Detroit Brownfield Redevelopment Authority

LAND DEVELOPMENT PROJECT
Detroit, Michigan

Release March 14, 2024

Bid Package

BP- 2024-03-14 – SOIL REMOVAL and DISPOSAL associated with the KETTERING DEMOLITION PROJECT

The City of Detroit Brownfield Redevelopment Authority (the DBRA) is soliciting competitive Bids for the removal of existing soil contaminated from two existing dirt mounds including legal off-site disposal and backfilling as part of the site preparation associated with the DBRA Kettering Demolition Project.

The document sections identified in the following Table of Contents, together with any addenda subsequently issued by the DBRA in accordance with procedures set forth in this Bid Package constitute the entirety of this solicitation, generally referred to hereafter as the "Bid Package" and the sole basis for the Bids submitted in response to the DBRA's solicitation.

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SECTION 1 INVITATION TO SUBMIT A RESPONSIVE BID

The City of Detroit Brownfield Redevelopment Authority (DBRA) invites experienced and well-qualified Excavation Contractors with Environmental Remediation qualifications to submit a Bid to excavate, remove and legally dispose off-site soils from two existing dirt mounds located on site. Refer to the Scope of Work in Section V..

PURPOSE:
The DBRA is preparing the former Kettering High School in Detroit for demolition. The site currently has approximately 70,000 cubic yards of soil that needs to be removed (prior to demolition) and legally disposed of to a class II landfill for the purpose of attracting industrial facility development; generally referred to herein as the Land Assembly Project.

The DBRA has engaged consultants to base line environmental assessments, geotechnical & TCLP testing, and due care response and remediation plans for the assembled property.

The DBRA intends to obtain Bids in response to this Bid Package and to directly contract with the most responsive Bidder on an expedited basis.

A. ISSUING AGENCY

The issuing entity and owner shall be:

City of Detroit Brownfield Redevelopment Authority (DBRA)
500 Griswold St, Suite 2200
Detroit, MI 48226

The DBRA will directly contract with the Bidder selected by the DBRA as the most responsive in the best interest of the DBRA. The contracted Bidder shall commence the provision of Services only upon written notification by the designated DBRA authorized representative after the DBRA's acknowledged receipt of the specified and required pre-commencement documentation (including insurance, executed contract or notice to proceed).

B. PRE-BID MEETING

A Pre-Bid Meeting planned for Wednesday, **March 20, 2024 at 10:00 AM** ONSITE – 6101 Van Dyke, Detroit (We will meet on the corner of Conger and Van Dyke – Please park on the Kettering site – Parking not permitted on Conger street)

C. ISSUING OF BID DOCUMENTS

Questions regarding the Bid Package and scope after the Pre-bid Meeting can be submitted by e-mail up to April 1, 2024 to orobertson@degc.org.

D. DUE DATE AND TIME & DELIVERY OF BIDS

Complete Bids shall be received by the DBRA no later than **4:00 PM, April 4. 2024.**

Bids shall emailed to **orobertson@degc.org** with the subject labeled as **"Bid for the LAND ASSEMBLY PROJECT – Bid Package 2024-03-19 SOIL REMOVAL AND DISPOSAL KETTERING DEMOLITION PROJECT**

All Bids shall use best efforts to comply with the prevailing Equal Opportunity and Labor Standard Provisions of the City of Detroit. Each Bidder must demonstrate its ability to obtain Tax Clearances from the City of Detroit, W-9 and a Certificate of Liability Insurance as a condition of award ability.

Additional information regarding this Bid Package may be requested by email to Orza Robertson at orobertson@degc.org All response to questions during the Bid Period will be responded, as determined necessary by the DBRA, in an Addendum to all Bidders who have attend the Pre-Bid meeting.

E. GENERAL PROJECT DESCRIPTION

The Land Assembly Project was established to assemble, secure ownership, and prepare blighted properties to attract industrial / manufacturing facilities by private developers..

The Work solicited by this Bid Package properly performed are described in Section V – Scope of Work.

The Scope of Services for this Bid Package includes, but is not limited to, the provision of all necessary and incidental labor, equipment, tools, material, supplies, and supervision to properly perform the Services necessary and incidental to provide the full scope of the Work specified in Section V.

F. SUBMITTAL PROCEDURES

The DBRA reserves the right, in the interest of maximizing obtaining fair and competitive Bids, to directly contact and provide to one copy of the Bid Package to prospective Bidders that have previously demonstrated to the satisfaction of the DBRA the capability and experience to expeditiously manage, schedule and complete the Pre-development Site Preparation Activities.,

Bids may not be withdrawn for a period of 90 days after the submission of the Bid. The DBRA reserves the right to waive any abnormalities in any Bid, and to reject any or all Bids in whole or in part whenever such waiver or rejection is in the best interest of the DBRA.

Bids shall be submitted only on the unaltered Bid Form included in Section III.

SECTION II – INSTRUCTIONS TO BIDDERS

Part I – Project Parameters

Project Name:	Kettering Demolition Project
Contracting Agency:	The City of Detroit Brownfield Redevelopment Authority ("DBRA") 500 Griswold St, Suite 2200, Detroit, Michigan 48226
Project Area:	The Project is located within the City of Detroit, County of Wayne, State of Michigan,
Bid Package Title:	Bid Package 2024-03-19 SOIL REMOVAL AND DISPOSAL KETTERING DEMOLITION PROJECT
Pre-Bid Meeting:	A Pre-Bid Meeting shall be held at the date, time and location identified in Section I - C of the Invitation to Bidders
Bid Due Date:	**Thursday, April 4, 2024 at 4:00pm.**
Email Bids To:	orobertson@degc.org
Subject line:	**Bid Package 2024-03-19 SOIL REMOVAL AND DISPOSAL KETTERING DEMOLITION PROJECT**

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Part II – Basis of Bid

This Bid Package sets forth all terms and conditions under which the DBRA and the Bidder shall enter into a Contract for the complete performance of Soil Removal, Disposal & Remediation Work specified in Section V.

Bids, submitted in accordance with the requirements of this Bid Package, will be evaluated by the DBRA staff. Based on DBRA staff recommendations, the DBRA Board may approve the selection of the Bidder deemed, in the best interests of the DBRA, to be the most experienced, well-qualified, appropriately priced and capable of performing the Soil Removal, Disposal & Remediation Work.

Upon Board authorization, the DBRA will contract with the Bidder, using the a contract similar in form to the Contract form, terms and conditions specified in Section IV incorporating the elements of the Bid and Services deemed in the DBRA's best interests. The Contract between the DBRA and the Board approved Bidder selected by the DBRA shall be based on the Bid submitted on the Section III Bid Form.

Bids will become on submission the property of the DBRA and will not be opened publicly or returned. Bids shall remain valid for not less than 90 days after the date submitted. The DBRA reserves the right to reject any or all Bids.

The Bidder shall include in the Bid Price the full reimbursement for all wages, labor taxes & fringe benefits, overheads & profits, insurance, personal protection equipment, transportation, communication (cell phones, internet, printing), materials, and equipment. All taxes involved in the completing the Work shall promptly paid to the appropriate taxing entity for all taxes owed in connection with the Work including, but not limited to, Michigan State Sales Tax and Use Tax.

Part III – Framework for Bids

A. GENERAL

Only Bidders with proven and documented qualifications and capacity required to provide the specified Services will be invited to submit a Bid in response to this Bid Package. Bids are to be submitted using only the Bid Form provided in

Section III of this Bid Package; Bids submitted in any other format will be deemed non-responsive. A qualified Bidder, for the purpose of this Bid Package, is a Contractor properly licensed to provide services in the State of Michigan, fully insured and experienced in providing the Services specified in the Section V Scope of Services within the City of Detroit, which can identify and commit qualified personnel to perform the Service in a timely and comprehensive manner. A qualified Bidder shall provide examples and evidence of the provision of similar and equal Services upon request by the DBRA.

B. DELIVERY OF BIDS

Email bid shall be identified with the Project Name, the Bidder's name and address, and the Bid Package Title.

C. DATE FOR RECEIVING BIDS

Bids shall be delivered to the designated location on or before the Bid due date and time specified in Section I – Invitation to Bidders. Bids transmitted via telephone or a written communication in any format other than the Bid form provided in the Bid Package are invalid and will not receive consideration.

D. BIDDERS' REPRESENTATION

By submitting a Bid the Bidder represents and certifies to the DBRA that, after thorough examination of the Bid Package Document:

- The Bidder has read and understands the Bid Package and the Bid is voluntarily submitted in accordance with the Bid Package with the understanding that the DBRA has no obligation to award a contract to the Bidder or compensate the Bidder in any way for the preparation and submission of a Bid in response to this Bid Package.
- The Bidder is familiar with the local labor conditions and City of Detroit prevailing wage ordinance.
- The Bidder commits and agrees to use its best efforts to comply with all City of Detroit executive orders governing the provision of Services on behalf of the City of Detroit including certification of Civil Rights, Inclusion and Opportunity (CRIO) department, the STEP program, and approval and City of Detroit tax clearance.
- The Bidder has appropriate licenses and the expertise, capacity and experienced organization to perform and complete the Services in accordance with the Bid Package.
- The Bidder is the construction industry and quality of workmanship standards customary in the Metropolitan Detroit area and is able to coordinate and provide the Services in accordance with the requirements of the governing City Departments..
- The Bidder agrees to expeditiously execute the Contract similar to the form provided in the Section IV, which incorporates the accepted elements of the Bid.
- The Bidder agrees to proceed with the Services under the Notice to Proceed while the Contract is being finalized for execution.

E. PREAWARD CONFERENCE

Bidders may be required to meet with the DBRA to review their Bid and the Scope of Services prior to Bid award. This meeting is distinct from the pre-Bid meeting and will be arranged by the DBRA.

F. INTERPRETATION OR CORRECTION OF BID PACKAGE

It shall be the Bidder's responsibility to ensure that all documents identified in the Bid Package are received and that Bidder's Bid is based upon the complete Bid Package including all addenda that may be issued. Bidders shall promptly notify the DBRA of any ambiguity, inconsistency or error they may discover upon examination of the Bid Package Project Area, or local conditions.

During the Bid Period questions regarding the Bid Package must be submitted via e-mail to:

Orza Robertson at orobertson@degc.org

G. SUBSTITUTIONS – NOT USED

H. ADDENDA

Requirements contained in the Bid Package shall apply to all Addenda, and the general character of the Services called for in the Addenda shall be the same as specified in the Bid Package for similar Services Incidental Work necessitated

by Addenda shall be included in the Bids, even though not specifically mentioned.
Addenda shall become a part of the Bid Package, and shall be acknowledged in the Bidder's Bid.

I. FORM AND STYLE OF BIDS – Not Applicable – Email ONLY

Bidders shall submit two (2) signed copies of the completed Bid. Each copy of the Bid shall include the legal name of Bidder and a statement that the Bidder is a sole proprietor, a partnership, a corporation, or any other legal entity.
All requested alternates and separate prices shall be included in the Bid. If an alternate price does not involve a change in the base Bid, enter "NO CHANGE". Bidder shall make no additional stipulations in the Bid, or qualify the Bid in any other manner.

J. MODIFICATION OR WITHDRAWAL OF BID

A Bid may not be modified, withdrawn or canceled by the Bidder during the stipulated time period following the time and date designated for the receipt of Bids.

K. REJECTION OF BIDS

The DBRA shall have the right to reject any or all Bids.

L. ACCEPTANCE OF BID (SELECTION)

The DBRA shall have the right to waive any informality, abnormality, or irregularity in any Bid received in determining and selecting the most responsive Bid considered in the best interests of the DBRA. on the basis of the sum of the base Bid along with the alternates and/or separate prices deemed acceptable.

M. TIME OF COMMENCING SERVICES AND COMPLETION OF WORK

The Bidder, if awarded a Contract by the DBRA for the Work, shall be required to commence the Work immediately upon receipt of a Notice to Proceed from the DBRA. The Bidder shall commence and proceed with the Work at all times in close coordination with the DBRA's Sr. Sr. Project Manager.

O. SUBCONSULTANTS / SUBBIDDERS / SUPPLIERS

The Bidder shall be a full service provider and shall not be permitted to assign or subcontract the provision of any portion of the Services without the sole written approval of the DBRA.

P. BOND REQUIREMENTS

Performance and Payment bonds in 100% of the Contract Amount as amended and defined by MCL Act 213 of 1963 Section 129 for Public Works projects shall be required and include in Base Bid Amount.

END OF SECTION

SECTION III – SCOPE OF WORK

I. GENERAL PROJECT DESCRIPTION

The DBRA is preparing the former Kettering High School in Detroit for demolition. The site currently has approximately 70,000 cubic yards of soil that needs to be removed (prior to demolition) and legally disposed of to a class II landfill for the purpose of attracting industrial facility development; generally referred to herein as the Land Assembly Project. The DBRA has engaged consultants to base line environmental assessments, geotechnical & TCLP testing, and due care response and remediation plans for the assembled property.

The DBRA's intent is to secure the necessary contractor who can complete the scope services that are stated below in an expedited fashion.

II. SCOPE OF SERVICES

The Construction Services to be provided by the Proposer (hereinafter referred to as the Contractor) upon the written direction of the DBRA shall include all materials, labor, equipment, tools, supervision, incidentals and profit/markup necessary to complete the scope of work noted below and the bid items noted on the bid form

The Contractor shall perform, without limitation, the following Services required to identify and complete the full scope of Site Preparation Work:

- Attend weekly construction coordination / progress meeting.
- Coordinate onsite work activities with other trade contractors.
- Supply sufficient labor, equipment and resources required to complete the project within the scheduled timeframe.
- Secure & pay for all permits required to perform the work.
- Secure & pay for erosion permits required to perform the work.
- Furnish, install, and maintain soil erosion control silt fence.
- Furnish, install, and maintain soil erosion control catch basin protections.
- Clearing, grubbing, removal, and legal off-site disposal of trees, brush and vegetation from the site. Her Includes removing and disposing of trees, brush, stubs, stumps, and other vegetation within and on existing fence line.
- Excavate and remove 70,000 cu yds of dirt on site to existing grade level. Including loading, hauling to and disposal in a Class II landfill.
- Maintain and Clean ALL roads and streets around project area **Daily** (I-94 Service Drive, Van Dyke Avenue, Conger Street and the Private road to the West (parallel to Townsend Street).
- Contractor will be responsible to repair and replace ANY and all of curb if disturbed during removal.

III. HOURS OF OPERATION & EMERGENCY CONTACT

The Contractor shall establish reasonable and productive hours for performing the Work with due consideration to the residents and surrounding businesses, The Contractor shall also maintain an on-site manager at all times with a 24 hour monitored cell phone number to receive emergency notifications.

END OF SECTION

SECTION IV – SAFETY REQUIREMENTS

A. GENERAL CONTRACTOR RESPONSIBILITY FOR SAFETY

The DBRA shall rely on the Project Manager's knowledge and assurances that every Work activity shall endeavor to:

1. Maintain secure Work areas free from hazardous conditions including establishing barricades, concealed space monitoring & protection equipment, traffic controls, prohibiting dumping or collection of rubbish in the Work area.
2. Provide at all times appropriate personal protection equipment for any employee, subcontracted persons, and the general public associated, involved or affected the Contractor's performance of the Work
3. Prevent accidents and injuries to anyone working on the Project Site which the Project Manager employs, subcontracts or arranges (knowing or otherwise) to be on the Properties during the Subcontractor's performance of the Work.
4. Prevent injury or exposure to injury general public within the influence of the Project during the Contractor's performance of the Work.
5. Maintain, post and distribute to all employees and workers at the project site, all "Right to Know" information for materials and equipment used by the Contractor in the performance of the Work.

The Contractor shall have the sole responsibility and obligation, to its employees, agents, advisors, consultants and subcontractors, to implement and maintain written OSHA compliant Corporate and Project Safety Program during the entire duration of the contract. The Contractor will be provided with an environmental disclosure statement summarizing the known subsurface conditions at the project site, and environmental assessment reports will be made available for review.

Upon notification of contract award and prior to the commencement of Work, the Project Manager shall obtain a letter, signed by an officer of each subcontractor, outlining the subcontractor's safety policy and corporate commitment to safety and compliance with the Project Manager's Corporate and Project Safety Program. The Project Manager will immediately provide evidence and a copy of the Safety Program to the DBRA upon request, notwithstanding, the DBRA is not responsible for assuring or monitoring the Project Manager's safety performance or program implementation.

In the event of imminent danger or when peril exists to life, limb, or property, the Project Manager's supervision and site staff shall have the authority and responsibility to immediately stop any or all work activities until any unsafe act or unsafe condition has ceased and otherwise corrected.

B. MIOSHA REQUIREMENTS

The Contractor shall, during execution of the Work for this Contract, promptly and fully comply with the provisions of the Michigan Occupational Safety and Health Act 154 of 1974 with particular attention paid, but not limited to, Occupational Safety and Health Administration, Department of Labor, Safety and Health Regulations for construction, and Occupational Safety and Health Standards, as printed and any changes thereto.

All fatality cases and/or accidents in which five (5) or more persons are injured in any one accident shall be reported to the District and/or Regional Office within forty-eight (48) hours from the time of occurrence:

Michigan Department of Labor
Bureau of Safety Regulations
3500 North Logan, P.O. Box 30035
Lansing, Michigan 48909
(517) 3731410

Copies of the Occupational Safety and Health Act 154 of 1974 and related information on education and training programs may be secured from the offices listed above.

END OF SECTION

SECTION III – BID FORM

DBRA: Bid Package 2024-03-14 SOIL REMOVAL AND DISPOSAL KETTERING DEMOLITION PROJECT

Project: LAND ASSEMBLY PROJECT– PRE-DEVELOPMENT SITE PREPARATION:

Name of Bidder: _____

Bidder's Address: _____

City / State / Zip Code: _____

E-Mail Address: _____

Bidder's Telephone: (_____)_____

Submitted to: The City of Detroit Brownfield Redevelopment Authority
500 Griswold Street, Suite 2200
Detroit, MI 48226
Attn: Orza Robertson
Email: orobertson@degc.org

A. BID

The Undersigned, as the Authorized Agent for the Bidder, certifies that the Bidder has thoroughly examined the Bid Package and hereby submits this Bid to furnish, for compensation by the DBRA in the amounts stated in this Bid for, all necessary and incidental labor, materials, tools, equipment, all applicable taxes, insurance, and supervision required to provide the Soil Removal, Disposal & Remediation Work in strict conformance with the requirements, terms and conditions set forth in this Bid Package.

The Undersigned certifies that the Bidder understands the provisions, terms and conditions set forth in the Contract included in this Bid Package as Section IV – Contract and that the Bidder is prepared to execute a contract with the DBRA incorporating the accepted provisions of this Bid.

B. STARTING AND COMPLETING WORK

The Undersigned certifies that, upon receipt of a Letter of Intent and Notice to Proceed from the DBRA, the Bidder is prepared to mobilize and commence the provision of Services based on the provisions of the terms and conditions set forth in this Bid Package pending the final preparation and execution of the Contract.

The DBRA intends to contract the Work on an urgent and expedited basis as follows:

Pre-Bid Meeting (On-Site – 6101 Van Dyke, Detroit, MI 48213)	March 20, 2024 at 10AM EST
Final Day to Submit Questions to Owner	April 1, 2024 at 10AM EST
Bid Due Date	April 4, 2024 at 4PM EST
Mobilize to Site	April 22, 2024

The Contractor agrees to complete the Work and obtain substantial and final completion in the number of days listed below after the commencement of any earth excavation activities on the Project Site:

Substantial Completion -50 days

- Substantial Completion – 65 days

The Undersigned hereby affirms the Bidder's understanding that the schedule and sequence for the provision of the Work shall be at the direction of the DBRA.

C. PERFORMANCE AND PAYMENT BONDS

The Undersigned affirms that the cost of a 100% Performance and Payment bonds for the full amount of the Bid Price is included in Bid Price.

D. ADDENDA

The Bidder acknowledges receipt of the following Addenda, which specify revisions to the Bid Package, and states that appropriate adjustments in the Bid Prices, if any, have been included in this Bid:

(1) ADDENDUM NO._____DATED_____
(2) ADDENDUM NO._____DATED _____
(3) ADDENDUM NO._____DATED _____

E. BASE BID PRICE

The Bidder submits the following Bid Prices for the complete provision of the Soil Removal and Disposal Work specified in Section V: Quantities will be adjusted on actual quantities at the bid unit prices

1. Secure & pay erosion permits – allowance

Estimated Quantity	Unit Price	Total
1 Lump Sum	$5,000.00	5,000.00

2. Install soil erosion control silt fence in protections – 3,000 lf of silt fence

Estimated Quantity	Unit Price	Total
3,000 LF	$_____	$ _____

3. Install soil erosion control - catch basin protections – 6 catch basin protections

Estimated Quantity	Unit Price	Total
6 EA	$_____	$ _____

4. Secure & pay for all permits required to perform the Work.- allowance

Estimated Quantity	Unit Price	Total
1 Lump Sum	$15,000.00$	15,000.00

5. Grubbing, removal and legal off-site disposal of topsoil, trees and vegetation from around the perimeter of site at or around dirt that is to be removed

Estimated Quantity	Unit Price	Total
1 Lump Sum	$_____	$_____

6. Removal of 70,000 cu yds of dirt, hauling to and disposal in a class II landfill

Estimated Quantity	Unit Price	Total
70,000 cu yds	$_____	$_____

Landfill Owner/ Location of Primary Landfill to be used:_____
Landfill Owner/Location of Second Landfill to be used:_____

Total Base Bid Amount Items 1 thru 6 $_____

ALTERNATE PRICES

UNIT PRICES (CIP=compacted in place) (MIP = measured in place)

1. Soil erosion control silt fence furnish & installed –
   add / deduct per lf $ _____
2. Catch basin protections – furnish & installed
   Add / deduct per each $ _____
3. Excavate & load out soil (measured in place)
   Add / deduct CY MIP $ _____
4. Trucking to landfill
   Add / deduct per ton $ _____
5. Grade surface to positive drainage
   Add / deduct per sf $ _____

The above Bid Prices include the cost of 100% Performance and Payment Bond as required by MCL Act 213 of 1963 Section 129 for Public Works Projects for the full final amended amount of the PM Contract

The Bidder [requires] [does not require] performance and payment bonds for all subcontracts. .

