

Iowa Department of Natural Resources
Solid Waste Land Application
Permit Application Form



Application for a solid waste land application must be accompanied by the plans, specifications and additional information required by the applicable solid waste rules under Iowa Administrative Code 567 Chapter 121.

Send completed applications with attached information to:

Iowa Department of Natural Resources
Land Quality Bureau
Solid Waste Section
502 E 9th St
Des Moines, IA 50319-0034

For questions concerning this application please contact the Department at (515) 725-8315.

New Permit

Permit Renewal # 17 -SDP- 06 - 95P -LAN

Section 1. Contact Information

Solid Waste Generator Name: The Kraft Heinz Company Phone: 641-421-2900

Address: P.O. Box 1488 City, State, Zip: Mason City, IA 50401-1802

Email: _____ Fax: 641-421-2936

Physical Location of Generating Facility:

Address: 1022 12th Street, NW City, State, Zip: Mason City, IA 50401

Responsible Official Name: Dave Haag Phone: 641-494-2620

Address: 1022 12th Street, NW City, State, Zip: Mason City, IA 50401

Email: kedmh31@kraftheinz.com Fax: 641-421-2936

Certified Professional Agronomist Name: Brian Ritland Phone: 515-290-8626

Address: 620 Country Club Road City, State, Zip: Iowa Falls, IA

Email: britland@pinnacleiowa.com License #: 23358 Fax: 641-648-7310

Consultant Name (if any): The Pinnacle Group, LLC Phone: 641-648-7300

Address: 620 Country Club Road City, State, Zip: Iowa Falls, IA

Email: britland@pinnacleiowa.cm Fax: 641-648-7310

Section 2. Waste Type

Does the material to be land applied contain free liquids¹? Yes No

If the material is a sludge, is it generated by a:

Commercial or industrial wastewater treatment facility
 Water supply treatment facility
 Air pollution control facility
 Other; Please elaborate: Food Processing Facility

Expected weight (tons) of solid waste to be land applied per year by the facility: 792

¹ The presence of free liquids is determined by the paint filter test. The paint filter test is done by placing a 100-milliliter or 100-gram representative sample of the material into a standard mesh number 60 (fine mesh size) conical paint filter for five minutes. Any free liquid visible below the funnel indicates sample failure.

Section 3. Permit Application Checklist

The following items must be attached. If the permit is being renewed and there is no change from what was submitted with previous applications, the Doc Id# may be listed in lieu of resubmitting the document. Analytical results and a cost closure estimate (for facilities storing material at the application sites) must be submitted with each renewal. Checking the appropriate boxes below certifies that the documents submitted in conjunction with this application form are complete and in compliance with the applicable chapters of Iowa Administrative Code. If an application is found by the DNR to be incomplete, it may be denied and returned to the applicant.

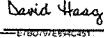
Required Documents	Attached or Doc Id#
Executive Summary (permit renewals only) <ul style="list-style-type: none"> Summary of each special provision of the current permit to determine if it is to remain the same, be revised or be removed. Summary of each permit amendment, if any, that occurred during the current permit cycle to determine if it shall be included with the renewed permit, be revised or be removed. Provide documentation and certification as required for new permit amendment requests and new variance requests from Iowa Administrative Code, if any. 	
Description of the material including source, quantity and method of treatment prior to land application	567 IAC 121.7(1)"a"(11) <input type="checkbox"/> 79060
Description of the land application process, including method of application, when application will take place, and equipment to be used	567 IAC 121.7(1)"a"(13) <input type="checkbox"/> 79060 567 IAC 121.7(1)"a"(14) <input type="checkbox"/>
Analytical results	567 IAC 121.7(1)"a"(12) <input checked="" type="checkbox"/> NA
Evidence waste application will not cause adverse effects	567 IAC 121.7(1)"a"(15) through 567 IAC 121.7(1)"a"(17) <input type="checkbox"/> 79060
Site Operation Plan	567 IAC 121.7(1)"a"(18) <input type="checkbox"/> 79060
Emergency Response and Remedial Action Plan	IAC 567 102.14 <input type="checkbox"/> 79060
Site Closure Plan	IAC 567 102.12(10) <input type="checkbox"/> 79060
Proof of financial assurance and closure cost estimate (only if material will be stored at application sites)	567 IAC 121.8 <input checked="" type="checkbox"/> NA
Table of land application sites. Include the following for each application site: <ul style="list-style-type: none"> Site ID County and township Legal description of site Total acres in site Acres eligible for land application Name of landowner 	567 IAC 121.7(1)"a"(4) <input type="checkbox"/> 79060
For each new application site, include the following:	
Aerial photograph with the application area(s) designated	567 IAC 121.7(1)"a"(1) <input type="checkbox"/> NA
Soil map	567 IAC 121.7(1)"a"(2) <input type="checkbox"/> NA
Water table levels	567 IAC 121.7(1)"a"(10) <input type="checkbox"/> NA
Location of wells within one mile of the site	567 IAC 121.7(1)"a"(5) <input type="checkbox"/> NA
Evidence of Natural Resources Conservation Service (NRCS) review and soil loss information	567 IAC 121.7(1)"a"(3) 567 IAC 121.7(1)"a"(6) through 567 IAC 121.7(1)"a"(8) <input type="checkbox"/> NA
Site soil testing	567 IAC 121.7(1)"a"(9) <input type="checkbox"/> NA
Proof of ownership or legal entitlement to use the site (agreement with the land owner)	567 IAC 121.7(1)"b"(6) <input type="checkbox"/> NA

Section 4. Applicant Certification

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I further certify that the construction and operation of the above described facility will be in accordance with the plans, specifications, reports and related communications accepted by the Iowa Department of Natural Resources and on file in its office; and in accordance with conditions imposed in the permit issued by the Iowa Department of Natural Resources.

Signature: 
E160197E8AC451

Date: 2/5/2026

Printed Name: David Haag

Title: EHS Coordinator

SECTION A. EXECUTIVE SUMMARY

Project Location – The following portions in Township 96 North, Range 19 West in Cerro Gordo County, Iowa:

West ½ of the Southwest ¼ of Section 4
Northwest ¼ of Section 9
Southeast ¼ of Section 5
Northeast ¼ of Section 8
West ½ of the Northwest ¼ and North ½ of the SW ¼ of Section 29
Southeast ¼ of section 30
Southwest ¼ of Section 34

Responsible Official –

Dave Hagg, Utilities/Environmental/PSM Coordinator
Kraft Heinz Food Company – Mason City
1022 12 Street, NW
Mason City, IA 50401
(641) 494-2620

Summary of each special provisions of the current permit

The existing General and Special Provisions can remain the same.

Summary of each permit amendment that occurred during the current permit cycle

No permit amendments occurred during the current permit cycle.

Documentation as required for new permit amendment requests

There are no new permit amendment requests.

Documentation as required for new variance request from Iowa Administrative Code

There are no variance requests.

SECTION B: ANALYTICAL RESULTS

Quarterly sludge sample results follow for Quarters 1 (January-March), 2 (April-June), 3 (July-September), and 4 (October-December) of 2022. All samples were preformed by Eurofins TestAmerica, Cedar Falls, Iowa.

ANALYTICAL REPORT

PREPARED FOR

Attn: Dave M Haag
Kraft Heinz Foods Company
1022 12th Street, NW
Mason City, Iowa 50401

Generated 2/28/2023 10:29:59 AM

JOB DESCRIPTION

503 Sludge

JOB NUMBER

310-249844-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Eurofins Cedar Falls

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



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2/28/2023 10:29:59 AM

Authorized for release by
Hannah Dietz, Project Management Assistant I
Hannah.Dietz@et.eurofinsus.com
(319)277-2401

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Case Narrative

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-249844-1

Job ID: 310-249844-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative
310-249844-1

Comments

No additional comments.

Receipt

The sample was received on 2/16/2023 8:10 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 6.4° C.

Receipt Exceptions

The following sample was received at the laboratory outside the required temperature criteria: Q1 Sludge (310-249844-1). This does not meet regulatory requirements. The client was contacted regarding this issue.

HPLC/IC

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-249844-1

Job Sample ID	Client Sample ID	Matrix	Collected	Received
310-249844-1	Q1 Sludge	Solid	02/14/23 09:00	02/16/23 08:10

Client Sample Results

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-249844-1

Client Sample ID: Q1 Sludge
Date Collected: 02/14/23 09:00
Date Received: 02/16/23 08:10

Lab Sample ID: 310-249844-1
Matrix: Solid
Percent Solids: 12.6

Method: SW846 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<73.4		73.4		mg/Kg	⊗		02/22/23 18:24	10

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<2.59		2.59		mg/Kg	⊗	02/22/23 09:00	02/22/23 15:12	1
Cadmium	<0.648		0.648		mg/Kg	⊗	02/22/23 09:00	02/22/23 15:12	1
Chromium	7.51		0.648		mg/Kg	⊗	02/22/23 09:00	02/22/23 15:12	1
Copper	11.3		0.648		mg/Kg	⊗	02/22/23 09:00	02/22/23 15:12	1
Lead	<3.24		3.24		mg/Kg	⊗	02/22/23 09:00	02/22/23 15:12	1
Molybdenum	<1.62		1.62		mg/Kg	⊗	02/22/23 09:00	02/22/23 15:12	1
Nickel	3.75		1.62		mg/Kg	⊗	02/22/23 09:00	02/22/23 15:12	1
Potassium	3660		32.4		mg/Kg	⊗	02/22/23 09:00	02/22/23 15:12	1
Selenium	<3.24		3.24		mg/Kg	⊗	02/22/23 09:00	02/22/23 15:12	1
Zinc	17.0		3.24		mg/Kg	⊗	02/22/23 09:00	02/22/23 15:12	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.140		0.140		mg/Kg	⊗	02/21/23 13:56	02/22/23 11:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	664		365		mg/Kg	⊗	02/23/23 12:04	02/23/23 19:58	1
Nitrogen, Kjeldahl (EPA 351.2)	27200	F1	2160		mg/Kg	⊗	02/17/23 09:05	02/17/23 15:26	1
Total Phosphorus as P (EPA 365.1)	5630		766		mg/Kg	⊗	02/17/23 14:46	02/18/23 11:14	10
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	3.09	HF	0.100		SU			02/16/23 15:47	1
Total Solids (SM 2540G)	13.0		0.100		%			02/20/23 11:45	1
Total Volatile Solids (SM 2540G)	94.4		0.0100		%			02/20/23 11:45	1

Lab Chronicle

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-249844-1

Client Sample ID: Q1 Sludge

Date Collected: 02/14/23 09:00

Date Received: 02/16/23 08:10

Lab Sample ID: 310-249844-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9040C		1	379389	A3GU	EET CF	02/16/23 15:47
Total/NA	Analysis	SM 2540G		1	379574	DGU1	EET CF	02/20/23 11:45

