D9913, EPA Lab Number TX00063, USEPA Approved Perchlorate Testing Lab, Oklahoma Department of Environmental Quality Laboratory Certificate 8125, Arkansas Department of Environmental Quality Certification #03-070-0, Louisiana Department of Environmental Quality Laboratory Certification (NELAP, LELAP) #02008, Louisiana Department of Health and Hospitals Drinking Water (NELAP) # LA030020, US Department of Energy Approved, State of Kansas Department of Health and Environment Waste Water and Solid/Hazardous Waste Cert. E-10365. The Accredited column designates accreditation by N -- NELAC, or z -- not covered under NELAC scope of accreditation.

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RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.

Paul Zhang, Ph.D., Quality Director

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Quality Control

Printed 07/07/2016

DREGS

Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

Account	Project
GPDR -L	746901

669146 Solid & Chemical Materials

SM2540 G-1997 /MOD

ControlBlk

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
Total Solids for Dry Wt	669146	-0.0003			grams	116654585	

Duplicate

Parameter	Sample	Type	Result	Unknown	Unit	RPD	Out	Limit%
Total Solids for Dry Wt	1499889	Duplicate	93.1	92.2	%	0.971		20.0
Total Solids for Dry Wt	1501561	Duplicate	93.6	93.6	%	0		20.0
Total Solids for Dry Wt	1501828	Duplicate	93.2	92.4	%	0.862		20.0

668396 Solid & Chemical Materials

EPA 7471A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
Mercury	668128	ND	0.000198	0.0002	mg/kg	116640877	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Mercury	0.00516	0.005	mg/kg	103	90.0 - 110		116640876
Mercury	0.00505	0.005	mg/kg	101	90.0 - 110		116640884
Mercury	0.00514	0.005	mg/kg	103	90.0 - 110		116640890

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Mercury	0.0197	0.02	mg/kg	98.5	90.0 - 110		116640875

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Mercury	0.00527	0.005	mg/kg	105	90.0 - 110		116640874

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Mercury	668128	0.00921	0.010	mg/kg	92.1	78.0 - 106	116640878	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Mercury	668128	0.00921	0.00908	0.010	78.0 - 106	92.1	90.8	mg/kg	1.42	20.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Mercury	1500901	1.10	0	0.300	0.929	70.1 - 110	86.1		mg/kg		25.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Mercury	1500901	1.10	1.15	0.300	0.994	70.1 - 110	86.1	91.5	mg/kg	6.06	25.0

668399 Solid & Chemical Materials

EPA 7470A

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Quality Control

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Mercury	668323	ND	0.0000684	0.0001	mg/L	116640981	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Mercury	0.00524	0.005	mg/L	105	90.0 - 110		116640973
TCLP Mercury	0.00513	0.005	mg/L	103	90.0 - 110		116640983
TCLP Mercury	0.00525	0.005	mg/L	105	90.0 - 110		116640989

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Mercury	0.0197	0.02	mg/L	98.5	90.0 - 110		116640963

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Mercury	0.00527	0.005	mg/L	105	90.0 - 110		116640962

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP Mercury	668323	0.00549	0.005	mg/L	110	86.7 - 116	116640982	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP Mercury	668323	0.00549	0.00548	0.005	86.7 - 116	110	110	mg/L	0.182	20.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Mercury	1500892	0.112	0	ND	0.100	83.3 - 120	112		mg/L		15.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Mercury	1500892	0.112	0.108	ND	0.100	83.3 - 120	112	108	mg/L	3.64	15.0

668514 Solid & Chemical Materials — EPA 6020A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Arsenic	668441	ND	0.010	0.010	mg/L	116643836	
TCLP Barium	668441	ND	0.010	0.010	mg/L	116643836	
TCLP Cadmium	668441	ND	0.001	0.001	mg/L	116643836	
TCLP Chromium	668441	ND	0.010	0.010	mg/L	116643836	
TCLP Lead	668441	ND	0.010	0.010	mg/L	116643836	
TCLP Selenium	668441	ND	0.010	0.010	mg/L	116643836	
TCLP Silver	668441	ND	0.010	0.010	mg/L	116643836	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Arsenic	0.0491	0.05	mg/L	98.2	90.0 - 110		116643816
TCLP Arsenic	0.0497	0.05	mg/L	99.4	90.0 - 110		116643822
TCLP Arsenic	0.0494	0.05	mg/L	98.8	90.0 - 110		116643832
TCLP Arsenic	0.0503	0.05	mg/L	101	90.0 - 110		116643842
TCLP Arsenic	0.0492	0.05	mg/L	98.4	90.0 - 110		116643849
TCLP Barium	0.050	0.05	mg/L	100	90.0 - 110		116643816
TCLP Barium	0.0495	0.05	mg/L	99.0	90.0 - 110		116643822
TCLP Barium	0.0495	0.05	mg/L	99.0	90.0 - 110		116643832

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Barium	0.0497	0.05	mg/L	99.4	90.0 - 110		116643842
TCLP Barium	0.0492	0.05	mg/L	98.4	90.0 - 110		116643849
TCLP Cadmium	0.0497	0.05	mg/L	99.4	90.0 - 110		116643816
TCLP Cadmium	0.0494	0.05	mg/L	98.8	90.0 - 110		116643822
TCLP Cadmium	0.0492	0.05	mg/L	98.4	90.0 - 110		116643832
TCLP Cadmium	0.0489	0.05	mg/L	97.8	90.0 - 110		116643842
TCLP Cadmium	0.0486	0.05	mg/L	97.2	90.0 - 110		116643849
TCLP Chromium	0.0508	0.05	mg/L	102	90.0 - 110		116643816
TCLP Chromium	0.0508	0.05	mg/L	102	90.0 - 110		116643822
TCLP Chromium	0.0503	0.05	mg/L	101	90.0 - 110		116643832
TCLP Chromium	0.0499	0.05	mg/L	99.8	90.0 - 110		116643842
TCLP Chromium	0.0502	0.05	mg/L	100	90.0 - 110		116643849
TCLP Lead	0.0512	0.05	mg/L	102	90.0 - 110		116643816
TCLP Lead	0.0519	0.05	mg/L	104	90.0 - 110		116643822
TCLP Lead	0.0514	0.05	mg/L	103	90.0 - 110		116643832
TCLP Lead	0.0506	0.05	mg/L	101	90.0 - 110		116643842
TCLP Lead	0.0509	0.05	mg/L	102	90.0 - 110		116643849
TCLP Selenium	0.0501	0.05	mg/L	100	90.0 - 110		116643816
TCLP Selenium	0.0514	0.05	mg/L	103	90.0 - 110		116643822
TCLP Selenium	0.0518	0.05	mg/L	104	90.0 - 110		116643832
TCLP Selenium	0.0516	0.05	mg/L	103	90.0 - 110		116643842
TCLP Selenium	0.0497	0.05	mg/L	99.4	90.0 - 110		116643849
TCLP Silver	0.0492	0.05	mg/L	98.4	90.0 - 110		116643816
TCLP Silver	0.050	0.05	mg/L	100	90.0 - 110		116643822
TCLP Silver	0.0494	0.05	mg/L	98.8	90.0 - 110		116643832
TCLP Silver	0.0487	0.05	mg/L	97.4	90.0 - 110		116643842
TCLP Silver	0.0488	0.05	mg/L	97.6	90.0 - 110		116643849

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Arsenic	0.0533	0.05	mg/L	107	90.0 - 110		116643804
TCLP Barium	0.0524	0.05	mg/L	105	90.0 - 110		116643804
TCLP Cadmium	0.052	0.05	mg/L	104	90.0 - 110		116643804
TCLP Chromium	0.0531	0.05	mg/L	106	90.0 - 110		116643804
TCLP Lead	0.0517	0.05	mg/L	103	90.0 - 110		116643804
TCLP Selenium	0.0528	0.05	mg/L	106	90.0 - 110		116643804
TCLP Silver	0.0515	0.05	mg/L	103	90.0 - 110		116643804

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP Arsenic	668441	0.485	0.500	mg/L	97.0	84.1 - 115	116643837	
TCLP Barium	668441	0.463	0.500	mg/L	92.6	85.5 - 111	116643837	
TCLP Cadmium	668441	0.245	0.250	mg/L	98.0	87.2 - 114	116643837	
TCLP Chromium	668441	0.485	0.500	mg/L	97.0	82.8 - 113	116643837	
TCLP Lead	668441	0.507	0.500	mg/L	101	84.5 - 115	116643837	
TCLP Selenium	668441	0.493	0.500	mg/L	98.6	86.3 - 119	116643837	
TCLP Silver	668441	0.0952	0.100	mg/L	95.2	83.6 - 112	116643837	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP Arsenic	668441	0.485	0.481	0.500	84.1 - 115	97.0	96.2	mg/L	0.828	14.0
TCLP Barium	668441	0.463	0.464	0.500	85.5 - 111	92.6	92.8	mg/L	0.216	14.0

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LCS Dup

Parameter	PrepSet	LCS	LCSD		Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP Cadmium	668441	0.245	0.247		0.250	87.2 - 114	98.0	98.8	mg/L	0.813	14.0
TCLP Chromium	668441	0.485	0.494		0.500	82.8 - 113	97.0	98.8	mg/L	1.84	14.0
TCLP Lead	668441	0.507	0.508		0.500	84.5 - 115	101	102	mg/L	0.197	14.0
TCLP Selenium	668441	0.493	0.492		0.500	86.3 - 119	98.6	98.4	mg/L	0.203	14.0
TCLP Silver	668441	0.0952	0.0951		0.100	83.6 - 112	95.2	95.1	mg/L	0.105	14.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Arsenic	1500892	2.35	0	ND	2.50	87.7 - 115	94.0		mg/L		20.0
TCLP Barium	1500892	11.7	0	9.80	2.50	78.8 - 112	76.0 *		mg/L		20.0
TCLP Cadmium	1500892	1.17	0	ND	1.25	89.5 - 111	93.6		mg/L		20.0
TCLP Chromium	1500892	2.47	0	0.144	2.50	79.9 - 112	93.0		mg/L		20.0
TCLP Lead	1500892	2.37	0	ND	2.50	83.6 - 112	94.8		mg/L		20.0
TCLP Selenium	1500892	2.31	0	ND	2.50	87.5 - 117	92.4		mg/L		20.0
TCLP Silver	1500892	0.455	0	ND	0.500	85.5 - 110	91.0		mg/L		20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Arsenic	1500892	2.35	2.29	ND	2.50	87.7 - 115	94.0	91.6	mg/L	2.59	20.0
TCLP Barium	1500892	11.7	12.6	9.80	2.50	78.8 - 112	76.0 *	112	mg/L	38.3 *	20.0
TCLP Cadmium	1500892	1.17	1.16	ND	1.25	89.5 - 111	93.6	92.8	mg/L	0.858	20.0
TCLP Chromium	1500892	2.47	2.46	0.144	2.50	79.9 - 112	93.0	92.6	mg/L	0.431	20.0
TCLP Lead	1500892	2.37	2.37	ND	2.50	83.6 - 112	94.8	94.8	mg/L	0	20.0
TCLP Selenium	1500892	2.31	2.28	ND	2.50	87.5 - 117	92.4	91.2	mg/L	1.31	20.0
TCLP Silver	1500892	0.455	0.453	ND	0.500	85.5 - 110	91.0	90.6	mg/L	0.441	20.0

668877 Solid & Chemical Materials — EPA 6010C

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units		File	Out
Boron	668651	0.00904	0.00876	0.100	mg/kg		116649551	
Tin, Total	668651	0.00786	0.00255	0.050	mg/kg	*	116649551	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Boron	5.19	5.00	mg/kg	104	90.0 - 110		116649550
Boron	5.13	5.00	mg/kg	103	90.0 - 110		116649559
Tin, Total	0.512	0.500	mg/kg	102	90.0 - 110		116649550
Tin, Total	0.507	0.500	mg/kg	101	90.0 - 110		116649559

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Boron	10.1	10.0	mg/kg	101	95.0 - 105		116649548
Tin, Total	1.01	1.00	mg/kg	101	95.0 - 105		116649548

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Boron	5.13	5.00	mg/kg	103	90.0 - 110		116649549
Tin, Total	0.509	0.500	mg/kg	102	90.0 - 110		116649549

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Boron	668651	4.63	5.00	mg/kg	92.6	85.5 - 112	116649552	
Tin, Total	668651	2.19	2.50	mg/kg	87.6	80.5 - 108	116649552	

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Quality Control

LCS Dup

Parameter	PrepSet	LCS	LCSD		Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Boron	668651	4.63	4.64		5.00	85.5 - 112	92.6	92.8	mg/kg	0.216	25.0
Tin, Total	668651	2.19	2.24		2.50	80.5 - 108	87.6	89.6	mg/kg	2.26	25.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Boron	1501824	241	0	5.53	238	37.2 - 140	98.9		mg/kg		25.0
Tin, Total	1501824	114	0	1.44	119	79.3 - 107	94.6		mg/kg		25.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Boron	1501824	241	247	5.53	236	37.2 - 140	98.9	101	mg/kg	2.52	25.0
Tin, Total	1501824	114	117	1.44	118	79.3 - 107	94.6	97.1	mg/kg	2.63	25.0

668903 Solid & Chemical Materials — EPA 6020A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units		File	Out
Aluminum, Total	668651	0.00454	0.000592	0.005	mg/kg	*	116650352	
Antimony, Total	668651	0.000838	0.000494	0.001	mg/kg		116650352	
Arsenic, Total	668651	ND	0.000869	0.002	mg/kg		116650352	
Barium	668651	ND	0.00241	0.003	mg/kg		116650352	
Cadmium, Total	668651	ND	0.000187	0.001	mg/kg		116650352	
Chromium, Total	668651	0.000824	0.000264	0.001	mg/kg	*	116650352	
Cobalt	668651	ND	0.00003260	0.001	mg/kg		116650352	
Copper, Total	668651	0.00102	0.000134	0.001	mg/kg	*	116650352	
Lead, Total	668651	0.000147	0.00004460	0.001	mg/kg	*	116650352	
Molybdenum	668651	0.000254	0.000186	0.001	mg/kg		116650352	
Nickel, Total	668651	ND	0.000441	0.001	mg/kg		116650352	
Selenium, Total	668651	ND	0.00194	0.003	mg/kg		116650352	
Silver, Total	668651	0.0000364	0.00002560	0.001	mg/kg		116650352	
Thallium, Total	668651	0.0000313	0.00002470	0.001	mg/kg		116650352	
Vanadium	668651	ND	0.000585	0.001	mg/kg		116650352	
Zinc, Total	668651	0.00111	0.0011	0.005	mg/kg		116650352	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Aluminum, Total	0.0508	0.05	mg/kg	102	90.0 - 110		116650351
Aluminum, Total	0.0519	0.05	mg/kg	104	90.0 - 110		116650357
Aluminum, Total	0.0508	0.05	mg/kg	102	90.0 - 110		116650361
Antimony, Total	0.0498	0.05	mg/kg	99.6	90.0 - 110		116650351
Antimony, Total	0.0512	0.05	mg/kg	102	90.0 - 110		116650357
Antimony, Total	0.0503	0.05	mg/kg	101	90.0 - 110		116650361
Arsenic, Total	0.0499	0.05	mg/kg	99.8	90.0 - 110		116650351
Arsenic, Total	0.0521	0.05	mg/kg	104	90.0 - 110		116650357
Arsenic, Total	0.0512	0.05	mg/kg	102	90.0 - 110		116650361
Barium	0.0509	0.05	mg/kg	102	90.0 - 110		116650351
Barium	0.0516	0.05	mg/kg	103	90.0 - 110		116650357
Barium	0.0508	0.05	mg/kg	102	90.0 - 110		116650361
Cadmium, Total	0.0502	0.05	mg/kg	100	90.0 - 110		116650351
Cadmium, Total	0.0495	0.05	mg/kg	99.0	90.0 - 110		116650357
Cadmium, Total	0.0497	0.05	mg/kg	99.4	90.0 - 110		116650361
Chromium, Total	0.0512	0.05	mg/kg	102	90.0 - 110		116650351

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CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
Chromium, Total	0.0501	0.05	mg/kg	100	90.0 - 110		116650357
Chromium, Total	0.0507	0.05	mg/kg	101	90.0 - 110		116650361
Cobalt	0.0511	0.05	mg/kg	102	90.0 - 110		116650351
Cobalt	0.0501	0.05	mg/kg	100	90.0 - 110		116650357
Cobalt	0.0503	0.05	mg/kg	101	90.0 - 110		116650361
Copper, Total	0.0506	0.05	mg/kg	101	90.0 - 110		116650351
Copper, Total	0.053	0.05	mg/kg	106	90.0 - 110		116650357
Copper, Total	0.0532	0.05	mg/kg	106	90.0 - 110		116650361
Lead, Total	0.0528	0.05	mg/kg	106	90.0 - 110		116650351
Lead, Total	0.0514	0.05	mg/kg	103	90.0 - 110		116650357
Lead, Total	0.0515	0.05	mg/kg	103	90.0 - 110		116650361
Molybdenum	0.0495	0.05	mg/kg	99.0	90.0 - 110		116650351
Molybdenum	0.0506	0.05	mg/kg	101	90.0 - 110		116650357
Molybdenum	0.0502	0.05	mg/kg	100	90.0 - 110		116650361
Nickel, Total	0.0514	0.05	mg/kg	103	90.0 - 110		116650351
Nickel, Total	0.0507	0.05	mg/kg	101	90.0 - 110		116650357
Nickel, Total	0.0512	0.05	mg/kg	102	90.0 - 110		116650361
Selenium, Total	0.0511	0.05	mg/kg	102	90.0 - 110		116650351
Selenium, Total	0.053	0.05	mg/kg	106	90.0 - 110		116650357
Selenium, Total	0.0529	0.05	mg/kg	106	90.0 - 110		116650361
Silver, Total	0.0501	0.05	mg/kg	100	90.0 - 110		116650351
Silver, Total	0.0506	0.05	mg/kg	101	90.0 - 110		116650357
Silver, Total	0.0508	0.05	mg/kg	102	90.0 - 110		116650361
Thallium, Total	0.0514	0.05	mg/kg	103	90.0 - 110		116650351
Thallium, Total	0.0501	0.05	mg/kg	100	90.0 - 110		116650357
Thallium, Total	0.0503	0.05	mg/kg	101	90.0 - 110		116650361
Vanadium	0.0508	0.05	mg/kg	102	90.0 - 110		116650351
Vanadium	0.0501	0.05	mg/kg	100	90.0 - 110		116650357
Vanadium	0.0503	0.05	mg/kg	101	90.0 - 110		116650361
Zinc, Total	0.0508	0.05	mg/kg	102	90.0 - 110		116650351
Zinc, Total	0.0523	0.05	mg/kg	105	90.0 - 110		116650357
Zinc, Total	0.0527	0.05	mg/kg	105	90.0 - 110		116650361

ICV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
Aluminum, Total	0.0505	0.05	mg/kg	101	90.0 - 110		116650347
Antimony, Total	0.0512	0.05	mg/kg	102	90.0 - 110		116650347
Arsenic, Total	0.0533	0.05	mg/kg	107	90.0 - 110		116650347
Barium	0.0521	0.05	mg/kg	104	90.0 - 110		116650347
Cadmium, Total	0.0526	0.05	mg/kg	105	90.0 - 110		116650347
Chromium, Total	0.0522	0.05	mg/kg	104	90.0 - 110		116650347
Cobalt	0.0525	0.05	mg/kg	105	90.0 - 110		116650347
Copper, Total	0.0532	0.05	mg/kg	106	90.0 - 110		116650347
Lead, Total	0.0517	0.05	mg/kg	103	90.0 - 110		116650347
Molybdenum	0.0518	0.05	mg/kg	104	90.0 - 110		116650347
Nickel, Total	0.0528	0.05	mg/kg	106	90.0 - 110		116650347
Selenium, Total	0.0537	0.05	mg/kg	107	90.0 - 110		116650347
Silver, Total	0.0526	0.05	mg/kg	105	90.0 - 110		116650347
Thallium, Total	0.0515	0.05	mg/kg	103	90.0 - 110		116650347
Vanadium	0.0519	0.05	mg/kg	104	90.0 - 110		116650347
Zinc, Total	0.0529	0.05	mg/kg	106	90.0 - 110		116650347

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Quality Control

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Aluminum, Total	668651	2.64	2.50	mg/kg	106	80.5 - 116	116650353	
Antimony, Total	668651	2.42	2.50	mg/kg	96.8	89.2 - 110	116650353	
Arsenic, Total	668651	2.34	2.50	mg/kg	93.6	87.9 - 110	116650353	
Barium	668651	2.43	2.50	mg/kg	97.2	88.6 - 110	116650353	
Cadmium, Total	668651	1.26	1.25	mg/kg	101	89.2 - 109	116650353	
Chromium, Total	668651	2.45	2.50	mg/kg	98.0	84.7 - 112	116650353	
Cobalt	668651	2.38	2.50	mg/kg	95.2	83.8 - 111	116650353	
Copper, Total	668651	2.31	2.50	mg/kg	92.4	85.4 - 109	116650353	
Lead, Total	668651	2.66	2.50	mg/kg	106	86.4 - 111	116650353	
Molybdenum	668651	2.71	2.50	mg/kg	108	90.1 - 116	116650353	
Nickel, Total	668651	2.35	2.50	mg/kg	94.0	82.4 - 110	116650353	
Selenium, Total	668651	2.25	2.50	mg/kg	90.0	83.6 - 111	116650353	
Silver, Total	668651	0.481	0.500	mg/kg	96.2	87.0 - 113	116650353	
Thallium, Total	668651	2.56	2.50	mg/kg	102	79.7 - 105	116650353	
Vanadium	668651	2.44	2.50	mg/kg	97.6	86.6 - 110	116650353	
Zinc, Total	668651	2.27	2.50	mg/kg	90.8	82.9 - 113	116650353	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Aluminum, Total	668651	2.64	2.54	2.50	80.5 - 116	106	102	mg/kg	3.86	20.0
Antimony, Total	668651	2.42	2.42	2.50	89.2 - 110	96.8	96.8	mg/kg	0	20.0
Arsenic, Total	668651	2.34	2.33	2.50	87.9 - 110	93.6	93.2	mg/kg	0.428	20.0
Barium	668651	2.43	2.40	2.50	88.6 - 110	97.2	96.0	mg/kg	1.24	20.0
Cadmium, Total	668651	1.26	1.25	1.25	89.2 - 109	101	100	mg/kg	0.797	20.0
Chromium, Total	668651	2.45	2.43	2.50	84.7 - 112	98.0	97.2	mg/kg	0.820	20.0
Cobalt	668651	2.38	2.35	2.50	83.8 - 111	95.2	94.0	mg/kg	1.27	20.0
Copper, Total	668651	2.31	2.31	2.50	85.4 - 109	92.4	92.4	mg/kg	0	20.0
Lead, Total	668651	2.66	2.64	2.50	86.4 - 111	106	106	mg/kg	0.755	20.0
Molybdenum	668651	2.71	2.62	2.50	90.1 - 116	108	105	mg/kg	3.38	20.0
Nickel, Total	668651	2.35	2.32	2.50	82.4 - 110	94.0	92.8	mg/kg	1.28	20.0
Selenium, Total	668651	2.25	2.22	2.50	83.6 - 111	90.0	88.8	mg/kg	1.34	20.0
Silver, Total	668651	0.481	0.470	0.500	87.0 - 113	96.2	94.0	mg/kg	2.31	20.0
Thallium, Total	668651	2.56	2.53	2.50	79.7 - 105	102	101	mg/kg	1.18	20.0
Vanadium	668651	2.44	2.43	2.50	86.6 - 110	97.6	97.2	mg/kg	0.411	20.0
Zinc, Total	668651	2.27	2.24	2.50	82.9 - 113	90.8	89.6	mg/kg	1.33	20.0

LDR

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Aluminum, Total	96.1	100	mg/kg	96.1	90.0 - 110		116650348
Antimony, Total	0.955	1	mg/kg	95.5	90.0 - 110		116650350
Arsenic, Total	9.71	10	mg/kg	97.1	90.0 - 110		116650350
Barium	9.66	10	mg/kg	96.6	90.0 - 110		116650350
Cadmium, Total	9.95	10	mg/kg	99.5	90.0 - 110		116650350
Chromium, Total	9.72	10	mg/kg	97.2	90.0 - 110		116650350
Cobalt	9.65	10	mg/kg	96.5	90.0 - 110		116650350
Copper, Total	9.58	10	mg/kg	95.8	90.0 - 110		116650350
Lead, Total	9.54	10	mg/kg	95.4	90.0 - 110		116650350
Molybdenum	9.91	10	mg/kg	99.1	90.0 - 110		116650350
Nickel, Total	9.78	10	mg/kg	97.8	90.0 - 110		116650350
Selenium, Total	9.65	10	mg/kg	96.5	90.0 - 110		116650350
Thallium, Total	9.34	10	mg/kg	93.4	90.0 - 110		116650350

ANA-LAB CORP. THE COMPLETE SERVICE LAB

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Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com **LELAP-accredited #02008**

Employee Owned Integrity Caring Continual Improvement

Quality Control

Printed 07/07/2016

LDR

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Vanadium	9.57	10	mg/kg	95.7	90.0 - 110		116650350
Zinc, Total	9.84	10	mg/kg	98.4	90.0 - 110		116650350

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Aluminum, Total	1501824	986	0	882	119	70.0 - 130	87.4		mg/kg		20.0
Antimony, Total	1501824	111	0	0.229	119	3.01 - 158	93.1		mg/kg		20.0
Arsenic, Total	1501824	120	0	0.417	119	71.2 - 118	100		mg/kg		20.0
Barium	1501824	128	0	14.4	119	0.100 - 235	95.5		mg/kg		20.0
Cadmium, Total	1501824	59.7	0	ND	59.5	89.0 - 109	100		mg/kg		20.0
Chromium, Total	1501824	120	0	1.78	119	62.8 - 120	99.3		mg/kg		20.0
Cobalt	1501824	124	0	0.379	119	69.4 - 115	104		mg/kg		20.0
Copper, Total	1501824	151	0	24.1	119	50.0 - 125	107		mg/kg		20.0
Lead, Total	1501824	122	0	1.02	119	51.4 - 133	102		mg/kg		20.0
Molybdenum	1501824	125	0	0.495	119	66.9 - 133	105		mg/kg		20.0
Nickel, Total	1501824	128	0	0.813	119	62.7 - 113	107		mg/kg		20.0
Selenium, Total	1501824	113	0	0.216	119	64.2 - 118	94.8		mg/kg		20.0
Silver, Total	1501824	22.4	0	0.0171	23.8	80.5 - 114	94.0		mg/kg		20.0
Thallium, Total	1501824	116	0	0.0192	119	71.8 - 103	97.5		mg/kg		20.0
Vanadium	1501824	117	0	2.18	119	47.8 - 141	96.5		mg/kg		20.0
Zinc, Total	1501824	157	0	40.9	119	48.0 - 127	97.6		mg/kg		20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Aluminum, Total	1501824	986	949	882	118	70.0 - 130	87.4	56.3 *	mg/kg	43.3 *	20.0
Antimony, Total	1501824	111	110	0.229	118	3.01 - 158	93.1	92.2	mg/kg	0.907	20.0
Arsenic, Total	1501824	120	120	0.417	118	71.2 - 118	100	100	mg/kg	0	20.0
Barium	1501824	128	126	14.4	118	0.100 - 235	95.5	93.8	mg/kg	1.78	20.0
Cadmium, Total	1501824	59.7	59.4	ND	59.0	89.0 - 109	100	99.8	mg/kg	0.504	20.0
Chromium, Total	1501824	120	120	1.78	118	62.8 - 120	99.3	99.3	mg/kg	0	20.0
Cobalt	1501824	124	128	0.379	118	69.4 - 115	104	107	mg/kg	3.18	20.0
Copper, Total	1501824	151	147	24.1	118	50.0 - 125	107	103	mg/kg	3.20	20.0
Lead, Total	1501824	122	120	1.02	118	51.4 - 133	102	100	mg/kg	1.67	20.0
Molybdenum	1501824	125	124	0.495	118	66.9 - 133	105	104	mg/kg	0.806	20.0
Nickel, Total	1501824	128	132	0.813	118	62.7 - 113	107	110	mg/kg	3.10	20.0
Selenium, Total	1501824	113	112	0.216	118	64.2 - 118	94.8	93.9	mg/kg	0.891	20.0
Silver, Total	1501824	22.4	22.0	0.0171	23.6	80.5 - 114	94.0	92.4	mg/kg	1.80	20.0
Thallium, Total	1501824	116	115	0.0192	118	71.8 - 103	97.5	96.6	mg/kg	0.866	20.0
Vanadium	1501824	117	117	2.18	118	47.8 - 141	96.5	96.5	mg/kg	0	20.0
Zinc, Total	1501824	157	148	40.9	118	48.0 - 127	97.6	90.0	mg/kg	8.06	20.0

669224 Solid & Chemical Materials **EPA 6010C**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units		File	Out
Total Iron	668651	0.0192	0.0035	0.025	mg/Kg	*	116655650	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Iron	2.44	2.50	mg/Kg	97.6	90.0 - 110		116655646
Total Iron	2.42	2.50	mg/Kg	96.8	90.0 - 110		116655652
Total Iron	2.41	2.50	mg/Kg	96.4	90.0 - 110		116655659

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Quality Control

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Iron	4.92	5.00	mg/Kg	98.4	95.0 - 105		116655636

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Iron	2.47	2.50	mg/Kg	98.8	90.0 - 110		116655640

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Total Iron	668651	2.74	2.50	mg/Kg	110	83.5 - 121	116655651	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Total Iron	668651	2.74	2.63	2.50	83.5 - 121	110	105	mg/Kg	4.10	25.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Total Iron	1501824	1480	0	1320	119	84.3 - 121	134 *		mg/Kg		25.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Total Iron	1501824	1480	1290	1320	118	84.3 - 121	134 *	-25.2 *	mg/Kg	292 *	25.0

668696 Solid & Chemical Materials

EPA 8270C

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
1,2,4-Trichlorobenzene	668081	ND	6.49	33.3	ug/kg	116646555	
1,2-Dichlorobenzene	668081	ND	3.53	33.3	ug/kg	116646555	
1,2-DPH (as azobenzene)	668081	ND	9.99	33.3	ug/kg	116646555	
1,3-Dichlorobenzene	668081	ND	5.33	33.3	ug/kg	116646555	
1,4-Dichlorobenzene	668081	ND	4.03	33.3	ug/kg	116646555	
2,4,5-Trichlorophenol	668081	ND	6.43	33.3	ug/kg	116646555	
2,4,6-Trichlorophenol	668081	ND	89.2	89.2	ug/kg	116646555	
2,4-Dichlorophenol	668081	ND	47.3	47.3	ug/kg	116646555	
2,4-Dimethylphenol	668081	ND	15.8	33.3	ug/kg	116646555	
2,4-Dinitrophenol	668081	ND	69.9	69.9	ug/kg	116646555	
2,4-Dinitrotoluene	668081	ND	43.0	43.0	ug/kg	116646555	
2,6-Dichlorophenol	668081	ND	131	131	ug/kg	116646555	
2,6-Dinitrotoluene	668081	ND	56.6	56.6	ug/kg	116646555	
2-Chloronaphthalene	668081	ND	4.06	33.3	ug/kg	116646555	
2-Chlorophenol	668081	ND	55.9	55.9	ug/kg	116646555	
2-Methylphenol (o-Cresol)	668081	ND	160	333	ug/kg	116646555	
2-Nitrophenol	668081	ND	121	121	ug/kg	116646555	
3&4-Methylphenol (m&p-Cresol)	668081	ND	87.9	87.9	ug/kg	116646555	
3,3'-Dichlorobenzidine	668081	ND	2130	2160	ug/kg	116646555	
4,6-Dinitro-2-methylphenol	668081	ND	151	151	ug/kg	116646555	
4-Bromophenyl phenyl ether	668081	ND	8.69	33.3	ug/kg	116646555	
4-Chlorophenyl phenyl ethe	668081	ND	3.60	33.3	ug/kg	116646555	
4-Nitrophenol	668081	ND	16.5	33.3	ug/kg	116646555	
Acenaphthene	668081	ND	4.10	33.3	ug/kg	116646555	
Acenaphthylene	668081	ND	138	138	ug/kg	116646555	
Anthracene	668081	ND	131	131	ug/kg	116646555	
Benzidine	668081	ND	25.0	33.3	ug/kg	116646555	

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Quality Control

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Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
Benzo(a)anthracene	668081	ND	8.52	33.3	ug/kg	116646555	
Benzo(a)pyrene	668081	ND	131	131	ug/kg	116646555	
Benzo(b)fluoranthene	668081	ND	343	343	ug/kg	116646555	
Benzo(ghi)perylene	668081	ND	289	289	ug/kg	116646555	
Benzo(k)fluoranthene	668081	ND	336	336	ug/kg	116646555	
Benzyl Butyl phthalate	668081	ND	26.5	33.3	ug/kg	116646555	
Bis(2-chloroethoxy)methane	668081	ND	3.66	33.3	ug/kg	116646555	
Bis(2-chloroethyl)ether	668081	ND	5.99	33.3	ug/kg	116646555	
Bis(2-chloroisopropyl)ether	668081	ND	4.16	33.3	ug/kg	116646555	
Bis(2-ethylhexyl)phthalate	668081	ND	23.1	166	ug/kg	116646555	
Chrysene (Benzo(a)phenanthrene)	668081	ND	4.00	33.3	ug/kg	116646555	
Dibenz(a,h)anthracene	668081	ND	239	239	ug/kg	116646555	
Diethyl phthalate	668081	ND	10.5	33.3	ug/kg	116646555	
Dimethyl phthalate	668081	ND	4.30	33.3	ug/kg	116646555	
Di-n-butylphthalate	668081	ND	264	264	ug/kg	116646555	
Di-n-octylphthalate	668081	ND	332	332	ug/kg	116646555	
Fluoranthene(Benzo(j,k)fluor ene)	668081	ND	3.93	33.3	ug/kg	116646555	
Fluorene	668081	ND	3.63	33.3	ug/kg	116646555	
Hexachlorobenzene	668081	ND	4.43	33.3	ug/kg	116646555	
Hexachlorobutadiene	668081	ND	4.30	33.3	ug/kg	116646555	
Hexachlorocyclopentadiene	668081	ND	42.6	42.6	ug/kg	116646555	
Hexachloroethane	668081	ND	16.1	33.3	ug/kg	116646555	
Indeno(1,2,3-cd)pyrene	668081	ND	241	241	ug/kg	116646555	
Isophorone	668081	ND	3.53	33.3	ug/kg	116646555	
Naphthalene	668081	ND	6.57	33.3	ug/kg	116646555	
Nitrobenzene	668081	ND	27.1	33.3	ug/kg	116646555	
N-Nitrosodimethylamine	668081	ND	15.2	33.3	ug/kg	116646555	
N-Nitrosodi-n-propylamine	668081	ND	6.33	33.3	ug/kg	116646555	
N-Nitrosodiphenylamine (as DPA	668081	ND	130	130	ug/kg	116646555	
p-Chloro-m-Cresol (4-Chloro-3-me	668081	ND	55.6	55.6	ug/kg	116646555	
Pentachlorophenol	668081	ND	39.3	39.3	ug/kg	116646555	
Phenanthrene	668081	ND	3.50	33.3	ug/kg	116646555	
Phenol	668081	ND	34.0	34.0	ug/kg	116646555	
Pyrene	668081	ND	6.49	33.3	ug/kg	116646555	
Pyridine	668081	ND	56.6	56.6	ug/kg	116646555	

CCC

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
1,4-Dichlorobenzene	44400	50000.0	ug/kg	88.8	80.0 - 120		116646554
2,4,6-Trichlorophenol	50100	50000.0	ug/kg	100	80.0 - 120		116646554
2,4-Dichlorophenol	48700	50000.0	ug/kg	97.4	80.0 - 120		116646554
2-Nitrophenol	47700	50000.0	ug/kg	95.4	80.0 - 120		116646554
Acenaphthene	45600	50000.0	ug/kg	91.2	80.0 - 120		116646554
Benzo(a)pyrene	47600	50000.0	ug/kg	95.2	80.0 - 120		116646554
Di-n-octylphthalate	49300	50000.0	ug/kg	98.6	80.0 - 120		116646554
Fluoranthene(Benzo(j,k)fluor ene)	57300	50000.0	ug/kg	115	80.0 - 120		116646554
Hexachlorobutadiene	52200	50000.0	ug/kg	104	80.0 - 120		116646554

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CCC

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
N-Nitrosodiphenylamine (as DPA	49800	50000.0	ug/kg	99.6	80.0 - 120		116646554
p-Chloro-m-Cresol (4-Chloro-3-me	51500	50000.0	ug/kg	103	80.0 - 120		116646554
Pentachlorophenol	44600	50000.0	ug/kg	89.2	80.0 - 120		116646554
Phenol	43700	50000.0	ug/kg	87.4	80.0 - 120		116646554

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
1,2,4-Trichlorobenzene	45900	50000	ug/kg	91.8	80.0 - 120		116646554
1,2-Dichlorobenzene	42900	50000	ug/kg	85.8	80.0 - 120		116646554
1,2-DPH (as azobenzene)	45100	50000	ug/kg	90.2	80.0 - 120		116646554
1,3-Dichlorobenzene	43000	50000	ug/kg	86.0	80.0 - 120		116646554
1,4-Dichlorobenzene	44400	50000	ug/kg	88.8	80.0 - 120		116646554
2,4,5-Trichlorophenol	49200	50000	ug/kg	98.4	80.0 - 120		116646554
2,4,6-Trichlorophenol	50100	50000	ug/kg	100	80.0 - 120		116646554
2,4-Dichlorophenol	48700	50000	ug/kg	97.4	80.0 - 120		116646554
2,4-Dimethylphenol	45200	50000	ug/kg	90.4	80.0 - 120		116646554
2,4-Dinitrophenol	47100	50000	ug/kg	94.2	80.0 - 120		116646554
2,4-Dinitrotoluene	51900	50000	ug/kg	104	80.0 - 120		116646554
2,6-Dichlorophenol	49400	50000	ug/kg	98.8	80.0 - 120		116646554
2,6-Dinitrotoluene	51000	50000	ug/kg	102	80.0 - 120		116646554
2-Chloronaphthalene	49300	50000	ug/kg	98.6	80.0 - 120		116646554
2-Chlorophenol	45100	50000	ug/kg	90.2	80.0 - 120		116646554
2-Methylphenol (o-Cresol)	43300	50000	ug/kg	86.6	80.0 - 120		116646554
2-Nitrophenol	47700	50000	ug/kg	95.4	80.0 - 120		116646554
3&4-Methylphenol (m&p-Cresol)	42900	50000	ug/kg	85.8	80.0 - 120		116646554
3,3'-Dichlorobenzidine	48500	50000	ug/kg	97.0	80.0 - 120		116646554
4,6-Dinitro-2-methylphenol	47200	50000	ug/kg	94.4	80.0 - 120		116646554
4-Bromophenyl phenyl ether	43700	50000	ug/kg	87.4	80.0 - 120		116646554
4-Chlorophenyl phenyl ethe	44100	50000	ug/kg	88.2	80.0 - 120		116646554
4-Nitrophenol	42600	50000	ug/kg	85.2	80.0 - 120		116646554
Acenaphthene	45600	50000	ug/kg	91.2	80.0 - 120		116646554
Acenaphthylene	47600	50000	ug/kg	95.2	80.0 - 120		116646554
Anthracene	44200	50000	ug/kg	88.4	80.0 - 120		116646554
Benzidine	58100	50000	ug/kg	116	80.0 - 120		116646554
Benzo(a)anthracene	45200	50000	ug/kg	90.4	80.0 - 120		116646554
Benzo(a)pyrene	47600	50000	ug/kg	95.2	80.0 - 120		116646554
Benzo(b)fluoranthene	49200	50000	ug/kg	98.4	80.0 - 120		116646554
Benzo(ghi)perylene	47500	50000	ug/kg	95.0	80.0 - 120		116646554
Benzo(k)fluoranthene	44400	50000	ug/kg	88.8	80.0 - 120		116646554
Benzyl Butyl phthalate	48200	50000	ug/kg	96.4	80.0 - 120		116646554
Bis(2-chloroethoxy)methane	44100	50000	ug/kg	88.2	80.0 - 120		116646554
Bis(2-chloroethyl)ether	42200	50000	ug/kg	84.4	80.0 - 120		116646554
Bis(2-chloroisopropyl)ether	39400	50000	ug/kg	78.8	80.0 - 120	*	116646554
Bis(2-ethylhexyl)phthalate	46400	50000	ug/kg	92.8	80.0 - 120		116646554
Chrysene (Benzo(a)phenanthrene)	43700	50000	ug/kg	87.4	80.0 - 120		116646554
Dibenz(a,h)anthracene	47700	50000	ug/kg	95.4	80.0 - 120		116646554
Diethyl phthalate	40600	50000	ug/kg	81.2	80.0 - 120		116646554
Dimethyl phthalate	46300	50000	ug/kg	92.6	80.0 - 120		116646554

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Di-n-butylphthalate	50000	50000	ug/kg	100	80.0 - 120		116646554
Di-n-octylphthalate	49300	50000	ug/kg	98.6	80.0 - 120		116646554
Fluoranthene(Benzo(j,k)fluorene)	57300	50000	ug/kg	115	80.0 - 120		116646554
Fluorene	42900	50000	ug/kg	85.8	80.0 - 120		116646554
Hexachlorobenzene	42300	50000	ug/kg	84.6	80.0 - 120		116646554
Hexachlorobutadiene	52200	50000	ug/kg	104	80.0 - 120		116646554
Hexachlorocyclopentadiene	49000	50000	ug/kg	98.0	80.0 - 120		116646554
Hexachloroethane	45900	50000	ug/kg	91.8	80.0 - 120		116646554
Indeno(1,2,3-cd)pyrene	44600	50000	ug/kg	89.2	80.0 - 120		116646554
Isophorone	41000	50000	ug/kg	82.0	80.0 - 120		116646554
Naphthalene	44100	50000	ug/kg	88.2	80.0 - 120		116646554
Nitrobenzene	59100	50000	ug/kg	118	80.0 - 120		116646554
N-Nitrosodimethylamine	44000	50000	ug/kg	88.0	80.0 - 120		116646554
N-Nitrosodi-n-propylamine	44800	50000	ug/kg	89.6	80.0 - 120		116646554
N-Nitrosodiphenylamine (as DPA	49800	50000	ug/kg	99.6	80.0 - 120		116646554
p-Chloro-m-Cresol (4-Chloro-3-me	51500	50000	ug/kg	103	80.0 - 120		116646554
Pentachlorophenol	44600	50000	ug/kg	89.2	80.0 - 120		116646554
Phenanthrene	43800	50000	ug/kg	87.6	80.0 - 120		116646554
Phenol	43700	50000	ug/kg	87.4	80.0 - 120		116646554
Pyrene	50800	50000	ug/kg	102	80.0 - 120		116646554
Pyridine	57100	50000	ug/kg	114	80.0 - 120		116646554

DFTPP

Parameter		RefMass	Reading	%	Limits%	Out	File
DFTPP Mass 127	578278	198	20208	53.8	40.0 - 60.0		116646553
DFTPP Mass 197	578278	198	0	0.0	0 - 1.00		116646553
DFTPP Mass 198	578278	198	37582	100.0	100 - 100		116646553
DFTPP Mass 199	578278	198	2609	6.9	5.00 - 9.00		116646553
DFTPP Mass 275	578278	198	8246	21.9	10.0 - 30.0		116646553
DFTPP Mass 365	578278	198	999	2.7	1.00 - 100		116646553
DFTPP Mass 441	578278	443	4662	78.8	0 - 100		116646553
DFTPP Mass 442	578278	198	30034	79.9	40.0 - 100		116646553
DFTPP Mass 443	578278	442	5913	19.7	17.0 - 23.0		116646553
DFTPP Mass 51	578278	198	13241	35.2	30.0 - 60.0		116646553
DFTPP Mass 68	578278	69.0	58	0.3	0 - 2.00		116646553
DFTPP Mass 69	578278	198	16795	44.7	0 - 100		116646553
DFTPP Mass 70	578278	69.0	96	0.6	0 - 2.00		116646553

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	668081	Blank	113300	123500	61760	185300		116646555	668081
1,4-Dichlorobenzene-d4-ISTD	668081	LCS	148500	123500	61760	185300		116646556	668081
1,4-Dichlorobenzene-d4-ISTD	668081	LCS Dup	126700	123500	61760	185300		116646557	668081
Acenaphthene-d10-ISTD	668081	Blank	271700	260600	130300	391000		116646555	668081
Acenaphthene-d10-ISTD	668081	LCS	305800	260600	130300	391000		116646556	668081
Acenaphthene-d10-ISTD	668081	LCS Dup	241500	260600	130300	391000		116646557	668081
Chrysene-d12-ISTD	668081	Blank	285900	324600	162300	486900		116646555	668081

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Quality Control

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
Chrysene-d12-ISTD	668081	LCS	274300	324600	162300	486900		116646556	668081
Chrysene-d12-ISTD	668081	LCS Dup	230700	324600	162300	486900		116646557	668081
Naphthalene-d8-ISTD	668081	Blank	439200	450200	225100	675300		116646555	668081
Naphthalene-d8-ISTD	668081	LCS	567300	450200	225100	675300		116646556	668081
Naphthalene-d8-ISTD	668081	LCS Dup	474300	450200	225100	675300		116646557	668081
Perylene-d12-ISTD	668081	Blank	187700	242900	121500	364400		116646555	668081
Perylene-d12-ISTD	668081	LCS	176800	242900	121500	364400		116646556	668081
Perylene-d12-ISTD	668081	LCS Dup	158600	242900	121500	364400		116646557	668081
Phenanthrene-d10-ISTD	668081	Blank	377200	395400	197700	593100		116646555	668081
Phenanthrene-d10-ISTD	668081	LCS	413400	395400	197700	593100		116646556	668081
Phenanthrene-d10-ISTD	668081	LCS Dup	342000	395400	197700	593100		116646557	668081
1,4-Dichlorobenzene-d4-ISTD	1500296	MS	125100	123500	61760	185300		116646561	668081
1,4-Dichlorobenzene-d4-ISTD	1500296	MSD	98630	123500	61760	185300		116646562	668081
Acenaphthene-d10-ISTD	1500296	MS	266400	260600	130300	391000		116646561	668081
Acenaphthene-d10-ISTD	1500296	MSD	176000	260600	130300	391000		116646562	668081
Chrysene-d12-ISTD	1500296	MS	257500	324600	162300	486900		116646561	668081
Chrysene-d12-ISTD	1500296	MSD	144000	324600	162300	486900	*	116646562	668081
Naphthalene-d8-ISTD	1500296	MS	480000	450200	225100	675300		116646561	668081
Naphthalene-d8-ISTD	1500296	MSD	355900	450200	225100	675300		116646562	668081
Perylene-d12-ISTD	1500296	MS	179700	242900	121500	364400		116646561	668081
Perylene-d12-ISTD	1500296	MSD	109900	242900	121500	364400	*	116646562	668081
Phenanthrene-d10-ISTD	1500296	MS	406000	395400	197700	593100		116646561	668081
Phenanthrene-d10-ISTD	1500296	MSD	214900	395400	197700	593100		116646562	668081

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	668081	Blank	5.060	5.070	5.010	5.130		116646555	668081
1,4-Dichlorobenzene-d4-ISTD	668081	LCS	5.060	5.070	5.010	5.130		116646556	668081
1,4-Dichlorobenzene-d4-ISTD	668081	LCS Dup	5.070	5.070	5.010	5.130		116646557	668081
Acenaphthene-d10-ISTD	668081	Blank	10.11	10.13	10.07	10.19		116646555	668081
Acenaphthene-d10-ISTD	668081	LCS	10.12	10.13	10.07	10.19		116646556	668081
Acenaphthene-d10-ISTD	668081	LCS Dup	10.12	10.13	10.07	10.19		116646557	668081
Chrysene-d12-ISTD	668081	Blank	17.73	17.75	17.69	17.81		116646555	668081
Chrysene-d12-ISTD	668081	LCS	17.74	17.75	17.69	17.81		116646556	668081
Chrysene-d12-ISTD	668081	LCS Dup	17.73	17.75	17.69	17.81		116646557	668081
Naphthalene-d8-ISTD	668081	Blank	6.780	6.790	6.730	6.850		116646555	668081
Naphthalene-d8-ISTD	668081	LCS	6.790	6.790	6.730	6.850		116646556	668081
Naphthalene-d8-ISTD	668081	LCS Dup	6.790	6.790	6.730	6.850		116646557	668081
Perylene-d12-ISTD	668081	Blank	19.46	19.47	19.41	19.53		116646555	668081
Perylene-d12-ISTD	668081	LCS	19.46	19.47	19.41	19.53		116646556	668081
Perylene-d12-ISTD	668081	LCS Dup	19.46	19.47	19.41	19.53		116646557	668081
Phenanthrene-d10-ISTD	668081	Blank	13.31	13.32	13.26	13.38		116646555	668081
Phenanthrene-d10-ISTD	668081	LCS	13.31	13.32	13.26	13.38		116646556	668081
Phenanthrene-d10-ISTD	668081	LCS Dup	13.31	13.32	13.26	13.38		116646557	668081
1,4-Dichlorobenzene-d4-ISTD	1500296	MS	5.060	5.070	5.010	5.130		116646561	668081
1,4-Dichlorobenzene-d4-ISTD	1500296	MSD	5.070	5.070	5.010	5.130		116646562	668081

ANA-LAB CORP. THE COMPLETE SERVICE LAB

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Quality Control

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IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
Acenaphthene-d10-ISTD	1500296	MS	10.12	10.13	10.07	10.19		116646561	668081
Acenaphthene-d10-ISTD	1500296	MSD	10.11	10.13	10.07	10.19		116646562	668081
Chrysene-d12-ISTD	1500296	MS	17.74	17.75	17.69	17.81		116646561	668081
Chrysene-d12-ISTD	1500296	MSD	17.73	17.75	17.69	17.81		116646562	668081
Naphthalene-d8-ISTD	1500296	MS	6.780	6.790	6.730	6.850		116646561	668081
Naphthalene-d8-ISTD	1500296	MSD	6.790	6.790	6.730	6.850		116646562	668081
Perylene-d12-ISTD	1500296	MS	19.46	19.47	19.41	19.53		116646561	668081
Perylene-d12-ISTD	1500296	MSD	19.45	19.47	19.41	19.53		116646562	668081
Phenanthrene-d10-ISTD	1500296	MS	13.31	13.32	13.26	13.38		116646561	668081
Phenanthrene-d10-ISTD	1500296	MSD	13.30	13.32	13.26	13.38		116646562	668081

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
1,2,4-Trichlorobenzene	668081	445	832	ug/kg	53.5	16.6 - 141	116646556	
1,2-Dichlorobenzene	668081	436	832	ug/kg	52.4	41.4 - 122	116646556	
1,2-DPH (as azobenzene)	668081	348	832	ug/kg	41.8	44.2 - 128	116646556	*
1,3-Dichlorobenzene	668081	437	832	ug/kg	52.5	26.7 - 125	116646556	
1,4-Dichlorobenzene	668081	414	832	ug/kg	49.7	13.0 - 145	116646556	
2,4,5-Trichlorophenol	668081	497	832	ug/kg	59.7	30.8 - 137	116646556	
2,4,6-Trichlorophenol	668081	478	832	ug/kg	57.4	26.0 - 135	116646556	
2,4-Dichlorophenol	668081	474	832	ug/kg	56.9	37.7 - 130	116646556	
2,4-Dimethylphenol	668081	152	832	ug/kg	18.3	0.100 - 119	116646556	
2,4-Dinitrophenol	668081	384	832	ug/kg	46.1	5.37 - 134	116646556	
2,4-Dinitrotoluene	668081	450	832	ug/kg	54.1	27.7 - 153	116646556	
2,6-Dichlorophenol	668081	477	832	ug/kg	57.3	40.5 - 121	116646556	
2,6-Dinitrotoluene	668081	454	832	ug/kg	54.5	45.1 - 134	116646556	
2-Chloronaphthalene	668081	478	832	ug/kg	57.4	28.6 - 134	116646556	
2-Chlorophenol	668081	457	832	ug/kg	54.9	37.7 - 125	116646556	
2-Methylphenol (o-Cresol)	668081	395	832	ug/kg	47.4	0.100 - 124	116646556	
2-Nitrophenol	668081	452	832	ug/kg	54.3	34.7 - 126	116646556	
3&4-Methylphenol (m&p-Cresol)	668081	406	832	ug/kg	48.8	0.100 - 116	116646556	
3,3'-Dichlorobenzidine	668081	211	832	ug/kg	25.3	0.100 - 123	116646556	
4,6-Dinitro-2-methylphenol	668081	420	832	ug/kg	50.5	15.8 - 139	116646556	
4-Bromophenyl phenyl ether	668081	413	832	ug/kg	49.6	50.4 - 124	116646556	*
4-Chlorophenyl phenyl ethe	668081	397	832	ug/kg	47.7	47.6 - 127	116646556	
4-Nitrophenol	668081	427	832	ug/kg	51.3	0.100 - 163	116646556	
Acenaphthene	668081	440	832	ug/kg	52.9	31.8 - 133	116646556	
Acenaphthylene	668081	429	832	ug/kg	51.5	44.9 - 114	116646556	
Anthracene	668081	416	832	ug/kg	50.0	48.3 - 118	116646556	
Benzo(a)anthracene	668081	434	832	ug/kg	52.1	49.4 - 125	116646556	
Benzo(a)pyrene	668081	510	832	ug/kg	61.3	50.2 - 124	116646556	
Benzo(b)fluoranthene	668081	463	832	ug/kg	55.6	41.0 - 137	116646556	
Benzo(ghi)perylene	668081	582	832	ug/kg	69.9	35.6 - 146	116646556	
Benzo(k)fluoranthene	668081	561	832	ug/kg	67.4	42.2 - 147	116646556	
Benzyl Butyl phthalate	668081	477	832	ug/kg	57.3	18.6 - 163	116646556	
Bis(2-chloroethoxy)methane	668081	439	832	ug/kg	52.7	45.3 - 123	116646556	
Bis(2-chloroethyl)ether	668081	463	832	ug/kg	55.6	12.1 - 143	116646556	
Bis(2-chloroisopropyl)ether	668081	432	832	ug/kg	51.9	21.3 - 146	116646556	
Bis(2-ethylhexyl)phthalate	668081	482	832	ug/kg	57.9	39.7 - 168	116646556	

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Quality Control

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Chrysene (Benzo(a)phenanthrene)	668081	437	832	ug/kg	52.5	52.8 - 121	116646556	*
Dibenz(a,h)anthracene	668081	508	832	ug/kg	61.0	46.1 - 136	116646556	
Diethyl phthalate	668081	380	832	ug/kg	45.6	25.7 - 144	116646556	
Dimethyl phthalate	668081	446	832	ug/kg	53.6	0.100 - 157	116646556	
Di-n-butylphthalate	668081	426	832	ug/kg	51.2	23.3 - 173	116646556	
Di-n-octylphthalate	668081	562	832	ug/kg	67.5	17.2 - 174	116646556	
Fluoranthene(Benzo(j,k)fluorene)	668081	441	832	ug/kg	53.0	52.0 - 135	116646556	
Fluorene	668081	396	832	ug/kg	47.6	52.2 - 125	116646556	*
Hexachlorobenzene	668081	423	832	ug/kg	50.8	52.1 - 124	116646556	*
Hexachlorobutadiene	668081	466	832	ug/kg	56.0	16.3 - 138	116646556	
Hexachlorocyclopentadiene	668081	544	832	ug/kg	65.3	0.100 - 149	116646556	
Hexachloroethane	668081	442	832	ug/kg	53.1	18.8 - 131	116646556	
Indeno(1,2,3-cd)pyrene	668081	422	832	ug/kg	50.7	44.3 - 138	116646556	
Isophorone	668081	476	832	ug/kg	57.2	44.3 - 123	116646556	
Naphthalene	668081	433	832	ug/kg	52.0	41.0 - 122	116646556	
Nitrobenzene	668081	519	832	ug/kg	62.3	42.1 - 122	116646556	
N-Nitrosodimethylamine	668081	2260	832	ug/kg	271	0.100 - 211	116646556	*
N-Nitrosodi-n-propylamine	668081	437	832	ug/kg	52.5	18.1 - 159	116646556	
N-Nitrosodiphenylamine (as DPA	668081	435	832	ug/kg	52.3	40.2 - 126	116646556	
p-Chloro-m-Cresol (4-Chloro-3-me	668081	417	832	ug/kg	50.1	42.6 - 131	116646556	
Pentachlorophenol	668081	372	832	ug/kg	44.7	9.29 - 146	116646556	
Phenanthrene	668081	426	832	ug/kg	51.2	49.1 - 127	116646556	
Phenol	668081	445	832	ug/kg	53.5	0.100 - 142	116646556	
Pyrene	668081	498	832	ug/kg	59.8	15.6 - 154	116646556	
Pyridine	668081	435	832	ug/kg	52.3	17.0 - 80.0	116646556	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,2,4-Trichlorobenzene	668081	445	451	832	16.6 - 141	53.5	54.2	ug/kg	1.30	30.0
1,2-Dichlorobenzene	668081	436	430	832	41.4 - 122	52.4	51.7	ug/kg	1.34	30.0
1,2-DPH (as azobenzene)	668081	348	381	832	44.2 - 128	41.8 *	45.8	ug/kg	9.13	30.0
1,3-Dichlorobenzene	668081	437	431	832	26.7 - 125	52.5	51.8	ug/kg	1.34	30.0
1,4-Dichlorobenzene	668081	414	420	832	13.0 - 145	49.7	50.5	ug/kg	1.60	30.0
2,4,5-Trichlorophenol	668081	497	489	832	30.8 - 137	59.7	58.7	ug/kg	1.69	30.0
2,4,6-Trichlorophenol	668081	478	487	832	26.0 - 135	57.4	58.5	ug/kg	1.90	30.0
2,4-Dichlorophenol	668081	474	467	832	37.7 - 130	56.9	56.1	ug/kg	1.42	30.0
2,4-Dimethylphenol	668081	152	129	832	0.100 - 119	18.3	15.5	ug/kg	16.6	30.0
2,4-Dinitrophenol	668081	384	304	832	5.37 - 134	46.1	36.5	ug/kg	23.2	30.0
2,4-Dinitrotoluene	668081	450	432	832	27.7 - 153	54.1	51.9	ug/kg	4.15	30.0
2,6-Dichlorophenol	668081	477	470	832	40.5 - 121	57.3	56.5	ug/kg	1.41	30.0
2,6-Dinitrotoluene	668081	454	453	832	45.1 - 134	54.5	54.4	ug/kg	0.184	30.0
2-Chloronaphthalene	668081	478	480	832	28.6 - 134	57.4	57.7	ug/kg	0.521	30.0
2-Chlorophenol	668081	457	455	832	37.7 - 125	54.9	54.7	ug/kg	0.365	30.0
2-Methylphenol (o-Cresol)	668081	395	392	832	0.100 - 124	47.4	47.1	ug/kg	0.635	30.0
2-Nitrophenol	668081	452	451	832	34.7 - 126	54.3	54.2	ug/kg	0.184	30.0
3&4-Methylphenol (m&p-Cresol)	668081	406	407	832	0.100 - 116	48.8	48.9	ug/kg	0.205	30.0
3,3'-Dichlorobenzidine	668081	211	255	832	0.100 - 123	25.3	30.6	ug/kg	19.0	30.0

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Quality Control

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
4,6-Dinitro-2-methylphenol	668081	420	384	832	15.8 - 139	50.5	46.1	ug/kg	9.11	30.0
4-Bromophenyl phenyl ether	668081	413	434	832	50.4 - 124	49.6 *	52.1	ug/kg	4.92	30.0
4-Chlorophenyl phenyl ethe	668081	397	458	832	47.6 - 127	47.7	55.0	ug/kg	14.2	30.0
4-Nitrophenol	668081	427	418	832	0.100 - 163	51.3	50.2	ug/kg	2.17	30.0
Acenaphthene	668081	440	439	832	31.8 - 133	52.9	52.7	ug/kg	0.379	30.0
Acenaphthylene	668081	429	429	832	44.9 - 114	51.5	51.5	ug/kg	0	30.0
Anthracene	668081	416	462	832	48.3 - 118	50.0	55.5	ug/kg	10.4	30.0
Benzo(a)anthracene	668081	434	453	832	49.4 - 125	52.1	54.4	ug/kg	4.32	30.0
Benzo(a)pyrene	668081	510	512	832	50.2 - 124	61.3	61.5	ug/kg	0.326	30.0
Benzo(b)fluoranthene	668081	463	481	832	41.0 - 137	55.6	57.8	ug/kg	3.88	30.0
Benzo(ghi)perylene	668081	582	636	832	35.6 - 146	69.9	76.4	ug/kg	8.89	30.0
Benzo(k)fluoranthene	668081	561	654	832	42.2 - 147	67.4	78.6	ug/kg	15.3	30.0
Benzyl Butyl phthalate	668081	477	463	832	18.6 - 163	57.3	55.6	ug/kg	3.01	30.0
Bis(2-chloroethoxy)methane	668081	439	457	832	45.3 - 123	52.7	54.9	ug/kg	4.09	30.0
Bis(2-chloroethyl)ether	668081	463	483	832	12.1 - 143	55.6	58.0	ug/kg	4.23	30.0
Bis(2-chloroisopropyl)ether	668081	432	435	832	21.3 - 146	51.9	52.3	ug/kg	0.768	30.0
Bis(2-ethylhexyl)phthalate	668081	482	470	832	39.7 - 168	57.9	56.5	ug/kg	2.45	30.0
Chrysene (Benzo(a)phenanthrene)	668081	437	440	832	52.8 - 121	52.5 *	52.9	ug/kg	0.759	30.0
Dibenz(a,h)anthracene	668081	508	540	832	46.1 - 136	61.0	64.9	ug/kg	6.20	30.0
Diethyl phthalate	668081	380	434	832	25.7 - 144	45.6	52.1	ug/kg	13.3	30.0
Dimethyl phthalate	668081	446	436	832	0.100 - 157	53.6	52.4	ug/kg	2.26	30.0
Di-n-butylphthalate	668081	426	487	832	23.3 - 173	51.2	58.5	ug/kg	13.3	30.0
Di-n-octylphthalate	668081	562	544	832	17.2 - 174	67.5	65.3	ug/kg	3.31	30.0
Fluoranthene(Benzo(j,k)fluor ene)	668081	441	490	832	52.0 - 135	53.0	58.9	ug/kg	10.5	30.0
Fluorene	668081	396	446	832	52.2 - 125	47.6 *	53.6	ug/kg	11.9	30.0
Hexachlorobenzene	668081	423	449	832	52.1 - 124	50.8 *	53.9	ug/kg	5.92	30.0
Hexachlorobutadiene	668081	466	492	832	16.3 - 138	56.0	59.1	ug/kg	5.39	30.0
Hexachlorocyclopentadiene	668081	544	522	832	0.100 - 149	65.3	62.7	ug/kg	4.06	30.0
Hexachloroethane	668081	442	456	832	18.8 - 131	53.1	54.8	ug/kg	3.15	30.0
Indeno(1,2,3-cd)pyrene	668081	422	429	832	44.3 - 138	50.7	51.5	ug/kg	1.57	30.0
Isophorone	668081	476	497	832	44.3 - 123	57.2	59.7	ug/kg	4.28	30.0
Naphthalene	668081	433	439	832	41.0 - 122	52.0	52.7	ug/kg	1.34	30.0
Nitrobenzene	668081	519	533	832	42.1 - 122	62.3	64.0	ug/kg	2.69	30.0
N-Nitrosodi-n-propylamine	668081	437	435	832	18.1 - 159	52.5	52.3	ug/kg	0.382	30.0
N-Nitrosodiphenylamine (as DPA	668081	435	477	832	40.2 - 126	52.3	57.3	ug/kg	9.12	30.0
p-Chloro-m-Cresol (4-Chloro-3-me	668081	417	395	832	42.6 - 131	50.1	47.4	ug/kg	5.54	30.0
Pentachlorophenol	668081	372	375	832	9.29 - 146	44.7	45.0	ug/kg	0.669	30.0
Phenanthrene	668081	426	425	832	49.1 - 127	51.2	51.1	ug/kg	0.196	30.0
Phenol	668081	445	437	832	0.100 - 142	53.5	52.5	ug/kg	1.89	30.0
Pyrene	668081	498	496	832	15.6 - 154	59.8	59.6	ug/kg	0.335	30.0
Pyridine	668081	435	349	832	17.0 - 80.0	52.3	41.9	ug/kg	22.1	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,2,4-Trichlorobenzene	1500296	834	0	ND	833	0.100 - 216	100		ug/kg		30.0
1,2-Dichlorobenzene	1500296	590	0	ND	833	0.100 - 146	70.8		ug/kg		30.0
1,2-DPH (as azobenzene)	1500296	516	0	ND	833	0.100 - 158	61.9		ug/kg		30.0
1,3-Dichlorobenzene	1500296	556	0	ND	833	0.100 - 153	66.7		ug/kg		30.0

ANA-LAB CORP. THE COMPLETE SERVICE LAB

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Employee Owned Integrity Caring Continual Improvement