G. SUB-CONSULTANTS / SUB-BIDDERS – NOT USED

H. JOINT VENTURE (For a Joint Venture Bidder Only)
If a Joint Venture Contractor, the undersigned agrees to submit to the DBRA prior to the Bid Award a copy of the Joint Venture Agreement to be entered into by the Joint Venture Partners. The Bidder understands that the Joint Venture Agreement form and content is subject to the sole approval of the DBRA.

I. WITHDRAWAL OF BID
The Bidder agrees that this Bid will remain firm and will not be withdrawn for a period of ninety (90) days after submission date of this Bid.

J. START OF SERVICES
The Bidder agrees to start Services immediately upon receipt of a Notice to Proceed from the DBRA.

K. REJECTION OF BIDS
The Bidder understands that the DBRA reserves the right to evaluate and waive any informality, abnormality, or irregularity in the submission of any Bid deemed, at the sole discretion of the DBRA, to be immaterial to the content, validity and fair – equal competitiveness of the Bid. The DBRA reserves the discretionary right to reject any or all Bids in whole or in part which are not submitted in accordance with the Bid Package terms and conditions, exceed the DBRA budget allocated for the Services, or are not consistent with the anticipated competitive pricing.

L. EQUAL OPPORTUNITY REQUIREMENTS
The Bidder acknowledges and confirms that Bidder upon execution of a Contract with the DBRA will use its best efforts to comply and require all subcontractors to comply with all equal opportunity and labor requirements described in Section IV, H-6, Equal Opportunity & Anti Discrimination Practices, which includes:

Compliance with Fair Employment Laws (Detroit Fair Employment Practices Ordinance 303-H). The Contractor shall comply with the United States Constitution and all federal, state and local laws, rules and regulations governing fair employment practices and equal employment opportunity.

City of Detroit Executive Order No. 2003-4. The Contractor shall comply with the goals of the City of Detroit's Executive Order No. 4, dated October 28, 1994, pertaining to the utilization of Detroit-based and small businesses.

City of Detroit Executive Order No. 2007-1 In the performance of the Services, the Contractor agrees to comply with the goals of the City of Detroit's Executive Order No. 2007-1 (refer to Section IV, Subsection H-6).

Ordinance No. 20-93. The Contractor agrees to comply in the performance of the Services, and shall require all subcontractors to comply with City of Detroit Ordinance No. 20-93, codified as Detroit City Code 18-5-60 through 18-5-66, Prevailing Wage and Fringe Benefit Rates Required for City Projects, as amended.

The Bidder agrees to submit upon request by the DBRA in a reasonable time the following information:

- A copy of the Bidder's formally adopted equal employment opportunity policy indicating that the firm does not discriminate in its employment practices and takes affirmative action to recruit and hire minority persons as required by Section 2-7-3 of Ordinance 303-H.
- A statement on company letterhead that it will not start the provision of Services on the Project until it has issued its affidavit of compliance to the Civil Rights, Inclusion and Opportunity (CRIO)relative to Ordinance 303-H.
- A copy of the firm's Affirmative Action Plan.

M. INTENTIONALLY DELETED

N. PROPOSER'S QUALIFICATIONS

The Undersigned declares that Bidder has had prior experience in the type of Work required by the Bid Package and that Bidder has the necessary finances, personnel and working organization, and equipment available to execute the proposed Services in accordance with the timing and requirements of the Contract Documents.

O. PROPOSER NOT IN ARREARS

The Undersigned certifies that, as of the date of this Bid, Bidder is not in arrears to the City of Detroit for any debts whatsoever (including but not limited to back taxes) as provided for in Sec. 21315, City Code (Ord No. 52H) and further certifies that the Bidder is not in default with respect to any City or DBRA contracts.

P. WAIVER

The Undersigned certifies the price Bid in this Bid is correct and complete and stated as intended by the Undersigned for Services covered by this Bid. The Undersigned further certifies that all information given in or furnished with this Bid is correct, complete, and submitted as intended by the Undersigned, and the undersigned does hereby waive any right or claim Bidder may now have or which may hereafter accrue to the Bidder, by reason of errors, mistakes, or omissions made by the Undersigned in this Bid, to refuse to execute the Contract if awarded to the Bidder, to demand the return of the Bid Security, or to be relieved from any of the Bidder's obligations as set forth in said Bid Security required with this Bid.

Q. SPECIAL FORMS

Bidders will note that a copy of each of the following documents has been included in this Section:

- Bid Signature Page
- Acknowledgments – Corporation, Partnership, Limited Liability Company and Joint Venture
- Resolution of Authority – Corporation, Partnership, Limited Liability Company and Joint Venture
- Affidavit of Non-Collusion and Non-Conflict of Interest
- Bidder's Insurance Certification
- Bidder's Most Recent Income Tax Clearance Form – (attach one copy)
- Bidder's Taxpayer Identification Number and Certification – W-9 (attach one copy))

Each set of the applicable documents is to be completed, signed, and returned with the Bid. These documents will later be used in preparing the execution Contract for the accepted Bid.

The Undersigned certifies and represents that he / she is authorized to execute, submit and bind this Bid on behalf of the Bidder,

NAME OF PROPOSER: _____
(Please Print Full Legal Name)

BUSINESS ADDRESS: _____
(Number and Street)

_____
(City) (State) (Zip Code)

FEDERAL TAX IDENTIFICATION NO.: _____

CHECK ONE:

____CORPORATION, incorporated under the laws of the State of _____

If not a Michigan Corporation, are you licensed to do business in the state of Michigan? YES_____NO _____

____PARTNERSHIP (Please List Partners)

____JOINT VENTURE (Please List Partners)

____LIMITED LIABILITY COMPANY (Please List Managing Members)

_____

THE CITY OF DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY
LAND ASSEMBLY PROJECT – KETTERING DEMOLITION PROJECT
Bid Package 2024-03-14– Soil Removal and Disposal
March 2024

SIGNED and SUBMITTED on_____, 2024

BY _____
Signature

_____ _____
Print Name Title

CORPORATE ACKNOWLEDGEMENT

STATE OF MICHIGAN)
)SS.
COUNTY OF)

The foregoing instrument was acknowledged before me on the_____day of_____, 2024, by _____, the_____of_____, a corporation of the State of _____.

Signature

Notary Public, Wayne County, Michigan

My commission expires: _____

PARTNERSHIP ACKNOWLEDGEMENT

STATE OF MICHIGAN)
)SS.
COUNTY OF)

The foregoing instrument was acknowledged before me on the_____day of_____, 2024, by _____, General Partner, on behalf of_____, a Partnership.

Signature

Notary Public, Wayne County, Michigan

My commission expires: _____

LIMITED LIABILITY COMPANY ACKNOWLEDGEMENT

STATE OF MICHIGAN)
)SS.
COUNTY OF)

The foregoing instrument was acknowledged before me on the_____day of_____, 2024, by _____, Managing Member, on behalf of_____, a Limited Liability Company.

Signature

Notary Public, Wayne County, Michigan
My commission expires: _____

JOINT VENTURE ACKNOWLEDGEMENT

STATE OF MICHIGAN)
)SS.
COUNTY OF)

The foregoing instrument was acknowledged before me on the_____day of_____, 2024, by _____, Authorized Agent, on behalf of_____, a Joint Venture.

Signature

Notary Public, Wayne County, Michigan

My commission expires: _____

THE CITY OF DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY
LAND ASSEMBLY PROJECT – KETTERING DEMOLITION PROJECT
Bid Package 2024-03-14– Soil Removal and Disposal
March 2024

RESOLUTION OF CORPORATE AUTHORITY

I,_____, as_____of_____, a Corporation of the State of _____ DO HEREBY CERTIFY that the following individuals are authorized agents of the Corporation:

Name: Title:

_____

_____

I FURTHER CERTIFY that any of the aforementioned officers of the Corporation are authorized to execute or guarantee and commit the Corporation to the terms, conditions, obligations, stipulations and undertakings contained in the Bid Packageand that all necessary corporate approvals have been obtained in relationship thereto.

IN WITNESS THEREOF, I affix my signature on the_____day of_____, 2024.

CORPORATE SEAL

(if applicable)

(Signature)

_____

(Title)

RESOLUTION OF PARTNERSHIP AUTHORITY

I,_____, as General Partner in_____, a Partnership in the State of_____DO HEREBY CERTIFY that the following are General Partners and are licensed to conduct in the State of Michigan and the City of Detroit:

I FURTHER CERTIFY that any of the aforementioned General Partners of the Partnership are authorized to execute or guarantee and commit the Partnership to the terms, conditions, obligations, stipulations and undertakings contained in the Bid Packageand that all necessary corporate approvals have been obtained in relationship thereto.

IN WITNESS THEREOF, I affix my signature on the_____day of_____, 2024.

(General Partner)

RESOLUTION OF LIMITED LIABILITY COMPANY AUTHORITY

I,_____, as Managing Member in_____, a Limited Liability Company organized in the State of_____DO HEREBY CERTIFY that the following are Managing Members and they and the company are licensed to conduct business in the State of Michigan and the City of Detroit:

I FURTHER CERTIFY that any of the aforementioned Managing Members are authorized to execute or guarantee and commit the Company to the terms, conditions, obligations, stipulations and undertakings contained in the Bid Package and that all necessary corporate approvals have been obtained in relationship thereto.

IN WITNESS THEREOF, I affix my signature on the_____day of_____, 2024.

(Managing Member)

RESOLUTION OF JOINT VENTURE AUTHORITY

I,_____, as Authorized Agent of_____, a Joint Venture organized under the laws of the State of_____between _____ and_____DO HEREBY CERTIFY that the following individuals are Authorized Agents of the Joint Venture and they and/or the Joint Venture members are licensed demolition BIDDERS in the State of Michigan and the City of Detroit:

I FURTHER CERTIFY that any of the aforementioned Authorized Agents of the Joint Venture are authorized to execute or guarantee and commit the Joint Venture to the terms, conditions, obligations, stipulations and undertakings contained in the Bid Packageand that all necessary corporate approvals have been obtained in relationship thereto.

IN WITNESS THEREOF, I affix my signature on the_____day of_____, 2024.

(Authorized Agent)

AFFIDAVIT OF NONCOLLUSION AND NONCONFLICT OF INTEREST

STATE OF MICHIGAN)
)SS.
COUNTY OF)

_____ being first duly sworn deposes and says that:

(1) He / She is _____, of _____.
(DBRA, Partner, Officer, Agent, Member) (Bidder)

(2) Bidder is fully informed with respect to the preparation and contents of the Bid as well as all circumstances in connection with the same;
(3) Neither the said Bidder nor any of its officers, partners, owners, agents, members, representatives, employees or parties in interest, including this affiant, has any way colluded, conspired, connived or agreed directly or indirectly with any other Bidder, Firm or person to submit a collusive or sham Bid in connection with the Contract for which the Bid has been submitted or to refrain from proposing in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement of collusion or communication or conference with any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the DBRA or any person interested in the proposed Contractor;
(4) The price or prices quoted in the Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Contractor or any of its agents, representatives, owners, partners, employees, or parties in interest, including this affiant;
(5) The Bidder has no conflict of interest with any federal, state, or local governmental agencies or any persons in connection with the Services specified in this Bid Package.

_____
(Signature)

_____
(Title)

Subscribed and sworn to before me this _____ day of _____, 2024.

_____
Notary Public, Wayne County, Michigan

My Commission Expires: _____

INSURANCE CERTIFICATION

The Bidder hereby certifies that it will furnish the required insurance coverage, as described in the Contract, Section IV, Subsection H-10.

INSURANCE CARRIER: _____

ADDRESS: _____

TELEPHONE NUMBER: _____

FAX NUMBER: _____

CONTACT PERSON: _____

CITY OF DETROIT TAXPAYER CLEARANCE

Attach Copy

TAXPAYER IDENTIFICATION NUMBER & CERTIFICATION – W-9 FORM

Attach Copy

SECTION IV – SAMPLE CONTRACT
(on following pages)

CONTRACT AGREEMENT

AGREEMENT

BETWEEN

THE CITY OF DETROIT
BROWNFIELD REDEVELOPMENT AUTHORITY

AND

_____

1. PARTIES TO THIS AGREEMENT

This "Agreement" is entered into and is in full force and effect on this the_____day of_____in the year ____, between **City of Detroit Brownfield Redevelopment Authority**, hereafter referred to as the "Owner", with its principal office at 500 Griswold, Suite 2200, Detroit, Michigan 48226, and _____, hereinafter referred to as the "Contractor", with its principal offices located_____, for the Contractor's performance of the "Work" specified herein and the Owner's payment of the Contract Value indicated in Section 7 "Payment" below for the Work properly executed and completed in accordance with this Agreement.

2. THE WORK

The Contractor, having submitted a Bid in response to and in accordance with the Owner's solicitation, agrees to furnish to the Owner all labor, materials, tools, equipment, construction administration and supervision necessary for and incidental to the proper execution and full completion of the Work set forth in:

2024-03-19 SOIL REMOVAL AND DISPOSAL KETTERING DEMOLITION PROJECT

complete, except as modified herein, and in a timely and workmanlike manner, in connection with the:

LAND ASSEMBLY PROJECT - PRE DEVELOPMENT SITE PREPARATION (the "Project")

in the City of Detroit, County of Wayne, Michigan.

The term "Work" as used herein means the provision by the Contractor of all labor, materials, equipment services, construction administration, and coordination necessary to complete the Scope of Work described and specified in Bid Package 2024-03-25 and the Contract Documents enumerated below, which constitute the entire basis of this Agreement between the Owner and the Contractor. The following documents are hereinafter referred to collectively as the "Contract Documents" and are incorporated by reference into this Agreement:

a) This Agreement, including all exhibits and attachments, and any amendments to this Agreement;
b) Bid Package 2024-03-19 in which the term "Bidder" shall have the same meaning as "Contractor" in this Agreement;
c) Addenda as indicated in the Bid, if issued;
d) Bulletins and Change Orders, if issued;
e) The Contractor's Bid, dated _____ and documents from the Contractor thereafter modifying the Contractor's Bid;
f) The documents set forth in Attachment B; and

g) Those documents listed in Article 20 below not otherwise listed in this Section.

3. CONTRACT TIME, STARTING AND COMPLETING

The Contractor agrees to start immediately, upon written notice by the Owner, the performance of the Work and diligently pursue the completion of the Work in accordance with a project schedule acceptable to and approved by the Owner (the "Project Schedule").

The Contractor shall carry on the construction, in accordance with the Project Schedule, including any phasing of operations, continuously without unscheduled stoppage so that all items of the Work are totally complete, including punchlist work, in accordance with the agreed upon completion date and/or any identified interim milestone dates. The Contractor's responsibility to complete the Work in accordance with the schedule shall not relieve the Contractor from the responsibility to coordinate the Work with the others or, as necessary, to sequence the Work, including interrupting the Work as required by the Owner.

The DBRA intends to contract the Work on an urgent and expedited basis as follows:

Pre-Bid Meeting Detroit Final Day to submit questions to Owner April 5th, 2024
Owner response to Questions
Bid Due Date
Letter of Intent to award
Board approval
Mobilize to Site

The Contractor agrees to complete the Work and obtain substantial and final completion in the number of days listed below after the commencement of any earth excavation activities on the Project Site:

Substantial Completion
Final Completion

Contract's obligation to complete the Work in accordance with the schedule listed above shall be tolled by the number of days equal to i) the number of days that frost laws are in effect and which thereby preclude the Contractor from completing the Work, and ii) the number of days that landfill operations in the immediate area are suspended due to inclement weather. Should either of the foregoing events occur, Contractor shall immediately provide notice to the Owner exercising its right to toll the completion dates, its reasoning for exercising such right, and the date that such tolling began. Upon the conclusion of such event, Contractor shall provide notice to Owner of its conclusion and immediately commence the Work.

"Work Day" means each day the Contractor shall perform the Work contemplated herein, which shall be a minimum six (6) days per week, subject to the tolling provisions contained in this Section 3.

4. SUBSTANTIAL COMPLETION

Substantial completion of the Work means the point at which the Owner determines that the Work is sufficiently complete in accordance with the approved Construction Documents to permit the Owner, to use the Project for the purposes for which it is intended, subject only to minor items of incomplete construction identified by the Owner. When the Contractor considers that the Work, or a designated portion thereof, which is acceptable to the Owner, is substantially complete, as defined above, the Contractor shall prepare for submission to the Owner a list of items to be completed or corrected. The failure to include any item on such list does not alter the responsibility of the Contractor to complete all of the Work in accordance with the Contract Documents. When the Owner, on the basis of an inspection, determines that the Work, or designated portion thereof, is substantially complete, the Owner will then prepare a Certificate of Substantial Completion, establishing the date of Substantial Completion. The Certificate of Substantial Completion shall detail the responsibilities of the Owner and the Contractor for security, maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time within which the Contractor shall complete the items listed therein. Warranties required by the Contract Documents shall commence on the Date of Final Completion of the Work, or designated portion thereof, unless otherwise provided in the Certificate of Substantial Completion. The Certificate of Substantial Completion shall be acknowledged by the Contractor in writing indicating acceptance of the responsibilities assigned to the Owner and the Contractor in such Certificate.

5. FINAL COMPLETION / FINAL CLEANING

The Contractor shall notify the Owner in writing when the Work, including all punchlist items, is totally complete and ready for final inspection. After satisfactory final inspection of the Work, final payment will be made in accordance with the Agreement. The Contractor shall achieve Final Completion in accordance with the schedule above. The Contractor shall arrange and schedule the final cleaning of the Work with the Owner after the completion of the Work and removal of all tools and excess materials.

6. LIQUIDATED DAMAGES

The Contractor is responsible for the scheduling, sequencing, and completion of the Work in coordination with others and is fully responsible for establishing the means and methods for completing the Work. The Contractor shall be responsible to complete the Work within the Work Days set forth in Section 3 above, subject to any tolling which may occur. Should for any reason the Contractor fail to achieve Final Completion and make the Work available for the intended use by the Owner, the Contract Value shall be reduced by an amount specified in subsection 108.10 of the Michigan Department of Transportation's Standard Specifications for Construction for each Work Day in which the Work remains unavailable for the intended use. The exercise of this clause by the Owner shall not accrue any obligations to any third party. This amount for liquidated damages is included because of the difficulty of assessing the actual damages suffered by the Owner in the event of the failure of the Contractor to complete the Work under this Agreement. Liquidated damages are cumulative for each completion date as set forth in the Bidding and Contract Documents and/or the Project Schedule.

7. PAYMENT

In consideration of the Contractor's full and complete performance of the Work called for in this Agreement, the Contractor shall be paid by unit prices with a total contract amount not to exceed the sum of _____("Contract Value"), which shall be distributed to the Contractor by the Owner in accordance with the terms and conditions set forth in Attachment A "Payment Procedures" and subject to a retention as set forth in Paragraph 12 of Attachment A. The lump sum amount stated above shall constitute a not-to-exceed Contract Value for the Work that may only be modified in writing by the Owner.

8. SCHEDULE

Time is of the essence of this Agreement. Upon written notice to proceed, the Contractor agrees immediately to commence the Work and to perform, in a punctual and diligent manner, all parts of the Work, according to the Bid Package. The Contractor shall not commence the performance of the Work until given authorization by the Owner.

The Contractor shall coordinate all the Work with the Project Schedule established by the Owner. The Project Schedule may be changed by Owner as deemed necessary or convenient to the benefit of the completion of the Project. The Contractor agrees to, as a material obligation of this Agreement, attend meetings and make sufficient inspections of the progress of the Project; to coordinate the Contractor's Work at all times with the progress of the Project and will, upon the Contractor's initiative, confer with the Owner so as to plan the Work in coordinated sequence with the work of the Owner and others, and be prepared to perform expeditiously the Work at the time most beneficial to the completion of the Project. Nothing contained in this Section shall be construed to obligate the Owner to direct or coordinate the Contractor's Work, or to obligate the Owner to increase the Contract Value as a result of changes made in the Project Schedule.

If the Contractor is not in default in any of the provisions herein, the Owner shall, at its reasonable discretion, expedite the completion of the Project or portions thereof, and if the Owner directs the Contractor to work overtime (or a second shift), it is agreed that the Contractor shall work the overtime (or second shift). It is also understood that the Owner is to pay only the actual extra cost over the rate for

regular time of such overtime. Time slips covering such overtime must be checked and approved daily. No overhead or profit is to be charged by the Contractor for such overtime.

The Contractor agrees to man the Project with sufficient crews and equipment necessary to complete the Work as required and will not delay the progress of the Project by limiting the number of crews or equipment working at the site. If additional labor or equipment is required in order not to delay the progress of the Project, the Contractor, at its own expense, agrees to work its forces overtime and/or additional shifts (including weekends and holidays) to remove impacts to the progress of the Project caused by the Contractor's delays and to recover the Progress Schedule. If the Contractor falls behind in or impedes the progress of the Project for any reason and, after forty-eight (48) hours written notice, fails or refuses to supply sufficient workmen, to deliver materials, or secure equipment to eliminate the delay in the progress of the Project, then the Owner shall have the right, without obligation or the concurrence of the Contractor, to supplement the Contractor's work forces with other workers and equipment and deduct the costs incurred by the Owner from the Contract Value.