Client Sample ID: Q1 Sludge

Date Collected: 02/14/23 09:00

Date Received: 02/16/23 08:10

Lab Sample ID: 310-249844-1

Matrix: Solid

Percent Solids: 12.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			379738	QTZ5	EET CF	02/22/23 09:32
Soluble	Analysis	9056A		10	379867	DHM5	EET CF	02/22/23 18:24
Total/NA	Prep	3050B			379597	DHM5	EET CF	02/22/23 09:00
Total/NA	Analysis	6010D		1	379846	ZRI4	EET CF	02/22/23 15:12
Total/NA	Prep	7471B			379690	XXW3	EET CF	02/21/23 13:56
Total/NA	Analysis	7471B		1	379772	DHM5	EET CF	02/22/23 11:09
Total/NA	Prep	Distill/Ammonia			379843	ENB7	EET CF	02/23/23 12:04
Total/NA	Analysis	350.1		1	379883	ZJX4	EET CF	02/23/23 19:58
Total/NA	Prep	351.2			379427	HE7K	EET CF	02/17/23 09:05
Total/NA	Analysis	351.2		1	379493	WZC8	EET CF	02/17/23 15:26
Total/NA	Prep	365.2/365.3/365			379472	MAQ3	EET CF	02/17/23 14:46
Total/NA	Analysis	365.1		10	379503	WZC8	EET CF	02/18/23 11:14

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Eurofins Cedar Falls

Definitions/Glossary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-249844-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
QL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-249844-1

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9040C		Solid	pH

Method Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-249844-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6010D	Metals (ICP)	SW846	EET CF
7471B	Mercury (CVAA)	SW846	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.1	Phosphorus, Total	EPA	EET CF
9040C	pH	SW846	EET CF
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET CF
3050B	Preparation, Metals	SW846	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.2/365.3/365	Phosphorus, Total	EPA	EET CF
7471B	Preparation, Mercury	SW846	EET CF
DI Leach	Deionized Water Leaching Procedure	ASTM	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>Kraft - kinc</u>			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE <u>4/10/23</u>	TIME <u>0810</u>	Received By: <u>R</u>
Delivery Type:	<input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # _____ of _____	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? _____	
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____	<input type="checkbox"/> NONE	
Thermometer ID:	<u>T</u>	Correction Factor (°C): <u>+0.1</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>63</u>	Corrected Temp (°C): <u>64</u>	
• Sample Container Temperature			
Container(s) used:	<u>PL 1L NT</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):	<u>64</u>		
Corrected Temp (°C):	<u>65</u>		
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Login Sample Receipt Checklist

Client: Kraft Heinz Foods Company

Job Number: 310-249844-1

Login Number: 249844

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Homolar, Dana J

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.	N/A	
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.	False	Cooler temperature outside required temperature criteria.
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.	False	Requested analyses are not listed on COC
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.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Dave M Haag
Kraft Heinz Foods Company
1022 12th Street, NW
Mason City, Iowa 50401

Generated 7/7/2023 5:24:55 PM

JOB DESCRIPTION

503 Sludge

JOB NUMBER

310-258799-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Eurofins Cedar Falls

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



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Authorized for release by
Hannah Dietz, Project Management Assistant I
Hannah.Dietz@et.eurofinsus.com
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Case Narrative

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-258799-1

Job ID: 310-258799-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative
310-258799-1

Comments

No additional comments.

Receipt

The sample was received on 6/23/2023 7:45 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.2° C.

HPLC/IC

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-258799-1

ab Sample ID	Client Sample ID	Matrix	Collected	Received
310-258799-1	Sludge	Sludge	06/21/23 15:00	06/23/23 07:45

Client Sample Results

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-258799-1

Client Sample ID: Sludge
Date Collected: 06/21/23 15:00
Date Received: 06/23/23 07:45

Lab Sample ID: 310-258799-1
Matrix: Sludge
Percent Solids: 12.1

Method: SW846 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<164		164		mg/Kg	*		07/05/23 13:12	10

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<9.66		9.66		mg/Kg	*	06/28/23 11:15	06/30/23 13:12	1
Cadmium	<2.42		2.42		mg/Kg	*	06/28/23 11:15	06/30/23 13:12	1
Chromium	6.10		2.42		mg/Kg	*	06/28/23 11:15	06/30/23 13:12	1
Copper	9.30		2.42		mg/Kg	*	06/28/23 11:15	06/30/23 13:12	1
Lead	<12.1		12.1		mg/Kg	*	06/28/23 11:15	06/30/23 13:12	1
Molybdenum	<6.04		6.04		mg/Kg	*	06/28/23 11:15	06/30/23 13:12	1
Nickel	<6.04		6.04		mg/Kg	*	06/28/23 11:15	06/30/23 13:12	1
Potassium	3220		242		mg/Kg	*	06/28/23 11:15	06/30/23 13:12	1
Selenium	<12.1		12.1		mg/Kg	*	06/28/23 11:15	06/30/23 13:12	1
Zinc	<12.1		12.1		mg/Kg	*	06/28/23 11:15	06/30/23 13:12	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.142		0.142		mg/Kg	*	06/30/23 11:12	07/03/23 13:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	520		404		mg/Kg	*	06/27/23 14:10	06/27/23 21:11	1
Nitrogen, Kjeldahl (EPA 351.2)	32100		2110		mg/Kg	*	06/26/23 06:29	06/26/23 19:47	1
Total Phosphorus as P (EPA 365.1)	4030		81.1		mg/Kg	*	06/26/23 09:27	06/26/23 22:01	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	3.05	HF	0.100		SU			06/23/23 10:24	1
Total Solids (SM 2540G)	12.6		0.100		%			06/27/23 07:36	1
Total Volatile Solids (SM 2540G)	95.7		0.0100		%			06/27/23 07:36	1

Eurofins Cedar Falls

Lab Chronicle

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-258799-1

Client Sample ID: Sludge
Date Collected: 06/21/23 15:00
Date Received: 06/23/23 07:45

Lab Sample ID: 310-258799-1
Matrix: Sludge

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9040C		1	391600	W9YR	EET CF	06/23/23 10:24
Total/NA	Analysis	SM 2540G		1	391859	DGU1	EET CF	06/27/23 07:36

Client Sample ID: Sludge
Date Collected: 06/21/23 15:00
Date Received: 06/23/23 07:45

Lab Sample ID: 310-258799-1
Matrix: Sludge
Percent Solids: 12.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			392532	QTZ5	EET CF	07/05/23 09:26
Soluble	Analysis	9056A		10	392882	QTZ5	EET CF	07/05/23 13:12
Total/NA	Prep	3050B			391775	DHM5	EET CF	06/28/23 11:15
Total/NA	Analysis	6010D		1	392385	ZRI4	EET CF	06/30/23 13:12
Total/NA	Prep	7471B			392345	XXW3	EET CF	06/30/23 11:12
Total/NA	Analysis	7471B		1	392553	XXW3	EET CF	07/03/23 13:14
Total/NA	Prep	Distill/Ammonia			391944	MQ8M	EET CF	06/27/23 14:10
Total/NA	Analysis	350.1		1	391975	ZJX4	EET CF	06/27/23 21:11
Total/NA	Prep	351.2			391694	W9YR	EET CF	06/26/23 06:29
Total/NA	Analysis	351.2		1	391831	ZJX4	EET CF	06/26/23 19:47
Total/NA	Prep	365.2/365.3/365			391738	MAQ3	EET CF	06/26/23 09:27
Total/NA	Analysis	365.1		1	391835	ZJX4	EET CF	06/26/23 22:01

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Definitions/Glossary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-258799-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
1QL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-258799-1

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9040C		Sludge	pH

Method Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-258799-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6010D	Metals (ICP)	SW846	EET CF
7471B	Mercury (CVAA)	SW846	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.1	Phosphorus, Total	EPA	EET CF
9040C	pH	SW846	EET CF
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET CF
3050B	Preparation, Metals	SW846	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.2/365.3/365	Phosphorus, Total	EPA	EET CF
7471B	Preparation, Mercury	SW846	EET CF
DI Leach	Deionized Water Leaching Procedure	ASTM	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Eurofins Cedar Falls



Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <i>Kraft</i>			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE 6 28 23	TIME 745	Received By. <i>mc</i>
Delivery Type:	<input checked="" type="checkbox"/> UPS <i>Early</i> <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes: Cooler ID:</i> _____		
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Cooler #</i> _____ <i>of</i> _____		
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes: Cooler custody seals intact?</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/>		
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Sample custody seals intact?</i> <input type="checkbox"/> Yes <input type="checkbox"/>		
No			
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Which VOA samples are in cooler?</i> ↓		
Temperature Record 1			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID:	<i>W</i>	Correction Factor (°C): <i>0</i>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<i>—</i>	Corrected Temp (°C): <i>—</i>	
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u> <i>500 ml plastic</i>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):	<i>1.2</i>		
Corrected Temp (°C):	<i>1.2</i>		
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) <i>If yes:</i> Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE <i>If yes, contact PM before proceeding. If no, proceed with login</i>			
Additional Comments			

Login Sample Receipt Checklist

Client: Kraft Heinz Foods Company

Job Number: 310-258799-1

Login Number: 258799

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Costello, Mackenzie K

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.	N/A	
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.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Dave M Haag
Kraft Heinz Foods Company
1022 12th Street, NW
Mason City, Iowa 50401

Generated 10/10/2023 5:29:31 PM

JOB DESCRIPTION

503 Sludge Quarterly

JOB NUMBER

310-265706-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Eurofins Cedar Falls

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



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Authorized for release by
Hannah Dietz, Project Management Assistant I
Hannah.Dietz@et.eurofinsus.com
(319)277-2401

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Case Narrative

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge Quarterly

Job ID: 310-265706-1

Job ID: 310-265706-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative 310-265706-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 9/27/2023 8:45 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.9°C

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge Quarterly

Job ID: 310-265706-1

Job Sample ID	Client Sample ID	Matrix	Collected	Received
310-265706-1	Sludge	Sludge	09/25/23 09:00	09/27/23 08:45

Client Sample Results

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge Quarterly

Job ID: 310-265706-1

Client Sample ID: Sludge

Date Collected: 09/25/23 09:00

Date Received: 09/27/23 08:45

Lab Sample ID: 310-265706-1

Matrix: Sludge

Percent Solids: 18.2

Method: SW846 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<105		105		mg/Kg	*		10/02/23 22:06	10

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<3.32		3.32		mg/Kg	*	10/03/23 11:21	10/05/23 16:22	1
Cadmium	<0.829		0.829		mg/Kg	*	10/03/23 11:21	10/05/23 16:22	1
Chromium	18.4		0.829		mg/Kg	*	10/03/23 11:21	10/05/23 16:22	1
Copper	14.4		0.829		mg/Kg	*	10/03/23 11:21	10/06/23 13:47	1
Lead	<4.14		4.14		mg/Kg	*	10/03/23 11:21	10/05/23 16:22	1
Molybdenum	<2.07		2.07		mg/Kg	*	10/03/23 11:21	10/06/23 13:47	1
Nickel	8.33		2.07		mg/Kg	*	10/03/23 11:21	10/05/23 16:22	1
Potassium	2280		82.9		mg/Kg	*	10/03/23 11:21	10/05/23 16:22	1
Selenium	<4.14		4.14		mg/Kg	*	10/03/23 11:21	10/05/23 16:22	1
Zinc	13.7		4.14		mg/Kg	*	10/03/23 11:21	10/06/23 13:47	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.103		0.103		mg/Kg	*	10/09/23 09:38	10/10/23 10:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	864		266		mg/Kg	*	09/28/23 14:22	09/29/23 00:00	1
Nitrogen, Kjeldahl (EPA 351.2)	23400		1410		mg/Kg	*	09/29/23 05:34	09/29/23 17:02	1
Total Phosphorus as P (EPA 365.1)	4650		544		mg/Kg	*	09/29/23 09:45	09/30/23 11:34	10
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	3.20	HF	1.00		SU			09/27/23 13:21	1
Total Solids (SM 2540G)	16.0		0.100		%			09/29/23 09:39	1
Total Volatile Solids (SM 2540G)	94.1		0.0100		%			09/29/23 09:39	1