Quality Control

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MS

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
1,4-Dichlorobenzene	1500296	531	0	ND	833	0.100 - 209	63.7		ug/kg		30.0
2,4,5-Trichlorophenol	1500296	619	0	ND	833	0.100 - 183	74.3		ug/kg		30.0
2,4,6-Trichlorophenol	1500296	617	0	ND	833	0.100 - 185	74.1		ug/kg		30.0
2,4-Dichlorophenol	1500296	599	0	ND	833	0.100 - 599	71.9		ug/kg		30.0
2,4-Dimethylphenol	1500296	144	0	ND	833	0.100 - 574	17.3		ug/kg		30.0
2,4-Dinitrophenol	1500296	705	0	ND	833	0.100 - 141	84.6		ug/kg		30.0
2,4-Dinitrotoluene	1500296	584	0	ND	833	0.100 - 221	70.1		ug/kg		30.0
2,6-Dichlorophenol	1500296	556	0	ND	833	0.100 - 67500	66.7		ug/kg		30.0
2,6-Dinitrotoluene	1500296	576	0	ND	833	0.100 - 166	69.1		ug/kg		30.0
2-Chloronaphthalene	1500296	592	0	ND	833	0.100 - 153	71.1		ug/kg		30.0
2-Chlorophenol	1500296	580	0	ND	833	0.100 - 199	69.6		ug/kg		30.0
2-Methylphenol (o-Cresol)	1500296	438	0	ND	833	60.0 - 130	52.6 *		ug/kg		30.0
2-Nitrophenol	1500296	594	0	ND	833	0.100 - 81800	71.3		ug/kg		30.0
3&4-Methylphenol (m&p-Cresol)	1500296	511	0	ND	833	70.0 - 130	61.3 *		ug/kg		30.0
3,3'-Dichlorobenzidine	1500296	21.3	0	ND	833	0.100 - 84.0	2.56		ug/kg		30.0
4,6-Dinitro-2-methylphenol	1500296	569	0	ND	833	0.100 - 142	68.3		ug/kg		30.0
4-Bromophenyl phenyl ether	1500296	569	0	17.7	833	0.100 - 173	68.3		ug/kg		30.0
4-Chlorophenyl phenyl ethe	1500296	580	0	ND	833	0.100 - 188	69.6		ug/kg		30.0
4-Nitrophenol	1500296	597	0	ND	833	0.100 - 244	71.7		ug/kg		30.0
Acenaphthene	1500296	564	0	ND	833	0.100 - 229	67.7		ug/kg		30.0
Acenaphthylene	1500296	557	0	ND	833	0.100 - 216	66.9		ug/kg		30.0
Anthracene	1500296	540	0	ND	833	0.100 - 223	64.8		ug/kg		30.0
Benzo(a)anthracene	1500296	559	0	ND	833	0.100 - 244	67.1		ug/kg		30.0
Benzo(a)pyrene	1500296	628	0	ND	833	0.100 - 273	75.4		ug/kg		30.0
Benzo(b)fluoranthene	1500296	623	0	ND	833	0.100 - 273	74.8		ug/kg		30.0
Benzo(ghi)perylene	1500296	702	0	ND	833	0.100 - 233	84.3		ug/kg		30.0
Benzo(k)fluoranthene	1500296	744	0	ND	833	0.100 - 288	89.3		ug/kg		30.0
Benzyl Butyl phthalate	1500296	601	0	ND	833	0.100 - 264	72.1		ug/kg		30.0
Bis(2-chloroethoxy)methane	1500296	572	0	ND	833	0.100 - 13300	68.7		ug/kg		30.0
Bis(2-chloroethyl)ether	1500296	629	0	ND	833	0.100 - 167	75.5		ug/kg		30.0
Bis(2-chloroisopropyl)ether	1500296	629	0	ND	833	0.100 - 224	75.5		ug/kg		30.0
Bis(2-ethylhexyl)phthalate	1500296	694	0	118	833	0.100 - 300	83.3		ug/kg		30.0
Chrysene (Benzo(a)phenanthrene)	1500296	559	0	ND	833	0.100 - 230	67.1		ug/kg		30.0
Dibenz(a,h)anthracene	1500296	632	0	ND	833	0.100 - 227	75.9		ug/kg		30.0
Diethyl phthalate	1500296	567	0	ND	833	0.100 - 159	68.1		ug/kg		30.0
Dimethyl phthalate	1500296	560	0	ND	833	0.100 - 156	67.2		ug/kg		30.0
Di-n-butylphthalate	1500296	552	0	ND	833	0.100 - 227	66.3		ug/kg		30.0
Di-n-octylphthalate	1500296	693	0	ND	833	0.100 - 230	83.2		ug/kg		30.0
Fluoranthene(Benzo(j,k)fluor ene)	1500296	572	0	ND	833	0.100 - 268	68.7		ug/kg		30.0
Fluorene	1500296	586	0	ND	833	0.100 - 256	70.3		ug/kg		30.0
Hexachlorobenzene	1500296	558	0	ND	833	0.100 - 161	67.0		ug/kg		30.0
Hexachlorobutadiene	1500296	613	0	ND	833	0.100 - 165	73.6		ug/kg		30.0
Hexachlorocyclopentadiene	1500296	680	0	ND	833	0.100 - 76.0	81.6 *		ug/kg		30.0
Hexachloroethane	1500296	565	0	ND	833	0.100 - 157	67.8		ug/kg		30.0
Indeno(1,2,3-cd)pyrene	1500296	514	0	ND	833	0.100 - 246	61.7		ug/kg		30.0
Isophorone	1500296	623	0	ND	833	0.100 - 45900	74.8		ug/kg		30.0
Naphthalene	1500296	570	0	ND	833	0.100 - 233	68.4		ug/kg		30.0
Nitrobenzene	1500296	692	0	ND	833	0.100 - 219	83.1		ug/kg		30.0

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Quality Control

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
N-Nitrosodi-n-propylamine	1500296	566	0	ND	833	0.100 - 263	67.9		ug/kg		30.0
N-Nitrosodiphenylamine (as DPA	1500296	581	0	ND	833	0.100 - 178	69.7		ug/kg		30.0
p-Chloro-m-Cresol (4-Chloro-3-me	1500296	573	0	ND	833	0.100 - 224	68.8		ug/kg		30.0
Pentachlorophenol	1500296	640	0	ND	833	0.100 - 211	76.8		ug/kg		30.0
Phenanthrene	1500296	546	0	ND	833	0.100 - 258	65.5		ug/kg		30.0
Phenol	1500296	540	0	ND	833	0.100 - 199	64.8		ug/kg		30.0
Pyrene	1500296	669	0	ND	833	0.100 - 311	80.3		ug/kg		30.0
Pyridine	1500296	469	0	ND	833	60.0 - 130	56.3 *		ug/kg		30.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,2,4-Trichlorobenzene	1500296	834	1110	ND	833	0.100 - 216	100	133	ug/kg	28.4	30.0
1,2-Dichlorobenzene	1500296	590	704	ND	833	0.100 - 146	70.8	84.5	ug/kg	17.6	30.0
1,2-DPH (as azobenzene)	1500296	516	741	ND	833	0.100 - 158	61.9	89.0	ug/kg	35.8 *	30.0
1,3-Dichlorobenzene	1500296	556	664	ND	833	0.100 - 153	66.7	79.7	ug/kg	17.7	30.0
1,4-Dichlorobenzene	1500296	531	638	ND	833	0.100 - 209	63.7	76.6	ug/kg	18.3	30.0
2,4,5-Trichlorophenol	1500296	619	821	ND	833	0.100 - 183	74.3	98.6	ug/kg	28.1	30.0
2,4,6-Trichlorophenol	1500296	617	846	ND	833	0.100 - 185	74.1	102	ug/kg	31.3 *	30.0
2,4-Dichlorophenol	1500296	599	758	ND	833	0.100 - 599	71.9	91.0	ug/kg	23.4	30.0
2,4-Dimethylphenol	1500296	144	406	ND	833	0.100 - 574	17.3	48.7	ug/kg	95.3 *	30.0
2,4-Dinitrophenol	1500296	705	595	ND	833	0.100 - 141	84.6	71.4	ug/kg	16.9	30.0
2,4-Dinitrotoluene	1500296	584	613	ND	833	0.100 - 221	70.1	73.6	ug/kg	4.85	30.0
2,6-Dichlorophenol	1500296	556	767	ND	833	0.100 - 67500	66.7	92.1	ug/kg	31.9 *	30.0
2,6-Dinitrotoluene	1500296	576	724	ND	833	0.100 - 166	69.1	86.9	ug/kg	22.8	30.0
2-Chloronaphthalene	1500296	592	792	ND	833	0.100 - 153	71.1	95.1	ug/kg	28.9	30.0
2-Chlorophenol	1500296	580	682	ND	833	0.100 - 199	69.6	81.9	ug/kg	16.2	30.0
2-Methylphenol (o-Cresol)	1500296	438	614	ND	833	60.0 - 130	52.6 *	73.7	ug/kg	33.5 *	30.0
2-Nitrophenol	1500296	594	732	ND	833	0.100 - 81800	71.3	87.9	ug/kg	20.8	30.0
3&4-Methylphenol (m&p-Cresol)	1500296	511	644	ND	833	70.0 - 130	61.3 *	77.3	ug/kg	23.0	30.0
3,3'-Dichlorobenzidine	1500296	21.3	54.3	ND	833	0.100 - 84.0	2.56	6.52	ug/kg	87.3 *	30.0
4,6-Dinitro-2-methylphenol	1500296	569	697	ND	833	0.100 - 142	68.3	83.7	ug/kg	20.2	30.0
4-Bromophenyl phenyl ether	1500296	569	768	17.7	833	0.100 - 173	66.2	90.1	ug/kg	30.6 *	30.0
4-Chlorophenyl phenyl ethe	1500296	580	655	ND	833	0.100 - 188	69.6	78.6	ug/kg	12.1	30.0
4-Nitrophenol	1500296	597	611	ND	833	0.100 - 244	71.7	73.3	ug/kg	2.32	30.0
Acenaphthene	1500296	564	725	ND	833	0.100 - 229	67.7	87.0	ug/kg	25.0	30.0
Acenaphthylene	1500296	557	709	ND	833	0.100 - 216	66.9	85.1	ug/kg	24.0	30.0
Anthracene	1500296	540	692	ND	833	0.100 - 223	64.8	83.1	ug/kg	24.7	30.0
Benzo(a)anthracene	1500296	559	726	ND	833	0.100 - 244	67.1	87.2	ug/kg	26.0	30.0
Benzo(a)pyrene	1500296	628	749	ND	833	0.100 - 273	75.4	89.9	ug/kg	17.6	30.0
Benzo(b)fluoranthene	1500296	623	796	ND	833	0.100 - 273	74.8	95.6	ug/kg	24.4	30.0
Benzo(ghi)perylene	1500296	702	894	ND	833	0.100 - 233	84.3	107	ug/kg	24.1	30.0
Benzo(k)fluoranthene	1500296	744	844	ND	833	0.100 - 288	89.3	101	ug/kg	12.6	30.0
Benzyl Butyl phthalate	1500296	601	787	ND	833	0.100 - 264	72.1	94.5	ug/kg	26.8	30.0
Bis(2-chloroethoxy)methane	1500296	572	726	ND	833	0.100 - 13300	68.7	87.2	ug/kg	23.7	30.0
Bis(2-chloroethyl)ether	1500296	629	130	ND	833	0.100 - 167	75.5	15.6	ug/kg	131 *	30.0
Bis(2-chloroisopropyl)ether	1500296	629	742	ND	833	0.100 - 224	75.5	89.1	ug/kg	16.5	30.0
Bis(2-ethylhexyl)phthalate	1500296	694	919	118	833	0.100 - 300	69.1	96.2	ug/kg	32.7 *	30.0
Chrysene (Benzo(a)phenanthrene)	1500296	559	740	ND	833	0.100 - 230	67.1	88.8	ug/kg	27.9	30.0

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Quality Control

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Dibenz(a,h)anthracene	1500296	632	759	ND	833	0.100 - 227	75.9	91.1	ug/kg	18.3	30.0
Diethyl phthalate	1500296	567	617	ND	833	0.100 - 159	68.1	74.1	ug/kg	8.45	30.0
Dimethyl phthalate	1500296	560	735	ND	833	0.100 - 156	67.2	88.2	ug/kg	27.0	30.0
Di-n-butylphthalate	1500296	552	758	ND	833	0.100 - 227	66.3	91.0	ug/kg	31.5 *	30.0
Di-n-octylphthalate	1500296	693	817	ND	833	0.100 - 230	83.2	98.1	ug/kg	16.4	30.0
Fluoranthene(Benzo(j,k)fluor ene)	1500296	572	752	ND	833	0.100 - 268	68.7	90.3	ug/kg	27.2	30.0
Fluorene	1500296	586	639	ND	833	0.100 - 256	70.3	76.7	ug/kg	8.65	30.0
Hexachlorobenzene	1500296	558	733	ND	833	0.100 - 161	67.0	88.0	ug/kg	27.1	30.0
Hexachlorobutadiene	1500296	613	800	ND	833	0.100 - 165	73.6	96.0	ug/kg	26.5	30.0
Hexachlorocyclopentadiene	1500296	680	782	ND	833	0.100 - 76.0	81.6 *	93.9 *	ug/kg	14.0	30.0
Hexachloroethane	1500296	565	677	ND	833	0.100 - 157	67.8	81.3	ug/kg	18.0	30.0
Indeno(1,2,3-cd)pyrene	1500296	514	620	ND	833	0.100 - 246	61.7	74.4	ug/kg	18.7	30.0
Isophorone	1500296	623	799	ND	833	0.100 - 45900	74.8	95.9	ug/kg	24.8	30.0
Naphthalene	1500296	570	723	ND	833	0.100 - 233	68.4	86.8	ug/kg	23.7	30.0
Nitrobenzene	1500296	692	902	ND	833	0.100 - 219	83.1	108	ug/kg	26.3	30.0
N-Nitrosodi-n-propylamine	1500296	566	697	ND	833	0.100 - 263	67.9	83.7	ug/kg	20.7	30.0
N-Nitrosodiphenylamine (as DPA	1500296	581	851	ND	833	0.100 - 178	69.7	102	ug/kg	37.7 *	30.0
p-Chloro-m-Cresol (4-Chloro-3-me	1500296	573	720	ND	833	0.100 - 224	68.8	86.4	ug/kg	22.7	30.0
Pentachlorophenol	1500296	640	783	ND	833	0.100 - 211	76.8	94.0	ug/kg	20.1	30.0
Phenanthrene	1500296	546	717	ND	833	0.100 - 258	65.5	86.1	ug/kg	27.1	30.0
Phenol	1500296	540	670	ND	833	0.100 - 199	64.8	80.4	ug/kg	21.5	30.0
Pyrene	1500296	669	820	ND	833	0.100 - 311	80.3	98.4	ug/kg	20.3	30.0
Pyridine	1500296	469	380	ND	833	60.0 - 130	56.3 *	45.6 *	ug/kg	21.0	30.0

SPCC

Parameter	Sample	RF	Minimum	File
2,4-Dinitrophenol	578179	47100	0.050	116646554
4-Nitrophenol	578179	42600	0.050	116646554
Hexachlorocyclopentadiene	578179	49000	0.050	116646554
N-Nitrosodi-n-propylamine	578179	44800	0.050	116646554

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	578179	CCV	50800	100000	ug/kg	50.8	36.6 - 112	116646554
2-Fluorobiphenyl-SURR	578179	CCV	51000	50000	ug/kg	102	29.5 - 105	116646554
2-Fluorophenol-SURR	578179	CCV	52900	100000	ug/kg	52.9	0.734 - 98.4	116646554
4-Terphenyl-d14-SURR	578179	CCV	55400	50000	ug/kg	111	33.1 - 118	116646554
Nitrobenzene-d5-SURR	578179	CCV	44900	50000	ug/kg	89.8	35.6 - 103	116646554
Phenol-d6-SURR	578179	CCV	41800	100000	ug/kg	41.8	0.100 - 110	116646554
2,4,6-Tribromophenol	668081	Blank	1070	3330	ug/kg	32.1 *	36.6 - 112	116646555
2,4,6-Tribromophenol	668081	LCS	1270	3330	ug/kg	38.1	36.6 - 112	116646556
2,4,6-Tribromophenol	668081	LCS Dup	1390	3330	ug/kg	41.7	36.6 - 112	116646557
2-Fluorobiphenyl-SURR	668081	Blank	11500	50000	ug/kg	23.0 *	29.5 - 105	116646555
2-Fluorobiphenyl-SURR	668081	LCS	12800	50000	ug/kg	25.6 *	29.5 - 105	116646556
2-Fluorobiphenyl-SURR	668081	LCS Dup	13400	50000	ug/kg	26.8 *	29.5 - 105	116646557
2-Fluorophenol-SURR	668081	Blank	39200	100000	ug/kg	39.2	0.734 - 98.4	116646555
2-Fluorophenol-SURR	668081	LCS	38200	100000	ug/kg	38.2	0.734 - 98.4	116646556
2-Fluorophenol-SURR	668081	LCS Dup	42400	100000	ug/kg	42.4	0.734 - 98.4	116646557
4-Terphenyl-d14-SURR	668081	Blank	12200	50000	ug/kg	24.4 *	33.1 - 118	116646555

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Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
4-Terphenyl-d14-SURR	668081	LCS	12200	50000	ug/kg	24.4 *	33.1 - 118	116646556
4-Terphenyl-d14-SURR	668081	LCS Dup	12000	50000	ug/kg	24.0 *	33.1 - 118	116646557
Nitrobenzene-d5-SURR	668081	Blank	12600	50000	ug/kg	25.2 *	35.6 - 103	116646555
Nitrobenzene-d5-SURR	668081	LCS	13000	50000	ug/kg	26.0 *	35.6 - 103	116646556
Nitrobenzene-d5-SURR	668081	LCS Dup	13400	50000	ug/kg	26.8 *	35.6 - 103	116646557
Phenol-d6-SURR	668081	Blank	43500	100000	ug/kg	43.5	0.100 - 110	116646555
Phenol-d6-SURR	668081	LCS	40000	100000	ug/kg	40.0	0.100 - 110	116646556
Phenol-d6-SURR	668081	LCS Dup	39900	100000	ug/kg	39.9	0.100 - 110	116646557
2,4,6-Tribromophenol	1500296	MS	2150	3330	ug/kg	64.6	36.6 - 112	116646561
2,4,6-Tribromophenol	1500296	MSD	2210	3330	ug/kg	66.4	36.6 - 112	116646562
2-Fluorobiphenyl-SURR	1500296	MS	558	1670	ug/kg	33.4	29.5 - 105	116646561
2-Fluorobiphenyl-SURR	1500296	MSD	779	1670	ug/kg	46.6	29.5 - 105	116646562
2-Fluorophenol-SURR	1500296	MS	1750	3330	ug/kg	52.6	0.734 - 98.4	116646561
2-Fluorophenol-SURR	1500296	MSD	2210	3330	ug/kg	66.4	0.734 - 98.4	116646562
4-Terphenyl-d14-SURR	1500296	MS	567	1670	ug/kg	34.0	33.1 - 118	116646561
4-Terphenyl-d14-SURR	1500296	MSD	723	1670	ug/kg	43.3	33.1 - 118	116646562
Nitrobenzene-d5-SURR	1500296	MS	560	1670	ug/kg	33.5 *	35.6 - 103	116646561
Nitrobenzene-d5-SURR	1500296	MSD	682	1670	ug/kg	40.8	35.6 - 103	116646562
Phenol-d6-SURR	1500296	MS	1630	3330	ug/kg	48.9	0.100 - 110	116646561
Phenol-d6-SURR	1500296	MSD	2020	3330	ug/kg	60.7	0.100 - 110	116646562

668758 Solid & Chemical Materials **EPA 8260B**

BFB

Parameter	Sample	RefMass	Reading	%	Limits%	Out	File
BFB Mass 173	668758	174	52	0.5	0 - 2.00		116647827
BFB Mass 174	668758	95.0	10356	74.1	50.0 - 100		116647827
BFB Mass 175	668758	174	690	6.7	5.00 - 9.00		116647827
BFB Mass 176	668758	174	9997	96.5	95.0 - 101		116647827
BFB Mass 177	668758	176	655	6.6	5.00 - 9.00		116647827
BFB Mass 50	668758	95.0	3222	23.1	15.0 - 40.0		116647827
BFB Mass 75	668758	95.0	6724	48.1	30.0 - 60.0		116647827
BFB Mass 95	668758	95.0	13974	100.0	100 - 100		116647827
BFB Mass 96	668758	95.0	928	6.6	5.00 - 9.00		116647827

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
1,1,1,2-Tetrachloroethane	668758	ND	0.499	1.00	ug/kg	116647831	
1,1,1-Trichloroethane	668758	ND	0.387	1.00	ug/kg	116647831	
1,1,2,2-Tetrachloroethane	668758	ND	0.350	1.00	ug/kg	116647831	
1,1,2-Trichloroethane	668758	ND	0.285	1.00	ug/kg	116647831	
1,1-Dichloroethane	668758	ND	0.123	1.00	ug/kg	116647831	
1,1-Dichloroethylene	668758	ND	0.162	1.00	ug/kg	116647831	
1,1-Dichloropropene	668758	ND	0.239	1.00	ug/kg	116647831	
1,2,3-Trichlorobenzene	668758	ND	0.581	1.00	ug/kg	116647831	
1,2,3-Trichloropropane	668758	ND	0.681	1.00	ug/kg	116647831	
1,2,4-Trichlorobenzene	668758	ND	0.504	1.00	ug/kg	116647831	
1,2,4-Trimethylbenzene	668758	ND	0.311	1.00	ug/kg	116647831	
1,2-Dibromo-3-chloropropane	668758	ND	0.636	1.00	ug/kg	116647831	
1,2-Dibromoethane	668758	ND	0.210	1.00	ug/kg	116647831	
1,2-Dichloroethane	668758	ND	0.197	1.00	ug/kg	116647831	

ANA-LAB CORP. THE COMPLETE SERVICE LAB

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Quality Control

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Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*	*Out*
1,2-Dichloropropane	668758	ND	0.446	1.00	ug/kg	116647831	
1,3,5-Trimethylbenzene	668758	ND	0.395	1.00	ug/kg	116647831	
1,3-Dichloropropane	668758	ND	0.208	1.00	ug/kg	116647831	
2,2-Dichloropropane	668758	ND	0.287	1.00	ug/kg	116647831	
2-Chloroethylvinyl ether	668758	ND	0.322	1.00	ug/kg	116647831	
2-Chlorotoluene	668758	ND	0.568	1.00	ug/kg	116647831	
4-Chlorotoluene	668758	ND	0.452	1.00	ug/kg	116647831	
Acetone	668758	ND	10.0	10.0	ug/kg	116647831	
Acrolein	668758	ND	2.85	5.00	ug/kg	116647831	
Acrylonitrile	668758	ND	3.32	5.00	ug/kg	116647831	
Benzene	668758	ND	0.363	1.00	ug/kg	116647831	
Bromobenzene	668758	ND	0.325	1.00	ug/kg	116647831	
Bromochloromethane	668758	ND	0.395	1.00	ug/kg	116647831	
Bromodichloromethane	668758	ND	0.365	1.00	ug/kg	116647831	
Bromoform	668758	ND	0.302	1.00	ug/kg	116647831	
Bromomethane (Methyl Bromi	668758	ND	0.542	1.00	ug/kg	116647831	
Carbon Tetrachloride	668758	ND	0.643	1.00	ug/kg	116647831	
Chlorobenzene	668758	ND	0.199	1.00	ug/kg	116647831	
Chloroethane	668758	ND	0.411	1.00	ug/kg	116647831	
Chloroform	668758	ND	0.293	1.00	ug/kg	116647831	
Chloromethane	668758	ND	0.185	1.00	ug/kg	116647831	
cis-1,2-Dichloroethylene	668758	ND	0.173	1.00	ug/kg	116647831	
cis-1,3-Dichloropropene	668758	ND	0.227	1.00	ug/kg	116647831	
Dibromochloromethane	668758	ND	0.184	1.00	ug/kg	116647831	
Dibromomethane	668758	ND	0.255	1.00	ug/kg	116647831	
Dichlorodifluoromethane	668758	ND	0.307	1.00	ug/kg	116647831	
Dichloromethane	668758	ND	0.900	1.00	ug/kg	116647831	
Ethylbenzene	668758	ND	0.223	1.00	ug/kg	116647831	
Hexachlorobutadiene	668758	ND	0.111	1.00	ug/kg	116647831	
Isopropylbenzene (Cumene)	668758	ND	0.369	1.00	ug/kg	116647831	
m- and p-Xylene	668758	ND	0.479	1.00	ug/kg	116647831	
m-Dichlorobenzene	668758	ND	0.271	1.00	ug/kg	116647831	
Methyl ethyl ketone (Butanone)	668758	ND	10.0	10.0	ug/kg	116647831	
Methyl Isobutyl Ketone	668758	ND	0.493	1.00	ug/kg	116647831	
Naphthalene	668758	ND	0.553	1.00	ug/kg	116647831	
n-Butylbenzene	668758	ND	0.402	1.00	ug/kg	116647831	
n-Propylbenzene	668758	ND	0.267	1.00	ug/kg	116647831	
o-Dichlorobenzene	668758	ND	0.326	1.00	ug/kg	116647831	
o-Xylene	668758	ND	0.154	1.00	ug/kg	116647831	
p-Dichlorobenzene	668758	ND	0.283	1.00	ug/kg	116647831	
p-Isopropyltoluene	668758	ND	0.329	1.00	ug/kg	116647831	
sec-Butylbenzene	668758	ND	0.369	1.00	ug/kg	116647831	
Styrene	668758	ND	0.303	1.00	ug/kg	116647831	
tert-Butylbenzene	668758	ND	0.302	1.00	ug/kg	116647831	
tert-Butylmethylether (MTBE)	668758	ND	0.721	3.00	ug/kg	116647831	
Tetrachloroethylene	668758	ND	0.416	1.00	ug/kg	116647831	
Toluene	668758	ND	0.275	1.00	ug/kg	116647831	
trans-1,2-Dichloroethylene	668758	ND	0.112	1.00	ug/kg	116647831	

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Quality Control

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Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
trans-1,3-Dichloropropene	668758	ND	0.285	1.00	ug/kg	116647831	
Trichloroethylene	668758	ND	0.882	1.00	ug/kg	116647831	
Trichlorofluoromethane	668758	ND	0.206	1.00	ug/kg	116647831	
Vinyl chloride	668758	ND	0.353	1.00	ug/kg	116647831	

CCC

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
1,1-Dichloroethylene	21.5	20.00	ug/kg	108	80.0 - 120		116647828
1,2-Dichloropropane	20.0	20.00	ug/kg	100	80.0 - 120		116647828
Chloroform	20.0	20.00	ug/kg	100	80.0 - 120		116647828
Ethylbenzene	20.3	20.00	ug/kg	102	80.0 - 120		116647828
Toluene	20.4	20.00	ug/kg	102	80.0 - 120		116647828
Vinyl chloride	21.3	20.00	ug/kg	106	80.0 - 120		116647828

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
1,1,1,2-Tetrachloroethane	19.5	20.0	ug/kg	97.5	80.0 - 120		116647828
1,1,1-Trichloroethane	20.8	20.0	ug/kg	104	80.0 - 120		116647828
1,1,2,2-Tetrachloroethane	21.3	20.0	ug/kg	106	80.0 - 120		116647828
1,1,2-Trichloroethane	20.1	20.0	ug/kg	100	80.0 - 120		116647828
1,1-Dichloroethane	19.8	20.0	ug/kg	99.0	80.0 - 120		116647828
1,1-Dichloroethylene	21.5	20.0	ug/kg	108	80.0 - 120		116647828
1,1-Dichloropropene	20.6	20.0	ug/kg	103	80.0 - 120		116647828
1,2,3-Trichlorobenzene	19.4	20.0	ug/kg	97.0	80.0 - 120		116647828
1,2,3-Trichloropropane	20.0	20.0	ug/kg	100	80.0 - 120		116647828
1,2,4-Trichlorobenzene	18.7	20.0	ug/kg	93.5	80.0 - 120		116647828
1,2,4-Trimethylbenzene	19.2	20.0	ug/kg	96.0	80.0 - 120		116647828
1,2-Dibromo-3-chloropropane	19.2	20.0	ug/kg	96.0	80.0 - 120		116647828
1,2-Dibromoethane	19.6	20.0	ug/kg	98.0	80.0 - 120		116647828
1,2-Dichloroethane	20.3	20.0	ug/kg	102	80.0 - 120		116647828
1,2-Dichloropropane	20.0	20.0	ug/kg	100	80.0 - 120		116647828
1,3,5-Trimethylbenzene	20.2	20.0	ug/kg	101	80.0 - 120		116647828
1,3-Dichloropropane	19.7	20.0	ug/kg	98.5	80.0 - 120		116647828
2,2-Dichloropropane	24.6	20.0	ug/kg	123	80.0 - 120	*	116647828
2-Chloroethylvinyl ether	17.6	20.0	ug/kg	88.0	80.0 - 120		116647828
2-Chlorotoluene	20.3	20.0	ug/kg	102	80.0 - 120		116647828
4-Chlorotoluene	20.6	20.0	ug/kg	103	80.0 - 120		116647828
Acetone	23.3	20.0	ug/kg	116	80.0 - 120		116647828
Acrolein	44.4	40.0	ug/kg	111	80.0 - 120		116647828
Acrylonitrile	38.6	40.0	ug/kg	96.5	80.0 - 120		116647828
Benzene	20.2	20.0	ug/kg	101	80.0 - 120		116647828
Bromobenzene	20.4	20.0	ug/kg	102	80.0 - 120		116647828
Bromochloromethane	19.7	20.0	ug/kg	98.5	80.0 - 120		116647828
Bromodichloromethane	19.9	20.0	ug/kg	99.5	80.0 - 120		116647828
Bromoform	18.8	20.0	ug/kg	94.0	80.0 - 120		116647828
Bromomethane (Methyl Bromi	23.1	20.0	ug/kg	116	80.0 - 120		116647828
Carbon Tetrachloride	19.9	20.0	ug/kg	99.5	80.0 - 120		116647828
Chlorobenzene	20.3	20.0	ug/kg	102	80.0 - 120		116647828
Chloroethane	19.8	20.0	ug/kg	99.0	80.0 - 120		116647828
Chloroform	20.0	20.0	ug/kg	100	80.0 - 120		116647828

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Quality Control

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Chloromethane	21.4	20.0	ug/kg	107	80.0 - 120		116647828
cis-1,2-Dichloroethylene	20.8	20.0	ug/kg	104	80.0 - 120		116647828
cis-1,3-Dichloropropene	19.4	20.0	ug/kg	97.0	80.0 - 120		116647828
Dibromochloromethane	19.4	20.0	ug/kg	97.0	80.0 - 120		116647828
Dibromomethane	19.9	20.0	ug/kg	99.5	80.0 - 120		116647828
Dichlorodifluoromethane	23.2	20.0	ug/kg	116	80.0 - 120		116647828
Dichloromethane	19.3	20.0	ug/kg	96.5	80.0 - 120		116647828
Ethylbenzene	20.3	20.0	ug/kg	102	80.0 - 120		116647828
Hexachlorobutadiene	21.0	20.0	ug/kg	105	80.0 - 120		116647828
Isopropylbenzene (Cumene)	19.8	20.0	ug/kg	99.0	80.0 - 120		116647828
m- and p-Xylene	40.7	40.0	ug/kg	102	80.0 - 120		116647828
m-Dichlorobenzene	20.4	20.0	ug/kg	102	80.0 - 120		116647828
Methyl ethyl ketone (Butanone)	21.1	20.0	ug/kg	106	80.0 - 120		116647828
Methyl Isobutyl Ketone	19.9	20.0	ug/kg	99.5	80.0 - 120		116647828
Naphthalene	17.9	20.0	ug/kg	89.5	80.0 - 120		116647828
n-Butylbenzene	20.9	20.0	ug/kg	104	80.0 - 120		116647828
n-Propylbenzene	20.4	20.0	ug/kg	102	80.0 - 120		116647828
o-Dichlorobenzene	19.7	20.0	ug/kg	98.5	80.0 - 120		116647828
o-Xylene	21.0	20.0	ug/kg	105	80.0 - 120		116647828
p-Dichlorobenzene	20.0	20.0	ug/kg	100	80.0 - 120		116647828
p-Isopropyltoluene	19.9	20.0	ug/kg	99.5	80.0 - 120		116647828
sec-Butylbenzene	19.8	20.0	ug/kg	99.0	80.0 - 120		116647828
Styrene	18.9	20.0	ug/kg	94.5	80.0 - 120		116647828
tert-Butylbenzene	20.0	20.0	ug/kg	100	80.0 - 120		116647828
tert-Butylmethylether (MTBE)	21.0	20.0	ug/kg	105	80.0 - 120		116647828
Tetrachloroethylene	21.2	20.0	ug/kg	106	80.0 - 120		116647828
Toluene	20.4	20.0	ug/kg	102	80.0 - 120		116647828
trans-1,2-Dichloroethylene	21.8	20.0	ug/kg	109	80.0 - 120		116647828
trans-1,3-Dichloropropene	19.6	20.0	ug/kg	98.0	80.0 - 120		116647828
Trichloroethylene	18.3	20.0	ug/kg	91.5	80.0 - 120		116647828
Trichlorofluoromethane	22.5	20.0	ug/kg	112	80.0 - 120		116647828
Vinyl chloride	21.3	20.0	ug/kg	106	80.0 - 120		116647828

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	668758	CCV	200700	200700	100400	301100		116647828	668758
1,4-DichlorobenzeneD4 (ISTD)	668758	LCS	185400	200700	100400	301100		116647829	668758
1,4-DichlorobenzeneD4 (ISTD)	668758	LCS Dup	193100	200700	100400	301100		116647830	668758
1,4-DichlorobenzeneD4 (ISTD)	668758	Blank	162200	200700	100400	301100		116647831	668758
ChlorobenzeneD5 (ISTD)	668758	CCV	350400	350400	175200	525600		116647828	668758
ChlorobenzeneD5 (ISTD)	668758	LCS	328400	350400	175200	525600		116647829	668758
ChlorobenzeneD5 (ISTD)	668758	LCS Dup	342100	350400	175200	525600		116647830	668758
ChlorobenzeneD5 (ISTD)	668758	Blank	335700	350400	175200	525600		116647831	668758
1,4-DichlorobenzeneD4 (ISTD)	1501552	MS	206200	200700	100400	301100		116647836	668758
1,4-DichlorobenzeneD4 (ISTD)	1501552	MSD	196100	200700	100400	301100		116647837	668758

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Quality Control

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
ChlorobenzeneD5 (ISTD)	1501552	MS	364900	350400	175200	525600		116647836	668758
ChlorobenzeneD5 (ISTD)	1501552	MSD	362100	350400	175200	525600		116647837	668758

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	668758	CCV	11.22	11.22	11.16	11.28		116647828	668758
1,4-DichlorobenzeneD4 (ISTD)	668758	LCS	11.22	11.22	11.16	11.28		116647829	668758
1,4-DichlorobenzeneD4 (ISTD)	668758	LCS Dup	11.22	11.22	11.16	11.28		116647830	668758
1,4-DichlorobenzeneD4 (ISTD)	668758	Blank	11.22	11.22	11.16	11.28		116647831	668758
ChlorobenzeneD5 (ISTD)	668758	CCV	8.854	8.854	8.794	8.914		116647828	668758
ChlorobenzeneD5 (ISTD)	668758	LCS	8.860	8.854	8.794	8.914		116647829	668758
ChlorobenzeneD5 (ISTD)	668758	LCS Dup	8.854	8.854	8.794	8.914		116647830	668758
ChlorobenzeneD5 (ISTD)	668758	Blank	8.860	8.854	8.794	8.914		116647831	668758
1,4-DichlorobenzeneD4 (ISTD)	1501552	MS	11.22	11.22	11.16	11.28		116647836	668758
1,4-DichlorobenzeneD4 (ISTD)	1501552	MSD	11.22	11.22	11.16	11.28		116647837	668758
ChlorobenzeneD5 (ISTD)	1501552	MS	8.860	8.854	8.794	8.914		116647836	668758
ChlorobenzeneD5 (ISTD)	1501552	MSD	8.854	8.854	8.794	8.914		116647837	668758

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
1,1,1,2-Tetrachloroethane	668758	20.9	20.0	ug/kg	104	77.5 - 133	116647829	
1,1,1-Trichloroethane	668758	22.9	20.0	ug/kg	114	74.3 - 136	116647829	
1,1,2,2-Tetrachloroethane	668758	24.0	20.0	ug/kg	120	65.9 - 137	116647829	
1,1,2-Trichloroethane	668758	21.2	20.0	ug/kg	106	79.2 - 123	116647829	
1,1-Dichloroethane	668758	21.2	20.0	ug/kg	106	75.8 - 126	116647829	
1,1-Dichloroethylene	668758	22.0	20.0	ug/kg	110	71.1 - 128	116647829	
1,1-Dichloropropene	668758	23.2	20.0	ug/kg	116	77.5 - 128	116647829	
1,2,3-Trichlorobenzene	668758	22.1	20.0	ug/kg	110	69.7 - 137	116647829	
1,2,3-Trichloropropane	668758	23.4	20.0	ug/kg	117	71.6 - 135	116647829	
1,2,4-Trichlorobenzene	668758	21.3	20.0	ug/kg	106	73.4 - 126	116647829	
1,2,4-Trimethylbenzene	668758	21.2	20.0	ug/kg	106	79.1 - 118	116647829	
1,2-Dibromo-3-chloropropane	668758	22.5	20.0	ug/kg	112	56.5 - 141	116647829	
1,2-Dibromoethane	668758	21.3	20.0	ug/kg	106	79.9 - 132	116647829	
1,2-Dichloroethane	668758	21.5	20.0	ug/kg	108	72.7 - 142	116647829	
1,2-Dichloropropane	668758	21.3	20.0	ug/kg	106	76.5 - 129	116647829	
1,3,5-Trimethylbenzene	668758	22.0	20.0	ug/kg	110	79.3 - 118	116647829	
1,3-Dichloropropane	668758	20.0	20.0	ug/kg	100	78.1 - 120	116647829	
2,2-Dichloropropane	668758	26.3	20.0	ug/kg	132	57.9 - 163	116647829	
2-Chloroethylvinyl ether	668758	16.3	20.0	ug/kg	81.5	23.2 - 155	116647829	
2-Chlorotoluene	668758	21.8	20.0	ug/kg	109	74.5 - 132	116647829	
4-Chlorotoluene	668758	20.9	20.0	ug/kg	104	76.9 - 132	116647829	
Acetone	668758	23.6	20.0	ug/kg	118	0.100 - 248	116647829	
Acrolein	668758	75.5	40.0	ug/kg	189	0.100 - 263	116647829	
Acrylonitrile	668758	45.1	40.0	ug/kg	113	60.0 - 144	116647829	
Benzene	668758	21.4	20.0	ug/kg	107	74.4 - 122	116647829	
Bromobenzene	668758	22.4	20.0	ug/kg	112	79.3 - 123	116647829	

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Quality Control

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Bromochloromethane	668758	21.2	20.0	ug/kg	106	78.7 - 135	116647829	
Bromodichloromethane	668758	20.9	20.0	ug/kg	104	74.3 - 130	116647829	
Bromoform	668758	21.9	20.0	ug/kg	110	64.2 - 134	116647829	
Bromomethane (Methyl Bromi	668758	20.4	20.0	ug/kg	102	45.1 - 150	116647829	
Carbon Tetrachloride	668758	23.1	20.0	ug/kg	116	70.8 - 131	116647829	
Chlorobenzene	668758	21.2	20.0	ug/kg	106	78.4 - 123	116647829	
Chloroethane	668758	23.4	20.0	ug/kg	117	70.4 - 134	116647829	
Chloroform	668758	20.4	20.0	ug/kg	102	75.8 - 128	116647829	
Chloromethane	668758	15.5	20.0	ug/kg	77.5	46.8 - 138	116647829	
cis-1,2-Dichloroethylene	668758	20.3	20.0	ug/kg	102	76.4 - 118	116647829	
cis-1,3-Dichloropropene	668758	18.6	20.0	ug/kg	93.0	68.9 - 112	116647829	
Dibromochloromethane	668758	20.2	20.0	ug/kg	101	71.9 - 130	116647829	
Dibromomethane	668758	23.0	20.0	ug/kg	115	79.9 - 129	116647829	
Dichlorodifluoromethane	668758	13.2	20.0	ug/kg	66.0	34.8 - 120	116647829	
Dichloromethane	668758	19.2	20.0	ug/kg	96.0	75.0 - 121	116647829	
Ethylbenzene	668758	21.8	20.0	ug/kg	109	79.8 - 125	116647829	
Hexachlorobutadiene	668758	23.2	20.0	ug/kg	116	72.3 - 131	116647829	
Isopropylbenzene (Cumene)	668758	19.8	20.0	ug/kg	99.0	70.5 - 130	116647829	
m- and p-Xylene	668758	43.0	40.0	ug/kg	108	81.5 - 117	116647829	
m-Dichlorobenzene	668758	22.2	20.0	ug/kg	111	78.3 - 129	116647829	
Methyl ethyl ketone (Butanone)	668758	19.8	20.0	ug/kg	99.0	31.5 - 165	116647829	
Methyl Isobutyl Ketone	668758	19.6	20.0	ug/kg	98.0	48.2 - 132	116647829	
Naphthalene	668758	23.4	20.0	ug/kg	117	68.4 - 136	116647829	
n-Butylbenzene	668758	23.4	20.0	ug/kg	117	78.1 - 125	116647829	
n-Propylbenzene	668758	22.3	20.0	ug/kg	112	76.3 - 138	116647829	
o-Dichlorobenzene	668758	20.8	20.0	ug/kg	104	76.1 - 128	116647829	
o-Xylene	668758	21.7	20.0	ug/kg	108	79.3 - 121	116647829	
p-Dichlorobenzene	668758	21.2	20.0	ug/kg	106	82.0 - 118	116647829	
p-Isopropyltoluene	668758	22.2	20.0	ug/kg	111	80.6 - 128	116647829	
sec-Butylbenzene	668758	20.7	20.0	ug/kg	104	72.8 - 132	116647829	
Styrene	668758	20.0	20.0	ug/kg	100	76.9 - 117	116647829	
tert-Butylbenzene	668758	21.8	20.0	ug/kg	109	75.3 - 132	116647829	
tert-Butylmethylether (MTBE)	668758	20.6	20.0	ug/kg	103	68.5 - 126	116647829	
Tetrachloroethylene	668758	23.3	20.0	ug/kg	116	61.7 - 147	116647829	
Toluene	668758	21.7	20.0	ug/kg	108	82.9 - 115	116647829	
trans-1,2-Dichloroethylene	668758	21.2	20.0	ug/kg	106	75.7 - 125	116647829	
trans-1,3-Dichloropropene	668758	21.0	20.0	ug/kg	105	71.7 - 133	116647829	
Trichloroethylene	668758	19.9	20.0	ug/kg	99.5	75.9 - 133	116647829	
Trichlorofluoromethane	668758	18.6	20.0	ug/kg	93.0	50.2 - 132	116647829	
Vinyl chloride	668758	15.5	20.0	ug/kg	77.5	45.9 - 125	116647829	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,1,1,2-Tetrachloroethane	668758	20.9	20.3	20.0	77.5 - 133	104	102	ug/kg	1.94	30.0
1,1,1-Trichloroethane	668758	22.9	21.8	20.0	74.3 - 136	114	109	ug/kg	4.48	30.0
1,1,2,2-Tetrachloroethane	668758	24.0	23.3	20.0	65.9 - 137	120	116	ug/kg	3.39	30.0
1,1,2-Trichloroethane	668758	21.2	21.4	20.0	79.2 - 123	106	107	ug/kg	0.939	30.0
1,1-Dichloroethane	668758	21.2	22.3	20.0	75.8 - 126	106	112	ug/kg	5.50	30.0
1,1-Dichloroethylene	668758	22.0	21.8	20.0	71.1 - 128	110	109	ug/kg	0.913	30.0

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Quality Control

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,1-Dichloropropene	668758	23.2	20.4	20.0	77.5 - 128	116	102	ug/kg	12.8	30.0
1,2,3-Trichlorobenzene	668758	22.1	21.0	20.0	69.7 - 137	110	105	ug/kg	4.65	30.0
1,2,3-Trichloropropane	668758	23.4	21.8	20.0	71.6 - 135	117	109	ug/kg	7.08	30.0
1,2,4-Trichlorobenzene	668758	21.3	20.0	20.0	73.4 - 126	106	100	ug/kg	5.83	30.0
1,2,4-Trimethylbenzene	668758	21.2	19.8	20.0	79.1 - 118	106	99.0	ug/kg	6.83	30.0
1,2-Dibromo-3-chloropropane	668758	22.5	20.0	20.0	56.5 - 141	112	100	ug/kg	11.3	30.0
1,2-Dibromoethane	668758	21.3	20.5	20.0	79.9 - 132	106	102	ug/kg	3.85	30.0
1,2-Dichloroethane	668758	21.5	20.6	20.0	72.7 - 142	108	103	ug/kg	4.74	30.0
1,2-Dichloropropane	668758	21.3	20.2	20.0	76.5 - 129	106	101	ug/kg	4.83	30.0
1,3,5-Trimethylbenzene	668758	22.0	20.8	20.0	79.3 - 118	110	104	ug/kg	5.61	30.0
1,3-Dichloropropane	668758	20.0	19.1	20.0	78.1 - 120	100	95.5	ug/kg	4.60	30.0
2,2-Dichloropropane	668758	26.3	24.3	20.0	57.9 - 163	132	122	ug/kg	7.87	30.0
2-Chloroethylvinyl ether	668758	16.3	15.1	20.0	23.2 - 155	81.5	75.5	ug/kg	7.64	30.0
2-Chlorotoluene	668758	21.8	21.1	20.0	74.5 - 132	109	106	ug/kg	2.79	30.0
4-Chlorotoluene	668758	20.9	19.9	20.0	76.9 - 132	104	99.5	ug/kg	4.42	30.0
Acetone	668758	23.6	22.7	20.0	0.100 - 248	118	114	ug/kg	3.45	30.0
Acrolein	668758	75.5	66.8	40.0	0.100 - 263	189	167	ug/kg	12.4	30.0
Acrylonitrile	668758	45.1	43.4	40.0	60.0 - 144	113	108	ug/kg	4.52	30.0
Benzene	668758	21.4	20.6	20.0	74.4 - 122	107	103	ug/kg	3.81	30.0
Bromobenzene	668758	22.4	21.2	20.0	79.3 - 123	112	106	ug/kg	5.50	30.0
Bromochloromethane	668758	21.2	20.9	20.0	78.7 - 135	106	104	ug/kg	1.90	30.0
Bromodichloromethane	668758	20.9	20.4	20.0	74.3 - 130	104	102	ug/kg	1.94	30.0
Bromoform	668758	21.9	21.0	20.0	64.2 - 134	110	105	ug/kg	4.65	30.0
Bromomethane (Methyl Bromi	668758	20.4	18.5	20.0	45.1 - 150	102	92.5	ug/kg	9.77	30.0
Carbon Tetrachloride	668758	23.1	21.2	20.0	70.8 - 131	116	106	ug/kg	9.01	30.0
Chlorobenzene	668758	21.2	20.0	20.0	78.4 - 123	106	100	ug/kg	5.83	30.0
Chloroethane	668758	23.4	21.5	20.0	70.4 - 134	117	108	ug/kg	8.00	30.0
Chloroform	668758	20.4	20.5	20.0	75.8 - 128	102	102	ug/kg	0	30.0
Chloromethane	668758	15.5	14.5	20.0	46.8 - 138	77.5	72.5	ug/kg	6.67	30.0
cis-1,2-Dichloroethylene	668758	20.3	19.8	20.0	76.4 - 118	102	99.0	ug/kg	2.99	30.0
cis-1,3-Dichloropropene	668758	18.6	17.6	20.0	68.9 - 112	93.0	88.0	ug/kg	5.52	30.0
Dibromochloromethane	668758	20.2	19.7	20.0	71.9 - 130	101	98.5	ug/kg	2.51	30.0
Dibromomethane	668758	23.0	22.2	20.0	79.9 - 129	115	111	ug/kg	3.54	30.0
Dichlorodifluoromethane	668758	13.2	12.5	20.0	34.8 - 120	66.0	62.5	ug/kg	5.45	30.0
Dichloromethane	668758	19.2	19.5	20.0	75.0 - 121	96.0	97.5	ug/kg	1.55	30.0
Ethylbenzene	668758	21.8	21.0	20.0	79.8 - 125	109	105	ug/kg	3.74	30.0
Hexachlorobutadiene	668758	23.2	20.7	20.0	72.3 - 131	116	104	ug/kg	10.9	30.0
Isopropylbenzene (Cumene)	668758	19.8	18.9	20.0	70.5 - 130	99.0	94.5	ug/kg	4.65	30.0
m- and p-Xylene	668758	43.0	40.7	40.0	81.5 - 117	108	102	ug/kg	5.71	30.0
m-Dichlorobenzene	668758	22.2	20.8	20.0	78.3 - 129	111	104	ug/kg	6.51	30.0
Methyl ethyl ketone (Butanone)	668758	19.8	19.2	20.0	31.5 - 165	99.0	96.0	ug/kg	3.08	30.0
Methyl Isobutyl Ketone	668758	19.6	17.9	20.0	48.2 - 132	98.0	89.5	ug/kg	9.07	30.0
Naphthalene	668758	23.4	21.8	20.0	68.4 - 136	117	109	ug/kg	7.08	30.0
n-Butylbenzene	668758	23.4	22.0	20.0	78.1 - 125	117	110	ug/kg	6.17	30.0
n-Propylbenzene	668758	22.3	21.0	20.0	76.3 - 138	112	105	ug/kg	6.45	30.0
o-Dichlorobenzene	668758	20.8	20.0	20.0	76.1 - 128	104	100	ug/kg	3.92	30.0
o-Xylene	668758	21.7	21.1	20.0	79.3 - 121	108	106	ug/kg	1.87	30.0
p-Dichlorobenzene	668758	21.2	20.7	20.0	82.0 - 118	106	104	ug/kg	1.90	30.0

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Quality Control

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
p-Isopropyltoluene	668758	22.2	20.6	20.0	80.6 - 128	111	103	ug/kg	7.48	30.0
sec-Butylbenzene	668758	20.7	19.7	20.0	72.8 - 132	104	98.5	ug/kg	5.43	30.0
Styrene	668758	20.0	19.3	20.0	76.9 - 117	100	96.5	ug/kg	3.56	30.0
tert-Butylbenzene	668758	21.8	20.6	20.0	75.3 - 132	109	103	ug/kg	5.66	30.0
tert-Butylmethylether (MTBE)	668758	20.6	20.8	20.0	68.5 - 126	103	104	ug/kg	0.966	30.0
Tetrachloroethylene	668758	23.3	22.0	20.0	61.7 - 147	116	110	ug/kg	5.31	30.0
Toluene	668758	21.7	20.9	20.0	82.9 - 115	108	104	ug/kg	3.77	30.0
trans-1,2-Dichloroethylene	668758	21.2	20.4	20.0	75.7 - 125	106	102	ug/kg	3.85	30.0
trans-1,3-Dichloropropene	668758	21.0	19.7	20.0	71.7 - 133	105	98.5	ug/kg	6.39	30.0
Trichloroethylene	668758	19.9	19.4	20.0	75.9 - 133	99.5	97.0	ug/kg	2.54	30.0
Trichlorofluoromethane	668758	18.6	17.3	20.0	50.2 - 132	93.0	86.5	ug/kg	7.24	30.0
Vinyl chloride	668758	15.5	14.7	20.0	45.9 - 125	77.5	73.5	ug/kg	5.30	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,1,1,2-Tetrachloroethane	1501552	18.4	0	ND	20.0	79.0 - 121	92.0		ug/kg		30.0
1,1,1-Trichloroethane	1501552	19.7	0	ND	20.0	80.0 - 114	98.5		ug/kg		30.0
1,1,2,2-Tetrachloroethane	1501552	21.3	0	ND	20.0	76.0 - 131	106		ug/kg		30.0
1,1,2-Trichloroethane	1501552	19.7	0	ND	20.0	90.0 - 112	98.5		ug/kg		30.0
1,1-Dichloroethane	1501552	19.1	0	ND	20.0	83.0 - 118	95.5		ug/kg		30.0
1,1-Dichloroethylene	1501552	18.2	0	ND	20.0	88.0 - 130	91.0		ug/kg		30.0
1,1-Dichloropropene	1501552	19.5	0	ND	20.0	80.0 - 118	97.5		ug/kg		30.0
1,2,3-Trichlorobenzene	1501552	19.0	0	ND	20.0	65.0 - 139	95.0		ug/kg		30.0
1,2,3-Trichloropropane	1501552	21.2	0	ND	20.0	74.0 - 132	106		ug/kg		30.0
1,2,4-Trichlorobenzene	1501552	18.6	0	ND	20.0	69.0 - 134	93.0		ug/kg		30.0
1,2,4-Trimethylbenzene	1501552	17.6	0	ND	20.0	77.0 - 118	88.0		ug/kg		30.0
1,2-Dibromo-3-chloropropane	1501552	20.0	0	ND	20.0	61.0 - 128	100		ug/kg		30.0
1,2-Dibromoethane	1501552	19.1	0	ND	20.0	80.0 - 119	95.5		ug/kg		30.0
1,2-Dichloroethane	1501552	18.6	0	ND	20.0	80.0 - 110	93.0		ug/kg		30.0
1,2-Dichloropropane	1501552	18.2	0	ND	20.0	84.0 - 112	91.0		ug/kg		30.0
1,3,5-Trimethylbenzene	1501552	18.2	0	ND	20.0	83.0 - 121	91.0		ug/kg		30.0
1,3-Dichloropropane	1501552	17.3	0	ND	20.0	81.0 - 114	86.5		ug/kg		30.0
2,2-Dichloropropane	1501552	20.0	0	ND	20.0	74.0 - 131	100		ug/kg		30.0
2-Chloroethylvinyl ether	1501552	16.1	0	ND	20.0	57.0 - 120	80.5		ug/kg		30.0
2-Chlorotoluene	1501552	18.4	0	ND	20.0	83.0 - 120	92.0		ug/kg		30.0
4-Chlorotoluene	1501552	17.8	0	ND	20.0	85.0 - 122	89.0		ug/kg		30.0
Acetone	1501552	20.5	0	ND	20.0	71.0 - 156	102		ug/kg		30.0
Acrolein	1501552	21.8	0	ND	40.0	0.100 - 1490	54.5		ug/kg		30.0
Acrylonitrile	1501552	41.9	0	ND	40.0	74.0 - 124	105		ug/kg		30.0
Benzene	1501552	18.4	0	ND	20.0	87.0 - 111	92.0		ug/kg		30.0
Bromobenzene	1501552	18.8	0	ND	20.0	85.0 - 120	94.0		ug/kg		30.0
Bromochloromethane	1501552	20.0	0	ND	20.0	80.0 - 129	100		ug/kg		30.0
Bromodichloromethane	1501552	18.8	0	0.980	20.0	79.0 - 108	94.0		ug/kg		30.0
Bromoform	1501552	19.0	0	ND	20.0	69.0 - 127	95.0		ug/kg		30.0
Bromomethane (Methyl Bromi	1501552	9.75	0	ND	20.0	56.0 - 126	48.8 *		ug/kg		30.0
Carbon Tetrachloride	1501552	18.0	0	ND	20.0	81.0 - 115	90.0		ug/kg		30.0
Chlorobenzene	1501552	18.3	0	ND	20.0	84.0 - 111	91.5		ug/kg		30.0
Chloroethane	1501552	17.7	0	ND	20.0	71.0 - 136	88.5		ug/kg		30.0
Chloroform	1501552	19.5	0	0.840	20.0	83.0 - 118	97.5		ug/kg		30.0

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Quality Control

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MS

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
Chloromethane	1501552	13.2	0	ND	20.0	59.0 - 130	66.0		ug/kg		30.0
cis-1,2-Dichloroethylene	1501552	18.6	0	ND	20.0	81.0 - 121	93.0		ug/kg		30.0
cis-1,3-Dichloropropene	1501552	10.3	0	ND	20.0	76.0 - 107	51.5 *		ug/kg		30.0
Dibromochloromethane	1501552	18.3	0	0.870	20.0	76.0 - 120	91.5		ug/kg		30.0
Dibromomethane	1501552	19.5	0	ND	20.0	85.0 - 115	97.5		ug/kg		30.0
Dichlorodifluoromethane	1501552	10.3	0	ND	20.0	56.0 - 128	51.5 *		ug/kg		30.0
Dichloromethane	1501552	17.3	0	ND	20.0	83.0 - 126	86.5		ug/kg		30.0
Ethylbenzene	1501552	18.6	0	ND	20.0	82.0 - 111	93.0		ug/kg		30.0
Hexachlorobutadiene	1501552	18.8	0	ND	20.0	72.0 - 139	94.0		ug/kg		30.0
Isopropylbenzene (Cumene)	1501552	16.4	0	ND	20.0	89.0 - 126	82.0 *		ug/kg		30.0
m- and p-Xylene	1501552	36.1	0	ND	40.0	79.0 - 115	90.2		ug/kg		30.0
m-Dichlorobenzene	1501552	18.5	0	ND	20.0	90.0 - 115	92.5		ug/kg		30.0
Methyl ethyl ketone (Butanone)	1501552	20.3	0	ND	20.0	66.0 - 139	102		ug/kg		30.0
Methyl Isobutyl Ketone	1501552	19.5	0	ND	20.0	67.0 - 125	97.5		ug/kg		30.0
Naphthalene	1501552	22.4	0	ND	20.0	62.0 - 150	112		ug/kg		30.0
n-Butylbenzene	1501552	18.9	0	ND	20.0	84.0 - 128	94.5		ug/kg		30.0
n-Propylbenzene	1501552	18.4	0	ND	20.0	87.0 - 123	92.0		ug/kg		30.0
o-Dichlorobenzene	1501552	18.1	0	ND	20.0	89.0 - 118	90.5		ug/kg		30.0
o-Xylene	1501552	18.6	0	ND	20.0	84.0 - 114	93.0		ug/kg		30.0
p-Dichlorobenzene	1501552	18.3	0	ND	20.0	92.0 - 117	91.5 *		ug/kg		30.0
p-Isopropyltoluene	1501552	18.0	0	ND	20.0	86.0 - 123	90.0		ug/kg		30.0
sec-Butylbenzene	1501552	16.9	0	ND	20.0	85.0 - 122	84.5 *		ug/kg		30.0
Styrene	1501552	17.2	0	ND	20.0	81.0 - 113	86.0		ug/kg		30.0
tert-Butylbenzene	1501552	18.4	0	ND	20.0	84.0 - 123	92.0		ug/kg		30.0
tert-Butylmethylether (MTBE)	1501552	18.4	0	ND	20.0	76.0 - 136	92.0		ug/kg		30.0
Tetrachloroethylene	1501552	19.5	0	ND	20.0	84.0 - 113	97.5		ug/kg		30.0
Toluene	1501552	18.6	0	ND	20.0	88.0 - 111	93.0		ug/kg		30.0
trans-1,2-Dichloroethylene	1501552	18.4	0	ND	20.0	89.0 - 130	92.0		ug/kg		30.0
trans-1,3-Dichloropropene	1501552	15.2	0	ND	20.0	81.0 - 117	76.0 *		ug/kg		30.0
Trichloroethylene	1501552	16.7	0	ND	20.0	86.0 - 111	83.5 *		ug/kg		30.0
Trichlorofluoromethane	1501552	14.9	0	ND	20.0	65.0 - 123	74.5		ug/kg		30.0
Vinyl chloride	1501552	12.4	0	ND	20.0	86.0 - 139	62.0 *		ug/kg		30.0

MSD

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
1,1,1,2-Tetrachloroethane	1501552	18.4	19.2	ND	20.0	79.0 - 121	92.0	96.0	ug/kg	4.26	30.0
1,1,1-Trichloroethane	1501552	19.7	19.4	ND	20.0	80.0 - 114	98.5	97.0	ug/kg	1.53	30.0
1,1,2,2-Tetrachloroethane	1501552	21.3	22.0	ND	20.0	76.0 - 131	106	110	ug/kg	3.23	30.0
1,1,2-Trichloroethane	1501552	19.7	19.6	ND	20.0	90.0 - 112	98.5	98.0	ug/kg	0.509	30.0
1,1-Dichloroethane	1501552	19.1	19.4	ND	20.0	83.0 - 118	95.5	97.0	ug/kg	1.56	30.0
1,1-Dichloroethylene	1501552	18.2	18.3	ND	20.0	88.0 - 130	91.0	91.5	ug/kg	0.548	30.0
1,1-Dichloropropene	1501552	19.5	19.5	ND	20.0	80.0 - 118	97.5	97.5	ug/kg	0	30.0
1,2,3-Trichlorobenzene	1501552	19.0	19.5	ND	20.0	65.0 - 139	95.0	97.5	ug/kg	2.60	30.0
1,2,3-Trichloropropane	1501552	21.2	22.3	ND	20.0	74.0 - 132	106	112	ug/kg	5.06	30.0
1,2,4-Trichlorobenzene	1501552	18.6	18.8	ND	20.0	69.0 - 134	93.0	94.0	ug/kg	1.07	30.0
1,2,4-Trimethylbenzene	1501552	17.6	18.4	ND	20.0	77.0 - 118	88.0	92.0	ug/kg	4.44	30.0
1,2-Dibromo-3-chloropropane	1501552	20.0	20.7	ND	20.0	61.0 - 128	100	104	ug/kg	3.44	30.0
1,2-Dibromoethane	1501552	19.1	19.1	ND	20.0	80.0 - 119	95.5	95.5	ug/kg	0	30.0
1,2-Dichloroethane	1501552	18.6	18.7	ND	20.0	80.0 - 110	93.0	93.5	ug/kg	0.536	30.0

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Quality Control

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MSD

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
1,2-Dichloropropane	1501552	18.2	18.3	ND	20.0	84.0 - 112	91.0	91.5	ug/kg	0.548	30.0
1,3,5-Trimethylbenzene	1501552	18.2	18.8	ND	20.0	83.0 - 121	91.0	94.0	ug/kg	3.24	30.0
1,3-Dichloropropane	1501552	17.3	17.9	ND	20.0	81.0 - 114	86.5	89.5	ug/kg	3.41	30.0
2,2-Dichloropropane	1501552	20.0	19.5	ND	20.0	74.0 - 131	100	97.5	ug/kg	2.53	30.0
2-Chloroethylvinyl ether	1501552	16.1	16.0	ND	20.0	57.0 - 120	80.5	80.0	ug/kg	0.623	30.0
2-Chlorotoluene	1501552	18.4	19.2	ND	20.0	83.0 - 120	92.0	96.0	ug/kg	4.26	30.0
4-Chlorotoluene	1501552	17.8	18.2	ND	20.0	85.0 - 122	89.0	91.0	ug/kg	2.22	30.0
Acetone	1501552	20.5	21.6	ND	20.0	71.0 - 156	102	108	ug/kg	5.23	30.0
Acrolein	1501552	21.8	20.0	ND	40.0	0.100 - 1490	54.5	50.0	ug/kg	8.61	30.0
Acrylonitrile	1501552	41.9	43.1	ND	40.0	74.0 - 124	105	108	ug/kg	2.82	30.0
Benzene	1501552	18.4	18.3	ND	20.0	87.0 - 111	92.0	91.5	ug/kg	0.545	30.0
Bromobenzene	1501552	18.8	19.9	ND	20.0	85.0 - 120	94.0	99.5	ug/kg	5.68	30.0
Bromochloromethane	1501552	20.0	19.5	ND	20.0	80.0 - 129	100	97.5	ug/kg	2.53	30.0
Bromodichloromethane	1501552	18.8	19.2	0.980	20.0	79.0 - 108	89.1	91.1	ug/kg	2.22	30.0
Bromoform	1501552	19.0	19.5	ND	20.0	69.0 - 127	95.0	97.5	ug/kg	2.60	30.0
Bromomethane (Methyl Bromi	1501552	9.75	9.21	ND	20.0	56.0 - 126	48.8 *	46.0 *	ug/kg	5.70	30.0
Carbon Tetrachloride	1501552	18.0	18.2	ND	20.0	81.0 - 115	90.0	91.0	ug/kg	1.10	30.0
Chlorobenzene	1501552	18.3	18.3	ND	20.0	84.0 - 111	91.5	91.5	ug/kg	0	30.0
Chloroethane	1501552	17.7	17.6	ND	20.0	71.0 - 136	88.5	88.0	ug/kg	0.567	30.0
Chloroform	1501552	19.5	19.6	0.840	20.0	83.0 - 118	93.3	93.8	ug/kg	0.534	30.0
Chloromethane	1501552	13.2	12.3	ND	20.0	59.0 - 130	66.0	61.5	ug/kg	7.06	30.0
cis-1,2-Dichloroethylene	1501552	18.6	18.2	ND	20.0	81.0 - 121	93.0	91.0	ug/kg	2.17	30.0
cis-1,3-Dichloropropene	1501552	10.3	10.1	ND	20.0	76.0 - 107	51.5 *	50.5 *	ug/kg	1.96	30.0
Dibromochloromethane	1501552	18.3	18.4	0.870	20.0	76.0 - 120	87.2	87.6	ug/kg	0.572	30.0
Dibromomethane	1501552	19.5	19.8	ND	20.0	85.0 - 115	97.5	99.0	ug/kg	1.53	30.0
Dichlorodifluoromethane	1501552	10.3	10.1	ND	20.0	56.0 - 128	51.5 *	50.5 *	ug/kg	1.96	30.0
Dichloromethane	1501552	17.3	17.2	ND	20.0	83.0 - 126	86.5	86.0	ug/kg	0.580	30.0
Ethylbenzene	1501552	18.6	18.5	ND	20.0	82.0 - 111	93.0	92.5	ug/kg	0.539	30.0
Hexachlorobutadiene	1501552	18.8	18.6	ND	20.0	72.0 - 139	94.0	93.0	ug/kg	1.07	30.0
Isopropylbenzene (Cumene)	1501552	16.4	17.0	ND	20.0	89.0 - 126	82.0 *	85.0 *	ug/kg	3.59	30.0
m- and p-Xylene	1501552	36.1	35.6	ND	40.0	79.0 - 115	90.2	89.0	ug/kg	1.39	30.0
m-Dichlorobenzene	1501552	18.5	19.2	ND	20.0	90.0 - 115	92.5	96.0	ug/kg	3.71	30.0
Methyl ethyl ketone (Butanone)	1501552	20.3	20.6	ND	20.0	66.0 - 139	102	103	ug/kg	1.47	30.0
Methyl Isobutyl Ketone	1501552	19.5	18.9	ND	20.0	67.0 - 125	97.5	94.5	ug/kg	3.12	30.0
Naphthalene	1501552	22.4	22.4	ND	20.0	62.0 - 150	112	112	ug/kg	0	30.0
n-Butylbenzene	1501552	18.9	18.7	ND	20.0	84.0 - 128	94.5	93.5	ug/kg	1.06	30.0
n-Propylbenzene	1501552	18.4	18.9	ND	20.0	87.0 - 123	92.0	94.5	ug/kg	2.68	30.0
o-Dichlorobenzene	1501552	18.1	18.4	ND	20.0	89.0 - 118	90.5	92.0	ug/kg	1.64	30.0
o-Xylene	1501552	18.6	18.5	ND	20.0	84.0 - 114	93.0	92.5	ug/kg	0.539	30.0
p-Dichlorobenzene	1501552	18.3	18.9	ND	20.0	92.0 - 117	91.5 *	94.5	ug/kg	3.23	30.0
p-Isopropyltoluene	1501552	18.0	18.2	ND	20.0	86.0 - 123	90.0	91.0	ug/kg	1.10	30.0
sec-Butylbenzene	1501552	16.9	17.6	ND	20.0	85.0 - 122	84.5 *	88.0	ug/kg	4.06	30.0
Styrene	1501552	17.2	17.2	ND	20.0	81.0 - 113	86.0	86.0	ug/kg	0	30.0
tert-Butylbenzene	1501552	18.4	18.7	ND	20.0	84.0 - 123	92.0	93.5	ug/kg	1.62	30.0
tert-Butylmethylether (MTBE)	1501552	18.4	19.0	ND	20.0	76.0 - 136	92.0	95.0	ug/kg	3.21	30.0
Tetrachloroethylene	1501552	19.5	18.9	ND	20.0	84.0 - 113	97.5	94.5	ug/kg	3.12	30.0
Toluene	1501552	18.6	18.4	ND	20.0	88.0 - 111	93.0	92.0	ug/kg	1.08	30.0
trans-1,2-Dichloroethylene	1501552	18.4	18.0	ND	20.0	89.0 - 130	92.0	90.0	ug/kg	2.20	30.0

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Quality Control

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MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
trans-1,3-Dichloropropene	1501552	15.2	15.2	ND	20.0	81.0 - 117	76.0 *	76.0 *	ug/kg	0	30.0
Trichloroethylene	1501552	16.7	16.4	ND	20.0	86.0 - 111	83.5 *	82.0 *	ug/kg	1.81	30.0
Trichlorofluoromethane	1501552	14.9	14.8	ND	20.0	65.0 - 123	74.5	74.0	ug/kg	0.673	30.0
Vinyl chloride	1501552	12.4	12.4	ND	20.0	86.0 - 139	62.0 *	62.0 *	ug/kg	0	30.0

SPCC

Parameter	Sample	RF	Minimum	File
1,1,2,2-Tetrachloroethane	668758	21.3	0.300	116647828
1,1-Dichloroethane	668758	19.8	0.100	116647828
Bromoform	668758	18.8	0.100	116647828
Chlorobenzene	668758	20.3	0.300	116647828
Chloromethane	668758	21.4	0.100	116647828