Should the Contractor fail, neglect, or refuse to complete the Work within the time period provided in the Project Schedule, Contractor agrees to pay the Owner as liquidated damages, and not as a penalty, the amounts specified in Section 6 of this Agreement. Owner may deduct any liquidated damages from the Contract Value.

9. SUBMITTALS

The Contractor shall prepare timely submittals and obtain approvals, as required in the Contract Documents, for all shop drawings, details, samples, warranties, operation manuals, and instructions, and agrees to, on Contractor's own initiative, expedite approvals to assure the timely progression of the Work without interruption. In the event the Contractor fails to make the submittals in a timely manner, the Owner may assign a coordinator to expedite the submittal process on behalf of the Contractor and shall deduct the cost from the Contract Value without the concurrence of the Contractor.

Approval of submittals by the Owner and/or the Owner's design consultant shall not relieve the Contractor of its obligation to perform the Work in strict accordance with the required specifications nor does it relieve the Contractor of its responsibility for the proper matching and fitting of the Work with contiguous work. All submittals shall be transmitted via the most rapid method (i.e., overnight mail or hand delivery) to the responsible reviewers as designated by:

Orza A. Robertson, Sr. Project Manager
City of Detroit Brownfield Redevelopment Authority
500 Griswold, Suite 2200
Detroit, Michigan 48226
orobertson@degc.org

The Contractor shall be required, at the Owner's option, to submit and maintain a current, all-inclusive "Material and Equipment Status Report" that identifies the promised date of submittals for approval and the delivery to the Project of material and/or equipment to be furnished by the Contractor. This report shall be relied upon by the Owner in analysis of the Contractor's conformance to the Progress Schedule.

10. CHANGES IN THE WORK

The Contractor agrees, without nullifying any portions of this Agreement, to incorporate revisions or changes to the scope of the Work made by written orders from the Owner. The Contractor agrees to provide, as a part of the Agreement, price quotations for changes in the Work, proposed or directed by the Owner. The Contractor agrees to provide such quotations within fourteen (14) days or less, as required by the nature of the change. The Contractor agrees to provide a detailed breakdown showing differences in quantity, and value of labor, equipment, and material involved. Wherever possible, the cost submitted shall be based on the unit prices provided in the proposal. The quotation will include any

claims made by the Contractor to extend the Project Schedule and will include the Contractor's cost estimate for any time extensions requested. All time extensions will become effective when agreed to by the Owner and will not be an entitlement of the Contractor merely as a result of a change. The time of completion will remain fixed, unless expressly otherwise agreed to by the Owner. If the time is extended, all added costs for same must be included in the original claim for the changes. Otherwise, such added costs will not be subject to reimbursement, except where the Contract Documents specifically allow for such reimbursement.

The Contractor will be required to furnish one (1) original and three (3) copies of each quotation for changes in the Work, whether in the form of a Bulletin, Clarification, or Field Order, which must be itemized in detail as to quantity and pricing to permit checking.

Should the Owner, because of the nature of the change, direct changes in the Work to be performed on a time and material basis in lieu of unit prices, or for a negotiated lump sum, and so notifies the Contractor in writing, the Contractor shall perform the changes in the Work at actual net cost plus overhead and profit with or without a maximum guarantee total cost agreed to, at the Owner's option. Any changes to the Work performed shall not exceed fifteen (15%) percent of the total cost of the Work to be performed by the Contractor or five (5%) of the total cost of the Work to be performed by a subcontractor without an amendment to this Agreement. Overhead and profit shall be charged at the same rate as applied to the rest of the Work under this Contract. Charges for time and material must be supported by records, including certified payrolls, checked and approved daily by the Owner's authorized representative or designee. The Contractor and his subcontractors will permit the Owner and the City of Detroit to audit its books, records, estimates, orders and files, as necessary to check the actual cost of the changed Work involved with time and material charges.

The Contractor shall strictly adhere to the Contract Documents, unless a change in the Work is authorized in writing by the Owner. In such case, the terms of the change shall be understood and agreed upon in writing by the Owner and the Contractor before the commencement of the revisions in the Work. The Contractor agrees to proceed promptly with any disputed work upon the written direction of the Owner, and to submit a claim within five (5) days outlining the reasons the Contractor believes that the claimed Work is not a part of the Agreement and stating the amount of claimed additional compensation being sought.

At the request of either party to this Agreement the Owner may issue a Field Order. The effect of issuing a Field Order shall be to authorize Work that may or may not be the subject to a Change Order for the purpose of allowing the Work to proceed in an efficient manner. It is acknowledged that the issuance of a Field Order is not the equivalent of a Change Order or an amendment to this Agreement.

11. CLEAN UP

Contractor shall identify work and staging zones, traffic patterns, construction signage, traffic and road maintenance plans for Owner approval before implementing. These plans will include identification of a responsible individual that can be contacted 24 hours 7 days a week to answer public inquiries and rectify public concerns. Contractor shall clean up and legally remove the Contractor's debris from the Project Site and adjacent public streets accessing the Project on a daily basis, including the removal of any and all debris or accumulated mud tracked on to adjacent streets and roads by the Contractor's vehicles, due to the Contractor's Work and/or having been created by the Contractor's work force. Should the Contractor fail to do the required cleanup work within twenty-four (24) hours of the written request, the Contractor agrees that the Owner may supplement the Contractor's cleanup effort and deduct the cost from the Contract Value without the concurrence of the Contractor.

12. SAFETY

The Contractor shall, at its own cost and expense, protect its own employees, the employees/consultants/agents of the Owner, and all other persons from risk of death, injury, or bodily harm arising out of or in any way connected with the Work performed under this Agreement. The

Contractor shall strictly comply with all safety orders, rules, regulations, or requirements of all federal, state, and local government agencies exercising safety jurisdiction over the Work, including, but not limited to, the federal and state occupational safety regulations. The Contractor shall indemnify and save harmless the Owner, its agents, and the City of Detroit from and against any liability, loss, cost, damage, or expense, including attorneys' fees, suffered or incurred as a result of any cause of action, proceeding, citation, or work stoppage arising out of, or in any way connected with, the alleged violation by the Contractor's work force of any such safety order, rule, regulation, or requirement, whether such violation is ultimately proved or not.

In the event the Owner finds the Contractor's work force in violation of any safety laws or regulations, notice will be given to the Contractor for immediate correction. If the Contractor does not immediately commence to cure the violation and continue to cure the violation without any delay whatsoever, the Owner may invoke the provisions of Section 15 except that the twenty-four (24) hours written notice requirement will not be required.

13. EQUAL EMPLOYMENT OPPORTUNITY AND ANTI-DISCRIMINATION PRACTICES

a. Compliance with Fair Employment Laws. The Contractor agrees that, in connection with the Project, it shall comply with the United States Constitution and all federal, state, and local laws, rules, and regulations governing fair employment practices and equal employment opportunity. The Contractor shall promptly furnish any information requested by the City of Detroit or its Human Rights Department with respect to this subsection a.

b. Human Rights. The Contractor shall comply with the rules and procedures applicable to the Contractor adopted by the Human Rights Department of the City of Detroit pursuant to the 1997 City of Detroit Charter and the Detroit City Code.

c. Ordinance No. 20-93. The Contractor voluntarily agrees that it shall use its best efforts in the performance of the Work, and shall require all subcontractors hired to perform portions of the Work to use their best efforts, to comply with goals equal to those set forth in City of Detroit Ordinance No. 20-93, codified as Detroit City Code 18-5-60 through 18-5-66, "Prevailing Wage and Fringe Benefit Rates Required for City Projects", as amended.

d. Reporting. Upon commencement of the Construction Work, the Contractor shall thereafter submit to the Owner, at the time it makes application for payment pursuant to Attachment A, monthly written reports evidencing its compliance with City of Detroit Executive Order No. 2014-5 and Subsection 13(d). The Contractor shall require similar reports from each of its subcontractors and shall submit the subcontractor's monthly reports along with its report. Upon receipt of such monthly reports they shall be submitted to the City of Detroit Human Rights Department ("HRD") as part of its contract information tracking system ("CITS"). Contractor agrees to provide all information required by HRD to conform to CITS. It further agrees to require by subcontract all if its subcontractors to provide all information required by HRD in relation to the CITS.

e. Notice to Subcontractors. The Contractor shall notify any subcontractor of its obligations under this Section 13 when soliciting subcontractors and shall include all applicable provisions of this Section 13 in any subcontract related to the Work. The Contractor shall take such action with respect to any subcontract as the City may reasonably direct as a means of enforcing such provisions, including sanctions for non-compliance, but shall not otherwise be liable for non-compliance by a contracting party.

f. Executive Order No. 2014-5. The Contractor shall comply with the goals established by the City of Detroit's Executive Order No. 2014-5, effective November 1, 2003, which sets goals for the utilization of Detroit-based businesses and small businesses. The Contractor shall contractually require and enforce compliance by all its lower-tier subcontractors to fulfill the requirements of this Section.

g. DBE, SBE, PARTICIPATION. The Contractor shall, through self-performance or through subcontractor utilization, make every effort ("good faith effort") to utilize Detroit Business Enterprises

(DBE) and Small Business Enterprises (SBE) in the performance of the Work consistent with the goals of the City of Detroit's Executive Order 2014-5. The Contractor shall comply with the requirements of the City of Detroit's Executive Order No. 2016-1.

A breach of the terms and conditions of this Section 13 may be regarded as a material breach of this Agreement.

14. INDEMNITY AND HOLD HARMLESS

a. Indemnity Agreement.

To the fullest extent permitted by law, Contractor shall indemnify and hold harmless the Owner, the City of Detroit, their consultants, and their agents, employees, invitees, and guests, from and against any claim, damage, loss, suit, action, administrative proceeding, demand, judgment, royalty, interest, lien, cost, expense, or any liability (including actual attorneys' fees) of whatsoever kind or nature, whether arising before, during, or after completion of the Contractor's Work, to the proportionate extent caused by the negligent acts or omissions of Contractor or persons for whom Contractor is responsible, occurring in connection with the Agreement or the Work of the Contractor, any subcontractor, or their respective agents, employees, or anyone for whose acts they may be liable.

In the case of any claims against any person or entity indemnified hereunder by any employee of the Contractor, anyone directly or indirectly employed by Contractor, or anyone for whose acts Contractor may be liable, the indemnification obligation set forth above shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor, or any person or entity, under workers' compensation acts, disability benefit acts, or other employee benefit acts.

In the event any claim is made against any person or entity for which Contractor has an indemnity obligation, the Owner may withhold from any payment due or thereafter to become due to the Contractor under the terms of this Contract an amount sufficient in the Owner's judgment to protect and indemnify it from any such claim.

The Contractor agrees within (10) ten days after written demand from the Owner to cause the effect of any suit or lien for which the contractor is responsible to be removed from the premises, and in the event the Contractor shall fail to do so, the Owner is authorized to use whatsoever means it may deem appropriate to cause such lien or suit to be removed or dismissed and the cost thereof, together with actual attorneys' fees shall be immediately due and payable to the Owner by the Contractor.

b. Hold Harmless Agreement

The Contractor shall assume liability and indemnify the Owner and the City of Detroit and their respective employees and agents from and against any liability and all loss, costs, damages, expenses, including actual attorneys' fees, on account of claims for personal injury, including death, sustained by any person or persons whomsoever, including employees of the Contractor or any subcontractor, and for injury to, or destruction of, property of a person or organization, including loss of use thereof, to the proportionate extent caused by the negligent performance of the Work under this Agreement.

The Contractor hereby accepts and assumes exclusive liability for, and shall indemnify, protect and save harmless the Owner and the City of Detroit from and against the payment of:

(i) All contributions, taxes or premiums (including interest and penalties thereon) which may be payable under the Unemployment Insurance Law of any State, the

Federal Social Security Act, Federal, State, County and/or Municipal Tax Withholding laws, or any other law, measured upon the payroll of or required to be withheld from employees, by whomsoever employed, engaged in the Work to be performed and furnished under this Agreement.

(ii) All sales, use, personal property and other taxes (including interest and penalties thereon) required by any Federal, State, County, Municipal or other law to be paid or collected by the Contractor or any of its vendors or any other person or persons acting for, through or under it or any of them, by reason of performance of the Work or the acquisition, ownership, furnishing or use of any materials, equipment, supplies, labor, services, or other items for or in connection with the Work.

(iii) All pension, welfare, vacation, annuity and other union benefit contributions payable under or in connection with respect to all persons, by whomsoever employed, engaged in the Work to be performed, and furnished under this Agreement.

c. Survival. This Section 14 shall survive the completion of the Work and any termination of this Agreement.

15. RECOURSE BY THE OWNER

If the Contractor defaults or at any time fails in any respect to properly and diligently prosecute the Work covered by this Agreement, or is unable to supply a sufficient number of properly skilled trades or materials of proper quality to maintain the sequential progress of the Work, or is adjudged as bankrupt, or files an arrangement proceeding, or commits any act of insolvency, or makes an assignment for benefit of creditors without the Owner's consent, or fails to make prompt payment to material men and laborers, or otherwise fails to perform fully any and all of the covenants herein contained, the Owner may, after giving twenty-four (24) hours written notice to the Contractor, secure and provide from any reasonable source supplemental labor, supervision, equipment, and materials, or make payments as may be deemed necessary by the Owner, in its sole and absolute discretion, to complete the Work. Any such supplemental provisions undertaken by the Owner in an attempt to remove delays in the progress of the Project caused in whole or in part by the Contractor's delinquent prosecution of the Work, shall not relieve the Contractor from its responsibility to complete any and all portions of the Work in accordance with the Agreement.

The cost, including the Owner's overhead, incurred by the Owner in its attempt to correct the Contractor's delinquent prosecution of the Work, shall be deducted first from any money due or thereafter to become due to the Contractor under this Agreement; or the Owner may, at its option, terminate the Contractor's right to proceed with the Work and take possession of the site and complete the Work by whatever method the Owner deems expedient. In the event the Owner takes such action as a result of the Contractor's failure or neglect to carry out the Work, the Contractor shall take no action to cancel existing orders for materials necessary to complete the Work.

In case the Owner discontinues the Contractor's right to proceed with the Work, the Contractor shall not be entitled to receive any further payment under this Agreement until the cost of the supplemental Work undertaken by the Owner is fully reimbursed by the Contractor. If the unpaid balance of the amount to be paid under this Agreement exceeds the expenses incurred by the Owner in finishing the Work, such excess shall be paid by the Owner to the Contractor, but, if such expense shall exceed such unpaid balance, then the Contractor shall pay to the Owner the amount by which such expense exceeds such unpaid balance within ten (10) days of demand by the Owner.

The expense incurred by the Owner as herein provided either for furnishing materials or for furnishing work, and any damages incurred by the Owner by reason of the Contractor's default, shall be chargeable

to, and paid by the Contractor. The expense to complete the Work of the Contractor shall be the sum of all costs to complete the Work, plus ten (10%) percent thereof and shall include, but not be limited to, the costs of materials, wages, salaries, subsistence, travels, transportation, equipment rentals, equipment maintenance, tools, supplies, freight charges, services, utilities, taxes, insurance, pensions, fringe benefits, office expenses, license fees, legal fees, accounting costs, engineering costs, bonds, penalties, litigation, financing, interest, and all other costs incurred by the Owner in completing the Work. If the Owner elects not to terminate the Contractor's right to proceed, the Contractor agrees to reimburse the Owner, for losses or damages resulting from the delay in timely progress of the Work, as well as all costs incurred by the Owner as defined above.

Should the Contractor default in the proper and/or timely performance of the Work, thereby causing delay to work by others, the Contractor shall be liable for all loss and damages, including liquidated and consequential damages (if any), sustained by the Owner or by others. The Contractor shall not be liable under this Section 15, if such default is caused by strikes, lockouts, Acts of God, or other reasons beyond the control of Contractor, provided that the Contractor gives written notice of the delay to the Owner within four (4) days following the start of the alleged occurrence.

The Owner reserves the right to terminate this Agreement in the event that any funding agency terminates the Project, or fire or other catastrophe damages the Project. In the event of such termination, the Contractor shall be entitled only to payment in the lesser amount of either:

a. Cost of the work actually completed, plus a reasonable percentage of the cost of the work actually completed for field supervision, overhead and profit.

b. A percentage of this Agreement amount that reflects the value of work actually completed in proportion to the Agreement amount.

There shall be deducted from any entitled amounts to be paid as provided in this Section 15, the amount of any payments made to the Contractor prior to the date of termination of this Agreement. The Contractor shall not be entitled to any claim, or claim of lien against the Owner or against the City of Detroit for any additional compensation, anticipated profits, anticipated revenues, profits from declined Projects or consequential damages in the event of such termination.

16. TERMINATION FOR CONVENIENCE

The Owner reserves the right to terminate this Agreement without cause at any time, without incurring any further liability whatsoever, other than as stated in this provision, by giving written notice to the Contractor of such termination specifying the effective date thereof, at least fifteen (15) days prior to the effective date of such termination. If this Agreement is terminated, the Owner will pay the Contractor only for the Work completed and stored on site prior to termination, including any retained amounts. The amount of the payment shall be computed by the Owner on the basis of the Work properly installed and such other means which, in the judgment of the Owner, represents fair value of the services provided, less the amount to any previous payments made, which final payment the Contractor agrees shall constitute full and complete payment and satisfaction under this Agreement.

The Owner or the Owner's designee may, at the Owner's option, undertake any part of the Work that is to be performed by the Contractor. In such an event, the Contractor shall not be entitled to any fees on the value of the Work not performed by the Contractor.

17. INSURANCE

The Contractor shall purchase and maintain in force the following insurances for the duration of this Agreement and any additional periods of coverage specified below:

a. Insurance Provided by the Contractor

The Contractor and all subcontractors of the Contractor shall be responsible for insuring their own transit coverage to the job site. If off-site storage is required, the Contractor shall provide separate proof of insurance for the entire value of the stored items and provide a safe storage area acceptable to the Owner. Deductibles resulting from transit and off-site storage shall be borne by the Contractor.

The Contractor and the Contractor's subcontractors performing work of any type at the Project Site shall maintain and pay for the following insurance coverage with the minimum limits:

1) Workers' Compensation insurance which meets Michigan statutory requirements and Employers' Liability insurance, with minimum limits of $500,000 for each accident, $500,000 each disease, and $500,000 each disease per employee. The Contractor agrees that it will obtain a similar covenant with respect to Workers' Compensation and Employers' Liability insurance from any consultant or subcontractor retained by it to render any of the Services. The Contractor shall keep this insurance in force and effect until the receipt of final payment.

2) Comprehensive General Liability insurance which conforms to the following requirements: the minimum policy limits shall be $2,000,000 each occurrence for bodily injury and $2,000,000 each occurrence for property damage, with a $5,000,000 umbrella including XCU and Products Completed Operations. This insurance shall be kept in force and effect for the entire term of this Agreement.

3) Automobile Liability insurance covering all owned, non-owned, or hired automobiles with minimum limits for bodily injury of $2,000,000 each person and $5,000,000 each accident and property damage of $5,000,000 each accident. Such insurance shall comply with the provisions of the Michigan No Fault Insurance Law. The Contractor shall keep this insurance in force and effect until receipt of final payment. Such insurance can be obtained through an umbrella policy.

4) Pollution Liability Insurance which conforms to the following requirements: the minimum policy limits shall be $5,000,000 each occurrence and in the aggregate. This insurance shall be kept in force and effect for the entire term of this Agreement and shall cover all subcontractors of the Contractor which are contracted to specifically perform trucking services. Contractor hereby agrees and acknowledges that the premium cost for such insurance shall be paid by the Owner at an amount not to exceed $12,650 with such payment being subject to the execution of a change order between the Owner and Contractor.

Notwithstanding the foregoing, all subcontractors of the Contractor which are contracted to specifically perform trucking services for the Contractor shall maintain and pay for the following insurance coverage with the minimum limits:

1) Workers' Compensation insurance which meets Michigan statutory requirements and Employers' Liability insurance, with minimum limits of $500,000 for each accident, $500,000 each disease, and $500,000 each disease per employee. The Contractor agrees that it will obtain a similar covenant with respect to Workers' Compensation and Employers' Liability insurance from any consultant or subcontractor retained by it to render any of the Services. The Contractor shall keep this insurance in force and effect until the receipt of final payment.

2) Comprehensive General Liability insurance which conforms to the following requirements: the minimum policy limits shall be $1,000,000 each occurrence for bodily injury and $2,000,000 general aggregate/umbrella liability coverage. This insurance shall be kept in force and effect for the entire term of this Agreement.

3) Automobile Liability insurance covering all owned, non-owned, or hired automobiles with minimum limits for bodily injury of $1,000,000 each person and $1,000,000 each accident and property damage of $1,000,000 each accident. Such insurance shall comply with the provisions of the Michigan No Fault Insurance Law. The Contractor shall keep this insurance in force and effect until receipt of final payment. Such insurance can be obtained through an umbrella policy.

If during the term of this Agreement, changed conditions or other pertinent factors should, in the reasonable judgment of the Owner, render inadequate the foregoing insurance limits, the Contractor shall furnish on demand by the Owner such additional coverage as may reasonably be required under the circumstances. All such insurance shall be effected under valid and enforceable policies, issued by insurers registered to do business in the State of Michigan, of recognized responsibility, which are well-rated by national rating organizations and are acceptable to the Owner.

The Contractor shall be responsible for payments of all deductibles contained in any insurance required hereunder. The provisions under this Section 17 requiring the Contractor to carry the insurance described herein shall not be construed in any matter as waiving or restricting the indemnification, obligation, or any other liability of the Contractor under this Agreement.