Lab Chronicle

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge Quarterly

Job ID: 310-265706-1

Client Sample ID: Sludge

Date Collected: 09/25/23 09:00

Date Received: 09/27/23 08:45

Lab Sample ID: 310-265706-1

Matrix: Sludge

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9040C		1	400808	W9YR	EET CF	09/27/23 13:21
Total/NA	Analysis	SM 2540G		1	401037	DGU1	EET CF	09/29/23 09:39

Client Sample ID: Sludge

Date Collected: 09/25/23 09:00

Date Received: 09/27/23 08:45

Lab Sample ID: 310-265706-1

Matrix: Sludge

Percent Solids: 18.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			401188	QTZ5	EET CF	10/02/23 13:47
Soluble	Analysis	9056A		10	401279	QTZ5	EET CF	10/02/23 22:06
Total/NA	Prep	3050B			401215	KCK5	EET CF	10/03/23 11:21
Total/NA	Analysis	6010D		1	401741	ZRI4	EET CF	10/05/23 16:22
Total/NA	Prep	3050B			401215	KCK5	EET CF	10/03/23 11:21
Total/NA	Analysis	6010D		1	401799	ZRI4	EET CF	10/06/23 13:47
Total/NA	Prep	7471B			401878	NFT2	EET CF	10/09/23 09:38
Total/NA	Analysis	7471B		1	402080	NFT2	EET CF	10/10/23 10:32
Total/NA	Prep	Distill/Ammonia			400942	MQ8M	EET CF	09/28/23 14:22
Total/NA	Analysis	350.1		1	400964	ZJX4	EET CF	09/29/23 00:00
Total/NA	Prep	351.2			400966	W9YR	EET CF	09/29/23 05:34
Total/NA	Analysis	351.2		1	401072	WZC8	EET CF	09/29/23 17:02
Total/NA	Prep	365.2/365.3/365			401042	MAQ3	EET CF	09/29/23 09:45
Total/NA	Analysis	365.1		10	401096	WZC8	EET CF	09/30/23 11:34

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Definitions/Glossary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge Quarterly

Job ID: 310-265706-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
QL	Method Quantitation Limit
C	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge Quarterly

Job ID: 310-265706-1

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9040C		Sludge	pH

Method Summary

Client: Kraft Heinz Foods Company
 Project/Site: 503 Sludge Quarterly

Job ID: 310-265706-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6010D	Metals (ICP)	SW846	EET CF
7471B	Mercury (CVAA)	SW846	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.1	Phosphorus, Total	EPA	EET CF
9040C	pH	SW846	EET CF
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET CF
3050B	Preparation, Metals	SW846	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.2/365.3/365	Phosphorus, Total	EPA	EET CF
7471B	Preparation, Mercury	SW846	EET CF
DI Leach	Deionized Water Leaching Procedure	ASTM	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

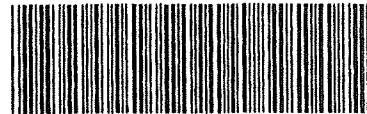
None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Cooler/Sample Receipt and Temperature Log Form

Client Information				
Client: Kraft foods				
City/State:	CITY	STATE	Project:	
Receipt Information				
Date/Time Received:	DATE 9/27/23	TIME 8:15	Received By: SL	
Delivery Type:	<input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee			
	<input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers				
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes: Cooler ID:</i>			
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Cooler # _____ of _____</i>			
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No</i>			
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No</i>			
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Which VOA samples are in cooler? ↓</i>			
Temperature Record				
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID:	<i>P</i>			
Correction Factor (°C): <i>0</i>				
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature				
Uncorrected Temp (°C):	<i>28.1A</i>			
	Corrected Temp (°C): <i>28.1</i>			
• Sample Container Temperature				
Container(s) used:	<u>CONTAINER 1</u> <i>500 plastic</i>		<u>CONTAINER 2</u> <i>1A</i>	
Uncorrected Temp (°C):	<i>2.9</i>		<i>2.9</i>	
Corrected Temp (°C):	<i>2.9</i>		<i>2.9</i>	
Exceptions Noted				
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No				
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No				
NOTE. If yes, contact PM before proceeding If no, proceed with login				
Additional Comments				
<i> </i>				
<i> </i>				
<i> </i>				

Login Sample Receipt Checklist

Client: Kraft Heinz Foods Company

Job Number: 310-265706-1

Login Number: 265706

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Lage, Sydney

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.	N/A	
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.	False	No sample date and/or time on COC, logged in per container labels.
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.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Dave M Haag
Kraft Heinz Foods Company
1022 12th Street, NW
Mason City, Iowa 50401

Generated 1/17/2024 4:23:38 PM

JOB DESCRIPTION

503 Sludge Quarterly

JOB NUMBER

310-272269-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Eurofins Cedar Falls

Job Notes

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Authorized for release by
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Case Narrative

Client: Kraft Heinz Foods Company
Project: 503 Sludge Quarterly

Job ID: 310-272269-1

Job ID: 310-272269-1

Eurofins Cedar Falls

**Job Narrative
310-272269-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 12/28/2023 8:30 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.9°C

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge Quarterly

Job ID: 310-272269-1

Job Sample ID	Client Sample ID	Matrix	Collected	Received
310-272269-1	Sludge	Sludge	12/24/23 11:00	12/28/23 08:30

Client Sample Results

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge Quarterly

Job ID: 310-272269-1

Client Sample ID: Sludge

Date Collected: 12/24/23 11:00
Date Received: 12/28/23 08:30

Lab Sample ID: 310-272269-1

Matrix: Sludge

Percent Solids: 24.3

Method: SW846 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<76.7		76.7		mg/Kg	⊗		01/09/24 12:46	10

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<13.8		13.8		mg/Kg	⊗	01/03/24 09:45	01/15/24 11:25	1
Cadmium	<3.44		3.44		mg/Kg	⊗	01/03/24 09:45	01/15/24 11:25	1
Chromium	26.7		3.44		mg/Kg	⊗	01/03/24 09:45	01/15/24 11:25	1
Copper	21.8		3.44		mg/Kg	⊗	01/03/24 09:45	01/15/24 11:25	1
Lead	<17.2		17.2		mg/Kg	⊗	01/03/24 09:45	01/15/24 11:25	1
Molybdenum	<8.60		8.60		mg/Kg	⊗	01/03/24 09:45	01/15/24 11:25	1
Nickel	14.3		8.60		mg/Kg	⊗	01/03/24 09:45	01/15/24 11:25	1
Potassium	1710		344		mg/Kg	⊗	01/03/24 09:45	01/15/24 11:25	1
Selenium	<17.2		17.2		mg/Kg	⊗	01/03/24 09:45	01/15/24 11:25	1
Zinc	33.3		17.2		mg/Kg	⊗	01/03/24 09:45	01/15/24 11:25	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0748		0.0748		mg/Kg	⊗	01/10/24 09:20	01/11/24 12:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	2620		343		mg/Kg	⊗	12/29/23 14:41	12/29/23 21:59	1
Nitrogen, Kjeldahl (EPA 351.2)	35600		9360		mg/Kg	⊗	01/02/24 06:10	01/02/24 13:54	10
Total Phosphorus as P (EPA 365.1)	8100		399		mg/Kg	⊗	12/29/23 09:44	12/29/23 17:43	10
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	26.5		0.100		%			12/28/23 13:28	1
Total Volatile Solids (SM 2540G)	90.0		0.0100		%			12/28/23 13:28	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	4.8	HF	1.0		SU	—		12/28/23 21:00	1

Lab Chronicle

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge Quarterly

Job ID: 310-272269-1

Client Sample ID: Sludge

Lab Sample ID: 310-272269-1

Matrix: Sludge

Date Collected: 12/24/23 11:00
Date Received: 12/28/23 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			410034	ZJX4	EET CF	12/28/23 16:18
Soluble	Analysis	9045D		1	410043	ZJX4	EET CF	12/28/23 21:00
Total/NA	Analysis	SM 2540G		1	410009	DGU1	EET CF	12/28/23 13:28

Client Sample ID: Sludge

Lab Sample ID: 310-272269-1

Matrix: Sludge

Date Collected: 12/24/23 11:00
Date Received: 12/28/23 08:30

Percent Solids: 24.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			410674	QTZ5	EET CF	01/09/24 10:35
Soluble	Analysis	9056A		10	410847	QTZ5	EET CF	01/09/24 12:46
Total/NA	Prep	3050B			410151	QTZ5	EET CF	01/03/24 09:45
Total/NA	Analysis	6010D		1	411172	ZRI4	EET CF	01/15/24 11:25
Total/NA	Prep	7471B			410824	NFT2	EET CF	01/10/24 09:20
Total/NA	Analysis	7471B		1	411012	NFT2	EET CF	01/11/24 12:24
Total/NA	Prep	Distill/Ammonia			410157	A3GU	EET CF	12/29/23 14:41
Total/NA	Analysis	350.1		1	410173	ZJX4	EET CF	12/29/23 21:59
Total/NA	Prep	351.2			410191	W9YR	EET CF	01/02/24 06:10
Total/NA	Analysis	351.2		10	410254	ENB7	EET CF	01/02/24 13:54
Total/NA	Prep	365.2/365.3/365			410094	MAQ3	EET CF	12/29/23 09:44
Total/NA	Analysis	365.1		10	410168	ZJX4	EET CF	12/29/23 17:43

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Definitions/Glossary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge Quarterly

Job ID: 310-272269-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
'QL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge Quarterly

Job ID: 310-272269-1

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Method Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge Quarterly

Job ID: 310-272269-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6010D	Metals (ICP)	SW846	EET CF
7471B	Mercury (CVAA)	SW846	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.1	Phosphorus, Total	EPA	EET CF
9045D	pH	SW846	EET CF
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET CF
3050B	Preparation, Metals	SW846	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.2/365.3/365	Phosphorus, Total	EPA	EET CF
7471B	Preparation, Mercury	SW846	EET CF
DI Leach	Deionized Water Leaching Procedure	ASTM	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401