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1,2-DCA-d4 (SURR)	668758	CCV	20.9	20.0	ug/kg	104	52.7 - 150	116647828
1,2-DCA-d4 (SURR)	668758	LCS	20.4	20.0	ug/kg	102	52.7 - 150	116647829
1,2-DCA-d4 (SURR)	668758	LCS Dup	20.4	20.0	ug/kg	102	52.7 - 150	116647830
1,2-DCA-d4 (SURR)	668758	Blank	20.9	20.0	ug/kg	104	52.7 - 150	116647831
Bromofluorobenzene (SURR)	668758	CCV	20.8	20.0	ug/kg	104	79.4 - 114	116647828
Bromofluorobenzene (SURR)	668758	LCS	20.7	20.0	ug/kg	104	79.4 - 114	116647829
Bromofluorobenzene (SURR)	668758	LCS Dup	20.8	20.0	ug/kg	104	79.4 - 114	116647830
Bromofluorobenzene (SURR)	668758	Blank	20.3	20.0	ug/kg	102	79.4 - 114	116647831
Dibromofluoromethane (SURR)	668758	CCV	20.7	20.0	ug/kg	104	68.7 - 124	116647828
Dibromofluoromethane (SURR)	668758	LCS	20.3	20.0	ug/kg	102	68.7 - 124	116647829
Dibromofluoromethane (SURR)	668758	LCS Dup	21.4	20.0	ug/kg	107	68.7 - 124	116647830
Dibromofluoromethane (SURR)	668758	Blank	21.0	20.0	ug/kg	105	68.7 - 124	116647831
TolueneD8 (SURR)	668758	CCV	20.7	20.0	ug/kg	104	76.0 - 118	116647828
TolueneD8 (SURR)	668758	LCS	20.2	20.0	ug/kg	101	76.0 - 118	116647829
TolueneD8 (SURR)	668758	LCS Dup	20.7	20.0	ug/kg	104	76.0 - 118	116647830
TolueneD8 (SURR)	668758	Blank	20.2	20.0	ug/kg	101	76.0 - 118	116647831
1,2-DCA-d4 (SURR)	1501552	MS	20.5	20.0	ug/kg	102	52.7 - 150	116647836
1,2-DCA-d4 (SURR)	1501552	MSD	20.4	20.0	ug/kg	102	52.7 - 150	116647837
Bromofluorobenzene (SURR)	1501552	MS	21.0	20.0	ug/kg	105	79.4 - 114	116647836
Bromofluorobenzene (SURR)	1501552	MSD	21.0	20.0	ug/kg	105	79.4 - 114	116647837
Dibromofluoromethane (SURR)	1501552	MS	21.2	20.0	ug/kg	106	68.7 - 124	116647836
Dibromofluoromethane (SURR)	1501552	MSD	20.5	20.0	ug/kg	102	68.7 - 124	116647837
TolueneD8 (SURR)	1501552	MS	20.4	20.0	ug/kg	102	76.0 - 118	116647836
TolueneD8 (SURR)	1501552	MSD	20.3	20.0	ug/kg	102	76.0 - 118	116647837

669047 Solid & Chemical Materials **EPA 8151**

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Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out

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Quality Control

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Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP 2,4 D	668165	ND	0.000159	0.0005	mg/L	116656667	
TCLP 2,4,5-TP (Silvex)	668165	ND	0.00008930	0.0003	mg/L	116656667	
TCLP 2,4 D	668637	ND	0.000159	0.0005	mg/L	116656652	
TCLP 2,4,5-TP (Silvex)	668637	ND	0.00008930	0.0003	mg/L	116656652	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP 2,4 D	0.154	0.150	mg/L	103	70.0 - 130		116652246
TCLP 2,4 D	0.208	0.150	mg/L	139	70.0 - 130	*	116656677
TCLP 2,4 D	0.204	0.150	mg/L	136	70.0 - 130	*	116656679
TCLP 2,4,5-TP (Silvex)	0.168	0.150	mg/L	112	70.0 - 130		116652246
TCLP 2,4,5-TP (Silvex)	0.225	0.150	mg/L	150	70.0 - 130	*	116656677
TCLP 2,4,5-TP (Silvex)	0.224	0.150	mg/L	149	70.0 - 130	*	116656679

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 2,4 D	668637	0.000718	0.001	mg/L	71.8	2.84 - 180	116656653	
TCLP 2,4,5-TP (Silvex)	668637	0.000605	0.001	mg/L	60.5	9.90 - 162	116656653	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP 2,4 D	668637	0.000718	0.0009	0.001	2.84 - 180	71.8	90.0	mg/L	22.5	30.0
TCLP 2,4,5-TP (Silvex)	668637	0.000605	0.000497	0.001	9.90 - 162	60.5	49.7	mg/L	19.6	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 2,4 D	1499939	0.332	0	ND	1.00	6.45 - 184	33.2		mg/L		30.0
TCLP 2,4,5-TP (Silvex)	1499939	0.351	0	ND	1.00	9.18 - 181	35.1		mg/L		30.0
TCLP 2,4 D	1500893	0.523	0	ND	1.00	6.45 - 184	52.3		mg/L		30.0
TCLP 2,4,5-TP (Silvex)	1500893	0.609	0	ND	1.00	9.18 - 181	60.9		mg/L		30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4-Dichlorophenylacetic Acid		CCV	0.151	0.100	mg/L	151	9.92 - 234	116652246
2,4-Dichlorophenylacetic Acid		CCV	0.186	0.100	mg/L	186	9.92 - 234	116656677
2,4-Dichlorophenylacetic Acid		CCV	0.183	0.100	mg/L	183	9.92 - 234	116656679
2,4-Dichlorophenylacetic Acid	668165	Blank	0.0849	0.100	mg/L	84.9	9.92 - 234	116656667
2,4-Dichlorophenylacetic Acid	668637	Blank	0.0989	0.100	mg/L	98.9	9.92 - 234	116656652
2,4-Dichlorophenylacetic Acid	668637	LCS	0.101	0.100	mg/L	101	9.92 - 234	116656653
2,4-Dichlorophenylacetic Acid	668637	LCS Dup	0.0922	0.100	mg/L	92.2	9.92 - 234	116656654
2,4-Dichlorophenylacetic Acid	1499939	MS	0.907	1.00	mg/L	90.7	9.92 - 234	116656657
2,4-Dichlorophenylacetic Acid	1500893	MS	1.08	1.00	mg/L	108	9.92 - 234	116656662

669072 Solid & Chemical Materials **EPA 8081A**

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Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out

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Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Chlordane	668165	ND	0.00000180	0.00001	mg/L	116652648	
TCLP Endrin	668165	ND	0.00000850	0.00001	mg/L	116652648	
TCLP gamma-BHC (Lindane)	668165	ND	0.00000890	0.00001	mg/L	116652648	
TCLP Heptachlor	668165	ND	0.00000140	0.00001	mg/L	116652648	
TCLP Heptachlor Epoxide	668165	ND	0.00000120	0.00001	mg/L	116652648	
TCLP Methoxychlor	668165	ND	0.00000560	0.00001	mg/L	116652648	
TCLP Toxaphene	668165	ND	0.00000370	0.00001	mg/L	116652648	
TCLP Chlordane	668356	ND	0.00000180	0.00001	mg/L	116652644	
TCLP Endrin	668356	ND	0.00000850	0.00001	mg/L	116652644	
TCLP gamma-BHC (Lindane)	668356	ND	0.00000890	0.00001	mg/L	116652644	
TCLP Heptachlor	668356	ND	0.00000140	0.00001	mg/L	116652644	
TCLP Heptachlor Epoxide	668356	ND	0.00000120	0.00001	mg/L	116652644	
TCLP Methoxychlor	668356	ND	0.00000560	0.00001	mg/L	116652644	
TCLP Toxaphene	668356	ND	0.00000370	0.00001	mg/L	116652644	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Endrin	0.107	0.100	mg/L	107	80.0 - 120		116652643
TCLP Endrin	0.109	0.100	mg/L	109	80.0 - 120		116652653
TCLP gamma-BHC (Lindane)	0.105	0.100	mg/L	105	80.0 - 120		116652643
TCLP gamma-BHC (Lindane)	0.111	0.100	mg/L	111	80.0 - 120		116652653
TCLP Heptachlor	0.105	0.100	mg/L	105	80.0 - 120		116652643
TCLP Heptachlor	0.105	0.100	mg/L	105	80.0 - 120		116652653
TCLP Heptachlor Epoxide	0.107	0.100	mg/L	107	80.0 - 120		116652643
TCLP Heptachlor Epoxide	0.110	0.100	mg/L	110	80.0 - 120		116652653
TCLP Methoxychlor	0.107	0.100	mg/L	107	80.0 - 120		116652643
TCLP Methoxychlor	0.100	0.100	mg/L	100	80.0 - 120		116652653

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP Endrin	668356	0.00104	0.001	mg/L	104	42.0 - 136	116652645	
TCLP gamma-BHC (Lindane)	668356	0.000945	0.001	mg/L	94.5	33.6 - 125	116652645	
TCLP Heptachlor	668356	0.000924	0.001	mg/L	92.4	19.4 - 121	116652645	
TCLP Heptachlor Epoxide	668356	0.00102	0.001	mg/L	102	43.4 - 123	116652645	
TCLP Methoxychlor	668356	0.00101	0.001	mg/L	101	32.1 - 143	116652645	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP Endrin	668356	0.00104	0.000934	0.001	42.0 - 136	104	93.4	mg/L	10.7	30.0
TCLP gamma-BHC (Lindane)	668356	0.000945	0.000808	0.001	33.6 - 125	94.5	80.8	mg/L	15.6	30.0
TCLP Heptachlor	668356	0.000924	0.000799	0.001	19.4 - 121	92.4	79.9	mg/L	14.5	30.0
TCLP Heptachlor Epoxide	668356	0.00102	0.000908	0.001	43.4 - 123	102	90.8	mg/L	11.6	30.0
TCLP Methoxychlor	668356	0.00101	0.000987	0.001	32.1 - 143	101	98.7	mg/L	2.30	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Endrin	1500893	0.0043	0	ND	0.005	21.4 - 154	86.0		mg/L		30.0

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MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP gamma-BHC (Lindane)	1500893	0.0038	0	ND	0.005	13.4 - 137	76.0		mg/L		30.0
TCLP Heptachlor	1500893	0.00365	0	ND	0.005	6.35 - 126	73.0		mg/L		30.0
TCLP Heptachlor Epoxide	1500893	0.0041	0	ND	0.005	26.2 - 133	82.0		mg/L		30.0
TCLP Methoxychlor	1500893	0.00459	0	ND	0.005	3.85 - 178	91.8		mg/L		30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Decachlorobiphenyl	577520	CCV	0.116	0.100	mg/L	116	10.0 - 150	116652643
Decachlorobiphenyl	577520	CCV	0.116	0.100	mg/L	116	10.0 - 150	116652653
Tetrachloro-m-Xylene (Surr)	577520	CCV	0.103	0.100	mg/L	103	10.0 - 150	116652643
Tetrachloro-m-Xylene (Surr)	577520	CCV	0.102	0.100	mg/L	102	10.0 - 150	116652653
Decachlorobiphenyl	668165	Blank	0.110	0.100	mg/L	110	10.0 - 150	116652648
Tetrachloro-m-Xylene (Surr)	668165	Blank	0.0411	0.100	mg/L	41.1	10.0 - 150	116652648
Decachlorobiphenyl	668356	Blank	0.0651	0.100	mg/L	65.1	10.0 - 150	116652644
Decachlorobiphenyl	668356	LCS	0.115	0.100	mg/L	115	10.0 - 150	116652645
Decachlorobiphenyl	668356	LCS Dup	0.115	0.100	mg/L	115	10.0 - 150	116652646
Tetrachloro-m-Xylene (Surr)	668356	Blank	0.0376	0.100	mg/L	37.6	10.0 - 150	116652644
Tetrachloro-m-Xylene (Surr)	668356	LCS	0.0883	0.100	mg/L	88.3	10.0 - 150	116652645
Tetrachloro-m-Xylene (Surr)	668356	LCS Dup	0.079	0.100	mg/L	79.0	10.0 - 150	116652646
Decachlorobiphenyl	1500893	MS	0.00438	0.005	mg/L	87.6	10.0 - 150	116652652
Tetrachloro-m-Xylene (Surr)	1500893	MS	0.00332	0.005	mg/L	66.4	10.0 - 150	116652652

669124 Solid & Chemical Materials **EPA 8270C**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP 2,4,5-Trichlorophenol	668165	ND	0.000201	0.001	mg/L	116653808	
TCLP 2,4,6-Trichlorophenol	668165	ND	0.000308	0.001	mg/L	116653808	
TCLP 2,4-Dinitrotoluene	668165	ND	0.000282	0.001	mg/L	116653808	
TCLP 2-Methylphenol (o-Cresol)	668165	ND	0.00033	0.001	mg/L	116653808	
TCLP 3&4-Methylphenol (m&p-Creso	668165	ND	0.000297	0.001	mg/L	116653808	
TCLP bis(2-Chloroethyl)ether	668165	ND	0.000443	0.001	mg/L	116653808	
TCLP Hexachlorobenzene	668165	ND	0.000292	0.001	mg/L	116653808	
TCLP Hexachlorobutadiene	668165	ND	0.000276	0.001	mg/L	116653808	
TCLP Hexachloroethane	668165	ND	0.000258	0.001	mg/L	116653808	
TCLP Nitrobenzene	668165	ND	0.00038	0.001	mg/L	116653808	
TCLP Pentachlorophenol	668165	ND	0.000332	0.001	mg/L	116653808	
TCLP Pyridine (Reg. Limit 5)	668165	ND	0.000492	0.001	mg/L	116653808	
TCLP 2,4,5-Trichlorophenol	668522	ND	0.000201	0.001	mg/L	116653804	
TCLP 2,4,5-Trichlorophenol	668522	ND	0.000201	0.001	mg/L	116653807	
TCLP 2,4,5-Trichlorophenol	668522	ND	0.000201	0.001	mg/L	116653810	
TCLP 2,4,6-Trichlorophenol	668522	ND	0.000308	0.001	mg/L	116653804	
TCLP 2,4,6-Trichlorophenol	668522	ND	0.000308	0.001	mg/L	116653807	
TCLP 2,4,6-Trichlorophenol	668522	ND	0.000308	0.001	mg/L	116653810	
TCLP 2,4-Dinitrotoluene	668522	ND	0.000282	0.001	mg/L	116653804	
TCLP 2,4-Dinitrotoluene	668522	ND	0.000282	0.001	mg/L	116653807	
TCLP 2,4-Dinitrotoluene	668522	ND	0.000282	0.001	mg/L	116653810	
TCLP 2-Methylphenol (o-Cresol)	668522	ND	0.00033	0.001	mg/L	116653804	

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Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP 2-Methylphenol (o-Cresol)	668522	ND	0.00033	0.001	mg/L	116653807	
TCLP 2-Methylphenol (o-Cresol)	668522	ND	0.00033	0.001	mg/L	116653810	
TCLP 3&4-Methylphenol (m&p-Creso	668522	ND	0.000297	0.001	mg/L	116653804	
TCLP 3&4-Methylphenol (m&p-Creso	668522	ND	0.000297	0.001	mg/L	116653807	
TCLP 3&4-Methylphenol (m&p-Creso	668522	ND	0.000297	0.001	mg/L	116653810	
TCLP bis(2-Chloroethyl)ether	668522	ND	0.000443	0.001	mg/L	116653804	
TCLP bis(2-Chloroethyl)ether	668522	ND	0.000443	0.001	mg/L	116653807	
TCLP bis(2-Chloroethyl)ether	668522	ND	0.000443	0.001	mg/L	116653810	
TCLP Hexachlorobenzene	668522	ND	0.000292	0.001	mg/L	116653804	
TCLP Hexachlorobenzene	668522	ND	0.000292	0.001	mg/L	116653807	
TCLP Hexachlorobenzene	668522	ND	0.000292	0.001	mg/L	116653810	
TCLP Hexachlorobutadiene	668522	ND	0.000276	0.001	mg/L	116653804	
TCLP Hexachlorobutadiene	668522	ND	0.000276	0.001	mg/L	116653807	
TCLP Hexachlorobutadiene	668522	ND	0.000276	0.001	mg/L	116653810	
TCLP Hexachloroethane	668522	ND	0.000258	0.001	mg/L	116653804	
TCLP Hexachloroethane	668522	ND	0.000258	0.001	mg/L	116653807	
TCLP Hexachloroethane	668522	ND	0.000258	0.001	mg/L	116653810	
TCLP Nitrobenzene	668522	ND	0.00038	0.001	mg/L	116653804	
TCLP Nitrobenzene	668522	ND	0.00038	0.001	mg/L	116653807	
TCLP Nitrobenzene	668522	ND	0.00038	0.001	mg/L	116653810	
TCLP Pentachlorophenol	668522	ND	0.000332	0.001	mg/L	116653804	
TCLP Pentachlorophenol	668522	ND	0.000332	0.001	mg/L	116653807	
TCLP Pentachlorophenol	668522	ND	0.000332	0.001	mg/L	116653810	
TCLP Pyridine (Reg. Limit 5)	668522	ND	0.000492	0.001	mg/L	116653804	
TCLP Pyridine (Reg. Limit 5)	668522	ND	0.000492	0.001	mg/L	116653807	
TCLP Pyridine (Reg. Limit 5)	668522	ND	0.000492	0.001	mg/L	116653810	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP 2,4,5-Trichlorophenol	49.1	50.0	mg/L	98.2	70.0 - 130		116653803
TCLP 2,4,6-Trichlorophenol	53.2	50.0	mg/L	106	70.0 - 130		116653803
TCLP 2,4-Dinitrotoluene	47.1	50.0	mg/L	94.2	70.0 - 130		116653803
TCLP 2-Methylphenol (o-Cresol)	42.4	50.0	mg/L	84.8	70.0 - 130		116653803
TCLP 3&4-Methylphenol (m&p-Creso	42.8	50.0	mg/L	85.6	70.0 - 130		116653803
TCLP bis(2-Chloroethyl)ether	41.6	50.0	mg/L	83.2	70.0 - 130		116653803
TCLP Hexachlorobenzene	46.5	50.0	mg/L	93.0	70.0 - 130		116653803
TCLP Hexachlorobutadiene	50.5	50.0	mg/L	101	70.0 - 130		116653803
TCLP Hexachloroethane	44.3	50.0	mg/L	88.6	70.0 - 130		116653803
TCLP Nitrobenzene	58.0	50.0	mg/L	116	70.0 - 130		116653803
TCLP Pentachlorophenol	45.1	50.0	mg/L	90.2	70.0 - 130		116653803
TCLP Pyridine (Reg. Limit 5)	46.9	50.0	mg/L	93.8	70.0 - 130		116653803

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DFTPP

Parameter		RefMass	Reading	%	Limits%	Out	File
DFTPP Mass 127	578278	198	23459	53.0	40.0 - 60.0		116653802
DFTPP Mass 197	578278	198	0	0.0	0 - 1.00		116653802
DFTPP Mass 198	578278	198	44241	100.0	100 - 100		116653802
DFTPP Mass 199	578278	198	2949	6.7	5.00 - 9.00		116653802
DFTPP Mass 275	578278	198	10616	24.0	10.0 - 30.0		116653802
DFTPP Mass 365	578278	198	1328	3.0	1.00 - 100		116653802
DFTPP Mass 441	578278	443	5921	80.4	0 - 100		116653802
DFTPP Mass 442	578278	198	38626	87.3	40.0 - 100		116653802
DFTPP Mass 443	578278	442	7365	19.1	17.0 - 23.0		116653802
DFTPP Mass 51	578278	198	15737	35.6	30.0 - 60.0		116653802
DFTPP Mass 68	578278	69.0	0	0.0	0 - 2.00		116653802
DFTPP Mass 69	578278	198	20117	45.5	0 - 100		116653802
DFTPP Mass 70	578278	69.0	86	0.4	0 - 2.00		116653802

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	578179	CCV	171000	171000	85520	256600		116653803	578179
Acenaphthene-d10-ISTD	578179	CCV	362000	362000	181000	543100		116653803	578179
Naphthalene-d8-ISTD	578179	CCV	651400	651400	325700	977100		116653803	578179
Phenanthrene-d10-ISTD	578179	CCV	525100	525100	262500	787600		116653803	578179
1,4-Dichlorobenzene-d4-ISTD	668165	Blank	97700	171000	85520	256600		116653808	668165
Acenaphthene-d10-ISTD	668165	Blank	191700	362000	181000	543100		116653808	668165
Naphthalene-d8-ISTD	668165	Blank	364100	651400	325700	977100		116653808	668165
Phenanthrene-d10-ISTD	668165	Blank	219300	525100	262500	787600	*	116653808	668165
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	86870	171000	85520	256600		116653804	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS	96340	171000	85520	256600		116653805	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS Dup	90470	171000	85520	256600		116653806	668522
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	111300	171000	85520	256600		116653807	668522
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	97030	171000	85520	256600		116653810	668522
Acenaphthene-d10-ISTD	668522	Blank	172600	362000	181000	543100	*	116653804	668522
Acenaphthene-d10-ISTD	668522	LCS	195500	362000	181000	543100		116653805	668522
Acenaphthene-d10-ISTD	668522	LCS Dup	188600	362000	181000	543100		116653806	668522
Acenaphthene-d10-ISTD	668522	Blank	218300	362000	181000	543100		116653807	668522
Acenaphthene-d10-ISTD	668522	Blank	192900	362000	181000	543100		116653810	668522
Naphthalene-d8-ISTD	668522	Blank	330000	651400	325700	977100		116653804	668522
Naphthalene-d8-ISTD	668522	LCS	365500	651400	325700	977100		116653805	668522
Naphthalene-d8-ISTD	668522	LCS Dup	353100	651400	325700	977100		116653806	668522
Naphthalene-d8-ISTD	668522	Blank	419200	651400	325700	977100		116653807	668522
Naphthalene-d8-ISTD	668522	Blank	367800	651400	325700	977100		116653810	668522
Phenanthrene-d10-ISTD	668522	Blank	204100	525100	262500	787600	*	116653804	668522
Phenanthrene-d10-ISTD	668522	LCS	251100	525100	262500	787600	*	116653805	668522
Phenanthrene-d10-ISTD	668522	LCS Dup	284400	525100	262500	787600		116653806	668522
Phenanthrene-d10-ISTD	668522	Blank	261900	525100	262500	787600	*	116653807	668522
Phenanthrene-d10-ISTD	668522	Blank	277100	525100	262500	787600		116653810	668522
1,4-Dichlorobenzene-d4-ISTD	1500893	MS	98350	171000	85520	256600		116653815	668522

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IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
Acenaphthene-d10-ISTD	1500893	MS	183400	362000	181000	543100		116653815	668522
Naphthalene-d8-ISTD	1500893	MS	383500	651400	325700	977100		116653815	668522
Phenanthrene-d10-ISTD	1500893	MS	252400	525100	262500	787600	*	116653815	668522

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	578179	CCV	4.910	4.910	4.850	4.970		116653803	578179
Acenaphthene-d10-ISTD	578179	CCV	9.890	9.890	9.830	9.950		116653803	578179
Naphthalene-d8-ISTD	578179	CCV	6.610	6.610	6.550	6.670		116653803	578179
Phenanthrene-d10-ISTD	578179	CCV	13.06	13.06	13.00	13.12		116653803	578179
1,4-Dichlorobenzene-d4-ISTD	668165	Blank	4.900	4.910	4.850	4.970		116653808	668165
Acenaphthene-d10-ISTD	668165	Blank	9.860	9.890	9.830	9.950		116653808	668165
Naphthalene-d8-ISTD	668165	Blank	6.590	6.610	6.550	6.670		116653808	668165
Phenanthrene-d10-ISTD	668165	Blank	13.02	13.06	13.00	13.12		116653808	668165
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	4.890	4.910	4.850	4.970		116653804	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS	4.900	4.910	4.850	4.970		116653805	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS Dup	4.900	4.910	4.850	4.970		116653806	668522
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	4.900	4.910	4.850	4.970		116653807	668522
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	4.890	4.910	4.850	4.970		116653810	668522
Acenaphthene-d10-ISTD	668522	Blank	9.860	9.890	9.830	9.950		116653804	668522
Acenaphthene-d10-ISTD	668522	LCS	9.860	9.890	9.830	9.950		116653805	668522
Acenaphthene-d10-ISTD	668522	LCS Dup	9.870	9.890	9.830	9.950		116653806	668522
Acenaphthene-d10-ISTD	668522	Blank	9.860	9.890	9.830	9.950		116653807	668522
Acenaphthene-d10-ISTD	668522	Blank	9.850	9.890	9.830	9.950		116653810	668522
Naphthalene-d8-ISTD	668522	Blank	6.590	6.610	6.550	6.670		116653804	668522
Naphthalene-d8-ISTD	668522	LCS	6.590	6.610	6.550	6.670		116653805	668522
Naphthalene-d8-ISTD	668522	LCS Dup	6.590	6.610	6.550	6.670		116653806	668522
Naphthalene-d8-ISTD	668522	Blank	6.590	6.610	6.550	6.670		116653807	668522
Naphthalene-d8-ISTD	668522	Blank	6.590	6.610	6.550	6.670		116653810	668522
Phenanthrene-d10-ISTD	668522	Blank	13.02	13.06	13.00	13.12		116653804	668522
Phenanthrene-d10-ISTD	668522	LCS	13.03	13.06	13.00	13.12		116653805	668522
Phenanthrene-d10-ISTD	668522	LCS Dup	13.03	13.06	13.00	13.12		116653806	668522
Phenanthrene-d10-ISTD	668522	Blank	13.02	13.06	13.00	13.12		116653807	668522
Phenanthrene-d10-ISTD	668522	Blank	13.02	13.06	13.00	13.12		116653810	668522
1,4-Dichlorobenzene-d4-ISTD	1500893	MS	4.890	4.910	4.850	4.970		116653815	668522
Acenaphthene-d10-ISTD	1500893	MS	9.860	9.890	9.830	9.950		116653815	668522
Naphthalene-d8-ISTD	1500893	MS	6.590	6.610	6.550	6.670		116653815	668522
Phenanthrene-d10-ISTD	1500893	MS	13.02	13.06	13.00	13.12		116653815	668522

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 2,4,5-Trichlorophenol	668522	0.0202	0.025	mg/L	80.8	40.4 - 118	116653805	
TCLP 2,4,6-Trichlorophenol	668522	0.0209	0.025	mg/L	83.6	39.2 - 114	116653805	
TCLP 2,4-Dinitrotoluene	668522	0.0186	0.025	mg/L	74.4	36.9 - 133	116653805	
TCLP 2-Methylphenol (o-Cresol)	668522	0.0156	0.025	mg/L	62.4	11.7 - 103	116653805	

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LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 3&4-Methylphenol (m&p-Creso	668522	0.0152	0.025	mg/L	60.8	0.100 - 132	116653805	
TCLP bis(2-Chloroethyl)ether	668522	0.0184	0.025	mg/L	73.6	24.1 - 122	116653805	
TCLP Hexachlorobenzene	668522	0.0223	0.025	mg/L	89.2	38.7 - 126	116653805	
TCLP Hexachlorobutadiene	668522	0.0153	0.025	mg/L	61.2	10.2 - 95.4	116653805	
TCLP Hexachloroethane	668522	0.0145	0.025	mg/L	58.0	10.6 - 94.1	116653805	
TCLP Nitrobenzene	668522	0.0215	0.025	mg/L	86.0	27.5 - 120	116653805	
TCLP Pentachlorophenol	668522	0.0147	0.025	mg/L	58.8	17.3 - 132	116653805	
TCLP Pyridine (Reg. Limit 5)	668522	0	0.025	mg/L	0	5.47 - 83.4	116653805	*

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP 2,4,5-Trichlorophenol	668522	0.0202	0.0216	0.025	40.4 - 118	80.8	86.4	mg/L	6.70	30.0
TCLP 2,4,6-Trichlorophenol	668522	0.0209	0.0219	0.025	39.2 - 114	83.6	87.6	mg/L	4.67	30.0
TCLP 2,4-Dinitrotoluene	668522	0.0186	0.0197	0.025	36.9 - 133	74.4	78.8	mg/L	5.74	30.0
TCLP 2-Methylphenol (o-Cresol)	668522	0.0156	0.0176	0.025	11.7 - 103	62.4	70.4	mg/L	12.0	30.0
TCLP 3&4-Methylphenol (m&p-Creso	668522	0.0152	0.0166	0.025	0.100 - 132	60.8	66.4	mg/L	8.81	30.0
TCLP bis(2-Chloroethyl)ether	668522	0.0184	0.0171	0.025	24.1 - 122	73.6	68.4	mg/L	7.32	30.0
TCLP Hexachlorobenzene	668522	0.0223	0.0198	0.025	38.7 - 126	89.2	79.2	mg/L	11.9	30.0
TCLP Hexachlorobutadiene	668522	0.0153	0.0171	0.025	10.2 - 95.4	61.2	68.4	mg/L	11.1	30.0
TCLP Hexachloroethane	668522	0.0145	0.0168	0.025	10.6 - 94.1	58.0	67.2	mg/L	14.7	30.0
TCLP Nitrobenzene	668522	0.0215	0.0241	0.025	27.5 - 120	86.0	96.4	mg/L	11.4	30.0
TCLP Pentachlorophenol	668522	0.0147	0.0156	0.025	17.3 - 132	58.8	62.4	mg/L	5.94	30.0
TCLP Pyridine (Reg. Limit 5)	668522	0	0.0005	0.025	5.47 - 83.4	0 *	2.00 *	mg/L	200 *	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 2,4,5-Trichlorophenol	1500893	0.199	0	ND	0.250	18.3 - 144	79.6		mg/L		30.0
TCLP 2,4,6-Trichlorophenol	1500893	0.199	0	ND	0.250	21.3 - 139	79.6		mg/L		30.0
TCLP 2,4-Dinitrotoluene	1500893	0.186	0	ND	0.250	19.7 - 161	74.4		mg/L		30.0
TCLP 2-Methylphenol (o-Cresol)	1500893	0.137	0	ND	0.250	6.97 - 119	54.8		mg/L		30.0
TCLP 3&4-Methylphenol (m&p-Creso	1500893	0.117	0	ND	0.250	0.100 - 230	46.8		mg/L		30.0
TCLP bis(2-Chloroethyl)ether	1500893	0.154	0	ND	0.250	11.0 - 128	61.6		mg/L		30.0
TCLP Hexachlorobenzene	1500893	0.246	0	ND	0.250	28.1 - 147	98.4		mg/L		30.0
TCLP Hexachlorobutadiene	1500893	0.154	0	ND	0.250	0.100 - 94.9	61.6		mg/L		30.0
TCLP Hexachloroethane	1500893	0.150	0	ND	0.250	0.100 - 101	60.0		mg/L		30.0
TCLP Nitrobenzene	1500893	0.226	0	ND	0.250	15.6 - 129	90.4		mg/L		30.0
TCLP Pentachlorophenol	1500893	0.161	0	ND	0.250	3.96 - 159	64.4		mg/L		30.0
TCLP Pyridine (Reg. Limit 5)	1500893	0	0	ND	0.250	0.100 - 90.0	0		mg/L		30.0

SPCC

Parameter	Sample	RF	Minimum	File
TCLP 2,4-Dinitrophenol	578179	40.1	0.050	116653803
TCLP 4-Nitrophenol	578179	43.0	0.050	116653803

ANA-LAB CORP. THE COMPLETE SERVICE LAB

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Quality Control

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SPCC

Parameter	Sample	RF	Minimum	File
TCLP Hexachlorocyclopentadiene	578179	56.8	0.050	116653803
TCLP N-Nitroso-n-propylamine	578179	43.2	0.050	116653803

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	578179	CCV	54.0	100	mg/L	54.0	4.84 - 133	116653803
2-Fluorobiphenyl-SURR	578179	CCV	51.0	50.0	mg/L	102	3.58 - 121	116653803
2-Fluorophenol-SURR	578179	CCV	50.0	100	mg/L	50.0	0.100 - 90.1	116653803
4-Terphenyl-d14-SURR	578179	CCV	54.5	50.0	mg/L	109	0.100 - 148	116653803
Nitrobenzene-d5-SURR	578179	CCV	42.8	50.0	mg/L	85.6	0.100 - 130	116653803
Phenol-d6-SURR	578179	CCV	40.2	100	mg/L	40.2	0.100 - 84.9	116653803
2,4,6-Tribromophenol	668165	Blank	1.99	3.33	mg/L	59.8	4.84 - 133	116653808
2-Fluorobiphenyl-SURR	668165	Blank	20.4	50.0	mg/L	40.8	3.58 - 121	116653808
2-Fluorophenol-SURR	668165	Blank	50.6	100	mg/L	50.6	0.100 - 90.1	116653808
4-Terphenyl-d14-SURR	668165	Blank	19.3	50.0	mg/L	38.6	0.100 - 148	116653808
Nitrobenzene-d5-SURR	668165	Blank	19.5	50.0	mg/L	39.0	0.100 - 130	116653808
Phenol-d6-SURR	668165	Blank	32.0	100	mg/L	32.0	0.100 - 84.9	116653808
2,4,6-Tribromophenol	668522	Blank	1.73	3.33	mg/L	52.0	4.84 - 133	116653804
2,4,6-Tribromophenol	668522	LCS	2.00	3.33	mg/L	60.1	4.84 - 133	116653805
2,4,6-Tribromophenol	668522	LCS Dup	2.08	3.33	mg/L	62.5	4.84 - 133	116653806
2,4,6-Tribromophenol	668522	Blank	2.03	3.33	mg/L	61.0	4.84 - 133	116653807
2,4,6-Tribromophenol	668522	Blank	2.06	3.33	mg/L	61.9	4.84 - 133	116653810
2-Fluorobiphenyl-SURR	668522	Blank	20.3	50.0	mg/L	40.6	3.58 - 121	116653804
2-Fluorobiphenyl-SURR	668522	LCS	18.9	50.0	mg/L	37.8	3.58 - 121	116653805
2-Fluorobiphenyl-SURR	668522	LCS Dup	20.4	50.0	mg/L	40.8	3.58 - 121	116653806
2-Fluorobiphenyl-SURR	668522	Blank	18.6	50.0	mg/L	37.2	3.58 - 121	116653807
2-Fluorobiphenyl-SURR	668522	Blank	19.3	50.0	mg/L	38.6	3.58 - 121	116653810
2-Fluorophenol-SURR	668522	Blank	52.7	100	mg/L	52.7	0.100 - 90.1	116653804
2-Fluorophenol-SURR	668522	LCS	44.7	100	mg/L	44.7	0.100 - 90.1	116653805
2-Fluorophenol-SURR	668522	LCS Dup	49.6	100	mg/L	49.6	0.100 - 90.1	116653806
2-Fluorophenol-SURR	668522	Blank	40.7	100	mg/L	40.7	0.100 - 90.1	116653807
2-Fluorophenol-SURR	668522	Blank	49.9	100	mg/L	49.9	0.100 - 90.1	116653810
4-Terphenyl-d14-SURR	668522	Blank	21.1	50.0	mg/L	42.2	0.100 - 148	116653804
4-Terphenyl-d14-SURR	668522	LCS	22.5	50.0	mg/L	45.0	0.100 - 148	116653805
4-Terphenyl-d14-SURR	668522	LCS Dup	23.9	50.0	mg/L	47.8	0.100 - 148	116653806
4-Terphenyl-d14-SURR	668522	Blank	19.8	50.0	mg/L	39.6	0.100 - 148	116653807
4-Terphenyl-d14-SURR	668522	Blank	19.8	50.0	mg/L	39.6	0.100 - 148	116653810
Nitrobenzene-d5-SURR	668522	Blank	18.5	50.0	mg/L	37.0	0.100 - 130	116653804
Nitrobenzene-d5-SURR	668522	LCS	17.3	50.0	mg/L	34.6	0.100 - 130	116653805
Nitrobenzene-d5-SURR	668522	LCS Dup	19.1	50.0	mg/L	38.2	0.100 - 130	116653806
Nitrobenzene-d5-SURR	668522	Blank	17.9	50.0	mg/L	35.8	0.100 - 130	116653807
Nitrobenzene-d5-SURR	668522	Blank	18.7	50.0	mg/L	37.4	0.100 - 130	116653810
Phenol-d6-SURR	668522	Blank	30.9	100	mg/L	30.9	0.100 - 84.9	116653804
Phenol-d6-SURR	668522	LCS	25.2	100	mg/L	25.2	0.100 - 84.9	116653805
Phenol-d6-SURR	668522	LCS Dup	28.2	100	mg/L	28.2	0.100 - 84.9	116653806
Phenol-d6-SURR	668522	Blank	27.5	100	mg/L	27.5	0.100 - 84.9	116653807
Phenol-d6-SURR	668522	Blank	30.4	100	mg/L	30.4	0.100 - 84.9	116653810
2,4,6-Tribromophenol	1500893	MS	0.604	1.00	mg/L	60.4	4.84 - 133	116653815
2-Fluorobiphenyl-SURR	1500893	MS	0.195	0.500	mg/L	39.0	3.58 - 121	116653815

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Quality Control

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2-Fluorophenol-SURR	1500893	MS	0.446	1.00	mg/L	44.6	0.100 - 90.1	116653815
4-Terphenyl-d14-SURR	1500893	MS	0.239	0.500	mg/L	47.8	0.100 - 148	116653815
Nitrobenzene-d5-SURR	1500893	MS	0.185	0.500	mg/L	37.0	0.100 - 130	116653815
Phenol-d6-SURR	1500893	MS	0.333	1.00	mg/L	33.3	0.100 - 84.9	116653815

669394 Solid & Chemical Materials

EPA 8270C

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP 2,4,5-Trichlorophenol	668522	ND	0.000961	0.005	mg/L	116657757	
TCLP 2,4,6-Trichlorophenol	668522	ND	0.00124	0.002	mg/L	116657757	
TCLP 2,4-Dinitrotoluene	668522	ND	0.00153	0.002	mg/L	116657757	
TCLP 2-Methylphenol (o-Cresol)	668522	ND	0.00848	0.010	mg/L	116657757	
TCLP 3&4-Methylphenol (m&p-Creso	668522	ND	0.00778	0.008	mg/L	116657757	
TCLP bis(2-Chloroethyl)ether	668522	ND	0.000348	0.001	mg/L	116657757	
TCLP Hexachlorobenzene	668522	ND	0.000871	0.001	mg/L	116657757	
TCLP Hexachlorobutadiene	668522	ND	0.00103	0.00103	mg/L	116657757	
TCLP Hexachloroethane	668522	ND	0.00105	0.002	mg/L	116657757	
TCLP Nitrobenzene	668522	ND	0.000271	0.001	mg/L	116657757	
TCLP Pentachlorophenol	668522	ND	0.00096	0.005	mg/L	116657757	
TCLP Pyridine (Reg. Limit 5)	668522	ND	0.00135	0.00135	mg/L	116657757	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP 2,4,5-Trichlorophenol	54.4	50.0	mg/L	109	70.0 - 130		116657749
TCLP 2,4,6-Trichlorophenol	48.7	50.0	mg/L	97.4	70.0 - 130		116657749
TCLP 2,4-Dinitrotoluene	45.7	50.0	mg/L	91.4	70.0 - 130		116657749
TCLP 2-Methylphenol (o-Cresol)	50.8	50.0	mg/L	102	70.0 - 130		116657749
TCLP 3&4-Methylphenol (m&p-Creso	48.3	50.0	mg/L	96.6	70.0 - 130		116657749
TCLP bis(2-Chloroethyl)ether	42.7	50.0	mg/L	85.4	70.0 - 130		116657749
TCLP Hexachlorobenzene	54.5	50.0	mg/L	109	70.0 - 130		116657749
TCLP Hexachlorobutadiene	50.5	50.0	mg/L	101	70.0 - 130		116657749
TCLP Hexachloroethane	49.8	50.0	mg/L	99.6	70.0 - 130		116657749
TCLP Nitrobenzene	40.2	50.0	mg/L	80.4	70.0 - 130		116657749
TCLP Pentachlorophenol	54.3	50.0	mg/L	109	70.0 - 130		116657749
TCLP Pyridine (Reg. Limit 5)	48.7	50.0	mg/L	97.4	70.0 - 130		116657749

DFTPP

Parameter		RefMass	Reading	%	Limits%	Out	File
DFTPP Mass 127	577690	198	27697	55.0	40.0 - 60.0		116657748
DFTPP Mass 197	577690	198	0	0.0	0 - 1.00		116657748
DFTPP Mass 198	577690	198	50344	100.0	100 - 100		116657748
DFTPP Mass 199	577690	198	3422	6.8	5.00 - 9.00		116657748
DFTPP Mass 275	577690	198	11117	22.1	10.0 - 30.0		116657748
DFTPP Mass 365	577690	198	1352	2.7	1.00 - 100		116657748
DFTPP Mass 441	577690	443	6463	79.3	0 - 100		116657748
DFTPP Mass 442	577690	198	42717	84.9	40.0 - 100		116657748

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DFTPP

Parameter		RefMass	Reading	%	Limits%	Out	File
DFTPP Mass 443	577690	442	8146	19.1	17.0 - 23.0		116657748
DFTPP Mass 51	577690	198	21845	43.4	30.0 - 60.0		116657748
DFTPP Mass 68	577690	69.0	0	0.0	0 - 2.00		116657748
DFTPP Mass 69	577690	198	24076	47.8	0 - 100		116657748
DFTPP Mass 70	577690	69.0	114	0.5	0 - 2.00		116657748

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	578179	CCV	113300	113300	56660	170000		116657749	578179
Acenaphthene-d10-ISTD	578179	CCV	199800	199800	99880	299600		116657749	578179
Naphthalene-d8-ISTD	578179	CCV	405900	405900	203000	608900		116657749	578179
Phenanthrene-d10-ISTD	578179	CCV	235900	235900	118000	353900		116657749	578179
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	102300	113300	56660	170000		116657757	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS	101100	113300	56660	170000		116657758	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS Dup	108700	113300	56660	170000		116657759	668522
Acenaphthene-d10-ISTD	668522	Blank	200600	199800	99880	299600		116657757	668522
Acenaphthene-d10-ISTD	668522	LCS	190700	199800	99880	299600		116657758	668522
Acenaphthene-d10-ISTD	668522	LCS Dup	197000	199800	99880	299600		116657759	668522
Naphthalene-d8-ISTD	668522	Blank	382100	405900	203000	608900		116657757	668522
Naphthalene-d8-ISTD	668522	LCS	369500	405900	203000	608900		116657758	668522
Naphthalene-d8-ISTD	668522	LCS Dup	388000	405900	203000	608900		116657759	668522
Phenanthrene-d10-ISTD	668522	Blank	268200	235900	118000	353900		116657757	668522
Phenanthrene-d10-ISTD	668522	LCS	254500	235900	118000	353900		116657758	668522
Phenanthrene-d10-ISTD	668522	LCS Dup	255300	235900	118000	353900		116657759	668522
1,4-Dichlorobenzene-d4-ISTD	1500893	MS	91420	113300	56660	170000		116657762	668522
Acenaphthene-d10-ISTD	1500893	MS	180900	199800	99880	299600		116657762	668522
Naphthalene-d8-ISTD	1500893	MS	337800	405900	203000	608900		116657762	668522
Phenanthrene-d10-ISTD	1500893	MS	225000	235900	118000	353900		116657762	668522

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	578179	CCV	4.640	4.640	4.580	4.700		116657749	578179
Acenaphthene-d10-ISTD	578179	CCV	7.100	7.100	7.040	7.160		116657749	578179
Naphthalene-d8-ISTD	578179	CCV	5.670	5.670	5.610	5.730		116657749	578179
Phenanthrene-d10-ISTD	578179	CCV	8.330	8.330	8.270	8.390		116657749	578179
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	4.630	4.640	4.580	4.700		116657757	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS	4.630	4.640	4.580	4.700		116657758	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS Dup	4.630	4.640	4.580	4.700		116657759	668522
Acenaphthene-d10-ISTD	668522	Blank	7.100	7.100	7.040	7.160		116657757	668522
Acenaphthene-d10-ISTD	668522	LCS	7.100	7.100	7.040	7.160		116657758	668522
Acenaphthene-d10-ISTD	668522	LCS Dup	7.100	7.100	7.040	7.160		116657759	668522
Naphthalene-d8-ISTD	668522	Blank	5.660	5.670	5.610	5.730		116657757	668522
Naphthalene-d8-ISTD	668522	LCS	5.660	5.670	5.610	5.730		116657758	668522
Naphthalene-d8-ISTD	668522	LCS Dup	5.660	5.670	5.610	5.730		116657759	668522
Phenanthrene-d10-ISTD	668522	Blank	8.320	8.330	8.270	8.390		116657757	668522

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Quality Control

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
Phenanthrene-d10-ISTD	668522	LCS	8.320	8.330	8.270	8.390		116657758	668522
Phenanthrene-d10-ISTD	668522	LCS Dup	8.320	8.330	8.270	8.390		116657759	668522
1,4-Dichlorobenzene-d4-IST D	1500893	MS	4.630	4.640	4.580	4.700		116657762	668522
Acenaphthene-d10-ISTD	1500893	MS	7.100	7.100	7.040	7.160		116657762	668522
Naphthalene-d8-ISTD	1500893	MS	5.660	5.670	5.610	5.730		116657762	668522
Phenanthrene-d10-ISTD	1500893	MS	8.320	8.330	8.270	8.390		116657762	668522

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 2,4,5-Trichlorophenol	668522	0.0232	0.025	mg/L	92.8	40.4 - 118	116657758	
TCLP 2,4,6-Trichlorophenol	668522	0.0202	0.025	mg/L	80.8	39.2 - 114	116657758	
TCLP 2,4-Dinitrotoluene	668522	0.023	0.025	mg/L	92.0	36.9 - 133	116657758	
TCLP 2-Methylphenol (o-Cresol)	668522	0.0174	0.025	mg/L	69.6	11.7 - 103	116657758	
TCLP 3&4-Methylphenol (m&p-Creso	668522	0.00974	0.025	mg/L	39.0	0.100 - 132	116657758	
TCLP bis(2-Chloroethyl)ether	668522	0.0193	0.025	mg/L	77.2	24.1 - 122	116657758	
TCLP Hexachlorobenzene	668522	0.023	0.025	mg/L	92.0	38.7 - 126	116657758	
TCLP Hexachlorobutadiene	668522	0.0161	0.025	mg/L	64.4	10.2 - 95.4	116657758	
TCLP Hexachloroethane	668522	0.0154	0.025	mg/L	61.6	10.6 - 94.1	116657758	
TCLP Nitrobenzene	668522	0.0145	0.025	mg/L	58.0	27.5 - 120	116657758	
TCLP Pentachlorophenol	668522	0.0219	0.025	mg/L	87.6	17.3 - 132	116657758	
TCLP Pyridine (Reg. Limit 5)	668522	0.0113	0.025	mg/L	45.2	5.47 - 83.4	116657758	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP 2,4,5-Trichlorophenol	668522	0.0232	0.0221	0.025	40.4 - 118	92.8	88.4	mg/L	4.86	30.0
TCLP 2,4,6-Trichlorophenol	668522	0.0202	0.0151	0.025	39.2 - 114	80.8	60.4	mg/L	28.9	30.0
TCLP 2,4-Dinitrotoluene	668522	0.023	0.0233	0.025	36.9 - 133	92.0	93.2	mg/L	1.30	30.0
TCLP 2-Methylphenol (o-Cresol)	668522	0.0174	0.0185	0.025	11.7 - 103	69.6	74.0	mg/L	6.13	30.0
TCLP 3&4-Methylphenol (m&p-Creso	668522	0.00974	0.0113	0.025	0.100 - 132	39.0	45.2	mg/L	14.7	30.0
TCLP bis(2-Chloroethyl)ether	668522	0.0193	0.0193	0.025	24.1 - 122	77.2	77.2	mg/L	0	30.0
TCLP Hexachlorobenzene	668522	0.023	0.0241	0.025	38.7 - 126	92.0	96.4	mg/L	4.67	30.0
TCLP Hexachlorobutadiene	668522	0.0161	0.0182	0.025	10.2 - 95.4	64.4	72.8	mg/L	12.2	30.0
TCLP Hexachloroethane	668522	0.0154	0.0173	0.025	10.6 - 94.1	61.6	69.2	mg/L	11.6	30.0
TCLP Nitrobenzene	668522	0.0145	0.0169	0.025	27.5 - 120	58.0	67.6	mg/L	15.3	30.0
TCLP Pentachlorophenol	668522	0.0219	0.0226	0.025	17.3 - 132	87.6	90.4	mg/L	3.15	30.0
TCLP Pyridine (Reg. Limit 5)	668522	0.0113	0.0122	0.025	5.47 - 83.4	45.2	48.8	mg/L	7.66	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 2,4,5-Trichlorophenol	1500893	0.202	0	ND	0.250	18.3 - 144	80.8		mg/L		30.0
TCLP 2,4,6-Trichlorophenol	1500893	0.172	0	ND	0.250	21.3 - 139	68.8		mg/L		30.0
TCLP 2,4-Dinitrotoluene	1500893	0.244	0	ND	0.250	19.7 - 161	97.6		mg/L		30.0
TCLP 2-Methylphenol (o-Cresol)	1500893	0.128	0	ND	0.250	6.97 - 119	51.2		mg/L		30.0
TCLP 3&4-Methylphenol (m&p-Creso	1500893	0.0637	0	ND	0.250	0.100 - 230	25.5		mg/L		30.0

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MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP bis(2-Chloroethyl)ether	1500893	0.0675	0	0.0016	0.250	11.0 - 128	26.4		mg/L		30.0
TCLP Hexachlorobenzene	1500893	0.232	0	ND	0.250	28.1 - 147	92.8		mg/L		30.0
TCLP Hexachlorobutadiene	1500893	0.147	0	ND	0.250	0.100 - 94.9	58.8		mg/L		30.0
TCLP Hexachloroethane	1500893	0.144	0	ND	0.250	0.100 - 101	57.6		mg/L		30.0
TCLP Nitrobenzene	1500893	0.168	0	ND	0.250	15.6 - 129	67.2		mg/L		30.0
TCLP Pentachlorophenol	1500893	0.234	0	ND	0.250	3.96 - 159	93.6		mg/L		30.0
TCLP Pyridine (Reg. Limit 5)	1500893	0	0	ND	0.250	0.100 - 90.0	0 *		mg/L		30.0

SPCC

Parameter	Sample	RF	Minimum	File
TCLP 2,4-Dinitrophenol	578179	45.9	0.050	116657749
TCLP 4-Nitrophenol	578179	50.1	0.050	116657749
TCLP Hexachlorocyclopentadiene	578179	50.2	0.050	116657749
TCLP N-Nitroso-n-propylamine	578179	49.3	0.050	116657749

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	578179	CCV	46.4	100	mg/L	46.4	4.84 - 133	116657749
2-Fluorobiphenyl-SURR	578179	CCV	54.0	50.0	mg/L	108	3.58 - 121	116657749
2-Fluorophenol-SURR	578179	CCV	45.6	100	mg/L	45.6	0.100 - 90.1	116657749
4-Terphenyl-d14-SURR	578179	CCV	57.8	50.0	mg/L	116	0.100 - 148	116657749
Nitrobenzene-d5-SURR	578179	CCV	50.3	50.0	mg/L	101	0.100 - 130	116657749
Phenol-d6-SURR	578179	CCV	50.4	100	mg/L	50.4	0.100 - 84.9	116657749
2,4,6-Tribromophenol	668522	Blank	2.16	3.33	mg/L	64.9	4.84 - 133	116657757
2,4,6-Tribromophenol	668522	LCS	2.09	3.33	mg/L	62.8	4.84 - 133	116657758
2,4,6-Tribromophenol	668522	LCS Dup	2.18	3.33	mg/L	65.5	4.84 - 133	116657759
2-Fluorobiphenyl-SURR	668522	Blank	20.0	50.0	mg/L	40.0	3.58 - 121	116657757
2-Fluorobiphenyl-SURR	668522	LCS	20.6	50.0	mg/L	41.2	3.58 - 121	116657758
2-Fluorobiphenyl-SURR	668522	LCS Dup	21.1	50.0	mg/L	42.2	3.58 - 121	116657759
2-Fluorophenol-SURR	668522	Blank	38.8	100	mg/L	38.8	0.100 - 90.1	116657757
2-Fluorophenol-SURR	668522	LCS	37.9	100	mg/L	37.9	0.100 - 90.1	116657758
2-Fluorophenol-SURR	668522	LCS Dup	40.3	100	mg/L	40.3	0.100 - 90.1	116657759
4-Terphenyl-d14-SURR	668522	Blank	18.9	50.0	mg/L	37.8	0.100 - 148	116657757
4-Terphenyl-d14-SURR	668522	LCS	21.6	50.0	mg/L	43.2	0.100 - 148	116657758
4-Terphenyl-d14-SURR	668522	LCS Dup	22.9	50.0	mg/L	45.8	0.100 - 148	116657759
Nitrobenzene-d5-SURR	668522	Blank	21.3	50.0	mg/L	42.6	0.100 - 130	116657757
Nitrobenzene-d5-SURR	668522	LCS	18.5	50.0	mg/L	37.0	0.100 - 130	116657758
Nitrobenzene-d5-SURR	668522	LCS Dup	21.7	50.0	mg/L	43.4	0.100 - 130	116657759
Phenol-d6-SURR	668522	Blank	33.2	100	mg/L	33.2	0.100 - 84.9	116657757
Phenol-d6-SURR	668522	LCS	31.0	100	mg/L	31.0	0.100 - 84.9	116657758
Phenol-d6-SURR	668522	LCS Dup	32.2	100	mg/L	32.2	0.100 - 84.9	116657759
2,4,6-Tribromophenol	1500893	MS	0.511	1.00	mg/L	51.1	4.84 - 133	116657762
2-Fluorobiphenyl-SURR	1500893	MS	0.191	0.500	mg/L	38.2	3.58 - 121	116657762
2-Fluorophenol-SURR	1500893	MS	0.408	1.00	mg/L	40.8	0.100 - 90.1	116657762
4-Terphenyl-d14-SURR	1500893	MS	0.219	0.500	mg/L	43.8	0.100 - 148	116657762
Nitrobenzene-d5-SURR	1500893	MS	0.195	0.500	mg/L	39.0	0.100 - 130	116657762
Phenol-d6-SURR	1500893	MS	0.378	1.00	mg/L	37.8	0.100 - 84.9	116657762

ANA-LAB CORP. THE COMPLETE SERVICE LAB

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

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Quality Control

Printed 07/07/2016

BFB

Parameter	Sample	RefMass	Reading	%	Limits%	Out	File
BFB Mass 173	669613	174	378	1.1	0 - 2.00		116661870
BFB Mass 174	669613	95.0	35760	99.9	50.0 - 100		116661870
BFB Mass 175	669613	174	2610	7.3	5.00 - 9.00		116661870
BFB Mass 176	669613	174	34429	96.3	95.0 - 101		116661870
BFB Mass 177	669613	176	2202	6.4	5.00 - 9.00		116661870
BFB Mass 50	669613	95.0	6043	16.9	15.0 - 40.0		116661870
BFB Mass 75	669613	95.0	16906	47.2	30.0 - 60.0		116661870
BFB Mass 95	669613	95.0	35789	100.0	100 - 100		116661870
BFB Mass 96	669613	95.0	2605	7.3	5.00 - 9.00		116661870

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units		File	Out
TCLP 1,1-Dichloroethene	669613	ND	0.000404	0.001	mg/L		116661874	
TCLP 1,1-Dichloroethene	669613	ND	0.000404	0.001	mg/L		116661875	
TCLP 1,2-Dichloroethane	669613	ND	0.000456	0.001	mg/L		116661874	
TCLP 1,2-Dichloroethane	669613	ND	0.000456	0.001	mg/L		116661875	
TCLP 1,4 Dichlorobenzene	669613	ND	0.000294	0.001	mg/L		116661874	
TCLP 1,4 Dichlorobenzene	669613	ND	0.000294	0.001	mg/L		116661875	
TCLP Benzene	669613	ND	0.000187	0.001	mg/L		116661874	
TCLP Benzene	669613	ND	0.000187	0.001	mg/L		116661875	
TCLP Carbon tetrachloride	669613	ND	0.000359	0.001	mg/L		116661874	
TCLP Carbon tetrachloride	669613	ND	0.000359	0.001	mg/L		116661875	
TCLP Chlorobenzene	669613	ND	0.000226	0.001	mg/L		116661874	
TCLP Chlorobenzene	669613	ND	0.000226	0.001	mg/L		116661875	
TCLP Chloroform	669613	ND	0.000211	0.001	mg/L		116661874	
TCLP Chloroform	669613	ND	0.000211	0.001	mg/L		116661875	
TCLP MEK	669613	ND	0.000382	0.001	mg/L		116661874	
TCLP MEK	669613	0.00108	0.000382	0.001	mg/L	*	116661875	
TCLP Tetrachloroethylene	669613	ND	0.000391	0.001	mg/L		116661874	
TCLP Tetrachloroethylene	669613	ND	0.000391	0.001	mg/L		116661875	
TCLP Trichloroethylene	669613	ND	0.000562	0.001	mg/L		116661874	
TCLP Trichloroethylene	669613	ND	0.000562	0.001	mg/L		116661875	
TCLP Vinyl chloride	669613	ND	0.000228	0.001	mg/L		116661874	
TCLP Vinyl chloride	669613	ND	0.000228	0.001	mg/L		116661875	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP 1,1-Dichloroethene	0.0224	0.020	mg/L	112	70.0 - 130		116661871
TCLP 1,2-Dichloroethane	0.0223	0.020	mg/L	112	70.0 - 130		116661871
TCLP 1,4 Dichlorobenzene	0.0222	0.020	mg/L	111	70.0 - 130		116661871
TCLP Benzene	0.0213	0.020	mg/L	106	70.0 - 130		116661871
TCLP Carbon tetrachloride	0.0227	0.020	mg/L	114	70.0 - 130		116661871
TCLP Chlorobenzene	0.022	0.020	mg/L	110	70.0 - 130		116661871
TCLP Chloroform	0.0216	0.020	mg/L	108	70.0 - 130		116661871
TCLP MEK	0.0185	0.020	mg/L	92.5	70.0 - 130		116661871
TCLP Tetrachloroethylene	0.0223	0.020	mg/L	112	70.0 - 130		116661871
TCLP Trichloroethylene	0.0219	0.020	mg/L	110	70.0 - 130		116661871
TCLP Vinyl chloride	0.0257	0.020	mg/L	128	70.0 - 130		116661871

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet

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Quality Control

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	669613	CCV	158100	158100	110700	205600		116661871	669613
1,4-DichlorobenzeneD4 (ISTD)	669613	LCS	152900	158100	110700	205600		116661872	669613
1,4-DichlorobenzeneD4 (ISTD)	669613	LCS Dup	166900	158100	110700	205600		116661873	669613
1,4-DichlorobenzeneD4 (ISTD)	669613	Blank	142900	158100	110700	205600		116661874	669613
1,4-DichlorobenzeneD4 (ISTD)	669613	Blank	138000	158100	110700	205600		116661875	669613
ChlorobenzeneD5 (ISTD)	669613	CCV	243400	243400	170400	316500		116661871	669613
ChlorobenzeneD5 (ISTD)	669613	LCS	236600	243400	170400	316500		116661872	669613
ChlorobenzeneD5 (ISTD)	669613	LCS Dup	254700	243400	170400	316500		116661873	669613
ChlorobenzeneD5 (ISTD)	669613	Blank	241000	243400	170400	316500		116661874	669613
ChlorobenzeneD5 (ISTD)	669613	Blank	231400	243400	170400	316500		116661875	669613

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	669613	LCS	12.01	12.01	11.95	12.07		116661872	669613
1,4-DichlorobenzeneD4 (ISTD)	669613	LCS Dup	12.01	12.01	11.95	12.07		116661873	669613
1,4-DichlorobenzeneD4 (ISTD)	669613	Blank	12.01	12.01	11.95	12.07		116661874	669613
1,4-DichlorobenzeneD4 (ISTD)	669613	Blank	12.01	12.01	11.95	12.07		116661875	669613
ChlorobenzeneD5 (ISTD)	669613	LCS	9.622	9.622	9.562	9.682		116661872	669613
ChlorobenzeneD5 (ISTD)	669613	LCS Dup	9.622	9.622	9.562	9.682		116661873	669613
ChlorobenzeneD5 (ISTD)	669613	Blank	9.622	9.622	9.562	9.682		116661874	669613
ChlorobenzeneD5 (ISTD)	669613	Blank	9.622	9.622	9.562	9.682		116661875	669613

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 1,1-Dichloroethene	669613	0.020	0.020	mg/L	100	70.7 - 131	116661872	
TCLP 1,2-Dichloroethane	669613	0.0218	0.020	mg/L	109	71.2 - 129	116661872	
TCLP 1,4 Dichlorobenzene	669613	0.0208	0.020	mg/L	104	78.4 - 121	116661872	
TCLP Benzene	669613	0.0211	0.020	mg/L	106	76.2 - 123	116661872	
TCLP Carbon tetrachloride	669613	0.0222	0.020	mg/L	111	68.3 - 131	116661872	
TCLP Chlorobenzene	669613	0.0206	0.020	mg/L	103	79.1 - 121	116661872	
TCLP Chloroform	669613	0.0214	0.020	mg/L	107	75.2 - 123	116661872	
TCLP MEK	669613	0.019	0.020	mg/L	95.0	43.0 - 150	116661872	
TCLP Tetrachloroethylene	669613	0.022	0.020	mg/L	110	74.8 - 130	116661872	
TCLP Trichloroethylene	669613	0.0218	0.020	mg/L	109	77.5 - 121	116661872	
TCLP Vinyl chloride	669613	0.0172	0.020	mg/L	86.0	43.0 - 134	116661872	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP 1,1-Dichloroethene	669613	0.020	0.0202	0.020	70.7 - 131	100	101	mg/L	0.995	30.0
TCLP 1,2-Dichloroethane	669613	0.0218	0.0199	0.020	71.2 - 129	109	99.5	mg/L	9.11	30.0
TCLP 1,4 Dichlorobenzene	669613	0.0208	0.0186	0.020	78.4 - 121	104	93.0	mg/L	11.2	30.0
TCLP Benzene	669613	0.0211	0.0188	0.020	76.2 - 123	106	94.0	mg/L	12.0	30.0
TCLP Carbon tetrachloride	669613	0.0222	0.020	0.020	68.3 - 131	111	100	mg/L	10.4	30.0
TCLP Chlorobenzene	669613	0.0206	0.019	0.020	79.1 - 121	103	95.0	mg/L	8.08	30.0
TCLP Chloroform	669613	0.0214	0.0193	0.020	75.2 - 123	107	96.5	mg/L	10.3	30.0

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LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
TCLP MEK	669613	0.019	0.0175	0.020	43.0 - 150	95.0	87.5	mg/L	8.22	30.0
TCLP Tetrachloroethylene	669613	0.022	0.0198	0.020	74.8 - 130	110	99.0	mg/L	10.5	30.0
TCLP Trichloroethylene	669613	0.0218	0.0194	0.020	77.5 - 121	109	97.0	mg/L	11.7	30.0
TCLP Vinyl chloride	669613	0.0172	0.015	0.020	43.0 - 134	86.0	75.0	mg/L	13.7	30.0

Surrogate

Parameter	*Sample*	*Type*	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
1,2-DCA-d4 (SURR)	669613	CCV	0.0202	0.020	mg/L	101	41.4 - 147	116661871
1,2-DCA-d4 (SURR)	669613	LCS	0.0198	0.020	mg/L	99.0	41.4 - 147	116661872
1,2-DCA-d4 (SURR)	669613	LCS Dup	0.0201	0.020	mg/L	100	41.4 - 147	116661873
1,2-DCA-d4 (SURR)	669613	Blank	0.0206	0.020	mg/L	103	41.4 - 147	116661874
1,2-DCA-d4 (SURR)	669613	Blank	0.0193	0.020	mg/L	96.5	41.4 - 147	116661875
Bromofluorobenzene (SURR)	669613	CCV	0.0199	0.020	mg/L	99.5	71.5 - 121	116661871
Bromofluorobenzene (SURR)	669613	LCS	0.0201	0.020	mg/L	100	71.5 - 121	116661872
Bromofluorobenzene (SURR)	669613	LCS Dup	0.0201	0.020	mg/L	100	71.5 - 121	116661873
Bromofluorobenzene (SURR)	669613	Blank	0.0199	0.020	mg/L	99.5	71.5 - 121	116661874
Bromofluorobenzene (SURR)	669613	Blank	0.020	0.020	mg/L	100	71.5 - 121	116661875
Dibromofluoromethane (SURR)	669613	CCV	0.0197	0.020	mg/L	98.5	57.9 - 122	116661871
Dibromofluoromethane (SURR)	669613	LCS	0.0196	0.020	mg/L	98.0	57.9 - 122	116661872
Dibromofluoromethane (SURR)	669613	LCS Dup	0.0199	0.020	mg/L	99.5	57.9 - 122	116661873
Dibromofluoromethane (SURR)	669613	Blank	0.0196	0.020	mg/L	98.0	57.9 - 122	116661874
Dibromofluoromethane (SURR)	669613	Blank	0.020	0.020	mg/L	100	57.9 - 122	116661875
ToluneneD8 (SURR)	669613	CCV	0.0197	0.020	mg/L	98.5	75.5 - 118	116661871
ToluneneD8 (SURR)	669613	LCS	0.0198	0.020	mg/L	99.0	75.5 - 118	116661872
ToluneneD8 (SURR)	669613	LCS Dup	0.0196	0.020	mg/L	98.0	75.5 - 118	116661873
ToluneneD8 (SURR)	669613	Blank	0.019	0.020	mg/L	95.0	75.5 - 118	116661874
ToluneneD8 (SURR)	669613	Blank	0.0199	0.020	mg/L	99.5	75.5 - 118	116661875

RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100% Recover% is Recovery Percent: result / known * 100%

Blank - Method Blank; LCS - Laboratory Control Sample; CCV - Continuing Calibration Verification; MS - Matrix Spike; ICV - Initial Calibration Verification; CCC - Calibration Check Compound; DFTPP - GC/MS Tuning Compound; BFB - GC/MS Tuning Compound; LDR - Linear Dynamic Range Standard

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LELAP-accredited #02008

Chain of Custody

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Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

GPDR

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Phone 870/567-8177
Fax 870/364-9076

Solid Samples

Matrix: Solid & Chemical Materials

Sampler Printed Name	Sampler Affiliation	Sampler Signature

Accredited	Test	Name	Method
	1	Glass Qt w/Teflon lined lid	
N	*TCL	TCLP Extraction Non-Volatile	EPA 1311
N	TVOX	TCLP Extraction ZHE Volatiles	EPA 1311ZHE
N	*AsT	TCLP Arsenic	EPA 6020A
N	*BaT	TCLP Barium	EPA 6020A
N	*CdT	TCLP Cadmium	EPA 6020A
N	*CrT	TCLP Chromium	EPA 6020A
N	*PbT	TCLP Lead	EPA 6020A
N	*SeT	TCLP Selenium	EPA 6020A
N	*AgT	TCLP Silver	EPA 6020A
N	*HgT	TCLP Mercury	EPA 7470A
N	TG80	GC TCLP Pesticide	EPA 8081A
N	TG50	GC TCLP Herbicide	EPA 8151
N	TVOA	MS TCLP Volatile Analysis	EPA 8260B
N	TABN	MS TCLP Semivolatile Analysis	EPA 8270C
	2	Glass 4 oz w/Teflon lined lid	
N	Reac	Reactivity	
	RH2O	Reactivity with Water	
	RS=	Sulfide Screen	ASTM D 4978-95/SW 9031
N	#Ign	Ignitability	EPA 1030
N	301S	Solid Metals Digestion	EPA 200.2 2.8
N	*BI	Boron	EPA 6010C
N	*SnI	Tin, Total	EPA 6010C
N	*FeI	Total Iron	EPA 6010C
N	*AlM	Aluminum, Total	EPA 6020A
N	*SbM	Antimony, Total	EPA 6020A
N	*AsM	Arsenic, Total	EPA 6020A
N	*BaM	Barium	EPA 6020A
N	*CdM	Cadmium, Total	EPA 6020A
N	*CrM	Chromium, Total	EPA 6020A
N	*CoM	Cobalt	EPA 6020A

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Chain of Custody

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Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

GPDR

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Phone 870/567-8177
Fax 870/364-9076

		Solid Samples		
N		*CuM	Copper, Total	EPA 6020A
N		*PbM	Lead, Total	EPA 6020A
N		*MoM	Molybdenum	EPA 6020A
N		*NiM	Nickel, Total	EPA 6020A
N		*SeM	Selenium, Total	EPA 6020A
N		*AgM	Silver, Total	EPA 6020A
N		*TlM	Thallium, Total	EPA 6020A
N		*VM	Vanadium	EPA 6020A
N		*ZnM	Zinc, Total	EPA 6020A
N		*HgS	Mercury	EPA 7471A
N		747S	Solid Metals Digestion Hg	EPA 7471A
N		1AHN	Semivolatile Hydrocarbons	EPA 8270C
N		RCN	Total Cyanide	EPA 9014
N		CorS	Corrosivity (Solids by pH)	EPA 9045D
N		pHLS	pH Measured in Water	EPA 9045D
N		TS%	Total Solids for Dry Wt	SM2540 G-1997 /MOD
	0	Z1-Administrative use only: no bottle required		
		ARDW	As Received to Dry Weight Basis	Calculation
	1	5035 Sampling Kit		
N		1VOA	Volatiles by GC/MS	EPA 8260B

Ana-Lab #	Sample ID	Bottles	Date	Time	Notes
1500893	DREGS FILTER	1	6/20/16	2:00 pm	

746901 CoC Print Group 001 of 001

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Chain of Custody

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Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

GPDR
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Phone 870/567-8177
Fax 870/364-9076

Solid Samples

Ambient Conditions/Comments

Date	Time	Relinquished	Received
6/20/16	1430	Printed Name RICHARD FREEMAN Affiliation GP	Printed Name FedEx Affiliation
		Signature	Signature
6/21/16	1020	Printed Name Affiliation FedEx	Printed Name Kathy Tarver Ana-Lab
		Signature	Signature Kathy Tarver
		Printed Name Affiliation	Printed Name Affiliation
		Signature	Signature
		Printed Name Affiliation	Printed Name Affiliation
		Signature	Signature

Sample Recieved on Ice? Yes No **Method of Shipment:** UPS Bus FedEx Lone Star Hand Delivered Other
Cooler/Sample Secure? Yes No **Tracking/Shipping #** 810018991449

The accredited column designates accreditation by A - A2LA, N - NELAC, or z - not listed under scope of accreditation. Unless otherwise specified, ANA-LAB shall provide these ordered services pursuant to our Standard Terms & Conditions Agreement (available for download from the welcome page at <http://www.ana-lab.com>). Ana-Lab personnel collect samples as specified by Ana-Lab SOP #000323.