Except for Workers' Compensation Insurance, all policies of insurance required hereunder shall name the Owner and the City of Detroit as additional insureds. These policies shall provide that the insurance provided to the additional insureds shall be primary and non-contributory with respect to the additional insureds.

The Contractor agrees that it will require each subcontractor or consultant utilized by the Contractor in connection with this Agreement and Project to maintain adequate insurance for its respective job, naming the Owner and the City of Detroit as additional insureds. These policies shall provide that the insurance provided to the additional insureds shall be primary and non-contributory with respect to the additional insureds.

Before the Contractor, its subcontractors, or its consultants commences performance of any Work at, prepares material for, or delivers material to, the Project Site, the Contractor and all of the Contractor's subcontractors, at any tier, shall provide Certificates of Insurance evidencing coverage in amounts not less than required above. Each of these required Certificates shall provide that the coverage therein afforded shall not be canceled or reduced except by written notice to the Owner and the City of Detroit given at least thirty (30) days prior to the effective date of such cancellation or reduction. In the event the coverage evidenced by any such Certificate is canceled or reduced, Contractor shall procure and furnish to the Owner new Certificates conforming to the above requirements before the effective date of such cancellation.

18. INTEGRATION AND AMENDMENT

All the terms and provisions of the Agreement, including those Contract Documents incorporated herein by reference, between the parties hereto pertaining to the subject matter hereof are fully set forth herein and no prior understanding or obligation not expressly set forth shall be binding on the parties. If any

provision, in whole or in part, of this Agreement should be found legally invalid, void, or unenforceable, the remaining provisions of this Agreement shall not be affected thereby, and the parties hereto shall, by amendment to this Agreement, properly replace such provision with a reasonable new provision which, as far as legally possible, shall approximate what the parties intended by the original provision, to carry out their purpose hereunder. No amendment or modification hereof shall be effective unless made in writing and executed by the duly authorized representatives of both parties.

19. GENERAL

The Contractor represents and states that the Contractor has carefully examined and understands this Agreement and the Contract Documents, and that the Contractor has investigated the nature, locality, and site of the Work, and that the Contractor enters into this Agreement on the basis of the Contractor's own examination, investigation, and evaluation of all such matters. The Contractor further represents that the Contractor is not in reliance upon any opinions or representations of the Owner, or of any of its officers, agents, servants, or employees.

No waiver by the Owner of any provision of this Agreement shall be deemed to be a waiver of any other provision hereof, or a waiver of any subsequent breach by Contractor of the same or any other provision.

The Owner's engagement of the Contractor is based upon the Contractor's representations to the Owner that it:

a. is experienced in the type of labor and services the Owner is engaging the Contractor to perform;
b. is authorized and licensed to perform the type of labor and services for which it is being engaged in the State and locality in which the Project is located;
c. is qualified, willing and able to perform the labor and services for the Project; and
d. has the expertise and ability to provide labor and services which will meet the Owner's objectives and requirements, and which will comply with the requirements of all governmental, public and quasi-public authorities and agencies having or asserting jurisdiction over the Project. Contractor acknowledges that it and its subcontractors are obligated to pay the prevailing wage and fringe benefit rates for the same or similar work in the locality in which the work is to be performed. The prevailing wage and fringe benefit rates shall be determined under 1965 PA 166, MCL 408.551 to 408.558.

20. ORDER OF PRECEDENCE

It is agreed that, in case of conflict between the terms of this Agreement and the terms contained elsewhere in the Contract Documents, the terms of the Agreement shall take precedence, and the conflicting terms found elsewhere in the Contract Documents shall be interpreted in accordance with the terms of this Agreement. Order of precedence for the Contract Documents shall be as follows:

Agreement
Special Provisions
Scope of Work
Contract Proposal
General Requirements
Supplemental Specifications
Standard Specifications
Construction Plans and Specifications

21. CITY COUNCIL AUDIT

Nothing contained herein shall be construed to or be permitted to operate as any restriction upon the power granted to the City Council of the City of Detroit by the City Charter to audit and allow all accounts chargeable against the City.

22. EXTENT OF AGREEMENT

Nothing contained in the Contract Documents shall be deemed to create any contractual relationship between any parties other than the Owner and the Contractor. Any contractual relationship between the Contractor and any subcontractor shall arise solely from and by virtue of an express contract between such parties. Nothing in the Contract Documents shall be deemed to give any third party any claim or right of action against the City of Detroit, the Owner, or the Contractor that does not exist without regard to the Contract Documents.

23. GOVERNMENT REGULATIONS

The Contractor shall comply with all rules, regulations, orders, etc., of all government agencies applicable to the Work under this Agreement. The Contractor shall cooperate with the Owner in promptly furnishing any information required by such agencies. It shall be an obligation of the Contractor to keep itself informed of governmental rules, regulations, orders, etc., which are applicable to the Work.

The Contractor shall include and contractually obligate all its subcontractors, suppliers, and vendors to specifically conform to all of the requirements of this Section in the performance of the Work.

24. CONTRACTOR WARRANTIES

The Contractor warrants and represents that all materials and equipment included in the Work are new, unless otherwise specified, and that the Work is of good quality, free from improper workmanship and defective materials and in conformance with design documents. Any portion of the Work that does not conform to the Contract Documents, including substitutions not properly approved and authorized, may be considered defective and shall be replaced by the Contractor without cost to the Owner upon discovery by the Owner. The Contractor shall correct defects in materials and/or workmanship for a period of one (1) year from the Final Completion Date of the Phase in which such portion of the Work is included or for such longer periods of time as may be agreed upon or specified.

The Contractor shall collect and deliver to the Owner, in bound and indexed form, all written warranties on materials, equipment and installations. All warranties shall commence on the Final Completion Date of the Phase in which such work is included, unless otherwise defined by the Contract Documents.

The Contractor shall warrant by sworn statements and waivers of lien that title to the Work invoiced in the Progress Payment Application will pass to the Owner either by incorporation in the construction or upon receipt payment by the Owner, whichever comes first. The Contractor shall warrant that all completed Work covered by an Application for Payment is free and clear of all liens, claims, security interests, or encumbrances, and that no portions of the Work, materials, or equipment has been acquired by the Contractor, or by any other person performing any portion of the Work, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the other person or can be otherwise imposed on the Contractor by such other persons. The Contractor and all subcontractors shall agree that title will so pass upon the Contractor's receipt of payment from the Owner.

25. SUBCONTRACTS

No portion of the Work may be subcontracted without prior written approval of the Owner. The Contractor shall submit the necessary subcontractor approval request forms, insurance certificates, and such other

affidavits as may be required by the Agreement. Approval of any subcontractor shall not relieve the Contractor of any responsibilities, duties, and/or liabilities as contained in the Contract Documents.

The Contractor shall require its approved subcontractors to provide an experienced and competent superintendent or foreman at the site of the Work at all times the Work is in progress. The superintendent or foreman shall have full authority to act for and sign on the subcontractor's behalf. The Owner shall have the right to demand removal of any contractor or subcontractor superintendent or foreman demonstrating a lack of competence or ability to perform the Work in accordance with the Contract Documents.

26. OTHER CONTRACTS

The Work of the Contractor is required to be coordinated with that of the Owner, the construction manager being Mannik & Smith Group, Inc. (the “Construction Manager”), and other contractors that may be employed by the Owner at the site. The Contractor shall fully cooperate and coordinate the Work with the Owner and other contractors in such a manner as the Owner may direct, so that the Work on the entire Project may be performed without delay or interference. No claim for additional costs or damages will be allowed for alleged interference or delay resulting from improper coordination of the Work.

27. PERMITS

The Contractor shall, unless specifically stated otherwise in the Contract Documents, secure and pay for all permits required for the performance of the Work, including, but not limited to, demolition permits, foundation and building permits, plumbing and electrical permits, Fire Marshall reviews, soil erosion permits, drain layer permits, street encroachment permits, and any other required permits, inspections, or fees relating to the Work. Permits shall be secured in a timely manner so as not to delay the start of the Work. Delays caused by the Contractor's failure to obtain the required permits in a timely manner shall not be the basis for any schedule extensions or increases in the Agreement amount.

28. SUBSURFACE CONDITIONS

If the Contractor discovers one or more of the physical conditions on the surface or subsurface at the Work site before disturbing the physical condition, the Contractor shall promptly notify the Owner in writing of the physical condition. The conditions are:

a. A subsurface or latent physical condition at the site is differing materially from those indicated in the Bid Documents or this Agreement.

b. An unknown physical condition at the Work site of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the character of the Work performed pursuant to this Agreement.

If the Owner receives such written notice, the Owner shall, with reasonable promptness, investigate the differing condition. In the event the Owner determines that the physical conditions identified in the written notice differ materially and may cause an increase or impact the costs and/or additional time required to perform the Work, the Owner's determination shall be made in writing and an equitable adjustment or method to determine an equitable adjustment shall be agreed to by the Owner and Contractor, and the Agreement modified accordingly.

The Contractor shall be held to have waived its rights for additional compensation and/or extension of time should the Contractor proceed with the Work associated with a claimed differing condition and fail to comply with the prior written notice requirements of this Section.

The purpose of this provision is to comply with the requirements of the Public Acts of 1998 No. 57. The terms "Contractor", "Governmental Entity", "Improved", "Improvement", "Person", and "Real Property" shall have the meanings set forth in Section 1 of the Act (MCLA §125.1591).

29. NOTICES

All notices shall be in writing and considered duly given if the original is (a) hand delivered; (b) delivered by telex, facsimile, or telecopy; (c) sent by U.S. Mail, postage prepaid, certified return receipt requested, or (d) by recognized overnight delivery service. Notices hand delivered, delivered by overnight delivery service, or delivered by telex, facsimile, or telecopy shall be deemed given the next business day following the date of delivery. Notices given by U.S. Mail shall be deemed given as of the second business day following the date of posting. All notices shall be given to the following addresses:

If to Owner:
500 Griswold
Suite 2200
Detroit, Michigan 48226
Attention: Authorized Agent
Facsimile Number: 313/963-8839

If to Contractor: _____
_____
_____
Attention: _____
Facsimile Number: _____

30. GENERAL CONDITIONS

The following General Requirements are in addition and supplementary to the terms and conditions stated in the Agreement. It is the intent of these General Requirements to work together with the specified requirements of the Agreement to define the terms and conditions agreed to between the Owner and the Contractor for the performance of the Work. In the event there are any conflicts or specific contradictions between the Sections, the terms set forth in the Agreement shall take precedence.

A. RECORD DOCUMENTS. A set of Record shall be marked as "Record Drawings" and be maintained at the Project site by the Contractor for the purposes of marking all changes, revisions, relocations, reroutes, or variances in the Work that differ from the Construction Documents. The "Record Drawings" shall be made accessible to all of the Contractor's subcontractors for recording any changes, field sketches, revisions, relocations, reroutes, or variances in the Work. The completed set of "Record Drawings" shall be transmitted to the Owner upon completion of the Work provided in a timely manner and in a format acceptable to the City Department having jurisdiction over the Work. Field sketches and installation records, other than shop, fabrication, or field installation drawings, shall not be submitted separately but shall be recorded on the "Record Drawing" set only.

Records of costs, pertaining to the Work performed by the Contractor, shall be kept on the basis of generally accepted construction industry accounting principles, consistently applied. The Contractor shall preserve all such records for a minimum period of three (3) years after the Final Completion Date, or such longer period as may be required by applicable law.

B. PROJECT MEETINGS. The Contractor shall arrange, conduct, and attend scheduled bi-weekly progress meetings. Special meetings for the purposes of coordinating and monitoring the Work progress, identifying problems, informing subcontractor and Project participants of Project status, stressing safety, coordinating construction details and inspecting quality conformance shall be conducted as required to assure the smooth and uninterrupted progression of the Work.

C. CONSTRUCTION PARKING. The Contractor shall be responsible for its employees' and subcontractors' vehicles while parked on or off the construction site. Any vehicle found to be owned by the Contractor's employee or an employee of the Contractor's subcontractor parked illegally may be towed away by the City or the Owner and charged to the Contractor by Change Order. The Owner

reserves the right to deny parking privileges on the Project site to any individual who parks a vehicle improperly or operates any vehicle in an unsafe manner.

D. EXISTING SITE CONDITIONS. The information in this Bid Package is intended to orient the Contractor to the site. The Contractor is responsible for thoroughly evaluating the site conditions. It is the responsibility of the Contractor, in conjunction with the utility companies, to verify the exact types and locations of existing utilities. Any damage to existing utilities caused by the Contractor shall be repaired at Contractor's expense, in accordance with the standard practices of the applicable City department or private utility company.

E. FIRST AID. A completely equipped first-aid kit shall be provided and maintained by the Contractor at the site in a clean, orderly condition and shall be readily accessible at all times to all the Contractor's employees. The Contractor shall designate certain employees who are properly instructed to be in charge of first aid. At least one such employee shall be available at the site whenever work is being carried on.

F. HOURS OF WORK. The Contractor shall conduct the work during normal working hours in cooperation with the existing property owners and occupants. At the beginning of work on this Agreement, the Contractor shall notify the Owner, in writing, of the schedule of the days and work hours proposed for a normal work week. The Contractor shall be responsible for contacting in advance all involved parties whenever the Contractor intends to depart from the normal work week schedule and resolve to the satisfaction of the Owner any reasonable objections. Any costs incurred, due to the failure of the Contractor to properly notify involved parties, shall be paid by the Contractor or deducted from the Contractor's Contract amount.

The Contractor shall plan and conduct the Work so as not to create a public nuisance or disturb the peace specifically for any residents near or adjacent to the Project site. Should the Contractor be stopped by order of a public authority from working at such times that are contrary to or in violation of any law, ordinance, permit, or license, the Contractor shall not be entitled to an extension of time or additional compensation due to such stoppage.

In an emergency requiring work to be performed outside the normal work week schedule to save or protect life or property, the requirements for the twenty-four (24) hour notification will be waived. The Contractor shall notify the Owner as soon as the Contractor determines that an emergency condition exists necessitating the change in or extension of the normal hours of work. However, the Contractor's determination of the existence of the emergency is subject to the review and revision by the Owner.

The normal work week schedule and/or daily hours of work may be altered as directed by the Owner, when, in its reasonable judgment, such alteration is necessary to maintain the required progress of the Work.

G. SANITARY REQUIREMENTS. Committing unnecessary acts of nuisance on the Project site is prohibited. Any employee who violates such provisions shall be promptly removed from the Project by the Contractor and not be permitted to work on the Project site without the written consent of the Owner.

H. CLEANLINESS OF WORK AND STREETS. The Work and all public or private property used in connection with the Work shall be kept in a neat, clean, and orderly condition at all times. Stored materials shall be safely stacked and ordered. Waste materials, rubbish, and debris shall be removed daily and shall not be allowed to accumulate. No burning of rubbish is permitted.

The Contractor shall remove unused construction equipment, temporary buildings, and excess materials from the site upon the reasonable request of the Owner. The site shall not be permitted to become a storage yard for the Contractor's equipment and materials not directly involved in the Work.

Any stored equipment or unnecessary materials stockpiled shall be removed from the Project site upon the request of the Owner.

During the performance of the Work, the Contractor shall daily inspect and maintain the Project site in a clean condition including control of dust, picking up of scattered construction debris, and removal of splattered materials from the surfaces of the new construction. Should the Contractor fail to maintain proper cleanliness or order on the site, the Owner, upon forty-eight (48) hour notice to the Contractor, shall arrange for the cleaning and removal of extraneous materials accumulated at the site and shall have the right to deduct the costs incurred from the Contract value.

Trucks hauling loose material from or to the project site shall be tight, and their loads trimmed and tarped to prevent spillage on the public streets. This requirement likewise applies to suppliers making deliveries to the Project site. The Contractor will be held responsible to require compliance by the Contractor's suppliers. The Owner shall have the right to deny site access to any subcontractor or supplier who refuses to comply with this requirement. The Contractor shall promptly (daily as a minimum) clean streets, sidewalks and alleys dirtied by any cause arising from the Contractor's operations. Should the Contractor fail to maintain proper street cleanliness, the Owner, upon notice to the Contractor will clean any such public rights-of-way and shall have the right to deduct the costs incurred from the Contract value.

I. SECURITY AND PROTECTION. The Contractor shall secure and protect from theft, loss, or damage all materials and equipment used for or relating to the Work until Final Completion and acceptance by the Owner. The Contractor shall employ and pay for a bonded guard service with a minimum of one (1) mobile guard assigned to the Project site during all non-working hours.

J. WORKING AREA. All the Work under this Agreement shall be performed on the Project site. The Contractor shall access the Project site via City streets and rights-of-way. The Contractor shall review the legal loading limit for the access streets and rights-of-way and shall be responsible for coordinating deliveries and shipments that do not exceed the legal load limits.

The Contractor shall use Flagmen in accordance with MMUTCD whenever trucks or equipment enter public roadways from the Project site.

Should additional working or storage space be desired, the Contractor shall make all arrangements with any property owner and submit to the Owner written evidence that the Contractor has secured permission to use this property for construction purposes. The Contractor shall pay all expense in connection with its use, and in no way involve or obligate the Owner by such use.

The City Zoning Ordinance provides for the restriction of material storage yards in certain residential areas. The Contractor is responsible to verify that any storage location contemplated can be used and, if a permit is required, shall obtain such permit from the Department of Buildings & Safety Engineering and pay all costs in connection therewith.

AA. DISCLAIMER OF SITE INFORMATION. By its own examinations, observations, investigations, and tests, the Contractor shall make its own determination of the existing site conditions. Information contained in this Bid Package is provided solely for the informational use of the Contractor. The Owner and the City of Detroit do not guarantee the accuracy or sufficiency of any site information.

AB. UNIT PRICES. Unit prices, if established during the Project, shall include all labor, material, tool, supervision, equipment, taxes, insurance, and bonding necessary for or incidental to the proper completion of the Work.

31. ASSIGNMENTS.

a. Assignment by Owner. The Owner may freely assign all or a part of its right, title and interest in the Agreement and upon such assignment, the Contractor shall attorn to the assignee of such assignment as if such assignee were an original party to this Agreement.

b. No Assignment by Contractor. The Contractor shall not assign, transfer, convey, or otherwise dispose of this Agreement, or the Contractor's right, title or interest in it or any part thereof, without the previous written consent of the Owner, which consent may be withheld in Owner's sole and absolute discretion. The Contractor shall not assign, either legally or equitably, by power of attorney or otherwise, any payment due or to become due under this Contract or the Contractor's claim thereto without the prior written consent of the Owner. The approval by the Owner of a particular assignment, transfer, or conveyance shall not dispense with such approval to any further or other assignments, which may be proposed by the Contractor. The approval of the Owner of any assignment, transfer, or conveyance shall not operate to release the Contractor hereunder from any obligations under this Agreement.

(Signatures commence on next page)

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized officers or agents as of the date first written above.

a Michigan corporation

By:_____
Print Name:_____
Its:_____

City of Detroit Brownfield Redevelopment Authority
a Michigan public body corporate

By:_____
Print Name:_____
Its:_____

By:_____
Print Name:_____
Its: Authorized Agent

Approved as to form only:
General Counsel to the Owner

By:_____
Rebecca A. Navin, Esq.

ATTACHMENT A

PAYMENT PROCEDURES

The Contractor shall submit all monthly invoices to the Construction Manager for final submission to the Owner. The Contractor shall also submit a Cost Breakdown of the Work for the purpose of developing a Schedule of Values as required by the Owner and/or Funding Source's accounting requirements and as required to further break down the unit cost in the proposal. The Cost Breakdown shall when totaled equal the Contract Value amount. The developed Schedule of Values shall be incorporated into the Contractor's invoice and used on a monthly basis to determine the amount earned by the Contractor that month. The cost breakdown must meet with approval of the Construction Manager and Owner and may be revised by either the Construction Manager or Owner at its sole discretion if it reasonably appears unbalanced. The Owner reserves the sole right, and the Contractor acknowledges such right, to withhold progress payments or portions thereof, in amounts judged necessary by the Owner should the Contractor become in default of any of the terms and conditions of the Agreement.

Procedure for Monthly Payment Applications

1. Before the 25th day of each month, the Contractor will contact the Construction Manager and the Owner's Sr. Sr. Sr. Project Manager identified in Section 9 of the Agreement and provide an estimate of the quantities and values of Work completed as projected to the end of the month so that a value of Work completed and earned can be agreed upon.

2. The Contractor must verify quantities and values approved and submit in triplicate the detailed invoice before the 1st day of each month. For each of the Line Items in the approved cost breakdown the Contractor shall indicate total charges through the current billing period, total charges through the previous billing period, total charges for the current billing period, quantities and types of units of work performed and the associated unit prices.

3. The monthly payment request shall be in the form of notarized AIA Documents G702 and G703 ("Application for Payment" and "Continuation Sheet" found in Attachment B), together with a spreadsheet of the Schedule of Value approved by the Owner.

4. A Partial Unconditional Waiver of Lien shall be submitted by the Contractor to the Construction Manager at the time payment is made. A Final Unconditional Waiver of Lien acknowledging payment in full to the Contractor and each subcontractor shall be submitted at the time final payment is made.

5. A notarized Contractor's sworn statement, showing that all labor and material furnished to the date of request has been paid in full shall accompany each monthly invoice.

6. All invoice documents and backup must be clearly identified with the Project name and shall be hand delivered or mailed to:

   Orza Robertson, Sr. Project Manager
   City of Detroit Brownfield Redevelopment Authority
   500 Griswold Street, Suite 2200
   Detroit, Michigan 48226

7. Requests for payment for extra work items will be accepted only when covered by Change Order (AIA Document G701) to the Agreement and only when submitted in the appropriate format and after approval by the Owner.

8. Payment will not be made for materials stored off of the Project site.

9. Should the Contractor fail to comply with steps (1) through (8), the monthly estimate presented to the Construction Manager or Owner may not be honored.