Cooler/Sample Receipt and Temperature Log Form

Client Information		
Client: <u>Kraft Foods</u>		
City/State: <u> </u>	CITY <u> </u> STATE <u>IA</u>	Project: <u> </u>
Receipt Information		
Date/Time Received: <u>12/28/23</u>	DATE <u> </u> TIME <u>0830</u>	Received By: <u> </u>
Delivery Type: <input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
Condition of Cooler/Containers		
Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler ID: <u> </u>		
Multiple Coolers? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler # <u> </u> of <u> </u>		
Cooler Custody Seals Present? <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Sample Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Trip Blank Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Which VOA samples are in cooler? <u> </u>		
Temperature Record		
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID: <u>T</u> Correction Factor (°C): <u>+0.0</u>		
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature		
Uncorrected Temp (°C): <u>1.9</u> Corrected Temp (°C): <u>1.9</u>		
• Sample Container Temperature		
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>
Uncorrected Temp (°C):		
Corrected Temp (°C):		
Exceptions Noted		
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No		
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No		
NOTE If yes, contact PM before proceeding If no, proceed with login		
Additional Comments		

Login Sample Receipt Checklist

Client: Kraft Heinz Foods Company

Job Number: 310-272269-1

Login Number: 272269

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Homolar, Dana J

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.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Dave M Haag
Kraft Heinz Foods Company
1022 12th Street, NW
Mason City, Iowa 50401

Generated 4/19/2024 8:38:11 AM

JOB DESCRIPTION

503 Sludge

JOB NUMBER

310-278578-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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Authorized for release by
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Case Narrative

Client: Kraft Heinz Foods Company
Project: 503 Sludge

Job ID: 310-278578-1

Job ID: 310-278578-1

Eurofins Cedar Falls

Job Narrative
310-278578-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 4/10/2024 8:50 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.1°C.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 365.1: The method blank for Prep Batch 418579 contained Phosphorus above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Cedar Falls

Sample Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-278578-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-278578-1	Sludge	Solid	03/28/24 11:00	04/10/24 08:50

Client Sample Results

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-278578-1

Client Sample ID: Sludge

Date Collected: 03/28/24 11:00
Date Received: 04/10/24 08:50

Lab Sample ID: 310-278578-1

Matrix: Solid

Percent Solids: 7.9

Method: SW846 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<231		231		mg/Kg	⊗		04/17/24 19:38	10

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<9.19		9.19		mg/Kg	⊗	04/11/24 10:00	04/11/24 14:19	1
Cadmium	<2.30		2.30		mg/Kg	⊗	04/11/24 10:00	04/11/24 14:19	1
Chromium	6.46		2.30		mg/Kg	⊗	04/11/24 10:00	04/11/24 14:19	1
Copper	14.7		2.30		mg/Kg	⊗	04/11/24 10:00	04/11/24 14:19	1
Lead	<11.5		11.5		mg/Kg	⊗	04/11/24 10:00	04/11/24 14:19	1
Molybdenum	<5.75		5.75		mg/Kg	⊗	04/11/24 10:00	04/11/24 14:19	1
Nickel	<5.75		5.75		mg/Kg	⊗	04/11/24 10:00	04/11/24 14:19	1
Potassium	2640		230		mg/Kg	⊗	04/11/24 10:00	04/11/24 14:19	1
Selenium	<11.5		11.5		mg/Kg	⊗	04/11/24 10:00	04/11/24 14:19	1
Zinc	17.7		11.5		mg/Kg	⊗	04/11/24 10:00	04/11/24 14:19	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.210		0.210		mg/Kg	⊗	04/17/24 17:02	04/18/24 16:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<601		601		mg/Kg	⊗	04/11/24 14:15	04/11/24 23:18	1
Nitrogen, Kjeldahl (EPA 351.2)	30800		3670		mg/Kg	⊗	04/15/24 05:41	04/15/24 20:26	1
Total Phosphorus as P (EPA 365.1)	4080	B	123		mg/Kg	⊗	04/12/24 10:08	04/12/24 21:51	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	6.21	HF	1.00		SU			04/10/24 11:24	1
Total Solids (SM 2540G)	8.27		0.100		%			04/10/24 11:03	1
Total Volatile Solids (SM 2540G)	95.0		0.0100		%			04/10/24 11:03	1

Lab Chronicle

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-278578-1

Client Sample ID: Sludge

Date Collected: 03/28/24 11:00

Date Received: 04/10/24 08:50

Lab Sample ID: 310-278578-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9040C		1	418309	W9YR	EET CF	04/10/24 11:24
Total/NA	Analysis	SM 2540G		1	418353	DGU1	EET CF	04/10/24 11:03

Client Sample ID: Sludge

Date Collected: 03/28/24 11:00

Date Received: 04/10/24 08:50

Lab Sample ID: 310-278578-1

Matrix: Solid

Percent Solids: 7.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			418875	QTZ5	EET CF	04/17/24 15:20
Soluble	Analysis	9056A		10	419152	QTZ5	EET CF	04/17/24 19:38
Total/NA	Prep	3050B			418403	QTZ5	EET CF	04/11/24 10:00
Total/NA	Analysis	6010D		1	418580	ZRI4	EET CF	04/11/24 14:19
Total/NA	Prep	7471B			419038	DHM5	EET CF	04/17/24 17:02
Total/NA	Analysis	7471B		1	419198	A6US	EET CF	04/18/24 16:37
Total/NA	Prep	Distill/Ammonia			418513	MQ8M	EET CF	04/11/24 14:15
Total/NA	Analysis	350.1		1	418544	ZJX4	EET CF	04/11/24 23:18
Total/NA	Prep	351.2			418676	W9YR	EET CF	04/15/24 05:41
Total/NA	Analysis	351.2		1	418797	ZJX4	EET CF	04/15/24 20:26
Total/NA	Prep	365.2/365.3/365			418579	MAQ3	EET CF	04/12/24 10:08
Total/NA	Analysis	365.1		1	418659	ZJX4	EET CF	04/12/24 21:51

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Definitions/Glossary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-278578-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
%R	Listed under the "D" column to designate that the result is reported on a dry weight basis
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
.QL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-278578-1

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9040C		Solid	pH

Method Summary

Client: Kraft Heinz Foods Company
 Project/Site: 503 Sludge

Job ID: 310-278578-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6010D	Metals (ICP)	SW846	EET CF
7471B	Mercury (CVAA)	SW846	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.1	Phosphorus, Total	EPA	EET CF
9040C	pH	SW846	EET CF
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET CF
3050B	Preparation, Metals	SW846	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.2/365.3/365	Phosphorus, Total	EPA	EET CF
7471B	Preparation, Mercury	SW846	EET CF
DI Leach	Deionized Water Leaching Procedure	ASTM	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



310-278578 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information				
Client: <i>Kraft</i>				
City/State: <i>IA</i>		STATE <i>IA</i>	Project: <i>Mu</i>	
Receipt Information				
Date/Time Received: <i>4-10-24</i>	DATE <i>4-10-24</i>	TIME <i>850</i>	Received By: <i>Mu</i>	
Delivery Type: <input checked="" type="checkbox"/> DPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other:				
Condition of Cooler/Containers				
Sample(s) received in Cooler?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # _____ of _____	
Cooler Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record				
Coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> Dry Ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE				
Thermometer ID: <i>X</i>		Correction Factor (°C): <i>0</i>		
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature				
Uncorrected Temp (°C): <i>4.1</i>		Corrected Temp (°C): <i>4.1</i>		
• Sample Container Temperature				
Container(s) used:	CONTAINER 1		CONTAINER 2	
Uncorrected Temp (°C):				
Corrected Temp (°C):				
Exceptions Noted				
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No				
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No				
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No				
NOTE If yes, contact PM before proceeding. If no, proceed with login				
Additional Comments				
_____ _____ _____ _____				

Login Sample Receipt Checklist

lient: Kraft Heinz Foods Company

Job Number: 310-278578-1

Login Number: 278578

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Costello, Mackenzie K

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.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	Date or time on COC did not match containers, logged in per container labels.
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.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Dave M Haag
Kraft Heinz Foods Company
1022 12th Street, NW
Mason City, Iowa 50401

Generated 9/28/2024 11:08:01 AM

JOB DESCRIPTION

503 Sludge

JOB NUMBER

310-290913-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Eurofins Cedar Falls

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
9/28/2024 11:08:01 AM

Authorized for release by
Hannah Dietz, Project Manager I
Hannah.Dietz@et.eurofinsus.com
(319)277-2401

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Case Narrative

Client: Kraft Heinz Foods Company
Project: 503 Sludge

Job ID: 310-290913-1

Job ID: 310-290913-1

Eurofins Cedar Falls

**Job Narrative
310-290913-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 9/19/2024 8:25 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.6°C.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-290913-1

.ab Sample ID	Client Sample ID	Matrix	Collected	Received
310-290913-1	Sludge	Solid	09/18/24 12:00	09/19/24 08:25

Client Sample Results

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-290913-1

Client Sample ID: Sludge

Date Collected: 09/18/24 12:00
Date Received: 09/19/24 08:25

Lab Sample ID: 310-290913-1

Matrix: Solid

Percent Solids: 27.2

Method: SW846 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<70.0		70.0		mg/Kg	⊗		09/24/24 12:01	10

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<12.7		12.7		mg/Kg	⊗	09/24/24 09:30	09/25/24 11:28	1
Cadmium	<3.17		3.17		mg/Kg	⊗	09/24/24 09:30	09/25/24 11:28	1
Chromium	43.3		3.17		mg/Kg	⊗	09/24/24 09:30	09/25/24 11:28	1
Copper	75.1		3.17		mg/Kg	⊗	09/24/24 09:30	09/25/24 11:28	1
Lead	<15.9		15.9		mg/Kg	⊗	09/24/24 09:30	09/25/24 11:28	1
Molybdenum	<7.93		7.93		mg/Kg	⊗	09/24/24 09:30	09/25/24 11:28	1
Nickel	49.1		7.93		mg/Kg	⊗	09/24/24 09:30	09/25/24 11:28	1
Potassium	1300		317		mg/Kg	⊗	09/24/24 09:30	09/25/24 11:28	1
Selenium	<15.9		15.9		mg/Kg	⊗	09/24/24 09:30	09/25/24 11:28	1
Zinc	59.5		15.9		mg/Kg	⊗	09/24/24 09:30	09/25/24 11:28	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0603		0.0603		mg/Kg	⊗	09/26/24 15:40	09/27/24 16:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	2490		179		mg/Kg	⊗	09/19/24 15:18	09/19/24 19:24	1
Nitrogen, Kjeldahl (EPA 351.2)	31400		8240		mg/Kg	⊗	09/20/24 16:17	09/20/24 19:05	10
Total Phosphorus as P (EPA 365.1)	9120		353		mg/Kg	⊗	09/20/24 17:56	09/23/24 14:24	10
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	27.6		0.100		%			09/19/24 11:53	1
Total Volatile Solids (SM 2540G)	83.9		0.0100		%			09/19/24 11:53	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	4.7	HF	1.0		SU			09/23/24 15:19	1

Eurofins Cedar Falls

Lab Chronicle

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-290913-1

Client Sample ID: Sludge

Date Collected: 09/18/24 12:00
Date Received: 09/19/24 08:25

Lab Sample ID: 310-290913-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			433987	T5AC	EET CF	09/23/24 13:20
Soluble	Analysis	9045D		1	434003	T5AC	EET CF	09/23/24 15:19
Total/NA	Analysis	SM 2540G		1	433691	DGU1	EET CF	09/19/24 11:53