Comments

5.2°C

005057 ☐ CF
005661 ☐ CF 2.0
003688 ☐ CF

00002
00152

FedEx Express Package US Airbill 61

FedEx Tracking Number 8100 1899 1449

MUR1

Form ID No. 0215

1 From Date 4-20-16

Sender's Name REBECCA BLANKENSHIP Phone 870 567-8812

Company GEORGIA PACIFIC/ENVIRONMENTAL

Address 100 SUPPLY RD 5.2°C

Dept/Floor/Suite/Room

City CROSSETT 1020 State AR ZIP 71635

2 Your Internal Billing Reference

3 To Recipient's Name SKEETER LUDEWIG Phone 903 984-0551

Company ANA-LAB

Address 2600 DUDLEY RD

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept/Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City KILGORE State TX ZIP 75662

0123423106

4 Express Package Service *To most locations. Packages up to 150 lbs.

Next Business Day

- FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected. ☒
- FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.

☐ Saturday Delivery NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required — Package may be left without obtaining a signature for delivery.
☐ Direct Signature — Someone at recipient's address may sign for delivery.
☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods? One box must be checked.

☒ No ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Restrictions apply for dangerous goods. See the current FedEx Service Guide. ☐ Cargo Aircraft Only

7 Payment Bill to:

☐ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

Total Packages 1 Total Weight 40 lbs. Credit Card Auth.

Your liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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Phone 903/984-0551 e-Mail corp@ana-lab.com LELAP-accredited #02008

Employee Owned Integrity Caring Continual Improvement

Report

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Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

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746938

Lime Mud

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ANA-LAB CORP. THE COMPLETE SERVICE LAB

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

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Employee Owned Integrity Caring Continual Improvement

Results

Printed: 07/07/2016

Lime Mud

Account	*Project*
GPDR-L	**746938**

Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

Results

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
1505098 Lime Mud Solid Samples							*Received:* 06/21/2016
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape			06/20/2016	14:00:00
Supplement to Test Report 1500892							
	Prepared:	***668651***	*06/23/2016*			*15:00:00*	
EPA 6010C		Analyzed	*LPS 06/24/2016*		*10:37:00*	*QCgroup*	*668888*
N **Total Iron**	**703 ***	**mg/Kg**	6.01			**7439-89-6**	17
EPA 6010C		Analyzed	*LPS 06/24/2016*		*11:24:00*	*QCgroup*	*668877*
N **Boron**	**<24.0 ***	**mg/kg**	24.0			**7440-42-8**	17
N **Tin, Total**	**<12.0 ***	**mg/kg**	12.0	B		**7440-31-5**	17
* Dry Weight Basis							
	Prepared:	***668441***	*06/22/2016*			*12:45:00*	
EPA 6020A		Analyzed	*CLK 06/22/2016*		*17:32:00*	*QCgroup*	*668514*
N **TCLP Arsenic**	**<0.050**	**mg/L**	0.050		5.00	**7440-38-2**	12
N **TCLP Barium**	**9.80**	**mg/L**	0.050	PD	100	**7440-39-3**	12
N **TCLP Cadmium**	**<0.005**	**mg/L**	0.005		1.00	**7440-43-9**	12
N **TCLP Chromium**	**0.144**	**mg/L**	0.050		5.00	**7440-47-3**	12
N **TCLP Lead**	**<0.050**	**mg/L**	0.050		5.00	**7439-92-1**	12
N **TCLP Selenium**	**<0.050**	**mg/L**	0.050		1.00	**7782-49-2**	12
N **TCLP Silver**	**<0.050**	**mg/L**	0.050		5.00	**7440-22-4**	12
	Prepared:	***668651***	*06/23/2016*			*15:00:00*	
EPA 6020A		Analyzed	*CLK 06/24/2016*		*14:20:00*	*QCgroup*	*668903*
N **Aluminum, Total**	**346 ***	**mg/kg**	1.20			**7429-90-5**	17
N **Antimony, Total**	**<0.240 ***	**mg/kg**	0.240			**7440-36-0**	17
N **Arsenic, Total**	**<0.481 ***	**mg/kg**	0.481		41.0	**7440-38-2**	17
N **Barium**	**620 ***	**mg/kg**	0.721			**7440-39-3**	17
N **Cadmium, Total**	**1.03 ***	**mg/kg**	0.240		39.0	**7440-43-9**	17
N **Chromium, Total**	**17.6 ***	**mg/kg**	0.240			**7440-47-3**	17
N **Cobalt**	**3.93 ***	**mg/kg**	0.240			**7440-48-4**	17
N **Copper, Total**	**15.9 ***	**mg/kg**	0.240		1500	**7440-50-8**	17
N **Lead, Total**	**3.49 ***	**mg/kg**	0.240		300	**7439-92-1**	17
N **Molybdenum**	**<0.240 ***	**mg/kg**	0.240		49.1	**7439-98-7**	17
N **Nickel, Total**	**28.8 ***	**mg/kg**	0.240		420	**7440-02-0**	17
N **Selenium, Total**	**<0.721 ***	**mg/kg**	0.721		100	**7782-49-2**	17
N **Silver, Total**	**<0.240 ***	**mg/kg**	0.240			**7440-22-4**	17
N **Thallium, Total**	**<0.240 ***	**mg/kg**	0.240			**7440-28-0**	17
N **Vanadium**	**1.25 ***	**mg/kg**	0.240			**7440-62-2**	17
N **Zinc, Total**	**78.5 ***	**mg/kg**	1.20		2800	**7440-66-6**	17
* Dry Weight Basis							
	Prepared:	***668323***	*06/22/2016*			*10:30:00*	
EPA 7470A		Analyzed	*CLK 06/22/2016*		*13:44:00*	*QCgroup*	*668399*

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Employee Owned Integrity Caring Continual Improvement

Results

Printed: 07/07/2016

Results

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
1505098 Lime Mud Solid Samples							*Received:* 06/21/2016
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape			06/20/2016	14:00:00
Supplement to Test Report 1500892							
EPA 7470A		Analyzed	*CLK 06/22/2016*		*13:44:00*	*QCgroup*	*668399*
N **TCLP Mercury**	**<0.002**	**mg/L**	0.002		0.200	**7439-97-6**	08
	Prepared:	***668128***	*06/21/2016*		*13:40:00*		
EPA 7471A		Analyzed	*CLK 06/22/2016*		*12:42:00*	*QCgroup*	*668396*
N **Mercury**	**<0.0196 ***	**mg/kg**	0.0196		17.0	**7439-97-6**	03
* Dry Weight Basis							
	Prepared:	***668356***	*06/22/2016*		*11:49:34*		
EPA 8081A		Analyzed	*SLC 06/24/2016*		*16:29:00*	*QCgroup*	*669072*
N **TCLP Chlordane**	**<0.00005**	**mg/L**	0.00005		0.030	**57-74-9**	11
N **TCLP Endrin**	**<0.00005**	**mg/L**	0.00005		0.020	**72-20-8**	11
N **TCLP gamma-BHC (Lindane)**	**<0.00005**	**mg/L**	0.00005		0.400	**58-89-9**	11
N **TCLP Heptachlor**	**<0.00005**	**mg/L**	0.00005		0.008	**76-44-8**	11
N **TCLP Heptachlor Epoxide**	**<0.00005**	**mg/L**	0.00005		0.008	**1024-57-3**	11
N **TCLP Methoxychlor**	**<0.00005**	**mg/L**	0.00005		10.0	**72-43-5**	11
N **TCLP Toxaphene**	**<0.00005**	**mg/L**	0.00005		0.500	**8001-35-2**	11
	Prepared:	***668637***	*06/23/2016*		*12:40:00*		
EPA 8151		Analyzed	*EMT 06/27/2016*		*12:54:00*	*QCgroup*	*669047*
N **TCLP 2,4 D**	**<0.500**	**mg/L**	0.500	X	10.0	**94-75-7**	16
N **TCLP 2,4,5-TP (Silvex)**	**<0.300**	**mg/L**	0.300	X	1.00	**93-72-1**	16
	Prepared:	***668758***	*06/23/2016*		*19:36:00*		
EPA 8260B		Analyzed	*JRH 06/23/2016*		*19:36:00*	*QCgroup*	*668758*
N **1,1,1,2-Tetrachloroethane**	**<50.0 ***	**ug/kg**	50.0	(	1420	**630-20-6**	01
N **1,1,1-Trichloroethane**	**<50.0 ***	**ug/kg**	50.0	(	1620	**71-55-6**	01
N **1,1,2,2-Tetrachloroethane**	**<50.0 ***	**ug/kg**	50.0	(	23.1	**79-34-5**	01
N **1,1,2-Trichloroethane**	**<50.0 ***	**ug/kg**	50.0	(	20.1	**79-00-5**	01
N **1,1-Dichloroethane**	**<50.0 ***	**ug/kg**	50.0	(	9250	**75-34-3**	01
N **1,1-Dichloroethylene**	**<50.0 ***	**ug/kg**	50.0	(	50.1	**75-35-4**	01
N **1,1-Dichloropropene**	**<50.0 ***	**ug/kg**	50.0	(	5.00	**563-58-6**	01
N **1,2,3-Trichlorobenzene**	**<50.0 ***	**ug/kg**	50.0	(	4800	**87-61-6**	01
N **1,2,3-Trichloropropane**	**<50.0 ***	**ug/kg**	50.0	(	2.28	**96-18-4**	01
N **1,2,4-Trichlorobenzene**	**<50.0 ***	**ug/kg**	50.0	(	4800	**120-82-1**	01
N **1,2,4-Trimethylbenzene**	**<50.0 ***	**ug/kg**	50.0	(	26000	**95-63-6**	01
N **1,2-Dibromo-3-chloropropane**	**<50.0 ***	**ug/kg**	50.0	(	1.75	**96-12-8**	01
N **1,2-Dibromoethane**	**<50.0 ***	**ug/kg**	50.0	(	0.210	**106-93-4**	01
N **1,2-Dichloroethane**	**<50.0 ***	**ug/kg**	50.0	(	13.7	**107-06-2**	01
N **1,2-Dichloropropane**	**<50.0 ***	**ug/kg**	50.0	(	22.8	**78-87-5**	01
N **1,3,5-Trimethylbenzene**	**<50.0 ***	**ug/kg**	50.0	(	45000	**108-67-8**	01
N **1,3-Dichloropropane**	**<50.0 ***	**ug/kg**	50.0	(	5.00	**142-28-9**	01
N **2,2-Dichloropropane**	**<50.0 ***	**ug/kg**	50.0	(X	5.00	**594-20-7**	01
N **2-Chloroethylvinyl ether**	**<50.0 ***	**ug/kg**	50.0	(	5.00	**110-75-8**	01
N **2-Chlorotoluene**	**<50.0 ***	**ug/kg**	50.0	(	1000000	**95-49-8**	01
N **4-Chlorotoluene**	**<50.0 ***	**ug/kg**	50.0	(	1000000	**106-43-4**	01

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Results

Printed: 07/07/2016

Results

1505098 Lime Mud Solid Samples *Received:* 06/21/2016

olid & Chemical Material *Collected by:* Client *Affiliation:* Georgia Pacific Pape 06/20/2016 14:00:00

Supplement to Test Report 1500892

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
EPA 8260B		Analyzed	*JRH 06/23/2016*		*19:36:00*	*QCgroup 668758*	
N Acetone	<500 *	ug/kg	500	(	4750	67-64-1	01
N Acrolein	<250 *	ug/kg	250	(	947	107-02-8	01
N Acrylonitrile	<250 *	ug/kg	250	(	7500	107-13-1	01
N Benzene	<18.2 *	ug/kg	18.2	(	26.0	71-43-2	01
N Bromobenzene	<50.0 *	ug/kg	50.0	(	5.00	108-86-1	01
N Bromochloromethane	<50.0 *	ug/kg	50.0	(	5.00	74-97-5	01
N Bromodichloromethane	<50.0 *	ug/kg	50.0	(	440	75-27-4	01
N Bromoform	<50.0 *	ug/kg	50.0	(	546	75-25-2	01
N Bromomethane (Methyl Bromi	<50.0 *	ug/kg	50.0	(	131	74-83-9	01
N Carbon Tetrachloride	<50.0 *	ug/kg	50.0	(	61.9	56-23-5	01
N Chlorobenzene	<50.0 *	ug/kg	50.0	(	1090	108-90-7	01
N Chloroethane	<50.0 *	ug/kg	50.0	(	30900	75-00-3	01
N Chloroform	<50.0 *	ug/kg	50.0	(	417	67-66-3	01
N Chloromethane	<50.0 *	ug/kg	50.0	(	405	74-87-3	01
N cis-1,2-Dichloroethylene	<50.0 *	ug/kg	50.0	(	248	156-59-2	01
N cis-1,3-Dichloropropene	<50.0 *	ug/kg	50.0	(	22.0	10061-01-5	01
N Dibromochloromethane	<50.0 *	ug/kg	50.0	(	445	124-48- 1	01
N Dibromomethane	<50.0 *	ug/kg	50.0	(	5.00	74-95-3	01
N Dichlorodifluoromethane	<50.0 *	ug/kg	50.0	(	239000	75-71-8	01
N Dichloromethane	<50.0 *	ug/kg	50.0	(	13.1	75-09-2	01
N Ethylbenzene	<50.0 *	ug/kg	50.0	(	7600	100-41-4	01
N Hexachlorobutadiene	<50.0 *	ug/kg	50.0	(	1400	87-68-3	01
N Isopropylbenzene (Cumene)	<50.0 *	ug/kg	50.0	(	347000	98-82-8	01
N m- and p-Xylene	<50.0 *	ug/kg	50.0	(	0	ARC-mpXyl	01
N m-Dichlorobenzene	<50.0 *	ug/kg	50.0	(	5.00	541-73-1	01
N Methyl ethyl ketone (Butanone)	<500 *	ug/kg	500	(	29300	78-93-3	01
N Methyl Isobutyl Ketone	<50.0 *	ug/kg	50.0	(	4950	108-10-1	01
N Naphthalene	<50.0 *	ug/kg	50.0	(	31000	91-20-3	01
N n-Butylbenzene	<50.0 *	ug/kg	50.0	(	45000	104-51-8	01
N n-Propylbenzene	<50.0 *	ug/kg	50.0	(	45000	103-65-1	01
N o-Dichlorobenzene	<50.0 *	ug/kg	50.0	(	5.00	95-50-1	01
N o-Xylene	<50.0 *	ug/kg	50.0	(	0	95-47-6	01
N p-Dichlorobenzene	<50.0 *	ug/kg	50.0	(	5.00	106-46-7	01
N p-Isopropyltoluene	<50.0 *	ug/kg	50.0	(		99-87-6	01
N sec-Butylbenzene	<50.0 *	ug/kg	50.0	(	45000	135-98-8	01
N Styrene	<50.0 *	ug/kg	50.0	(	3250	100-42-5	01
N tert-Butylbenzene	<50.0 *	ug/kg	50.0	(	45000	98-06-6	01
N tert-Butylmethylether (MTBE)	<150 *	ug/kg	150	(	620	1634-04-4	01
N Tetrachloroethylene	<50.0 *	ug/kg	50.0	(	50.2	127-18-4	01
N Toluene	<50.0 *	ug/kg	50.0	(	8200	108-88-3	01
N trans-1,2-Dichloroethylene	<50.0 *	ug/kg	50.0	(	490	156-60-5	01
N trans-1,3-Dichloropropene	<50.0 *	ug/kg	50.0	(	5.00	10061-02-6	01
N Trichloroethylene	<50.0 *	ug/kg	50.0	(	33.6	79-01-6	01
N Trichlorofluoromethane	<50.0 *	ug/kg	50.0	(	128000	75-69-4	01
N Vinyl chloride	<50.0 *	ug/kg	50.0	(	22.3	75-01-4	01

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Employee Owned Integrity Caring Continual Improvement

Results

Printed: 07/07/2016

Results

Parameter		Results	Units	RL	Flags	MAL	CAS	Bottle
1505098	**Lime Mud Solid Samples**						*Received:* 06/21/2016	
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape				06/20/2016 14:00:00	
Supplement to Test Report 1500892								
EPA 8260B			Calculated *CAL 06/28/2016*		*14:42:32*	*QCgroup*	*668758*	
N	**Xylenes, Total**	<50.0 *	ug/kg	50.0		120000	1330-20-7	01
	Prepared:	*669092*	*06/27/2016*			*15:00:00*		
EPA 8260B			Analyzed *JRH 06/29/2016*		*13:53:00*	*QCgroup*	*669613*	
N	**TCLP 1,1-Dichloroethene**	<0.010	mg/L	0.010		0.700	75-35-4	19
N	**TCLP 1,2-Dichloroethane**	<0.010	mg/L	0.010		0.500	107-06-2	19
N	**TCLP 1,4 Dichlorobenzene**	<0.010	mg/L	0.010		7.50	106-46-7	19
N	**TCLP Benzene**	<0.010	mg/L	0.010		0.500	71-43-2	19
N	**TCLP Carbon tetrachloride**	<0.010	mg/L	0.010		0.500	56-23-5	19
N	**TCLP Chlorobenzene**	<0.010	mg/L	0.010		100	108-90-7	19
N	**TCLP Chloroform**	<0.010	mg/L	0.010		6.00	67-66-3	19
N	**TCLP MEK**	<0.010	mg/L	0.010		200	78-93-3	19
N	**TCLP Tetrachloroethylene**	<0.010	mg/L	0.010		0.700	127-18-4	19
N	**TCLP Trichloroethylene**	<0.010	mg/L	0.010		0.500	79-01-6	19
N	**TCLP Vinyl chloride**	<0.010	mg/L	0.010		0.200	75-01-4	19
	* Dry Weight Basis							
	Prepared:	*668081*	*06/21/2016*			*08:30:00*		
EPA 8270C			Analyzed *SLC 06/22/2016*		*21:23:00*	*QCgroup*	*668696*	
N	**1,2,4-Trichlorobenzene**	<33.3 *	ug/kg	33.3		4790	120-82-1	02
N	**1,2-Dichlorobenzene**	<33.3 *	ug/kg	33.3		17900	95-50-1	02
N	**1,2-DPH (as azobenzene)**	<32.3 *	ug/kg	32.3	S	32.3	122-66-7	02
N	**1,3-Dichlorobenzene**	<33.3 *	ug/kg	33.3		439000	541-73-1	02
N	**1,4-Dichlorobenzene**	<33.3 *	ug/kg	33.3		2100	106-46-7	02
N	**2,4,5-Trichlorophenol**	<33.3 *	ug/kg	33.3		33800	95-95-4	02
N	**2,4,6-Trichlorophenol**	<89.3 *	ug/kg	89.3		594	88-06-2	02
N	**2,4-Dichlorophenol**	<47.3 *	ug/kg	47.3		352	120-83-2	02
N	**2,4-Dimethylphenol**	<33.3 *	ug/kg	33.3		3230	105-67-9	02
N	**2,4-Dinitrophenol**	<70.0 *	ug/kg	70.0		93.7	51-28-5	02
N	**2,4-Dinitrotoluene**	<43.0 *	ug/kg	43.0		5.32	121-14-2	02
N	**2,6-Dichlorophenol**	<131 *	ug/kg	131			87-65-0	02
N	**2,6-Dinitrotoluene**	<56.7 *	ug/kg	56.7		4.81	606-20-2	02
N	**2-Chloronaphthalene**	<33.3 *	ug/kg	33.3		670000	91-58-7	02
N	**2-Chlorophenol**	<56.0 *	ug/kg	56.0		1630	95-57-8	02
N	**2-Methylphenol (o-Cresol)**	<333 *	ug/kg	333		7120	95-48-7	02
N	**2-Nitrophenol**	<121 *	ug/kg	121		787	88-75-5	02
N	**3&4-Methylphenol (m&p-Cresol)**	<88.0 *	ug/kg	88.0		632	MEPH34	02
N	**3,3'-Dichlorobenzidine**	<2170 *	ug/kg	2170		62.6	91-94-1	02
N	**4,6-Dinitro-2-methylphenol**	<151 *	ug/kg	151		130000	534-52-1	02
N	**4-Bromophenyl phenyl ether**	<33.3 *	ug/kg	33.3	S	1.89	101-55-3	02
N	**4-Chlorophenyl phenyl ethe**	<33.3 *	ug/kg	33.3		4.23	7005-72-3	02
N	**4-Nitrophenol**	<33.3 *	ug/kg	33.3		947	100-02-7	02
N	**Acenaphthene**	<33.3 *	ug/kg	33.3		236000	83-32-9	02
N	**Acenaphthylene**	<138 *	ug/kg	138		409000	208-96-8	02
N	**Anthracene**	<131 *	ug/kg	131		6890000	120-12-7	02
N	**Benzidine**	<33.3 *	ug/kg	33.3		0.011	92-87-5	02

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Results

Printed: 07/07/2016

Results

1505098 Lime Mud Solid Samples *Received:* 06/21/2016

olid & Chemical Material *Collected by:* Client *Affiliation:* Georgia Pacific Pape 06/20/2016 14:00:00

Supplement to Test Report 1500892

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
EPA 8270C		Analyzed	*SLC 06/22/2016*		*21:23:00 QCgroup*	*668696*	
N Benzo(a)anthracene	<33.3 *	ug/kg	33.3		17700	56-55-3	02
N Benzo(a)pyrene	<131 *	ug/kg	131		7640	50-32-8	02
N Benzo(b)fluoranthene	<343 *	ug/kg	343		60100	205-99-2	02
N Benzo(ghi)perylene	<289 *	ug/kg	289		0	191-24-2	02
N Benzo(k)fluoranthene	<337 *	ug/kg	337		615000	207-08-9	02
N Benzyl Butyl phthalate	<33.3 *	ug/kg	33.3		2700000	85-68-7	02
N Bis(2-chloroethoxy)methane	<33.3 *	ug/kg	33.3		20.0	111-91-1	02
N Bis(2-chloroethyl)ether	<33.3 *	ug/kg	33.3		2.11	111-44-4	02
N Bis(2-chloroisopropyl)ether	<33.3 *	ug/kg	33.3	S	190	39638-32-9	02
N Bis(2-ethylhexyl)phthalate	<167 *	ug/kg	167		164000	117-81-7	02
N Chrysene (Benzo(a)phenanthrene)	<33.3 *	ug/kg	33.3	S	1550000	218-01-9	02
N Dibenz(a,h)anthracene	<240 *	ug/kg	240		15200	53-70-3	02
N Diethyl phthalate	<33.3 *	ug/kg	33.3		156000	84-66-2	02
N Dimethyl phthalate	<33.3 *	ug/kg	33.3		243000	131-11-3	02
N Di-n-butylphthalate	<264 *	ug/kg	264		2.47	84-74-2	02
N Di-n-octylphthalate	<333 *	ug/kg	333		0	117-84-0	02
N Fluoranthene(Benzo(j,k)fluorene)	<33.3 *	ug/kg	33.3		1920000	206-44-0	02
N Fluorene	<33.3 *	ug/kg	33.3	S	299000	86-73-7	02
N Hexachlorobenzene	<33.3 *	ug/kg	33.3	S	1100	118-74-1	02
N Hexachlorobutadiene	<33.3 *	ug/kg	33.3		1370	87-68-3	02
N Hexachlorocyclopentadiene	<42.7 *	ug/kg	42.7		19300	77-47-4	02
N Hexachloroethane	<33.3 *	ug/kg	33.3		1840	67-72-1	02
N Indeno(1,2,3-cd)pyrene	<242 *	ug/kg	242		173000	193-39-5	02
N Isophorone	<33.3 *	ug/kg	33.3		3000	78-59-1	02
N Naphthalene	<33.3 *	ug/kg	33.3		31000	91-20-3	02
N Nitrobenzene	<33.3 *	ug/kg	33.3		87.9	98-95-3	02
N N-Nitrosodimethylamine	<33.3 *	ug/kg	33.3	X	0.037	62-75-9	02
N N-Nitrosodi-n-propylamine	<33.3 *	ug/kg	33.3		0.350	621-64-7	02
N N-Nitrosodiphenylamine (as DPA	<130 *	ug/kg	130		2820	86-30-6	02
N p-Chloro-m-Cresol (4-Chloro-3-me	<55.7 *	ug/kg	55.7		330000	59-50-7	02
N Pentachlorophenol	<39.3 *	ug/kg	39.3		3.58	87-86-5	02
N Phenanthrene	<33.3 *	ug/kg	33.3		420000	85-01-8	02
N Phenol	<34.0 *	ug/kg	34.0		38300	108-95-2	02
N Pyrene	<33.3 *	ug/kg	33.3		1120000	129-00-0	02
N Pyridine	<56.7 *	ug/kg	56.7		69.0	110-86-1	02
Prepared:	*668522*		*06/23/2016*		*07:20:00*		
EPA 8270C		Analyzed	*SLC 06/24/2016*		*16:46:00 QCgroup*	*669124*	
N TCLP 2,4,5-Trichlorophenol	<0.010	mg/L	0.010		1.00	95-95-4	15
N TCLP 2,4,6-Trichlorophenol	<0.010	mg/L	0.010		2.00	88-06-2	15
N TCLP 2,4-Dinitrotoluene	<0.010	mg/L	0.010		0.130	121-14-2	15
N TCLP 2-Methylphenol (o-Cresol)	<0.010	mg/L	0.010		200		15
N TCLP 3&4-Methylphenol (m&p-Creso	<0.010	mg/L	0.010		200		15
N TCLP bis(2-Chloroethyl)ether	<0.010	mg/L	0.010		0.100	111-44-4	15
N TCLP Hexachlorobenzene	<0.010	mg/L	0.010		0.130	118-74-1	15
N TCLP Hexachlorobutadiene	<0.010	mg/L	0.010		0.500	87-68-3	15

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Results

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Results

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle

1505098 Lime Mud Solid Samples *Received:* 06/21/2016

olid & Chemical Material *Collected by:* Client *Affiliation:* Georgia Pacific Pape 06/20/2016 14:00:00

Supplement to Test Report 1500892

EPA 8270C			Analyzed	*SLC 06/24/2016*	*16:46:00*	*QCgroup*	*669124*	
N	**TCLP Hexachloroethane**	**<0.010**	**mg/L**	0.010	3.00	**67-72-1**		15
N	**TCLP Nitrobenzene**	**<0.010**	**mg/L**	0.010	2.00	**98-95-3**		15
N	**TCLP Pentachlorophenol**	**<0.010**	**mg/L**	0.010	100	**87-86-5**		15
EPA 8270C			Analyzed	*KJS 06/28/2016*	*18:44:00*	*QCgroup*	*669394*	
N	**TCLP Pyridine (Reg. Limit 5)**	**<0.0135**	**mg/L**	0.0135	5.00	**110-86-1**		15
EPA 8270C			Calculated	*CAL 06/29/2016*	*10:13:26*	*QCgroup*	*669124*	
N	**TCLP Total Cresols (Reg Lim 200)**	**<0.010**	**mg/L**	0.010	200	**108-39-4,ect.**		15

* Dry Weight Basis

	Prepared:	***669146***		*06/27/2016*	*16:36:00*			
SM2540 G-1997 /MOD			Analyzed	*KBP 06/27/2016*	*16:36:00*	*QCgroup*	*669146*	
N	**Total Solids for Dry Wt**	**100**	**%**	0.010	E			01

Sample Preparation

1505098 Lime Mud Solid Samples *Received:* 06/21/2016

	Prepared:			*07/07/2016*	*13:39:58*			
Calculation			Calculated	*CAL 07/07/2016*	*13:39:58*	*QCgroup*		
	As Received to Dry Weight Basis	**Calculated**						
	Prepared:			*06/22/2016*	*17:00:00*			
Cooler Return			Analyzed	*MG3 06/22/2016*	*17:00:00*	*QCgroup*		
Z	**Return Cooler/No bottles Require**	**Returned**						
	Prepared:	***668165***		*06/21/2016*	*14:55:00*			
EPA 3510C			Analyzed	*MGH 06/22/2016*	*11:49:34*	*QCgroup*	*668356*	
	TCLP Liq-Liq Extr. W/Hex Exch.	**10/200**	**ml**					06
EPA 3510C			Analyzed	*CRG 06/23/2016*	*07:20:00*	*QCgroup*	*668522*	
	TCLP Liquid-Liquid Extract	**1/100**	**ml**					06
	Prepared:	***668165***		*06/21/2016*	*14:55:00*			
EPA 1311			Analyzed	*TDD 06/21/2016*	*14:55:00*	*QCgroup*	*668165*	
N	**TCLP Extraction Non-Volatile**	**SOLID EXT 2**						01
	Prepared:	***669092***		*06/27/2016*	*15:00:00*			
EPA 1311ZHE			Analyzed	*TDD 06/27/2016*	*15:00:00*	*QCgroup*	*669092*	
N	**TCLP Extraction ZHE Volatiles**	**100.0% SOLID**	**ml**					01
	Prepared:	***668165***		*06/21/2016*	*14:55:00*			
EPA 3005A			Analyzed	*TES 06/22/2016*	*12:45:00*	*QCgroup*	*668441*	
N	**Metals Digestion TCLP Extract**	**50/10**	**ml**					05

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Results

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Sample Preparation

1505098 Lime Mud Solid Samples *Received:* 06/21/2016

		Prepared:		***668651***	*06/23/2016*	*15:00:00*		
EPA 3050B					Analyzed	*TES 06/23/2016*	*15:00:00*	*QCgroup*	*668651*
N	**Solid/Sludge/Soil/Sediment Metal**		**50/1.04**		**grams**				01
		Prepared:		***668081***	*06/21/2016*	*08:30:00*		
EPA 3550B					Analyzed	*MCC 06/21/2016*	*08:30:00*	*QCgroup*	*668081*
N	**Sonic Extraction**		**1/30**		**ml**				01
		Prepared:		***668165***	*06/21/2016*	*14:55:00*		
EPA 7470A					Analyzed	*ALB 06/22/2016*	*10:30:00*	*QCgroup*	*668323*
N	**Metals Digestion TCLP 7470**		**50/2.5**		**ml**				05
		Prepared:		***668128***	*06/21/2016*	*13:40:00*		
EPA 7471A					Analyzed	*ALB 06/21/2016*	*13:40:00*	*QCgroup*	*668128*
N	**Solid Metals Digestion Hg**		**50/0.5115**		**grams**				01
		Prepared:		***668356***	*06/22/2016*	*11:49:34*		
EPA 8081A					Analyzed	*SLC 06/24/2016*	*16:29:00*	*QCgroup*	*669072*
N	**GC TCLP Pesticide**		**Entered**						11
		Prepared:		***668637***	*06/23/2016*	*12:40:00*		
EPA 8151					Analyzed	*EMT 06/27/2016*	*12:54:00*	*QCgroup*	*669047*
N	**GC TCLP Herbicide**		**Entered**						16
		Prepared:		***668165***	*06/21/2016*	*14:55:00*		
EPA 8151A (Prep)					Analyzed	*CRG 06/23/2016*	*12:40:00*	*QCgroup*	*668637*
N	**Esterification of TCLP Extract**		**10/1.0**		**ml**				06
		Prepared:		***668758***	*06/23/2016*	*19:36:00*		
EPA 8260B					Analyzed	*JRH 06/23/2016*	*19:36:00*	*QCgroup*	*668758*
N	**Volatiles by GC/MS**		**Entered**						01
		Prepared:		***669092***	*06/27/2016*	*15:00:00*		
EPA 8260B					Analyzed	*JRH 06/29/2016*	*13:53:00*	*QCgroup*	*669613*
N	**MS TCLP Volatile Analysis**		**Entered**						19
		Prepared:		***668081***	*06/21/2016*	*08:30:00*		
EPA 8270C					Analyzed	*SLC 06/22/2016*	*21:23:00*	*QCgroup*	*668696*
N	**Semivolatile Hydrocarbons**		**Entered**						02
		Prepared:		***668522***	*06/23/2016*	*07:20:00*		
EPA 8270C					Analyzed	*KJS 06/28/2016*	*18:44:00*	*QCgroup*	*669394*
N	**MS TCLP Semivolatile Analysis**		**Entered**						15
		Prepared:		***668892***	*06/24/2016*	*14:50:34*		
SM 2540 G-1997					Analyzed	*KBP 06/24/2016*	*14:50:34*	*QCgroup*	*668892*
N	**Total Solids Start Code**		**Started**						

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Results

Qualifiers:

B - Analyte detected in the associated method blank
D - Duplicate RPD was higher than expected
E - Estimated Value
(- Sample from Bulk Container
P - Spike recovery outside control limits due to matrix effects.
X - Standard reads higher than desired.
S - Standard reads lower than desired

We report results on an 'As Received' or wet basis unless marked 'Dry Weight'. Unless otherwise noted, testing was performed at Ana-lab's corporate laboratory that holds the following Federal and State certificates: Texas Department of Health Lead Firm Certificate 2110076, US Department of Agriculture Soil Import Permit S-37592, Texas Commisson on Environmental Quality Drinking Water Laboratory Certificate TX219, Texas Commission on Environmental Quality NELAP T104704201, Oklahoma Department of Environmental Quality Drinking Water Certification Lab ID# D9913, EPA Lab Number TX00063, USEPA Approved Perchlorate Testing Lab, Oklahoma Department of Environmental Quality Laboratory Certificate 8125, Arkansas Department of Environmental Quality Certification #03-070-0, Louisiana Department of Environmental Quality Laboratory Certification (NELAP, LELAP) #02008, Louisiana Department of Health and Hospitals Drinking Water (NELAP) # LA030020, US Department of Energy Approved, State of Kansas Department of Health and Environment Waste Water and Solid/Hazardous Waste Cert. E-10365. The Accredited column designates accreditation by N -- NELAC, or z -- not covered under NELAC scope of accreditation.

These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of Ana-Lab Corp. Unless otherwise specified, these test results meet the requirements of NELAC.
RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.

Paul Zhang, Ph.D., Quality Director

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Quality Control

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Lime Mud

Account	Project
GPDR -L	**746938**

Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

669146 Solid & Chemical Materials **SM2540 G-1997 /MOD**

ControlBlk

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*	*Out*
Total Solids for Dry Wt	669146	-0.0003			grams	116654585	

Duplicate

Parameter	*Sample*	*Type*	*Result*	*Unknown*	*Unit*	*RPD*	*Out*	*Limit%*
Total Solids for Dry Wt	1499889	Duplicate	93.1	92.2	%	0.971		20.0
Total Solids for Dry Wt	1501561	Duplicate	93.6	93.6	%	0		20.0
Total Solids for Dry Wt	1501828	Duplicate	93.2	92.4	%	0.862		20.0

668396 Solid & Chemical Materials **EPA 7471A**

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*	*Out*
Mercury	668128	ND	0.000198	0.0002	mg/kg	116640877	

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
Mercury	0.00516	0.005	mg/kg	103	90.0 - 110		116640876
Mercury	0.00505	0.005	mg/kg	101	90.0 - 110		116640884
Mercury	0.00514	0.005	mg/kg	103	90.0 - 110		116640890

ICL

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
Mercury	0.0197	0.02	mg/kg	98.5	90.0 - 110		116640875

ICV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
Mercury	0.00527	0.005	mg/kg	105	90.0 - 110		116640874

LCS

Parameter	*PrepSet*	*Reading*	*Known*	*Units*	*Recover%*	*Limits*	*File*	*Out*
Mercury	668128	0.00921	0.010	mg/kg	92.1	78.0 - 106	116640878	

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
Mercury	668128	0.00921	0.00908	0.010	78.0 - 106	92.1	90.8	mg/kg	1.42	20.0

MS

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
Mercury	1500901	1.10	0	0.300	0.929	70.1 - 110	86.1		mg/kg		25.0

MSD

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
Mercury	1500901	1.10	1.15	0.300	0.994	70.1 - 110	86.1	91.5	mg/kg	6.06	25.0

668399 Solid & Chemical Materials **EPA 7470A**

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Quality Control

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Mercury	668323	ND	0.00006840	0.0001	mg/L	116640981	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Mercury	0.00524	0.005	mg/L	105	90.0 - 110		116640973
TCLP Mercury	0.00513	0.005	mg/L	103	90.0 - 110		116640983
TCLP Mercury	0.00525	0.005	mg/L	105	90.0 - 110		116640989

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Mercury	0.0197	0.02	mg/L	98.5	90.0 - 110		116640963

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Mercury	0.00527	0.005	mg/L	105	90.0 - 110		116640962

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP Mercury	668323	0.00549	0.005	mg/L	110	86.7 - 116	116640982	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP Mercury	668323	0.00549	0.00548	0.005	86.7 - 116	110	110	mg/L	0.182	20.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Mercury	1500892	0.112	0	ND	0.100	83.3 - 120	112		mg/L		15.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Mercury	1500892	0.112	0.108	ND	0.100	83.3 - 120	112	108	mg/L	3.64	15.0

668514 Solid & Chemical Materials — EPA 6020A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Arsenic	668441	ND	0.010	0.010	mg/L	116643836	
TCLP Barium	668441	ND	0.010	0.010	mg/L	116643836	
TCLP Cadmium	668441	ND	0.001	0.001	mg/L	116643836	
TCLP Chromium	668441	ND	0.010	0.010	mg/L	116643836	
TCLP Lead	668441	ND	0.010	0.010	mg/L	116643836	
TCLP Selenium	668441	ND	0.010	0.010	mg/L	116643836	
TCLP Silver	668441	ND	0.010	0.010	mg/L	116643836	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Arsenic	0.0491	0.05	mg/L	98.2	90.0 - 110		116643816
TCLP Arsenic	0.0497	0.05	mg/L	99.4	90.0 - 110		116643822
TCLP Arsenic	0.0494	0.05	mg/L	98.8	90.0 - 110		116643832
TCLP Arsenic	0.0503	0.05	mg/L	101	90.0 - 110		116643842
TCLP Arsenic	0.0492	0.05	mg/L	98.4	90.0 - 110		116643849
TCLP Barium	0.050	0.05	mg/L	100	90.0 - 110		116643816
TCLP Barium	0.0495	0.05	mg/L	99.0	90.0 - 110		116643822
TCLP Barium	0.0495	0.05	mg/L	99.0	90.0 - 110		116643832

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Barium	0.0497	0.05	mg/L	99.4	90.0 - 110		116643842
TCLP Barium	0.0492	0.05	mg/L	98.4	90.0 - 110		116643849
TCLP Cadmium	0.0497	0.05	mg/L	99.4	90.0 - 110		116643816
TCLP Cadmium	0.0494	0.05	mg/L	98.8	90.0 - 110		116643822
TCLP Cadmium	0.0492	0.05	mg/L	98.4	90.0 - 110		116643832
TCLP Cadmium	0.0489	0.05	mg/L	97.8	90.0 - 110		116643842
TCLP Cadmium	0.0486	0.05	mg/L	97.2	90.0 - 110		116643849
TCLP Chromium	0.0508	0.05	mg/L	102	90.0 - 110		116643816
TCLP Chromium	0.0508	0.05	mg/L	102	90.0 - 110		116643822
TCLP Chromium	0.0503	0.05	mg/L	101	90.0 - 110		116643832
TCLP Chromium	0.0499	0.05	mg/L	99.8	90.0 - 110		116643842
TCLP Chromium	0.0502	0.05	mg/L	100	90.0 - 110		116643849
TCLP Lead	0.0512	0.05	mg/L	102	90.0 - 110		116643816
TCLP Lead	0.0519	0.05	mg/L	104	90.0 - 110		116643822
TCLP Lead	0.0514	0.05	mg/L	103	90.0 - 110		116643832
TCLP Lead	0.0506	0.05	mg/L	101	90.0 - 110		116643842
TCLP Lead	0.0509	0.05	mg/L	102	90.0 - 110		116643849
TCLP Selenium	0.0501	0.05	mg/L	100	90.0 - 110		116643816
TCLP Selenium	0.0514	0.05	mg/L	103	90.0 - 110		116643822
TCLP Selenium	0.0518	0.05	mg/L	104	90.0 - 110		116643832
TCLP Selenium	0.0516	0.05	mg/L	103	90.0 - 110		116643842
TCLP Selenium	0.0497	0.05	mg/L	99.4	90.0 - 110		116643849
TCLP Silver	0.0492	0.05	mg/L	98.4	90.0 - 110		116643816
TCLP Silver	0.050	0.05	mg/L	100	90.0 - 110		116643822
TCLP Silver	0.0494	0.05	mg/L	98.8	90.0 - 110		116643832
TCLP Silver	0.0487	0.05	mg/L	97.4	90.0 - 110		116643842
TCLP Silver	0.0488	0.05	mg/L	97.6	90.0 - 110		116643849

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Arsenic	0.0533	0.05	mg/L	107	90.0 - 110		116643804
TCLP Barium	0.0524	0.05	mg/L	105	90.0 - 110		116643804
TCLP Cadmium	0.052	0.05	mg/L	104	90.0 - 110		116643804
TCLP Chromium	0.0531	0.05	mg/L	106	90.0 - 110		116643804
TCLP Lead	0.0517	0.05	mg/L	103	90.0 - 110		116643804
TCLP Selenium	0.0528	0.05	mg/L	106	90.0 - 110		116643804
TCLP Silver	0.0515	0.05	mg/L	103	90.0 - 110		116643804

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP Arsenic	668441	0.485	0.500	mg/L	97.0	84.1 - 115	116643837	
TCLP Barium	668441	0.463	0.500	mg/L	92.6	85.5 - 111	116643837	
TCLP Cadmium	668441	0.245	0.250	mg/L	98.0	87.2 - 114	116643837	
TCLP Chromium	668441	0.485	0.500	mg/L	97.0	82.8 - 113	116643837	
TCLP Lead	668441	0.507	0.500	mg/L	101	84.5 - 115	116643837	
TCLP Selenium	668441	0.493	0.500	mg/L	98.6	86.3 - 119	116643837	
TCLP Silver	668441	0.0952	0.100	mg/L	95.2	83.6 - 112	116643837	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP Arsenic	668441	0.485	0.481	0.500	84.1 - 115	97.0	96.2	mg/L	0.828	14.0
TCLP Barium	668441	0.463	0.464	0.500	85.5 - 111	92.6	92.8	mg/L	0.216	14.0

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Quality Control

LCS Dup

Parameter	PrepSet	LCS	LCSD		Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP Cadmium	668441	0.245	0.247		0.250	87.2 - 114	98.0	98.8	mg/L	0.813	14.0
TCLP Chromium	668441	0.485	0.494		0.500	82.8 - 113	97.0	98.8	mg/L	1.84	14.0
TCLP Lead	668441	0.507	0.508		0.500	84.5 - 115	101	102	mg/L	0.197	14.0
TCLP Selenium	668441	0.493	0.492		0.500	86.3 - 119	98.6	98.4	mg/L	0.203	14.0
TCLP Silver	668441	0.0952	0.0951		0.100	83.6 - 112	95.2	95.1	mg/L	0.105	14.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Arsenic	1500892	2.35	0	ND	2.50	87.7 - 115	94.0		mg/L		20.0
TCLP Barium	1500892	11.7	0	9.80	2.50	78.8 - 112	76.0 *		mg/L		20.0
TCLP Cadmium	1500892	1.17	0	ND	1.25	89.5 - 111	93.6		mg/L		20.0
TCLP Chromium	1500892	2.47	0	0.144	2.50	79.9 - 112	93.0		mg/L		20.0
TCLP Lead	1500892	2.37	0	ND	2.50	83.6 - 112	94.8		mg/L		20.0
TCLP Selenium	1500892	2.31	0	ND	2.50	87.5 - 117	92.4		mg/L		20.0
TCLP Silver	1500892	0.455	0	ND	0.500	85.5 - 110	91.0		mg/L		20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Arsenic	1500892	2.35	2.29	ND	2.50	87.7 - 115	94.0	91.6	mg/L	2.59	20.0
TCLP Barium	1500892	11.7	12.6	9.80	2.50	78.8 - 112	76.0 *	112	mg/L	38.3 *	20.0
TCLP Cadmium	1500892	1.17	1.16	ND	1.25	89.5 - 111	93.6	92.8	mg/L	0.858	20.0
TCLP Chromium	1500892	2.47	2.46	0.144	2.50	79.9 - 112	93.0	92.6	mg/L	0.431	20.0
TCLP Lead	1500892	2.37	2.37	ND	2.50	83.6 - 112	94.8	94.8	mg/L	0	20.0
TCLP Selenium	1500892	2.31	2.28	ND	2.50	87.5 - 117	92.4	91.2	mg/L	1.31	20.0
TCLP Silver	1500892	0.455	0.453	ND	0.500	85.5 - 110	91.0	90.6	mg/L	0.441	20.0

668877 Solid & Chemical Materials — EPA 6010C

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units		File	Out
Boron	668651	0.00904	0.00876	0.100	mg/kg		116649551	
Tin, Total	668651	0.00786	0.00255	0.050	mg/kg	*	116649551	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Boron	5.19	5.00	mg/kg	104	90.0 - 110		116649550
Boron	5.13	5.00	mg/kg	103	90.0 - 110		116649559
Tin, Total	0.512	0.500	mg/kg	102	90.0 - 110		116649550
Tin, Total	0.507	0.500	mg/kg	101	90.0 - 110		116649559

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Boron	10.1	10.0	mg/kg	101	95.0 - 105		116649548
Tin, Total	1.01	1.00	mg/kg	101	95.0 - 105		116649548

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Boron	5.13	5.00	mg/kg	103	90.0 - 110		116649549
Tin, Total	0.509	0.500	mg/kg	102	90.0 - 110		116649549

LCS

Parameter	PrepSet	Reading		Known	Units	Recover%	Limits	File	Out
Boron	668651	4.63		5.00	mg/kg	92.6	85.5 - 112	116649552	
Tin, Total	668651	2.19		2.50	mg/kg	87.6	80.5 - 108	116649552	

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LCS Dup

Parameter	PrepSet	LCS	LCSD		Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Boron	668651	4.63	4.64		5.00	85.5 - 112	92.6	92.8	mg/kg	0.216	25.0
Tin, Total	668651	2.19	2.24		2.50	80.5 - 108	87.6	89.6	mg/kg	2.26	25.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Boron	1501824	241	0	5.53	238	37.2 - 140	98.9		mg/kg		25.0
Tin, Total	1501824	114	0	1.44	119	79.3 - 107	94.6		mg/kg		25.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Boron	1501824	241	247	5.53	236	37.2 - 140	98.9	101	mg/kg	2.52	25.0
Tin, Total	1501824	114	117	1.44	118	79.3 - 107	94.6	97.1	mg/kg	2.63	25.0

668888 Solid & Chemical Materials — EPA 6010C

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units		File	Out
Total Iron	668651	0.0222	0.0035	0.025	mg/Kg	*	116649831	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Iron	2.44	2.50	mg/Kg	97.6	90.0 - 110		116649830
Total Iron	2.64	2.50	mg/Kg	106	90.0 - 110		116649838

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Iron	4.89	5.00	mg/Kg	97.8	95.0 - 105		116649823

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Iron	2.41	2.50	mg/Kg	96.4	90.0 - 110		116649827

LCS

Parameter	PrepSet	Reading		Known	Units	Recover%	Limits	File	Out
Total Iron	668651	2.73		2.50	mg/Kg	109	83.5 - 121	116649832	

LCS Dup

Parameter	PrepSet	LCS	LCSD		Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Total Iron	668651	2.73	2.58		2.50	83.5 - 121	109	103	mg/Kg	5.65	25.0

LDR

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Iron	9.41	10.0	mg/Kg	94.1	90.0 - 110		116649824

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Total Iron	1501824	1450	0	1220	119	84.3 - 121	193 *		mg/Kg		25.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Total Iron	1501824	1450	1260	1220	118	84.3 - 121	193 *	33.6 *	mg/Kg	141 *	25.0

668903 Solid & Chemical Materials — EPA 6020A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units		File	Out

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Parameter	PrepSet	Reading	MDL	MQL	Units		File	Out
Aluminum, Total	668651	0.00454	0.000592	0.005	mg/kg	*	116650352	
Antimony, Total	668651	0.000838	0.000494	0.001	mg/kg		116650352	
Arsenic, Total	668651	ND	0.000869	0.002	mg/kg		116650352	
Barium	668651	ND	0.00241	0.003	mg/kg		116650352	
Cadmium, Total	668651	ND	0.000187	0.001	mg/kg		116650352	
Chromium, Total	668651	0.000824	0.000264	0.001	mg/kg	*	116650352	
Cobalt	668651	ND	0.00003260	0.001	mg/kg		116650352	
Copper, Total	668651	0.00102	0.000134	0.001	mg/kg	*	116650352	
Lead, Total	668651	0.000147	0.00004460	0.001	mg/kg	*	116650352	
Molybdenum	668651	0.000254	0.000186	0.001	mg/kg		116650352	
Nickel, Total	668651	ND	0.000441	0.001	mg/kg		116650352	
Selenium, Total	668651	ND	0.00194	0.003	mg/kg		116650352	
Silver, Total	668651	0.0000364	0.00002560	0.001	mg/kg		116650352	
Thallium, Total	668651	0.0000313	0.00002470	0.001	mg/kg		116650352	
Vanadium	668651	ND	0.000585	0.001	mg/kg		116650352	
Zinc, Total	668651	0.00111	0.0011	0.005	mg/kg		116650352	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Aluminum, Total	0.0508	0.05	mg/kg	102	90.0 - 110		116650351
Aluminum, Total	0.0519	0.05	mg/kg	104	90.0 - 110		116650357
Aluminum, Total	0.0508	0.05	mg/kg	102	90.0 - 110		116650361
Antimony, Total	0.0498	0.05	mg/kg	99.6	90.0 - 110		116650351
Antimony, Total	0.0512	0.05	mg/kg	102	90.0 - 110		116650357
Antimony, Total	0.0503	0.05	mg/kg	101	90.0 - 110		116650361
Arsenic, Total	0.0499	0.05	mg/kg	99.8	90.0 - 110		116650351
Arsenic, Total	0.0521	0.05	mg/kg	104	90.0 - 110		116650357
Arsenic, Total	0.0512	0.05	mg/kg	102	90.0 - 110		116650361
Barium	0.0509	0.05	mg/kg	102	90.0 - 110		116650351
Barium	0.0516	0.05	mg/kg	103	90.0 - 110		116650357
Barium	0.0508	0.05	mg/kg	102	90.0 - 110		116650361
Cadmium, Total	0.0502	0.05	mg/kg	100	90.0 - 110		116650351
Cadmium, Total	0.0495	0.05	mg/kg	99.0	90.0 - 110		116650357
Cadmium, Total	0.0497	0.05	mg/kg	99.4	90.0 - 110		116650361
Chromium, Total	0.0512	0.05	mg/kg	102	90.0 - 110		116650351
Chromium, Total	0.0501	0.05	mg/kg	100	90.0 - 110		116650357
Chromium, Total	0.0507	0.05	mg/kg	101	90.0 - 110		116650361
Cobalt	0.0511	0.05	mg/kg	102	90.0 - 110		116650351
Cobalt	0.0501	0.05	mg/kg	100	90.0 - 110		116650357
Cobalt	0.0503	0.05	mg/kg	101	90.0 - 110		116650361
Copper, Total	0.0506	0.05	mg/kg	101	90.0 - 110		116650351
Copper, Total	0.053	0.05	mg/kg	106	90.0 - 110		116650357
Copper, Total	0.0532	0.05	mg/kg	106	90.0 - 110		116650361
Lead, Total	0.0528	0.05	mg/kg	106	90.0 - 110		116650351
Lead, Total	0.0514	0.05	mg/kg	103	90.0 - 110		116650357
Lead, Total	0.0515	0.05	mg/kg	103	90.0 - 110		116650361
Molybdenum	0.0495	0.05	mg/kg	99.0	90.0 - 110		116650351
Molybdenum	0.0506	0.05	mg/kg	101	90.0 - 110		116650357
Molybdenum	0.0502	0.05	mg/kg	100	90.0 - 110		116650361
Nickel, Total	0.0514	0.05	mg/kg	103	90.0 - 110		116650351
Nickel, Total	0.0507	0.05	mg/kg	101	90.0 - 110		116650357

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Nickel, Total	0.0512	0.05	mg/kg	102	90.0 - 110		116650361
Selenium, Total	0.0511	0.05	mg/kg	102	90.0 - 110		116650351
Selenium, Total	0.053	0.05	mg/kg	106	90.0 - 110		116650357
Selenium, Total	0.0529	0.05	mg/kg	106	90.0 - 110		116650361
Silver, Total	0.0501	0.05	mg/kg	100	90.0 - 110		116650351
Silver, Total	0.0506	0.05	mg/kg	101	90.0 - 110		116650357
Silver, Total	0.0508	0.05	mg/kg	102	90.0 - 110		116650361
Thallium, Total	0.0514	0.05	mg/kg	103	90.0 - 110		116650351
Thallium, Total	0.0501	0.05	mg/kg	100	90.0 - 110		116650357
Thallium, Total	0.0503	0.05	mg/kg	101	90.0 - 110		116650361
Vanadium	0.0508	0.05	mg/kg	102	90.0 - 110		116650351
Vanadium	0.0501	0.05	mg/kg	100	90.0 - 110		116650357
Vanadium	0.0503	0.05	mg/kg	101	90.0 - 110		116650361
Zinc, Total	0.0508	0.05	mg/kg	102	90.0 - 110		116650351
Zinc, Total	0.0523	0.05	mg/kg	105	90.0 - 110		116650357
Zinc, Total	0.0527	0.05	mg/kg	105	90.0 - 110		116650361

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Aluminum, Total	0.0505	0.05	mg/kg	101	90.0 - 110		116650347
Antimony, Total	0.0512	0.05	mg/kg	102	90.0 - 110		116650347
Arsenic, Total	0.0533	0.05	mg/kg	107	90.0 - 110		116650347
Barium	0.0521	0.05	mg/kg	104	90.0 - 110		116650347
Cadmium, Total	0.0526	0.05	mg/kg	105	90.0 - 110		116650347
Chromium, Total	0.0522	0.05	mg/kg	104	90.0 - 110		116650347
Cobalt	0.0525	0.05	mg/kg	105	90.0 - 110		116650347
Copper, Total	0.0532	0.05	mg/kg	106	90.0 - 110		116650347
Lead, Total	0.0517	0.05	mg/kg	103	90.0 - 110		116650347
Molybdenum	0.0518	0.05	mg/kg	104	90.0 - 110		116650347
Nickel, Total	0.0528	0.05	mg/kg	106	90.0 - 110		116650347
Selenium, Total	0.0537	0.05	mg/kg	107	90.0 - 110		116650347
Silver, Total	0.0526	0.05	mg/kg	105	90.0 - 110		116650347
Thallium, Total	0.0515	0.05	mg/kg	103	90.0 - 110		116650347
Vanadium	0.0519	0.05	mg/kg	104	90.0 - 110		116650347
Zinc, Total	0.0529	0.05	mg/kg	106	90.0 - 110		116650347

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Aluminum, Total	668651	2.64	2.50	mg/kg	106	80.5 - 116	116650353	
Antimony, Total	668651	2.42	2.50	mg/kg	96.8	89.2 - 110	116650353	
Arsenic, Total	668651	2.34	2.50	mg/kg	93.6	87.9 - 110	116650353	
Barium	668651	2.43	2.50	mg/kg	97.2	88.6 - 110	116650353	
Cadmium, Total	668651	1.26	1.25	mg/kg	101	89.2 - 109	116650353	
Chromium, Total	668651	2.45	2.50	mg/kg	98.0	84.7 - 112	116650353	
Cobalt	668651	2.38	2.50	mg/kg	95.2	83.8 - 111	116650353	
Copper, Total	668651	2.31	2.50	mg/kg	92.4	85.4 - 109	116650353	
Lead, Total	668651	2.66	2.50	mg/kg	106	86.4 - 111	116650353	
Molybdenum	668651	2.71	2.50	mg/kg	108	90.1 - 116	116650353	
Nickel, Total	668651	2.35	2.50	mg/kg	94.0	82.4 - 110	116650353	
Selenium, Total	668651	2.25	2.50	mg/kg	90.0	83.6 - 111	116650353	
Silver, Total	668651	0.481	0.500	mg/kg	96.2	87.0 - 113	116650353	

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Quality Control

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Thallium, Total	668651	2.56	2.50	mg/kg	102	79.7 - 105	116650353	
Vanadium	668651	2.44	2.50	mg/kg	97.6	86.6 - 110	116650353	
Zinc, Total	668651	2.27	2.50	mg/kg	90.8	82.9 - 113	116650353	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Aluminum, Total	668651	2.64	2.54	2.50	80.5 - 116	106	102	mg/kg	3.86	20.0
Antimony, Total	668651	2.42	2.42	2.50	89.2 - 110	96.8	96.8	mg/kg	0	20.0
Arsenic, Total	668651	2.34	2.33	2.50	87.9 - 110	93.6	93.2	mg/kg	0.428	20.0
Barium	668651	2.43	2.40	2.50	88.6 - 110	97.2	96.0	mg/kg	1.24	20.0
Cadmium, Total	668651	1.26	1.25	1.25	89.2 - 109	101	100	mg/kg	0.797	20.0
Chromium, Total	668651	2.45	2.43	2.50	84.7 - 112	98.0	97.2	mg/kg	0.820	20.0
Cobalt	668651	2.38	2.35	2.50	83.8 - 111	95.2	94.0	mg/kg	1.27	20.0
Copper, Total	668651	2.31	2.31	2.50	85.4 - 109	92.4	92.4	mg/kg	0	20.0
Lead, Total	668651	2.66	2.64	2.50	86.4 - 111	106	106	mg/kg	0.755	20.0
Molybdenum	668651	2.71	2.62	2.50	90.1 - 116	108	105	mg/kg	3.38	20.0
Nickel, Total	668651	2.35	2.32	2.50	82.4 - 110	94.0	92.8	mg/kg	1.28	20.0
Selenium, Total	668651	2.25	2.22	2.50	83.6 - 111	90.0	88.8	mg/kg	1.34	20.0
Silver, Total	668651	0.481	0.470	0.500	87.0 - 113	96.2	94.0	mg/kg	2.31	20.0
Thallium, Total	668651	2.56	2.53	2.50	79.7 - 105	102	101	mg/kg	1.18	20.0
Vanadium	668651	2.44	2.43	2.50	86.6 - 110	97.6	97.2	mg/kg	0.411	20.0
Zinc, Total	668651	2.27	2.24	2.50	82.9 - 113	90.8	89.6	mg/kg	1.33	20.0

LDR

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Aluminum, Total	96.1	100	mg/kg	96.1	90.0 - 110		116650348
Antimony, Total	0.955	1	mg/kg	95.5	90.0 - 110		116650350
Arsenic, Total	9.71	10	mg/kg	97.1	90.0 - 110		116650350
Barium	9.66	10	mg/kg	96.6	90.0 - 110		116650350
Cadmium, Total	9.95	10	mg/kg	99.5	90.0 - 110		116650350
Chromium, Total	9.72	10	mg/kg	97.2	90.0 - 110		116650350
Cobalt	9.65	10	mg/kg	96.5	90.0 - 110		116650350
Copper, Total	9.58	10	mg/kg	95.8	90.0 - 110		116650350
Lead, Total	9.54	10	mg/kg	95.4	90.0 - 110		116650350
Molybdenum	9.91	10	mg/kg	99.1	90.0 - 110		116650350
Nickel, Total	9.78	10	mg/kg	97.8	90.0 - 110		116650350
Selenium, Total	9.65	10	mg/kg	96.5	90.0 - 110		116650350
Thallium, Total	9.34	10	mg/kg	93.4	90.0 - 110		116650350
Vanadium	9.57	10	mg/kg	95.7	90.0 - 110		116650350
Zinc, Total	9.84	10	mg/kg	98.4	90.0 - 110		116650350

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Aluminum, Total	1501824	986	0	882	119	70.0 - 130	87.4		mg/kg		20.0
Antimony, Total	1501824	111	0	0.229	119	3.01 - 158	93.1		mg/kg		20.0
Arsenic, Total	1501824	120	0	0.417	119	71.2 - 118	100		mg/kg		20.0
Barium	1501824	128	0	14.4	119	0.100 - 235	95.5		mg/kg		20.0
Cadmium, Total	1501824	59.7	0	ND	59.5	89.0 - 109	100		mg/kg		20.0
Chromium, Total	1501824	120	0	1.78	119	62.8 - 120	99.3		mg/kg		20.0
Cobalt	1501824	124	0	0.379	119	69.4 - 115	104		mg/kg		20.0
Copper, Total	1501824	151	0	24.1	119	50.0 - 125	107		mg/kg		20.0
Lead, Total	1501824	122	0	1.02	119	51.4 - 133	102		mg/kg		20.0

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MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Molybdenum	1501824	125	0	0.495	119	66.9 - 133	105		mg/kg		20.0
Nickel, Total	1501824	128	0	0.813	119	62.7 - 113	107		mg/kg		20.0
Selenium, Total	1501824	113	0	0.216	119	64.2 - 118	94.8		mg/kg		20.0
Silver, Total	1501824	22.4	0	0.0171	23.8	80.5 - 114	94.0		mg/kg		20.0
Thallium, Total	1501824	116	0	0.0192	119	71.8 - 103	97.5		mg/kg		20.0
Vanadium	1501824	117	0	2.18	119	47.8 - 141	96.5		mg/kg		20.0
Zinc, Total	1501824	157	0	40.9	119	48.0 - 127	97.6		mg/kg		20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Aluminum, Total	1501824	986	949	882	118	70.0 - 130	87.4	56.3 *	mg/kg	43.3 *	20.0
Antimony, Total	1501824	111	110	0.229	118	3.01 - 158	93.1	92.2	mg/kg	0.907	20.0
Arsenic, Total	1501824	120	120	0.417	118	71.2 - 118	100	100	mg/kg	0	20.0
Barium	1501824	128	126	14.4	118	0.100 - 235	95.5	93.8	mg/kg	1.78	20.0
Cadmium, Total	1501824	59.7	59.4	ND	59.0	89.0 - 109	100	99.8	mg/kg	0.504	20.0
Chromium, Total	1501824	120	120	1.78	118	62.8 - 120	99.3	99.3	mg/kg	0	20.0
Cobalt	1501824	124	128	0.379	118	69.4 - 115	104	107	mg/kg	3.18	20.0
Copper, Total	1501824	151	147	24.1	118	50.0 - 125	107	103	mg/kg	3.20	20.0
Lead, Total	1501824	122	120	1.02	118	51.4 - 133	102	100	mg/kg	1.67	20.0
Molybdenum	1501824	125	124	0.495	118	66.9 - 133	105	104	mg/kg	0.806	20.0
Nickel, Total	1501824	128	132	0.813	118	62.7 - 113	107	110	mg/kg	3.10	20.0
Selenium, Total	1501824	113	112	0.216	118	64.2 - 118	94.8	93.9	mg/kg	0.891	20.0
Silver, Total	1501824	22.4	22.0	0.0171	23.6	80.5 - 114	94.0	92.4	mg/kg	1.80	20.0
Thallium, Total	1501824	116	115	0.0192	118	71.8 - 103	97.5	96.6	mg/kg	0.866	20.0
Vanadium	1501824	117	117	2.18	118	47.8 - 141	96.5	96.5	mg/kg	0	20.0
Zinc, Total	1501824	157	148	40.9	118	48.0 - 127	97.6	90.0	mg/kg	8.06	20.0

668696 Solid & Chemical Materials **EPA 8270C**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
1,2,4-Trichlorobenzene	668081	ND	6.49	33.3	ug/kg	116646555	
1,2-Dichlorobenzene	668081	ND	3.53	33.3	ug/kg	116646555	
1,2-DPH (as azobenzene)	668081	ND	9.99	33.3	ug/kg	116646555	
1,3-Dichlorobenzene	668081	ND	5.33	33.3	ug/kg	116646555	
1,4-Dichlorobenzene	668081	ND	4.03	33.3	ug/kg	116646555	
2,4,5-Trichlorophenol	668081	ND	6.43	33.3	ug/kg	116646555	
2,4,6-Trichlorophenol	668081	ND	89.2	89.2	ug/kg	116646555	
2,4-Dichlorophenol	668081	ND	47.3	47.3	ug/kg	116646555	
2,4-Dimethylphenol	668081	ND	15.8	33.3	ug/kg	116646555	
2,4-Dinitrophenol	668081	ND	69.9	69.9	ug/kg	116646555	
2,4-Dinitrotoluene	668081	ND	43.0	43.0	ug/kg	116646555	
2,6-Dichlorophenol	668081	ND	131	131	ug/kg	116646555	
2,6-Dinitrotoluene	668081	ND	56.6	56.6	ug/kg	116646555	
2-Chloronaphthalene	668081	ND	4.06	33.3	ug/kg	116646555	
2-Chlorophenol	668081	ND	55.9	55.9	ug/kg	116646555	
2-Methylphenol (o-Cresol)	668081	ND	160	333	ug/kg	116646555	
2-Nitrophenol	668081	ND	121	121	ug/kg	116646555	
3&4-Methylphenol (m&p-Cresol)	668081	ND	87.9	87.9	ug/kg	116646555	
3,3'-Dichlorobenzidine	668081	ND	2130	2160	ug/kg	116646555	
4,6-Dinitro-2-methylphenol	668081	ND	151	151	ug/kg	116646555	