10. No payments shall become due under this Agreement until:

    a. This Agreement is executed by the Contractor and the Owner.
    b. Such items as Bonds and Certificates of Insurance are furnished satisfactory to the Owner.
    c. Such time as the Owner receives from its Funding Sources funds for the work performed by Contractor, and properly invoiced from Contractor to the Owner.
    d. If the Contractor fails to or is deemed by the Owner to be in willful default of the requirements to comply with the goals set by the City of Detroit's Executive Orders No. 4 and 22.

11. The Owner will pay Contractor the value of work approved by the Owner, less the applicable retainage, for Contractor's approved invoices within thirty (30) days of the receipt, by the Owner.

ATTACHMENT B

RELATED DOCUMENTS

The Contractor shall be responsible to secure copies of the following documents necessary for the proper administration of the Agreement:

AIA Document G701
AIA Document G702
AIA Document G703
Instruction Sheets for AIA G702/G703
Contractor's Sworn Statement
Partial Unconditional Waiver of Lien
Final Unconditional Waiver of Lien

ATTACHMENT C

Maintenance of Records:
Records shall be maintained in accordance with Part 196, Clean Michigan Initiative Implementation, of NREPA.

(a) The Contractor shall maintain full and complete books, ledgers, journals, accounts, documents and records, and any other supporting data (herein collectively called "Records") in auditable form in accordance with generally accepted accounting principles wherein are kept all entries reflecting all of its operations pursuant to this Agreement. The Records shall document all services performed under this Agreement including, but not limited to, all Activities performed pursuant to this Agreement and all financial records associated therewith.

(b) The Contractor shall make available, and shall require any subcontractor to make available, at all reasonable times all Records and project sites directly pertinent to this Agreement for monitoring, audits, inspections and examinations, the making of excerpts and transcriptions, and for the evaluation of costs and pricing of services under this Agreement by the Owner, the City, the Comptroller of the United States, and any other City, State, or Federal agencies.

(c) The Contractor upon request by the Owner, shall provide to the Owner all data and information as necessary to allow the Owner to meet its reporting obligations to the City, including, but not limited to, data and information needed by the Owner for close-out submissions, if any, to the City.

(d) The Contractor shall keep records in sufficient detail and shall report in sufficient detail to the Owner, and shall require its subcontractors to keep records and to report in sufficient detail to the Contractor, so as to enable (1) the City to meet all of its reporting and monitoring obligations, and (2) the Owner to meet any of its reporting and monitoring obligations under the Agreement between the governing jurisdiction for Infrastructure Improvements.

(e) In the event of any dispute between the parties hereto as to the reporting requirements required hereunder or to be required of the subcontractors, the reasonable determination of the Owner shall govern.

The Contractor shall comply with the mandatory standards and policies relating to energy efficiency which are contained in the State Energy Conservation Plan issued in compliance with the Energy Policy and Conservation Act (P.L. 94-163).

The Contractor shall comply with all requirements of the rule entitled "New Restrictions on Lobbying" found at 24 CFR 87 (the "Lobbying Rule"). The Lobbying Rule requires, but is not limited to, requiring that the Contractor and any subcontractor not use any Federal appropriated funds to pay for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, including subawards at all tiers, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement, including subawards at all tiers. If compensation to be paid to the Contractor, as provided in Section 4.01, exceeds $100,000, the Contractor shall submit to the Owner the Certification Regarding Lobbying, Attachment C-1 herein (the "Certification") and, if applicable, Disclosure of Lobbying Activities, Attachment C-2 herein (the "Disclosure"). The Contractor shall require any subcontractors to comply with all requirements of the Lobbying Rule applicable to subcontractors and shall include the language of the Certification, and require that the language of the Certification be included, in the award documents for any subcontracts.

(a) The Contractor shall, directly or indirectly, employ, award contracts to, or otherwise engage the services of, or fund any contractor, subcontractor, or principal, as defined in the Federal regulations at 24 CFR 24.105, during any period of debarment, suspension, or placement in ineligibility status under the provisions of 24 CFR, part 24, or during any period during which the Contractor or subcontractor or principal is proposed for debarment under 48 CFR, part 9, subpart 9.4. If during the term of this Agreement, the Contractor is placed on the HUD debarred list, or is placed in ineligibility status, or is suspended, pursuant to the regulations at 24 CFR, part 24, the professional subcontractor shall immediately notify the Owner.

(b) The Contractor shall submit to the Owner a certification regarding debarment, suspension, ineligibility, and voluntary exclusion utilizing the form attached hereto as Attachment C-3, and in conformance to the instructions thereon.

(c) The Contractor shall require all parties who occupy a position with the Contractor defined in 24 CFR 24.105 as a principal to submit such certification to the Contractor, who in turn, shall submit such certification to the Owner. The Contractor shall require all parties who stand in a lower tier relationship to the Contractor to submit such certification to the Contractor, and the Contractor shall submit such certification to the Owner, if such lower tier relationship is a covered transaction as defined in 24 CFR 24.110.

C-1

CERTIFICATION RE LOBBYING

C-2

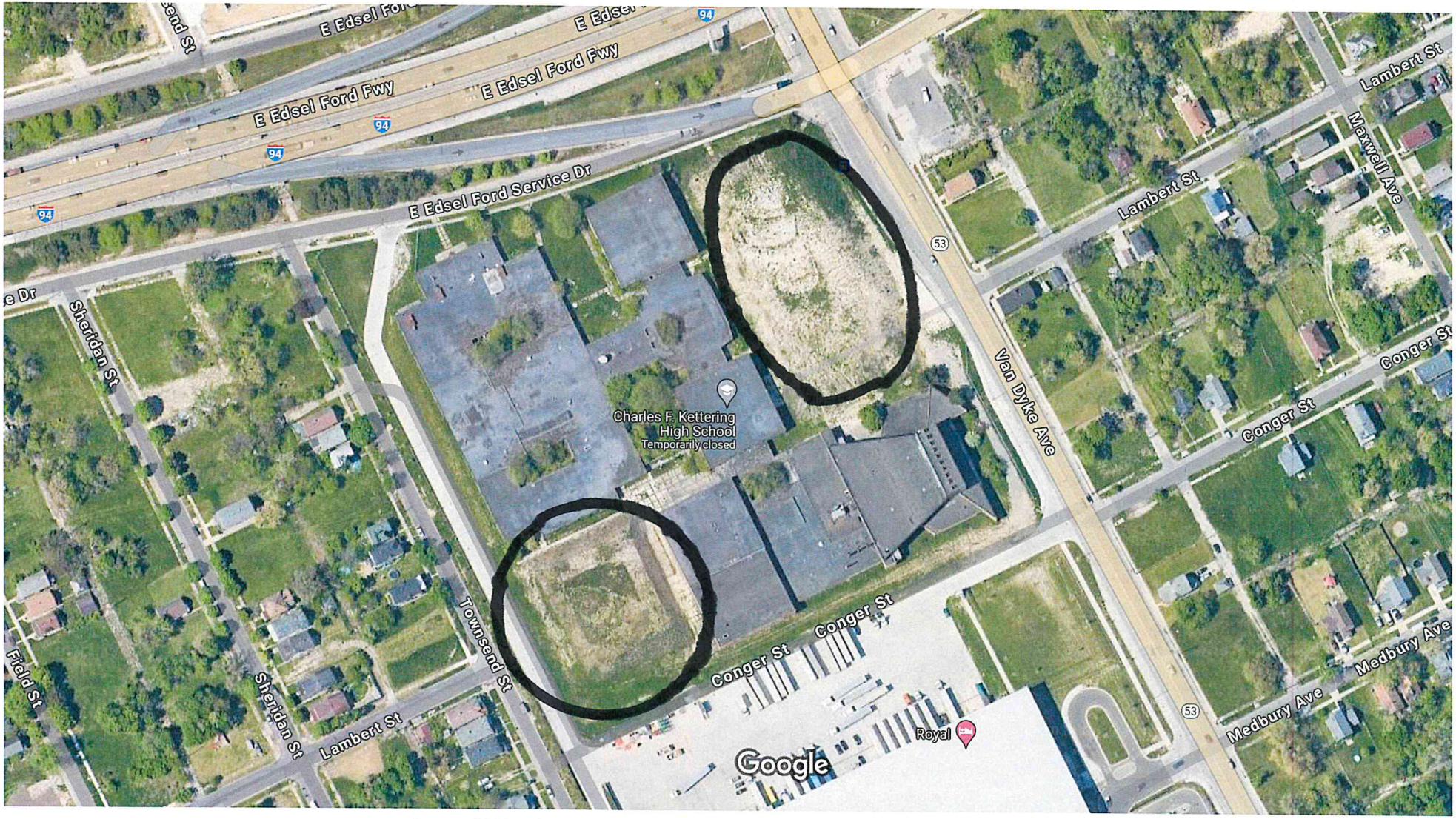
DISCLOSURE

C-3

CERTIFICATION RE ELIGIBILITY

EXHIBIT A – SITE MAP

Google Maps



Imagery ©2024 Airbus, CNES / Airbus, Maxar Technologies, Sanborn, U.S. Geological Survey, USDA/FPAC/GEO, Map data ©2024 100 ft

https://www.google.com/maps/@42.3844902,-83.0203792,349m/data=!3m1!1e3?entry=ttu

EXHIBIT B – SOIL SAMPLING REPORT

DLZ
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SURVEYING • CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

TRANSMITTAL LETTER

DATE: February 23, 2024

TO: Mr. Cleveland Dailey, Project Manager
Detroit Economic Growth Corp
500 Griswold St., Ste 2200
Detroit, MI 48227

RE: Former Kettering High School Stockpile Reuse Suitability Sampling and Analysis

PROJECT #

WE ARE TRANSMITTING HEREWITH THE FOLLOWING MATERIAL

Date	Copies	Description
2/23/2024	1	Stockpile Reuse Suitability Sampling and Analysis for the Former Kettering High School

REMARKS

Please find attached the Stockpile Reuse Suitability Sampling and Analysis for the Former Kettering High School. If you have any questions, you may contact Mr. Dor'Mario Brown at 248.727.7083. Thank you.

DLZ REPRESENTATIVE

Dor'Mario Brown
Division Manager

DLZ
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SURVEYING • CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

MEMORANDUM

DATE: February 23, 2024

TO: Mr. Cleveland Dailey
Project Manager
Detroit Economic Growth Corp.
500 Griswold Street, Ste 2200, Detroit, MI 48226

CC: Mr. Orza Robertson
Senior Project Manager
Detroit Economic Growth Corp.
500 Griswold Street, Ste 2200, Detroit, MI 48226

FROM: Dor'Mario Brown

SUBJECT: DRAFT SUMMARY OF FINDINGS
STOCKPILE REUSE SUITABILITY SAMPLING AND ANALYSIS
FORMER KETTERING HIGH SCHOOL
6101 VAN DYKE AVENUE
DETROIT, MICHIGAN

DLZ Michigan, Inc. (DLZ) has prepared this memorandum to present the results of the limited stockpile soil sampling and analysis recently conducted at the former Kettering High School (Kettering H.S.) Site – located at 6101 Van Dyke Avenue in Detroit, Michigan, hereinafter referred to as the "Subject Property." The limited stockpile soil sampling and analysis was completed by DLZ for the Detroit Brownfield Redevelopment Authority (DBRA) to characterize soil within the two large stockpiles present in the northeast and southwest portions of the Subject Property. Soil stockpiles are being evaluated by the DBRA to determine onsite and offsite reuse options and/or to facilitate their removal for site redevelopment.

To evaluate the stockpiled soil for reuse, DLZ compared the environmental/chemical and geotechnical/physical properties of the soil relative to the requirements of Exhibit A, Scope of Services, revised 3/18/2019 by the Detroit Building Authority (DBA) and the Detroit Land Bank Authority (DLBA) and included as **Attachment A**. DLZ also performed a drone survey to calculate volumes of soil present in the two stockpiles as well as calculated the approximate volume of soil required for backfilling tunnels, basements, etc.

SITE BACKGROUND INFORMATION

The site is located at 6101 Van Dyke Avenue within the City of Detroit. A site map is included as **Figure 1**. Two stockpiles of soil are located in the northeast and southwest portions of the Subject Property, respectively. The

larger soil pile ("Northeast") contains approximately 52,769 cubic yards of soil and the smaller soil pile ("Southwest") contains approximately 11,347 cubic yards of soil. The Northeast soil pile is approximately 16 feet tall, and the Southwest pile is approximately 12 feet tall. The origin of the soil in these two piles is unknown.

STOCKPILE SOIL SAMPLING

DLZ mobilized to the site on January 23 and 25, 2023 to collect soil samples from the Northeast and the Southwest soil stockpiles. A total of twelve soil borings (NE-SB-01 through NE-SB-12) were advanced into the Northeast stockpile and seven soil borings (SW-SB-01 through SW-SB-07) were advanced into the Southwest stockpile. Soil boring locations are shown on **Figure 2.** The soil borings were advanced using Geoprobe direct push methods to a maximum depth of fifteen feet below the pile surface (bps) in the Northeast stockpile and twelve feet bps in the Southwest stockpile. Soil samples were examined by a Geologist or Environmental Scientist and screened with a photoionization detector (PID) for volatile organic vapors. Of the 12 borings advanced at the Northeast stockpile, 8 discrete (NE-SB-01, -03, -04, -05, -07, -09, -10, and -12) and 4 composite (NE-SB-02, -06, -08, and -11) soil samples were collected, and of the 7 borings advanced at the Southwest stockpile, 7 discrete (SW-SB-01 through -07) and 3 composite (SW-SB-01, -03, and -06) soil samples were collected. The composite soil samples were comprised of 1-foot intervals throughout the boring combined and placed into a Ziplock bag and homogenized prior to being placed into sample containers. Discrete soil samples collected for volatile organic compounds (VOCs) were collected following the United States Environmental Protection Agency (USEPA) Publication SW-846 Method 5035, final version (March 1998), Testing Methods for Evaluating Solid Waste. All soils were containerized into the appropriate supplied laboratory containers.

The eight discrete soil samples from the Northeast stockpile and seven discrete soil samples from the Southwest stockpile were submitted to Fibertec under standard chain of custody (COC) for analysis of Total clay content (ASTM D7928), VOCs (EPA Method 8260), semi-volatile organic compounds (SVOCs [EPA Method 8270]), poly-chlorinated biphenyls (PCBs [EPA Method 8082]), Michigan 10 Metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc [EPA Methods 6020 and 7470/7471]), chloride (EPA Method 9056), and herbicides/pesticides (EPA Method 8081/8082). The discrete samples were also submitted for geotechnical analysis to determine total clay content (ASTM D7928). Additionally, the four composite soil samples from the Northeast stockpile and three composite soil samples from the Southwest stockpile were submitted to Fibertec for analysis of toxicity characteristic leaching procedure testing (TCLP) VOCs (EPA Methods 1511 and 8260), TCLP SVOCs (EPA Methods 1311 and 8270), TCLP RCRA 8 metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver [EPA Method6020 and 7040/7041]), and PCBs (EPA Method 8082).

LABORATORY RESULTS

The results of the submitted soil samples were compared to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Part 201 Generic Residential Cleanup Criteria (GRCC) to determine if the material is

suitable for use as backfill within the City of Detroit. **Table 1** and **Table 2** present the soil analytical results that have been compared to applicable Part 201 GRCC.

- Arsenic was detected in each discrete soil sample from both stockpiles. Of the 15 discrete samples, 14 samples (all except SW-SB-01) contained arsenic at concentrations exceeding either the Residential Drinking Water Protection (DWP) Criteria, the Groundwater Surface Water Interface Protection (GSIP), Criteria, and/or the Residential Direct Contact (DC) Criteria.
- Chromium was detected above the GSIP Criteria in discrete soil samples SW-SB-03, SW-SB-06, NE-SB-01, and NE-SB-03.
- One or both SVOCs phenanthrene and pyrene were detected in 4 discrete soil samples (SW-SB-06, NE-SB-05, NE-SB-07, and NE-SB-10) at concentrations exceeding the Residential Soil Volatilization to Indoor Air Pathway Screening Levels (VIAP). SVOC concentrations also exceeded the GSIP Criteria at sample location NE-SB-07, and the GSIP and DC Criteria at sample location SW-SB-06. All other SVOC concentrations were either non-detect or detected below EGLE screening criteria.
- The VOC tetrachloroethylene was detected at sample location SW-SB-06 at a concentration exceeding the VIAP Screening Level. All other VOCs were either non-detect or detected below EGLE screening criteria.
- Low levels of the chlorinated pesticide chlordane were detected in 5 discrete soil samples at concentrations which did not exceed EGLE screening criteria.
- No PCBs or chloride were detected in any samples.

The results of the composite soil samples for TCLP analysis indicated that the soil can be classified as non-hazardous waste for off-site disposal purposes. The Fibertec laboratory reports are presented in **Attachment B**.

BACKFILL USABILITY DISCUSSION

The soil samples collected during this investigation were taken at varying depths from below the pile surface as a means of creating a representative profile of the two stockpiles. Sample depth intervals ranged from 1-2' bps to 13-14' bps at the Northeast stockpile, and from 1-2' bps to 9-10' bps at the Southwest stockpile. Based on the laboratory results, all but one soil sample collected (SW-SB-01) indicated exceedances of arsenic above both the DWP and the GSIP Criteria, with eight of those samples also exceeding the DC Criteria. Chromium was detected in four samples at concentrations which exceeded the GSIP Criteria. SVOCs including phenanthrene and benzo(a)pyrene were detected in four samples at concentrations which exceeded either the GSIP Criteria, DC Criteria, and/or VIAP Screening Levels. The VOC tetrachloroethylene was detected in one sample in exceedance of VIAP Screening Levels. In addition to the environmental analyses, the samples were also submitted for geotechnical analysis to determine the total clay content of the two stockpiles. Laboratory results concluded the soil to be only 5-10% clay.

According to Guide Sheet 10 of the MDEQ Part 201 Training Manual (July 2006), *background* is defined as the concentration or level of a hazardous substance which exists in the environment at – or regionally proximate to – a Facility that is not attributable to any release at or regionally proximate to the Facility.

Guide Sheet 10 allows for the calculation of alternative background concentrations using the methods described in the MDEQ's Sampling Strategies and Statistics Training Materials (S^3TM). Of the methods described in the S^3TM, DLZ considered comparison against the Huron-Erie Glacial Lobe Concentrations (HEGL), Michigan Background Soil Survey (2005, updated 2015; MBSS) as the MBSS is meant to provide a resource for information regarding the concentrations of naturally occurring metals that can be expected in various soil types and geographic areas of Michigan. However, since the soil at the two stockpiles is only 5-10% clay, HEGL values are not relevant for comparison as background.

The soil at the site based on the visual observations and the soil logged during the drilling of the soil borings, is a mixture of brown and gray silty to clayey sands, sand/gravel mixtures, and some areas of yellow clay. No blue or gray clay was observed in the soil cuttings from either stockpile. Large pieces of brick and concrete were observed atop the stockpiles, primarily the Northeast stockpile. No soil staining or elevated PID results were noted during soil sampling.

Based on the visual observations of the soil piles there appears to be large pieces of concrete and/or whole bricks that may need to be removed prior to placement as fill.

VOLUME SURVEY

DLZ performed an aerial drone survey across each stockpile, and calculated volumes of soil present in the two stockpiles, presented in **Attachment C**. The larger Northeast soil stockpile was found to contain approximately 52,769 cubic yards of soil and the smaller Southwest soil stockpile was found to contain approximately 11,347 cubic yards of soil. DLZ also calculated the approximate volume of subgrade spaces to be backfilled during site redevelopment. The total volume of subgrade spaces including the former pool, locker rooms, fan rooms, tunnels, etc. was calculated to be approximately 22,706 cubic yards.

CONCLUSIONS

Based on DLZs sampling and review of the analytical results, the soil located in the two stockpiles at 6101 Van Dyke Avenue in Detroit, Michigan does not meet the DBA's Guidance for Backfill Material Evaluation and Testing from Category 3: Commercial Sites. DBA's rejection is based upon the following:

- Rejection includes the entirety of both Northeast and Southwest stockpiles, which currently consist of approximately 52,679 cubic yards and 11,347 cubic yards, respectively;
- Rejection is due to concentrations of various constituents of concern detected above Michigan Part 201 Generic Residential Cleanup Criteria (GRCC);
- Rejection considered both the environmental and geotechnical characteristics of the material. Although the material was deemed satisfactory for geotechnical analyses, the material in both piles cannot be reused due to COCs present within the soil. Furthermore, DBA should consider oversight during any loading and/or transfer activities; and,

- Rejection considers that information provided to DLZ by others is complete, true and accurate.

On behalf of the Detroit Building Authority, DLZ has completed its evaluation of approximately 64,026 cubic yards of stockpiled backfill materials located at 6101 Van Dyke in Detroit, Michigan. Based on the analytical results, soils comprising both the Northeast and Southwest stockpiles are contaminated above EGLE Part 201 Generic Residential Cleanup Criteria and are not suitable for off-site beneficial re-use.

The volume of subgrade spaces at the Subject Property to be backfilled totals approximately 22,706 cubic yards. It is DLZs understanding that in the City of Detroit, EGLE will allow environmentally impacted soil to be relocated on property that is similarly contaminated and identified as a "Facility" in accordance with Part 201 of Michigan's PA 451, as amended. Therefore, if the Kettering property is known to have environmental contamination qualifying the site as a "Facility" the soil stockpiled on the Kettering site may be able to be relocated on the same property. Due to the potential complexity of this situation, DLZ would recommend a meeting or correspondence with DEGC and BSEED to further evaluate options for on-site disposal.