Client Sample ID: Sludge

Date Collected: 09/18/24 12:00
Date Received: 09/19/24 08:25

Lab Sample ID: 310-290913-1

Matrix: Solid

Percent Solids: 27.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			433981	HE7K	EET CF	09/23/24 13:11
Soluble	Analysis	9056A		10	434276	HE7K	EET CF	09/24/24 12:01
Total/NA	Prep	3050B			433711	F5MW	EET CF	09/24/24 09:30
Total/NA	Analysis	6010D		1	434270	ZRI4	EET CF	09/25/24 11:28
Total/NA	Prep	7471B			434257	QTZ5	EET CF	09/26/24 15:40
Total/NA	Analysis	7471B		1	434589	QTZ5	EET CF	09/27/24 16:55
Total/NA	Prep	Distill/Ammonia			433721	MQ8M	EET CF	09/19/24 15:18
Total/NA	Analysis	350.1		1	433690	ENB7	EET CF	09/19/24 19:24
Total/NA	Prep	351.2			433748	W9YR	EET CF	09/20/24 16:17
Total/NA	Analysis	351.2		10	433869	ZJX4	EET CF	09/20/24 19:05
Total/NA	Prep	365.2/365.3/365			433872	T5AC	EET CF	09/20/24 17:56
Total/NA	Analysis	365.1		10	433964	ENB7	EET CF	09/23/24 14:24

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Definitions/Glossary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-290913-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
'QL	Method Quantitation Limit
,C	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-290913-1

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Method Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-290913-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6010D	Metals (ICP)	SW846	EET CF
7471B	Mercury (CVAA)	SW846	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.1	Phosphorus, Total	EPA	EET CF
9045D	pH	SW846	EET CF
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET CF
3050B	Preparation, Metals	SW846	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.2/365.3/365	Phosphorus, Total	EPA	EET CF
7471B	Preparation, Mercury	SW846	EET CF
DI Leach	Deionized Water Leaching Procedure	ASTM	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

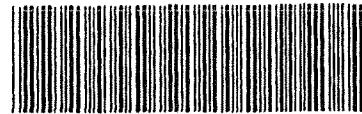
None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



310-290913 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information Client: <i>Kraft Foods</i> City/State: <input type="text"/> CITY <input type="text"/> STATE Project.												
Receipt Information Date/Time Received: <input type="text"/> DATE <i>9/19/24</i> <input type="text"/> TIME <i>825</i> Received By <i>X</i>												
Delivery Type: <input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other:												
Condition of Cooler/Containers Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler ID Multiple Coolers? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler # _____ of _____ Cooler Custody Seals Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Sample Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No Trip Blank Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Which VOA samples are in cooler? ↓												
Temperature Record Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE Thermometer ID: <i>2</i> Correction Factor (°C): <i>0</i>												
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature Uncorrected Temp (°C): <i>0.6</i> Corrected Temp (°C): <i>0.6</i>												
• Sample Container Temperature <table border="1"> <tr> <td>Container(s) used:</td> <td><input type="text"/> CONTAINER 1</td> <td><input type="text"/> CONTAINER 2</td> </tr> <tr> <td>Uncorrected Temp (°C):</td> <td colspan="2"><input type="text"/></td> </tr> <tr> <td>Corrected Temp (°C):</td> <td colspan="2"><input type="text"/></td> </tr> </table>				Container(s) used:	<input type="text"/> CONTAINER 1	<input type="text"/> CONTAINER 2	Uncorrected Temp (°C):	<input type="text"/>		Corrected Temp (°C):	<input type="text"/>	
Container(s) used:	<input type="text"/> CONTAINER 1	<input type="text"/> CONTAINER 2										
Uncorrected Temp (°C):	<input type="text"/>											
Corrected Temp (°C):	<input type="text"/>											
Exceptions Noted 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No												
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No												
NOTE If yes, contact PM before proceeding If no, proceed with login												
Additional Comments <hr/> <hr/> <hr/>												

Company: Kraft Foods

Send Report To Dave Haag
 Address 1022 12th St. NW
 City/State/Zip Code Mason City, IA 50401
 Telephone Number 641-421-2966
 Sampled by (Print Name) Al E. Klenborg
 (Signature) Al E. Klenborg

Your PO #:

Invoice To
Accounts Payable

Project Name
503 Sludge

Quarterly

RUSH TAT (Must call ahead)

Standard TAT

E-mail results

Fax Results

cc:

Project Number 31002510

Project Manager Linda Cmelik

Email Address kedmh31@kraftfoods.com

Preservative	Matrix	Analyze For	
		Sludge	Soil
H ₂ SO ₄ , Glass (Yellow & White Label)	503 Regs		
H ₂ SO ₄ , Plastic (Yellow & White Label)			
NaOH (Orange & White Label)			
HCl (Blue & White Label)			
HNO ₃ (Red & White Label)			
ice			
Field Filtered			
Composite			
# of containers shipped			
Date Sampled	Grab		
Time Sampled	1	X	
Sludge	9-18-24	12:00	

NOTE: All turn around times are calculated from the time of receipt at TestAmerica

NOTICE: Pre-Arrangements must be made **AT LEAST 48 Hours in ADVANCE** to receive results with RUSH turn around time commitments; additional charges may be assessed.

NOTE: There may be a charge assessed for TestAmerica disposing of sample remainders.

Relinquished by Al E. Klenborg Date 9-18-24 Time 14:00 Received by DH

Shipped Via	Date	Time	Comments	Temperature Upon Receipt	Laboratory Comments
Received for TestAmerica by					

NOTES:
Please fill in shaded areas

Login Sample Receipt Checklist

Client: Kraft Heinz Foods Company

Job Number: 310-290913-1

Login Number: 290913

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Hirsch, Preston

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.	N/A	
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.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Dave M Haag
Kraft Heinz Foods Company
1022 12th Street, NW
Mason City, Iowa 50401

Generated 1/7/2025 3:38:38 PM

JOB DESCRIPTION

503 Sludge
Quarterly

JOB NUMBER

310-297448-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Eurofins Cedar Falls

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



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1/7/2025 3:38:38 PM

Authorized for release by
Hannah Dietz, Project Manager I
Hannah.Dietz@et.eurofinsus.com
(319)277-2401

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Case Narrative

Client: Kraft Heinz Foods Company
Project: 503 Sludge

Job ID: 310-297448-1

Job ID: 310-297448-1

Eurofins Cedar Falls

Job Narrative
310-297448-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 12/19/2024 8:40 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.4°C.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Cedar Falls

Sample Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-297448-1
SDG: Quarterly

Job Sample ID	Client Sample ID	Matrix	Collected	Received
310-297448-1	Sludge	Solid	12/18/24 08:00	12/19/24 08:40

Client Sample Results

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-297448-1

SDG: Quarterly

Client Sample ID: Sludge

Date Collected: 12/18/24 08:00
Date Received: 12/19/24 08:40

Lab Sample ID: 310-297448-1

Matrix: Solid

Percent Solids: 10.1

Method: SW846 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<190		190		mg/Kg	⊗		12/20/24 12:40	10

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<7.60		7.60		mg/Kg	⊗	12/27/24 10:00	01/06/25 14:37	1
Cadmium	<1.90		1.90		mg/Kg	⊗	12/27/24 10:00	01/06/25 14:37	1
Chromium	4.72		1.90		mg/Kg	⊗	12/27/24 10:00	01/06/25 14:37	1
Copper	13.4 F1		1.90		mg/Kg	⊗	12/27/24 10:00	01/07/25 14:41	1
Lead	<9.50		9.50		mg/Kg	⊗	12/27/24 10:00	01/06/25 14:37	1
Molybdenum	<4.75		4.75		mg/Kg	⊗	12/27/24 10:00	01/06/25 14:37	1
Nickel	<4.75		4.75		mg/Kg	⊗	12/27/24 10:00	01/06/25 14:37	1
Potassium	4430		190		mg/Kg	⊗	12/27/24 10:00	01/06/25 14:37	1
Selenium	<9.50		9.50		mg/Kg	⊗	12/27/24 10:00	01/06/25 14:37	1
Zinc	17.4		9.50		mg/Kg	⊗	12/27/24 10:00	01/07/25 14:41	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.158		0.158		mg/Kg	⊗	12/30/24 13:50	12/31/24 11:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1) ·	661		467		mg/Kg	⊗	12/23/24 12:00	12/23/24 21:42	1
Nitrogen, Kjeldahl (EPA 351.2)	60800		23000		mg/Kg	⊗	12/19/24 11:09	12/19/24 18:34	10
Total Phosphorus as P (EPA 365.1)	14900		934		mg/Kg	⊗	12/19/24 19:09	12/20/24 01:29	10
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	11.0		0.100		%			12/19/24 11:27	1
Total Volatile Solids (SM 2540G)	88.8		0.0100		%			12/19/24 11:27	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	5.3	HF	1.0		SU	⊗		12/19/24 22:11	1

Eurofins Cedar Falls

Lab Chronicle

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-297448-1
SDG: Quarterly

Client Sample ID: Sludge

Date Collected: 12/18/24 08:00

Date Received: 12/19/24 08:40

Lab Sample ID: 310-297448-1

Matrix: Solid

Prep Type	Batch	Batch	Run	Dilution	Batch	Prepared
Prep Type	Type	Method		Factor	Number Analyst	or Analyzed
Soluble	Leach	DI Leach			443050 T5AC	EET CF 12/19/24 20:21
Soluble	Analysis	9045D		1	443054 T5AC	EET CF 12/19/24 22:11
Total/NA	Analysis	SM 2540G		1	442992 DGU1	EET CF 12/19/24 11:27

Client Sample ID: Sludge

Date Collected: 12/18/24 08:00

Date Received: 12/19/24 08:40

Lab Sample ID: 310-297448-1

Matrix: Solid

Percent Solids: 10.1

Prep Type	Batch	Batch	Run	Dilution	Batch	Prepared
Prep Type	Type	Method		Factor	Number Analyst	or Analyzed
Soluble	Leach	DI Leach			443080 WZC8	EET CF 12/20/24 08:52
Soluble	Analysis	9056A		10	443181 WZC8	EET CF 12/20/24 12:40
Total/NA	Prep	3050B			443188 F5MW	EET CF 12/27/24 10:00
Total/NA	Analysis	6010D		1	444055 ZRI4	EET CF 01/06/25 14:37
Total/NA	Prep	3050B			443188 F5MW	EET CF 12/27/24 10:00
Total/NA	Analysis	6010D		1	444136 ZRI4	EET CF 01/07/25 14:41
Total/NA	Prep	7471B			443001 QTZ5	EET CF 12/30/24 13:50
Total/NA	Analysis	7471B		1	443752 QTZ5	EET CF 12/31/24 11:40
Total/NA	Prep	Distill/Ammonia			443266 RLT9	EET CF 12/23/24 12:00
Total/NA	Analysis	350.1		1	443315 ZJX4	EET CF 12/23/24 21:42
Total/NA	Prep	351.2			442893 W9YR	EET CF 12/19/24 11:09
Total/NA	Analysis	351.2		10	443046 ZJX4	EET CF 12/19/24 18:34
Total/NA	Prep	365.2/365.3/365			443047 T5AC	EET CF 12/19/24 19:09
Total/NA	Analysis	365.1		10	443058 ZJX4	EET CF 12/20/24 01:29