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Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*	*Out*
4-Bromophenyl phenyl ether	668081	ND	8.69	33.3	ug/kg	116646555	
4-Chlorophenyl phenyl ethe	668081	ND	3.60	33.3	ug/kg	116646555	
4-Nitrophenol	668081	ND	16.5	33.3	ug/kg	116646555	
Acenaphthene	668081	ND	4.10	33.3	ug/kg	116646555	
Acenaphthylene	668081	ND	138	138	ug/kg	116646555	
Anthracene	668081	ND	131	131	ug/kg	116646555	
Benzidine	668081	ND	25.0	33.3	ug/kg	116646555	
Benzo(a)anthracene	668081	ND	8.52	33.3	ug/kg	116646555	
Benzo(a)pyrene	668081	ND	131	131	ug/kg	116646555	
Benzo(b)fluoranthene	668081	ND	343	343	ug/kg	116646555	
Benzo(ghi)perylene	668081	ND	289	289	ug/kg	116646555	
Benzo(k)fluoranthene	668081	ND	336	336	ug/kg	116646555	
Benzyl Butyl phthalate	668081	ND	26.5	33.3	ug/kg	116646555	
Bis(2-chloroethoxy)methane	668081	ND	3.66	33.3	ug/kg	116646555	
Bis(2-chloroethyl)ether	668081	ND	5.99	33.3	ug/kg	116646555	
Bis(2-chloroisopropyl)ether	668081	ND	4.16	33.3	ug/kg	116646555	
Bis(2-ethylhexyl)phthalate	668081	ND	23.1	166	ug/kg	116646555	
Chrysene (Benzo(a)phenanthrene)	668081	ND	4.00	33.3	ug/kg	116646555	
Dibenz(a,h)anthracene	668081	ND	239	239	ug/kg	116646555	
Diethyl phthalate	668081	ND	10.5	33.3	ug/kg	116646555	
Dimethyl phthalate	668081	ND	4.30	33.3	ug/kg	116646555	
Di-n-butylphthalate	668081	ND	264	264	ug/kg	116646555	
Di-n-octylphthalate	668081	ND	332	332	ug/kg	116646555	
Fluoranthene(Benzo(j,k)fluor ene)	668081	ND	3.93	33.3	ug/kg	116646555	
Fluorene	668081	ND	3.63	33.3	ug/kg	116646555	
Hexachlorobenzene	668081	ND	4.43	33.3	ug/kg	116646555	
Hexachlorobutadiene	668081	ND	4.30	33.3	ug/kg	116646555	
Hexachlorocyclopentadiene	668081	ND	42.6	42.6	ug/kg	116646555	
Hexachloroethane	668081	ND	16.1	33.3	ug/kg	116646555	
Indeno(1,2,3-cd)pyrene	668081	ND	241	241	ug/kg	116646555	
Isophorone	668081	ND	3.53	33.3	ug/kg	116646555	
Naphthalene	668081	ND	6.57	33.3	ug/kg	116646555	
Nitrobenzene	668081	ND	27.1	33.3	ug/kg	116646555	
N-Nitrosodimethylamine	668081	ND	15.2	33.3	ug/kg	116646555	
N-Nitrosodi-n-propylamine	668081	ND	6.33	33.3	ug/kg	116646555	
N-Nitrosodiphenylamine (as DPA	668081	ND	130	130	ug/kg	116646555	
p-Chloro-m-Cresol (4-Chloro-3-me	668081	ND	55.6	55.6	ug/kg	116646555	
Pentachlorophenol	668081	ND	39.3	39.3	ug/kg	116646555	
Phenanthrene	668081	ND	3.50	33.3	ug/kg	116646555	
Phenol	668081	ND	34.0	34.0	ug/kg	116646555	
Pyrene	668081	ND	6.49	33.3	ug/kg	116646555	
Pyridine	668081	ND	56.6	56.6	ug/kg	116646555	

CCC

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
1,4-Dichlorobenzene	44400	50000.0	ug/kg	88.8	80.0 - 120		116646554
2,4,6-Trichlorophenol	50100	50000.0	ug/kg	100	80.0 - 120		116646554
2,4-Dichlorophenol	48700	50000.0	ug/kg	97.4	80.0 - 120		116646554

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CCC

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
2-Nitrophenol	47700	50000.0	ug/kg	95.4	80.0 - 120		116646554
Acenaphthene	45600	50000.0	ug/kg	91.2	80.0 - 120		116646554
Benzo(a)pyrene	47600	50000.0	ug/kg	95.2	80.0 - 120		116646554
Di-n-octylphthalate	49300	50000.0	ug/kg	98.6	80.0 - 120		116646554
Fluoranthene(Benzo(j,k)fluor ene)	57300	50000.0	ug/kg	115	80.0 - 120		116646554
Hexachlorobutadiene	52200	50000.0	ug/kg	104	80.0 - 120		116646554
N-Nitrosodiphenylamine (as DPA	49800	50000.0	ug/kg	99.6	80.0 - 120		116646554
p-Chloro-m-Cresol (4-Chloro-3-me	51500	50000.0	ug/kg	103	80.0 - 120		116646554
Pentachlorophenol	44600	50000.0	ug/kg	89.2	80.0 - 120		116646554
Phenol	43700	50000.0	ug/kg	87.4	80.0 - 120		116646554

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
1,2,4-Trichlorobenzene	45900	50000	ug/kg	91.8	80.0 - 120		116646554
1,2-Dichlorobenzene	42900	50000	ug/kg	85.8	80.0 - 120		116646554
1,2-DPH (as azobenzene)	45100	50000	ug/kg	90.2	80.0 - 120		116646554
1,3-Dichlorobenzene	43000	50000	ug/kg	86.0	80.0 - 120		116646554
1,4-Dichlorobenzene	44400	50000	ug/kg	88.8	80.0 - 120		116646554
2,4,5-Trichlorophenol	49200	50000	ug/kg	98.4	80.0 - 120		116646554
2,4,6-Trichlorophenol	50100	50000	ug/kg	100	80.0 - 120		116646554
2,4-Dichlorophenol	48700	50000	ug/kg	97.4	80.0 - 120		116646554
2,4-Dimethylphenol	45200	50000	ug/kg	90.4	80.0 - 120		116646554
2,4-Dinitrophenol	47100	50000	ug/kg	94.2	80.0 - 120		116646554
2,4-Dinitrotoluene	51900	50000	ug/kg	104	80.0 - 120		116646554
2,6-Dichlorophenol	49400	50000	ug/kg	98.8	80.0 - 120		116646554
2,6-Dinitrotoluene	51000	50000	ug/kg	102	80.0 - 120		116646554
2-Chloronaphthalene	49300	50000	ug/kg	98.6	80.0 - 120		116646554
2-Chlorophenol	45100	50000	ug/kg	90.2	80.0 - 120		116646554
2-Methylphenol (o-Cresol)	43300	50000	ug/kg	86.6	80.0 - 120		116646554
2-Nitrophenol	47700	50000	ug/kg	95.4	80.0 - 120		116646554
3&4-Methylphenol (m&p-Cresol)	42900	50000	ug/kg	85.8	80.0 - 120		116646554
3,3'-Dichlorobenzidine	48500	50000	ug/kg	97.0	80.0 - 120		116646554
4,6-Dinitro-2-methylphenol	47200	50000	ug/kg	94.4	80.0 - 120		116646554
4-Bromophenyl phenyl ether	43700	50000	ug/kg	87.4	80.0 - 120		116646554
4-Chlorophenyl phenyl ethe	44100	50000	ug/kg	88.2	80.0 - 120		116646554
4-Nitrophenol	42600	50000	ug/kg	85.2	80.0 - 120		116646554
Acenaphthene	45600	50000	ug/kg	91.2	80.0 - 120		116646554
Acenaphthylene	47600	50000	ug/kg	95.2	80.0 - 120		116646554
Anthracene	44200	50000	ug/kg	88.4	80.0 - 120		116646554
Benzidine	58100	50000	ug/kg	116	80.0 - 120		116646554
Benzo(a)anthracene	45200	50000	ug/kg	90.4	80.0 - 120		116646554
Benzo(a)pyrene	47600	50000	ug/kg	95.2	80.0 - 120		116646554
Benzo(b)fluoranthene	49200	50000	ug/kg	98.4	80.0 - 120		116646554
Benzo(ghi)perylene	47500	50000	ug/kg	95.0	80.0 - 120		116646554
Benzo(k)fluoranthene	44400	50000	ug/kg	88.8	80.0 - 120		116646554
Benzyl Butyl phthalate	48200	50000	ug/kg	96.4	80.0 - 120		116646554
Bis(2-chloroethoxy)methane	44100	50000	ug/kg	88.2	80.0 - 120		116646554
Bis(2-chloroethyl)ether	42200	50000	ug/kg	84.4	80.0 - 120		116646554

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Bis(2-chloroisopropyl)ether	39400	50000	ug/kg	78.8	80.0 - 120	*	116646554
Bis(2-ethylhexyl)phthalate	46400	50000	ug/kg	92.8	80.0 - 120		116646554
Chrysene (Benzo(a)phenanthrene)	43700	50000	ug/kg	87.4	80.0 - 120		116646554
Dibenz(a,h)anthracene	47700	50000	ug/kg	95.4	80.0 - 120		116646554
Diethyl phthalate	40600	50000	ug/kg	81.2	80.0 - 120		116646554
Dimethyl phthalate	46300	50000	ug/kg	92.6	80.0 - 120		116646554
Di-n-butylphthalate	50000	50000	ug/kg	100	80.0 - 120		116646554
Di-n-octylphthalate	49300	50000	ug/kg	98.6	80.0 - 120		116646554
Fluoranthene(Benzo(j,k)fluorene)	57300	50000	ug/kg	115	80.0 - 120		116646554
Fluorene	42900	50000	ug/kg	85.8	80.0 - 120		116646554
Hexachlorobenzene	42300	50000	ug/kg	84.6	80.0 - 120		116646554
Hexachlorobutadiene	52200	50000	ug/kg	104	80.0 - 120		116646554
Hexachlorocyclopentadiene	49000	50000	ug/kg	98.0	80.0 - 120		116646554
Hexachloroethane	45900	50000	ug/kg	91.8	80.0 - 120		116646554
Indeno(1,2,3-cd)pyrene	44600	50000	ug/kg	89.2	80.0 - 120		116646554
Isophorone	41000	50000	ug/kg	82.0	80.0 - 120		116646554
Naphthalene	44100	50000	ug/kg	88.2	80.0 - 120		116646554
Nitrobenzene	59100	50000	ug/kg	118	80.0 - 120		116646554
N-Nitrosodimethylamine	44000	50000	ug/kg	88.0	80.0 - 120		116646554
N-Nitrosodi-n-propylamine	44800	50000	ug/kg	89.6	80.0 - 120		116646554
N-Nitrosodiphenylamine (as DPA	49800	50000	ug/kg	99.6	80.0 - 120		116646554
p-Chloro-m-Cresol (4-Chloro-3-me	51500	50000	ug/kg	103	80.0 - 120		116646554
Pentachlorophenol	44600	50000	ug/kg	89.2	80.0 - 120		116646554
Phenanthrene	43800	50000	ug/kg	87.6	80.0 - 120		116646554
Phenol	43700	50000	ug/kg	87.4	80.0 - 120		116646554
Pyrene	50800	50000	ug/kg	102	80.0 - 120		116646554
Pyridine	57100	50000	ug/kg	114	80.0 - 120		116646554

DFTPP

Parameter		RefMass	Reading	%	Limits%	Out	File
DFTPP Mass 127	578278	198	20208	53.8	40.0 - 60.0		116646553
DFTPP Mass 197	578278	198	0	0.0	0 - 1.00		116646553
DFTPP Mass 198	578278	198	37582	100.0	100 - 100		116646553
DFTPP Mass 199	578278	198	2609	6.9	5.00 - 9.00		116646553
DFTPP Mass 275	578278	198	8246	21.9	10.0 - 30.0		116646553
DFTPP Mass 365	578278	198	999	2.7	1.00 - 100		116646553
DFTPP Mass 441	578278	443	4662	78.8	0 - 100		116646553
DFTPP Mass 442	578278	198	30034	79.9	40.0 - 100		116646553
DFTPP Mass 443	578278	442	5913	19.7	17.0 - 23.0		116646553
DFTPP Mass 51	578278	198	13241	35.2	30.0 - 60.0		116646553
DFTPP Mass 68	578278	69.0	58	0.3	0 - 2.00		116646553
DFTPP Mass 69	578278	198	16795	44.7	0 - 100		116646553
DFTPP Mass 70	578278	69.0	96	0.6	0 - 2.00		116646553

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-IST D	668081	Blank	113300	123500	61760	185300		116646555	668081

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IS Areas

Parameter	*Sample*	*Type*	*Reading*	*CCVISM*	*Low*	*High*	*Out*	*File*	*PrepSet*
1,4-Dichlorobenzene-d4-ISTD	668081	LCS	148500	123500	61760	185300		116646556	668081
1,4-Dichlorobenzene-d4-ISTD	668081	LCS Dup	126700	123500	61760	185300		116646557	668081
Acenaphthene-d10-ISTD	668081	Blank	271700	260600	130300	391000		116646555	668081
Acenaphthene-d10-ISTD	668081	LCS	305800	260600	130300	391000		116646556	668081
Acenaphthene-d10-ISTD	668081	LCS Dup	241500	260600	130300	391000		116646557	668081
Chrysene-d12-ISTD	668081	Blank	285900	324600	162300	486900		116646555	668081
Chrysene-d12-ISTD	668081	LCS	274300	324600	162300	486900		116646556	668081
Chrysene-d12-ISTD	668081	LCS Dup	230700	324600	162300	486900		116646557	668081
Naphthalene-d8-ISTD	668081	Blank	439200	450200	225100	675300		116646555	668081
Naphthalene-d8-ISTD	668081	LCS	567300	450200	225100	675300		116646556	668081
Naphthalene-d8-ISTD	668081	LCS Dup	474300	450200	225100	675300		116646557	668081
Perylene-d12-ISTD	668081	Blank	187700	242900	121500	364400		116646555	668081
Perylene-d12-ISTD	668081	LCS	176800	242900	121500	364400		116646556	668081
Perylene-d12-ISTD	668081	LCS Dup	158600	242900	121500	364400		116646557	668081
Phenanthrene-d10-ISTD	668081	Blank	377200	395400	197700	593100		116646555	668081
Phenanthrene-d10-ISTD	668081	LCS	413400	395400	197700	593100		116646556	668081
Phenanthrene-d10-ISTD	668081	LCS Dup	342000	395400	197700	593100		116646557	668081
1,4-Dichlorobenzene-d4-ISTD	1500296	MS	125100	123500	61760	185300		116646561	668081
1,4-Dichlorobenzene-d4-ISTD	1500296	MSD	98630	123500	61760	185300		116646562	668081
Acenaphthene-d10-ISTD	1500296	MS	266400	260600	130300	391000		116646561	668081
Acenaphthene-d10-ISTD	1500296	MSD	176000	260600	130300	391000		116646562	668081
Chrysene-d12-ISTD	1500296	MS	257500	324600	162300	486900		116646561	668081
Chrysene-d12-ISTD	1500296	MSD	144000	324600	162300	486900	*	116646562	668081
Naphthalene-d8-ISTD	1500296	MS	480000	450200	225100	675300		116646561	668081
Naphthalene-d8-ISTD	1500296	MSD	355900	450200	225100	675300		116646562	668081
Perylene-d12-ISTD	1500296	MS	179700	242900	121500	364400		116646561	668081
Perylene-d12-ISTD	1500296	MSD	109900	242900	121500	364400	*	116646562	668081
Phenanthrene-d10-ISTD	1500296	MS	406000	395400	197700	593100		116646561	668081
Phenanthrene-d10-ISTD	1500296	MSD	214900	395400	197700	593100		116646562	668081

IS RetTime

Parameter	*Sample*	*Type*	*Reading*	*CCVISM*	*Low*	*High*	*Out*	*File*	*PrepSet*
1,4-Dichlorobenzene-d4-ISTD	668081	Blank	5.060	5.070	5.010	5.130		116646555	668081
1,4-Dichlorobenzene-d4-ISTD	668081	LCS	5.060	5.070	5.010	5.130		116646556	668081
1,4-Dichlorobenzene-d4-ISTD	668081	LCS Dup	5.070	5.070	5.010	5.130		116646557	668081
Acenaphthene-d10-ISTD	668081	Blank	10.11	10.13	10.07	10.19		116646555	668081
Acenaphthene-d10-ISTD	668081	LCS	10.12	10.13	10.07	10.19		116646556	668081
Acenaphthene-d10-ISTD	668081	LCS Dup	10.12	10.13	10.07	10.19		116646557	668081
Chrysene-d12-ISTD	668081	Blank	17.73	17.75	17.69	17.81		116646555	668081
Chrysene-d12-ISTD	668081	LCS	17.74	17.75	17.69	17.81		116646556	668081
Chrysene-d12-ISTD	668081	LCS Dup	17.73	17.75	17.69	17.81		116646557	668081
Naphthalene-d8-ISTD	668081	Blank	6.780	6.790	6.730	6.850		116646555	668081
Naphthalene-d8-ISTD	668081	LCS	6.790	6.790	6.730	6.850		116646556	668081
Naphthalene-d8-ISTD	668081	LCS Dup	6.790	6.790	6.730	6.850		116646557	668081
Perylene-d12-ISTD	668081	Blank	19.46	19.47	19.41	19.53		116646555	668081
Perylene-d12-ISTD	668081	LCS	19.46	19.47	19.41	19.53		116646556	668081

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IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
Perylene-d12-ISTD	668081	LCS Dup	19.46	19.47	19.41	19.53		116646557	668081
Phenanthrene-d10-ISTD	668081	Blank	13.31	13.32	13.26	13.38		116646555	668081
Phenanthrene-d10-ISTD	668081	LCS	13.31	13.32	13.26	13.38		116646556	668081
Phenanthrene-d10-ISTD	668081	LCS Dup	13.31	13.32	13.26	13.38		116646557	668081
1,4-Dichlorobenzene-d4-ISTD	1500296	MS	5.060	5.070	5.010	5.130		116646561	668081
1,4-Dichlorobenzene-d4-ISTD	1500296	MSD	5.070	5.070	5.010	5.130		116646562	668081
Acenaphthene-d10-ISTD	1500296	MS	10.12	10.13	10.07	10.19		116646561	668081
Acenaphthene-d10-ISTD	1500296	MSD	10.11	10.13	10.07	10.19		116646562	668081
Chrysene-d12-ISTD	1500296	MS	17.74	17.75	17.69	17.81		116646561	668081
Chrysene-d12-ISTD	1500296	MSD	17.73	17.75	17.69	17.81		116646562	668081
Naphthalene-d8-ISTD	1500296	MS	6.780	6.790	6.730	6.850		116646561	668081
Naphthalene-d8-ISTD	1500296	MSD	6.790	6.790	6.730	6.850		116646562	668081
Perylene-d12-ISTD	1500296	MS	19.46	19.47	19.41	19.53		116646561	668081
Perylene-d12-ISTD	1500296	MSD	19.45	19.47	19.41	19.53		116646562	668081
Phenanthrene-d10-ISTD	1500296	MS	13.31	13.32	13.26	13.38		116646561	668081
Phenanthrene-d10-ISTD	1500296	MSD	13.30	13.32	13.26	13.38		116646562	668081

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
1,2,4-Trichlorobenzene	668081	445	832	ug/kg	53.5	16.6 - 141	116646556	
1,2-Dichlorobenzene	668081	436	832	ug/kg	52.4	41.4 - 122	116646556	
1,2-DPH (as azobenzene)	668081	348	832	ug/kg	41.8	44.2 - 128	116646556	*
1,3-Dichlorobenzene	668081	437	832	ug/kg	52.5	26.7 - 125	116646556	
1,4-Dichlorobenzene	668081	414	832	ug/kg	49.7	13.0 - 145	116646556	
2,4,5-Trichlorophenol	668081	497	832	ug/kg	59.7	30.8 - 137	116646556	
2,4,6-Trichlorophenol	668081	478	832	ug/kg	57.4	26.0 - 135	116646556	
2,4-Dichlorophenol	668081	474	832	ug/kg	56.9	37.7 - 130	116646556	
2,4-Dimethylphenol	668081	152	832	ug/kg	18.3	0.100 - 119	116646556	
2,4-Dinitrophenol	668081	384	832	ug/kg	46.1	5.37 - 134	116646556	
2,4-Dinitrotoluene	668081	450	832	ug/kg	54.1	27.7 - 153	116646556	
2,6-Dichlorophenol	668081	477	832	ug/kg	57.3	40.5 - 121	116646556	
2,6-Dinitrotoluene	668081	454	832	ug/kg	54.5	45.1 - 134	116646556	
2-Chloronaphthalene	668081	478	832	ug/kg	57.4	28.6 - 134	116646556	
2-Chlorophenol	668081	457	832	ug/kg	54.9	37.7 - 125	116646556	
2-Methylphenol (o-Cresol)	668081	395	832	ug/kg	47.4	0.100 - 124	116646556	
2-Nitrophenol	668081	452	832	ug/kg	54.3	34.7 - 126	116646556	
3&4-Methylphenol (m&p-Cresol)	668081	406	832	ug/kg	48.8	0.100 - 116	116646556	
3,3'-Dichlorobenzidine	668081	211	832	ug/kg	25.3	0.100 - 123	116646556	
4,6-Dinitro-2-methylphenol	668081	420	832	ug/kg	50.5	15.8 - 139	116646556	
4-Bromophenyl phenyl ether	668081	413	832	ug/kg	49.6	50.4 - 124	116646556	*
4-Chlorophenyl phenyl ethe	668081	397	832	ug/kg	47.7	47.6 - 127	116646556	
4-Nitrophenol	668081	427	832	ug/kg	51.3	0.100 - 163	116646556	
Acenaphthene	668081	440	832	ug/kg	52.9	31.8 - 133	116646556	
Acenaphthylene	668081	429	832	ug/kg	51.5	44.9 - 114	116646556	
Anthracene	668081	416	832	ug/kg	50.0	48.3 - 118	116646556	
Benzo(a)anthracene	668081	434	832	ug/kg	52.1	49.4 - 125	116646556	
Benzo(a)pyrene	668081	510	832	ug/kg	61.3	50.2 - 124	116646556	
Benzo(b)fluoranthene	668081	463	832	ug/kg	55.6	41.0 - 137	116646556	
Benzo(ghi)perylene	668081	582	832	ug/kg	69.9	35.6 - 146	116646556	

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Parameter	*PrepSet*	*Reading*	*Known*	*Units*	*Recover%*	*Limits*	*File*	*Out*
Benzo(k)fluoranthene	668081	561	832	ug/kg	67.4	42.2 - 147	116646556	
Benzyl Butyl phthalate	668081	477	832	ug/kg	57.3	18.6 - 163	116646556	
Bis(2-chloroethoxy)methane	668081	439	832	ug/kg	52.7	45.3 - 123	116646556	
Bis(2-chloroethyl)ether	668081	463	832	ug/kg	55.6	12.1 - 143	116646556	
Bis(2-chloroisopropyl)ether	668081	432	832	ug/kg	51.9	21.3 - 146	116646556	
Bis(2-ethylhexyl)phthalate	668081	482	832	ug/kg	57.9	39.7 - 168	116646556	
Chrysene (Benzo(a)phenanthrene)	668081	437	832	ug/kg	52.5	52.8 - 121	116646556	*
Dibenz(a,h)anthracene	668081	508	832	ug/kg	61.0	46.1 - 136	116646556	
Diethyl phthalate	668081	380	832	ug/kg	45.6	25.7 - 144	116646556	
Dimethyl phthalate	668081	446	832	ug/kg	53.6	0.100 - 157	116646556	
Di-n-butylphthalate	668081	426	832	ug/kg	51.2	23.3 - 173	116646556	
Di-n-octylphthalate	668081	562	832	ug/kg	67.5	17.2 - 174	116646556	
Fluoranthene(Benzo(j,k)fluor ene)	668081	441	832	ug/kg	53.0	52.0 - 135	116646556	
Fluorene	668081	396	832	ug/kg	47.6	52.2 - 125	116646556	*
Hexachlorobenzene	668081	423	832	ug/kg	50.8	52.1 - 124	116646556	*
Hexachlorobutadiene	668081	466	832	ug/kg	56.0	16.3 - 138	116646556	
Hexachlorocyclopentadiene	668081	544	832	ug/kg	65.3	0.100 - 149	116646556	
Hexachloroethane	668081	442	832	ug/kg	53.1	18.8 - 131	116646556	
Indeno(1,2,3-cd)pyrene	668081	422	832	ug/kg	50.7	44.3 - 138	116646556	
Isophorone	668081	476	832	ug/kg	57.2	44.3 - 123	116646556	
Naphthalene	668081	433	832	ug/kg	52.0	41.0 - 122	116646556	
Nitrobenzene	668081	519	832	ug/kg	62.3	42.1 - 122	116646556	
N-Nitrosodimethylamine	668081	2260	832	ug/kg	271	0.100 - 211	116646556	*
N-Nitrosodi-n-propylamine	668081	437	832	ug/kg	52.5	18.1 - 159	116646556	
N-Nitrosodiphenylamine (as DPA	668081	435	832	ug/kg	52.3	40.2 - 126	116646556	
p-Chloro-m-Cresol (4-Chloro-3-me	668081	417	832	ug/kg	50.1	42.6 - 131	116646556	
Pentachlorophenol	668081	372	832	ug/kg	44.7	9.29 - 146	116646556	
Phenanthrene	668081	426	832	ug/kg	51.2	49.1 - 127	116646556	
Phenol	668081	445	832	ug/kg	53.5	0.100 - 142	116646556	
Pyrene	668081	498	832	ug/kg	59.8	15.6 - 154	116646556	
Pyridine	668081	435	832	ug/kg	52.3	17.0 - 80.0	116646556	

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
1,2,4-Trichlorobenzene	668081	445	451	832	16.6 - 141	53.5	54.2	ug/kg	1.30	30.0
1,2-Dichlorobenzene	668081	436	430	832	41.4 - 122	52.4	51.7	ug/kg	1.34	30.0
1,2-DPH (as azobenzene)	668081	348	381	832	44.2 - 128	41.8 *	45.8	ug/kg	9.13	30.0
1,3-Dichlorobenzene	668081	437	431	832	26.7 - 125	52.5	51.8	ug/kg	1.34	30.0
1,4-Dichlorobenzene	668081	414	420	832	13.0 - 145	49.7	50.5	ug/kg	1.60	30.0
2,4,5-Trichlorophenol	668081	497	489	832	30.8 - 137	59.7	58.7	ug/kg	1.69	30.0
2,4,6-Trichlorophenol	668081	478	487	832	26.0 - 135	57.4	58.5	ug/kg	1.90	30.0
2,4-Dichlorophenol	668081	474	467	832	37.7 - 130	56.9	56.1	ug/kg	1.42	30.0
2,4-Dimethylphenol	668081	152	129	832	0.100 - 119	18.3	15.5	ug/kg	16.6	30.0
2,4-Dinitrophenol	668081	384	304	832	5.37 - 134	46.1	36.5	ug/kg	23.2	30.0
2,4-Dinitrotoluene	668081	450	432	832	27.7 - 153	54.1	51.9	ug/kg	4.15	30.0
2,6-Dichlorophenol	668081	477	470	832	40.5 - 121	57.3	56.5	ug/kg	1.41	30.0
2,6-Dinitrotoluene	668081	454	453	832	45.1 - 134	54.5	54.4	ug/kg	0.184	30.0
2-Chloronaphthalene	668081	478	480	832	28.6 - 134	57.4	57.7	ug/kg	0.521	30.0

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LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
2-Chlorophenol	668081	457	455	832	37.7 - 125	54.9	54.7	ug/kg	0.365	30.0
2-Methylphenol (o-Cresol)	668081	395	392	832	0.100 - 124	47.4	47.1	ug/kg	0.635	30.0
2-Nitrophenol	668081	452	451	832	34.7 - 126	54.3	54.2	ug/kg	0.184	30.0
3&4-Methylphenol (m&p-Cresol)	668081	406	407	832	0.100 - 116	48.8	48.9	ug/kg	0.205	30.0
3,3'-Dichlorobenzidine	668081	211	255	832	0.100 - 123	25.3	30.6	ug/kg	19.0	30.0
4,6-Dinitro-2-methylphenol	668081	420	384	832	15.8 - 139	50.5	46.1	ug/kg	9.11	30.0
4-Bromophenyl phenyl ether	668081	413	434	832	50.4 - 124	49.6 *	52.1	ug/kg	4.92	30.0
4-Chlorophenyl phenyl ethe	668081	397	458	832	47.6 - 127	47.7	55.0	ug/kg	14.2	30.0
4-Nitrophenol	668081	427	418	832	0.100 - 163	51.3	50.2	ug/kg	2.17	30.0
Acenaphthene	668081	440	439	832	31.8 - 133	52.9	52.7	ug/kg	0.379	30.0
Acenaphthylene	668081	429	429	832	44.9 - 114	51.5	51.5	ug/kg	0	30.0
Anthracene	668081	416	462	832	48.3 - 118	50.0	55.5	ug/kg	10.4	30.0
Benzo(a)anthracene	668081	434	453	832	49.4 - 125	52.1	54.4	ug/kg	4.32	30.0
Benzo(a)pyrene	668081	510	512	832	50.2 - 124	61.3	61.5	ug/kg	0.326	30.0
Benzo(b)fluoranthene	668081	463	481	832	41.0 - 137	55.6	57.8	ug/kg	3.88	30.0
Benzo(ghi)perylene	668081	582	636	832	35.6 - 146	69.9	76.4	ug/kg	8.89	30.0
Benzo(k)fluoranthene	668081	561	654	832	42.2 - 147	67.4	78.6	ug/kg	15.3	30.0
Benzyl Butyl phthalate	668081	477	463	832	18.6 - 163	57.3	55.6	ug/kg	3.01	30.0
Bis(2-chloroethoxy)methane	668081	439	457	832	45.3 - 123	52.7	54.9	ug/kg	4.09	30.0
Bis(2-chloroethyl)ether	668081	463	483	832	12.1 - 143	55.6	58.0	ug/kg	4.23	30.0
Bis(2-chloroisopropyl)ether	668081	432	435	832	21.3 - 146	51.9	52.3	ug/kg	0.768	30.0
Bis(2-ethylhexyl)phthalate	668081	482	470	832	39.7 - 168	57.9	56.5	ug/kg	2.45	30.0
Chrysene (Benzo(a)phenanthrene)	668081	437	440	832	52.8 - 121	52.5 *	52.9	ug/kg	0.759	30.0
Dibenz(a,h)anthracene	668081	508	540	832	46.1 - 136	61.0	64.9	ug/kg	6.20	30.0
Diethyl phthalate	668081	380	434	832	25.7 - 144	45.6	52.1	ug/kg	13.3	30.0
Dimethyl phthalate	668081	446	436	832	0.100 - 157	53.6	52.4	ug/kg	2.26	30.0
Di-n-butylphthalate	668081	426	487	832	23.3 - 173	51.2	58.5	ug/kg	13.3	30.0
Di-n-octylphthalate	668081	562	544	832	17.2 - 174	67.5	65.3	ug/kg	3.31	30.0
Fluoranthene(Benzo(j,k)fluor ene)	668081	441	490	832	52.0 - 135	53.0	58.9	ug/kg	10.5	30.0
Fluorene	668081	396	446	832	52.2 - 125	47.6 *	53.6	ug/kg	11.9	30.0
Hexachlorobenzene	668081	423	449	832	52.1 - 124	50.8 *	53.9	ug/kg	5.92	30.0
Hexachlorobutadiene	668081	466	492	832	16.3 - 138	56.0	59.1	ug/kg	5.39	30.0
Hexachlorocyclopentadiene	668081	544	522	832	0.100 - 149	65.3	62.7	ug/kg	4.06	30.0
Hexachloroethane	668081	442	456	832	18.8 - 131	53.1	54.8	ug/kg	3.15	30.0
Indeno(1,2,3-cd)pyrene	668081	422	429	832	44.3 - 138	50.7	51.5	ug/kg	1.57	30.0
Isophorone	668081	476	497	832	44.3 - 123	57.2	59.7	ug/kg	4.28	30.0
Naphthalene	668081	433	439	832	41.0 - 122	52.0	52.7	ug/kg	1.34	30.0
Nitrobenzene	668081	519	533	832	42.1 - 122	62.3	64.0	ug/kg	2.69	30.0
N-Nitrosodi-n-propylamine	668081	437	435	832	18.1 - 159	52.5	52.3	ug/kg	0.382	30.0
N-Nitrosodiphenylamine (as DPA	668081	435	477	832	40.2 - 126	52.3	57.3	ug/kg	9.12	30.0
p-Chloro-m-Cresol (4-Chloro-3-me	668081	417	395	832	42.6 - 131	50.1	47.4	ug/kg	5.54	30.0
Pentachlorophenol	668081	372	375	832	9.29 - 146	44.7	45.0	ug/kg	0.669	30.0
Phenanthrene	668081	426	425	832	49.1 - 127	51.2	51.1	ug/kg	0.196	30.0
Phenol	668081	445	437	832	0.100 - 142	53.5	52.5	ug/kg	1.89	30.0
Pyrene	668081	498	496	832	15.6 - 154	59.8	59.6	ug/kg	0.335	30.0
Pyridine	668081	435	349	832	17.0 - 80.0	52.3	41.9	ug/kg	22.1	30.0

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Quality Control

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MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,2,4-Trichlorobenzene	1500296	834	0	ND	833	0.100 - 216	100		ug/kg		30.0
1,2-Dichlorobenzene	1500296	590	0	ND	833	0.100 - 146	70.8		ug/kg		30.0
1,2-DPH (as azobenzene)	1500296	516	0	ND	833	0.100 - 158	61.9		ug/kg		30.0
1,3-Dichlorobenzene	1500296	556	0	ND	833	0.100 - 153	66.7		ug/kg		30.0
1,4-Dichlorobenzene	1500296	531	0	ND	833	0.100 - 209	63.7		ug/kg		30.0
2,4,5-Trichlorophenol	1500296	619	0	ND	833	0.100 - 183	74.3		ug/kg		30.0
2,4,6-Trichlorophenol	1500296	617	0	ND	833	0.100 - 185	74.1		ug/kg		30.0
2,4-Dichlorophenol	1500296	599	0	ND	833	0.100 - 599	71.9		ug/kg		30.0
2,4-Dimethylphenol	1500296	144	0	ND	833	0.100 - 574	17.3		ug/kg		30.0
2,4-Dinitrophenol	1500296	705	0	ND	833	0.100 - 141	84.6		ug/kg		30.0
2,4-Dinitrotoluene	1500296	584	0	ND	833	0.100 - 221	70.1		ug/kg		30.0
2,6-Dichlorophenol	1500296	556	0	ND	833	0.100 - 67500	66.7		ug/kg		30.0
2,6-Dinitrotoluene	1500296	576	0	ND	833	0.100 - 166	69.1		ug/kg		30.0
2-Chloronaphthalene	1500296	592	0	ND	833	0.100 - 153	71.1		ug/kg		30.0
2-Chlorophenol	1500296	580	0	ND	833	0.100 - 199	69.6		ug/kg		30.0
2-Methylphenol (o-Cresol)	1500296	438	0	ND	833	60.0 - 130	52.6 *		ug/kg		30.0
2-Nitrophenol	1500296	594	0	ND	833	0.100 - 81800	71.3		ug/kg		30.0
3&4-Methylphenol (m&p-Cresol)	1500296	511	0	ND	833	70.0 - 130	61.3 *		ug/kg		30.0
3,3'-Dichlorobenzidine	1500296	21.3	0	ND	833	0.100 - 84.0	2.56		ug/kg		30.0
4,6-Dinitro-2-methylphenol	1500296	569	0	ND	833	0.100 - 142	68.3		ug/kg		30.0
4-Bromophenyl phenyl ether	1500296	569	0	17.7	833	0.100 - 173	68.3		ug/kg		30.0
4-Chlorophenyl phenyl ethe	1500296	580	0	ND	833	0.100 - 188	69.6		ug/kg		30.0
4-Nitrophenol	1500296	597	0	ND	833	0.100 - 244	71.7		ug/kg		30.0
Acenaphthene	1500296	564	0	ND	833	0.100 - 229	67.7		ug/kg		30.0
Acenaphthylene	1500296	557	0	ND	833	0.100 - 216	66.9		ug/kg		30.0
Anthracene	1500296	540	0	ND	833	0.100 - 223	64.8		ug/kg		30.0
Benzo(a)anthracene	1500296	559	0	ND	833	0.100 - 244	67.1		ug/kg		30.0
Benzo(a)pyrene	1500296	628	0	ND	833	0.100 - 273	75.4		ug/kg		30.0
Benzo(b)fluoranthene	1500296	623	0	ND	833	0.100 - 273	74.8		ug/kg		30.0
Benzo(ghi)perylene	1500296	702	0	ND	833	0.100 - 233	84.3		ug/kg		30.0
Benzo(k)fluoranthene	1500296	744	0	ND	833	0.100 - 288	89.3		ug/kg		30.0
Benzyl Butyl phthalate	1500296	601	0	ND	833	0.100 - 264	72.1		ug/kg		30.0
Bis(2-chloroethoxy)methane	1500296	572	0	ND	833	0.100 - 13300	68.7		ug/kg		30.0
Bis(2-chloroethyl)ether	1500296	629	0	ND	833	0.100 - 167	75.5		ug/kg		30.0
Bis(2-chloroisopropyl)ether	1500296	629	0	ND	833	0.100 - 224	75.5		ug/kg		30.0
Bis(2-ethylhexyl)phthalate	1500296	694	0	118	833	0.100 - 300	83.3		ug/kg		30.0
Chrysene (Benzo(a)phenanthrene)	1500296	559	0	ND	833	0.100 - 230	67.1		ug/kg		30.0
Dibenz(a,h)anthracene	1500296	632	0	ND	833	0.100 - 227	75.9		ug/kg		30.0
Diethyl phthalate	1500296	567	0	ND	833	0.100 - 159	68.1		ug/kg		30.0
Dimethyl phthalate	1500296	560	0	ND	833	0.100 - 156	67.2		ug/kg		30.0
Di-n-butylphthalate	1500296	552	0	ND	833	0.100 - 227	66.3		ug/kg		30.0
Di-n-octylphthalate	1500296	693	0	ND	833	0.100 - 230	83.2		ug/kg		30.0
Fluoranthene(Benzo(j,k)fluorene)	1500296	572	0	ND	833	0.100 - 268	68.7		ug/kg		30.0
Fluorene	1500296	586	0	ND	833	0.100 - 256	70.3		ug/kg		30.0
Hexachlorobenzene	1500296	558	0	ND	833	0.100 - 161	67.0		ug/kg		30.0
Hexachlorobutadiene	1500296	613	0	ND	833	0.100 - 165	73.6		ug/kg		30.0
Hexachlorocyclopentadiene	1500296	680	0	ND	833	0.100 - 76.0	81.6 *		ug/kg		30.0
Hexachloroethane	1500296	565	0	ND	833	0.100 - 157	67.8		ug/kg		30.0

ANA-LAB CORP. THE COMPLETE SERVICE LAB

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Quality Control

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MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Indeno(1,2,3-cd)pyrene	1500296	514	0	ND	833	0.100 - 246	61.7		ug/kg		30.0
Isophorone	1500296	623	0	ND	833	0.100 - 45900	74.8		ug/kg		30.0
Naphthalene	1500296	570	0	ND	833	0.100 - 233	68.4		ug/kg		30.0
Nitrobenzene	1500296	692	0	ND	833	0.100 - 219	83.1		ug/kg		30.0
N-Nitrosodi-n-propylamine	1500296	566	0	ND	833	0.100 - 263	67.9		ug/kg		30.0
N-Nitrosodiphenylamine (as DPA	1500296	581	0	ND	833	0.100 - 178	69.7		ug/kg		30.0
p-Chloro-m-Cresol (4-Chloro-3-me	1500296	573	0	ND	833	0.100 - 224	68.8		ug/kg		30.0
Pentachlorophenol	1500296	640	0	ND	833	0.100 - 211	76.8		ug/kg		30.0
Phenanthrene	1500296	546	0	ND	833	0.100 - 258	65.5		ug/kg		30.0
Phenol	1500296	540	0	ND	833	0.100 - 199	64.8		ug/kg		30.0
Pyrene	1500296	669	0	ND	833	0.100 - 311	80.3		ug/kg		30.0
Pyridine	1500296	469	0	ND	833	60.0 - 130	56.3 *		ug/kg		30.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,2,4-Trichlorobenzene	1500296	834	1110	ND	833	0.100 - 216	100	133	ug/kg	28.4	30.0
1,2-Dichlorobenzene	1500296	590	704	ND	833	0.100 - 146	70.8	84.5	ug/kg	17.6	30.0
1,2-DPH (as azobenzene)	1500296	516	741	ND	833	0.100 - 158	61.9	89.0	ug/kg	35.8 *	30.0
1,3-Dichlorobenzene	1500296	556	664	ND	833	0.100 - 153	66.7	79.7	ug/kg	17.7	30.0
1,4-Dichlorobenzene	1500296	531	638	ND	833	0.100 - 209	63.7	76.6	ug/kg	18.3	30.0
2,4,5-Trichlorophenol	1500296	619	821	ND	833	0.100 - 183	74.3	98.6	ug/kg	28.1	30.0
2,4,6-Trichlorophenol	1500296	617	846	ND	833	0.100 - 185	74.1	102	ug/kg	31.3 *	30.0
2,4-Dichlorophenol	1500296	599	758	ND	833	0.100 - 599	71.9	91.0	ug/kg	23.4	30.0
2,4-Dimethylphenol	1500296	144	406	ND	833	0.100 - 574	17.3	48.7	ug/kg	95.3 *	30.0
2,4-Dinitrophenol	1500296	705	595	ND	833	0.100 - 141	84.6	71.4	ug/kg	16.9	30.0
2,4-Dinitrotoluene	1500296	584	613	ND	833	0.100 - 221	70.1	73.6	ug/kg	4.85	30.0
2,6-Dichlorophenol	1500296	556	767	ND	833	0.100 - 67500	66.7	92.1	ug/kg	31.9 *	30.0
2,6-Dinitrotoluene	1500296	576	724	ND	833	0.100 - 166	69.1	86.9	ug/kg	22.8	30.0
2-Chloronaphthalene	1500296	592	792	ND	833	0.100 - 153	71.1	95.1	ug/kg	28.9	30.0
2-Chlorophenol	1500296	580	682	ND	833	0.100 - 199	69.6	81.9	ug/kg	16.2	30.0
2-Methylphenol (o-Cresol)	1500296	438	614	ND	833	60.0 - 130	52.6 *	73.7	ug/kg	33.5 *	30.0
2-Nitrophenol	1500296	594	732	ND	833	0.100 - 81800	71.3	87.9	ug/kg	20.8	30.0
3&4-Methylphenol (m&p-Cresol)	1500296	511	644	ND	833	70.0 - 130	61.3 *	77.3	ug/kg	23.0	30.0
3,3'-Dichlorobenzidine	1500296	21.3	54.3	ND	833	0.100 - 84.0	2.56	6.52	ug/kg	87.3 *	30.0
4,6-Dinitro-2-methylphenol	1500296	569	697	ND	833	0.100 - 142	68.3	83.7	ug/kg	20.2	30.0
4-Bromophenyl phenyl ether	1500296	569	768	17.7	833	0.100 - 173	66.2	90.1	ug/kg	30.6 *	30.0
4-Chlorophenyl phenyl ethe	1500296	580	655	ND	833	0.100 - 188	69.6	78.6	ug/kg	12.1	30.0
4-Nitrophenol	1500296	597	611	ND	833	0.100 - 244	71.7	73.3	ug/kg	2.32	30.0
Acenaphthene	1500296	564	725	ND	833	0.100 - 229	67.7	87.0	ug/kg	25.0	30.0
Acenaphthylene	1500296	557	709	ND	833	0.100 - 216	66.9	85.1	ug/kg	24.0	30.0
Anthracene	1500296	540	692	ND	833	0.100 - 223	64.8	83.1	ug/kg	24.7	30.0
Benzo(a)anthracene	1500296	559	726	ND	833	0.100 - 244	67.1	87.2	ug/kg	26.0	30.0
Benzo(a)pyrene	1500296	628	749	ND	833	0.100 - 273	75.4	89.9	ug/kg	17.6	30.0
Benzo(b)fluoranthene	1500296	623	796	ND	833	0.100 - 273	74.8	95.6	ug/kg	24.4	30.0
Benzo(ghi)perylene	1500296	702	894	ND	833	0.100 - 233	84.3	107	ug/kg	24.1	30.0
Benzo(k)fluoranthene	1500296	744	844	ND	833	0.100 - 288	89.3	101	ug/kg	12.6	30.0
Benzyl Butyl phthalate	1500296	601	787	ND	833	0.100 - 264	72.1	94.5	ug/kg	26.8	30.0
Bis(2-chloroethoxy)methane	1500296	572	726	ND	833	0.100 - 13300	68.7	87.2	ug/kg	23.7	30.0
Bis(2-chloroethyl)ether	1500296	629	130	ND	833	0.100 - 167	75.5	15.6	ug/kg	131 *	30.0

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Quality Control

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MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Bis(2-chloroisopropyl)ether	1500296	629	742	ND	833	0.100 - 224	75.5	89.1	ug/kg	16.5	30.0
Bis(2-ethylhexyl)phthalate	1500296	694	919	118	833	0.100 - 300	69.1	96.2	ug/kg	32.7 *	30.0
Chrysene (Benzo(a)phenanthrene)	1500296	559	740	ND	833	0.100 - 230	67.1	88.8	ug/kg	27.9	30.0
Dibenz(a,h)anthracene	1500296	632	759	ND	833	0.100 - 227	75.9	91.1	ug/kg	18.3	30.0
Diethyl phthalate	1500296	567	617	ND	833	0.100 - 159	68.1	74.1	ug/kg	8.45	30.0
Dimethyl phthalate	1500296	560	735	ND	833	0.100 - 156	67.2	88.2	ug/kg	27.0	30.0
Di-n-butylphthalate	1500296	552	758	ND	833	0.100 - 227	66.3	91.0	ug/kg	31.5 *	30.0
Di-n-octylphthalate	1500296	693	817	ND	833	0.100 - 230	83.2	98.1	ug/kg	16.4	30.0
Fluoranthene(Benzo(j,k)fluorene)	1500296	572	752	ND	833	0.100 - 268	68.7	90.3	ug/kg	27.2	30.0
Fluorene	1500296	586	639	ND	833	0.100 - 256	70.3	76.7	ug/kg	8.65	30.0
Hexachlorobenzene	1500296	558	733	ND	833	0.100 - 161	67.0	88.0	ug/kg	27.1	30.0
Hexachlorobutadiene	1500296	613	800	ND	833	0.100 - 165	73.6	96.0	ug/kg	26.5	30.0
Hexachlorocyclopentadiene	1500296	680	782	ND	833	0.100 - 76.0	81.6 *	93.9 *	ug/kg	14.0	30.0
Hexachloroethane	1500296	565	677	ND	833	0.100 - 157	67.8	81.3	ug/kg	18.0	30.0
Indeno(1,2,3-cd)pyrene	1500296	514	620	ND	833	0.100 - 246	61.7	74.4	ug/kg	18.7	30.0
Isophorone	1500296	623	799	ND	833	0.100 - 45900	74.8	95.9	ug/kg	24.8	30.0
Naphthalene	1500296	570	723	ND	833	0.100 - 233	68.4	86.8	ug/kg	23.7	30.0
Nitrobenzene	1500296	692	902	ND	833	0.100 - 219	83.1	108	ug/kg	26.3	30.0
N-Nitrosodi-n-propylamine	1500296	566	697	ND	833	0.100 - 263	67.9	83.7	ug/kg	20.7	30.0
N-Nitrosodiphenylamine (as DPA	1500296	581	851	ND	833	0.100 - 178	69.7	102	ug/kg	37.7 *	30.0
p-Chloro-m-Cresol (4-Chloro-3-me	1500296	573	720	ND	833	0.100 - 224	68.8	86.4	ug/kg	22.7	30.0
Pentachlorophenol	1500296	640	783	ND	833	0.100 - 211	76.8	94.0	ug/kg	20.1	30.0
Phenanthrene	1500296	546	717	ND	833	0.100 - 258	65.5	86.1	ug/kg	27.1	30.0
Phenol	1500296	540	670	ND	833	0.100 - 199	64.8	80.4	ug/kg	21.5	30.0
Pyrene	1500296	669	820	ND	833	0.100 - 311	80.3	98.4	ug/kg	20.3	30.0
Pyridine	1500296	469	380	ND	833	60.0 - 130	56.3 *	45.6 *	ug/kg	21.0	30.0

SPCC

Parameter	Sample	RF	Minimum	File
2,4-Dinitrophenol	578179	47100	0.050	116646554
4-Nitrophenol	578179	42600	0.050	116646554
Hexachlorocyclopentadiene	578179	49000	0.050	116646554
N-Nitrosodi-n-propylamine	578179	44800	0.050	116646554

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	578179	CCV	50800	100000	ug/kg	50.8	36.6 - 112	116646554
2-Fluorobiphenyl-SURR	578179	CCV	51000	50000	ug/kg	102	29.5 - 105	116646554
2-Fluorophenol-SURR	578179	CCV	52900	100000	ug/kg	52.9	0.734 - 98.4	116646554
4-Terphenyl-d14-SURR	578179	CCV	55400	50000	ug/kg	111	33.1 - 118	116646554
Nitrobenzene-d5-SURR	578179	CCV	44900	50000	ug/kg	89.8	35.6 - 103	116646554
Phenol-d6-SURR	578179	CCV	41800	100000	ug/kg	41.8	0.100 - 110	116646554
2,4,6-Tribromophenol	668081	Blank	1070	3330	ug/kg	32.1 *	36.6 - 112	116646555
2,4,6-Tribromophenol	668081	LCS	1270	3330	ug/kg	38.1	36.6 - 112	116646556
2,4,6-Tribromophenol	668081	LCS Dup	1390	3330	ug/kg	41.7	36.6 - 112	116646557
2-Fluorobiphenyl-SURR	668081	Blank	11500	50000	ug/kg	23.0 *	29.5 - 105	116646555
2-Fluorobiphenyl-SURR	668081	LCS	12800	50000	ug/kg	25.6 *	29.5 - 105	116646556
2-Fluorobiphenyl-SURR	668081	LCS Dup	13400	50000	ug/kg	26.8 *	29.5 - 105	116646557

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Quality Control

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2-Fluorophenol-SURR	668081	Blank	39200	100000	ug/kg	39.2	0.734 - 98.4	116646555
2-Fluorophenol-SURR	668081	LCS	38200	100000	ug/kg	38.2	0.734 - 98.4	116646556
2-Fluorophenol-SURR	668081	LCS Dup	42400	100000	ug/kg	42.4	0.734 - 98.4	116646557
4-Terphenyl-d14-SURR	668081	Blank	12200	50000	ug/kg	24.4 *	33.1 - 118	116646555
4-Terphenyl-d14-SURR	668081	LCS	12200	50000	ug/kg	24.4 *	33.1 - 118	116646556
4-Terphenyl-d14-SURR	668081	LCS Dup	12000	50000	ug/kg	24.0 *	33.1 - 118	116646557
Nitrobenzene-d5-SURR	668081	Blank	12600	50000	ug/kg	25.2 *	35.6 - 103	116646555
Nitrobenzene-d5-SURR	668081	LCS	13000	50000	ug/kg	26.0 *	35.6 - 103	116646556
Nitrobenzene-d5-SURR	668081	LCS Dup	13400	50000	ug/kg	26.8 *	35.6 - 103	116646557
Phenol-d6-SURR	668081	Blank	43500	100000	ug/kg	43.5	0.100 - 110	116646555
Phenol-d6-SURR	668081	LCS	40000	100000	ug/kg	40.0	0.100 - 110	116646556
Phenol-d6-SURR	668081	LCS Dup	39900	100000	ug/kg	39.9	0.100 - 110	116646557
2,4,6-Tribromophenol	1500296	MS	2150	3330	ug/kg	64.6	36.6 - 112	116646561
2,4,6-Tribromophenol	1500296	MSD	2210	3330	ug/kg	66.4	36.6 - 112	116646562
2-Fluorobiphenyl-SURR	1500296	MS	558	1670	ug/kg	33.4	29.5 - 105	116646561
2-Fluorobiphenyl-SURR	1500296	MSD	779	1670	ug/kg	46.6	29.5 - 105	116646562
2-Fluorophenol-SURR	1500296	MS	1750	3330	ug/kg	52.6	0.734 - 98.4	116646561
2-Fluorophenol-SURR	1500296	MSD	2210	3330	ug/kg	66.4	0.734 - 98.4	116646562
4-Terphenyl-d14-SURR	1500296	MS	567	1670	ug/kg	34.0	33.1 - 118	116646561
4-Terphenyl-d14-SURR	1500296	MSD	723	1670	ug/kg	43.3	33.1 - 118	116646562
Nitrobenzene-d5-SURR	1500296	MS	560	1670	ug/kg	33.5 *	35.6 - 103	116646561
Nitrobenzene-d5-SURR	1500296	MSD	682	1670	ug/kg	40.8	35.6 - 103	116646562
Phenol-d6-SURR	1500296	MS	1630	3330	ug/kg	48.9	0.100 - 110	116646561
Phenol-d6-SURR	1500296	MSD	2020	3330	ug/kg	60.7	0.100 - 110	116646562

668758 Solid & Chemical Materials **EPA 8260B**

BFB

Parameter	Sample	RefMass	Reading	%	Limits%	Out	File
BFB Mass 173	668758	174	52	0.5	0 - 2.00		116647827
BFB Mass 174	668758	95.0	10356	74.1	50.0 - 100		116647827
BFB Mass 175	668758	174	690	6.7	5.00 - 9.00		116647827
BFB Mass 176	668758	174	9997	96.5	95.0 - 101		116647827
BFB Mass 177	668758	176	655	6.6	5.00 - 9.00		116647827
BFB Mass 50	668758	95.0	3222	23.1	15.0 - 40.0		116647827
BFB Mass 75	668758	95.0	6724	48.1	30.0 - 60.0		116647827
BFB Mass 95	668758	95.0	13974	100.0	100 - 100		116647827
BFB Mass 96	668758	95.0	928	6.6	5.00 - 9.00		116647827

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Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
1,1,1,2-Tetrachloroethane	668758	ND	0.499	1.00	ug/kg	116647831	
1,1,1-Trichloroethane	668758	ND	0.387	1.00	ug/kg	116647831	
1,1,2,2-Tetrachloroethane	668758	ND	0.350	1.00	ug/kg	116647831	
1,1,2-Trichloroethane	668758	ND	0.285	1.00	ug/kg	116647831	
1,1-Dichloroethane	668758	ND	0.123	1.00	ug/kg	116647831	
1,1-Dichloroethylene	668758	ND	0.162	1.00	ug/kg	116647831	
1,1-Dichloropropene	668758	ND	0.239	1.00	ug/kg	116647831	
1,2,3-Trichlorobenzene	668758	ND	0.581	1.00	ug/kg	116647831	
1,2,3-Trichloropropane	668758	ND	0.681	1.00	ug/kg	116647831	
1,2,4-Trichlorobenzene	668758	ND	0.504	1.00	ug/kg	116647831	
1,2,4-Trimethylbenzene	668758	ND	0.311	1.00	ug/kg	116647831	

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Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
1,2-Dibromo-3-chloropropane	668758	ND	0.636	1.00	ug/kg	116647831	
1,2-Dibromoethane	668758	ND	0.210	1.00	ug/kg	116647831	
1,2-Dichloroethane	668758	ND	0.197	1.00	ug/kg	116647831	
1,2-Dichloropropane	668758	ND	0.446	1.00	ug/kg	116647831	
1,3,5-Trimethylbenzene	668758	ND	0.395	1.00	ug/kg	116647831	
1,3-Dichloropropane	668758	ND	0.208	1.00	ug/kg	116647831	
2,2-Dichloropropane	668758	ND	0.287	1.00	ug/kg	116647831	
2-Chloroethylvinyl ether	668758	ND	0.322	1.00	ug/kg	116647831	
2-Chlorotoluene	668758	ND	0.568	1.00	ug/kg	116647831	
4-Chlorotoluene	668758	ND	0.452	1.00	ug/kg	116647831	
Acetone	668758	ND	10.0	10.0	ug/kg	116647831	
Acrolein	668758	ND	2.85	5.00	ug/kg	116647831	
Acrylonitrile	668758	ND	3.32	5.00	ug/kg	116647831	
Benzene	668758	ND	0.363	1.00	ug/kg	116647831	
Bromobenzene	668758	ND	0.325	1.00	ug/kg	116647831	
Bromochloromethane	668758	ND	0.395	1.00	ug/kg	116647831	
Bromodichloromethane	668758	ND	0.365	1.00	ug/kg	116647831	
Bromoform	668758	ND	0.302	1.00	ug/kg	116647831	
Bromomethane (Methyl Bromi	668758	ND	0.542	1.00	ug/kg	116647831	
Carbon Tetrachloride	668758	ND	0.643	1.00	ug/kg	116647831	
Chlorobenzene	668758	ND	0.199	1.00	ug/kg	116647831	
Chloroethane	668758	ND	0.411	1.00	ug/kg	116647831	
Chloroform	668758	ND	0.293	1.00	ug/kg	116647831	
Chloromethane	668758	ND	0.185	1.00	ug/kg	116647831	
cis-1,2-Dichloroethylene	668758	ND	0.173	1.00	ug/kg	116647831	
cis-1,3-Dichloropropene	668758	ND	0.227	1.00	ug/kg	116647831	
Dibromochloromethane	668758	ND	0.184	1.00	ug/kg	116647831	
Dibromomethane	668758	ND	0.255	1.00	ug/kg	116647831	
Dichlorodifluoromethane	668758	ND	0.307	1.00	ug/kg	116647831	
Dichloromethane	668758	ND	0.900	1.00	ug/kg	116647831	
Ethylbenzene	668758	ND	0.223	1.00	ug/kg	116647831	
Hexachlorobutadiene	668758	ND	0.111	1.00	ug/kg	116647831	
Isopropylbenzene (Cumene)	668758	ND	0.369	1.00	ug/kg	116647831	
m- and p-Xylene	668758	ND	0.479	1.00	ug/kg	116647831	
m-Dichlorobenzene	668758	ND	0.271	1.00	ug/kg	116647831	
Methyl ethyl ketone (Butanone)	668758	ND	10.0	10.0	ug/kg	116647831	
Methyl Isobutyl Ketone	668758	ND	0.493	1.00	ug/kg	116647831	
Naphthalene	668758	ND	0.553	1.00	ug/kg	116647831	
n-Butylbenzene	668758	ND	0.402	1.00	ug/kg	116647831	
n-Propylbenzene	668758	ND	0.267	1.00	ug/kg	116647831	
o-Dichlorobenzene	668758	ND	0.326	1.00	ug/kg	116647831	
o-Xylene	668758	ND	0.154	1.00	ug/kg	116647831	
p-Dichlorobenzene	668758	ND	0.283	1.00	ug/kg	116647831	
p-Isopropyltoluene	668758	ND	0.329	1.00	ug/kg	116647831	
sec-Butylbenzene	668758	ND	0.369	1.00	ug/kg	116647831	
Styrene	668758	ND	0.303	1.00	ug/kg	116647831	
tert-Butylbenzene	668758	ND	0.302	1.00	ug/kg	116647831	
tert-Butylmethylether (MTBE)	668758	ND	0.721	3.00	ug/kg	116647831	

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Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*	*Out*
Tetrachloroethylene	668758	ND	0.416	1.00	ug/kg	116647831	
Toluene	668758	ND	0.275	1.00	ug/kg	116647831	
trans-1,2-Dichloroethylene	668758	ND	0.112	1.00	ug/kg	116647831	
trans-1,3-Dichloropropene	668758	ND	0.285	1.00	ug/kg	116647831	
Trichloroethylene	668758	ND	0.882	1.00	ug/kg	116647831	
Trichlorofluoromethane	668758	ND	0.206	1.00	ug/kg	116647831	
Vinyl chloride	668758	ND	0.353	1.00	ug/kg	116647831	

CCC

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
1,1-Dichloroethylene	21.5	20.00	ug/kg	108	80.0 - 120		116647828
1,2-Dichloropropane	20.0	20.00	ug/kg	100	80.0 - 120		116647828
Chloroform	20.0	20.00	ug/kg	100	80.0 - 120		116647828
Ethylbenzene	20.3	20.00	ug/kg	102	80.0 - 120		116647828
Toluene	20.4	20.00	ug/kg	102	80.0 - 120		116647828
Vinyl chloride	21.3	20.00	ug/kg	106	80.0 - 120		116647828

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
1,1,1,2-Tetrachloroethane	19.5	20.0	ug/kg	97.5	80.0 - 120		116647828
1,1,1-Trichloroethane	20.8	20.0	ug/kg	104	80.0 - 120		116647828
1,1,2,2-Tetrachloroethane	21.3	20.0	ug/kg	106	80.0 - 120		116647828
1,1,2-Trichloroethane	20.1	20.0	ug/kg	100	80.0 - 120		116647828
1,1-Dichloroethane	19.8	20.0	ug/kg	99.0	80.0 - 120		116647828
1,1-Dichloroethylene	21.5	20.0	ug/kg	108	80.0 - 120		116647828
1,1-Dichloropropene	20.6	20.0	ug/kg	103	80.0 - 120		116647828
1,2,3-Trichlorobenzene	19.4	20.0	ug/kg	97.0	80.0 - 120		116647828
1,2,3-Trichloropropane	20.0	20.0	ug/kg	100	80.0 - 120		116647828
1,2,4-Trichlorobenzene	18.7	20.0	ug/kg	93.5	80.0 - 120		116647828
1,2,4-Trimethylbenzene	19.2	20.0	ug/kg	96.0	80.0 - 120		116647828
1,2-Dibromo-3-chloropropane	19.2	20.0	ug/kg	96.0	80.0 - 120		116647828
1,2-Dibromoethane	19.6	20.0	ug/kg	98.0	80.0 - 120		116647828
1,2-Dichloroethane	20.3	20.0	ug/kg	102	80.0 - 120		116647828
1,2-Dichloropropane	20.0	20.0	ug/kg	100	80.0 - 120		116647828
1,3,5-Trimethylbenzene	20.2	20.0	ug/kg	101	80.0 - 120		116647828
1,3-Dichloropropane	19.7	20.0	ug/kg	98.5	80.0 - 120		116647828
2,2-Dichloropropane	24.6	20.0	ug/kg	123	80.0 - 120	*	116647828
2-Chloroethylvinyl ether	17.6	20.0	ug/kg	88.0	80.0 - 120		116647828
2-Chlorotoluene	20.3	20.0	ug/kg	102	80.0 - 120		116647828
4-Chlorotoluene	20.6	20.0	ug/kg	103	80.0 - 120		116647828
Acetone	23.3	20.0	ug/kg	116	80.0 - 120		116647828
Acrolein	44.4	40.0	ug/kg	111	80.0 - 120		116647828
Acrylonitrile	38.6	40.0	ug/kg	96.5	80.0 - 120		116647828
Benzene	20.2	20.0	ug/kg	101	80.0 - 120		116647828
Bromobenzene	20.4	20.0	ug/kg	102	80.0 - 120		116647828
Bromochloromethane	19.7	20.0	ug/kg	98.5	80.0 - 120		116647828
Bromodichloromethane	19.9	20.0	ug/kg	99.5	80.0 - 120		116647828
Bromoform	18.8	20.0	ug/kg	94.0	80.0 - 120		116647828
Bromomethane (Methyl Bromi	23.1	20.0	ug/kg	116	80.0 - 120		116647828
Carbon Tetrachloride	19.9	20.0	ug/kg	99.5	80.0 - 120		116647828

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CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
Chlorobenzene	20.3	20.0	ug/kg	102	80.0 - 120		116647828
Chloroethane	19.8	20.0	ug/kg	99.0	80.0 - 120		116647828
Chloroform	20.0	20.0	ug/kg	100	80.0 - 120		116647828
Chloromethane	21.4	20.0	ug/kg	107	80.0 - 120		116647828
cis-1,2-Dichloroethylene	20.8	20.0	ug/kg	104	80.0 - 120		116647828
cis-1,3-Dichloropropene	19.4	20.0	ug/kg	97.0	80.0 - 120		116647828
Dibromochloromethane	19.4	20.0	ug/kg	97.0	80.0 - 120		116647828
Dibromomethane	19.9	20.0	ug/kg	99.5	80.0 - 120		116647828
Dichlorodifluoromethane	23.2	20.0	ug/kg	116	80.0 - 120		116647828
Dichloromethane	19.3	20.0	ug/kg	96.5	80.0 - 120		116647828
Ethylbenzene	20.3	20.0	ug/kg	102	80.0 - 120		116647828
Hexachlorobutadiene	21.0	20.0	ug/kg	105	80.0 - 120		116647828
Isopropylbenzene (Cumene)	19.8	20.0	ug/kg	99.0	80.0 - 120		116647828
m- and p-Xylene	40.7	40.0	ug/kg	102	80.0 - 120		116647828
m-Dichlorobenzene	20.4	20.0	ug/kg	102	80.0 - 120		116647828
Methyl ethyl ketone (Butanone)	21.1	20.0	ug/kg	106	80.0 - 120		116647828
Methyl Isobutyl Ketone	19.9	20.0	ug/kg	99.5	80.0 - 120		116647828
Naphthalene	17.9	20.0	ug/kg	89.5	80.0 - 120		116647828
n-Butylbenzene	20.9	20.0	ug/kg	104	80.0 - 120		116647828
n-Propylbenzene	20.4	20.0	ug/kg	102	80.0 - 120		116647828
o-Dichlorobenzene	19.7	20.0	ug/kg	98.5	80.0 - 120		116647828
o-Xylene	21.0	20.0	ug/kg	105	80.0 - 120		116647828
p-Dichlorobenzene	20.0	20.0	ug/kg	100	80.0 - 120		116647828
p-Isopropyltoluene	19.9	20.0	ug/kg	99.5	80.0 - 120		116647828
sec-Butylbenzene	19.8	20.0	ug/kg	99.0	80.0 - 120		116647828
Styrene	18.9	20.0	ug/kg	94.5	80.0 - 120		116647828
tert-Butylbenzene	20.0	20.0	ug/kg	100	80.0 - 120		116647828
tert-Butylmethylether (MTBE)	21.0	20.0	ug/kg	105	80.0 - 120		116647828
Tetrachloroethylene	21.2	20.0	ug/kg	106	80.0 - 120		116647828
Toluene	20.4	20.0	ug/kg	102	80.0 - 120		116647828
trans-1,2-Dichloroethylene	21.8	20.0	ug/kg	109	80.0 - 120		116647828
trans-1,3-Dichloropropene	19.6	20.0	ug/kg	98.0	80.0 - 120		116647828
Trichloroethylene	18.3	20.0	ug/kg	91.5	80.0 - 120		116647828
Trichlorofluoromethane	22.5	20.0	ug/kg	112	80.0 - 120		116647828
Vinyl chloride	21.3	20.0	ug/kg	106	80.0 - 120		116647828