DLZ understands that the Detroit Building Authority is depending upon the overall completeness, accuracy and conclusions in this report and hereby provides reliance on the contents and conclusions presented in the report. No information has been deleted, omitted, or changed that would otherwise have caused the Detroit Building Authority to reach a different conclusion.

If you have any questions or comments, feel free to contact the undersigned at (248) 996-2447.

Sincerely,

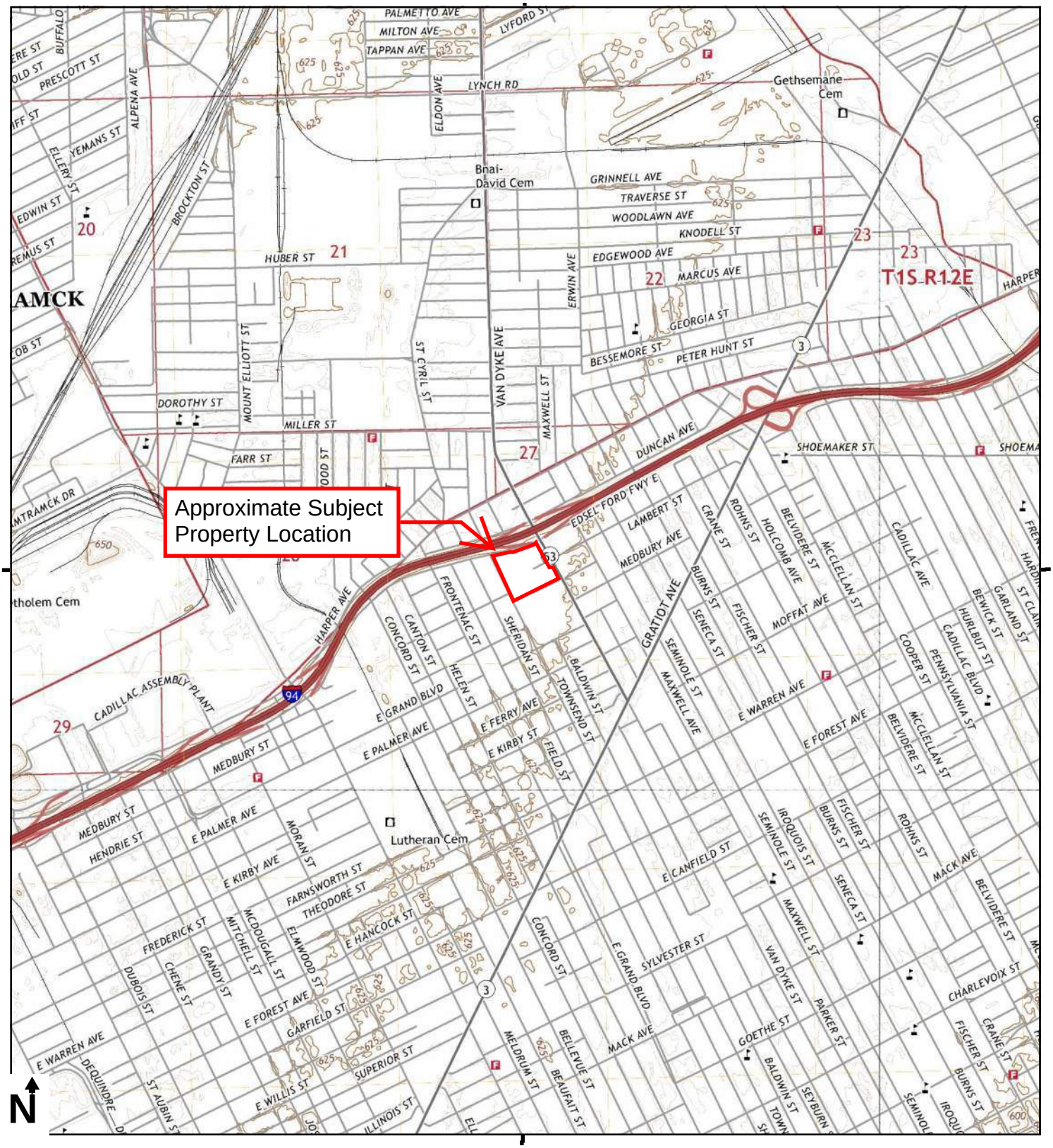
DLZ MICHIGAN, INC.

Dor'Mario Brown
Division Manager

Daniel McNeely
Environmental Scientist

Enclosures

FIGURE(S)



DLZ	Property Location Map 6101 Van Dyke Avenue Detroit, Michigan	Project #: 2242-7533-07 June 2023 **FIG 1**

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TABLE(S)

TABLE 1 - NORTHEAST STOCKPILE ANALYTICAL RESULTS
KETTERING HIGH SCHOOL
6101 VAN DYKE AVE, DETROIT MI

Parameters* *(Refer to detailed laboratory report for method reference data)*	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Residential Soil Volatilization to Indoor Air Inhalation Criteria	Residential Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Residential Finite VSIC for 5 Meter Source Thickness	Residential Finite VSIC for 2 Meter Source Thickness	Residential Particulate Soil Inhalation Criteria	Residential Direct Contact Criteria	Residential Soil Volatilization to Indoor Air Pathway (VIAP) Screening Levels	Sample Location	NE-SB-01	NE-SB-03	NE-SB-04	NE-SB-05	NE-SB-07	NE-SB-09	NE-SB-10	NE-SB-12
												Collection Date	01/23/24	01/25/24	01/25/24	01/25/24	01/25/24	01/25/24	01/25/24	01/25/24
												Depth	(7-8')	(13-14')	(9-10')	(6-7')	(3-4')	(1-2')	(11-12')	(8-9')
Metals																				
Arsenic	7440-38-2	5,800	4,600	4,600	NLV	NLV	NLV	NLV	7.2E+5	7,600	NA		**10,000**	**9,000**	**8,300**	**8,500**	**7,500**	**8,200**	**5,900**	**8,000**
Barium (B)	7440-39-3	75,000	1.3E+6	(G)	NLV	NLV	NLV	NLV	3.3E+8	3.7E+7	NA		**76,000**	**86,000**	**66,000**	**65,000**	**120,000**	**69,000**	**53,000**	**56,000**
Cadmium (B)	7440-43-9	1,200	6,000	(G,X)	NLV	NLV	NLV	NLV	1.7E+6	5.5E+5	NA		**390**	**140**	**220**	**260**	**560**	**260**	**630**	**150**
Chromium, Total	7440-47-3	18,000 (total)	30,000	3,300	NLV	NLV	NLV	NLV	2.6E+5	2.5E+6	NA		**20,000**	**26,000**	**16,000**	**17,000**	**13,000**	**17,000**	**16,000**	**16,000**
Copper (B)	7440-50-8	32,000	5.8E+6	(G)	NLV	NLV	NLV	NLV	1.3E+8	2.0E+7	NA		**21,000**	**15,000**	**15,000**	**17,000**	**24,000**	**16,000**	**11,000**	**15,000**
Lead (B)	7439-92-1	21,000	7.0E+5	(G,X)	NLV	NLV	NLV	NLV	1.0E+8	4.0E+5	NA		**180,000**	**16,000**	**37,000**	**34,000**	**170,000**	**30,000**	**39,000**	**13,000**
Mercury, Total	7439-97-6	130	1,700	50 (M); 1.2	48,000	52,000	52,000	52,000	2.0E+7	1.6E+5	22 (M)		<50	<50	<50	<50	**95**	<50	<50	<50
Selenium (B)	7782-49-2	410	4,000	400	NLV	NLV	NLV	NLV	1.3E+8	2.6E+6	NA		**350**	**210**	**280**	**300**	**360**	**290**	**240**	**240**
Silver (B)	7440-22-4	1,000	4,500	100 (M); 27	NLV	NLV	NLV	NLV	6.7E+6	2.5E+6	NA		<100	<100	<100	<100	<100	<100	<100	<100
Zinc (B)	7440-66-6	47,000	2.4E+6	(G)	NLV	NLV	NLV	NLV	ID	1.7E+8	NA		**79,000**	**79,000**	**62,000**	**69,000**	**210,000**	**67,000**	**67,000**	**45,000**
Nonspecific Grouping																				
Chloride	16887-00-6	NA	5.0E+6	(X)	NLV	NLV	NLV	NLV	ID	5.0E+5 (F)	NA		<100,000	<100,000	<100,000	<100,000	<100,000	<100,000	<100,000	<100,000
PCBs																				
PCB, Aroclor 1016	12674-11-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1221	11104-28-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1232	11141-16-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1242	53469-21-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1248	12672-29-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1254	11097-69-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1260	11096-82-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100	<100
Polychlorinated biphenyls (PCBs) (J,T)	1336-36-3	NA	NLL	NLL	3.0E+6	2.4E+5	7.9E+6	7.9E+6	5.2E+6	(T)	ID		<100	<100	<100	<100	<100	<100	<100	<100
Pesticides																				
Dalapon	75-99-0	NA	4,000	NA	NLV	NLV	NLV	NLV	ID	1.9E+7	NA		<100	<100	<100	<100	<100	<100	<100	<100
Dicamba	1918-00-9	NA	4,400	NA	NA	NLV	NLV	NLV	ID	3.4E+6	NA		<100	<100	<100	<100	<100	<100	<100	<100
2,4-Dichlorophenoxyacetic acid	94-75-7	NA	1,400	4,400	NLV	NLV	NLV	NLV	6.7E+9	2.5E+6	NA		<200	<200	<200	<200	<200	<200	<200	<200
Dinoseb	88-85-7	NA	300	200 (M); 43	NLV	NLV	NLV	NLV	2.7E+8	66,000 (DD)	NA		<100	<100	<100	<100	<100	<100	<100	<100
Silvex (2,4,5-TP)	93-72-1	NA	3,600	2,200	NLV	NLV	NLV	NLV	ID	1.7E+6	NA		<200	<200	<200	<200	<200	<200	<200	<200
Pesticides, Chlorinated																				
Aldrin	309-00-2	NA	NLL	NLL	1.3E+6	58,000	58,000	58,000	6.4E+5	1,000	520		<20	<20	<20	<20	<20	<20	<20	<20
Chlordane (J)	57-74-9	NA	NLL	NLL	1.1E+7	1.2E+6	1.2E+6	1.2E+6	3.1E+7	31,000	13,000 (EE)		**43**	<25	<25	**120**	**42**	<25	<25	<25
4-4'-DDD	72-54-8	NA	NLL	NLL	NLV	NLV	NLV	NLV	4.4E+7	95,000	NA		<20	<20	<20	<20	<20	<20	<20	<20
4-4'-DDE	72-55-9	NA	NLL	NLL	NLV	NLV	NLV	NLV	3.2E+7	45,000	39,000		<20	<20	<20	<20	<20	<20	<20	<20
4-4'-DDT	50-29-3	NA	NLL	NLL	NLV	NLV	NLV	NLV	3.2E+7	57,000	NA		<20	<20	<20	<20	<20	<20	<20	<20
Dieldrin	60-57-1	NA	NLL	NLL	1.4E+5	19,000	19,000	19,000	6.8E+5	1,100	770		<20	<20	<20	<20	<20	<20	<20	<20
Endosulfan I	959-98-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	TX		<20	<20	<20	<20	<20	<20	<20	<20
Endosulfan II	33213-65-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<20	<20	<20	<20	<20	<20	<20	<20
Endrin	72-20-8	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	65,000	NA		<20	<20	<20	<20	<20	<20	<20	<20
Heptachlor	76-44-8	NA	NLL	NLL	3.5E+5	62,000	62,000	62,000	2.4E+6	5,600	3,600		<20	<20	<20	<20	<20	<20	<20	<20
Heptachlor epoxide	1024-57-3	NA	NLL	NLL	NLV	NLV	NLV	NLV	1.2E+6	3,100	ID		<20	<20	<20	<20	<20	<20	<20	<20
alpha-Hexachlorocyclohexane	319-84-6	NA	18	ID	30,000	12,000	22,000	25,000	1.7E+6	2,600	NA		<17	<17	<17	<17	<17	<16	<17	<16
beta-Hexachlorocyclohexane	319-85-7	NA	37	ID	NLV	NLV	NLV	NLV	5.9E+6	5,400	NA		<20	<20	<20	<20	<20	<20	<20	<20
Lindane	58-89-9	NA	20 (M); 7.0	20 (M); 1.1	ID	ID	ID	ID	ID	8,300	TX		<20	<20	<20	<20	<20	<20	<20	<20
Methoxychlor	72-43-5	NA	16,000	NA	ID	ID	ID	ID	ID	1.9E+6	NA		<50	<50	<50	<50	<50	<50	<50	<50
Semivolatiles, BNAs																				
Aniline	62-53-3	NA	1,100	330 (M); 80	NLV	NLV	NLV	NLV	6.7E+7	3.3E+5	NA		<330	<330	<330	<330	<330	<330	<330	<330
Azobenzene	103-33-3	NA	4,200	ID	6.1E+6	6.3E+5	6.3E+5	6.3E+5	1.0E+8	1.4E+5	ID		<330	<330	<330	<330	<330	<330	<330	<330
Benzyl alcohol	100-51-6	NA	2.0E+5	NA	NLV	NLV	NLV	NLV	3.3E+11	3.2E+8 (C)	NA		<3,300	<3,300	<3,300	<3,300	<3,300	<3,300	<3,300	<3,300
4-Bromophenyl Phenylether	101-55-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330	<330
Butyl benzyl phthalate	85-68-7	NA	2.2E+6 (C)	1.2E+5 (X)	NLV	NLV	NLV	NLV	4.7E+10	3.6E+7 (C)	NA		<330	<330	<330	<330	<330	<330	<330	<330
Carbazole	86-74-8	NA	9,400	1,100	NLV	NLV	NLV	NLV	6.2E+7	5.3E+5	NA		<330	<330	<330	<330	**460**	<330	<330	<330
4-Chloro-3-methylphenol	59-50-7	NA	5,800	280	NLV	NLV	NLV	NLV	ID	4.5E+6	NA		<280	<280	<280	<280	<280	<280	<280	<280
Bis(2-chloroethoxy)methane	111-91-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330	<330
bis(2-Chloroethyl)ether (I)	111-44-4	NA	100	100 (M); 20	8,300	3,800	3,800	3,800	9.4E+6	13,000	3.4 (M)		<100	<100	<100	<100	<100	<100	<100	<100
Bis(2-chloroisopropyl) Ether	108-60-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330	<330
beta-Chloronaphthalene	91-58-7	NA	6.2E+5	NA	ID	ID	ID	ID	ID	5.6E+7	NA		<330	<330	<330	<330	<330	<330	<330	<330
2-Chlorophenol	95-57-8	NA	900	360	4.3E+5	9.6E+5	9.6E+5	9.6E+5	1.2E+9	1.4E+6	12,000 (DD)		<330	<330	<330	<330	<330	<330	<330	<330
4-Chlorophenyl Phenylether	7005-72-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330	<330
Dibenzofuran	132-64-9	NA	ID	1,700	2.0E+6	1.3E+5	1.3E+5	1.3E+5	6.7E+6	ID	7.10E+06		<330	<330	<330	<330	<330	<330	<330	<330
2,4-Dichlorophenol	120-83-2	NA	1,500	330 (M); 220	NLV	NLV	NLV	NLV	5.1E+9	6.6E+5 (DD)	NA		<330	<330	<330	<330	<330	<330	<330	<330
Diethyl phthalate	84-66-2	NA	1.1E+5	2,200	NLV	NLV	NLV	NLV	3.3E+9	1.7E+8 (C)	NA		<330	<330	<330	<330	<330	<330	<330	<330
2,4-Dimethylphenol	105-67-9	NA	7,400	7,600	NLV	NLV	NLV	NLV	4.7E+9	1.1E+7	NA		<330	<330	<330	<330	<330	<330	<330	<330
Dimethyl phthalate	131-11-3	NA	1.5E+6 (C)	NA	NLV	NLV	NLV	NLV	3.3E+9	1.0E+9 (C,D)	NA		<330	<330	<330	<330	<330	<330	<330	<330
Di-n-butyl phthalate	84-74-2	NA	9.6E+5 (C)	11,000	NLV	NLV	NLV	NLV	3.3E+9	2.7E+7 (C)	NA		<330	<330	<330	<330	<330	<330	<330	<330
2,4-Dinitrophenol	51-28-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<830	<850	<860	<840	<850	<830	<830	<830
2,4-Dinitrotoluene	121-14-2	NA	430	NA	NLV	NLV	NLV	NLV	1.6E+7	48,000	NA		<330	<330	<330	<330	<330	<330	<330	<330
2,6-Dinitrotoluene	606-20-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330	<330
Di-n-octyl phthalate	117-84-0	NA	1.0E+8	ID	NLV	NLV	NLV	NLV	3.1E+10	6.9E+6	ID		<330	<330	<330	<330	<330	<330	<330	<330
bis(2-Ethylhexyl)phthalate	117-81-7	NA	NLL	NLL	NLV	NLV	NLV	NLV	7.0E+8	2.8E+6	NA		<330	<330	<330	<330	<330	<330	<330	<330
Hexachlorobenzene (C-66)	118-74-1	NA	1,800	350	41,000	17,000	17,000	17,000	6.8E+6	8,900	6.7 (M)		<330	<330	<330	<330	<330	<330	<330	<330
Hexachlorocyclopentadiene (C-56)	77-47-4	NA	3.2E+5	ID	30,000	50,000	50,000	50,000	1.3E+7	2.3E+6 (C)	0.32 (M)		<330	<330	<330	<330	<330	<330	<330	<330
Hexachloroethane	67-72-1	NA	430	1,800 (X)	40,000	5.5E+5	9.3E+5	9.3E+5	2.3E+8	2.3E+5	3.2 (M)		<330	<330	<330	<330	<330	<330	<330	<330
Isophorone	78-59-1	NA	15,000	26,000 (X)	NLV	NLV	NLV	NLV	1.2E+10	4.8E+6 (C)	NA		<330	<330	<330	<330	<330	<330	<330	<330
2-Methyl-4,6-dinitrophenol	534-52-1	NA	830 (M); 400	NA	NLV	NLV	NLV	NLV	1.3E+8	79,000	NA		<830	<830	<830	<830	<830	<830	<830	<830
Methylphenol, 2-	95-48-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330	<330
Methylphenol, 3- and 4-	MEPH1314	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<660	<660	<660	<660	<660	<660	<660	<660
2-Nitroaniline	88-74-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330	<330
3-Nitroaniline	99-09-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<830	<830	<830	<830	<830	<830	<830	<830
4-Nitroaniline	100-01-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<830	<830	<830	<830	<830	<830	<830	<830
Nitrobenzene (I)	98-95-3	NA	330 (M); 68	3,600 (X)	91,000	54,000	54,000	54,000	4.7E+7	1.0E+5	170 (M)		<330	<330	<330	<330	<330	<330	<330	<330
2-Nitrophenol	88-75-5	NA	400	ID	NLV	NLV	NLV	NLV	ID	6.3E+5	ID		<330	<330	<330	<330	<330	<330	<330	<330
4-Nitrophenol	100-02-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<830	<830	<830	<830	<850	<830	<830	<830
N-Nitrosodimethylamine	62-75-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330	<330
n-Nitroso-di-n-propylamine	621-64-7	NA	330 (M); 100	NA	NLV	NLV	NLV	NLV	1.6E+6	1,200	NA		<330	<330	<330	<330	<330	<330	<330	<330
N-Nitrosodiphenylamine	86-30-6	NA	5,400	NA	NLV	NLV	NLV	NLV	2.2E+9	1.7E+6	NA		<330	<330	<330	<330	<330	<330	<330	<330
Pentachlorophenol	87-86-5	NA	22	(G,X)	NLV	NLV	NLV	NLV	1.0E+8	90,000	NA		<830	<800	<800	<800	<850	<800	<800	<800
Phenol	108-95-2	NA	88,000	9,000	NLV	NLV	NLV	NLV	4.0E+10	4.0E+7 (C,DD)	NA		<330	<330	<330	<330	<330	<330	<330	<330
Pyridine (I)	110-86-1	NA	400	NA	1,100	8,200	40,000	97,000	2.3E+8	2.3E+5 (C)	540		<330	<330	<330	<330	<330	<330	<330	<330
2,4,5-Trichlorophenol	95-95-4	NA	39,000	NA	NLV	NLV	NLV	NLV	2.3E+10	2.3E+7	NA		<330	<330	<330	<330	<330	<330	<330	<330
2,4,6-Trichlorophenol	88-06-2	NA	2,400	330 (M); 100	NLV	NLV	NLV	NLV	1.0E+9	7.1E+5	NA		<330	<330	<330	<330	<330	<330	<330	<330
Semivolatiles, PNAs																				
Acenaphthene	83-32-9	NA	3.0E+5	8,700	1.9E+8	8.1E+7	8.1E+7	8.1E+7	1.4E+10	4.1E+7	2.0E+5		<330	<330	<330	<330	<330	<330	<330	<330
Acenaphthylene	208-96-8	NA	5,900	ID	1.6E+6	2.2E+6	2.2E+6	2.2E+6	2.3E+9	1.6E+6	ID		<330	<330	<330	<330	<330	<330	<330	<330
Anthracene	120-12-7	NA	41,000	ID	1.0E+9 (D)	1.4E+9	1.4E+9	1.4E+9	6.7E+10	2.3E+8	1.30E+07		<330	<330	<330	<330	**830**	<330	<330	<330
Benzo(a)anthracene (Q)	56-55-3	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	20,000	1.6E+5 (MM)		<330	<330	<330	<330	**2,000**	<330	**340**	<330
Benzo(a)pyrene (Q)	50-32-8	NA	NLL	NLL	NLV	NLV	NLV	NLV	1.5E+6	2,000	NA		<330	<330	<330	<330	**1,800**	<330	<330	<330
Benzo(b)fluoranthene (Q)	205-99-2	NA	NLL	NLL	ID	ID	ID	ID	ID	20,000	NA		<330	<330	<330	<330	**3,100**	<330	**510**	<330
Benzo(g,h,i)perylene	191-24-2	NA	NLL	NLL	NLV	NLV	NLV	NLV	8.0E+8	2.5E+6	NA		<330	<330	<330	<330	**550**	<330	<330	<330
Benzo(k)fluoranthene (Q)	207-08-9	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	2.0E+5	NA		<330	<330	<330	<330	**1,200**	<330	<330	<330
Chrysene (Q)	218-01-9	NA	NLL	NLL	ID	ID	ID	ID	ID	2.0E+6	NA		<330	<330	<330	<330	**2,200**	<330	**410**	<330
Dibenzo(a,h)anthracene (Q)	53-70-3	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	2,000	NA		<330	<330	<330	<330	<330	<330	<330	<330
Fluoranthene	206-44-0	NA	7.3E+5	5,500	1.0E+9 (D)	7.4E+8	7.4E+8	7.4E+8	9.3E+9	4.6E+7	NA		<330	<330	**420**	**450**	**6,200**	**360**	**790**	<330
Fluorene	86-73-7	NA	3.9E+5	5,300	5.8E+8	1.3E+8	1.3E+8	1.3E+8	9.3E+9	2.7E+7	4.70E+05		<330	<330	<330	<330	**330**	<330	<330	<330
Indeno(1,2,3-cd)pyrene (Q)	193-39-5	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	20,000	NA		<330	<330	<330	<330	**580**	<330	<330	<330
2-Methylnaphthalene	91-57-6	NA	57,000	4,200	2.7E+6	1.5E+6	1.5E+6	1.5E+6	6.7E+8	8.1E+6	1,700		<330	<330	<330	<330	<330	<330	<330	<330
Phenanthrene	85-01-8	NA	56,000	2,100	2.8E+6	1.6E+5	1.6E+5	1.6E+5	6.7E+6	1.6E+6	67 (M)		<330	<330	<330	**440**	**4,900**	<330	**430**	<330
Pyrene	129-00-0	NA	4.8E+5	ID	1.0E+9 (D)	6.5E+8	6.5E+8	6.5E+8	6.7E+9	2.9E+7	1,700		<330	<330	**340**	**350**	**4,600**	<330	**860**	<330
Toxaphene																				
Toxaphene	8001-35-2	NA	24,000	8,200	NLV	NLV	NLV	NLV	9.7E+6	20,000	NA		<170	<170	<170	<170	<170	<170	<170	<170
Volatiles, VOCs																				
Acetone (I)	67-64-1	NA	15,000	34,000	2.9E+8 (C)	1.3E+8	1.3E+8	1.9E+8	3.9E+11	2.3E+7	2.60E+05		<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Acrylonitrile (I)	107-13-1	NA	100 (M); 52	100 (M); 40	6,600	5,000	5,100	10,000	4.6E+7	16,000	1.2 (M)		<140	<150	<160	<150	<160	<140	<150	<140
Benzene (I)	71-43-2	NA	100	4,000 (X)	1,600	13,000	34,000	79,000	3.8E+8	1.8E+5	1.7 (M)		<50	<50	<50	<50	<50	<50	<50	<50
Bromobenzene (I)	108-86-1	NA	550	NA	3.1E+5	4.5E+5	4.5E+5	4.5E+5	5.3E+8	5.4E+5	160		<100	<100	<100	<100	<100	<100	<100	<100
Bromochloromethane	74-97-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100	<100
Bromodichloromethane	75-27-4	NA	1,600 (W)	ID	1,200	9,100	9,700	19,000	8.4E+7	1.1E+5	0.61 (M)		<100	<100	<100	<100	<100	<100	<100	<100
Bromoform	75-25-2	NA	1,600 (W)	ID	1.5E+5	9.0E+5	9.0E+5	9.0E+5	2.8E+9	8.2E+5	45 (M)		<100	<100	<100	<100	<100	<100	<100	<100
Bromomethane	74-83-9	NA	200	100	860	11,000	57,000	1.4E+5	3.3E+8	3.2E+5	0.90 (M)		<200	<200	<200	<200	<200	<200	<200	<200
2-Butanone (MEK) (I)	78-93-3	NA	2.6E+5	44,000	5.4E+7 (C)	2.9E+7	2.9E+7	3.5E+7	6.7E+10	1.2E+8 (C,DD)	31,000 (DD)		<750	<750	<750	<750	<750	<750	<750	<750
n-Butylbenzene	104-51-8	NA	1,600	ID	ID	ID	ID	ID	2.0E+9	2.5E+6	550		<72	<76	<81	<76	<78	<68	<75	<69
sec-Butylbenzene	135-98-8	NA	1,600	ID	ID	ID	ID	ID	4.0E+8	2.5E+6	3,800		<50	<50	<50	<50	<50	<50	<50	<50
tert-Butylbenzene (I)	98-06-6	NA	1,600	ID	ID	ID	ID	ID	6.7E+8	2.5E+6	0.64 (M)		<50	<50	<50	<50	<50	<50	<50	<50
Carbon disulfide (I,R)	75-15-0	NA	16,000	ID	76,000	1.3E+6	7.9E+6	1.9E+7	4.7E+10	7.2E+6 (C,DD)	52 (M)		<250	<250	<250	<250	<250	<250	<250	<250
Carbon tetrachloride	56-23-5	NA	100	760 (X)	190	3,500	12,000	28,000	1.3E+8	96,000	0.31 (M)		<72	<76	<81	<76	<78	<68	<75	<69
Chlorobenzene (I)	108-90-7	NA	2,000	500	1.2E+5	7.7E+5	9.9E+5	2.1E+6	4.7E+9	4.3E+6 (C)	82		<50	<50	<50	<50	<50	<50	<50	<50
Chloroethane	75-00-3	NA	8,600	22,000 (X)	2.9E+6 (C)	3.0E+7	1.2E+8	2.8E+8	6.7E+11	2.6E+6 (C)	330		<250	<250	<250	<250	<250	<250	<250	<250
Chloroform	67-66-3	NA	1,600 (W)	7,000	7,200	45,000	1.2E+5	2.7E+5	1.3E+9	1.2E+6	0.26 (M)		<50	<50	<50	<50	<50	<50	<50	<50
Chloromethane (I)	74-87-3	NA	5,200	ID	2,300	40,000	4.1E+5	1.0E+6	4.9E+9	1.6E+6 (C)	6.9 (M)		<250	<250	<250	<250	<250	<250	<250	<250
o-Chlorotoluene (I)	95-49-8	NA	3,300	ID	2.7E+5	1.2E+6	2.9E+6	6.3E+6	4.7E+9	4.5E+6 (C)	200		<50	<50	<50	<50	<50	<50	<50	<50
Dibromochloromethane	124-48-1	NA	1,600 (W)	ID	3,900	24,000	24,000	33,000	1.3E+8	1.1E+5	0.40 (MM) (M)		<100	<100	<100	<100	<100	<100	<100	<100
Dibromochloropropane	96-12-8	NA	10 (M); 4.0	ID	220	260	260	260	5.6E+5	4,400 (C)	ID		<250	<250	<250	<250	<250	<250	<250	<250
Dibromomethane	74-95-3	NA	1,600	NA	ID	ID	ID	ID	ID	2.5E+6 (C)	3.5 (M)		<250	<250	<250	<250	<250	<250	<250	<250
1,2-Dichlorobenzene	95-50-1	NA	14,000	280	1.1E+7 (C)	3.9E+7	3.9E+7	5.2E+7	1.0E+11	1.9E+7 (C)	1,500		<100	<100	<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	541-73-1	NA	170	680	26,000	79,000	79,000	1.1E+5	2.0E+8	2.0E+5 (C)	10 (M)		<100	<100	<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	106-46-7	NA	1,700	360	19,000	77,000	77,000	1.1E+5	4.5E+8	4.0E+5	23 (M)		<100	<100	<100	<100	<100	<100	<100	<100
Dichlorodifluoromethane	75-71-8	NA	95,000	ID	9.0E+5	5.3E+7	5.5E+8	1.4E+9	3.3E+12	5.2E+7 (C)	12 (M)		<250	<250	<250	<250	<250	<250	<250	<250