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Definitions/Glossary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-297448-1
SDG: Quarterly

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
DL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-297448-1
SDG: Quarterly

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Method Summary

Client: Kraft Heinz Foods Company
 Project/Site: 503 Sludge

Job ID: 310-297448-1
 SDG: Quarterly

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6010D	Metals (ICP)	SW846	EET CF
7471B	Mercury (CVAA)	SW846	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.1	Phosphorus, Total	EPA	EET CF
9045D	pH	SW846	EET CF
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET CF
3050B	Preparation, Metals	SW846	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.2/365.3/365	Phosphorus, Total	EPA	EET CF
7471B	Preparation, Mercury	SW846	EET CF
DI Leach	Deionized Water Leaching Procedure	ASTM	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

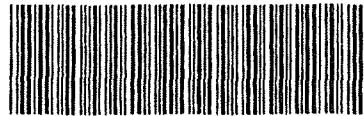
None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Cooler/Sample Receipt and Temperature Log Form

Client Information				
Client:	Kraft Foods			
City/State:	CITY	STATE	A	Project:
Receipt Information				
Date/Time Received:	DATE 12/19/24	TIME 0800	Received By: R	
Delivery Type:	<input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other:			
Condition of Cooler/Containers				
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler ID:			
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler # ____ of ____			
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Which VOA samples are in cooler? ↓			
Temperature Record				
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID:	R Correction Factor (°C): +0.0			
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature				
Uncorrected Temp (°C):	0.4	Corrected Temp (°C):	0.4	
• Sample Container Temperature				
Container(s) used:	CONTAINER 1		CONTAINER 2	
Uncorrected Temp (°C):				
Corrected Temp (°C):				
Exceptions Noted				
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No				
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No				
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No				
NOTE If yes, contact PM before proceeding If no, proceed with login				
Additional Comments				
_____ _____ _____				

Cedar Falls Division
3019 Venture Way
Cedar Falls, IA 50613

Phone 319-277-2401 or 1-800-750-2425
Fax 319-277-2425

Kraft Foods Company

Send Report To [Dave Haag](#)

Address 1022 12th St NW

City/State/Zip Code: Meagan City: 1A 58181

卷之三

卷之三

Sanctioned by (Print Name) John Doe 1234567890

helly eggs

YOUR PO #

Invoice 10

Project Name

Project Number

Project Mar

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Page 12 of 13

Login Sample Receipt Checklist

Client: Kraft Heinz Foods Company

Job Number: 310-297448-1

SDG Number: Quarterly

Login Number: 297448

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Homolar, Dana J

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.	N/A	
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.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Dave M Haag
Kraft Heinz Foods Company
1022 12th Street, NW
Mason City, Iowa 50401

Generated 3/13/2025 1:47:57 PM

JOB DESCRIPTION

503 Sludge

JOB NUMBER

310-300997-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Eurofins Cedar Falls

Job Notes

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Authorized for release by
Hannah Dietz, Project Manager I
Hannah.Dietz@et.eurofinsus.com
(319)277-2401

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Case Narrative

Client: Kraft Heinz Foods Company
Project: 503 Sludge

Job ID: 310-300997-1

Job ID: 310-300997-1

Eurofins Cedar Falls

Job Narrative
310-300997-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 2/27/2025 8:55 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.1°C.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Cedar Falls

Sample Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-300997-1

Job Sample ID	Client Sample ID	Matrix	Collected	Received
310-300997-1	Sludge	Sludge	02/26/25 08:00	02/27/25 08:55

Client Sample Results

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-300997-1

Client Sample ID: Sludge

Date Collected: 02/26/25 08:00

Date Received: 02/27/25 08:55

Lab Sample ID: 310-300997-1

Matrix: Sludge

Percent Solids: 11.7

Method: SW846 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<156	H	156		mg/Kg	⊗		02/28/25 10:05	10

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<6.44		6.44		mg/Kg	⊗	03/10/25 09:00	03/11/25 12:38	1
Cadmium	<1.61		1.61		mg/Kg	⊗	03/10/25 09:00	03/11/25 12:38	1
Chromium	11.5		1.61		mg/Kg	⊗	03/10/25 09:00	03/11/25 12:38	1
Copper	64.9		1.61		mg/Kg	⊗	03/10/25 09:00	03/12/25 15:47	1
Lead	<8.05		8.05		mg/Kg	⊗	03/10/25 09:00	03/11/25 12:38	1
Molybdenum	<4.02		4.02		mg/Kg	⊗	03/10/25 09:00	03/11/25 12:38	1
Nickel	7.42		4.02		mg/Kg	⊗	03/10/25 09:00	03/11/25 12:38	1
Potassium	3250		161		mg/Kg	⊗	03/10/25 09:00	03/11/25 12:38	1
Selenium	<8.05		8.05		mg/Kg	⊗	03/10/25 09:00	03/11/25 12:38	1
Zinc	45.9		8.05		mg/Kg	⊗	03/10/25 09:00	03/11/25 12:38	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.142		0.142		mg/Kg	⊗	02/28/25 10:32	02/28/25 13:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	749		405		mg/Kg	⊗	03/03/25 11:48	03/03/25 21:54	1
Nitrogen, Kjeldahl (EPA 351.2)	65000		14900		mg/Kg	⊗	03/05/25 06:54	03/05/25 16:58	10
Total Phosphorus as P (EPA 365.1)	15600		790		mg/Kg	⊗	03/04/25 18:05	03/04/25 23:13	10
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	8.71		0.100		%			02/28/25 05:46	1
Total Volatile Solids (SM 2540G)	89.2		0.0100		%			02/28/25 05:46	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	5.8	HF	1.0		SU	⊗		03/04/25 20:17	1

Lab Chronicle

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-300997-1

Client Sample ID: Sludge

Lab Sample ID: 310-300997-1

Matrix: Sludge

Date Collected: 02/26/25 08:00
Date Received: 02/27/25 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			448065	T5AC	EET CF	03/04/25 18:27
Soluble	Analysis	9045D		1	448067	T5AC	EET CF	03/04/25 20:17
Total/NA	Analysis	SM 2540G		1	447714	DGU1	EET CF	02/28/25 05:46

Client Sample ID: Sludge

Lab Sample ID: 310-300997-1

Matrix: Sludge

Date Collected: 02/26/25 08:00
Date Received: 02/27/25 08:55

Percent Solids: 11.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			447729	QTZ5	EET CF	02/28/25 08:27
Soluble	Analysis	9056A		10	447760	QTZ5	EET CF	02/28/25 10:05
Total/NA	Prep	3050B			448110	F5MW	EET CF	03/10/25 09:00
Total/NA	Analysis	6010D		1	448680	ZRI4	EET CF	03/11/25 12:38
Total/NA	Prep	3050B			448110	F5MW	EET CF	03/10/25 09:00
Total/NA	Analysis	6010D		1	448742	ZRI4	EET CF	03/12/25 15:47
Total/NA	Prep	7471B			447683	F5MW	EET CF	02/28/25 10:32
Total/NA	Analysis	7471B		1	447802	F5MW	EET CF	02/28/25 13:18
Total/NA	Prep	Distill/Ammonia			447900	RLT9	EET CF	03/03/25 11:48
Total/NA	Analysis	350.1		1	447948	ZJX4	EET CF	03/03/25 21:54
Total/NA	Prep	351.2			448081	W9YR	EET CF	03/05/25 06:54
Total/NA	Analysis	351.2		10	448150	ZJX4	EET CF	03/05/25 16:58
Total/NA	Prep	365.2/365.3/365			448063	T5AC	EET CF	03/04/25 18:05
Total/NA	Analysis	365.1		10	448066	ZJX4	EET CF	03/04/25 23:13

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Eurofins Cedar Falls

Definitions/Glossary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-300997-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
DL	Method Detection Limit
mL	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-300997-1

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Method Summary

Client: Kraft Heinz Foods Company
 Project/Site: 503 Sludge

Job ID: 310-300997-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6010D	Metals (ICP)	SW846	EET CF
7471B	Mercury (CVAA)	SW846	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.1	Phosphorus, Total	EPA	EET CF
9045D	pH	SW846	EET CF
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET CF
3050B	Preparation, Metals	SW846	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.2/365.3/365	Phosphorus, Total	EPA	EET CF
7471B	Preparation, Mercury	SW846	EET CF
DI Leach	Deionized Water Leaching Procedure	ASTM	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Cooler/Sample Receipt and Temperature Log Form

Client Information	
Client: Kraft Foods	
City/State:	Mason City IA
Project:	
Receipt Information	
Date/Time Received:	DATE 2/27/25 TIME 855
Received By:	X B
Delivery Type:	<input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other.
Condition of Cooler/Containers	
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler ID:
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler # _____ of _____
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, Which VOA samples are in cooler? ↓
Temperature Record	
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE
Thermometer ID:	2
Correction Factor (°C) 0	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature	
Uncorrected Temp (°C):	31
Corrected Temp (°C) 31	
• Sample Container Temperature	
Container(s) used:	<u>CONTAINER 1</u>
Uncorrected Temp (°C):	
Corrected Temp (°C):	
Exceptions Noted	
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No	
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No	
Note: If yes, contact PM before proceeding. If no, proceed with login	
Additional Comments	

Cedar Falls Division
3019 Venture Way
Cedar Falls, IA 50613

Phone 319-277-2401 or 1-800-750-2401
Fax 319-277-2425

Company **Kraft Foods**

Send Report To Dave Haag

Address 1022 12th St NW

City/State/Zip Code Mason City, IA 50401

Telephone Number 641-421-2966 Fax 641-421-2936

Sampled by (Print Name) Al Eiklenborg

(Signature) Al Eiklenborg

Your PO #

Invoice To

Project Number

Project Name

Quarterly

Comments

Project Manager

Linda Cmelik

Email Address

kedmh31@kraftfoods.com

Sample ID	Date Sampled	Time Sampled	# of containers shipped	Comments	Preservative		Matrix	Analyze For	cc.
					ce	HNO ₃ (Red & White Label)			
Sludge	2/26/25	08:00	1	X	Grab	NaOH (Orange & White Label)	H ₂ SO ₄ (Plastic (Yellow & White Label))	None (Black & White Label)	
					Field Filtered	HCl (Blue & White Label)	NaOH (Orange & White Label)	Other (Specify)	
					Composite	HNO ₃ (Red & White Label)	Groundwater	Soil	
							Wastewater	Sludge	
							Drinking Water	Other Specialty Stormwater	
								RUSH TAT (Must call ahead)	
								Standard TAT	
								E-mail results	
								Fax Results	
								Send QC with report	

NOTE: All turn around times are calculated from the time of receipt at TestAmerica

NOTICE: Pre-Arrangements must be made AT LEAST 48 Hours in ADVANCE to receive results with RUSH turn around time commitments; additional charges may be assessed.

