



HLW Engineering Group

Engineering

Management

January 23, 2026

Mr. Brad Davision
Land Quality Bureau
Iowa Department of Natural Resources
6200 Park Avenue, Suite 200
Des Moines, Iowa 50321

**RE: Notification Letter - Alternate Source of Carbon Disulfide
Cass County Sanitary Landfill 15-SDP-01-75C**

Dear Mr. Davison:

The laboratory Analytical Report for the water testing at MW-13, MW-19, MW-20, MW-21, MW-36, and MW-37R reported the detection of carbon disulfide in the sample collected October 27, 2025. The wells are in the monitoring system for the facility.

The reported carbon disulfide detections were noted to be anomalous compared to historic water quality at the site, as carbon disulfide had never been verified at any well at the facility. Identification of an alternate source of carbon disulfide was warranted.

The source of carbon disulfide has been documented to be two (2) new brands of latex gloves utilized during field sampling in the fall of 2025. The information in Attachment A supports the identification of the alternate source. Use of the latex gloves (by make and manufacturer) in the field by HLW personnel ceased immediately upon discovery.

The reported carbon disulfide concentrations reported October 27, 2025, are dismissed and are not considered to be part of the site's water quality record.

Please feel free to contact our office at (515) 733-4144 with any questions you may have.

Sincerely,
HLW Engineering Group

A handwritten signature in blue ink that reads "Todd Whipple".

Todd Whipple, CPG
Project Manager

cc: Mr. Chris Jahnke, Manager

Attachment A

Carbon Disulfide Alternate Source Determination (Latex Gloves)



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IL0435

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: Environmental Testing

Project / PO Number: N/A
Received: 12/03/2025
Reported: 12/05/2025

Analytical Testing Parameters

Client Sample ID:	Distilled Water	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	12/03/2025 9:12
Lab Sample ID:	1IL0435-01		

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Carbon Disulfide	<1.0	1.0	ug/L		12/04/25 0000	12/04/25 1625	RAF
Surrogate: Dibromofluoromethane	104	Limit: 57-128	% Rec		12/04/25 0000	12/04/25 1625	RAF
Surrogate: 1,2-Dichloroethane-d4	82.8	Limit: 49-135	% Rec		12/04/25 0000	12/04/25 1625	RAF
Surrogate: Toluene-d8	101	Limit: 82-116	% Rec		12/04/25 0000	12/04/25 1625	RAF
Surrogate: 4-Bromofluorobenzene	99.3	Limit: 77-114	% Rec		12/04/25 0000	12/04/25 1625	RAF

Client Sample ID:	Vinyl Gloves	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	12/03/2025 9:13
Lab Sample ID:	1IL0435-02		

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Carbon Disulfide	<1.0	1.0	ug/L		12/04/25 0000	12/04/25 1650	RAF
Surrogate: Dibromofluoromethane	103	Limit: 57-128	% Rec		12/04/25 0000	12/04/25 1650	RAF
Surrogate: 1,2-Dichloroethane-d4	84.5	Limit: 49-135	% Rec		12/04/25 0000	12/04/25 1650	RAF
Surrogate: Toluene-d8	100	Limit: 82-116	% Rec		12/04/25 0000	12/04/25 1650	RAF
Surrogate: 4-Bromofluorobenzene	99.3	Limit: 77-114	% Rec		12/04/25 0000	12/04/25 1650	RAF

Client Sample ID:	Latex 1 Gloves	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	12/03/2025 9:14
Lab Sample ID:	1IL0435-03		

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Carbon Disulfide	241	1.0	ug/L		12/04/25 0000	12/04/25 1715	RAF
Surrogate: Dibromofluoromethane	103	Limit: 57-128	% Rec		12/04/25 0000	12/04/25 1715	RAF
Surrogate: 1,2-Dichloroethane-d4	84.3	Limit: 49-135	% Rec		12/04/25 0000	12/04/25 1715	RAF
Surrogate: Toluene-d8	100	Limit: 82-116	% Rec		12/04/25 0000	12/04/25 1715	RAF
Surrogate: 4-Bromofluorobenzene	98.7	Limit: 77-114	% Rec		12/04/25 0000	12/04/25 1715	RAF

Microbac Laboratories, Inc., Newton

600 East 17th Street South | Newton, IA 50208 | 641-792-8451 p | www.microbac.com



CERTIFICATE OF ANALYSIS

1IL0435

Client Sample ID:	Latex 2 Gloves	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	12/03/2025 9:15
Lab Sample ID:	1IL0435-04		

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Carbon Disulfide	154	1.0	ug/L		12/04/25 0000	12/04/25 1741	RAF
Surrogate: Dibromofluoromethane	102	Limit: 57-128	% Rec		12/04/25 0000	12/04/25 1741	RAF
Surrogate: 1,2-Dichloroethane-d4	83.2	Limit: 49-135	% Rec		12/04/25 0000	12/04/25 1741	RAF
Surrogate: Toluene-d8	102	Limit: 82-116	% Rec		12/04/25 0000	12/04/25 1741	RAF
Surrogate: 4-Bromofluorobenzene	97.5	Limit: 77-114	% Rec		12/04/25 0000	12/04/25 1741	RAF

Definitions

RL: Reporting Limit

Report Comments

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included. **The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <https://www.microbac.com/standard-terms-conditions>.**

Reviewed and Approved By:

Heather Murphy

Customer Relationship Specialist

heather.murphy@microbac.com

12/05/25 16:40

A standard 1D barcode is positioned vertically on the left side of the page. It is composed of vertical black lines of varying widths on a white background.