IS Areas

Parameter	*Sample*	*Type*	*Reading*	*CCVISM*	*Low*	*High*	*Out*	*File*	*PrepSet*
1,4-DichlorobenzeneD4 (ISTD)	668758	CCV	200700	200700	100400	301100		116647828	668758
1,4-DichlorobenzeneD4 (ISTD)	668758	LCS	185400	200700	100400	301100		116647829	668758
1,4-DichlorobenzeneD4 (ISTD)	668758	LCS Dup	193100	200700	100400	301100		116647830	668758
1,4-DichlorobenzeneD4 (ISTD)	668758	Blank	162200	200700	100400	301100		116647831	668758
ChlorobenzeneD5 (ISTD)	668758	CCV	350400	350400	175200	525600		116647828	668758
ChlorobenzeneD5 (ISTD)	668758	LCS	328400	350400	175200	525600		116647829	668758
ChlorobenzeneD5 (ISTD)	668758	LCS Dup	342100	350400	175200	525600		116647830	668758
ChlorobenzeneD5 (ISTD)	668758	Blank	335700	350400	175200	525600		116647831	668758

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IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1501552	MS	206200	200700	100400	301100		116647836	668758
1,4-DichlorobenzeneD4 (ISTD)	1501552	MSD	196100	200700	100400	301100		116647837	668758
ChlorobenzeneD5 (ISTD)	1501552	MS	364900	350400	175200	525600		116647836	668758
ChlorobenzeneD5 (ISTD)	1501552	MSD	362100	350400	175200	525600		116647837	668758

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	668758	CCV	11.22	11.22	11.16	11.28		116647828	668758
1,4-DichlorobenzeneD4 (ISTD)	668758	LCS	11.22	11.22	11.16	11.28		116647829	668758
1,4-DichlorobenzeneD4 (ISTD)	668758	LCS Dup	11.22	11.22	11.16	11.28		116647830	668758
1,4-DichlorobenzeneD4 (ISTD)	668758	Blank	11.22	11.22	11.16	11.28		116647831	668758
ChlorobenzeneD5 (ISTD)	668758	CCV	8.854	8.854	8.794	8.914		116647828	668758
ChlorobenzeneD5 (ISTD)	668758	LCS	8.860	8.854	8.794	8.914		116647829	668758
ChlorobenzeneD5 (ISTD)	668758	LCS Dup	8.854	8.854	8.794	8.914		116647830	668758
ChlorobenzeneD5 (ISTD)	668758	Blank	8.860	8.854	8.794	8.914		116647831	668758
1,4-DichlorobenzeneD4 (ISTD)	1501552	MS	11.22	11.22	11.16	11.28		116647836	668758
1,4-DichlorobenzeneD4 (ISTD)	1501552	MSD	11.22	11.22	11.16	11.28		116647837	668758
ChlorobenzeneD5 (ISTD)	1501552	MS	8.860	8.854	8.794	8.914		116647836	668758
ChlorobenzeneD5 (ISTD)	1501552	MSD	8.854	8.854	8.794	8.914		116647837	668758

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
1,1,1,2-Tetrachloroethane	668758	20.9	20.0	ug/kg	104	77.5 - 133	116647829	
1,1,1-Trichloroethane	668758	22.9	20.0	ug/kg	114	74.3 - 136	116647829	
1,1,2,2-Tetrachloroethane	668758	24.0	20.0	ug/kg	120	65.9 - 137	116647829	
1,1,2-Trichloroethane	668758	21.2	20.0	ug/kg	106	79.2 - 123	116647829	
1,1-Dichloroethane	668758	21.2	20.0	ug/kg	106	75.8 - 126	116647829	
1,1-Dichloroethylene	668758	22.0	20.0	ug/kg	110	71.1 - 128	116647829	
1,1-Dichloropropene	668758	23.2	20.0	ug/kg	116	77.5 - 128	116647829	
1,2,3-Trichlorobenzene	668758	22.1	20.0	ug/kg	110	69.7 - 137	116647829	
1,2,3-Trichloropropane	668758	23.4	20.0	ug/kg	117	71.6 - 135	116647829	
1,2,4-Trichlorobenzene	668758	21.3	20.0	ug/kg	106	73.4 - 126	116647829	
1,2,4-Trimethylbenzene	668758	21.2	20.0	ug/kg	106	79.1 - 118	116647829	
1,2-Dibromo-3-chloropropane	668758	22.5	20.0	ug/kg	112	56.5 - 141	116647829	
1,2-Dibromoethane	668758	21.3	20.0	ug/kg	106	79.9 - 132	116647829	
1,2-Dichloroethane	668758	21.5	20.0	ug/kg	108	72.7 - 142	116647829	
1,2-Dichloropropane	668758	21.3	20.0	ug/kg	106	76.5 - 129	116647829	
1,3,5-Trimethylbenzene	668758	22.0	20.0	ug/kg	110	79.3 - 118	116647829	
1,3-Dichloropropane	668758	20.0	20.0	ug/kg	100	78.1 - 120	116647829	
2,2-Dichloropropane	668758	26.3	20.0	ug/kg	132	57.9 - 163	116647829	
2-Chloroethylvinyl ether	668758	16.3	20.0	ug/kg	81.5	23.2 - 155	116647829	
2-Chlorotoluene	668758	21.8	20.0	ug/kg	109	74.5 - 132	116647829	
4-Chlorotoluene	668758	20.9	20.0	ug/kg	104	76.9 - 132	116647829	
Acetone	668758	23.6	20.0	ug/kg	118	0.100 - 248	116647829	
Acrolein	668758	75.5	40.0	ug/kg	189	0.100 - 263	116647829	

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LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Acrylonitrile	668758	45.1	40.0	ug/kg	113	60.0 - 144	116647829	
Benzene	668758	21.4	20.0	ug/kg	107	74.4 - 122	116647829	
Bromobenzene	668758	22.4	20.0	ug/kg	112	79.3 - 123	116647829	
Bromochloromethane	668758	21.2	20.0	ug/kg	106	78.7 - 135	116647829	
Bromodichloromethane	668758	20.9	20.0	ug/kg	104	74.3 - 130	116647829	
Bromoform	668758	21.9	20.0	ug/kg	110	64.2 - 134	116647829	
Bromomethane (Methyl Bromi	668758	20.4	20.0	ug/kg	102	45.1 - 150	116647829	
Carbon Tetrachloride	668758	23.1	20.0	ug/kg	116	70.8 - 131	116647829	
Chlorobenzene	668758	21.2	20.0	ug/kg	106	78.4 - 123	116647829	
Chloroethane	668758	23.4	20.0	ug/kg	117	70.4 - 134	116647829	
Chloroform	668758	20.4	20.0	ug/kg	102	75.8 - 128	116647829	
Chloromethane	668758	15.5	20.0	ug/kg	77.5	46.8 - 138	116647829	
cis-1,2-Dichloroethylene	668758	20.3	20.0	ug/kg	102	76.4 - 118	116647829	
cis-1,3-Dichloropropene	668758	18.6	20.0	ug/kg	93.0	68.9 - 112	116647829	
Dibromochloromethane	668758	20.2	20.0	ug/kg	101	71.9 - 130	116647829	
Dibromomethane	668758	23.0	20.0	ug/kg	115	79.9 - 129	116647829	
Dichlorodifluoromethane	668758	13.2	20.0	ug/kg	66.0	34.8 - 120	116647829	
Dichloromethane	668758	19.2	20.0	ug/kg	96.0	75.0 - 121	116647829	
Ethylbenzene	668758	21.8	20.0	ug/kg	109	79.8 - 125	116647829	
Hexachlorobutadiene	668758	23.2	20.0	ug/kg	116	72.3 - 131	116647829	
Isopropylbenzene (Cumene)	668758	19.8	20.0	ug/kg	99.0	70.5 - 130	116647829	
m- and p-Xylene	668758	43.0	40.0	ug/kg	108	81.5 - 117	116647829	
m-Dichlorobenzene	668758	22.2	20.0	ug/kg	111	78.3 - 129	116647829	
Methyl ethyl ketone (Butanone)	668758	19.8	20.0	ug/kg	99.0	31.5 - 165	116647829	
Methyl Isobutyl Ketone	668758	19.6	20.0	ug/kg	98.0	48.2 - 132	116647829	
Naphthalene	668758	23.4	20.0	ug/kg	117	68.4 - 136	116647829	
n-Butylbenzene	668758	23.4	20.0	ug/kg	117	78.1 - 125	116647829	
n-Propylbenzene	668758	22.3	20.0	ug/kg	112	76.3 - 138	116647829	
o-Dichlorobenzene	668758	20.8	20.0	ug/kg	104	76.1 - 128	116647829	
o-Xylene	668758	21.7	20.0	ug/kg	108	79.3 - 121	116647829	
p-Dichlorobenzene	668758	21.2	20.0	ug/kg	106	82.0 - 118	116647829	
p-Isopropyltoluene	668758	22.2	20.0	ug/kg	111	80.6 - 128	116647829	
sec-Butylbenzene	668758	20.7	20.0	ug/kg	104	72.8 - 132	116647829	
Styrene	668758	20.0	20.0	ug/kg	100	76.9 - 117	116647829	
tert-Butylbenzene	668758	21.8	20.0	ug/kg	109	75.3 - 132	116647829	
tert-Butylmethylether (MTBE)	668758	20.6	20.0	ug/kg	103	68.5 - 126	116647829	
Tetrachloroethylene	668758	23.3	20.0	ug/kg	116	61.7 - 147	116647829	
Toluene	668758	21.7	20.0	ug/kg	108	82.9 - 115	116647829	
trans-1,2-Dichloroethylene	668758	21.2	20.0	ug/kg	106	75.7 - 125	116647829	
trans-1,3-Dichloropropene	668758	21.0	20.0	ug/kg	105	71.7 - 133	116647829	
Trichloroethylene	668758	19.9	20.0	ug/kg	99.5	75.9 - 133	116647829	
Trichlorofluoromethane	668758	18.6	20.0	ug/kg	93.0	50.2 - 132	116647829	
Vinyl chloride	668758	15.5	20.0	ug/kg	77.5	45.9 - 125	116647829	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,1,1,2-Tetrachloroethane	668758	20.9	20.3	20.0	77.5 - 133	104	102	ug/kg	1.94	30.0
1,1,1-Trichloroethane	668758	22.9	21.8	20.0	74.3 - 136	114	109	ug/kg	4.48	30.0
1,1,2,2-Tetrachloroethane	668758	24.0	23.3	20.0	65.9 - 137	120	116	ug/kg	3.39	30.0

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Quality Control

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LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
1,1,2-Trichloroethane	668758	21.2	21.4	20.0	79.2 - 123	106	107	ug/kg	0.939	30.0
1,1-Dichloroethane	668758	21.2	22.3	20.0	75.8 - 126	106	112	ug/kg	5.50	30.0
1,1-Dichloroethylene	668758	22.0	21.8	20.0	71.1 - 128	110	109	ug/kg	0.913	30.0
1,1-Dichloropropene	668758	23.2	20.4	20.0	77.5 - 128	116	102	ug/kg	12.8	30.0
1,2,3-Trichlorobenzene	668758	22.1	21.0	20.0	69.7 - 137	110	105	ug/kg	4.65	30.0
1,2,3-Trichloropropane	668758	23.4	21.8	20.0	71.6 - 135	117	109	ug/kg	7.08	30.0
1,2,4-Trichlorobenzene	668758	21.3	20.0	20.0	73.4 - 126	106	100	ug/kg	5.83	30.0
1,2,4-Trimethylbenzene	668758	21.2	19.8	20.0	79.1 - 118	106	99.0	ug/kg	6.83	30.0
1,2-Dibromo-3-chloropropane	668758	22.5	20.0	20.0	56.5 - 141	112	100	ug/kg	11.3	30.0
1,2-Dibromoethane	668758	21.3	20.5	20.0	79.9 - 132	106	102	ug/kg	3.85	30.0
1,2-Dichloroethane	668758	21.5	20.6	20.0	72.7 - 142	108	103	ug/kg	4.74	30.0
1,2-Dichloropropane	668758	21.3	20.2	20.0	76.5 - 129	106	101	ug/kg	4.83	30.0
1,3,5-Trimethylbenzene	668758	22.0	20.8	20.0	79.3 - 118	110	104	ug/kg	5.61	30.0
1,3-Dichloropropane	668758	20.0	19.1	20.0	78.1 - 120	100	95.5	ug/kg	4.60	30.0
2,2-Dichloropropane	668758	26.3	24.3	20.0	57.9 - 163	132	122	ug/kg	7.87	30.0
2-Chloroethylvinyl ether	668758	16.3	15.1	20.0	23.2 - 155	81.5	75.5	ug/kg	7.64	30.0
2-Chlorotoluene	668758	21.8	21.1	20.0	74.5 - 132	109	106	ug/kg	2.79	30.0
4-Chlorotoluene	668758	20.9	19.9	20.0	76.9 - 132	104	99.5	ug/kg	4.42	30.0
Acetone	668758	23.6	22.7	20.0	0.100 - 248	118	114	ug/kg	3.45	30.0
Acrolein	668758	75.5	66.8	40.0	0.100 - 263	189	167	ug/kg	12.4	30.0
Acrylonitrile	668758	45.1	43.4	40.0	60.0 - 144	113	108	ug/kg	4.52	30.0
Benzene	668758	21.4	20.6	20.0	74.4 - 122	107	103	ug/kg	3.81	30.0
Bromobenzene	668758	22.4	21.2	20.0	79.3 - 123	112	106	ug/kg	5.50	30.0
Bromochloromethane	668758	21.2	20.9	20.0	78.7 - 135	106	104	ug/kg	1.90	30.0
Bromodichloromethane	668758	20.9	20.4	20.0	74.3 - 130	104	102	ug/kg	1.94	30.0
Bromoform	668758	21.9	21.0	20.0	64.2 - 134	110	105	ug/kg	4.65	30.0
Bromomethane (Methyl Bromi	668758	20.4	18.5	20.0	45.1 - 150	102	92.5	ug/kg	9.77	30.0
Carbon Tetrachloride	668758	23.1	21.2	20.0	70.8 - 131	116	106	ug/kg	9.01	30.0
Chlorobenzene	668758	21.2	20.0	20.0	78.4 - 123	106	100	ug/kg	5.83	30.0
Chloroethane	668758	23.4	21.5	20.0	70.4 - 134	117	108	ug/kg	8.00	30.0
Chloroform	668758	20.4	20.5	20.0	75.8 - 128	102	102	ug/kg	0	30.0
Chloromethane	668758	15.5	14.5	20.0	46.8 - 138	77.5	72.5	ug/kg	6.67	30.0
cis-1,2-Dichloroethylene	668758	20.3	19.8	20.0	76.4 - 118	102	99.0	ug/kg	2.99	30.0
cis-1,3-Dichloropropene	668758	18.6	17.6	20.0	68.9 - 112	93.0	88.0	ug/kg	5.52	30.0
Dibromochloromethane	668758	20.2	19.7	20.0	71.9 - 130	101	98.5	ug/kg	2.51	30.0
Dibromomethane	668758	23.0	22.2	20.0	79.9 - 129	115	111	ug/kg	3.54	30.0
Dichlorodifluoromethane	668758	13.2	12.5	20.0	34.8 - 120	66.0	62.5	ug/kg	5.45	30.0
Dichloromethane	668758	19.2	19.5	20.0	75.0 - 121	96.0	97.5	ug/kg	1.55	30.0
Ethylbenzene	668758	21.8	21.0	20.0	79.8 - 125	109	105	ug/kg	3.74	30.0
Hexachlorobutadiene	668758	23.2	20.7	20.0	72.3 - 131	116	104	ug/kg	10.9	30.0
Isopropylbenzene (Cumene)	668758	19.8	18.9	20.0	70.5 - 130	99.0	94.5	ug/kg	4.65	30.0
m- and p-Xylene	668758	43.0	40.7	40.0	81.5 - 117	108	102	ug/kg	5.71	30.0
m-Dichlorobenzene	668758	22.2	20.8	20.0	78.3 - 129	111	104	ug/kg	6.51	30.0
Methyl ethyl ketone (Butanone)	668758	19.8	19.2	20.0	31.5 - 165	99.0	96.0	ug/kg	3.08	30.0
Methyl Isobutyl Ketone	668758	19.6	17.9	20.0	48.2 - 132	98.0	89.5	ug/kg	9.07	30.0
Naphthalene	668758	23.4	21.8	20.0	68.4 - 136	117	109	ug/kg	7.08	30.0
n-Butylbenzene	668758	23.4	22.0	20.0	78.1 - 125	117	110	ug/kg	6.17	30.0
n-Propylbenzene	668758	22.3	21.0	20.0	76.3 - 138	112	105	ug/kg	6.45	30.0

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Quality Control

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
o-Dichlorobenzene	668758	20.8	20.0	20.0	76.1 - 128	104	100	ug/kg	3.92	30.0
o-Xylene	668758	21.7	21.1	20.0	79.3 - 121	108	106	ug/kg	1.87	30.0
p-Dichlorobenzene	668758	21.2	20.7	20.0	82.0 - 118	106	104	ug/kg	1.90	30.0
p-Isopropyltoluene	668758	22.2	20.6	20.0	80.6 - 128	111	103	ug/kg	7.48	30.0
sec-Butylbenzene	668758	20.7	19.7	20.0	72.8 - 132	104	98.5	ug/kg	5.43	30.0
Styrene	668758	20.0	19.3	20.0	76.9 - 117	100	96.5	ug/kg	3.56	30.0
tert-Butylbenzene	668758	21.8	20.6	20.0	75.3 - 132	109	103	ug/kg	5.66	30.0
tert-Butylmethylether (MTBE)	668758	20.6	20.8	20.0	68.5 - 126	103	104	ug/kg	0.966	30.0
Tetrachloroethylene	668758	23.3	22.0	20.0	61.7 - 147	116	110	ug/kg	5.31	30.0
Toluene	668758	21.7	20.9	20.0	82.9 - 115	108	104	ug/kg	3.77	30.0
trans-1,2-Dichloroethylene	668758	21.2	20.4	20.0	75.7 - 125	106	102	ug/kg	3.85	30.0
trans-1,3-Dichloropropene	668758	21.0	19.7	20.0	71.7 - 133	105	98.5	ug/kg	6.39	30.0
Trichloroethylene	668758	19.9	19.4	20.0	75.9 - 133	99.5	97.0	ug/kg	2.54	30.0
Trichlorofluoromethane	668758	18.6	17.3	20.0	50.2 - 132	93.0	86.5	ug/kg	7.24	30.0
Vinyl chloride	668758	15.5	14.7	20.0	45.9 - 125	77.5	73.5	ug/kg	5.30	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,1,1,2-Tetrachloroethane	1501552	18.4	0	ND	20.0	79.0 - 121	92.0		ug/kg		30.0
1,1,1-Trichloroethane	1501552	19.7	0	ND	20.0	80.0 - 114	98.5		ug/kg		30.0
1,1,2,2-Tetrachloroethane	1501552	21.3	0	ND	20.0	76.0 - 131	106		ug/kg		30.0
1,1,2-Trichloroethane	1501552	19.7	0	ND	20.0	90.0 - 112	98.5		ug/kg		30.0
1,1-Dichloroethane	1501552	19.1	0	ND	20.0	83.0 - 118	95.5		ug/kg		30.0
1,1-Dichloroethylene	1501552	18.2	0	ND	20.0	88.0 - 130	91.0		ug/kg		30.0
1,1-Dichloropropene	1501552	19.5	0	ND	20.0	80.0 - 118	97.5		ug/kg		30.0
1,2,3-Trichlorobenzene	1501552	19.0	0	ND	20.0	65.0 - 139	95.0		ug/kg		30.0
1,2,3-Trichloropropane	1501552	21.2	0	ND	20.0	74.0 - 132	106		ug/kg		30.0
1,2,4-Trichlorobenzene	1501552	18.6	0	ND	20.0	69.0 - 134	93.0		ug/kg		30.0
1,2,4-Trimethylbenzene	1501552	17.6	0	ND	20.0	77.0 - 118	88.0		ug/kg		30.0
1,2-Dibromo-3-chloropropane	1501552	20.0	0	ND	20.0	61.0 - 128	100		ug/kg		30.0
1,2-Dibromoethane	1501552	19.1	0	ND	20.0	80.0 - 119	95.5		ug/kg		30.0
1,2-Dichloroethane	1501552	18.6	0	ND	20.0	80.0 - 110	93.0		ug/kg		30.0
1,2-Dichloropropane	1501552	18.2	0	ND	20.0	84.0 - 112	91.0		ug/kg		30.0
1,3,5-Trimethylbenzene	1501552	18.2	0	ND	20.0	83.0 - 121	91.0		ug/kg		30.0
1,3-Dichloropropane	1501552	17.3	0	ND	20.0	81.0 - 114	86.5		ug/kg		30.0
2,2-Dichloropropane	1501552	20.0	0	ND	20.0	74.0 - 131	100		ug/kg		30.0
2-Chloroethylvinyl ether	1501552	16.1	0	ND	20.0	57.0 - 120	80.5		ug/kg		30.0
2-Chlorotoluene	1501552	18.4	0	ND	20.0	83.0 - 120	92.0		ug/kg		30.0
4-Chlorotoluene	1501552	17.8	0	ND	20.0	85.0 - 122	89.0		ug/kg		30.0
Acetone	1501552	20.5	0	ND	20.0	71.0 - 156	102		ug/kg		30.0
Acrolein	1501552	21.8	0	ND	40.0	0.100 - 1490	54.5		ug/kg		30.0
Acrylonitrile	1501552	41.9	0	ND	40.0	74.0 - 124	105		ug/kg		30.0
Benzene	1501552	18.4	0	ND	20.0	87.0 - 111	92.0		ug/kg		30.0
Bromobenzene	1501552	18.8	0	ND	20.0	85.0 - 120	94.0		ug/kg		30.0
Bromochloromethane	1501552	20.0	0	ND	20.0	80.0 - 129	100		ug/kg		30.0
Bromodichloromethane	1501552	18.8	0	0.980	20.0	79.0 - 108	94.0		ug/kg		30.0
Bromoform	1501552	19.0	0	ND	20.0	69.0 - 127	95.0		ug/kg		30.0
Bromomethane (Methyl Bromi	1501552	9.75	0	ND	20.0	56.0 - 126	48.8 *		ug/kg		30.0
Carbon Tetrachloride	1501552	18.0	0	ND	20.0	81.0 - 115	90.0		ug/kg		30.0

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Quality Control

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Chlorobenzene	1501552	18.3	0	ND	20.0	84.0 - 111	91.5		ug/kg		30.0
Chloroethane	1501552	17.7	0	ND	20.0	71.0 - 136	88.5		ug/kg		30.0
Chloroform	1501552	19.5	0	0.840	20.0	83.0 - 118	97.5		ug/kg		30.0
Chloromethane	1501552	13.2	0	ND	20.0	59.0 - 130	66.0		ug/kg		30.0
cis-1,2-Dichloroethylene	1501552	18.6	0	ND	20.0	81.0 - 121	93.0		ug/kg		30.0
cis-1,3-Dichloropropene	1501552	10.3	0	ND	20.0	76.0 - 107	51.5 *		ug/kg		30.0
Dibromochloromethane	1501552	18.3	0	0.870	20.0	76.0 - 120	91.5		ug/kg		30.0
Dibromomethane	1501552	19.5	0	ND	20.0	85.0 - 115	97.5		ug/kg		30.0
Dichlorodifluoromethane	1501552	10.3	0	ND	20.0	56.0 - 128	51.5 *		ug/kg		30.0
Dichloromethane	1501552	17.3	0	ND	20.0	83.0 - 126	86.5		ug/kg		30.0
Ethylbenzene	1501552	18.6	0	ND	20.0	82.0 - 111	93.0		ug/kg		30.0
Hexachlorobutadiene	1501552	18.8	0	ND	20.0	72.0 - 139	94.0		ug/kg		30.0
Isopropylbenzene (Cumene)	1501552	16.4	0	ND	20.0	89.0 - 126	82.0 *		ug/kg		30.0
m- and p-Xylene	1501552	36.1	0	ND	40.0	79.0 - 115	90.2		ug/kg		30.0
m-Dichlorobenzene	1501552	18.5	0	ND	20.0	90.0 - 115	92.5		ug/kg		30.0
Methyl ethyl ketone (Butanone)	1501552	20.3	0	ND	20.0	66.0 - 139	102		ug/kg		30.0
Methyl Isobutyl Ketone	1501552	19.5	0	ND	20.0	67.0 - 125	97.5		ug/kg		30.0
Naphthalene	1501552	22.4	0	ND	20.0	62.0 - 150	112		ug/kg		30.0
n-Butylbenzene	1501552	18.9	0	ND	20.0	84.0 - 128	94.5		ug/kg		30.0
n-Propylbenzene	1501552	18.4	0	ND	20.0	87.0 - 123	92.0		ug/kg		30.0
o-Dichlorobenzene	1501552	18.1	0	ND	20.0	89.0 - 118	90.5		ug/kg		30.0
o-Xylene	1501552	18.6	0	ND	20.0	84.0 - 114	93.0		ug/kg		30.0
p-Dichlorobenzene	1501552	18.3	0	ND	20.0	92.0 - 117	91.5 *		ug/kg		30.0
p-Isopropyltoluene	1501552	18.0	0	ND	20.0	86.0 - 123	90.0		ug/kg		30.0
sec-Butylbenzene	1501552	16.9	0	ND	20.0	85.0 - 122	84.5 *		ug/kg		30.0
Styrene	1501552	17.2	0	ND	20.0	81.0 - 113	86.0		ug/kg		30.0
tert-Butylbenzene	1501552	18.4	0	ND	20.0	84.0 - 123	92.0		ug/kg		30.0
tert-Butylmethylether (MTBE)	1501552	18.4	0	ND	20.0	76.0 - 136	92.0		ug/kg		30.0
Tetrachloroethylene	1501552	19.5	0	ND	20.0	84.0 - 113	97.5		ug/kg		30.0
Toluene	1501552	18.6	0	ND	20.0	88.0 - 111	93.0		ug/kg		30.0
trans-1,2-Dichloroethylene	1501552	18.4	0	ND	20.0	89.0 - 130	92.0		ug/kg		30.0
trans-1,3-Dichloropropene	1501552	15.2	0	ND	20.0	81.0 - 117	76.0 *		ug/kg		30.0
Trichloroethylene	1501552	16.7	0	ND	20.0	86.0 - 111	83.5 *		ug/kg		30.0
Trichlorofluoromethane	1501552	14.9	0	ND	20.0	65.0 - 123	74.5		ug/kg		30.0
Vinyl chloride	1501552	12.4	0	ND	20.0	86.0 - 139	62.0 *		ug/kg		30.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,1,1,2-Tetrachloroethane	1501552	18.4	19.2	ND	20.0	79.0 - 121	92.0	96.0	ug/kg	4.26	30.0
1,1,1-Trichloroethane	1501552	19.7	19.4	ND	20.0	80.0 - 114	98.5	97.0	ug/kg	1.53	30.0
1,1,2,2-Tetrachloroethane	1501552	21.3	22.0	ND	20.0	76.0 - 131	106	110	ug/kg	3.23	30.0
1,1,2-Trichloroethane	1501552	19.7	19.6	ND	20.0	90.0 - 112	98.5	98.0	ug/kg	0.509	30.0
1,1-Dichloroethane	1501552	19.1	19.4	ND	20.0	83.0 - 118	95.5	97.0	ug/kg	1.56	30.0
1,1-Dichloroethylene	1501552	18.2	18.3	ND	20.0	88.0 - 130	91.0	91.5	ug/kg	0.548	30.0
1,1-Dichloropropene	1501552	19.5	19.5	ND	20.0	80.0 - 118	97.5	97.5	ug/kg	0	30.0
1,2,3-Trichlorobenzene	1501552	19.0	19.5	ND	20.0	65.0 - 139	95.0	97.5	ug/kg	2.60	30.0
1,2,3-Trichloropropane	1501552	21.2	22.3	ND	20.0	74.0 - 132	106	112	ug/kg	5.06	30.0
1,2,4-Trichlorobenzene	1501552	18.6	18.8	ND	20.0	69.0 - 134	93.0	94.0	ug/kg	1.07	30.0
1,2,4-Trimethylbenzene	1501552	17.6	18.4	ND	20.0	77.0 - 118	88.0	92.0	ug/kg	4.44	30.0

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Quality Control

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MSD

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
1,2-Dibromo-3-chloropropane	1501552	20.0	20.7	ND	20.0	61.0 - 128	100	104	ug/kg	3.44	30.0
1,2-Dibromoethane	1501552	19.1	19.1	ND	20.0	80.0 - 119	95.5	95.5	ug/kg	0	30.0
1,2-Dichloroethane	1501552	18.6	18.7	ND	20.0	80.0 - 110	93.0	93.5	ug/kg	0.536	30.0
1,2-Dichloropropane	1501552	18.2	18.3	ND	20.0	84.0 - 112	91.0	91.5	ug/kg	0.548	30.0
1,3,5-Trimethylbenzene	1501552	18.2	18.8	ND	20.0	83.0 - 121	91.0	94.0	ug/kg	3.24	30.0
1,3-Dichloropropane	1501552	17.3	17.9	ND	20.0	81.0 - 114	86.5	89.5	ug/kg	3.41	30.0
2,2-Dichloropropane	1501552	20.0	19.5	ND	20.0	74.0 - 131	100	97.5	ug/kg	2.53	30.0
2-Chloroethylvinyl ether	1501552	16.1	16.0	ND	20.0	57.0 - 120	80.5	80.0	ug/kg	0.623	30.0
2-Chlorotoluene	1501552	18.4	19.2	ND	20.0	83.0 - 120	92.0	96.0	ug/kg	4.26	30.0
4-Chlorotoluene	1501552	17.8	18.2	ND	20.0	85.0 - 122	89.0	91.0	ug/kg	2.22	30.0
Acetone	1501552	20.5	21.6	ND	20.0	71.0 - 156	102	108	ug/kg	5.23	30.0
Acrolein	1501552	21.8	20.0	ND	40.0	0.100 - 1490	54.5	50.0	ug/kg	8.61	30.0
Acrylonitrile	1501552	41.9	43.1	ND	40.0	74.0 - 124	105	108	ug/kg	2.82	30.0
Benzene	1501552	18.4	18.3	ND	20.0	87.0 - 111	92.0	91.5	ug/kg	0.545	30.0
Bromobenzene	1501552	18.8	19.9	ND	20.0	85.0 - 120	94.0	99.5	ug/kg	5.68	30.0
Bromochloromethane	1501552	20.0	19.5	ND	20.0	80.0 - 129	100	97.5	ug/kg	2.53	30.0
Bromodichloromethane	1501552	18.8	19.2	0.980	20.0	79.0 - 108	89.1	91.1	ug/kg	2.22	30.0
Bromoform	1501552	19.0	19.5	ND	20.0	69.0 - 127	95.0	97.5	ug/kg	2.60	30.0
Bromomethane (Methyl Bromi	1501552	9.75	9.21	ND	20.0	56.0 - 126	48.8 *	46.0 *	ug/kg	5.70	30.0
Carbon Tetrachloride	1501552	18.0	18.2	ND	20.0	81.0 - 115	90.0	91.0	ug/kg	1.10	30.0
Chlorobenzene	1501552	18.3	18.3	ND	20.0	84.0 - 111	91.5	91.5	ug/kg	0	30.0
Chloroethane	1501552	17.7	17.6	ND	20.0	71.0 - 136	88.5	88.0	ug/kg	0.567	30.0
Chloroform	1501552	19.5	19.6	0.840	20.0	83.0 - 118	93.3	93.8	ug/kg	0.534	30.0
Chloromethane	1501552	13.2	12.3	ND	20.0	59.0 - 130	66.0	61.5	ug/kg	7.06	30.0
cis-1,2-Dichloroethylene	1501552	18.6	18.2	ND	20.0	81.0 - 121	93.0	91.0	ug/kg	2.17	30.0
cis-1,3-Dichloropropene	1501552	10.3	10.1	ND	20.0	76.0 - 107	51.5 *	50.5 *	ug/kg	1.96	30.0
Dibromochloromethane	1501552	18.3	18.4	0.870	20.0	76.0 - 120	87.2	87.6	ug/kg	0.572	30.0
Dibromomethane	1501552	19.5	19.8	ND	20.0	85.0 - 115	97.5	99.0	ug/kg	1.53	30.0
Dichlorodifluoromethane	1501552	10.3	10.1	ND	20.0	56.0 - 128	51.5 *	50.5 *	ug/kg	1.96	30.0
Dichloromethane	1501552	17.3	17.2	ND	20.0	83.0 - 126	86.5	86.0	ug/kg	0.580	30.0
Ethylbenzene	1501552	18.6	18.5	ND	20.0	82.0 - 111	93.0	92.5	ug/kg	0.539	30.0
Hexachlorobutadiene	1501552	18.8	18.6	ND	20.0	72.0 - 139	94.0	93.0	ug/kg	1.07	30.0
Isopropylbenzene (Cumene)	1501552	16.4	17.0	ND	20.0	89.0 - 126	82.0 *	85.0 *	ug/kg	3.59	30.0
m- and p-Xylene	1501552	36.1	35.6	ND	40.0	79.0 - 115	90.2	89.0	ug/kg	1.39	30.0
m-Dichlorobenzene	1501552	18.5	19.2	ND	20.0	90.0 - 115	92.5	96.0	ug/kg	3.71	30.0
Methyl ethyl ketone (Butanone)	1501552	20.3	20.6	ND	20.0	66.0 - 139	102	103	ug/kg	1.47	30.0
Methyl Isobutyl Ketone	1501552	19.5	18.9	ND	20.0	67.0 - 125	97.5	94.5	ug/kg	3.12	30.0
Naphthalene	1501552	22.4	22.4	ND	20.0	62.0 - 150	112	112	ug/kg	0	30.0
n-Butylbenzene	1501552	18.9	18.7	ND	20.0	84.0 - 128	94.5	93.5	ug/kg	1.06	30.0
n-Propylbenzene	1501552	18.4	18.9	ND	20.0	87.0 - 123	92.0	94.5	ug/kg	2.68	30.0
o-Dichlorobenzene	1501552	18.1	18.4	ND	20.0	89.0 - 118	90.5	92.0	ug/kg	1.64	30.0
o-Xylene	1501552	18.6	18.5	ND	20.0	84.0 - 114	93.0	92.5	ug/kg	0.539	30.0
p-Dichlorobenzene	1501552	18.3	18.9	ND	20.0	92.0 - 117	91.5 *	94.5	ug/kg	3.23	30.0
p-Isopropyltoluene	1501552	18.0	18.2	ND	20.0	86.0 - 123	90.0	91.0	ug/kg	1.10	30.0
sec-Butylbenzene	1501552	16.9	17.6	ND	20.0	85.0 - 122	84.5 *	88.0	ug/kg	4.06	30.0
Styrene	1501552	17.2	17.2	ND	20.0	81.0 - 113	86.0	86.0	ug/kg	0	30.0
tert-Butylbenzene	1501552	18.4	18.7	ND	20.0	84.0 - 123	92.0	93.5	ug/kg	1.62	30.0
tert-Butylmethylether (MTBE)	1501552	18.4	19.0	ND	20.0	76.0 - 136	92.0	95.0	ug/kg	3.21	30.0

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Quality Control

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Tetrachloroethylene	1501552	19.5	18.9	ND	20.0	84.0 - 113	97.5	94.5	ug/kg	3.12	30.0
Toluene	1501552	18.6	18.4	ND	20.0	88.0 - 111	93.0	92.0	ug/kg	1.08	30.0
trans-1,2-Dichloroethylene	1501552	18.4	18.0	ND	20.0	89.0 - 130	92.0	90.0	ug/kg	2.20	30.0
trans-1,3-Dichloropropene	1501552	15.2	15.2	ND	20.0	81.0 - 117	76.0 *	76.0 *	ug/kg	0	30.0
Trichloroethylene	1501552	16.7	16.4	ND	20.0	86.0 - 111	83.5 *	82.0 *	ug/kg	1.81	30.0
Trichlorofluoromethane	1501552	14.9	14.8	ND	20.0	65.0 - 123	74.5	74.0	ug/kg	0.673	30.0
Vinyl chloride	1501552	12.4	12.4	ND	20.0	86.0 - 139	62.0 *	62.0 *	ug/kg	0	30.0

SPCC

Parameter	Sample	RF	Minimum	File
1,1,2,2-Tetrachloroethane	668758	21.3	0.300	116647828
1,1-Dichloroethane	668758	19.8	0.100	116647828
Bromoform	668758	18.8	0.100	116647828
Chlorobenzene	668758	20.3	0.300	116647828
Chloromethane	668758	21.4	0.100	116647828

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1,2-DCA-d4 (SURR)	668758	CCV	20.9	20.0	ug/kg	104	52.7 - 150	116647828
1,2-DCA-d4 (SURR)	668758	LCS	20.4	20.0	ug/kg	102	52.7 - 150	116647829
1,2-DCA-d4 (SURR)	668758	LCS Dup	20.4	20.0	ug/kg	102	52.7 - 150	116647830
1,2-DCA-d4 (SURR)	668758	Blank	20.9	20.0	ug/kg	104	52.7 - 150	116647831
Bromofluorobenzene (SURR)	668758	CCV	20.8	20.0	ug/kg	104	79.4 - 114	116647828
Bromofluorobenzene (SURR)	668758	LCS	20.7	20.0	ug/kg	104	79.4 - 114	116647829
Bromofluorobenzene (SURR)	668758	LCS Dup	20.8	20.0	ug/kg	104	79.4 - 114	116647830
Bromofluorobenzene (SURR)	668758	Blank	20.3	20.0	ug/kg	102	79.4 - 114	116647831
Dibromofluoromethane (SURR)	668758	CCV	20.7	20.0	ug/kg	104	68.7 - 124	116647828
Dibromofluoromethane (SURR)	668758	LCS	20.3	20.0	ug/kg	102	68.7 - 124	116647829
Dibromofluoromethane (SURR)	668758	LCS Dup	21.4	20.0	ug/kg	107	68.7 - 124	116647830
Dibromofluoromethane (SURR)	668758	Blank	21.0	20.0	ug/kg	105	68.7 - 124	116647831
TolueneD8 (SURR)	668758	CCV	20.7	20.0	ug/kg	104	76.0 - 118	116647828
TolueneD8 (SURR)	668758	LCS	20.2	20.0	ug/kg	101	76.0 - 118	116647829
TolueneD8 (SURR)	668758	LCS Dup	20.7	20.0	ug/kg	104	76.0 - 118	116647830
TolueneD8 (SURR)	668758	Blank	20.2	20.0	ug/kg	101	76.0 - 118	116647831
1,2-DCA-d4 (SURR)	1501552	MS	20.5	20.0	ug/kg	102	52.7 - 150	116647836
1,2-DCA-d4 (SURR)	1501552	MSD	20.4	20.0	ug/kg	102	52.7 - 150	116647837
Bromofluorobenzene (SURR)	1501552	MS	21.0	20.0	ug/kg	105	79.4 - 114	116647836
Bromofluorobenzene (SURR)	1501552	MSD	21.0	20.0	ug/kg	105	79.4 - 114	116647837
Dibromofluoromethane (SURR)	1501552	MS	21.2	20.0	ug/kg	106	68.7 - 124	116647836
Dibromofluoromethane (SURR)	1501552	MSD	20.5	20.0	ug/kg	102	68.7 - 124	116647837
TolueneD8 (SURR)	1501552	MS	20.4	20.0	ug/kg	102	76.0 - 118	116647836
TolueneD8 (SURR)	1501552	MSD	20.3	20.0	ug/kg	102	76.0 - 118	116647837

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Quality Control

669047 Solid & Chemical Materials **EPA 8151**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP 2,4 D	668165	ND	0.000159	0.0005	mg/L	116656667	
TCLP 2,4,5-TP (Silvex)	668165	ND	0.00008930	0.0003	mg/L	116656667	
TCLP 2,4 D	668637	ND	0.000159	0.0005	mg/L	116656652	
TCLP 2,4,5-TP (Silvex)	668637	ND	0.00008930	0.0003	mg/L	116656652	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP 2,4 D	0.154	0.150	mg/L	103	70.0 - 130		116652246
TCLP 2,4 D	0.208	0.150	mg/L	139	70.0 - 130	*	116656677
TCLP 2,4 D	0.204	0.150	mg/L	136	70.0 - 130	*	116656679
TCLP 2,4,5-TP (Silvex)	0.168	0.150	mg/L	112	70.0 - 130		116652246
TCLP 2,4,5-TP (Silvex)	0.225	0.150	mg/L	150	70.0 - 130	*	116656677
TCLP 2,4,5-TP (Silvex)	0.224	0.150	mg/L	149	70.0 - 130	*	116656679

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 2,4 D	668637	0.000718	0.001	mg/L	71.8	2.84 - 180	116656653	
TCLP 2,4,5-TP (Silvex)	668637	0.000605	0.001	mg/L	60.5	9.90 - 162	116656653	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP 2,4 D	668637	0.000718	0.0009	0.001	2.84 - 180	71.8	90.0	mg/L	22.5	30.0
TCLP 2,4,5-TP (Silvex)	668637	0.000605	0.000497	0.001	9.90 - 162	60.5	49.7	mg/L	19.6	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 2,4 D	1499939	0.332	0	ND	1.00	6.45 - 184	33.2		mg/L		30.0
TCLP 2,4,5-TP (Silvex)	1499939	0.351	0	ND	1.00	9.18 - 181	35.1		mg/L		30.0
TCLP 2,4 D	1500893	0.523	0	ND	1.00	6.45 - 184	52.3		mg/L		30.0
TCLP 2,4,5-TP (Silvex)	1500893	0.609	0	ND	1.00	9.18 - 181	60.9		mg/L		30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4-Dichlorophenylacetic Acid		CCV	0.151	0.100	mg/L	151	9.92 - 234	116652246
2,4-Dichlorophenylacetic Acid		CCV	0.186	0.100	mg/L	186	9.92 - 234	116656677
2,4-Dichlorophenylacetic Acid		CCV	0.183	0.100	mg/L	183	9.92 - 234	116656679
2,4-Dichlorophenylacetic Acid	668165	Blank	0.0849	0.100	mg/L	84.9	9.92 - 234	116656667
2,4-Dichlorophenylacetic Acid	668637	Blank	0.0989	0.100	mg/L	98.9	9.92 - 234	116656652
2,4-Dichlorophenylacetic Acid	668637	LCS	0.101	0.100	mg/L	101	9.92 - 234	116656653
2,4-Dichlorophenylacetic Acid	668637	LCS Dup	0.0922	0.100	mg/L	92.2	9.92 - 234	116656654
2,4-Dichlorophenylacetic Acid	1499939	MS	0.907	1.00	mg/L	90.7	9.92 - 234	116656657
2,4-Dichlorophenylacetic Acid	1500893	MS	1.08	1.00	mg/L	108	9.92 - 234	116656662

669072 Solid & Chemical Materials **EPA 8081A**

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Quality Control

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Chlordane	668165	ND	0.00000180	.00001	mg/L	116652648	
TCLP Endrin	668165	ND	0.00000850	.00001	mg/L	116652648	
TCLP gamma-BHC (Lindane)	668165	ND	0.00000890	.00001	mg/L	116652648	
TCLP Heptachlor	668165	ND	0.00000140	.00001	mg/L	116652648	
TCLP Heptachlor Epoxide	668165	ND	0.00000120	.00001	mg/L	116652648	
TCLP Methoxychlor	668165	ND	0.00000560	.00001	mg/L	116652648	
TCLP Toxaphene	668165	ND	0.00000370	.00001	mg/L	116652648	
TCLP Chlordane	668356	ND	0.00000180	.00001	mg/L	116652644	
TCLP Endrin	668356	ND	0.00000850	.00001	mg/L	116652644	
TCLP gamma-BHC (Lindane)	668356	ND	0.00000890	.00001	mg/L	116652644	
TCLP Heptachlor	668356	ND	0.00000140	.00001	mg/L	116652644	
TCLP Heptachlor Epoxide	668356	ND	0.00000120	.00001	mg/L	116652644	
TCLP Methoxychlor	668356	ND	0.00000560	.00001	mg/L	116652644	
TCLP Toxaphene	668356	ND	0.00000370	.00001	mg/L	116652644	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Endrin	0.107	0.100	mg/L	107	80.0 - 120		116652643
TCLP Endrin	0.109	0.100	mg/L	109	80.0 - 120		116652653
TCLP gamma-BHC (Lindane)	0.105	0.100	mg/L	105	80.0 - 120		116652643
TCLP gamma-BHC (Lindane)	0.111	0.100	mg/L	111	80.0 - 120		116652653
TCLP Heptachlor	0.105	0.100	mg/L	105	80.0 - 120		116652643
TCLP Heptachlor	0.105	0.100	mg/L	105	80.0 - 120		116652653
TCLP Heptachlor Epoxide	0.107	0.100	mg/L	107	80.0 - 120		116652643
TCLP Heptachlor Epoxide	0.110	0.100	mg/L	110	80.0 - 120		116652653
TCLP Methoxychlor	0.107	0.100	mg/L	107	80.0 - 120		116652643
TCLP Methoxychlor	0.100	0.100	mg/L	100	80.0 - 120		116652653

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP Endrin	668356	0.00104	0.001	mg/L	104	42.0 - 136	116652645	
TCLP gamma-BHC (Lindane)	668356	0.000945	0.001	mg/L	94.5	33.6 - 125	116652645	
TCLP Heptachlor	668356	0.000924	0.001	mg/L	92.4	19.4 - 121	116652645	
TCLP Heptachlor Epoxide	668356	0.00102	0.001	mg/L	102	43.4 - 123	116652645	
TCLP Methoxychlor	668356	0.00101	0.001	mg/L	101	32.1 - 143	116652645	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP Endrin	668356	0.00104	0.000934	0.001	42.0 - 136	104	93.4	mg/L	10.7	30.0
TCLP gamma-BHC (Lindane)	668356	0.000945	0.000808	0.001	33.6 - 125	94.5	80.8	mg/L	15.6	30.0
TCLP Heptachlor	668356	0.000924	0.000799	0.001	19.4 - 121	92.4	79.9	mg/L	14.5	30.0
TCLP Heptachlor Epoxide	668356	0.00102	0.000908	0.001	43.4 - 123	102	90.8	mg/L	11.6	30.0
TCLP Methoxychlor	668356	0.00101	0.000987	0.001	32.1 - 143	101	98.7	mg/L	2.30	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Endrin	1500893	0.0043	0	ND	0.005	21.4 - 154	86.0		mg/L		30.0

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Quality Control

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MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP gamma-BHC (Lindane)	1500893	0.0038	0	ND	0.005	13.4 - 137	76.0		mg/L		30.0
TCLP Heptachlor	1500893	0.00365	0	ND	0.005	6.35 - 126	73.0		mg/L		30.0
TCLP Heptachlor Epoxide	1500893	0.0041	0	ND	0.005	26.2 - 133	82.0		mg/L		30.0
TCLP Methoxychlor	1500893	0.00459	0	ND	0.005	3.85 - 178	91.8		mg/L		30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Decachlorobiphenyl	577520	CCV	0.116	0.100	mg/L	116	10.0 - 150	116652643
Decachlorobiphenyl	577520	CCV	0.116	0.100	mg/L	116	10.0 - 150	116652653
Tetrachloro-m-Xylene (Surr)	577520	CCV	0.103	0.100	mg/L	103	10.0 - 150	116652643
Tetrachloro-m-Xylene (Surr)	577520	CCV	0.102	0.100	mg/L	102	10.0 - 150	116652653
Decachlorobiphenyl	668165	Blank	0.110	0.100	mg/L	110	10.0 - 150	116652648
Tetrachloro-m-Xylene (Surr)	668165	Blank	0.0411	0.100	mg/L	41.1	10.0 - 150	116652648
Decachlorobiphenyl	668356	Blank	0.0651	0.100	mg/L	65.1	10.0 - 150	116652644
Decachlorobiphenyl	668356	LCS	0.115	0.100	mg/L	115	10.0 - 150	116652645
Decachlorobiphenyl	668356	LCS Dup	0.115	0.100	mg/L	115	10.0 - 150	116652646
Tetrachloro-m-Xylene (Surr)	668356	Blank	0.0376	0.100	mg/L	37.6	10.0 - 150	116652644
Tetrachloro-m-Xylene (Surr)	668356	LCS	0.0883	0.100	mg/L	88.3	10.0 - 150	116652645
Tetrachloro-m-Xylene (Surr)	668356	LCS Dup	0.079	0.100	mg/L	79.0	10.0 - 150	116652646
Decachlorobiphenyl	1500893	MS	0.00438	0.005	mg/L	87.6	10.0 - 150	116652652
Tetrachloro-m-Xylene (Surr)	1500893	MS	0.00332	0.005	mg/L	66.4	10.0 - 150	116652652

669124 Solid & Chemical Materials — EPA 8270C

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP 2,4,5-Trichlorophenol	668165	ND	0.000201	0.001	mg/L	116653808	
TCLP 2,4,6-Trichlorophenol	668165	ND	0.000308	0.001	mg/L	116653808	
TCLP 2,4-Dinitrotoluene	668165	ND	0.000282	0.001	mg/L	116653808	
TCLP 2-Methylphenol (o-Cresol)	668165	ND	0.00033	0.001	mg/L	116653808	
TCLP 3&4-Methylphenol (m&p-Creso	668165	ND	0.000297	0.001	mg/L	116653808	
TCLP bis(2-Chloroethyl)ether	668165	ND	0.000443	0.001	mg/L	116653808	
TCLP Hexachlorobenzene	668165	ND	0.000292	0.001	mg/L	116653808	
TCLP Hexachlorobutadiene	668165	ND	0.000276	0.001	mg/L	116653808	
TCLP Hexachloroethane	668165	ND	0.000258	0.001	mg/L	116653808	
TCLP Nitrobenzene	668165	ND	0.00038	0.001	mg/L	116653808	
TCLP Pentachlorophenol	668165	ND	0.000332	0.001	mg/L	116653808	
TCLP Pyridine (Reg. Limit 5)	668165	ND	0.000492	0.001	mg/L	116653808	
TCLP 2,4,5-Trichlorophenol	668522	ND	0.000201	0.001	mg/L	116653804	
TCLP 2,4,5-Trichlorophenol	668522	ND	0.000201	0.001	mg/L	116653807	
TCLP 2,4,5-Trichlorophenol	668522	ND	0.000201	0.001	mg/L	116653810	
TCLP 2,4,6-Trichlorophenol	668522	ND	0.000308	0.001	mg/L	116653804	
TCLP 2,4,6-Trichlorophenol	668522	ND	0.000308	0.001	mg/L	116653807	
TCLP 2,4,6-Trichlorophenol	668522	ND	0.000308	0.001	mg/L	116653810	
TCLP 2,4-Dinitrotoluene	668522	ND	0.000282	0.001	mg/L	116653804	
TCLP 2,4-Dinitrotoluene	668522	ND	0.000282	0.001	mg/L	116653807	
TCLP 2,4-Dinitrotoluene	668522	ND	0.000282	0.001	mg/L	116653810	
TCLP 2-Methylphenol (o-Cresol)	668522	ND	0.00033	0.001	mg/L	116653804	

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Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*	*Out*
TCLP 2-Methylphenol (o-Cresol)	668522	ND	0.00033	0.001	mg/L	116653807	
TCLP 2-Methylphenol (o-Cresol)	668522	ND	0.00033	0.001	mg/L	116653810	
TCLP 3&4-Methylphenol (m&p-Creso	668522	ND	0.000297	0.001	mg/L	116653804	
TCLP 3&4-Methylphenol (m&p-Creso	668522	ND	0.000297	0.001	mg/L	116653807	
TCLP 3&4-Methylphenol (m&p-Creso	668522	ND	0.000297	0.001	mg/L	116653810	
TCLP bis(2-Chloroethyl)ether	668522	ND	0.000443	0.001	mg/L	116653804	
TCLP bis(2-Chloroethyl)ether	668522	ND	0.000443	0.001	mg/L	116653807	
TCLP bis(2-Chloroethyl)ether	668522	ND	0.000443	0.001	mg/L	116653810	
TCLP Hexachlorobenzene	668522	ND	0.000292	0.001	mg/L	116653804	
TCLP Hexachlorobenzene	668522	ND	0.000292	0.001	mg/L	116653807	
TCLP Hexachlorobenzene	668522	ND	0.000292	0.001	mg/L	116653810	
TCLP Hexachlorobutadiene	668522	ND	0.000276	0.001	mg/L	116653804	
TCLP Hexachlorobutadiene	668522	ND	0.000276	0.001	mg/L	116653807	
TCLP Hexachlorobutadiene	668522	ND	0.000276	0.001	mg/L	116653810	
TCLP Hexachloroethane	668522	ND	0.000258	0.001	mg/L	116653804	
TCLP Hexachloroethane	668522	ND	0.000258	0.001	mg/L	116653807	
TCLP Hexachloroethane	668522	ND	0.000258	0.001	mg/L	116653810	
TCLP Nitrobenzene	668522	ND	0.00038	0.001	mg/L	116653804	
TCLP Nitrobenzene	668522	ND	0.00038	0.001	mg/L	116653807	
TCLP Nitrobenzene	668522	ND	0.00038	0.001	mg/L	116653810	
TCLP Pentachlorophenol	668522	ND	0.000332	0.001	mg/L	116653804	
TCLP Pentachlorophenol	668522	ND	0.000332	0.001	mg/L	116653807	
TCLP Pentachlorophenol	668522	ND	0.000332	0.001	mg/L	116653810	
TCLP Pyridine (Reg. Limit 5)	668522	ND	0.000492	0.001	mg/L	116653804	
TCLP Pyridine (Reg. Limit 5)	668522	ND	0.000492	0.001	mg/L	116653807	
TCLP Pyridine (Reg. Limit 5)	668522	ND	0.000492	0.001	mg/L	116653810	

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
TCLP 2,4,5-Trichlorophenol	49.1	50.0	mg/L	98.2	70.0 - 130		116653803
TCLP 2,4,6-Trichlorophenol	53.2	50.0	mg/L	106	70.0 - 130		116653803
TCLP 2,4-Dinitrotoluene	47.1	50.0	mg/L	94.2	70.0 - 130		116653803
TCLP 2-Methylphenol (o-Cresol)	42.4	50.0	mg/L	84.8	70.0 - 130		116653803
TCLP 3&4-Methylphenol (m&p-Creso	42.8	50.0	mg/L	85.6	70.0 - 130		116653803
TCLP bis(2-Chloroethyl)ether	41.6	50.0	mg/L	83.2	70.0 - 130		116653803
TCLP Hexachlorobenzene	46.5	50.0	mg/L	93.0	70.0 - 130		116653803
TCLP Hexachlorobutadiene	50.5	50.0	mg/L	101	70.0 - 130		116653803
TCLP Hexachloroethane	44.3	50.0	mg/L	88.6	70.0 - 130		116653803
TCLP Nitrobenzene	58.0	50.0	mg/L	116	70.0 - 130		116653803
TCLP Pentachlorophenol	45.1	50.0	mg/L	90.2	70.0 - 130		116653803
TCLP Pyridine (Reg. Limit 5)	46.9	50.0	mg/L	93.8	70.0 - 130		116653803

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DFTPP

Parameter		RefMass	Reading	%	Limits%	Out	File
DFTPP Mass 127	578278	198	23459	53.0	40.0 - 60.0		116653802
DFTPP Mass 197	578278	198	0	0.0	0 - 1.00		116653802
DFTPP Mass 198	578278	198	44241	100.0	100 - 100		116653802
DFTPP Mass 199	578278	198	2949	6.7	5.00 - 9.00		116653802
DFTPP Mass 275	578278	198	10616	24.0	10.0 - 30.0		116653802
DFTPP Mass 365	578278	198	1328	3.0	1.00 - 100		116653802
DFTPP Mass 441	578278	443	5921	80.4	0 - 100		116653802
DFTPP Mass 442	578278	198	38626	87.3	40.0 - 100		116653802
DFTPP Mass 443	578278	442	7365	19.1	17.0 - 23.0		116653802
DFTPP Mass 51	578278	198	15737	35.6	30.0 - 60.0		116653802
DFTPP Mass 68	578278	69.0	0	0.0	0 - 2.00		116653802
DFTPP Mass 69	578278	198	20117	45.5	0 - 100		116653802
DFTPP Mass 70	578278	69.0	86	0.4	0 - 2.00		116653802

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	578179	CCV	171000	171000	85520	256600		116653803	578179
Acenaphthene-d10-ISTD	578179	CCV	362000	362000	181000	543100		116653803	578179
Naphthalene-d8-ISTD	578179	CCV	651400	651400	325700	977100		116653803	578179
Phenanthrene-d10-ISTD	578179	CCV	525100	525100	262500	787600		116653803	578179
1,4-Dichlorobenzene-d4-ISTD	668165	Blank	97700	171000	85520	256600		116653808	668165
Acenaphthene-d10-ISTD	668165	Blank	191700	362000	181000	543100		116653808	668165
Naphthalene-d8-ISTD	668165	Blank	364100	651400	325700	977100		116653808	668165
Phenanthrene-d10-ISTD	668165	Blank	219300	525100	262500	787600	*	116653808	668165
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	86870	171000	85520	256600		116653804	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS	96340	171000	85520	256600		116653805	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS Dup	90470	171000	85520	256600		116653806	668522
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	111300	171000	85520	256600		116653807	668522
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	97030	171000	85520	256600		116653810	668522
Acenaphthene-d10-ISTD	668522	Blank	172600	362000	181000	543100	*	116653804	668522
Acenaphthene-d10-ISTD	668522	LCS	195500	362000	181000	543100		116653805	668522
Acenaphthene-d10-ISTD	668522	LCS Dup	188600	362000	181000	543100		116653806	668522
Acenaphthene-d10-ISTD	668522	Blank	218300	362000	181000	543100		116653807	668522
Acenaphthene-d10-ISTD	668522	Blank	192900	362000	181000	543100		116653810	668522
Naphthalene-d8-ISTD	668522	Blank	330000	651400	325700	977100		116653804	668522
Naphthalene-d8-ISTD	668522	LCS	365500	651400	325700	977100		116653805	668522
Naphthalene-d8-ISTD	668522	LCS Dup	353100	651400	325700	977100		116653806	668522
Naphthalene-d8-ISTD	668522	Blank	419200	651400	325700	977100		116653807	668522
Naphthalene-d8-ISTD	668522	Blank	367800	651400	325700	977100		116653810	668522
Phenanthrene-d10-ISTD	668522	Blank	204100	525100	262500	787600	*	116653804	668522
Phenanthrene-d10-ISTD	668522	LCS	251100	525100	262500	787600	*	116653805	668522
Phenanthrene-d10-ISTD	668522	LCS Dup	284400	525100	262500	787600		116653806	668522
Phenanthrene-d10-ISTD	668522	Blank	261900	525100	262500	787600	*	116653807	668522
Phenanthrene-d10-ISTD	668522	Blank	277100	525100	262500	787600		116653810	668522
1,4-Dichlorobenzene-d4-ISTD	1500893	MS	98350	171000	85520	256600		116653815	668522

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Quality Control

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
Acenaphthene-d10-ISTD	1500893	MS	183400	362000	181000	543100		116653815	668522
Naphthalene-d8-ISTD	1500893	MS	383500	651400	325700	977100		116653815	668522
Phenanthrene-d10-ISTD	1500893	MS	252400	525100	262500	787600	*	116653815	668522

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	578179	CCV	4.910	4.910	4.850	4.970		116653803	578179
Acenaphthene-d10-ISTD	578179	CCV	9.890	9.890	9.830	9.950		116653803	578179
Naphthalene-d8-ISTD	578179	CCV	6.610	6.610	6.550	6.670		116653803	578179
Phenanthrene-d10-ISTD	578179	CCV	13.06	13.06	13.00	13.12		116653803	578179
1,4-Dichlorobenzene-d4-ISTD	668165	Blank	4.900	4.910	4.850	4.970		116653808	668165
Acenaphthene-d10-ISTD	668165	Blank	9.860	9.890	9.830	9.950		116653808	668165
Naphthalene-d8-ISTD	668165	Blank	6.590	6.610	6.550	6.670		116653808	668165
Phenanthrene-d10-ISTD	668165	Blank	13.02	13.06	13.00	13.12		116653808	668165
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	4.890	4.910	4.850	4.970		116653804	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS	4.900	4.910	4.850	4.970		116653805	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS Dup	4.900	4.910	4.850	4.970		116653806	668522
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	4.900	4.910	4.850	4.970		116653807	668522
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	4.890	4.910	4.850	4.970		116653810	668522
Acenaphthene-d10-ISTD	668522	Blank	9.860	9.890	9.830	9.950		116653804	668522
Acenaphthene-d10-ISTD	668522	LCS	9.860	9.890	9.830	9.950		116653805	668522
Acenaphthene-d10-ISTD	668522	LCS Dup	9.870	9.890	9.830	9.950		116653806	668522
Acenaphthene-d10-ISTD	668522	Blank	9.860	9.890	9.830	9.950		116653807	668522
Acenaphthene-d10-ISTD	668522	Blank	9.850	9.890	9.830	9.950		116653810	668522
Naphthalene-d8-ISTD	668522	Blank	6.590	6.610	6.550	6.670		116653804	668522
Naphthalene-d8-ISTD	668522	LCS	6.590	6.610	6.550	6.670		116653805	668522
Naphthalene-d8-ISTD	668522	LCS Dup	6.590	6.610	6.550	6.670		116653806	668522
Naphthalene-d8-ISTD	668522	Blank	6.590	6.610	6.550	6.670		116653807	668522
Naphthalene-d8-ISTD	668522	Blank	6.590	6.610	6.550	6.670		116653810	668522
Phenanthrene-d10-ISTD	668522	Blank	13.02	13.06	13.00	13.12		116653804	668522
Phenanthrene-d10-ISTD	668522	LCS	13.03	13.06	13.00	13.12		116653805	668522
Phenanthrene-d10-ISTD	668522	LCS Dup	13.03	13.06	13.00	13.12		116653806	668522
Phenanthrene-d10-ISTD	668522	Blank	13.02	13.06	13.00	13.12		116653807	668522
Phenanthrene-d10-ISTD	668522	Blank	13.02	13.06	13.00	13.12		116653810	668522
1,4-Dichlorobenzene-d4-ISTD	1500893	MS	4.890	4.910	4.850	4.970		116653815	668522
Acenaphthene-d10-ISTD	1500893	MS	9.860	9.890	9.830	9.950		116653815	668522
Naphthalene-d8-ISTD	1500893	MS	6.590	6.610	6.550	6.670		116653815	668522
Phenanthrene-d10-ISTD	1500893	MS	13.02	13.06	13.00	13.12		116653815	668522

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 2,4,5-Trichlorophenol	668522	0.0202	0.025	mg/L	80.8	40.4 - 118	116653805	
TCLP 2,4,6-Trichlorophenol	668522	0.0209	0.025	mg/L	83.6	39.2 - 114	116653805	
TCLP 2,4-Dinitrotoluene	668522	0.0186	0.025	mg/L	74.4	36.9 - 133	116653805	
TCLP 2-Methylphenol (o-Cresol)	668522	0.0156	0.025	mg/L	62.4	11.7 - 103	116653805	

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LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 3&4-Methylphenol (m&p-Creso	668522	0.0152	0.025	mg/L	60.8	0.100 - 132	116653805	
TCLP bis(2-Chloroethyl)ether	668522	0.0184	0.025	mg/L	73.6	24.1 - 122	116653805	
TCLP Hexachlorobenzene	668522	0.0223	0.025	mg/L	89.2	38.7 - 126	116653805	
TCLP Hexachlorobutadiene	668522	0.0153	0.025	mg/L	61.2	10.2 - 95.4	116653805	
TCLP Hexachloroethane	668522	0.0145	0.025	mg/L	58.0	10.6 - 94.1	116653805	
TCLP Nitrobenzene	668522	0.0215	0.025	mg/L	86.0	27.5 - 120	116653805	
TCLP Pentachlorophenol	668522	0.0147	0.025	mg/L	58.8	17.3 - 132	116653805	
TCLP Pyridine (Reg. Limit 5)	668522	0	0.025	mg/L	0	5.47 - 83.4	116653805	*

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP 2,4,5-Trichlorophenol	668522	0.0202	0.0216	0.025	40.4 - 118	80.8	86.4	mg/L	6.70	30.0
TCLP 2,4,6-Trichlorophenol	668522	0.0209	0.0219	0.025	39.2 - 114	83.6	87.6	mg/L	4.67	30.0
TCLP 2,4-Dinitrotoluene	668522	0.0186	0.0197	0.025	36.9 - 133	74.4	78.8	mg/L	5.74	30.0
TCLP 2-Methylphenol (o-Cresol)	668522	0.0156	0.0176	0.025	11.7 - 103	62.4	70.4	mg/L	12.0	30.0
TCLP 3&4-Methylphenol (m&p-Creso	668522	0.0152	0.0166	0.025	0.100 - 132	60.8	66.4	mg/L	8.81	30.0
TCLP bis(2-Chloroethyl)ether	668522	0.0184	0.0171	0.025	24.1 - 122	73.6	68.4	mg/L	7.32	30.0
TCLP Hexachlorobenzene	668522	0.0223	0.0198	0.025	38.7 - 126	89.2	79.2	mg/L	11.9	30.0
TCLP Hexachlorobutadiene	668522	0.0153	0.0171	0.025	10.2 - 95.4	61.2	68.4	mg/L	11.1	30.0
TCLP Hexachloroethane	668522	0.0145	0.0168	0.025	10.6 - 94.1	58.0	67.2	mg/L	14.7	30.0
TCLP Nitrobenzene	668522	0.0215	0.0241	0.025	27.5 - 120	86.0	96.4	mg/L	11.4	30.0
TCLP Pentachlorophenol	668522	0.0147	0.0156	0.025	17.3 - 132	58.8	62.4	mg/L	5.94	30.0
TCLP Pyridine (Reg. Limit 5)	668522	0	0.0005	0.025	5.47 - 83.4	0 *	2.00 *	mg/L	200 *	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 2,4,5-Trichlorophenol	1500893	0.199	0	ND	0.250	18.3 - 144	79.6		mg/L		30.0
TCLP 2,4,6-Trichlorophenol	1500893	0.199	0	ND	0.250	21.3 - 139	79.6		mg/L		30.0
TCLP 2,4-Dinitrotoluene	1500893	0.186	0	ND	0.250	19.7 - 161	74.4		mg/L		30.0
TCLP 2-Methylphenol (o-Cresol)	1500893	0.137	0	ND	0.250	6.97 - 119	54.8		mg/L		30.0
TCLP 3&4-Methylphenol (m&p-Creso	1500893	0.117	0	ND	0.250	0.100 - 230	46.8		mg/L		30.0
TCLP bis(2-Chloroethyl)ether	1500893	0.154	0	ND	0.250	11.0 - 128	61.6		mg/L		30.0
TCLP Hexachlorobenzene	1500893	0.246	0	ND	0.250	28.1 - 147	98.4		mg/L		30.0
TCLP Hexachlorobutadiene	1500893	0.154	0	ND	0.250	0.100 - 94.9	61.6		mg/L		30.0
TCLP Hexachloroethane	1500893	0.150	0	ND	0.250	0.100 - 101	60.0		mg/L		30.0
TCLP Nitrobenzene	1500893	0.226	0	ND	0.250	15.6 - 129	90.4		mg/L		30.0
TCLP Pentachlorophenol	1500893	0.161	0	ND	0.250	3.96 - 159	64.4		mg/L		30.0
TCLP Pyridine (Reg. Limit 5)	1500893	0	0	ND	0.250	0.100 - 90.0	0		mg/L		30.0