NOTE: There may be a charge assessed for TestAmerica disposing of sample remainders. Reinquished by Date Time Received by

Shipped Via	Date	Time	Comments	Reinquished by	Date	Time	Comments
Received For TestAmerica by	2/26/25	14:00	Temperature Upon Receipt	Al Eiklenborg	2/26/25	14:00	

NOTES: Please fill in shaded areas

Login Sample Receipt Checklist

Client: Kraft Heinz Foods Company

Job Number: 310-300997-1

Login Number: 300997

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Bunker, Xavier M

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.	N/A	
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.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Dave M Haag
Kraft Heinz Foods Company
1022 12th Street, NW
Mason City, Iowa 50401

Generated 7/10/2025 10:38:21 AM

JOB DESCRIPTION

503 Sludge

JOB NUMBER

310-309905-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Eurofins Cedar Falls

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
7/10/2025 10:38:21 AM

Authorized for release by
Hannah Dietz, Project Manager I
Hannah.Dietz@et.eurofinsus.com
(319)277-2401

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Case Narrative

Client: Kraft Heinz Foods Company
Project: 503 Sludge

Job ID: 310-309905-1

Job ID: 310-309905-1

Eurofins Cedar Falls

**Job Narrative
310-309905-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 7/1/2025 8:30 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.3°C.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-309905-1

Job Sample ID	Client Sample ID	Matrix	Collected	Received
310-309905-1	Sludge	Sludge	06/30/25 07:30	07/01/25 08:30

Client Sample Results

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-309905-1

Client Sample ID: Sludge

Date Collected: 06/30/25 07:30

Date Received: 07/01/25 08:30

Lab Sample ID: 310-309905-1

Matrix: Sludge

Percent Solids: 21.7

Method: SW846 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<83.7	F1	83.7		mg/Kg	⊗		07/07/25 10:10	10

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<3.65		3.65		mg/Kg	⊗	07/08/25 09:30	07/09/25 12:43	1
Cadmium	<0.913		0.913		mg/Kg	⊗	07/08/25 09:30	07/09/25 12:43	1
Chromium	11.8		0.913		mg/Kg	⊗	07/08/25 09:30	07/09/25 12:43	1
Copper	55.2		0.913		mg/Kg	⊗	07/08/25 09:30	07/09/25 12:43	1
Lead	<4.57		4.57		mg/Kg	⊗	07/08/25 09:30	07/09/25 12:43	1
Molybdenum	<2.28		2.28		mg/Kg	⊗	07/08/25 09:30	07/09/25 12:43	1
Nickel	6.81		2.28		mg/Kg	⊗	07/08/25 09:30	07/09/25 12:43	1
Potassium	2550		91.3		mg/Kg	⊗	07/08/25 09:30	07/09/25 12:43	1
Selenium	<4.57		4.57		mg/Kg	⊗	07/08/25 09:30	07/09/25 12:43	1
Zinc	34.4		4.57		mg/Kg	⊗	07/08/25 09:30	07/09/25 12:43	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0866		0.0866		mg/Kg	⊗	07/02/25 13:36	07/03/25 10:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	1360		202		mg/Kg	⊗	07/03/25 12:49	07/03/25 19:46	1
Nitrogen, Kjeldahl (EPA 351.2)	44800		9360		mg/Kg	⊗	07/02/25 05:24	07/02/25 11:42	10
Total Phosphorus as P (EPA 365.1)	7040		462		mg/Kg	⊗	07/02/25 12:33	07/02/25 22:15	10
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	20.5		0.100		%			07/02/25 04:54	1
Total Volatile Solids (SM 2540G)	92.2		0.0100		%			07/02/25 04:54	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	4.8	HF	1.0		SU	⊗		07/03/25 15:32	1

Lab Chronicle

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-309905-1

Client Sample ID: Sludge

Date Collected: 06/30/25 07:30
Date Received: 07/01/25 08:30

Lab Sample ID: 310-309905-1

Matrix: Sludge

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			459588	T5AC	EET CF	07/03/25 13:11
Soluble	Analysis	9045D		1	459603	T5AC	EET CF	07/03/25 15:32
Total/NA	Analysis	SM 2540G		1	459338	DGU1	EET CF	07/02/25 04:54

Client Sample ID: Sludge

Date Collected: 06/30/25 07:30
Date Received: 07/01/25 08:30

Lab Sample ID: 310-309905-1

Matrix: Sludge

Percent Solids: 21.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			459559	QTZ5	EET CF	07/07/25 08:50
Soluble	Analysis	9056A		10	459727	QTZ5	EET CF	07/07/25 10:10
Total/NA	Prep	3050B			459425	WK2X	EET CF	07/08/25 09:30
Total/NA	Analysis	6010D		1	460003	ZRI4	EET CF	07/09/25 12:43
Total/NA	Prep	3050B			459425	WK2X	EET CF	07/08/25 09:30
Total/NA	Analysis	6010D		1	460052	ZRI4	EET CF	07/09/25 12:43
Total/NA	Prep	7471B			459296	F5MW	EET CF	07/02/25 13:36
Total/NA	Analysis	7471B		1	459558	F5MW	EET CF	07/03/25 10:11
Total/NA	Prep	Distill/Ammonia			459581	E6KR	EET CF	07/03/25 12:49
Total/NA	Analysis	350.1		1	459625	ZJX4	EET CF	07/03/25 19:46
Total/NA	Prep	351.2			459341	W9YR	EET CF	07/02/25 05:24
Total/NA	Analysis	351.2		10	459423	ENB7	EET CF	07/02/25 11:42
Total/NA	Prep	365.2/365.3/365			459430	T5AC	EET CF	07/02/25 12:33
Total/NA	Analysis	365.1		10	459480	ZJX4	EET CF	07/02/25 22:15

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Definitions/Glossary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-309905-1

Qualifiers

PLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
DL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-309905-1

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Method Summary

Client: Kraft Heinz Foods Company
Project/Site: 503 Sludge

Job ID: 310-309905-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6010D	Metals (ICP)	SW846	EET CF
7471B	Mercury (CVAA)	SW846	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.1	Phosphorus, Total	EPA	EET CF
9045D	pH	SW846	EET CF
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET CF
3050B	Preparation, Metals	SW846	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.2/365.3/365	Phosphorus, Total	EPA	EET CF
7471B	Preparation, Mercury	SW846	EET CF
DI Leach	Deionized Water Leaching Procedure	ASTM	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Cooler/Sample Receipt and Temperature Log Form

Client Information				
Client: Kraft Foods				
City/State.	CITY MASON CITY	STATE IA	Project:	
Receipt Information				
Date/Time Received.	DATE 7/125	TIME 0830	Received By. 1	
Delivery Type:	<input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other. _____			
Condition of Cooler/Containers				
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes: Cooler ID:</i> _____			
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Cooler # _____ of _____</i>			
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes. Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No</i>			
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No</i>			
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes. Which VOA samples are in cooler? ↓</i>			
Temperature Record				
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID:	12 <i>Correction Factor (°C): +0.0</i>			
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature				
Uncorrected Temp (°C):	3.3 <i>Corrected Temp (°C): 33</i>			
• Sample Container Temperature				
Container(s) used:	CONTAINER 1		CONTAINER 2	
Uncorrected Temp (°C):				
Corrected Temp (°C):				
Exceptions Noted				
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) <i>If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No</i>				
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No				
<i>NOTE If yes, contact PM before proceeding If no, proceed with login</i>				
Additional Comments				

Log Sample Receipt Checklist

Client: Kraft Heinz Foods Company

Job Number: 310-309905-1

Login Number: 309905

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Homolar, Dana J

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.	N/A	
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.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Dave M Haag
Kraft Heinz Foods Company
1022 12th Street, NW
Mason City, Iowa 50401

Generated 9/25/2025 4:12:43 PM

JOB DESCRIPTION

Quarterly

JOB NUMBER

310-315567-1

Eurofins Cedar Falls

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
9/25/2025 4:12:43 PM

Authorized for release by
Hannah Dietz, Project Manager I
Hannah.Dietz@et.eurofinsus.com
(319)277-2401

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Case Narrative

Client: Kraft Heinz Foods Company
Project: Quartely

Job ID: 310-315567-1

Job ID: 310-315567-1

Eurofins Cedar Falls

Job Narrative 310-315567-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The sample was received on 9/12/2025 8:25 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.5°C.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Kraft Heinz Foods Company
Project/Site: Quartely

Job ID: 310-315567-1

Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
310-315567-1	Sludge	Solid	09/11/25 07:30	09/12/25 08:25	Iowa

Client Sample Results

Client: Kraft Heinz Foods Company
Project/Site: Quartely

Job ID: 310-315567-1

Client Sample ID: Sludge

Date Collected: 09/11/25 07:30

Date Received: 09/12/25 08:25

Lab Sample ID: 310-315567-1

Matrix: Solid

Percent Solids: 13.2

Method: SW846 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<136		136		mg/Kg	⊗		09/18/25 19:34	10

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<27.0		27.0		mg/Kg	⊗	09/23/25 10:30	09/25/25 12:02	1
Cadmium	<6.75		6.75		mg/Kg	⊗	09/23/25 10:30	09/25/25 12:02	1
Chromium	19.5		6.75		mg/Kg	⊗	09/23/25 10:30	09/25/25 12:02	1
Copper	46.6		6.75		mg/Kg	⊗	09/23/25 10:30	09/25/25 12:02	1
Lead	<33.7		33.7		mg/Kg	⊗	09/23/25 10:30	09/25/25 12:02	1
Molybdenum	<16.9		16.9		mg/Kg	⊗	09/23/25 10:30	09/25/25 12:02	1
Nickel	<16.9		16.9		mg/Kg	⊗	09/23/25 10:30	09/25/25 12:02	1
Potassium	2490		675		mg/Kg	⊗	09/23/25 10:30	09/25/25 12:02	1
Selenium	<33.7		33.7		mg/Kg	⊗	09/23/25 10:30	09/25/25 12:02	1
Zinc	52.6		33.7		mg/Kg	⊗	09/23/25 10:30	09/25/25 12:02	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.145		0.145		mg/Kg	⊗	09/22/25 15:40	09/23/25 09:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	451		366		mg/Kg	⊗	09/16/25 13:21	09/16/25 18:49	1
Nitrogen, Kjeldahl (EPA 351.2)	66600		16100		mg/Kg	⊗	09/15/25 05:56	09/15/25 17:57	10
Total Phosphorus as P (EPA 365.1)	13600		731		mg/Kg	⊗	09/16/25 19:33	09/17/25 01:59	10
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	4.79	HF	1.00		SU			09/12/25 12:13	1
Total Solids (SM 2540G)	12.9		0.100		%			09/15/25 04:39	1
Total Volatile Solids (SM 2540G)	87.4		0.0100		%			09/15/25 04:39	1

Lab Chronicle

Client: Kraft Heinz Foods Company
Project/Site: Quartely

Job ID: 310-315567-1

Client Sample ID: Sludge

Date Collected: 09/11/25 07:30
Date Received: 09/12/25 08:25

Lab Sample ID: 310-315567-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9040C		1	466532	W9YR	EET CF	09/12/25 12:13
Total/NA	Analysis	SM 2540G		1	466619	DGU1	EET CF	09/15/25 04:39