TABLE 1 - NORTHEAST STOCKPILE ANALYTICAL RESULTS
KETTERING HIGH SCHOOL
6101 VAN DYKE AVE, DETROIT MI

Parameters* *(Refer to detailed laboratory report for method reference data)*	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Residential Soil Volatilization to Indoor Air Inhalation Criteria	Residential Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Residential Finite VSIC for 5 Meter Source Thickness	Residential Finite VSIC for 2 Meter Source Thickness	Residential Particulate Soil Inhalation Criteria	Residential Direct Contact Criteria	Residential Soil Volatilization to Indoor Air Pathway (VIAP) Screening Levels	Sample Location	NE-SB-01	NE-SB-03	NE-SB-04	NE-SB-05	NE-SB-07	NE-SB-09	NE-SB-10	NE-SB-12
												Collection Date	01/23/24	01/25/24	01/25/24	01/25/24	01/25/24	01/25/24	01/25/24	01/25/24
												Depth	(7-8')	(13-14')	(9-10')	(6-7')	(3-4')	(1-2')	(11-12')	(8-9')
1,1-Dichloroethane	75-34-3	NA	18,000	15,000	2.3E+5	2.1E+6	5.9E+6	1.4E+7	3.3E+10	2.7E+7 (C)	2.6 (M)		<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dichloroethane (I)	107-06-2	NA	100	7,200 (X)	2,100	6,200	11,000	26,000	1.2E+8	91,000	0.82 (M)		<72	<76	<81	<76	<78	<68	<75	<69
cis-1,2-Dichloroethylene	156-59-2	NA	1,400	12,000	22,000	1.8E+5	4.2E+5	9.9E+5	2.3E+9	2.5E+6 (C)	2.1 (M)		<50	<50	<50	<50	<50	<50	<50	<50
trans-1,2-Dichloroethylene	156-60-5	NA	2,000	30,000 (X)	23,000	2.8E+5	8.3E+5	2.0E+6	4.7E+9	3.8E+6 (C)	12 (M)		<50	<50	<50	<50	<50	<50	<50	<50
1,1-Dichloroethylene (I)	75-35-4	NA	140	2,600	62	1,100	5,300	13,000	6.2E+7	2.0E+5	12 (M)		<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dichloropropane (I)	78-87-5	NA	100	4,600 (X)	4,000	25,000	50,000	1.1E+5	2.7E+8	1.4E+5	2.1 (M)		<72	<76	<81	<76	<78	<68	<75	<69
cis-1,3-Dichloropropylene	10061-01-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<72	<76	<81	<76	<78	<68	<75	<69
trans-1,3-Dichloropropylene	10061-02-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<50	<50	<50	<50	<50	<50	<50	<50
Ethylbenzene (I)	100-41-4	NA	1,500	360	87,000	7.2E+5	1.0E+6	2.2E+6	1.0E+10	2.2E+7 (C)	12 (M)		<50	<50	<50	<50	<50	<50	<50	<50
Ethylene dibromide	106-93-4	NA	20 (M); 1.0	110 (X)	670	1,700	1,700	3,300	1.4E+7	92	7.40E-02		<50	<50	<50	<50	<50	<50	<50	<50
2-Hexanone	591-78-6	NA	20,000	ID	9.9E+5	1.1E+6	1.1E+6	1.4E+6	2.7E+9	3.2E+7 (C)	210 (M)		<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500
Isopropyl benzene	98-82-8	NA	91,000	3,200	4.0E+5 (C)	1.7E+6	1.7E+6	2.8E+6	5.8E+9	2.5E+7 (C)	3.8 (M)		<250	<250	<250	<250	<250	<250	<250	<250
4-Methyl-2-pentanone (MIBK) (I)	108-10-1	NA	36,000	ID	3.7E+7 (C)	4.5E+7	4.5E+7	6.7E+7	1.4E+11	5.6E+7 (C)	3,300		<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500
Methylene chloride	75-09-2	NA	100	30,000 (X)	45,000	2.1E+5	5.9E+5	1.4E+6	6.6E+9	1.3E+6	130		<100	<100	<100	<100	<100	<100	<100	<100
Methyl-tert-butyl ether (MTBE)	1634-04-4	NA	800	1.4E+5 (X)	9.9E+6 (C)	2.5E+7	3.9E+7	8.7E+7	2.0E+11	1.5E+6	74 (M)		<250	<250	<250	<250	<250	<250	<250	<250
Naphthalene	91-20-3	NA	35,000	730	2.5E+5	3.0E+5	3.0E+5	3.0E+5	2.0E+8	1.6E+7	67 (M)		<330	<330	<330	<330	<330	<330	<330	<330
n-Propylbenzene (I)	103-65-1	NA	1,600	ID	ID	ID	ID	ID	1.3E+9	2.5E+6	1,800 (DD)		<100	<100	<100	<100	<100	<100	<100	<100
Styrene	100-42-5	NA	2,700	2,100 (X)	2.5E+5	9.7E+5	9.7E+5	1.4E+6	5.5E+9	4.0E+5	150		<50	<50	<50	<50	<50	<50	<50	<50
1,1,1,2-Tetrachloroethane	630-20-6	NA	1,500	ID	6,200	36,000	54,000	1.0E+5	4.2E+8	4.8E+5 (C)	3.2 (M)		<100	<100	<100	<100	<100	<100	<100	<100
1,1,2,2-Tetrachloroethane	79-34-5	NA	170	1,600 (X)	4,300	10,000	10,000	14,000	5.4E+7	53,000	2.7 (M)		<72	<76	<81	<76	<78	<68	<75	<69
Tetrachloroethylene	127-18-4	NA	100	1,200 (X)	11,000	1.7E+5	4.8E+5	1.1E+6	2.7E+9	2.0E+5 (C)	6.2 (M) (EE)		<50	<50	<50	<50	<50	<50	<50	<50
Toluene (I)	108-88-3	NA	16,000	5,400	3.3E+5 (C)	2.8E+6	5.1E+6	1.2E+7	2.7E+10	5.0E+7 (C)	3,700		<50	<50	<50	<50	<50	<50	<50	<50
1,2,4-Trichlorobenzene	120-82-1	NA	4,200	5,900 (X)	9.6E+6 (C)	2.8E+7	2.8E+7	2.8E+7	2.5E+10	9.9E+5 (DD)	53 (M)		<250	<250	<330	<330	<330	<330	<330	<250
1,1,1-Trichloroethane	71-55-6	NA	4,000	1,800	2.5E+5	3.8E+6	1.2E+7	2.8E+7	6.7E+10	5.0E+8 (C)	450 (EE)		<50	<50	<50	<50	<50	<50	<50	<50
1,1,2-Trichloroethane	79-00-5	NA	100	6,600 (X)	4,600	17,000	21,000	44,000	1.9E+8	1.8E+5	0.37 (M)		<72	<76	<81	<76	<78	<68	<75	<69
Trichloroethylene	79-01-6	NA	100	4,000 (X)	1,000	11,000	25,000	57,000	1.3E+8	1.1E+5 (DD)	0.33 (M) (DD)		<50	<50	<50	<50	<50	<50	<50	<50
Trichlorofluoromethane	75-69-4	NA	52,000	NA	2.8E+6 (C)	9.2E+7	6.3E+8	1.5E+9	3.8E+12	7.9E+7 (C)	19 (M)		<100	<100	<100	<100	<100	<100	<100	<100
1,2,3-Trichloropropane	96-18-4	NA	840	NA	4,000	9,200	9,200	11,000	2.0E+7	1.3E+6 (C)	2.6 (M)		<100	<100	<100	<100	<100	<100	<100	<100
1,2,3-Trimethylbenzene	526-73-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100	<100
1,2,4-Trimethylbenzene (I)	95-63-6	NA	2,100	570	4.3E+6 (C)	2.1E+7	5.0E+8	5.0E+8	8.2E+10	3.2E+7 (C)	150 (JT)		<100	<100	<100	<100	<100	<100	<100	<100
1,3,5-Trimethylbenzene (I)	108-67-8	NA	1,800	1,100	2.6E+6 (C)	1.6E+7	3.8E+8	3.8E+8	8.2E+10	3.2E+7 (C)	100 (JT)		<100	<100	<100	<100	<100	<100	<100	<100
Vinyl chloride	75-01-4	NA	40	260 (X)	270	4,200	30,000	73,000	3.5E+8	3,800	0.082 (MM) (M)		<40	<40	<41	<40	<40	<40	<40	<40
Xylenes (I)	1330-20-7	NA	5,600	980	6.3E+6 (C)	4.6E+7	6.1E+7	1.3E+8	2.9E+11	4.1E+8 (C)	280 (J)		<150	<150	<150	<150	<150	<150	<150	<150

Concentrations are reported in micrograms per kilogram (µg/Kg)
Bold text indicates a compound was detected at the reported concentration
Underlined text indicates an exceedance of the Statewide Default Background Level
Concentrations less than the Statewide Default Background Levels are not indicated as exceedances
Green shaded cells indicate an exceedance of Groundwater Surface Water Interface Protection Criteria
Blue shaded cells indicate an exceedance of both Drinking Water Protection and Groundwater Surface Water Interface Protection Criteria
Orange shaded cells indicates an exceedance of Residential Direct Contact Criteria
Yellow shaded cells indicates an exceedance of Infinite Source Volatile Soil Inhalation Criteria, Finite VSIC for 5 Meter Source Thickness, and/or Finite VSIC for 2 Meter Source Thickness
Pink shaded cells indicate an exceedance of Soil Volatilization to Indoor Air Inhalation Criteria
***Italic* text indicates an exceedance of Residential Particulate Soil Inhalation Criteria**
Red text indicates an exceedance of Soil Volatilization to Indoor Air Pathway (VIAP) Screening Levels
ID - Insufficient data to develop criteria
NA - Not applicable or not available
NCE - No Criteria Established
NLV - Hazardous substance is not likely to volatilize under most conditions
NLL - Hazardous substance is not likely to leach under most conditions
(B) - Background may be substituted if higher than the calculated cleanup criterion
(C) - Calculated criterion exceeds the chemical-specific soil saturation screening level
(D) - Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+9 ppb
(DD) - Hazardous substance causes developmental effects.
(EE) - The acceptable air concentration (AAC) for the volatile hazardous substances is not derived using standard equations. The hazardous substance may cause adverse human health effects for less than chronic exposures.
(G) - GSI criterion depends on the pH or water hardness, or both, of the receiving surface water.
(I) - Hazardous substance may exhibit the characteristic of ignitability
(J) - Hazardous substance may be present in several isomer forms. Isomer-specific concentrations must be added together for comparison to criteria.
(JT) - Hazardous substance may be present in several isomer forms. The VIAP screening level may be used for the individual isomer provided that it is the sole isomer detected; however, when multiple isomers are detected in a medium, the isomer-specific concentrations must be added together and compared to the most restrictive VIAP screening level of the detected isomers.
(M) - Site-specific criterion may be below target detection limits
(MM) - Hazardous substance is a carcinogen with a mutagenic mode of action.
(Q) - Criteria for carcinogenic polycyclic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene
(R) - Hazardous substance may exhibit the characteristic of reactivity as defined under 40 CFR 761
(T) - Refer to federal Toxic Substances Control Act (TSCA) to determine TSCA cleanup standards
(W) - Concentrations of trihalomethanes in soil shall be added together to determine complicance with the drinking water protection criterion of 1,600 ug/kg
(X) - The GSI criterion is not protective of surface water that is used as a drinking water source