SPCC

Parameter	Sample	RF	Minimum	File
TCLP 2,4-Dinitrophenol	578179	40.1	0.050	116653803
TCLP 4-Nitrophenol	578179	43.0	0.050	116653803

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Quality Control

SPCC

Parameter	Sample	RF	Minimum	File
TCLP Hexachlorocyclopentadiene	578179	56.8	0.050	116653803
TCLP N-Nitroso-n-propylamine	578179	43.2	0.050	116653803

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	578179	CCV	54.0	100	mg/L	54.0	4.84 - 133	116653803
2-Fluorobiphenyl-SURR	578179	CCV	51.0	50.0	mg/L	102	3.58 - 121	116653803
2-Fluorophenol-SURR	578179	CCV	50.0	100	mg/L	50.0	0.100 - 90.1	116653803
4-Terphenyl-d14-SURR	578179	CCV	54.5	50.0	mg/L	109	0.100 - 148	116653803
Nitrobenzene-d5-SURR	578179	CCV	42.8	50.0	mg/L	85.6	0.100 - 130	116653803
Phenol-d6-SURR	578179	CCV	40.2	100	mg/L	40.2	0.100 - 84.9	116653803
2,4,6-Tribromophenol	668165	Blank	1.99	3.33	mg/L	59.8	4.84 - 133	116653808
2-Fluorobiphenyl-SURR	668165	Blank	20.4	50.0	mg/L	40.8	3.58 - 121	116653808
2-Fluorophenol-SURR	668165	Blank	50.6	100	mg/L	50.6	0.100 - 90.1	116653808
4-Terphenyl-d14-SURR	668165	Blank	19.3	50.0	mg/L	38.6	0.100 - 148	116653808
Nitrobenzene-d5-SURR	668165	Blank	19.5	50.0	mg/L	39.0	0.100 - 130	116653808
Phenol-d6-SURR	668165	Blank	32.0	100	mg/L	32.0	0.100 - 84.9	116653808
2,4,6-Tribromophenol	668522	Blank	1.73	3.33	mg/L	52.0	4.84 - 133	116653804
2,4,6-Tribromophenol	668522	LCS	2.00	3.33	mg/L	60.1	4.84 - 133	116653805
2,4,6-Tribromophenol	668522	LCS Dup	2.08	3.33	mg/L	62.5	4.84 - 133	116653806
2,4,6-Tribromophenol	668522	Blank	2.03	3.33	mg/L	61.0	4.84 - 133	116653807
2,4,6-Tribromophenol	668522	Blank	2.06	3.33	mg/L	61.9	4.84 - 133	116653810
2-Fluorobiphenyl-SURR	668522	Blank	20.3	50.0	mg/L	40.6	3.58 - 121	116653804
2-Fluorobiphenyl-SURR	668522	LCS	18.9	50.0	mg/L	37.8	3.58 - 121	116653805
2-Fluorobiphenyl-SURR	668522	LCS Dup	20.4	50.0	mg/L	40.8	3.58 - 121	116653806
2-Fluorobiphenyl-SURR	668522	Blank	18.6	50.0	mg/L	37.2	3.58 - 121	116653807
2-Fluorobiphenyl-SURR	668522	Blank	19.3	50.0	mg/L	38.6	3.58 - 121	116653810
2-Fluorophenol-SURR	668522	Blank	52.7	100	mg/L	52.7	0.100 - 90.1	116653804
2-Fluorophenol-SURR	668522	LCS	44.7	100	mg/L	44.7	0.100 - 90.1	116653805
2-Fluorophenol-SURR	668522	LCS Dup	49.6	100	mg/L	49.6	0.100 - 90.1	116653806
2-Fluorophenol-SURR	668522	Blank	40.7	100	mg/L	40.7	0.100 - 90.1	116653807
2-Fluorophenol-SURR	668522	Blank	49.9	100	mg/L	49.9	0.100 - 90.1	116653810
4-Terphenyl-d14-SURR	668522	Blank	21.1	50.0	mg/L	42.2	0.100 - 148	116653804
4-Terphenyl-d14-SURR	668522	LCS	22.5	50.0	mg/L	45.0	0.100 - 148	116653805
4-Terphenyl-d14-SURR	668522	LCS Dup	23.9	50.0	mg/L	47.8	0.100 - 148	116653806
4-Terphenyl-d14-SURR	668522	Blank	19.8	50.0	mg/L	39.6	0.100 - 148	116653807
4-Terphenyl-d14-SURR	668522	Blank	19.8	50.0	mg/L	39.6	0.100 - 148	116653810
Nitrobenzene-d5-SURR	668522	Blank	18.5	50.0	mg/L	37.0	0.100 - 130	116653804
Nitrobenzene-d5-SURR	668522	LCS	17.3	50.0	mg/L	34.6	0.100 - 130	116653805
Nitrobenzene-d5-SURR	668522	LCS Dup	19.1	50.0	mg/L	38.2	0.100 - 130	116653806
Nitrobenzene-d5-SURR	668522	Blank	17.9	50.0	mg/L	35.8	0.100 - 130	116653807
Nitrobenzene-d5-SURR	668522	Blank	18.7	50.0	mg/L	37.4	0.100 - 130	116653810
Phenol-d6-SURR	668522	Blank	30.9	100	mg/L	30.9	0.100 - 84.9	116653804
Phenol-d6-SURR	668522	LCS	25.2	100	mg/L	25.2	0.100 - 84.9	116653805
Phenol-d6-SURR	668522	LCS Dup	28.2	100	mg/L	28.2	0.100 - 84.9	116653806
Phenol-d6-SURR	668522	Blank	27.5	100	mg/L	27.5	0.100 - 84.9	116653807
Phenol-d6-SURR	668522	Blank	30.4	100	mg/L	30.4	0.100 - 84.9	116653810
2,4,6-Tribromophenol	1500893	MS	0.604	1.00	mg/L	60.4	4.84 - 133	116653815
2-Fluorobiphenyl-SURR	1500893	MS	0.195	0.500	mg/L	39.0	3.58 - 121	116653815

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Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2-Fluorophenol-SURR	1500893	MS	0.446	1.00	mg/L	44.6	0.100 - 90.1	116653815
4-Terphenyl-d14-SURR	1500893	MS	0.239	0.500	mg/L	47.8	0.100 - 148	116653815
Nitrobenzene-d5-SURR	1500893	MS	0.185	0.500	mg/L	37.0	0.100 - 130	116653815
Phenol-d6-SURR	1500893	MS	0.333	1.00	mg/L	33.3	0.100 - 84.9	116653815

669394 Solid & Chemical Materials

EPA 8270C

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP 2,4,5-Trichlorophenol	668522	ND	0.000961	0.005	mg/L	116657757	
TCLP 2,4,6-Trichlorophenol	668522	ND	0.00124	0.002	mg/L	116657757	
TCLP 2,4-Dinitrotoluene	668522	ND	0.00153	0.002	mg/L	116657757	
TCLP 2-Methylphenol (o-Cresol)	668522	ND	0.00848	0.010	mg/L	116657757	
TCLP 3&4-Methylphenol (m&p-Creso	668522	ND	0.00778	0.008	mg/L	116657757	
TCLP bis(2-Chloroethyl)ether	668522	ND	0.000348	0.001	mg/L	116657757	
TCLP Hexachlorobenzene	668522	ND	0.000871	0.001	mg/L	116657757	
TCLP Hexachlorobutadiene	668522	ND	0.00103	0.00103	mg/L	116657757	
TCLP Hexachloroethane	668522	ND	0.00105	0.002	mg/L	116657757	
TCLP Nitrobenzene	668522	ND	0.000271	0.001	mg/L	116657757	
TCLP Pentachlorophenol	668522	ND	0.00096	0.005	mg/L	116657757	
TCLP Pyridine (Reg. Limit 5)	668522	ND	0.00135	0.00135	mg/L	116657757	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP 2,4,5-Trichlorophenol	54.4	50.0	mg/L	109	70.0 - 130		116657749
TCLP 2,4,6-Trichlorophenol	48.7	50.0	mg/L	97.4	70.0 - 130		116657749
TCLP 2,4-Dinitrotoluene	45.7	50.0	mg/L	91.4	70.0 - 130		116657749
TCLP 2-Methylphenol (o-Cresol)	50.8	50.0	mg/L	102	70.0 - 130		116657749
TCLP 3&4-Methylphenol (m&p-Creso	48.3	50.0	mg/L	96.6	70.0 - 130		116657749
TCLP bis(2-Chloroethyl)ether	42.7	50.0	mg/L	85.4	70.0 - 130		116657749
TCLP Hexachlorobenzene	54.5	50.0	mg/L	109	70.0 - 130		116657749
TCLP Hexachlorobutadiene	50.5	50.0	mg/L	101	70.0 - 130		116657749
TCLP Hexachloroethane	49.8	50.0	mg/L	99.6	70.0 - 130		116657749
TCLP Nitrobenzene	40.2	50.0	mg/L	80.4	70.0 - 130		116657749
TCLP Pentachlorophenol	54.3	50.0	mg/L	109	70.0 - 130		116657749
TCLP Pyridine (Reg. Limit 5)	48.7	50.0	mg/L	97.4	70.0 - 130		116657749

DFTPP

Parameter		RefMass	Reading	%	Limits%	Out	File
DFTPP Mass 127	577690	198	27697	55.0	40.0 - 60.0		116657748
DFTPP Mass 197	577690	198	0	0.0	0 - 1.00		116657748
DFTPP Mass 198	577690	198	50344	100.0	100 - 100		116657748
DFTPP Mass 199	577690	198	3422	6.8	5.00 - 9.00		116657748
DFTPP Mass 275	577690	198	11117	22.1	10.0 - 30.0		116657748
DFTPP Mass 365	577690	198	1352	2.7	1.00 - 100		116657748
DFTPP Mass 441	577690	443	6463	79.3	0 - 100		116657748
DFTPP Mass 442	577690	198	42717	84.9	40.0 - 100		116657748

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DFTPP

Parameter		RefMass	Reading	%	Limits%	Out	File
DFTPP Mass 443	577690	442	8146	19.1	17.0 - 23.0		116657748
DFTPP Mass 51	577690	198	21845	43.4	30.0 - 60.0		116657748
DFTPP Mass 68	577690	69.0	0	0.0	0 - 2.00		116657748
DFTPP Mass 69	577690	198	24076	47.8	0 - 100		116657748
DFTPP Mass 70	577690	69.0	114	0.5	0 - 2.00		116657748

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	578179	CCV	113300	113300	56660	170000		116657749	578179
Acenaphthene-d10-ISTD	578179	CCV	199800	199800	99880	299600		116657749	578179
Naphthalene-d8-ISTD	578179	CCV	405900	405900	203000	608900		116657749	578179
Phenanthrene-d10-ISTD	578179	CCV	235900	235900	118000	353900		116657749	578179
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	102300	113300	56660	170000		116657757	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS	101100	113300	56660	170000		116657758	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS Dup	108700	113300	56660	170000		116657759	668522
Acenaphthene-d10-ISTD	668522	Blank	200600	199800	99880	299600		116657757	668522
Acenaphthene-d10-ISTD	668522	LCS	190700	199800	99880	299600		116657758	668522
Acenaphthene-d10-ISTD	668522	LCS Dup	197000	199800	99880	299600		116657759	668522
Naphthalene-d8-ISTD	668522	Blank	382100	405900	203000	608900		116657757	668522
Naphthalene-d8-ISTD	668522	LCS	369500	405900	203000	608900		116657758	668522
Naphthalene-d8-ISTD	668522	LCS Dup	388000	405900	203000	608900		116657759	668522
Phenanthrene-d10-ISTD	668522	Blank	268200	235900	118000	353900		116657757	668522
Phenanthrene-d10-ISTD	668522	LCS	254500	235900	118000	353900		116657758	668522
Phenanthrene-d10-ISTD	668522	LCS Dup	255300	235900	118000	353900		116657759	668522
1,4-Dichlorobenzene-d4-ISTD	1500893	MS	91420	113300	56660	170000		116657762	668522
Acenaphthene-d10-ISTD	1500893	MS	180900	199800	99880	299600		116657762	668522
Naphthalene-d8-ISTD	1500893	MS	337800	405900	203000	608900		116657762	668522
Phenanthrene-d10-ISTD	1500893	MS	225000	235900	118000	353900		116657762	668522

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	578179	CCV	4.640	4.640	4.580	4.700		116657749	578179
Acenaphthene-d10-ISTD	578179	CCV	7.100	7.100	7.040	7.160		116657749	578179
Naphthalene-d8-ISTD	578179	CCV	5.670	5.670	5.610	5.730		116657749	578179
Phenanthrene-d10-ISTD	578179	CCV	8.330	8.330	8.270	8.390		116657749	578179
1,4-Dichlorobenzene-d4-ISTD	668522	Blank	4.630	4.640	4.580	4.700		116657757	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS	4.630	4.640	4.580	4.700		116657758	668522
1,4-Dichlorobenzene-d4-ISTD	668522	LCS Dup	4.630	4.640	4.580	4.700		116657759	668522
Acenaphthene-d10-ISTD	668522	Blank	7.100	7.100	7.040	7.160		116657757	668522
Acenaphthene-d10-ISTD	668522	LCS	7.100	7.100	7.040	7.160		116657758	668522
Acenaphthene-d10-ISTD	668522	LCS Dup	7.100	7.100	7.040	7.160		116657759	668522
Naphthalene-d8-ISTD	668522	Blank	5.660	5.670	5.610	5.730		116657757	668522
Naphthalene-d8-ISTD	668522	LCS	5.660	5.670	5.610	5.730		116657758	668522
Naphthalene-d8-ISTD	668522	LCS Dup	5.660	5.670	5.610	5.730		116657759	668522
Phenanthrene-d10-ISTD	668522	Blank	8.320	8.330	8.270	8.390		116657757	668522

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Quality Control

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
Phenanthrene-d10-ISTD	668522	LCS	8.320	8.330	8.270	8.390		116657758	668522
Phenanthrene-d10-ISTD	668522	LCS Dup	8.320	8.330	8.270	8.390		116657759	668522
1,4-Dichlorobenzene-d4-IST D	1500893	MS	4.630	4.640	4.580	4.700		116657762	668522
Acenaphthene-d10-ISTD	1500893	MS	7.100	7.100	7.040	7.160		116657762	668522
Naphthalene-d8-ISTD	1500893	MS	5.660	5.670	5.610	5.730		116657762	668522
Phenanthrene-d10-ISTD	1500893	MS	8.320	8.330	8.270	8.390		116657762	668522

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 2,4,5-Trichlorophenol	668522	0.0232	0.025	mg/L	92.8	40.4 - 118	116657758	
TCLP 2,4,6-Trichlorophenol	668522	0.0202	0.025	mg/L	80.8	39.2 - 114	116657758	
TCLP 2,4-Dinitrotoluene	668522	0.023	0.025	mg/L	92.0	36.9 - 133	116657758	
TCLP 2-Methylphenol (o-Cresol)	668522	0.0174	0.025	mg/L	69.6	11.7 - 103	116657758	
TCLP 3&4-Methylphenol (m&p-Creso	668522	0.00974	0.025	mg/L	39.0	0.100 - 132	116657758	
TCLP bis(2-Chloroethyl)ether	668522	0.0193	0.025	mg/L	77.2	24.1 - 122	116657758	
TCLP Hexachlorobenzene	668522	0.023	0.025	mg/L	92.0	38.7 - 126	116657758	
TCLP Hexachlorobutadiene	668522	0.0161	0.025	mg/L	64.4	10.2 - 95.4	116657758	
TCLP Hexachloroethane	668522	0.0154	0.025	mg/L	61.6	10.6 - 94.1	116657758	
TCLP Nitrobenzene	668522	0.0145	0.025	mg/L	58.0	27.5 - 120	116657758	
TCLP Pentachlorophenol	668522	0.0219	0.025	mg/L	87.6	17.3 - 132	116657758	
TCLP Pyridine (Reg. Limit 5)	668522	0.0113	0.025	mg/L	45.2	5.47 - 83.4	116657758	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP 2,4,5-Trichlorophenol	668522	0.0232	0.0221	0.025	40.4 - 118	92.8	88.4	mg/L	4.86	30.0
TCLP 2,4,6-Trichlorophenol	668522	0.0202	0.0151	0.025	39.2 - 114	80.8	60.4	mg/L	28.9	30.0
TCLP 2,4-Dinitrotoluene	668522	0.023	0.0233	0.025	36.9 - 133	92.0	93.2	mg/L	1.30	30.0
TCLP 2-Methylphenol (o-Cresol)	668522	0.0174	0.0185	0.025	11.7 - 103	69.6	74.0	mg/L	6.13	30.0
TCLP 3&4-Methylphenol (m&p-Creso	668522	0.00974	0.0113	0.025	0.100 - 132	39.0	45.2	mg/L	14.7	30.0
TCLP bis(2-Chloroethyl)ether	668522	0.0193	0.0193	0.025	24.1 - 122	77.2	77.2	mg/L	0	30.0
TCLP Hexachlorobenzene	668522	0.023	0.0241	0.025	38.7 - 126	92.0	96.4	mg/L	4.67	30.0
TCLP Hexachlorobutadiene	668522	0.0161	0.0182	0.025	10.2 - 95.4	64.4	72.8	mg/L	12.2	30.0
TCLP Hexachloroethane	668522	0.0154	0.0173	0.025	10.6 - 94.1	61.6	69.2	mg/L	11.6	30.0
TCLP Nitrobenzene	668522	0.0145	0.0169	0.025	27.5 - 120	58.0	67.6	mg/L	15.3	30.0
TCLP Pentachlorophenol	668522	0.0219	0.0226	0.025	17.3 - 132	87.6	90.4	mg/L	3.15	30.0
TCLP Pyridine (Reg. Limit 5)	668522	0.0113	0.0122	0.025	5.47 - 83.4	45.2	48.8	mg/L	7.66	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 2,4,5-Trichlorophenol	1500893	0.202	0	ND	0.250	18.3 - 144	80.8		mg/L		30.0
TCLP 2,4,6-Trichlorophenol	1500893	0.172	0	ND	0.250	21.3 - 139	68.8		mg/L		30.0
TCLP 2,4-Dinitrotoluene	1500893	0.244	0	ND	0.250	19.7 - 161	97.6		mg/L		30.0
TCLP 2-Methylphenol (o-Cresol)	1500893	0.128	0	ND	0.250	6.97 - 119	51.2		mg/L		30.0
TCLP 3&4-Methylphenol (m&p-Creso	1500893	0.0637	0	ND	0.250	0.100 - 230	25.5		mg/L		30.0

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Quality Control

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP bis(2-Chloroethyl)ether	1500893	0.0675	0	0.0016	0.250	11.0 - 128	26.4		mg/L		30.0
TCLP Hexachlorobenzene	1500893	0.232	0	ND	0.250	28.1 - 147	92.8		mg/L		30.0
TCLP Hexachlorobutadiene	1500893	0.147	0	ND	0.250	0.100 - 94.9	58.8		mg/L		30.0
TCLP Hexachloroethane	1500893	0.144	0	ND	0.250	0.100 - 101	57.6		mg/L		30.0
TCLP Nitrobenzene	1500893	0.168	0	ND	0.250	15.6 - 129	67.2		mg/L		30.0
TCLP Pentachlorophenol	1500893	0.234	0	ND	0.250	3.96 - 159	93.6		mg/L		30.0
TCLP Pyridine (Reg. Limit 5)	1500893	0	0	ND	0.250	0.100 - 90.0	0 *		mg/L		30.0

SPCC

Parameter	Sample	RF	Minimum	File
TCLP 2,4-Dinitrophenol	578179	45.9	0.050	116657749
TCLP 4-Nitrophenol	578179	50.1	0.050	116657749
TCLP Hexachlorocyclopentadiene	578179	50.2	0.050	116657749
TCLP N-Nitroso-n-propylamine	578179	49.3	0.050	116657749

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	578179	CCV	46.4	100	mg/L	46.4	4.84 - 133	116657749
2-Fluorobiphenyl-SURR	578179	CCV	54.0	50.0	mg/L	108	3.58 - 121	116657749
2-Fluorophenol-SURR	578179	CCV	45.6	100	mg/L	45.6	0.100 - 90.1	116657749
4-Terphenyl-d14-SURR	578179	CCV	57.8	50.0	mg/L	116	0.100 - 148	116657749
Nitrobenzene-d5-SURR	578179	CCV	50.3	50.0	mg/L	101	0.100 - 130	116657749
Phenol-d6-SURR	578179	CCV	50.4	100	mg/L	50.4	0.100 - 84.9	116657749
2,4,6-Tribromophenol	668522	Blank	2.16	3.33	mg/L	64.9	4.84 - 133	116657757
2,4,6-Tribromophenol	668522	LCS	2.09	3.33	mg/L	62.8	4.84 - 133	116657758
2,4,6-Tribromophenol	668522	LCS Dup	2.18	3.33	mg/L	65.5	4.84 - 133	116657759
2-Fluorobiphenyl-SURR	668522	Blank	20.0	50.0	mg/L	40.0	3.58 - 121	116657757
2-Fluorobiphenyl-SURR	668522	LCS	20.6	50.0	mg/L	41.2	3.58 - 121	116657758
2-Fluorobiphenyl-SURR	668522	LCS Dup	21.1	50.0	mg/L	42.2	3.58 - 121	116657759
2-Fluorophenol-SURR	668522	Blank	38.8	100	mg/L	38.8	0.100 - 90.1	116657757
2-Fluorophenol-SURR	668522	LCS	37.9	100	mg/L	37.9	0.100 - 90.1	116657758
2-Fluorophenol-SURR	668522	LCS Dup	40.3	100	mg/L	40.3	0.100 - 90.1	116657759
4-Terphenyl-d14-SURR	668522	Blank	18.9	50.0	mg/L	37.8	0.100 - 148	116657757
4-Terphenyl-d14-SURR	668522	LCS	21.6	50.0	mg/L	43.2	0.100 - 148	116657758
4-Terphenyl-d14-SURR	668522	LCS Dup	22.9	50.0	mg/L	45.8	0.100 - 148	116657759
Nitrobenzene-d5-SURR	668522	Blank	21.3	50.0	mg/L	42.6	0.100 - 130	116657757
Nitrobenzene-d5-SURR	668522	LCS	18.5	50.0	mg/L	37.0	0.100 - 130	116657758
Nitrobenzene-d5-SURR	668522	LCS Dup	21.7	50.0	mg/L	43.4	0.100 - 130	116657759
Phenol-d6-SURR	668522	Blank	33.2	100	mg/L	33.2	0.100 - 84.9	116657757
Phenol-d6-SURR	668522	LCS	31.0	100	mg/L	31.0	0.100 - 84.9	116657758
Phenol-d6-SURR	668522	LCS Dup	32.2	100	mg/L	32.2	0.100 - 84.9	116657759
2,4,6-Tribromophenol	1500893	MS	0.511	1.00	mg/L	51.1	4.84 - 133	116657762
2-Fluorobiphenyl-SURR	1500893	MS	0.191	0.500	mg/L	38.2	3.58 - 121	116657762
2-Fluorophenol-SURR	1500893	MS	0.408	1.00	mg/L	40.8	0.100 - 90.1	116657762
4-Terphenyl-d14-SURR	1500893	MS	0.219	0.500	mg/L	43.8	0.100 - 148	116657762
Nitrobenzene-d5-SURR	1500893	MS	0.195	0.500	mg/L	39.0	0.100 - 130	116657762
Phenol-d6-SURR	1500893	MS	0.378	1.00	mg/L	37.8	0.100 - 84.9	116657762

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BFB

Parameter	Sample	RefMass	Reading	%	Limits%	Out	File
BFB Mass 173	669613	174	378	1.1	0 - 2.00		116661870
BFB Mass 174	669613	95.0	35760	99.9	50.0 - 100		116661870
BFB Mass 175	669613	174	2610	7.3	5.00 - 9.00		116661870
BFB Mass 176	669613	174	34429	96.3	95.0 - 101		116661870
BFB Mass 177	669613	176	2202	6.4	5.00 - 9.00		116661870
BFB Mass 50	669613	95.0	6043	16.9	15.0 - 40.0		116661870
BFB Mass 75	669613	95.0	16906	47.2	30.0 - 60.0		116661870
BFB Mass 95	669613	95.0	35789	100.0	100 - 100		116661870
BFB Mass 96	669613	95.0	2605	7.3	5.00 - 9.00		116661870

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units		File	Out
TCLP 1,1-Dichloroethene	669613	ND	0.000404	0.001	mg/L		116661874	
TCLP 1,1-Dichloroethene	669613	ND	0.000404	0.001	mg/L		116661875	
TCLP 1,2-Dichloroethane	669613	ND	0.000456	0.001	mg/L		116661874	
TCLP 1,2-Dichloroethane	669613	ND	0.000456	0.001	mg/L		116661875	
TCLP 1,4 Dichlorobenzene	669613	ND	0.000294	0.001	mg/L		116661874	
TCLP 1,4 Dichlorobenzene	669613	ND	0.000294	0.001	mg/L		116661875	
TCLP Benzene	669613	ND	0.000187	0.001	mg/L		116661874	
TCLP Benzene	669613	ND	0.000187	0.001	mg/L		116661875	
TCLP Carbon tetrachloride	669613	ND	0.000359	0.001	mg/L		116661874	
TCLP Carbon tetrachloride	669613	ND	0.000359	0.001	mg/L		116661875	
TCLP Chlorobenzene	669613	ND	0.000226	0.001	mg/L		116661874	
TCLP Chlorobenzene	669613	ND	0.000226	0.001	mg/L		116661875	
TCLP Chloroform	669613	ND	0.000211	0.001	mg/L		116661874	
TCLP Chloroform	669613	ND	0.000211	0.001	mg/L		116661875	
TCLP MEK	669613	ND	0.000382	0.001	mg/L		116661874	
TCLP MEK	669613	0.00108	0.000382	0.001	mg/L	*	116661875	
TCLP Tetrachloroethylene	669613	ND	0.000391	0.001	mg/L		116661874	
TCLP Tetrachloroethylene	669613	ND	0.000391	0.001	mg/L		116661875	
TCLP Trichloroethylene	669613	ND	0.000562	0.001	mg/L		116661874	
TCLP Trichloroethylene	669613	ND	0.000562	0.001	mg/L		116661875	
TCLP Vinyl chloride	669613	ND	0.000228	0.001	mg/L		116661874	
TCLP Vinyl chloride	669613	ND	0.000228	0.001	mg/L		116661875	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP 1,1-Dichloroethene	0.0224	0.020	mg/L	112	70.0 - 130		116661871
TCLP 1,2-Dichloroethane	0.0223	0.020	mg/L	112	70.0 - 130		116661871
TCLP 1,4 Dichlorobenzene	0.0222	0.020	mg/L	111	70.0 - 130		116661871
TCLP Benzene	0.0213	0.020	mg/L	106	70.0 - 130		116661871
TCLP Carbon tetrachloride	0.0227	0.020	mg/L	114	70.0 - 130		116661871
TCLP Chlorobenzene	0.022	0.020	mg/L	110	70.0 - 130		116661871
TCLP Chloroform	0.0216	0.020	mg/L	108	70.0 - 130		116661871
TCLP MEK	0.0185	0.020	mg/L	92.5	70.0 - 130		116661871
TCLP Tetrachloroethylene	0.0223	0.020	mg/L	112	70.0 - 130		116661871
TCLP Trichloroethylene	0.0219	0.020	mg/L	110	70.0 - 130		116661871
TCLP Vinyl chloride	0.0257	0.020	mg/L	128	70.0 - 130		116661871

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet

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IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	669613	CCV	158100	158100	110700	205600		116661871	669613
1,4-DichlorobenzeneD4 (ISTD)	669613	LCS	152900	158100	110700	205600		116661872	669613
1,4-DichlorobenzeneD4 (ISTD)	669613	LCS Dup	166900	158100	110700	205600		116661873	669613
1,4-DichlorobenzeneD4 (ISTD)	669613	Blank	142900	158100	110700	205600		116661874	669613
1,4-DichlorobenzeneD4 (ISTD)	669613	Blank	138000	158100	110700	205600		116661875	669613
ChlorobenzeneD5 (ISTD)	669613	CCV	243400	243400	170400	316500		116661871	669613
ChlorobenzeneD5 (ISTD)	669613	LCS	236600	243400	170400	316500		116661872	669613
ChlorobenzeneD5 (ISTD)	669613	LCS Dup	254700	243400	170400	316500		116661873	669613
ChlorobenzeneD5 (ISTD)	669613	Blank	241000	243400	170400	316500		116661874	669613
ChlorobenzeneD5 (ISTD)	669613	Blank	231400	243400	170400	316500		116661875	669613
1,4-DichlorobenzeneD4 (ISTD)	1500893	MS	149800	158100	110700	205600		116661880	669092
1,4-DichlorobenzeneD4 (ISTD)	1500893	MSD	146000	158100	110700	205600		116661881	669092
ChlorobenzeneD5 (ISTD)	1500893	MS	224700	243400	170400	316500		116661880	669092
ChlorobenzeneD5 (ISTD)	1500893	MSD	221100	243400	170400	316500		116661881	669092

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	669613	LCS	12.01	12.01	11.95	12.07		116661872	669613
1,4-DichlorobenzeneD4 (ISTD)	669613	LCS Dup	12.01	12.01	11.95	12.07		116661873	669613
1,4-DichlorobenzeneD4 (ISTD)	669613	Blank	12.01	12.01	11.95	12.07		116661874	669613
1,4-DichlorobenzeneD4 (ISTD)	669613	Blank	12.01	12.01	11.95	12.07		116661875	669613
ChlorobenzeneD5 (ISTD)	669613	LCS	9.622	9.622	9.562	9.682		116661872	669613
ChlorobenzeneD5 (ISTD)	669613	LCS Dup	9.622	9.622	9.562	9.682		116661873	669613
ChlorobenzeneD5 (ISTD)	669613	Blank	9.622	9.622	9.562	9.682		116661874	669613
ChlorobenzeneD5 (ISTD)	669613	Blank	9.622	9.622	9.562	9.682		116661875	669613
1,4-DichlorobenzeneD4 (ISTD)	1500893	MS	12.01	12.01	11.95	12.07		116661880	669092
1,4-DichlorobenzeneD4 (ISTD)	1500893	MSD	12.01	12.01	11.95	12.07		116661881	669092
ChlorobenzeneD5 (ISTD)	1500893	MS	9.622	9.622	9.562	9.682		116661880	669092
ChlorobenzeneD5 (ISTD)	1500893	MSD	9.622	9.622	9.562	9.682		116661881	669092

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP 1,1-Dichloroethene	669613	0.020	0.020	mg/L	100	70.7 - 131	116661872	
TCLP 1,2-Dichloroethane	669613	0.0218	0.020	mg/L	109	71.2 - 129	116661872	
TCLP 1,4 Dichlorobenzene	669613	0.0208	0.020	mg/L	104	78.4 - 121	116661872	
TCLP Benzene	669613	0.0211	0.020	mg/L	106	76.2 - 123	116661872	
TCLP Carbon tetrachloride	669613	0.0222	0.020	mg/L	111	68.3 - 131	116661872	
TCLP Chlorobenzene	669613	0.0206	0.020	mg/L	103	79.1 - 121	116661872	
TCLP Chloroform	669613	0.0214	0.020	mg/L	107	75.2 - 123	116661872	
TCLP MEK	669613	0.019	0.020	mg/L	95.0	43.0 - 150	116661872	
TCLP Tetrachloroethylene	669613	0.022	0.020	mg/L	110	74.8 - 130	116661872	
TCLP Trichloroethylene	669613	0.0218	0.020	mg/L	109	77.5 - 121	116661872	

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LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP Vinyl chloride	669613	0.0172	0.020	mg/L	86.0	43.0 - 134	116661872	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP 1,1-Dichloroethene	669613	0.020	0.0202	0.020	70.7 - 131	100	101	mg/L	0.995	30.0
TCLP 1,2-Dichloroethane	669613	0.0218	0.0199	0.020	71.2 - 129	109	99.5	mg/L	9.11	30.0
TCLP 1,4 Dichlorobenzene	669613	0.0208	0.0186	0.020	78.4 - 121	104	93.0	mg/L	11.2	30.0
TCLP Benzene	669613	0.0211	0.0188	0.020	76.2 - 123	106	94.0	mg/L	12.0	30.0
TCLP Carbon tetrachloride	669613	0.0222	0.020	0.020	68.3 - 131	111	100	mg/L	10.4	30.0
TCLP Chlorobenzene	669613	0.0206	0.019	0.020	79.1 - 121	103	95.0	mg/L	8.08	30.0
TCLP Chloroform	669613	0.0214	0.0193	0.020	75.2 - 123	107	96.5	mg/L	10.3	30.0
TCLP MEK	669613	0.019	0.0175	0.020	43.0 - 150	95.0	87.5	mg/L	8.22	30.0
TCLP Tetrachloroethylene	669613	0.022	0.0198	0.020	74.8 - 130	110	99.0	mg/L	10.5	30.0
TCLP Trichloroethylene	669613	0.0218	0.0194	0.020	77.5 - 121	109	97.0	mg/L	11.7	30.0
TCLP Vinyl chloride	669613	0.0172	0.015	0.020	43.0 - 134	86.0	75.0	mg/L	13.7	30.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 1,1-Dichloroethene	1500893	0.218	0	ND	0.200	61.3 - 136	109		mg/L		30.0
TCLP 1,2-Dichloroethane	1500893	0.222	0	ND	0.200	62.1 - 133	111		mg/L		30.0
TCLP 1,4 Dichlorobenzene	1500893	0.199	0	ND	0.200	74.1 - 123	99.5		mg/L		30.0
TCLP Benzene	1500893	0.207	0	ND	0.200	66.5 - 130	104		mg/L		30.0
TCLP Carbon tetrachloride	1500893	0.225	0	ND	0.200	60.3 - 136	112		mg/L		30.0
TCLP Chlorobenzene	1500893	0.207	0	ND	0.200	75.1 - 127	104		mg/L		30.0
TCLP Chloroform	1500893	0.216	0	ND	0.200	62.3 - 133	108		mg/L		30.0
TCLP MEK	1500893	0.199	0	0.0068	0.200	5.29 - 184	96.1		mg/L		30.0
TCLP Tetrachloroethylene	1500893	0.215	0	ND	0.200	71.3 - 130	108		mg/L		30.0
TCLP Trichloroethylene	1500893	0.203	0	ND	0.200	65.2 - 128	102		mg/L		30.0
TCLP Vinyl chloride	1500893	0.163	0	ND	0.200	26.9 - 140	81.5		mg/L		30.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP 1,1-Dichloroethene	1500893	0.218	0.215	ND	0.200	61.3 - 136	109	108	mg/L	1.39	30.0
TCLP 1,2-Dichloroethane	1500893	0.222	0.228	ND	0.200	62.1 - 133	111	114	mg/L	2.67	30.0
TCLP 1,4 Dichlorobenzene	1500893	0.199	0.206	ND	0.200	74.1 - 123	99.5	103	mg/L	3.46	30.0
TCLP Benzene	1500893	0.207	0.211	ND	0.200	66.5 - 130	104	106	mg/L	1.91	30.0
TCLP Carbon tetrachloride	1500893	0.225	0.223	ND	0.200	60.3 - 136	112	112	mg/L	0.893	30.0
TCLP Chlorobenzene	1500893	0.207	0.213	ND	0.200	75.1 - 127	104	106	mg/L	2.86	30.0
TCLP Chloroform	1500893	0.216	0.223	ND	0.200	62.3 - 133	108	112	mg/L	3.19	30.0
TCLP MEK	1500893	0.199	0.208	0.0068	0.200	5.29 - 184	96.1	101	mg/L	4.58	30.0
TCLP Tetrachloroethylene	1500893	0.215	0.217	ND	0.200	71.3 - 130	108	108	mg/L	0.926	30.0
TCLP Trichloroethylene	1500893	0.203	0.202	ND	0.200	65.2 - 128	102	101	mg/L	0.494	30.0
TCLP Vinyl chloride	1500893	0.163	0.167	ND	0.200	26.9 - 140	81.5	83.5	mg/L	2.42	30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1,2-DCA-d4 (SURR)	669613	CCV	0.0202	0.020	mg/L	101	41.4 - 147	116661871
1,2-DCA-d4 (SURR)	669613	LCS	0.0198	0.020	mg/L	99.0	41.4 - 147	116661872
1,2-DCA-d4 (SURR)	669613	LCS Dup	0.0201	0.020	mg/L	100	41.4 - 147	116661873
1,2-DCA-d4 (SURR)	669613	Blank	0.0206	0.020	mg/L	103	41.4 - 147	116661874
1,2-DCA-d4 (SURR)	669613	Blank	0.0193	0.020	mg/L	96.5	41.4 - 147	116661875

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Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Bromofluorobenzene (SURR)	669613	CCV	0.0199	0.020	mg/L	99.5	71.5 - 121	116661871
Bromofluorobenzene (SURR)	669613	LCS	0.0201	0.020	mg/L	100	71.5 - 121	116661872
Bromofluorobenzene (SURR)	669613	LCS Dup	0.0201	0.020	mg/L	100	71.5 - 121	116661873
Bromofluorobenzene (SURR)	669613	Blank	0.0199	0.020	mg/L	99.5	71.5 - 121	116661874
Bromofluorobenzene (SURR)	669613	Blank	0.020	0.020	mg/L	100	71.5 - 121	116661875
Dibromofluoromethane (SURR)	669613	CCV	0.0197	0.020	mg/L	98.5	57.9 - 122	116661871
Dibromofluoromethane (SURR)	669613	LCS	0.0196	0.020	mg/L	98.0	57.9 - 122	116661872
Dibromofluoromethane (SURR)	669613	LCS Dup	0.0199	0.020	mg/L	99.5	57.9 - 122	116661873
Dibromofluoromethane (SURR)	669613	Blank	0.0196	0.020	mg/L	98.0	57.9 - 122	116661874
Dibromofluoromethane (SURR)	669613	Blank	0.020	0.020	mg/L	100	57.9 - 122	116661875
TolueneD8 (SURR)	669613	CCV	0.0197	0.020	mg/L	98.5	75.5 - 118	116661871
TolueneD8 (SURR)	669613	LCS	0.0198	0.020	mg/L	99.0	75.5 - 118	116661872
TolueneD8 (SURR)	669613	LCS Dup	0.0196	0.020	mg/L	98.0	75.5 - 118	116661873
TolueneD8 (SURR)	669613	Blank	0.019	0.020	mg/L	95.0	75.5 - 118	116661874
TolueneD8 (SURR)	669613	Blank	0.0199	0.020	mg/L	99.5	75.5 - 118	116661875
1,2-DCA-d4 (SURR)	1500893	MS	0.0206	0.020	mg/L	103	41.4 - 147	116661880
1,2-DCA-d4 (SURR)	1500893	MSD	0.0203	0.020	mg/L	102	41.4 - 147	116661881
Bromofluorobenzene (SURR)	1500893	MS	0.0198	0.020	mg/L	99.0	71.5 - 121	116661880
Bromofluorobenzene (SURR)	1500893	MSD	0.0196	0.020	mg/L	98.0	71.5 - 121	116661881
Dibromofluoromethane (SURR)	1500893	MS	0.0206	0.020	mg/L	103	57.9 - 122	116661880
Dibromofluoromethane (SURR)	1500893	MSD	0.0203	0.020	mg/L	102	57.9 - 122	116661881
TolueneD8 (SURR)	1500893	MS	0.0197	0.020	mg/L	98.5	75.5 - 118	116661880
TolueneD8 (SURR)	1500893	MSD	0.0194	0.020	mg/L	97.0	75.5 - 118	116661881

RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100% Recover% is Recovery Percent: result / known * 100%

Blank - Method Blank; LCS - Laboratory Control Sample; CCV - Continuing Calibration Verification; MS - Matrix Spike; ICV - Initial Calibration Verification; CCC - Calibration Check Compound; DFTPP - GC/MS Tuning Compound; BFB - GC/MS Tuning Compound; LDR - Linear Dynamic Range Standard

746938 CoC Print Group 001 of 001

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com

LELAP-accredited #02008

Chain of Custody

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Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

GPDR

119

Phone 870/567-8177
Fax 870/364-9076

Solid Samples

Matrix: Solid & Chemical Materials

Sampler Printed Name	Sampler Affiliation	Sampler Signature

Accredited	Test	Name	Method
	1	Glass Qt w/Teflon lined lid	
N	*TCL	TCLP Extraction Non-Volatile	EPA 1311
N	TVOX	TCLP Extraction ZHE Volatiles	EPA 1311ZHE
N	*AsT	TCLP Arsenic	EPA 6020A
N	*BaT	TCLP Barium	EPA 6020A
N	*CdT	TCLP Cadmium	EPA 6020A
N	*CrT	TCLP Chromium	EPA 6020A
N	*PbT	TCLP Lead	EPA 6020A
N	*SeT	TCLP Selenium	EPA 6020A
N	*AgT	TCLP Silver	EPA 6020A
N	*Hg*	TCLP Mercury	EPA 7470A
N	TG80	GC TCLP Pesticide	EPA 8081A
N	TG50	GC TCLP Herbicide	EPA 8151
N	TVOA	MS TCLP Volatile Analysis	EPA 8260B
N	TABN	MS TCLP Semivolatile Analysis	EPA 8270C
	2	Glass 4 oz w/Teflon lined lid	
N	Reac	Reactivity	
	RH2O	Reactivity with Water	
	RS=	Sulfide Screen	ASTM D 4978-95/SW 9031
N	#Ign	Ignitability	EPA 1030
N	301S	Solid Metals Digestion	EPA 200.2 2.8
N	*BI	Boron	EPA 6010C
N	*SnI	Tin, Total	EPA 6010C
N	*FeI	Total Iron	EPA 6010C
N	*AlM	Aluminum, Total	EPA 6020A
N	*SbM	Antimony, Total	EPA 6020A
N	*AsM	Arsenic, Total	EPA 6020A
N	*BaM	Barium	EPA 6020A
N	*CdM	Cadmium, Total	EPA 6020A
N	*CrM	Chromium, Total	EPA 6020A
N	*CoM	Cobalt	EPA 6020A

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

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Chain of Custody

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Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

GPDR

119

Phone 870/567-8177
Fax 870/364-9076

		Solid Samples		
N		*CuM	Copper, Total	EPA 6020A
N		*PbM	Lead, Total	EPA 6020A
N		*MoM	Molybdenum	EPA 6020A
N		*NiM	Nickel, Total	EPA 6020A
N		*SeM	Selenium, Total	EPA 6020A
N		*AgM	Silver, Total	EPA 6020A
N		*TlM	Thallium, Total	EPA 6020A
N		*VM	Vanadium	EPA 6020A
N		*ZnM	Zinc, Total	EPA 6020A
N		*HgS	Mercury	EPA 7471A
N		747S	Solid Metals Digestion Hg	EPA 7471A
N		IABN	Semivolatile Hydrocarbons	EPA 8270C
N		RCN	Total Cyanide	EPA 9014
N		CorS	Corrosivity (Solids by pH)	EPA 9045D
N		pHLS	pH Measured in Water	EPA 9045D
N		TS%	Total Solids for Dry Wt	SM2540 G-1997 /MOD
	0	ZI-Administrative use only: no bottle required		
		ARDW	As Received to Dry Weight Basis	Calculation
	1	5035 Sampling Kit		
N		IVOA	Volatiles by GC/MS	EPA 8260B

Ana-Lab #	Sample ID	Bottles	Date	Time	Notes
150089	LIME MUD	1	6/20/16	2:00pm	

Corporate Shipping: 2600 Dudley Rd. Kilgore, TX 75662

Ark-La-Miss Region: 4720 Viking Dr. Suite A Bossier City LA 71111

ACCREDITED IN ACCORDANCE WITH NELAP-accredited #T104704201

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

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Chain of Custody

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Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

GPDR

119

Phone 870/567-8177
Fax 870/364-9076

Solid Samples

Ambient Conditions/Comments

Date	Time	Relinquished		Received	
5/20/16	4:30 PM	Printed Name RICHARD FREEMAN	Affiliation GEORGIA-PACIFIC	Printed Name FedEx	Affiliation
		Signature		Signature	
5/21/16	1020	Printed Name FedEx	Affiliation	Printed Name Kathy Tarver	Affiliation Ana-Lab
		Signature		Signature Kathy Tarver	
		Printed Name	Affiliation	Printed Name	Affiliation
		Signature		Signature	
		Printed Name	Affiliation	Printed Name	Affiliation
		Signature		Signature	

Sample Recieved on Ice? Yes No **Method of Shipment:** UPS Bus FedEx Lone Star Hand Delivered Other

Cooler/Sample Secure? Yes No **Tracking/Shipping #** 810018991450

The accredited column designates accreditation by A - A2LA, N - NELAC, or z - not listed under scope of accreditation. Unless otherwise specified, ANA-LAB shall provide these ordered services pursuant to our Standard Terms & Conditions Agreement (available for download from the welcome page at <http://www.ana-lab.com>). Ana-Lab personnel collect samples as specified by Ana-Lab SOP #000323.

Comments

5°C

005057 ☐ CF____
005661 ☑ CF0.0
003688 ☐ CF____

FedEx Express Package US Airbill

FedEx Tracking Number 8100 1899 1450

1 From Date 6-2016

Sender's Name REBECCA BLANKENSHIP Phone 870 567-8812

Company GEORGIA PACIFIC/ENVIRONMENTAL

Address 100 SUPPLY RD 1020

Dept/Floor/Suite/Room

City CROSSETT S.82 State AR ZIP 71635

2 Your Internal Billing Reference

3 To

Recipient's Name SKEETER LUBBEN 16 Phone 903-984-0551

Company ANA-LAB

Address 2600 DUDLEY RD.

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept/Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City KILGORE State TX ZIP 75662

0123423106

Hold Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

Hold Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

fedex.com 1.800.GoFedEx 1.800.463.3339

4 Express Package Service *To most locations. Packages up to 150 lbs.

Next Business Day

- FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected. [X]
- FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.

FedEx Envelope* FedEx Pak* FedEx Box FedEx Tube Other [X]

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.

Saturday Delivery NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver

No Signature Required — Package may be left without obtaining a signature for delivery.

Direct Signature — Someone at recipient's address may sign for delivery.

Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?

One box must be checked.

No [X] Yes As per attached Shipper's Declaration. Yes Shipper's Declaration not required. Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Regulations apply for dangerous goods — see the current FedEx Service Guide.

Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

Sender Acct. No. in Section 4 will be billed [X] Recipient Third Party Credit Card Cash/Check

Obtain recip. Acct. No.

Total Packages 1 Total Weight 25 lbs.

Credit Card Auth.

Your liability is limited to USD 100 unless you declare a higher value. See the current FedEx Service Guide for details.

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Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 e-Mail corp@ana-lab.com LELAP-accredited #02008

Employee Owned Integrity Caring Continual Improvement

Report

Printed 08/05/2016 Page 1 of 1

Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

Table of Contents

Account	*Project*
GPDR -L	**749761**

This report consists of this Table of Contents and the following pages:

ANA-LAB CORP. THE COMPLETE SERVICE LAB

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com

Employee Owned Integrity Caring Continual Improvement

Results

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Account	*Project*
GPDR-L	**749761**

Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

Results

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
1511431 Slaker Grits						*Received:* 07/29/2016	
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape			07/28/2016 10:00:00	
	Prepared: **674485**		*08/01/2016*			*14:30:00*	
EPA 6010C		Analyzed	*LPS 08/02/2016*			*10:46:00 QCgroup 674716*	
N **Total Iron**	**1110 ***	**mg/Kg**	6.19	P		**7439-89-6**	04
EPA 6010C		Analyzed	*LPS 08/02/2016*			*13:15:00 QCgroup 674750*	
N **Boron**	**<24.8 ***	**mg/kg**	24.8			**7440-42-8**	04
N **Tin, Total**	**<12.4 ***	**mg/kg**	12.4			**7440-31-5**	04
* Dry Weight Basis							
	Prepared: **674485**		*08/01/2016*			*14:30:00*	
EPA 6020A		Analyzed	*CLK 08/02/2016*			*13:49:00 QCgroup 674744*	
N **Antimony, Total**	**0.285 ***	**mg/kg**	0.248	B		**7440-36-0**	04
N **Arsenic, Total**	**<0.495 ***	**mg/kg**	0.495		41.0	**7440-38-2**	04
N **Barium**	**357 ***	**mg/kg**	0.248			**7440-39-3**	04
N **Cadmium, Total**	**0.443 ***	**mg/kg**	0.248		39.0	**7440-43-9**	04
N **Chromium, Total**	**11.9 ***	**mg/kg**	0.248			**7440-47-3**	04
N **Cobalt**	**3.83 ***	**mg/kg**	0.248			**7440-48-4**	04
N **Copper, Total**	**2.92 ***	**mg/kg**	0.248	B	1500	**7440-50-8**	04
N **Lead, Total**	**1.39 ***	**mg/kg**	0.248		300	**7439-92-1**	04
N **Molybdenum**	**<0.744 ***	**mg/kg**	0.744	B	49.1	**7439-98-7**	04
N **Nickel, Total**	**16.7 ***	**mg/kg**	0.248		420	**7440-02-0**	04
N **Selenium, Total**	**<0.744 ***	**mg/kg**	0.744		100	**7782-49-2**	04
N **Silver, Total**	**<0.248 ***	**mg/kg**	0.248			**7440-22-4**	04
N **Thallium, Total**	**<0.248 ***	**mg/kg**	0.248	B		**7440-28-0**	04
N **Vanadium**	**6.22 ***	**mg/kg**	0.248			**7440-62-2**	04
N **Zinc, Total**	**17.3 ***	**mg/kg**	1.24		2800	**7440-66-6**	04
EPA 6020A		Analyzed	*CLK 08/02/2016*			*14:06:00 QCgroup 674744*	
N **Aluminum, Total**	**3180 ***	**mg/kg**	12.4	PD		**7429-90-5**	04
	Prepared: **674942**		*08/03/2016*			*13:15:00*	
EPA 6020A		Analyzed	*CLK 08/03/2016*			*20:01:00 QCgroup 675100*	
N **TCLP Arsenic**	**<0.050**	**mg/L**	0.050	P	5.00	**7440-38-2**	15
N **TCLP Cadmium**	**<0.005**	**mg/L**	0.005		1.00	**7440-43-9**	15
N **TCLP Chromium**	**<0.050**	**mg/L**	0.050		5.00	**7440-47-3**	15
N **TCLP Lead**	**<0.050**	**mg/L**	0.050		5.00	**7439-92-1**	15
N **TCLP Selenium**	**<0.050**	**mg/L**	0.050		1.00	**7782-49-2**	15
N **TCLP Silver**	**<0.050**	**mg/L**	0.050	P	5.00	**7440-22-4**	15
EPA 6020A		Analyzed	*CLK 08/04/2016*			*13:53:00 QCgroup 675255*	
N **TCLP Barium**	**1.27**	**mg/L**	0.050		100	**7440-39-3**	15
* Dry Weight Basis							

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Employee Owned Integrity Caring Continual Improvement

Results

Printed: 08/05/2016

Results

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
1511431 Slaker Grits							*Received:* 07/29/2016
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape			07/28/2016	10:00:00
	Prepared: **674910**		*08/03/2016*			*10:30:00*	
EPA 7470A		Analyzed	*LPS 08/03/2016*		*13:56:00*	*QCgroup*	*674966*
N **TCLP Mercury**	**<0.002**	**mg/L**	0.002		0.200	**7439-97-6**	12
	Prepared: **674577**		*08/02/2016*			*08:15:00*	
EPA 7471A		Analyzed	*CLK 08/02/2016*		*13:03:00*	*QCgroup*	*674732*
N **Mercury**	**<0.0226 ***	**mg/kg**	0.0226	P	17.0	**7439-97-6**	07
* Dry Weight Basis							
	Prepared: **674654**		*08/01/2016*			*10:43:00*	
SM2540 G-1997 /MOD		Analyzed	*TH2 08/01/2016*		*10:43:00*	*QCgroup*	*674654*
N **Total Solids for Dry Wt**	**86.2**	**%**	0.010				01
1511433 All Lime Mud							*Received:* 07/29/2016
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape			07/28/2016	10:00:00
	Prepared: **674485**		*08/01/2016*			*14:30:00*	
EPA 6010C		Analyzed	*LPS 08/02/2016*		*10:56:00*	*QCgroup*	*674716*
N **Total Iron**	**285 ***	**mg/Kg**	7.06			**7439-89-6**	04
EPA 6010C		Analyzed	*LPS 08/02/2016*		*13:27:00*	*QCgroup*	*674750*
N **Boron**	**<28.3 ***	**mg/kg**	28.3			**7440-42-8**	04
N **Tin, Total**	**<14.1 ***	**mg/kg**	14.1			**7440-31-5**	04
* Dry Weight Basis							
	Prepared: **674485**		*08/01/2016*			*14:30:00*	
EPA 6020A		Analyzed	*CLK 08/02/2016*		*13:59:00*	*QCgroup*	*674744*
N **Aluminum, Total**	**125 ***	**mg/kg**	2.83			**7429-90-5**	04
N **Antimony, Total**	**<0.283 ***	**mg/kg**	0.283	B		**7440-36-0**	04
N **Arsenic, Total**	**<0.565 ***	**mg/kg**	0.565		41.0	**7440-38-2**	04
N **Barium**	**377 ***	**mg/kg**	0.283			**7440-39-3**	04
N **Cadmium, Total**	**0.613 ***	**mg/kg**	0.283		39.0	**7440-43-9**	04
N **Chromium, Total**	**13.4 ***	**mg/kg**	0.283			**7440-47-3**	04
N **Cobalt**	**1.96 ***	**mg/kg**	0.283			**7440-48-4**	04
N **Copper, Total**	**1.31 ***	**mg/kg**	0.283	B	1500	**7440-50-8**	04
N **Lead, Total**	**1.85 ***	**mg/kg**	0.283		300	**7439-92-1**	04
N **Molybdenum**	**<0.848 ***	**mg/kg**	0.848	B	49.1	**7439-98-7**	04
N **Nickel, Total**	**11.4 ***	**mg/kg**	0.283		420	**7440-02-0**	04
N **Selenium, Total**	**<0.848 ***	**mg/kg**	0.848		100	**7782-49-2**	04
N **Silver, Total**	**<0.283 ***	**mg/kg**	0.283			**7440-22-4**	04
N **Thallium, Total**	**<0.283 ***	**mg/kg**	0.283	B		**7440-28-0**	04
N **Vanadium**	**0.861 ***	**mg/kg**	0.283			**7440-62-2**	04
N **Zinc, Total**	**2.49 ***	**mg/kg**	1.41	B	2800	**7440-66-6**	04
	Prepared: **674942**		*08/03/2016*			*13:15:00*	
EPA 6020A		Analyzed	*CLK 08/03/2016*		*20:12:00*	*QCgroup*	*675100*
N **TCLP Arsenic**	**<0.050**	**mg/L**	0.050		5.00	**7440-38-2**	09

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Employee Owned Integrity Caring Continual Improvement

Results

Printed: 08/05/2016

Results

Parameter	Results	Units	RL	Flags	MAL	CAS	Bottle
1511433 All Lime Mud						*Received:* 07/29/2016	
olid & Chemical Material	*Collected by:* Client		*Affiliation:* Georgia Pacific Pape			07/28/2016 10:00:00	
EPA 6020A		Analyzed	*CLK 08/03/2016*		*20:12:00*	*QCgroup 675100*	
N **TCLP Cadmium**	**<0.005**	**mg/L**	0.005		1.00	**7440-43-9**	09
N **TCLP Chromium**	**<0.050**	**mg/L**	0.050		5.00	**7440-47-3**	09
N **TCLP Lead**	**<0.050**	**mg/L**	0.050		5.00	**7439-92-1**	09
N **TCLP Selenium**	**<0.050**	**mg/L**	0.050		1.00	**7782-49-2**	09
N **TCLP Silver**	**<0.050**	**mg/L**	0.050		5.00	**7440-22-4**	09
EPA 6020A		Analyzed	*CLK 08/04/2016*		*14:03:00*	*QCgroup 675255*	
N **TCLP Barium**	**1.36**	**mg/L**	0.050		100	**7440-39-3**	09
* Dry Weight Basis							
Prepared:	***674910***		*08/03/2016*		*10:30:00*		
EPA 7470A		Analyzed	*LPS 08/03/2016*		*14:01:00*	*QCgroup 674966*	
N **TCLP Mercury**	**<0.002**	**mg/L**	0.002		0.200	**7439-97-6**	08
Prepared:	***674577***		*08/02/2016*		*08:15:00*		
EPA 7471A		Analyzed	*CLK 08/02/2016*		*13:10:00*	*QCgroup 674732*	
N **Mercury**	**<0.0236 ***	**mg/kg**	0.0236		17.0	**7439-97-6**	05
* Dry Weight Basis							
Prepared:	***674654***		*08/01/2016*		*12:30:00*		
SM2540 G-1997 /MOD		Analyzed	*TH2 08/01/2016*		*12:30:00*	*QCgroup 674654*	
N **Total Solids for Dry Wt**	**82.7**	%	0.010				01

Sample Preparation

1511431 Slaker Grits						*Received:* 07/29/2016	
Prepared:			*08/05/2016*		*09:57:41*		
Calculation		Calculated	*CAL 08/05/2016*		*09:57:41*	*QCgroup*	
As Received to Dry Weight Basis	**Calculated**						
Prepared:			*08/01/2016*		*17:00:00*		
Cooler Return		Analyzed	*MG3 08/01/2016*		*17:00:00*	*QCgroup*	
z **Return Cooler/No bottles Require**	**Returned**						
Prepared:	***674746***		*08/02/2016*		*14:50:00*		
EPA 1311		Analyzed	*TDD 08/02/2016*		*14:50:00*	*QCgroup 674746*	
N **TCLP Extraction Non-Volatile**	**SOLID EXT 2**						02
Prepared:	***674746***		*08/02/2016*		*14:50:00*		
EPA 3005A		Analyzed	*TES 08/03/2016*		*13:15:00*	*QCgroup 674942*	
N **Metals Digestion TCLP Extract**	**50/10**	**ml**					11
Prepared:	***674485***		*08/01/2016*		*14:30:00*		

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Results

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Sample Preparation

1511431 Slaker Grits *Received:* 07/29/2016

EPA 3050B-MOD				Analyzed	*TES 08/01/2016*	*14:30:00*	*QCgroup*	*674485*
N	**Organic Metals Digestion**	**50/1.17**		**grams**				01
	Prepared:	***674746***		*08/02/2016*		*14:50:00*		
EPA 7470A				Analyzed	*ALB 08/03/2016*	*10:30:00*	*QCgroup*	*674910*
N	**Metals Digestion TCLP 7470**	**50/2.5**		**ml**				11
	Prepared:	***674577***		*08/02/2016*		*08:15:00*		
EPA 7471A				Analyzed	*ALB 08/02/2016*	*08:15:00*	*QCgroup*	*674577*
N	**Solid Metals Digestion Hg**	**50/0.5123**		**grams**				01
	Prepared:			*08/01/2016*		*10:43:00*		
SM 2540 G-1997				Analyzed	*TH2 08/01/2016*	*10:43:00*	*QCgroup*	
N	**Total Solids Start Code**	**Started**						

1511433 All Lime Mud *Received:* 07/29/2016

	Prepared:			*08/05/2016*		*09:57:42*		
Calculation				Calculated	*CAL 08/05/2016*	*09:57:42*	*QCgroup*	
	As Received to Dry Weight Basis	**Calculated**						
	Prepared:	***674746***		*08/02/2016*		*14:50:00*		
EPA 1311				Analyzed	*TDD 08/02/2016*	*14:50:00*	*QCgroup*	*674746*
N	**TCLP Extraction Non-Volatile**	**SOLID EXT 2**						02
	Prepared:	***674746***		*08/02/2016*		*14:50:00*		
EPA 3005A				Analyzed	*TES 08/03/2016*	*13:15:00*	*QCgroup*	*674942*
N	**Metals Digestion TCLP Extract**	**50/10**		**ml**				07
	Prepared:	***674485***		*08/01/2016*		*14:30:00*		
EPA 3050B-MOD				Analyzed	*TES 08/01/2016*	*14:30:00*	*QCgroup*	*674485*
N	**Organic Metals Digestion**	**50/1.07**		**grams**				01
	Prepared:	***674746***		*08/02/2016*		*14:50:00*		
EPA 7470A				Analyzed	*ALB 08/03/2016*	*10:30:00*	*QCgroup*	*674910*
N	**Metals Digestion TCLP 7470**	**50/2.5**		**ml**				07
	Prepared:	***674577***		*08/02/2016*		*08:15:00*		
EPA 7471A				Analyzed	*ALB 08/02/2016*	*08:15:00*	*QCgroup*	*674577*
N	**Solid Metals Digestion Hg**	**50/0.5122**		**grams**				01
	Prepared:			*08/01/2016*		*12:30:00*		
SM 2540 G-1997				Analyzed	*TH2 08/01/2016*	*12:30:00*	*QCgroup*	
N	**Total Solids Start Code**	**Started**						

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Results

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Qualifiers:

B - Analyte detected in the associated method blank D - Duplicate RPD was higher than expected
P - Spike recovery outside control limits due to matrix effects.

We report results on an 'As Received' or wet basis unless marked 'Dry Weight'. Unless otherwise noted, testing was performed at Ana-lab's corporate laboratory that holds the following Federal and State certificates: Texas Department of Health Lead Firm Certificate 2110076, US Department of Agriculture Soil Import Permit S-37592, Texas Commisson on Environmental Quality Drinking Water Laboratory Certificate TX219, Texas Commission on Environmental Quality NELAP T104704201, Oklahoma Department of Environmental Quality Drinking Water Certification Lab ID# D9913, EPA Lab Number TX00063, USEPA Approved Perchlorate Testing Lab, Oklahoma Department of Environmental Quality Laboratory Certificate 8125, Arkansas Department of Environmental Quality Certification #03-070-0, Louisiana Department of Environmental Quality Laboratory Certification (NELAP, LELAP) #02008, Louisiana Department of Health and Hospitals Drinking Water (NELAP) # LA030020, US Department of Energy Approved, State of Kansas Department of Health and Environment Waste Water and Solid/Hazardous Waste Cert. E-10365. The Accredited column designates accreditation by N -- NELAC, or z -- not covered under NELAC scope of accreditation.

These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of Ana-Lab Corp. Unless otherwise specified, these test results meet the requirements of NELAC.
RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.