Client Sample ID: Sludge

Date Collected: 09/11/25 07:30
Date Received: 09/12/25 08:25

Lab Sample ID: 310-315567-1

Matrix: Solid

Percent Solids: 13.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			466570	QTZ5	EET CF	09/18/25 12:45
Soluble	Analysis	9056A		10	467454	ZRI4	EET CF	09/18/25 19:34
Total/NA	Prep	3050B			467562	QTZ5	EET CF	09/23/25 10:30
Total/NA	Analysis	6010D		1	467986	ZRI4	EET CF	09/25/25 12:02
Total/NA	Prep	7471B			467358	RLT9	EET CF	09/22/25 15:40
Total/NA	Analysis	7471B		1	467638	RLT9	EET CF	09/23/25 09:47
Total/NA	Prep	Distill/Ammonia			466847	WZC8	EET CF	09/16/25 13:21
Total/NA	Analysis	350.1		1	466904	ZJX4	EET CF	09/16/25 18:49
Total/NA	Prep	351.2			466623	W9YR	EET CF	09/15/25 05:56
Total/NA	Analysis	351.2		10	466768	ZJX4	EET CF	09/15/25 17:57
Total/NA	Prep	365.2/365.3/365			466901	T5AC	EET CF	09/16/25 19:33
Total/NA	Analysis	365.1		10	466907	ZJX4	EET CF	09/17/25 01:59

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Definitions/Glossary

Client: Kraft Heinz Foods Company
Project/Site: Quartely

Job ID: 310-315567-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
1QL	Method Quantitation Limit
.C	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Kraft Heinz Foods Company
Project/Site: Quartely

Job ID: 310-315567-1

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9040C		Solid	pH

Method Summary

Client: Kraft Heinz Foods Company
Project/Site: Quarterly

Job ID: 310-315567-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6010D	Metals (ICP)	SW846	EET CF
7471B	Mercury (CVAA)	SW846	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.1	Phosphorus, Total	EPA	EET CF
9040C	pH	SW846	EET CF
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET CF
3050B	Preparation, Metals	SW846	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.2/365.3/365	Phosphorus, Total	EPA	EET CF
7471B	Preparation, Mercury	SW846	EET CF
DI Leach	Deionized Water Leaching Procedure	ASTM	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: Kraft Foods			
City/State.	CITY MASON CITY	STATE IA	Project
Receipt Information			
Date/Time Received.	DATE 9-12-25	TIME 625	Received By Pf
Delivery Type	<input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other _____		
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes Cooler ID.
Multiple Coolers?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes. Cooler # _____ of _____
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes. Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes. Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes Which VOA samples are in cooler? ↓
Temperature Record			
Coolant.	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice
<input type="checkbox"/> Other:	<input type="checkbox"/> NONE		
Thermometer ID.	Correction Factor (°C). 0		
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	0.5	Corrected Temp (°C):	0.5
• Sample Container Temperature			
Container(s) used:	CONTAINER 1		CONTAINER 2
Uncorrected Temp (°C)			
Corrected Temp (°C)			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			

Cedar Falls Division
3019 Venture Way
Cedar Falls, IA 50613

Company Kraft Foods

Send Report To	Dave Haag	Your PO #:	
Address	1022 12th St NW	Invoice To	Accounts Payable
City/State/Zip Code	Mason City, IA 50401	Project Name	503 Sludge
Telephone Number	641-421-2966	Project Number	31002510
Sampled by (Print Name)	<u>Dave Haag</u>	Project Manager	Linda Cmelik
(Signature)	<u>Dave Haag</u>	Email Address	kedmh31@kraftfoods.com

Preservative	Matrix	Analyze For		cc.
		Sludge	503 Regs	
None (Black & White Label)				
H ₂ SO ₄ , Plastic (Yellow & White Label)				
NaOH (Orange & White Label)				
HCl (Blue & White Label)				
HNO ₃ (Red & White Label)				
Ice				
Field Filtered				
Composite				
# of containers shipped				
Date Sampled	9-11-25	043	1	X
Time Sampled				
Sample ID				
Sludge				

NOTES: Please fill in shaded areas

NOTE: All turn around times are calculated from the time of receipt at TestAmerica

NOTICE: Pre-Arrangements must be made AT LEAST 48 Hours in ADVANCE to receive results with RUSH turn around time commitments; additional charges may be assessed.

NOTE: There may be a charge assessed for TestAmerica disposing of sample remainders.

Relinquished by Dave Haag

Received for TestAmerica by	Date	Time	Comments	Temperature Upon Receipt	Laboratory Comments	
Shipped Via	Date	Time	Comments	Received by	Date	Time

Login Sample Receipt Checklist

Client: Kraft Heinz Foods Company

Job Number: 310-315567-1

SDG Number:

Login Number: 315567

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Homolar, Dana J

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.	N/A	
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.	True	
Residual Chlorine Checked.	N/A	

Permit Amendment Application

17-SDP-06-95P-LAN

February 2026

SECTION C: PROOF OF FINANCIAL ASSURANCE

Corporate Guarantee is provided for Proof of Financial Assurance

LAND APPLICATION OF WASTES CORPORATE GUARANTEE

Guarantee made this February 1, 2026 by Kraft Heinz Company, herein referred to as "Guarantor". This Guarantee is made on behalf of the Kraft Heinz Company located at 1022 12th Street, Mason City IA, 50401, which is an entity with which Guarantor has a substantial business relationship". This Guarantee is made by the Guarantor on behalf of Kraft Heinz Company to the Iowa Department of Natural Resources, herein referred to as "IDNR", in an amount not to exceed forty-nine thousand six hundred forty dollars (\$49,640.00) lawful money of the United States.

WHEREAS, Section 455B.306 of the Code of Iowa requires financial assurance instruments for all sanitary disposal projects; and

WHEREAS, Kraft Heinz Company has applied to the IDNR to operate a sanitary disposal project located within the State of Iowa, and is required pursuant to IAC 567 Chapter 121.8 to maintain financial assurance for closure care in connection therewith; and

WHEREAS, IAC 567 Chapter 121.8(4)"e" provides for the "Corporate Guarantee" mechanism to be an acceptable financial assurance instrument, and Guarantor meets or exceeds the financial test criteria and agrees to comply with the requirements of said subrule; and

WHEREAS, the Kraft Heinz Company owns or operates the following waste generating facility(ies) covered by this Guarantee: IDNR Solid Waste Land Application Permit Number 17-SDP-06-95P-LAN, The Kraft Heinz Company, 1022 12th Street NW Mason City IA 50401-1802, with a cost closure estimate of \$49,640.00, or portions thereof, for which financial assurance is demonstrated by this Guarantee.

WHEREAS, the Guarantor guarantees to IDNR that in the event that Kraft Heinz Company fails to perform site closure of the above site(s) in accordance with the approved plan or other permit requirements, whenever required to do so, the Guarantor shall either perform closure, pay a third party to perform closure, establish a fully funded secured trust fund as specified in IAC 567 Chapter 121.8(4)"a", or establish an alternate financial assurance instrument in the name of Kraft Heinz Company in the amount of the current closure cost estimate, as required by Chapter 121.

WHEREAS, the Guarantor agrees to remain bound under this Guarantee for as long as Kraft Heinz Company must comply with the applicable financial assurance requirements of Chapter 121, or until the Guarantor provides written notice, by certified mail, of intent to terminate Guarantee, at least 90 days prior to the date said Guarantee is to be terminated. When such notice is provided, Kraft Heinz Company shall, within 60 days, provide proof of alternate financial assurance to IDNR.

If a means of alternate financial assurance is not provided within the 60 days, IDNR shall suspend the permit and Kraft Heinz Company shall be required to perform proper closure within 30 days of the permit suspension. If Kraft Heinz Company does not properly close the site within the 30 days, this shall constitute a failure to perform and IDNR shall file a claim with the Guarantor to collect the amount of funds necessary to properly close the site(s) covered by this Guarantee.

WHEREAS, the Guarantor expressly waives notice of acceptance of this Guarantee by Kraft Heinz Company or by IDNR. Guarantor also expressly waives notice of amendments or modifications of the closure plan and of amendments or modifications of the facility permit(s).

IN WITNESS THEREOF, the Guarantor executes this Corporate Guarantee under their respective hand and seal, this _____ day of 1/19/2026, 20 _____.

Kraft Heinz Company

Guarantor

—Signed by:

Signature:

mICHAEI MARTINEZ

EEFA9E1EE1897405

Name: MICHAEL MARTINEZ Title: Plant Manager

Signature: _____

Name: _____ Title: _____

Signature of Witness or Notary:

SECTION D: COST CLOSURE ESTIMATE

The current cost closure estimate is provided and stamped by a professional engineer licensed by the State of Iowa.

Solid Waste Land Application

Permit 17-SDP-06-95P-LAN

Kraft Heinz Foods Company

December 2025

Supplemental Information

SECTIONS R & S. SITE CLOSURE

In the event of closure, when Kraft Heinz Foods Company will no longer use the land disposal option, the solid waste will be handled by Future EnviroAssets, LLC. There is no projected date for closure. Following closure, there will be no post closure monitoring or site inspections necessary. Contacts for post closure are the same as in Section C. The current closure estimates are as follows.

Kraft Heinz Foods Company
Solid Waste Permit #17-SDP-06-95P-LAN
Mason City, Iowa
Facility Closure Cost Estimate 567-121.8

Storage capacity at land application site, 14480 Thrush Avenue, Mason City

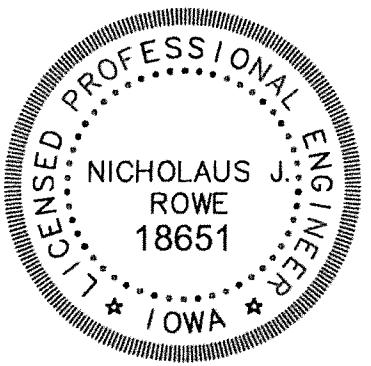
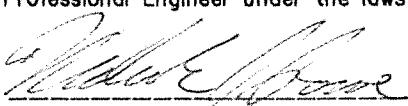
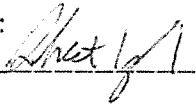
200,000 gallons
Typically 5%-7% solids

In the event that the site is closed, Future EnviroAssets, LLC would provide 6000 gallon tankers for transport to Amana Farms Anaerobic Digester

Assume 200,000 gallons to be hauled from farm silo and transported
One 6,000 gallon tanker load transportation fee is \$885 per load
Anaerobic Digester Tip Fee is \$575 per load
200,000 gallons / 6,000 gallons per load = 33.33 loads, or 34 loads
34 loads x \$885/load = \$30,090 for transportation costs
34 loads x \$575/load = \$19,550 for digester tip fee

Closure costs for hauling and treatment of 200,000 gallons is

\$30,090 + \$19,550 = \$49,640 plus any applicable fuel surcharge

	<p>I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.</p> <p> Nicholaus J. Rowe, P.E. License number 18651 My license renewal date is December 31, 2025 Pages or sheets covered by this seal: </p>
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