PRINT OR TYPE INFORMATION BELOW	
SAMPLER:	<u>T. WHIPPLE</u>
SITE NAME:	
ADDRESS:	
CITY/ST/ZIP:	
PHONE:	
FAX:	
REPORT TO:	<u>T. WHIPPLE / Jim Eggers</u>
NAME:	<u>HIN / Microbase</u>
COMPANY NAME:	<u>HIN</u>
ADDRESS:	
CITY/ST/ZIP:	<u>Stony City / Newton</u>
PHONE:	
BILL TO:	<u>HIN - Todd Whole</u>
NAME:	<u>HIN - Todd Whole</u>
COMPANY NAME:	<u>204 West Broad Street</u>
ADDRESS:	<u>Story City, IA 50248</u>
CITY/ST/ZIP:	
PHONE:	
Keystone Quote No:	<u> </u> (If Applicable)

Relinquished by: (Signature) <i>John J. Goss</i>	Date <u>12/3/25</u> Time	Received by: (Signature) <i>John J. Goss</i>	Date Time	Turn-Around: <input type="checkbox"/> Standard <input type="checkbox"/> Rush	Contact Lab Prior to Submission
Relinquished by: (Signature) <i>John J. Goss</i>	Date Time	Received for Lab by: (Signature) <i>John J. Goss</i>	Date <u>12-3-25</u> Time <u>9:40</u>	Remarks: Placed 4 gloves in 1000 ml plastic non-preserved container. Add distilled water to container neck. Let stand 3 minutes. Poured	

Shamrock®

Latex Examination Gloves

Gloves are produced from materials which comply with FDA
21CFR 177 - 199 for food contact **LATEX 1 Gloves**

CAUTION:

This product contains natural rubber latex which may cause allergic reactions. Other components used in the gloves may cause allergic reactions in some people. If redness or irritation occurs, stop using these gloves. If you have skin allergies or suspect you may be sensitized to natural rubber latex, do not use these gloves. Consult with a dermatologist or physician. Exclude from latex free areas.

SIZE	ITEM#
X-Small	10110
Small	10111
Medium	10112
Large	10113
X-Large	10114



www.smrgloves.com



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6 4193210113 9
Made in Indonesia

Lot # : 21-12-121-58-8
Batch # : 21108392HJL

For Other Shamrock Gloves, Please Visit Our Website.

The Right Glove for the Right Person at the Right Price®

Powder Free Latex Examination Gloves **LATEX 2 GLOVES** PHANTOM®

by **ADENNA**®

Warning: Isolated cases of allergic reactions to rubber latex or powder have been reported. If you experience a reaction to this product, discontinue use immediately and consult your physician. Reactions may include such phenomena as watery eyes, wheezing, hives, rashes, welts, redness, dryness, tingling, or other skin irritations; hay fever-like symptoms such as sneezing, running nose, itching throat or nose; or tightness of the chest.

Storage: Avoid excessive heat. Open box should be shielded from exposure to direct sunlight or fluorescent lighting.

Advertencia: Han sido reportados casos aislados de reacciones alérgicas al caucho o al polvo. Si usted experimenta una reacción a este producto, descontinúe su uso inmediatamente y consulte a un doctor. Las reacciones quizás incluyan ojos irritados, ronquidos, enrojecimiento de la piel, resquebedad y otras irritaciones de la piel; otros síntomas como estornudos, flujo nasal, picazón en la garganta y la nariz o prisión en el pecho.

Almacenamiento: Evite el calor excesivo. Una vez abierto el envase, éste no debe exponer a los rayos directos del sol ni a la iluminación fluorescente.

Avertissement : Des cas isolés de réactions allergiques au latex d'élastomère-caoutchouc ou à la poudre ont été rapportés. Si vous réagissez à ce produit, arrêtez de l'utiliser et consultez immédiatement votre médecin. Parmi les réactions possibles, citons le larmoiement, la respiration sifflante, l'urticaire, les éruptions ou brases cutanées, les rougeurs, la sécheresse, les fourmillements, ou autres irritations. On rapporte aussi des symptômes semblables à ceux du rhume des foins : éternuements, nez qui coule, irritation du nez ou de la gorge ou encore une oppression respiratoire.

Stockage : Évitez la chaleur excessive. les boîtes ouvertes doivent être protégées de l'exposition directe au soleil et de l'éclairage fluorescent.

Manufactured for / Fabricados por / Fabriqués pour

ADENNA®
A hospeco BRANDS GROUP Company
Adenna LLC | Ontario, CA 91761, USA
www.Adenna.com

LOT NO: 0280530625 | MFG: JUN-2025



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