Paul Zhang, Ph.D., Quality Director

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Quality Control

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SOLID

Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

Account	Project
GPDR -L	749761

674654 Solid & Chemical Materials — SM2540 G-1997 /MOD

ControlBlk

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
Total Solids for Dry Wt	674654	0.0000			grams	116752888	

Duplicate

Parameter	Sample	Type	Result	Unknown	Unit	RPD	Out	Limit%
Total Solids for Dry Wt	1510453	Duplicate	69.7	70.6	%	1.28		20.0
Total Solids for Dry Wt	1510806	Duplicate	76.7	76.0	%	0.917		20.0
Total Solids for Dry Wt	1511103	Duplicate	1.16	1.20	%	3.39		20.0

674716 Solid & Chemical Materials — EPA 6010C

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
Total Iron	674485	0.00453	0.0035	0.025	mg/Kg	116754244	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Iron	2.48	2.50	mg/Kg	99.2	90.0 - 110		116754243
Total Iron	2.50	2.50	mg/Kg	100	90.0 - 110		116754251

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Iron	5.05	5.00	mg/Kg	101	95.0 - 105		116754230

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Iron	2.46	2.50	mg/Kg	98.4	90.0 - 110		116754234

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Total Iron	674485	2.49	2.50	mg/Kg	99.6	83.5 - 121	116754245	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Total Iron	674485	2.49	2.38	2.50	83.5 - 121	99.6	95.2	mg/Kg	4.52	25.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Total Iron	1511431	871	0	961	106	84.3 - 121	0 *		mg/Kg		25.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Total Iron	1511431	871	1050	961	103	84.3 - 121	-84.9 *	84.0 *	mg/Kg	18.6	25.0

674732 Solid & Chemical Materials — EPA 7471A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out

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Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
Mercury	674577	ND	0.000198	0.0002	mg/kg	116754726	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Mercury	0.00506	0.005	mg/kg	101	90.0 - 110		116754725
Mercury	0.00483	0.005	mg/kg	96.6	90.0 - 110		116754733

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Mercury	0.0195	0.02	mg/kg	97.5	90.0 - 110		116754724

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Mercury	0.00543	0.005	mg/kg	109	90.0 - 110		116754723

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Mercury	674577	0.0105	0.010	mg/kg	105	78.0 - 106	116754727	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Mercury	674577	0.0105	0.00997	0.010	78.0 - 106	105	99.7	mg/kg	5.18	20.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Mercury	1511431	0.549	0	0.00781	0.972	70.1 - 110	55.7 *		mg/kg		25.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Mercury	1511431	0.549	0.533	0.00781	0.917	70.1 - 110	55.7 *	54.0 *	mg/kg	3.00	25.0

674744 Solid & Chemical Materials — EPA 6020A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units		File	Out
Aluminum, Total	674485	0.00613	0.00418	0.010	mg/kg		116754992	
Antimony, Total	674485	0.00591	0.000806	0.001	mg/kg	*	116754992	
Arsenic, Total	674485	ND	0.000492	0.002	mg/kg		116754992	
Barium	674485	0.000922	0.000369	0.001	mg/kg	*	116754992	
Cadmium, Total	674485	ND	0.000223	0.001	mg/kg		116754992	
Chromium, Total	674485	0.000462	0.000409	0.001	mg/kg		116754992	
Cobalt	674485	0.0000723	0.00003780	.001	mg/kg		116754992	
Copper, Total	674485	0.00927	0.000618	0.001	mg/kg	*	116754992	
Lead, Total	674485	0.000521	0.00009630	.001	mg/kg	*	116754992	
Molybdenum	674485	0.00167	0.000287	0.003	mg/kg	*	116754992	
Nickel, Total	674485	ND	0.000336	0.001	mg/kg		116754992	
Selenium, Total	674485	0.000904	0.000835	0.003	mg/kg		116754992	
Silver, Total	674485	ND	0.000113	0.001	mg/kg		116754992	
Thallium, Total	674485	0.000262	0.000108	0.001	mg/kg	*	116754992	
Vanadium	674485	ND	0.000605	0.001	mg/kg		116754992	
Zinc, Total	674485	0.00422	0.000432	0.005	mg/kg	*	116754992	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Aluminum, Total	0.0499	0.05	mg/kg	99.8	90.0 - 110		116754991
Aluminum, Total	0.0503	0.05	mg/kg	101	90.0 - 110		116755000
Antimony, Total	0.0518	0.05	mg/kg	104	90.0 - 110		116754991
Antimony, Total	0.0513	0.05	mg/kg	103	90.0 - 110		116755000
Arsenic, Total	0.050	0.05	mg/kg	100	90.0 - 110		116754991
Arsenic, Total	0.0497	0.05	mg/kg	99.4	90.0 - 110		116755000
Barium	0.0508	0.05	mg/kg	102	90.0 - 110		116754991
Barium	0.051	0.05	mg/kg	102	90.0 - 110		116755000
Cadmium, Total	0.0502	0.05	mg/kg	100	90.0 - 110		116754991
Cadmium, Total	0.0499	0.05	mg/kg	99.8	90.0 - 110		116755000
Chromium, Total	0.0504	0.05	mg/kg	101	90.0 - 110		116754991
Chromium, Total	0.0503	0.05	mg/kg	101	90.0 - 110		116755000
Cobalt	0.051	0.05	mg/kg	102	90.0 - 110		116754991
Cobalt	0.0504	0.05	mg/kg	101	90.0 - 110		116755000
Copper, Total	0.0498	0.05	mg/kg	99.6	90.0 - 110		116754991
Copper, Total	0.0506	0.05	mg/kg	101	90.0 - 110		116755000
Lead, Total	0.050	0.05	mg/kg	100	90.0 - 110		116754991
Lead, Total	0.0496	0.05	mg/kg	99.2	90.0 - 110		116755000
Molybdenum	0.0505	0.05	mg/kg	101	90.0 - 110		116754991
Molybdenum	0.0493	0.05	mg/kg	98.6	90.0 - 110		116755000
Nickel, Total	0.0511	0.05	mg/kg	102	90.0 - 110		116754991
Nickel, Total	0.0507	0.05	mg/kg	101	90.0 - 110		116755000
Selenium, Total	0.0496	0.05	mg/kg	99.2	90.0 - 110		116754991
Selenium, Total	0.0497	0.05	mg/kg	99.4	90.0 - 110		116755000
Silver, Total	0.0506	0.05	mg/kg	101	90.0 - 110		116754991
Silver, Total	0.0505	0.05	mg/kg	101	90.0 - 110		116755000
Thallium, Total	0.0501	0.05	mg/kg	100	90.0 - 110		116754991
Thallium, Total	0.0499	0.05	mg/kg	99.8	90.0 - 110		116755000
Vanadium	0.0505	0.05	mg/kg	101	90.0 - 110		116754991
Vanadium	0.0505	0.05	mg/kg	101	90.0 - 110		116755000
Zinc, Total	0.0494	0.05	mg/kg	98.8	90.0 - 110		116754991
Zinc, Total	0.0504	0.05	mg/kg	101	90.0 - 110		116755000

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Aluminum, Total	0.051	0.05	mg/kg	102	90.0 - 110		116754988
Antimony, Total	0.0497	0.05	mg/kg	99.4	90.0 - 110		116754988
Arsenic, Total	0.0513	0.05	mg/kg	103	90.0 - 110		116754988
Barium	0.0506	0.05	mg/kg	101	90.0 - 110		116754988
Cadmium, Total	0.0513	0.05	mg/kg	103	90.0 - 110		116754988
Chromium, Total	0.0515	0.05	mg/kg	103	90.0 - 110		116754988
Cobalt	0.0522	0.05	mg/kg	104	90.0 - 110		116754988
Copper, Total	0.0508	0.05	mg/kg	102	90.0 - 110		116754988
Lead, Total	0.050	0.05	mg/kg	100	90.0 - 110		116754988
Molybdenum	0.0502	0.05	mg/kg	100	90.0 - 110		116754988
Nickel, Total	0.0515	0.05	mg/kg	103	90.0 - 110		116754988
Selenium, Total	0.0504	0.05	mg/kg	101	90.0 - 110		116754988
Silver, Total	0.0506	0.05	mg/kg	101	90.0 - 110		116754988
Thallium, Total	0.0508	0.05	mg/kg	102	90.0 - 110		116754988
Vanadium	0.0515	0.05	mg/kg	103	90.0 - 110		116754988
Zinc, Total	0.0511	0.05	mg/kg	102	90.0 - 110		116754988

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LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Aluminum, Total	674485	2.20	2.50	mg/kg	88.0	80.0 - 120	116754993	
Antimony, Total	674485	2.25	2.50	mg/kg	90.0	80.0 - 120	116754993	
Arsenic, Total	674485	2.27	2.50	mg/kg	90.8	80.0 - 120	116754993	
Barium	674485	2.31	2.50	mg/kg	92.4	80.0 - 120	116754993	
Cadmium, Total	674485	1.17	1.25	mg/kg	93.6	80.0 - 120	116754993	
Chromium, Total	674485	2.27	2.50	mg/kg	90.8	80.0 - 120	116754993	
Cobalt	674485	2.32	2.50	mg/kg	92.8	80.0 - 120	116754993	
Copper, Total	674485	2.30	2.50	mg/kg	92.0	80.0 - 120	116754993	
Lead, Total	674485	2.24	2.50	mg/kg	89.6	80.0 - 120	116754993	
Molybdenum	674485	2.41	2.50	mg/kg	96.4	80.0 - 120	116754993	
Nickel, Total	674485	2.33	2.50	mg/kg	93.2	80.0 - 120	116754993	
Selenium, Total	674485	2.16	2.50	mg/kg	86.4	80.0 - 120	116754993	
Silver, Total	674485	0.464	0.500	mg/kg	92.8	80.0 - 120	116754993	
Thallium, Total	674485	2.19	2.50	mg/kg	87.6	80.0 - 120	116754993	
Vanadium	674485	2.26	2.50	mg/kg	90.4	80.0 - 120	116754993	
Zinc, Total	674485	2.19	2.50	mg/kg	87.6	80.0 - 120	116754993	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Aluminum, Total	674485	2.20	2.19	2.50	80.0 - 120	88.0	87.6	mg/kg	0.456	20.0
Antimony, Total	674485	2.25	2.21	2.50	80.0 - 120	90.0	88.4	mg/kg	1.79	20.0
Arsenic, Total	674485	2.27	2.24	2.50	80.0 - 120	90.8	89.6	mg/kg	1.33	20.0
Barium	674485	2.31	2.27	2.50	80.0 - 120	92.4	90.8	mg/kg	1.75	20.0
Cadmium, Total	674485	1.17	1.16	1.25	80.0 - 120	93.6	92.8	mg/kg	0.858	20.0
Chromium, Total	674485	2.27	2.27	2.50	80.0 - 120	90.8	90.8	mg/kg	0	20.0
Cobalt	674485	2.32	2.33	2.50	80.0 - 120	92.8	93.2	mg/kg	0.430	20.0
Copper, Total	674485	2.30	2.28	2.50	80.0 - 120	92.0	91.2	mg/kg	0.873	20.0
Lead, Total	674485	2.24	2.22	2.50	80.0 - 120	89.6	88.8	mg/kg	0.897	20.0
Molybdenum	674485	2.41	2.38	2.50	80.0 - 120	96.4	95.2	mg/kg	1.25	20.0
Nickel, Total	674485	2.33	2.31	2.50	80.0 - 120	93.2	92.4	mg/kg	0.862	20.0
Selenium, Total	674485	2.16	2.16	2.50	80.0 - 120	86.4	86.4	mg/kg	0	20.0
Silver, Total	674485	0.464	0.455	0.500	80.0 - 120	92.8	91.0	mg/kg	1.96	20.0
Thallium, Total	674485	2.19	2.17	2.50	80.0 - 120	87.6	86.8	mg/kg	0.917	20.0
Vanadium	674485	2.26	2.24	2.50	80.0 - 120	90.4	89.6	mg/kg	0.889	20.0
Zinc, Total	674485	2.19	2.16	2.50	80.0 - 120	87.6	86.4	mg/kg	1.38	20.0

LDR

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Aluminum, Total	9.28	10	mg/kg	92.8	90.0 - 110		116754990
Antimony, Total	0.909	1	mg/kg	90.9	90.0 - 110		116754990
Arsenic, Total	9.54	10	mg/kg	95.4	90.0 - 110		116754990
Barium	9.34	10	mg/kg	93.4	90.0 - 110		116754990
Cadmium, Total	9.58	10	mg/kg	95.8	90.0 - 110		116754990
Chromium, Total	9.34	10	mg/kg	93.4	90.0 - 110		116754990
Cobalt	9.42	10	mg/kg	94.2	90.0 - 110		116754990
Copper, Total	9.27	10	mg/kg	92.7	90.0 - 110		116754990
Lead, Total	9.21	10	mg/kg	92.1	90.0 - 110		116754990
Molybdenum	10.1	10	mg/kg	101	90.0 - 110		116754990
Nickel, Total	9.53	10	mg/kg	95.3	90.0 - 110		116754990
Selenium, Total	9.77	10	mg/kg	97.7	90.0 - 110		116754990
Thallium, Total	9.08	10	mg/kg	90.8	90.0 - 110		116754990

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LDR

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Vanadium	9.33	10	mg/kg	93.3	90.0 - 110		116754990
Zinc, Total	9.39	10	mg/kg	93.9	90.0 - 110		116754990

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Aluminum, Total	1511431	2900	0	2600	106	75.0 - 125	283 *		mg/kg		20.0
Antimony, Total	1511431	87.5	0	0.246	106	55.7 - 131	82.3		mg/kg		20.0
Arsenic, Total	1511431	104	0	0.351	106	69.7 - 129	97.8		mg/kg		20.0
Barium	1511431	395	0	308	106	28.2 - 176	82.1		mg/kg		20.0
Cadmium, Total	1511431	50.7	0	0.382	53.0	74.3 - 120	94.9		mg/kg		20.0
Chromium, Total	1511431	105	0	10.3	106	74.2 - 120	89.3		mg/kg		20.0
Cobalt	1511431	96.2	0	3.30	106	68.8 - 126	87.6		mg/kg		20.0
Copper, Total	1511431	98.3	0	2.52	106	61.7 - 132	90.4		mg/kg		20.0
Lead, Total	1511431	94.7	0	1.20	106	72.2 - 127	88.2		mg/kg		20.0
Molybdenum	1511431	110	0	0.460	106	75.0 - 125	103		mg/kg		20.0
Nickel, Total	1511431	104	0	14.4	106	66.9 - 123	84.5		mg/kg		20.0
Selenium, Total	1511431	96.6	0	0.192	106	58.6 - 137	91.0		mg/kg		20.0
Silver, Total	1511431	19.6	0	0.0242	21.2	42.2 - 139	92.3		mg/kg		20.0
Thallium, Total	1511431	93.9	0	0.0141	106	67.5 - 117	88.6		mg/kg		20.0
Vanadium	1511431	104	0	5.36	106	61.5 - 123	93.1		mg/kg		20.0
Zinc, Total	1511431	104	0	14.9	106	63.2 - 122	84.1		mg/kg		20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Aluminum, Total	1511431	2900	3690	2600	103	75.0 - 125	283 *	1030 *	mg/kg	114 *	20.0
Antimony, Total	1511431	87.5	83.4	0.246	103	55.7 - 131	82.3	78.4	mg/kg	4.81	20.0
Arsenic, Total	1511431	104	101	0.351	103	69.7 - 129	97.8	95.0	mg/kg	2.94	20.0
Barium	1511431	395	393	308	103	28.2 - 176	82.1	80.2	mg/kg	2.33	20.0
Cadmium, Total	1511431	50.7	48.6	0.382	51.7	74.3 - 120	94.9	91.0	mg/kg	4.26	20.0
Chromium, Total	1511431	105	101	10.3	103	74.2 - 120	89.3	85.6	mg/kg	4.31	20.0
Cobalt	1511431	96.2	93.1	3.30	103	68.8 - 126	87.6	84.7	mg/kg	3.39	20.0
Copper, Total	1511431	98.3	95.6	2.52	103	61.7 - 132	90.4	87.8	mg/kg	2.86	20.0
Lead, Total	1511431	94.7	91.1	1.20	103	72.2 - 127	88.2	84.8	mg/kg	3.93	20.0
Molybdenum	1511431	110	106	0.460	103	75.0 - 125	103	99.6	mg/kg	3.72	20.0
Nickel, Total	1511431	104	101	14.4	103	66.9 - 123	84.5	81.7	mg/kg	3.41	20.0
Selenium, Total	1511431	96.6	94.0	0.192	103	58.6 - 137	91.0	88.5	mg/kg	2.73	20.0
Silver, Total	1511431	19.6	18.9	0.0242	20.7	42.2 - 139	92.3	89.0	mg/kg	3.64	20.0
Thallium, Total	1511431	93.9	89.6	0.0141	103	67.5 - 117	88.6	84.5	mg/kg	4.69	20.0
Vanadium	1511431	104	102	5.36	103	61.5 - 123	93.1	91.2	mg/kg	2.05	20.0
Zinc, Total	1511431	104	102	14.9	103	63.2 - 122	84.1	82.2	mg/kg	2.27	20.0

674750 Solid & Chemical Materials

EPA 6010C

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units		File	Out
Boron	674485	0.0228	0.00876	0.100	mg/kg	*	116755048	
Tin, Total	674485	0.00993	0.00255	0.050	mg/kg	*	116755048	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Boron	4.90	5.00	mg/kg	98.0	90.0 - 110		116755047
Boron	5.19	5.00	mg/kg	104	90.0 - 110		116755057

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Quality Control

Printed 08/05/2016

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Tin, Total	0.509	0.500	mg/kg	102	90.0 - 110		116755047
Tin, Total	0.524	0.500	mg/kg	105	90.0 - 110		116755057

Dir. SPKD

Parameter	Sample	DSPK	DSPKD	UNK	Known	Limits%	DSPK%	DSPKD%	Units	RPD	Limit%
Boron	1511431	223	227	7.05	212	80.0 - 120	102	106	mg/kg	1.78	25.0

Direct SPK

Parameter	Sample	DSPK	UNK	Known	Limits%	DSPK%	Units	
Boron	1511431	223	7.05	212	80.0 - 120	102	mg/kg	25.0

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Boron	9.92	10.0	mg/kg	99.2	95.0 - 105		116755045
Tin, Total	0.992	1.00	mg/kg	99.2	95.0 - 105		116755045

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Boron	4.94	5.00	mg/kg	98.8	90.0 - 110		116755046
Tin, Total	0.511	0.500	mg/kg	102	90.0 - 110		116755046

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Boron	674485	5.10	5.00	mg/kg	102	85.5 - 112	116755049	
Tin, Total	674485	2.34	2.50	mg/kg	93.6	80.5 - 108	116755049	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Boron	674485	5.10	4.92	5.00	85.5 - 112	102	98.4	mg/kg	3.59	25.0
Tin, Total	674485	2.34	2.42	2.50	80.5 - 108	93.6	96.8	mg/kg	3.36	25.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Tin, Total	1511431	89.9	0	ND	106	79.3 - 107	84.8		mg/kg		25.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Tin, Total	1511431	89.9	89.2	ND	103	79.3 - 107	84.8	84.2	mg/kg	0.782	25.0

674966 Solid & Chemical Materials — EPA 7470A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Mercury	674910	ND	0.000072	0.0001	mg/L	116758423	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Mercury	0.00486	0.005	mg/L	97.2	90.0 - 110		116758416
TCLP Mercury	0.00495	0.005	mg/L	99.0	90.0 - 110		116758425
TCLP Mercury	0.00498	0.005	mg/L	99.6	90.0 - 110		116758431

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Mercury	0.0191	0.02	mg/L	95.5	90.0 - 110		116758393

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Quality Control

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Mercury	0.00525	0.005	mg/L	105	90.0 - 110		116758392

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP Mercury	674910	0.00521	0.005	mg/L	104	86.7 - 116	116758424	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP Mercury	674910	0.00521	0.00519	0.005	86.7 - 116	104	104	mg/L	0.385	20.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Mercury	1511431	0.107	0	ND	0.100	83.3 - 120	107		mg/L		15.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Mercury	1511431	0.107	0.105	ND	0.100	83.3 - 120	107	105	mg/L	1.89	15.0

675100 Solid & Chemical Materials

EPA 6020A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Arsenic	674942	ND	0.010	0.010	mg/L	116760990	
TCLP Cadmium	674942	ND	0.001	0.001	mg/L	116760990	
TCLP Chromium	674942	ND	0.010	0.010	mg/L	116760990	
TCLP Lead	674942	ND	0.010	0.010	mg/L	116760990	
TCLP Selenium	674942	ND	0.010	0.010	mg/L	116760990	
TCLP Silver	674942	ND	0.010	0.010	mg/L	116760990	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Arsenic	0.0467	0.05	mg/L	93.4	90.0 - 110		116760982
TCLP Arsenic	0.0463	0.05	mg/L	92.6	90.0 - 110		116760989
TCLP Arsenic	0.0461	0.05	mg/L	92.2	90.0 - 110		116760997
TCLP Cadmium	0.0498	0.05	mg/L	99.6	90.0 - 110		116760982
TCLP Cadmium	0.0492	0.05	mg/L	98.4	90.0 - 110		116760989
TCLP Cadmium	0.0489	0.05	mg/L	97.8	90.0 - 110		116760997
TCLP Chromium	0.050	0.05	mg/L	100	90.0 - 110		116760982
TCLP Chromium	0.049	0.05	mg/L	98.0	90.0 - 110		116760989
TCLP Chromium	0.049	0.05	mg/L	98.0	90.0 - 110		116760997
TCLP Lead	0.0501	0.05	mg/L	100	90.0 - 110		116760982
TCLP Lead	0.0496	0.05	mg/L	99.2	90.0 - 110		116760989
TCLP Lead	0.050	0.05	mg/L	100	90.0 - 110		116760997
TCLP Selenium	0.0503	0.05	mg/L	101	90.0 - 110		116760982
TCLP Selenium	0.0505	0.05	mg/L	101	90.0 - 110		116760989
TCLP Selenium	0.0505	0.05	mg/L	101	90.0 - 110		116760997
TCLP Silver	0.0482	0.05	mg/L	96.4	90.0 - 110		116760982
TCLP Silver	0.048	0.05	mg/L	96.0	90.0 - 110		116760989
TCLP Silver	0.0473	0.05	mg/L	94.6	90.0 - 110		116760997

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Arsenic	0.0529	0.05	mg/L	106	90.0 - 110		116760932
TCLP Cadmium	0.051	0.05	mg/L	102	90.0 - 110		116760932

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ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Chromium	0.0522	0.05	mg/L	104	90.0 - 110		116760932
TCLP Lead	0.0528	0.05	mg/L	106	90.0 - 110		116760932
TCLP Selenium	0.0526	0.05	mg/L	105	90.0 - 110		116760932
TCLP Silver	0.0521	0.05	mg/L	104	90.0 - 110		116760932

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP Arsenic	674942	0.436	0.500	mg/L	87.2	84.1 - 115	116760991	
TCLP Cadmium	674942	0.243	0.250	mg/L	97.2	87.2 - 114	116760991	
TCLP Chromium	674942	0.533	0.500	mg/L	107	82.8 - 113	116760991	
TCLP Lead	674942	0.504	0.500	mg/L	101	84.5 - 115	116760991	
TCLP Selenium	674942	0.500	0.500	mg/L	100	86.3 - 119	116760991	
TCLP Silver	674942	0.0903	0.100	mg/L	90.3	83.6 - 112	116760991	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP Arsenic	674942	0.436	0.438	0.500	84.1 - 115	87.2	87.6	mg/L	0.458	14.0
TCLP Cadmium	674942	0.243	0.244	0.250	87.2 - 114	97.2	97.6	mg/L	0.411	14.0
TCLP Chromium	674942	0.533	0.525	0.500	82.8 - 113	107	105	mg/L	1.51	14.0
TCLP Lead	674942	0.504	0.503	0.500	84.5 - 115	101	101	mg/L	0.199	14.0
TCLP Selenium	674942	0.500	0.499	0.500	86.3 - 119	100	99.8	mg/L	0.200	14.0
TCLP Silver	674942	0.0903	0.0902	0.100	83.6 - 112	90.3	90.2	mg/L	0.111	14.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Arsenic	1511431	2.11	0	ND	2.50	87.7 - 115	84.4 *		mg/L		20.0
TCLP Cadmium	1511431	1.18	0	ND	1.25	89.5 - 111	94.4		mg/L		20.0
TCLP Chromium	1511431	2.47	0	0.0153	2.50	79.9 - 112	98.2		mg/L		20.0
TCLP Lead	1511431	2.40	0	ND	2.50	83.6 - 112	96.0		mg/L		20.0
TCLP Selenium	1511431	2.35	0	ND	2.50	87.5 - 117	94.0		mg/L		20.0
TCLP Silver	1511431	0.430	0	ND	0.500	85.5 - 110	86.0		mg/L		20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Arsenic	1511431	2.11	2.13	ND	2.50	87.7 - 115	84.4 *	85.2 *	mg/L	0.943	20.0
TCLP Cadmium	1511431	1.18	1.16	ND	1.25	89.5 - 111	94.4	92.8	mg/L	1.71	20.0
TCLP Chromium	1511431	2.47	2.58	0.0153	2.50	79.9 - 112	98.2	103	mg/L	4.38	20.0
TCLP Lead	1511431	2.40	2.43	ND	2.50	83.6 - 112	96.0	97.2	mg/L	1.24	20.0
TCLP Selenium	1511431	2.35	2.38	ND	2.50	87.5 - 117	94.0	95.2	mg/L	1.27	20.0
TCLP Silver	1511431	0.430	0.425	ND	0.500	85.5 - 110	86.0	85.0 *	mg/L	1.17	20.0

675255 Solid & Chemical Materials — EPA 6020A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File	Out
TCLP Barium	674942	ND	0.010	0.010	mg/L	116763427	

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Barium	0.0517	0.05	mg/L	103	90.0 - 110		116763411
TCLP Barium	0.052	0.05	mg/L	104	90.0 - 110		116763420
TCLP Barium	0.0517	0.05	mg/L	103	90.0 - 110		116763430
TCLP Barium	0.0517	0.05	mg/L	103	90.0 - 110		116763438

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ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TCLP Barium	0.0526	0.05	mg/L	105	90.0 - 110		116763407

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TCLP Barium	674942	0.484	0.500	mg/L	96.8	85.5 - 111	116763428	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TCLP Barium	674942	0.484	0.484	0.500	85.5 - 111	96.8	96.8	mg/L	0	14.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Barium	1511431	3.62	0	1.27	2.50	78.8 - 112	94.0		mg/L		20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TCLP Barium	1511431	3.62	3.63	1.27	2.50	78.8 - 112	94.0	94.4	mg/L	0.425	20.0

RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100% Recover% is Recovery Percent: result / known * 100%

Blank - Method Blank; LCS - Laboratory Control Sample; CCV - Continuing Calibration Verification; MS - Matrix Spike; ICV - Initial Calibration Verification; LDR - Linear Dynamic Range Standard

749761 CoC Print Group 001 of 001

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Chain of Custody

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Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

GPDR

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Phone 870/567-8177
Fax 870/364-9076

Solid Samples

Matrix: Solid & Chemical Materials

Accredited	Test Name	Method
Sampler Printed Name	*Sampler Affiliation*	*Sampler Signature*
	1 Glass Qt w/Teflon lined lid	
N	*TCL TCLP Extraction Non-Volatile	EPA 1311
N	*AsT TCLP Arsenic	EPA 6020A
N	*BaT TCLP Barium	EPA 6020A
N	*CdT TCLP Cadmium	EPA 6020A
N	*CrT TCLP Chromium	EPA 6020A
N	*PbT TCLP Lead	EPA 6020A
N	*SeT TCLP Selenium	EPA 6020A
N	*AgT TCLP Silver	EPA 6020A
N	*Hg* TCLP Mercury	EPA 7470A
	2 Glass 4 oz w/Teflon lined lid	
N	3015 Solid Metals Digestion	EPA 200.2 2.8
N	*BI Boron	EPA 6010C
N	*SnI Tin, Total	EPA 6010C
N	*FeI Total Iron	EPA 6010C
N	*AlM Aluminum, Total	EPA 6020A
N	*SbM Anthmony, Total	EPA 6020A
N	*AsM Arsenic, Total	EPA 6020A
N	*BaM Barium	EPA 6020A
N	*CdM Cadmium, Total	EPA 6020A
N	*CrM Chromium, Total	EPA 6020A
N	*CoM Cobalt	EPA 6020A
N	*CuM Copper, Total	EPA 6020A
N	*PbM Lead, Total	EPA 6020A
N	*MoM Molybdenum	EPA 6020A
N	*NiM Nickel, Total	EPA 6020A
N	*SeM Selenium, Total	EPA 6020A
N	*AgM Silver, Total	EPA 6020A
N	*TlM Thallium, Total	EPA 6020A
N	*VM Vanadium	EPA 6020A
N	*ZnM Zinc, Total	EPA 6020A

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Chain of Custody

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Report To

GPDR

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

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Phone 870/567-8177
Fax 870/364-9076

Solid Samples

N	%HgS	Mercury	EPA 7471A
N	747S	Solid Metals Digestion Hg	EPA 7471A
N	TS%	Total Solids for Dry Wt	SM2540 G-1997 /MOD

0 Z1-Administrative use only: no bottle required

ARDW As Received to Dry Weight Basis Calculation

Ana-Lab #	Sample ID	Bottles	Date	Time	Notes
151431	SLAKER GRITS	3	7/28/16	10 AM	
433	ALL LIME MUD	3	7/28/16	10 AM	

Ambient Conditions/Comments

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Chain of Custody

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Report To

Georgia Pacific Paper Op-ARK
Richard Freeman,DP#33
P O Box 3333
Crossett, AR 71635-

GPDR

119

Phone 870/567-8177
Fax 870/364-9076

Solid Samples

Date	Time	Relinquished		Received	
7/28/16	4:30	*Printed Name* RICHARD FREEMAN	*Affiliation* GP CROSSETT PAPER	*Printed Name* FedEx	*Affiliation*
	7/28/16	*Signature*		*Signature*	
7.29.16	DSC	*Printed Name* FedEx	*Affiliation*	*Printed Name* Tiffany Tarver	*Affiliation* Ana-Lab Corporation
	1015	*Signature*		*Signature*	
		Printed Name	*Affiliation*	*Printed Name*	*Affiliation*
		Signature		*Signature*	
		Printed Name	*Affiliation*	*Printed Name*	*Affiliation*
		Signature		*Signature*	

Sample Recieved on Ice? [X] Yes [ ] No **Method of Shipment:** [ ] UPS [ ] Bus [X] FedEx [ ] Lone Star [ ] Hand Delivered [ ] Other

Cooler/Sample Secure? [X] Yes [ ] No **Tracking/Shipping #** 8100 1899 1714

The accredited column designates accreditation by A - A2LA, N - NELAC, or z - not listed under scope of accreditation. Unless otherwise specified, ANA-LAB shall provide these ordered services pursuant to our Standard Terms & Conditions Agreement (available for download from the welcome page at <http://www.ana-lab.com>). Ana-Lab personnel collect samples as specified by Ana-Lab SOP #000323.

Comments

3.1 °C

005057 [ ] CF____
005661 [X] CF 0.0
003688 [ ] CF____

749761 CoC Print Group 001 of 001

FedEx Express

FedEx Tracking Number 8100 1899 1714

Form ID No. 0215

7/28/16 [redacted]

Sender's Name [illegible] Phone (870) 367-[illegible]

Company GEORGIA PACIFIC [illegible]

Address 100 SUPPLY ST Dept./Floor/Suite/Room

City CROSSETT State AR ZIP 71635

3.12
4

2 Your Internal Billing Reference

3 To

Recipient's Name SKEETER LUDEWIG Phone 903 984-0551

Company ANA-LAB

Address 2610 DUDLEY RD Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City KILGORE State TX ZIP 75662

Hold Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

Hold Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

0127423106

8100 1899 1714

4 Express Package Servic

Next Business Day

- ☐ FedEx First Overnight — Earliest next business morning delivery to se locations. Friday shipments will be delivered Monday unless Saturday Delivery is selecte
- ☑ FedEx Priority Overnight — Next business morning.* Friday shipments v delivered on Monday unless Saturday Deliv is selected.
- ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

5 Packaging *Declared value l

- ☐ FedEx Envelope*
- ☐

6 Special Handling and D

- ☐ Saturday Delivery — NOT available for FedEx Standard Overnig
- ☐ No Signature Required — Package may be left without obtaining a signature for delivery.

Does this shipment contain dar

Dry ice must be clear

- ☒ No
- ☐ Yes — As per attached Shipper's Declaration.
- ☐

Restrictions apply for dangerous goods—see the

7 Payment *Bill to:*

Ent

- ☒ Sender — Acct. No. in Section 1 will be billed.
- ☐ Recipien

[redacted]

Total Packages	Total Weight
1	1 3

Our liability is limited to US$100 unless you declare

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fedex.com 1.800.GoFedEx 1.800.463.3339

Appendix C

Waters Agricultural Laboratories, Inc.
*P.O. Box 382 * 257 Newton Highway*
Camilla, GA 31730-0382
(229) 336-7216 fax (229) 336-7967

Sludge Analysis

Nutrient Levels

Charge To:
Georgia Pacific
po Box 3333
Crossett, AR 71635

Date Received:
5/26/2016

Date Processed:
6/2/2016

Grower:
Richard Freeman

			Below Results Reported in Percentage (%) Values															Below Results Reported in Parts Per Million (ppm) Values													Below Results Reported in Percentage (%) Values							Wet Sieve % Retained		
Sample No.	Lab#	C : N	Total N	NH4	NO3+NO2	Organic N	Total P2O5	Total K2O	S	Zn	Mn	Fe	Cu	Ca	Mg	Na	Al	B	Cd	Cr	Pb	Co	Ni	Mo	As	Ba	Hg	Se	Ag	Cl	Ash	Moisture	CCE by Titration	SAR	pH (units)	Conductivity (mmhos/cm)	#10 Sieve	# 60 Sieve	#100 Sieve
1-PCS	62109	159.17 : 1	0.14	0.08	0.06	0.00	0.03	0.04	0.02	0.001	0.003	0.010	0.001	0.930	0.040	0.060	0.005	88.530	N.D.	1.880	1.890	0.127	N.D.	N.D.	0.029	0.171	N.D.	N.D.	0.021	0.300	2.790	75.150	6.880	0.020	9.400	0.393	-	-	-
2-Ash Ditch	62110		0.25	0.02	0.07	0.11	0.21	0.18	0.16	0.030	0.090	0.340	0.003	5.400	0.110	0.110	0.410	62.090	0.898	11.830	6.730	7.140	8.160	4.700	1.140	3.590	N.D.	N.D.	0.650	0.250	34.990	51.910	22.130	0.010	7.820	1.500	7.97	31.4	6.22
3-Ash 10A	62111		0.17	0.05	0.08	0.04	0.35	0.79	0.08	0.010	0.240	0.490	0.003	8.030	0.410	0.190	0.720	87.210	0.914	19.330	6.880	5.940	8.050	N.D.	2.860	7.700	N.D.	N.D.	1.640	0.350	59.990	30.630	27.380	0.020	10.890	1.540	15.05	15.47	5.44

Waters Agricultural Laboratories, Inc.
*P.O. Box 382 * 257 Newton Highway*
Camilla, GA 31730-0382
(229) 336-7216 fax (229) 336-7967

Sludge Analysis

Nutrient Levels

Charge To:
Georgia Pacific
po Box 3333
Crossett, AR 71635

Date Received:
6/23/2016

Date Processed:
6/29/2016

Grower:
Richard Freeman

			Below Results Reported in Percentage (%) Values															Below Results Reported in Parts Per Million (ppm) Values															Below Results Reported in Percentage (%) Values							Wet Sieve % Retained		
Sample No.	Lab#	C : N	Total N	NH4	NO3+NO2	Organic N	Total P2O5	Total K2O	S	Zn	Mn	Fe	Cu	Ca	Mg	Na	Al	B	Cd	Cr	Pb	Co	Ni	Mo	As	Ba	Hg	Se	Ag	Cl	Ash	Moisture	CCE by Titration	SAR	pH (units)	Conductivity (mmhos/cm)	#10 Sieve	#60 Sieve	#100 Sieve
1-Dregs Filter	62195	75.79 : 1	0.11	0.10	0.01	0.00	0.30	0.20	0.55	0.030	0.560	0.260	0.020	18.340	1.630	1.290	0.180	N.D.	2.730	24.600	8.220	10.520	81.550	N.D.	N.D.	744.700	N.D.	0.091	0.947	0.900	50.740	47.240	55.250	0.010	12.330	15.330	0.08	22.4	2.76
2-Lime Mud	62196	17.49: 1	0.24	0.12	0.10	0.02	1.24	0.04	0.07	0.001	0.140	0.100	0.002	54.040	0.790	0.950	0.040	N.D.	0.984	19.780	2.500	3.010	24.380	0.370	0.538	519.200	N.D.	0.090	0.072	13.700	85.110	0.040	125.000	0.040	12.620	13.530	12.25	8.71	0.24

Waters Agricultural Laboratories, Inc.
*P.O. Box 382 * 257 Newton Highway*
Camilla, GA 31730-0382
(229) 336-7216 fax (229) 336-7967

Sludge Analysis

Nutrient Levels

Charge To:
Georgia Pacific
po Box 3333
Crossett, AR 71635

Date Received:
7/29/2016

Date Processed:
8/2/2016

Grower:
Richard Freeman

			Below Results Reported in Percentage (%) Values															Below Results Reported in Parts Per Million (ppm) Values													Below Results Reported in Percentage (%) Values							Wet Sieve % Retained		
Sample No.	Lab#	C : N	Total N	NH4	NO3+NO2	Organic N	Total P2O5	Total K2O	S	Zn	Mn	Fe	Cu	Ca	Mg	Na	Al	B	Cd	Cr	Pb	Co	Ni	Mo	As	Ba	Hg	Se	Ag	Cl	Ash	Moisture	CCE by Titration	SAR	pH (units)	Conductivity (mmhos/cm)	#10 Sieve	# 60 Sieve	#100 Sieve
1-Slaker Grits	62285	70.86 : 1	N.D.	N.D.	N.D.	N.D.	0.76	0.02	0.03	0.001	0.046	0.090	0.001	94.920	0.280	0.210	0.015	5.540	0.553	9.370	N.D.	1.960	11.100	0.429	0.327	0.279	N.D.	0.034	0.465	0.300	83.600	14.560	82.500	0.010	11.180	6.870	18.94	46.9	22.95
2-All Lime Mud	62286	81.72 : 1	N.D.	N.D.	N.D.	N.D.	0.81	0.03	0.02	0.001	0.046	0.030	0.001	34.880	0.260	0.580	0.014	5.130	0.594	6.920	N.D.	0.987	7.010	0.546	0.063	0.268	N.D.	0.048	0.435	0.250	82.410	15.740	82.000	0.030	10.970	0.995	0	0.06	0.03

Appendix D

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-128409-1
Client Project/Site: Crossett Sludge

For:
Georgia-Pacific Corporation
BOX 3333
Crossett, Arkansas 71635

Attn: Richard Freeman

Authorized for release by:
8/26/2016 5:06:17 PM
Robert Bearden, Project Manager I
(912)354-7858
robert.bearden@testamericainc.com

Designee for

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

Client: Georgia-Pacific Corporation
Project/Site: Crossett Sludge

TestAmerica Job ID: 680-128409-1

Job ID: 680-128409-1

Laboratory: TestAmerica Savannah

Narrative

680-128409-1

Subcontract Work

Methods Coliphages, Enteroviruses, Fecal Coliforms, Fecal Streptococci, Helminth Ova, Salmonella: These methods were subcontracted to BCS Laboratories. The subcontract laboratory certifications are different from that of the facility issuing the final report.

BIOLOGICAL CONSULTING SERVICES
OF NORTH FLORIDA, INC.

August 26, 2016

Project Manager(s)
TestAmerica Savannah
5102 LaRoche Avenue
Savannah GA 31404
912-354-7858
lisa.harvey@testamericainc.com; MKersey@testamericainc.com; jerry.lanier@testamericainc.com
Client ID: Crossett Primary Clarifier Solids

BCS ID: 1608070

Dear Project Manager(s),

We have completed the analysis of the submitted samples as outlined below.

Project Name: Crosset Sludge (Job #680-128409)

Analysis	Method
Culturable Cytopathic Enteric Viruses	ASTM D4994-89; BCS SOP V-5 (ISO17025 and TNI Accredited)
Salmonella	EPA 1682; BCS SOP M-4 (ISO17025 and TNI Accredited)
Fecal Coliforms MPN	EPA 1681; SM 9221E; BCS SOP B-4 (ISO17025 and TNI Accredited)
Fecal Enterococci/Streptococci	SM 9230 B; BCS SOP B-5 (ISO17025 Accredited & NOT TNI Accredited)
Coliphage (male specific & somatic)	Total Coliphage BCS SOP V-11 (ISO17025 and TNI Accredited)
Helminth Ova in Solids	EPA625/R-92/013 Ap. I; BCS SOP H-3 (ISO17025 and TNI Accredited)

Following, you will find our report on the results of the analysis conducted on the referenced samples. Should you have any questions, please do not hesitate to contact me.

Sincerely,

Bonnie Mull

Bonnie Mull, MPH
Laboratory Operations Manager

BCS LABORATORIES, INC. – GAINESVILLE
4609 NW 6TH STREET. STE. A. GAINESVILLE. FLORIDA 32609
TEL. (352) 377-9272, FAX. (352) 377-5630
WWW.MICROBIOSERVICES.COM

Client:	TestAmerica Savannah
Analysis:	*Culturable Cytopathic Enteric Viruses*
Project Name:	Crosset Sludge (Job #680-128409)
Client Sample ID:	Crossett Primary Clarifier Solids — Sample Date/Time: August 04, 2016 14:00
BCS Sample ID:	1608070 — Sample Description: Biosolids
Date Received:	August 05, 2016 10:17 — Amount Submitted: 1000 g — % Solids: 20.5
Amount Analyzed:	50.6 g — Receipt Temperature: 1.5 deg C — Preserved: Yes
Analysis Start:	August 05, 2016 11:15 — Analysis Stop Date: August 22, 2016 13:37
Analyst:	George Lukasik, Ph.D. — Qualifier: U
Primary Value:	≤1.1 Infectious Units MPN/sample analyzed
Secondary Value:	≤0.4 Infectious Units MPN/4 dry grams (equivalent to pfu/4 grams dry)

Analysis Notes: Undetected: Analyte was not detected in the sample analyzed; Value represents the method's detection limit for the amount of sample analyzed as per the method's standard reporting units

Client:	TestAmerica Savannah
Analysis:	*Salmonella*
Project Name:	Crosset Sludge (Job #680-128409)
Client Sample ID:	Crossett Primary Clarifier Solids — Sample Date/Time: August 04, 2016 14:00
BCS Sample ID:	1608070 — Sample Description: Biosolids
Date Received:	August 05, 2016 10:17 — Amount Submitted: 1000 g — % Solids: 20.5
Amount Analyzed:	50.09 g — Receipt Temperature: 1.5 deg C — Preserved: Yes
Analysis Start:	August 05, 2016 11:31 — Analysis Stop Date: August 09, 2016 9:05
Analyst:	Jennifer Price — Qualifier: U
Primary Value:	≤0.07 Salmonella MPN/mL sample analyzed
Secondary Value:	≤1.3 Salmonella MPN/4 dry grams

Analysis Notes: Undetected: Analyte was not detected in the sample analyzed; Value represents the method's detection limit for the amount of sample analyzed as per the method's standard reporting units

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WWW.MICROBIOSERVICES.COM
FL DOH #E82924, ISO/IEC 17025:2005 L2422 (L-A-B), PA DEP# 68-03950, EPA# FL01147

Client:	TestAmerica Savannah		
Analysis:	*Fecal Coliforms MPN*		
Project Name:	Crosset Sludge (Job #680-128409)		
Client Sample ID:	Crossett Primary Clarifier Solids	Sample Date/Time: August 04, 2016 14:00	
BCS Sample ID:	1608070	Sample Description: Biosolids	
Date Received:	August 05, 2016 10:17	Amount Submitted: 1000 g	% Solids: 20.5
Amount Analyzed:	50.09 g	Receipt Temperature: 1.5 deg C	Preserved: Yes
Analysis Start:	August 05, 2016 11:31	Analysis Stop Date: August 06, 2016 12:00	
Analyst:	Jennifer Price	Qualifier: U	
Primary Value:	≤1.8	Fecal Coliforms MPN/mL sample analyzed	
Secondary Value:	≤8.8	Fecal coliforms/dry gram	

Analysis Notes: Undetected: Analyte was not detected in the sample analyzed; Value represents the method's detection limit for the amount of sample analyzed as per the method's standard reporting units

Client:	TestAmerica Savannah		
Analysis:	*Fecal Enterococci/Streptococci*		
Project Name:	Crosset Sludge (Job #680-128409)		
Client Sample ID:	Crossett Primary Clarifier Solids	Sample Date/Time: August 04, 2016 14:00	
BCS Sample ID:	1608070	Sample Description: Biosolids	
Date Received:	August 05, 2016 10:17	Amount Submitted: 1000 g	% Solids: 20.5
Amount Analyzed:	50.09 g	Receipt Temperature: 1.5 deg C	Preserved: Yes
Analysis Start:	August 05, 2016 11:31	Analysis Stop Date: August 07, 2016 12:00	
Analyst:	Jennifer Price	Qualifier: U	
Primary Value:	≤1.8	Microorganism MPN/mL sample analyzed	
Secondary Value:	≤8.8	Microorganisms/dry gram	

Analysis Notes: Undetected: Analyte was not detected in the sample analyzed; Value represents the method's detection limit for the amount of sample analyzed as per the method's standard reporting units

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WWW.MICROBIOSERVICES.COM
FL DOH #E82924, ISO/IEC 17025:2005 L2422 (L-A-B), PA DEP# 68-03950, EPA# FL01147

Client:	TestAmerica Savannah
Analysis:	*Coliphage (male specific & somatic)*
Project Name:	Crosset Sludge (Job #680-128409)
Client Sample ID:	Crossett Primary Clarifier Solids — Sample Date/Time: August 04, 2016 14:00
BCS Sample ID:	1608070 — Sample Description: Biosolids
Date Received:	August 05, 2016 10:17 — Amount Submitted: 1000 g — % Solids: 20.5
Amount Analyzed:	26.03 g — Receipt Temperature: 1.5 deg C — Preserved: Yes
Analysis Start:	August 05, 2016 13:14 — Analysis Stop Date: August 08, 2016 9:51
Analyst:	David Sekora, M.S. — Qualifier: U
Primary Value:	≤9.0 PFU/mL sample analyzed
Secondary Value:	≤1.7 PFU /dry gram

Analysis Notes: Undetected: Analyte was not detected in the sample analyzed; Value represents the method's detection limit for the amount of sample analyzed as per the method's standard reporting units

Client:	TestAmerica Savannah
Analysis:	*Helminth Ova in Solids*
Project Name:	Crosset Sludge (Job #680-128409)
Client Sample ID:	Crossett Primary Clarifier Solids — Sample Date/Time: August 04, 2016 14:00
BCS Sample ID:	1608070 — Sample Description: Biosolids
Date Received:	August 05, 2016 10:17 — Amount Submitted: 1000 g — % Solids: 20.5
Amount Analyzed:	50.75 g — Receipt Temperature: 1.5 deg C — Preserved: Yes
Analysis Start:	August 05, 2016 10:50 — Analysis Stop Date: August 25, 2016 14:15
Analyst:	Wei-yea Hsu, M.S. — Qualifier: U
Primary Value:	≤1.0 Total Ascaris (Helminth Ova) Count
Secondary Value:	≤0.4 Potentially Viable Ascaris (Helminth Ova)/ 4 dry grams

Analysis Notes: Undetected: Analyte was not detected in the sample analyzed; Value represents the method's detection limit for the amount of sample analyzed as per the method's standard reporting units

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FL DOH #E82924, ISO/IEC 17025:2005 L2422 (L-A-B), PA DEP# 68-03950, EPA# FL01147

Client: TestAmerica Savannah

Project: Crosset Sludge (Job #680-128409)

Method Detection Limit: 1 microorganism/ unit weight or volume analyzed

Practical Quantitation Limit: 1 microorganism/ unit weight or volume analyzed

Report Notes:

Sample(s) were received well preserved and in excellent condition. Sample(s) were analyzed following receipt as per the described analytical methodology. End of report notes.

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FL DOH #E82924, ISO/IEC 17025:2005 L2422 (L-A-B), PA DEP# 68-03950, EPA# FL01147

I certify that I have examined I am familiar with the information submitted herein. The results pertain only to analyzed sample(s) associated identifier #(s). Based on my inquiry of the individuals responsible for the analysis, I believe the data to be true, accurate, complete. Sampling field data was obtained from submitted documents. The analysis was authorized commissioned by the client. The resulting data are representative of the analysis conducted on the material/samples/articles provided by the client (or client's representative) it's/their condition at the time of analysis. The sample(s) were analyzed in accordance with the appropriate method , however due to the inherent limitations of the methods, microorganisms may avoid detection. BCS Laboratories offers no express or implied warranties concerning the quality, safety, and/or purity of any sample, batch, source, or the process they are derived from. Quality assurance controls were performed as outlined in the method and as per Good Laboratory Practices. The analysis results presented in this report meet the requirements of The NELAC Institute (TNI), ISO 17025, and The FL Public Health's Laboratory Certification Program, as applicable unless otherwise noted.

Signature of Laboratory Director/Authorized Rep. Bonnie Mull Date: August 26, 2016

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FL DOH #E82924, ISO/IEC 17025:2005 L2422 (L-A-B), PA DEP# 68-03950, EPA# FL01147

DATA QUALIFIER CODES	
SYMBOL	MEANING
B	Results based on counts outside the acceptable range.
D	Measurement was made in the field.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J1	The sample matrix interfered with the ability to make any accurate determination.
J2	No Quality Control criteria exist for the component.
J3	The data are questionable because of improper laboratory or field protocols.
L	Off scale high. Actual value is known to be greater than value given.
N	Presumptive evidence for the presence of material. There is an indication that the analyte is present, but the confirmation requirement was not met.
O	Sampled, but analysis not performed.
Q	Sample held beyond the accepted holding time.
U	Indicates that the compound was analyzed for but not detected. The specified component was not detected. The reported value is the method detection limit.
V	Analyte was detected in both sample and associated method blank. Data may not be accurate.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.
Z	Too many colonies present (TNTC); the numeric value given represents the upper end of the value that can be determined based on the volume.
?	Data are rejected and should not be used. QC data for analyte did not meet acceptance criteria. Presence or absence of analyte could not be confirmed.
**	Not reported due to interference.
^	BCS is not currently accredited for this analyte.
#	BCS Lab specific qualifier. See laboratory analysis notes.

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FL DOH #E82924, ISO/IEC 17025:2005 L2422 (L-A-B), PA DEP# 68-03950, EPA# FL01147

CHAIN OF CUSTODY RECORD

www.microbioservices.com

FL DOH Laboratory #E82924, EPA# FL01147

BCS Laboratories
4609 NW 6th street, Building A
Gainesville, FL 32609
Tel. (352) 377-9272, Fax. (352) 377-5630

Client Name and Address: GEORGIA-PACIFIC CROSSETT LLC.
City/State/Zip: CROSSETT, ARKANSAS 71635
Project Manager: RICHARD FREEMAN
Telephone Number: 870-500-5737 **Fax No.:**
Sampler Name: (Print) RICHARD FREEMAN
Sampler Signature: Richard Freeman

Compliance Monitoring? ☐ Yes ☐ No
Report To: RICHARD FREEMAN
Email: rjfreeman@gapac.com
Quote #: TEST AMERICA 68016442
Project ID: CROSSETT SLUDGE
Invoice To: TEST AMERICA 68101648Z

Sample ID / Description	Date Sampled	Time Sampled	No. of containers shipped	Grab	Composite	Field Filtered	pH at collection	Temperature at collection	Preservative: Na Thiosulfate	Preservative: Ice / frozen Ice packs	Preservative: Other (specify):	Matrix: Groundwater	Matrix: Wastewater	Matrix: Drinking Water	Matrix: Biosolid/Sludge/Soil (circle)	Matrix: Other (specify):	Analysis: Enteroviruses/Enteric virus	Analysis: EPA 1615 enterovirus	Analysis: EPA 1615 Noroviruses	Analysis: Crypto & Giardia	Analysis: E. coli	Analysis: Enterococcus	Analysis: Total Coliform	Analysis: Endospores Clostridium	Analysis: Fecal coliform	Analysis: Helminth Ova	Analysis: Total H. Plate Count	Analysis: Salmonella	Analysis: Legionella (Culture or Genetic)	Analysis: Pseudomonas	Analysis: Other: FECAL STREP. - TOXOCLI	Analysis: Other: GIARDIA/CRYPTO	RUSH TAT (Fee Applies)
SAMPLED 8/4/16 2:00 pm																																	
CROSSETT PRIMARY CLARIFIER SOLIDS	8/4/16	2:00 pm	1	X						X					X		X								X	X		X			X	X	
TestAmerica Savannah Crossett Primary Clarifier 1608070 08/05/2016 10:17																																	

Special Instructions:

Method of Shipment: UPS Postal DHL FEDEX Other:

Relinquished by:	Date	Time	Received by:	Date	Time
Richard Freeman	8/4/16	4:30pm			
Relinquished by:	**Date**	**Time**	**Received by BCS Laboratories**	**Date**	**Time**
			JP	8-5-16	10:17

Laboratory Comments:

Temp. @ recp't: 1.4 °C IR- 1.5 °C Corrected for IR

Presence of visable Ice Y (N) ICE PACKS

Hold Time ✓

\\BCSG\BCS Current QADC SOP Benchsheets Logs & Forms\COC forms\[BCS COC 03 31 2015 LP.xls]BCS COC Master

CHAIN OF CUSTODY RECORD

www.microbioservices.com

FL DOH Laboratory #E82924, EPA# FL01147

BCS Laboratories
4609 NW 6th street, Building A
Gainesville, FL 32609
Tel. (352) 377-9272, Fax. (352) 377-5630

Client Name and Address: GEORGIA-PACIFIC CROSSETT LLC.
City/State/Zip: CROSSETT, ARKANSAS 71635
Project Manager: RICHARD FREEMAN
Telephone Number: 870-500-5737 Fax No.:
Sampler Name: (Print) RICHARD FREEMAN
Sampler Signature: Richard Freeman

Compliance Monitoring? [ ] Yes [ ] No
Report To: RICHARD FREEMAN
Email: rjfreema@gapac.com
Quote #: TEST AMERICA 68016442
Project ID: CROSSETT SLUDGE
Invoice To: TEST AMERICA 68101648Z

Sample ID / Description	Date Sampled	Time Sampled	No. of containers shipped	Grab	Composite	Field Filtered	pH at collection	Temperature at collection	Preservative: Na Thiosulfate	Preservative: Ice / frozen Ice packs	Preservative: Other (specify):	Matrix: Groundwater	Matrix: Wastewater	Matrix: Drinking Water	Matrix: Biosolid/Sludge/Soil (circle)	Matrix: Other (specify):	Analysis: Enteroviruses/Enteric virus	Analysis: EPA 1615 enterovirus	Analysis: EPA 1615 Noroviruses	Analysis: Crypto & Giardia	Analysis: E. coli	Analysis: Enterococcus	Analysis: Total Coliform	Analysis: Endospores Clostridium	Analysis: Fecal coliform	Analysis: Helminth Ova	Analysis: Total H. Plate Count	Analysis: Salmonella	Analysis: Legionella (Culture or Genetic)	Analysis: Pseudomonas	Analysis: Other: FECAL STREP.	Analysis: Other: CLOSTRIDIUM PERFRINGENS	RUSH TAT (Fee Applies)
SAMPLED 8/4/16 2:00 pm																																	
CROSSETT PRIMARY CLARIFIER SOLIDS	8/4/16	2:00 pm	1	X						X					X		X							X	X		X				X	X	
TestAmerica Savannah Crossett Primary Clarifier 1608070 08/05/2016 10:17																																	

Special Instructions:

Method of Shipment: UPS Postal DHL FEDEX Other:

Relinquished by:	Date	Time	Received by:	Date	Time
Richard Freeman	8/4/16	4:30 pm			
Relinquished by:	Date	Time	Received by BCS Laboratories	Date	Time
			J.P.	8/5/16	10:17

Laboratory Comments:

Temp. @ recp't: 1.4 °C IR- 1.5 °C Corrected for IR

Presence of visable Ice Y (N) ICE PACKS

Hold Time ✓

680-128409

Page 11 of 12

8/26/2016

Login Sample Receipt Checklist

Client: Georgia-Pacific Corporation

Job Number: 680-128409-1

Login Number: 128409
List Number: 1
Creator: Ragnaldsen, Amy E

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-126131-1
Client Project/Site: Crossett Residuals

For:
Georgia-Pacific Corporation
BOX 3333
Crossett, Arkansas 71635

Attn: Rachel Johnson

Jerry Lanier

Authorized for release by:
6/30/2016 4:37:35 PM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

Table of Contents

Job ID: 680-126131-1

Laboratory: TestAmerica Savannah

Narrative

Job Narrative
680-126131-1

Comments
No additional comments.

Receipt
The sample was received on 6/8/2016 10:19 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9° C.

Subcontract Work
Methods Coliphages, Enteroviruses, Fecal Coliforms, Fecal Streptococci, Helminth Ova, Salmonella: These methods were subcontracted to BCS Laboratories. The subcontract laboratory certifications are different from that of the facility issuing the final report.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Georgia-Pacific Corporation
Project/Site: Crossett Residuals

TestAmerica Job ID: 680-126131-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-126131-1	CROSSETT RESIDUALS	Solid	06/07/16 08:00	06/08/16 10:19

Method Summary

Client: Georgia-Pacific Corporation
Project/Site: Crossett Residuals

TestAmerica Job ID: 680-126131-1

Method	Method Description	Protocol	Laboratory
Coliphages	General Sub Contract Method	NONE	
Enteroviruses	General Sub Contract Method	NONE	
Fecal Coliforms	General Sub Contract Method	NONE	
Fecal Streptococci	General Sub Contract Method	NONE	
Helminth Ova	General Sub Contract Method	NONE	
Salmonella	General Sub Contract Method	NONE	

Protocol References:

NONE = NONE

Laboratory References:

= Gainesville, FL, 4609 NW 6th St, Bldg A, Gainesville, FL 32609, TEL (352)377-9272

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

BIOLOGICAL CONSULTING SERVICES
OF NORTH FLORIDA, INC.

June 28, 2016

Project Manager(s)
TestAmerica Savannah
5102 LaRoche Avenue
Savannah GA 31404
912-354-7858
lisa.harvey@testamericainc.com; MKersey@testamericainc.com; jerry.lanier@testamericainc.com
Client ID: Crossett Residuals

BCS ID: 1606066

Dear Project Manager(s),

We have completed the analysis of the submitted samples as outlined below.

Project Name: TestAmerica Job 680-126131

Analysis	Method
Culturable Cytopathic Enteric Viruses	ASTM D4994-89; BCS SOP V-5 (ISO17025 and TNI Accredited)
Salmonella	EPA 1682; BCS SOP M-4 (ISO17025 and TNI Accredited)
Fecal Coliforms MPN	EPA 1681; SM 9221E; BCS SOP B-4 (ISO17025 and TNI Accredited)
Fecal Enterococci/Streptococci	SM 9230 B; BCS SOP B-5 (ISO17025 Accredited & NOT TNI Accredited)
Coliphage	BCS SOP V-11 (ISO17025 and TNI Accredited)
Helminth Ova in Solids	EPA625/R-92/013 Ap. I; BCS SOP H-3 (ISO17025 and TNI Accredited)

Following, you will find our report on the results of the analysis conducted on the referenced samples. Should you have any questions, please do not hesitate to contact me.

Sincerely,

Bonnie Mull

Bonnie Mull, MPH
Laboratory Operations Manager

BCS LABORATORIES, INC. – GAINESVILLE
4609 NW 6TH STREET. STE. A. GAINESVILLE. FLORIDA 32609
TEL. (352) 377-9272, FAX. (352) 377-5630
WWW.MICROBIOSERVICES.COM
FL DOH #E82924, ISO/IEC 17025:2005 L2422 (L-A-B), PA DEP# 68-03950, EPA# FL01147

Client:	TestAmerica Savannah		
Analysis:	*Culturable Cytopathic Enteric Viruses*		
Project Name:	TestAmerica Job 680-126131		
Client Sample ID:	Crossett Residuals	Sample Date/Time:	June 07, 2016 8:00
BCS Sample ID:	1606066	Sample Description:	Biosolids
Date Received:	June 08, 2016 10:19	Percent Solids:	38.3
Dilution factor:	51.76 g	Receipt Temperature:	0.9 deg C Ice: No
Analysis Start:	June 08, 2016 13:40	Analysis Stop Date:	June 25, 2016 10:11
Analyst:	Tara Wiley, M.S.	Qualifier:	U; Q
Primary Value:	≤1.1	Infectious Units MPN/sample analyzed	
Secondary Value:	≤0.2	Infectious Units MPN/4 dry grams (equivalent to pfu/4 grams dry)	

Analysis Notes: Undetected: Analyte was not detected in the sample analyzed; Value represents the method's detection limit for the amount of sample analyzed as per the method's standard reporting units; Q: Sample was received greater than 24 hours following sample collection.

Client:	TestAmerica Savannah		
Analysis:	*Salmonella*		
Project Name:	TestAmerica Job 680-126131		
Client Sample ID:	Crossett Residuals	Sample Date/Time:	June 07, 2016 8:00
BCS Sample ID:	1606066	Sample Description:	Biosolids
Date Received:	June 08, 2016 10:19	Percent Solids:	38.3
Dilution factor:	49.99 g	Receipt Temperature:	0.9 deg C Ice: No
Analysis Start:	June 08, 2016 13:46	Analysis Stop Date:	June 10, 2016 8:15
Analyst:	Jennifer Price	Qualifier:	U; Q
Primary Value:	≤0.07	Salmonella MPN/mL sample analyzed	
Secondary Value:	≤0.7	Salmonella MPN/4 dry grams	

Analysis Notes: Undetected: Analyte was not detected in the sample analyzed; Value represents the method's detection limit for the amount of sample analyzed as per the method's standard reporting units; Q: Sample was received greater than 24 hours following sample collection.

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Client:	TestAmerica Savannah		
Analysis:	*Fecal Coliforms MPN*		
Project Name:	TestAmerica Job 680-126131		
Client Sample ID:	Crossett Residuals	Sample Date/Time:	June 07, 2016 8:00
BCS Sample ID:	1606066	Sample Description:	Biosolids
Date Received:	June 08, 2016 10:19	Percent Solids:	38.3
Dilution factor:	49.99 g	Receipt Temperature:	0.9 deg C Ice: No
Analysis Start:	June 08, 2016 13:46	Analysis Stop Date:	June 09, 2016 12:06
Analyst:	Jennifer Price	Qualifier:	U; Q
Primary Value:	≤1.8	Fecal Coliforms MPN/mL sample analyzed	
Secondary Value:	≤4.7	Fecal coliforms/dry gram	

Analysis Notes: Undetected: Analyte was not detected in the sample analyzed; Value represents the method's detection limit for the amount of sample analyzed as per the method's standard reporting units; Q: Sample was received greater than 24 hours following sample collection.

Client:	TestAmerica Savannah		
Analysis:	*Fecal Enterococci/Streptococci*		
Project Name:	TestAmerica Job 680-126131		
Client Sample ID:	Crossett Residuals	Sample Date/Time:	June 07, 2016 8:00
BCS Sample ID:	1606066	Sample Description:	Biosolids
Date Received:	June 08, 2016 10:19	Percent Solids:	38.3
Dilution factor:	49.99 g	Receipt Temperature:	0.9 deg C Ice: No
Analysis Start:	June 08, 2016 13:26	Analysis Stop Date:	June 11, 2016 11:45
Analyst:	Jennifer Price	Qualifier:	Q
Primary Value:	493	Microorganism MPN/mL sample analyzed	
Secondary Value:	1,290	Microorganisms/dry gram	

Analysis Notes: Q: Sample was received greater than 24 hours following sample collection.

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FL DOH #E82924, ISO/IEC 17025:2005 L2422 (L-A-B), PA DEP# 68-03950, EPA# FL01147

Client:	TestAmerica Savannah		
Analysis:	*Coliphage*		
Project Name:	TestAmerica Job 680-126131		
Client Sample ID:	Crossett Residuals	Sample Date/Time:	June 07, 2016 8:00
BCS Sample ID:	1606066	Sample Description:	Biosolids
Date Received:	June 08, 2016 10:19	Percent Solids:	38.3
Dilution factor:	24.99 g	Receipt Temperature:	0.9 deg C Ice: No
Analysis Start:	June 08, 2016 13:41	Analysis Stop Date:	June 09, 2016 10:55
Analyst:	David Sekora, M.S.	Qualifier:	U; Q
Primary Value:	≤2.5 PFU/mL sample analyzed		
Secondary Value:	≤0.3 PFU /dry gram		

Analysis Notes: Undetected: Analyte was not detected in the sample analyzed; Value represents the method's detection limit for the amount of sample analyzed as per the method's standard reporting units; Q: Sample was received greater than 24 hours following sample collection.

Client:	TestAmerica Savannah		
Analysis:	*Helminth Ova in Solids*		
Project Name:	TestAmerica Job 680-126131		
Client Sample ID:	Crossett Residuals	Sample Date/Time:	June 07, 2016 8:00
BCS Sample ID:	1606066	Sample Description:	Biosolids
Date Received:	June 08, 2016 10:19	Percent Solids:	38.3
Dilution factor:	51.2 g	Receipt Temperature:	0.9 deg C Ice: No
Analysis Start:	June 08, 2016 13:38	Analysis Stop Date:	June 28, 2016 13:02
Analyst:	Wei-yea Hsu, M.S.	Qualifier:	U
Primary Value:	≤1.0 Total Ascaris (Helminth Ova) Count		
Secondary Value:	≤0.2 Potentially Viable Ascaris (Helminth Ova)/ 4 dry grams		

Analysis Notes: Undetected: Analyte was not detected in the sample analyzed; Value represents the method's detection limit for the amount of sample analyzed as per the method's standard reporting units

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Client: TestAmerica Savannah

Project: TestAmerica Job 680-126131

Method Detection Limit: 1 microorganism/ unit weight or volume analyzed

Practical Quantitation Limit: 1 microorganism/ unit weight or volume analyzed

Report Notes:

Sample(s) were received well preserved and in excellent condition. Sample(s) were analyzed following receipt as per the described analytical methodology. End of report notes.

BCS LABORATORIES, INC. – GAINESVILLE
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FL DOH #E82924, ISO/IEC 17025:2005 L2422 (L-A-B), PA DEP# 68-03950, EPA# FL01147

I certify that I have examined I am familiar with the information submitted herein. The results pertain only to analyzed sample(s) associated identifier #(s). Based on my inquiry of the individuals responsible for the analysis, I believe the data to be true, accurate, complete. Sampling field data was obtained from submitted documents. The analysis was authorized commissioned by the client. The resulting data are representative of the analysis conducted on the material/samples/articles provided by the client (or client's representative) it's/their condition at the time of analysis. The sample(s) were analyzed in accordance with the appropriate method , however due to the inherent limitations of the methods, microorganisms may avoid detection. BCS Laboratories offers no express or implied warranties concerning the quality, safety, and/or purity of any sample, batch, source, or the process they are derived from. Quality assurance controls were performed as outlined in the method and as per Good Laboratory Practices. The analysis results presented in this report meet the requirements of The NELAC Institute (TNI), ISO 17025, and The FL Public Health's Laboratory Certification Program, as applicable unless otherwise noted.

Signature of Laboratory Director/Authorized Rep. Bonnie Mull Date: June 28, 2016

BCS LABORATORIES, INC. – GAINESVILLE
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DATA QUALIFIER CODES	
SYMBOL	MEANING
B	Results based on counts outside the acceptable range.
D	Measurement was made in the field.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J1	The sample matrix interfered with the ability to make any accurate determination.
J2	No Quality Control criteria exist for the component.
J3	The data are questionable because of improper laboratory or field protocols.
L	Off scale high. Actual value is known to be greater than value given.
N	Presumptive evidence for the presence of material. There is an indication that the analyte is present, but the confirmation requirement was not met.
O	Sampled, but analysis not performed.
Q	Sample held beyond the accepted holding time.
U	Indicates that the compound was analyzed for but not detected. The specified component was not detected. The reported value is the method detection limit.
V	Analyte was detected in both sample and associated method blank. Data may not be accurate.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.
Z	Too many colonies present (TNTC); the numeric value given represents the upper end of the value that can be determined based on the volume.
?	Data are rejected and should not be used. QC data for analyte did not meet acceptance criteria. Presence or absence of analyte could not be confirmed.
**	Not reported due to interference.
^	BCS is not currently accredited for this analyte.
#	BCS Lab specific qualifier. See laboratory analysis notes.

BCS LABORATORIES, INC. – GAINESVILLE
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Report to: Jerry Lanier

CHAIN OF CUSTODY RECORD

BCS Laboratories
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Gainesville, FL 32609
Tel. (352) 377-9272, Fax. (352) 377-5630
www.microbioservices.com
FL DOH Laboratory #E82924, EPA# FL01147

Client Name and Address: GEORGIA-PACIFIC CROSSETT LLC
City/State/Zip: CROSSETT, ARKANSAS 71635
Project Manager: RICHARD FREEMAN
Telephone Number: 870-500-5737 Fax No.:
Sampler Name: (Print) RICHARD FREEMAN
Sampler Signature:

Compliance Monitoring? ☐ Yes ☐ No
Report To: RICHARD FREEMAN
Email: rjfreema@gapac.com
Quote #: TESTAMERICA 68016442
Project ID: CROSSETT RESIDUALS
Invoice To: TEST AMERICA 68016442

Sample ID / Description	Date Sampled	Time Sampled	No. of containers shipped	Grab	Composite	Field Filtered	pH at collection	Temperature at collection	Preservative: Na Thiosulfate	Preservative: Ice / frozen Ice packs	Preservative: Other (specify):	Matrix: Groundwater	Matrix: Wastewater	Matrix: Drinking Water	Matrix: Biosolid/Sludge/Soil (circle)	Matrix: Other (specify): ASH	Analysis: Enteroviruses/Enteric virus	Analysis: EPA 1615 enterovirus	Analysis: EPA 1615 Noroviruses	Analysis: Crypto & Giardia	Analysis: E. coli	Analysis: Enterococcus	Analysis: Total Coliform	Analysis: Endospores Clostridium	Analysis: Fecal coliform	Analysis: Helminth Ova	Analysis: Total H. Plate Count	Analysis: Salmonella	Analysis: Legionella (Culture or Genetic)	Analysis: Pseudomonas	Analysis: Other: FECAL STREP- Tacoccus	Analysis: Other: COLIPHAGES	RUSH TAT (Fee Applies)
CROSSETT RESIDUALS	6/7/16	8:00AM	1	X						X					X	X	X								X	X		X			X	X	

TestAmerica Savannah
Crossett Residuals
1606066
06/08/2016 10:19

Special Instructions:

Method of Shipment: UPS Postal DHL FEDEX Other:

Relinquished by:	Date	Time	Received by:	Date	Time
	6/7/16	4:30p			
Relinquished by:	Date	Time	Received by BCS Laboratories:	Date	Time
			BCS-JP	6-8-16	10:19

Laboratory Comments:

Temp. @ recp't: 0.8 IR- 4 0.9 °C Corrected for IR

Presence of visable ice Y (N)

Hold Time Out of hold OK for 6/30/2016

Login Sample Receipt Checklist

Client: Georgia-Pacific Corporation

Job Number: 680-126131-1

Login Number: 126131
List Number: 1
Creator: Ragnaldsen, Amy E

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Georgia-Pacific Corporation
Project/Site: Crossett Residuals

TestAmerica Job ID: 680-126131-1

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0692	01-31-17

Express

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NORTH LITTLE ROCK AR 72118
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3302