TABLE 2 - SOUTHWEST STOCKPILE ANALYTICAL RESULTS
KETTERING HIGH SCHOOL
6101 VAN DYKE AVE, DETROIT MI

Parameters* *(Refer to detailed laboratory report for method reference data)	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Residential Soil Volatilization to Indoor Air Inhalation Criteria	Residential Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Residential Finite VSIC for 5 Meter Source Thickness	Residential Finite VSIC for 2 Meter Source Thickness	Residential Particulate Soil Inhalation Criteria	Residential Direct Contact Criteria	Residential Soil Volatilization to Indoor Air Pathway (VIAP) Screening Levels	Sample Location	SW-SB-01	SW-SB-02	SW-SB-03	SW-SB-04	SW-SB-05	SW-SB-06	SW-SB-07
												Collection Date	01/23/24	01/23/24	01/23/24	01/23/24	01/23/24	01/23/24	01/23/24
												Depth	(9-10')	(6-7')	(4-5')	(2-3')	(3-4')	(1-2')	(7-8')
Metals																			
Arsenic	7440-38-2	5,800	4,600	4,600	NLV	NLV	NLV	NLV	7.2E+5	7,600	NA		**5,300**	**6,900**	**11,000**	**6,000**	**8,100**	**6,700**	**7,500**
Barium (B)	7440-39-3	75,000	1.3E+6	(G)	NLV	NLV	NLV	NLV	3.3E+8	3.7E+7	NA		**69,000**	**51,000**	**69,000**	**46,000**	**61,000**	**110,000**	**58,000**
Cadmium (B)	7440-43-9	1,200	6,000	(G,X)	NLV	NLV	NLV	NLV	1.7E+6	5.5E+5	NA		**190**	**140**	**310**	**190**	**210**	**290**	**140**
Chromium, Total	7440-47-3	18,000 (total)	30,000	3,300	NLV	NLV	NLV	NLV	2.6E+5	2.5E+6	NA		**15,000**	**16,000**	**19,000**	**17,000**	**17,000**	**19,000**	**16,000**
Copper (B)	7440-50-8	32,000	5.8E+6	(G)	NLV	NLV	NLV	NLV	1.3E+8	2.0E+7	NA		**10,000**	**14,000**	**19,000**	**12,000**	**15,000**	**14,000**	**11,000**
Lead (B)	7439-92-1	21,000	7.0E+5	(G,X)	NLV	NLV	NLV	NLV	1.0E+8	4.0E+5	NA		**46,000**	**7,900**	**18,000**	**22,000**	**18,000**	**110,000**	**11,000**
Mercury, Total	7439-97-6	130	1,700	50 (M); 1.2	48,000	52,000	52,000	52,000	2.0E+7	1.6E+5	22 (M)		<50	<50	<50	<50	**70**	**81**	<50
Selenium (B)	7782-49-2	410	4,000	400	NLV	NLV	NLV	NLV	1.3E+8	2.6E+6	NA		**310**	**220**	**340**	**210**	**300**	**260**	**220**
Silver (B)	7440-22-4	1,000	4,500	100 (M); 27	NLV	NLV	NLV	NLV	6.7E+6	2.5E+6	NA		<100	<100	<100	<100	<100	<100	<100
Zinc (B)	7440-66-6	47,000	2.4E+6	(G)	NLV	NLV	NLV	NLV	ID	1.7E+8	NA		**72,000**	**41,000**	**58,000**	**49,000**	**60,000**	**99,000**	**40,000**
Nonspecific Grouping																			
Chloride	16887-00-6	NA	5.0E+6	(X)	NLV	NLV	NLV	NLV	ID	5.0E+5 (F)	NA		<100,000	<100,000	<100,000	<100,000	<100,000	<100,000	<100,000
PCBs																			
PCB, Aroclor 1016	12674-11-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1221	11104-28-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1232	11141-16-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1242	53469-21-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1248	12672-29-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1254	11097-69-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1260	11096-82-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100
PCB, Aroclor 1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100
Polychlorinated biphenyls (PCBs) (J,T)	1336-36-3	NA	NLL	NLL	3.0E+6	2.4E+5	7.9E+6	7.9E+6	5.2E+6	(T)	ID		<100	<100	<100	<100	<100	<100	<100
Pesticides																			
Dalapon	75-99-0	NA	4,000	NA	NLV	NLV	NLV	NLV	ID	1.9E+7	NA		<100	<100	<100	<100	<100	<100	<100
Dicamba	1918-00-9	NA	4,400	NA	NA	NLV	NLV	NLV	ID	3.4E+6	NA		<100	<100	<100	<100	<100	<100	<100
2,4-Dichlorophenoxyacetic acid	94-75-7	NA	1,400	4,400	NLV	NLV	NLV	NLV	6.7E+9	2.5E+6	NA		<200	<200	<200	<200	<200	<200	<200
Dinoseb	88-85-7	NA	300	200 (M); 43	NLV	NLV	NLV	NLV	2.7E+8	66,000 (DD)	NA		<100	<100	<100	<100	<100	<100	<100
Silvex (2,4,5-TP)	93-72-1	NA	3,600	2,200	NLV	NLV	NLV	NLV	ID	1.7E+6	NA		<200	<200	<200	<200	<200	<200	<200
Pesticides, Chlorinated																			
Aldrin	309-00-2	NA	NLL	NLL	1.3E+6	58,000	58,000	58,000	6.4E+5	1,000	520		<20	<20	<20	<20	<20	<20	<20
Chlordane (J)	57-74-9	NA	NLL	NLL	1.1E+7	1.2E+6	1.2E+6	1.2E+6	3.1E+7	31,000	13,000 (EE)		**120**	<25	<25	**56**	<25	<25	<25
4-4'-DDD	72-54-8	NA	NLL	NLL	NLV	NLV	NLV	NLV	4.4E+7	95,000	NA		<20	<20	<20	<20	<20	<20	<20
4-4'-DDE	72-55-9	NA	NLL	NLL	NLV	NLV	NLV	NLV	3.2E+7	45,000	39,000		<20	<20	<20	<20	<20	<20	<20
4-4'-DDT	50-29-3	NA	NLL	NLL	NLV	NLV	NLV	NLV	3.2E+7	57,000	NA		<20	<20	<20	<20	<20	<20	<20
Dieldrin	60-57-1	NA	NLL	NLL	1.4E+5	19,000	19,000	19,000	6.8E+5	1,100	770		<20	<20	<20	<20	<20	<20	<20
Endosulfan I	959-98-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	TX		<20	<20	<20	<20	<20	<20	<20
Endosulfan II	33213-65-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<20	<20	<20	<20	<20	<20	<20
Endrin	72-20-8	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	65,000	NA		<20	<20	<20	<20	<20	<20	<20
Heptachlor	76-44-8	NA	NLL	NLL	3.5E+5	62,000	62,000	62,000	2.4E+6	5,600	3,600		<20	<20	<20	<20	<20	<20	<20
Heptachlor epoxide	1024-57-3	NA	NLL	NLL	NLV	NLV	NLV	NLV	1.2E+6	3,100	ID		<20	<20	<20	<20	<20	<20	<20
alpha-Hexachlorocyclohexane	319-84-6	NA	18	ID	30,000	12,000	22,000	25,000	1.7E+6	2,600	NA		<16	<16	<17	<16	<16	<16	<16
beta-Hexachlorocyclohexane	319-85-7	NA	37	ID	NLV	NLV	NLV	NLV	5.9E+6	5,400	NA		<20	<20	<20	<20	<20	<20	<20
Lindane	58-89-9	NA	20 (M); 7.0	20 (M); 1.1	ID	ID	ID	ID	ID	8,300	TX		<20	<20	<20	<20	<20	<20	<20
Methoxychlor	72-43-5	NA	16,000	NA	ID	ID	ID	ID	ID	1.9E+6	NA		<50	<50	<50	<50	<50	<50	<50
Semivolatiles, BNAs																			
Aniline	62-53-3	NA	1,100	330 (M); 80	NLV	NLV	NLV	NLV	6.7E+7	3.3E+5	NA		<330	<330	<330	<330	<330	<330	<330
Azobenzene	103-33-3	NA	4,200	ID	6.1E+6	6.3E+5	6.3E+5	6.3E+5	1.0E+8	1.4E+5	ID		<330	<330	<330	<330	<330	<330	<330
Benzyl alcohol	100-51-6	NA	2.0E+5	NA	NLV	NLV	NLV	NLV	3.3E+11	3.2E+8 (C)	NA		<3,300	<3,300	<3,300	<3,300	<3,300	<3,300	<3,300
4-Bromophenyl Phenylether	101-55-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330
Butyl benzyl phthalate	85-68-7	NA	2.2E+6 (C)	1.2E+5 (X)	NLV	NLV	NLV	NLV	4.7E+10	3.6E+7 (C)	NA		<330	<330	<330	<330	<330	<330	<330
Carbazole	86-74-8	NA	9,400	1,100	NLV	NLV	NLV	NLV	6.2E+7	5.3E+5	NA		<330	<330	<330	<330	<330	**430**	<330
4-Chloro-3-methylphenol	59-50-7	NA	5,800	280	NLV	NLV	NLV	NLV	ID	4.5E+6	NA		<280	<280	<280	<280	<280	<280	<280
Bis(2-chloroethoxy)methane	111-91-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330
bis(2-Chloroethyl)ether (I)	111-44-4	NA	100	100 (M); 20	8,300	3,800	3,800	3,800	9.4E+6	13,000	3.4 (M)		<100	<100	<100	<100	<100	<100	<100
Bis(2-chloroisopropyl) Ether	108-60-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330
beta-Chloronaphthalene	91-58-7	NA	6.2E+5	NA	ID	ID	ID	ID	ID	5.6E+7	NA		<330	<330	<330	<330	<330	<330	<330
2-Chlorophenol	95-57-8	NA	900	360	4.3E+5	9.6E+5	9.6E+5	9.6E+5	1.2E+9	1.4E+6	12,000 (DD)		<330	<330	<330	<330	<330	<330	<330
4-Chlorophenyl Phenylether	7005-72-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330
Dibenzofuran	132-64-9	NA	ID	1,700	2.0E+6	1.3E+5	1.3E+5	1.3E+5	6.7E+6	ID	7.10E+06		<330	<330	<330	<330	<330	<330	<330
2,4-Dichlorophenol	120-83-2	NA	1,500	330 (M); 220	NLV	NLV	NLV	NLV	5.1E+9	6.6E+5 (DD)	NA		<330	<330	<330	<330	<330	<330	<330
Diethyl phthalate	84-66-2	NA	1.1E+5	2,200	NLV	NLV	NLV	NLV	3.3E+9	1.7E+8 (C)	NA		<330	<330	<330	<330	<330	<330	<330
2,4-Dimethylphenol	105-67-9	NA	7,400	7,600	NLV	NLV	NLV	NLV	4.7E+9	1.1E+7	NA		<330	<330	<330	<330	<330	<330	<330
Dimethyl phthalate	131-11-3	NA	1.5E+6 (C)	NA	NLV	NLV	NLV	NLV	3.3E+9	1.0E+9 (C,D)	NA		<330	<330	<330	<330	<330	<330	<330
Di-n-butyl phthalate	84-74-2	NA	9.6E+5 (C)	11,000	NLV	NLV	NLV	NLV	3.3E+9	2.7E+7 (C)	NA		<330	<330	<330	<330	<330	<330	<330
2,4-Dinitrophenol	51-28-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<830	<830	<850	<830	<830	<830	<830
2,4-Dinitrotoluene	121-14-2	NA	430	NA	NLV	NLV	NLV	NLV	1.6E+7	48,000	NA		<330	<330	<330	<330	<330	<330	<330
2,6-Dinitrotoluene	606-20-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330
Di-n-octyl phthalate	117-84-0	NA	1.0E+8	ID	NLV	NLV	NLV	NLV	3.1E+10	6.9E+6	ID		<330	<330	<330	<330	<330	<330	<330
bis(2-Ethylhexyl)phthalate	117-81-7	NA	NLL	NLL	NLV	NLV	NLV	NLV	7.0E+8	2.8E+6	NA		<330	<330	<330	<330	<330	<330	<330
Hexachlorobenzene (C-66)	118-74-1	NA	1,800	350	41,000	17,000	17,000	17,000	6.8E+6	8,900	6.7 (M)		<330	<330	<330	<330	<330	<330	<330
Hexachlorocyclopentadiene (C-56)	77-47-4	NA	3.2E+5	ID	30,000	50,000	50,000	50,000	1.3E+7	2.3E+6 (C)	0.32 (M)		<330	<330	<330	<330	<330	<330	<330
Hexachloroethane	67-72-1	NA	430	1,800 (X)	40,000	5.5E+5	9.3E+5	9.3E+5	2.3E+8	2.3E+5	3.2 (M)		<330	<330	<330	<330	<330	<330	<330
Isophorone	78-59-1	NA	15,000	26,000 (X)	NLV	NLV	NLV	NLV	1.2E+10	4.8E+6 (C)	NA		<330	<330	<330	<330	<330	<330	<330
2-Methyl-4,6-dinitrophenol	534-52-1	NA	830 (M); 400	NA	NLV	NLV	NLV	NLV	1.3E+8	79,000	NA		<830	<830	<830	<830	<830	<830	<830
Methylphenol, 2-	95-48-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330
Methylphenol, 3- and 4-	MEPH1314	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<660	<660	<660	<660	<660	<660	<660
2-Nitroaniline	88-74-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330
3-Nitroaniline	99-09-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<830	<830	<830	<830	<830	<830	<830
4-Nitroaniline	100-01-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<830	<830	<830	<830	<830	<830	<830
Nitrobenzene (I)	98-95-3	NA	330 (M); 68	3,600 (X)	91,000	54,000	54,000	54,000	4.7E+7	1.0E+5	170 (M)		<330	<330	<330	<330	<330	<330	<330
2-Nitrophenol	88-75-5	NA	400	ID	NLV	NLV	NLV	NLV	ID	6.3E+5	ID		<330	<330	<330	<330	<330	<330	<330
4-Nitrophenol	100-02-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<830	<830	<850	<830	<830	<830	<830
N-Nitrosodimethylamine	62-75-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<330	<330	<330	<330	<330	<330	<330
n-Nitroso-di-n-propylamine	621-64-7	NA	330 (M); 100	NA	NLV	NLV	NLV	NLV	1.6E+6	1,200	NA		<330	<330	<330	<330	<330	<330	<330
N-Nitrosodiphenylamine	86-30-6	NA	5,400	NA	NLV	NLV	NLV	NLV	2.2E+9	1.7E+6	NA		<330	<330	<330	<330	<330	<330	<330
Pentachlorophenol	87-86-5	NA	22	(G,X)	NLV	NLV	NLV	NLV	1.0E+8	90,000	NA		<800	<810	<850	<800	<810	<810	<810
Phenol	108-95-2	NA	88,000	9,000	NLV	NLV	NLV	NLV	4.0E+10	4.0E+7 (C,DD)	NA		<330	<330	<330	<330	<330	<330	<330
Pyridine (I)	110-86-1	NA	400	NA	1,100	8,200	40,000	97,000	2.3E+8	2.3E+5 (C)	540		<330	<330	<330	<330	<330	<330	<330
2,4,5-Trichlorophenol	95-95-4	NA	39,000	NA	NLV	NLV	NLV	NLV	2.3E+10	2.3E+7	NA		<330	<330	<330	<330	<330	<330	<330
2,4,6-Trichlorophenol	88-06-2	NA	2,400	330 (M); 100	NLV	NLV	NLV	NLV	1.0E+9	7.1E+5	NA		<330	<330	<330	<330	<330	<330	<330
Semivolatiles, PNAs																			
Acenaphthene	83-32-9	NA	3.0E+5	8,700	1.9E+8	8.1E+7	8.1E+7	8.1E+7	1.4E+10	4.1E+7	2.0E+5		<330	<330	<330	<330	<330	<330	<330
Acenaphthylene	208-96-8	NA	5,900	ID	1.6E+6	2.2E+6	2.2E+6	2.2E+6	2.3E+9	1.6E+6	ID		<330	<330	<330	<330	<330	<330	<330
Anthracene	120-12-7	NA	41,000	ID	1.0E+9 (D)	1.4E+9	1.4E+9	1.4E+9	6.7E+10	2.3E+8	1.30E+07		<330	<330	<330	<330	<330	**910**	<330
Benzo(a)anthracene (Q)	56-55-3	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	20,000	1.6E+5 (MM)		<330	<330	<330	<330	<330	**3,500**	<330
Benzo(a)pyrene (Q)	50-32-8	NA	NLL	NLL	NLV	NLV	NLV	NLV	1.5E+6	2,000	NA		<330	<330	<330	<330	<330	**3,400**	<330
Benzo(b)fluoranthene (Q)	205-99-2	NA	NLL	NLL	ID	ID	ID	ID	ID	20,000	NA		<330	<330	<330	<330	<330	**5,500**	<330
Benzo(g,h,i)perylene	191-24-2	NA	NLL	NLL	NLV	NLV	NLV	NLV	8.0E+8	2.5E+6	NA		<330	<330	<330	<330	<330	**1,200**	<330
Benzo(k)fluoranthene (Q)	207-08-9	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	2.0E+5	NA		<330	<330	<330	<330	<330	**2,000**	<330
Chrysene (Q)	218-01-9	NA	NLL	NLL	ID	ID	ID	ID	ID	2.0E+6	NA		<330	<330	<330	<330	<330	**3,500**	<330
Dibenzo(a,h)anthracene (Q)	53-70-3	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	2,000	NA		<330	<330	<330	<330	<330	**370**	<330
Fluoranthene	206-44-0	NA	7.3E+5	5,500	1.0E+9 (D)	7.4E+8	7.4E+8	7.4E+8	9.3E+9	4.6E+7	NA		**390**	<330	<330	<330	<330	<330	<330
Fluorene	86-73-7	NA	3.9E+5	5,300	5.8E+8	1.3E+8	1.3E+8	1.3E+8	9.3E+9	2.7E+7	4.70E+05		<330	<330	<330	<330	<330	<330	<330
Indeno(1,2,3-cd)pyrene (Q)	193-39-5	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	20,000	NA		<330	<330	<330	<330	<330	**1,300**	<330
2-Methylnaphthalene	91-57-6	NA	57,000	4,200	2.7E+6	1.5E+6	1.5E+6	1.5E+6	6.7E+8	8.1E+6	1,700		<330	<330	<330	<330	<330	<330	<330
Phenanthrene	85-01-8	NA	56,000	2,100	2.8E+6	1.6E+5	1.6E+5	1.6E+5	6.7E+6	1.6E+6	67 (M)		<330	<330	<330	<330	<330	5,000	<330
Pyrene	129-00-0	NA	4.8E+5	ID	1.0E+9 (D)	6.5E+8	6.5E+8	6.5E+8	6.7E+9	2.9E+7	1,700		<330	<330	<330	<330	<330	7,600	<330
Toxaphene																			
Toxaphene	8001-35-2	NA	24,000	8,200	NLV	NLV	NLV	NLV	9.7E+6	20,000	NA		<170	<170	<170	<170	<170	<170	<170
Volatiles, VOCs																			
Acetone (I)	67-64-1	NA	15,000	34,000	2.9E+8 (C)	1.3E+8	1.3E+8	1.9E+8	3.9E+11	2.3E+7	2.60E+05		<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Acrylonitrile (I)	107-13-1	NA	100 (M); 52	100 (M); 40	6,600	5,000	5,100	10,000	4.6E+7	16,000	1.2 (M)		<140	<140	<160	<140	<140	<140	<140
Benzene (I)	71-43-2	NA	100	4,000 (X)	1,600	13,000	34,000	79,000	3.8E+8	1.8E+5	1.7 (M)		<50	<50	<50	<50	<50	<50	<50
Bromobenzene (I)	108-86-1	NA	550	NA	3.1E+5	4.5E+5	4.5E+5	4.5E+5	5.3E+8	5.4E+5	160		<100	<100	<100	<100	<100	<100	<100
Bromochloromethane	74-97-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100
Bromodichloromethane	75-27-4	NA	1,600 (W)	ID	1,200	9,100	9,700	19,000	8.4E+7	1.1E+5	0.61 (M)		<100	<100	<100	<100	<100	<100	<100
Bromoform	75-25-2	NA	1,600 (W)	ID	1.5E+5	9.0E+5	9.0E+5	9.0E+5	2.8E+9	8.2E+5	45 (M)		<100	<100	<100	<100	<100	<100	<100
Bromomethane	74-83-9	NA	200	100	860	11,000	57,000	1.4E+5	3.3E+8	3.2E+5	0.90 (M)		<200	<200	<200	<200	<200	<200	<200
2-Butanone (MEK) (I)	78-93-3	NA	2.6E+5	44,000	5.4E+7 (C)	2.9E+7	2.9E+7	3.5E+7	6.7E+10	1.2E+8 (C,DD)	31,000 (DD)		<750	<750	<750	<750	<750	<750	<750
n-Butylbenzene	104-51-8	NA	1,600	ID	ID	ID	ID	ID	2.0E+9	2.5E+6	550		<71	<71	<80	<72	<72	<72	<72
sec-Butylbenzene	135-98-8	NA	1,600	ID	ID	ID	ID	ID	4.0E+8	2.5E+6	3,800		<50	<50	<50	<50	<50	<50	<50
tert-Butylbenzene (I)	98-06-6	NA	1,600	ID	ID	ID	ID	ID	6.7E+8	2.5E+6	0.64 (M)		<50	<50	<50	<50	<50	<50	<50
Carbon disulfide (I,R)	75-15-0	NA	16,000	ID	76,000	1.3E+6	7.9E+6	1.9E+7	4.7E+10	7.2E+6 (C,DD)	52 (M)		<250	<250	<250	<250	<250	<250	<250
Carbon tetrachloride	56-23-5	NA	100	760 (X)	190	3,500	12,000	28,000	1.3E+8	96,000	0.31 (M)		<71	<71	<80	<72	<72	<72	<72
Chlorobenzene (I)	108-90-7	NA	2,000	500	1.2E+5	7.7E+5	9.9E+5	2.1E+6	4.7E+9	4.3E+6 (C)	82		<50	<50	<50	<50	<50	<50	<50
Chloroethane	75-00-3	NA	8,600	22,000 (X)	2.9E+6 (C)	3.0E+7	1.2E+8	2.8E+8	6.7E+11	2.6E+6 (C)	330		<250	<250	<250	<250	<250	<250	<250
Chloroform	67-66-3	NA	1,600 (W)	7,000	7,200	45,000	1.2E+5	2.7E+5	1.3E+9	1.2E+6	0.26 (M)		<50	<50	<50	<50	<50	<50	<50
Chloromethane (I)	74-87-3	NA	5,200	ID	2,300	40,000	4.1E+5	1.0E+6	4.9E+9	1.6E+6 (C)	6.9 (M)		<250	<250	<250	<250	<250	<250	<250
o-Chlorotoluene (I)	95-49-8	NA	3,300	ID	2.7E+5	1.2E+6	2.9E+6	6.3E+6	4.7E+9	4.5E+6 (C)	200		<50	<50	<50	<50	<50	<50	<50
Dibromochloromethane	124-48-1	NA	1,600 (W)	ID	3,900	24,000	24,000	33,000	1.3E+8	1.1E+5	0.40 (MM) (M)		<100	<100	<100	<100	<100	<100	<100
Dibromochloropropane	96-12-8	NA	10 (M); 4.0	ID	220	260	260	260	5.6E+5	4,400 (C)	ID		<250	<250	<250	<250	<250	<250	<250
Dibromomethane	74-95-3	NA	1,600	NA	ID	ID	ID	ID	ID	2.5E+6 (C)	3.5 (M)		<250	<250	<250	<250	<250	<250	<250
1,2-Dichlorobenzene	95-50-1	NA	14,000	280	1.1E+7 (C)	3.9E+7	3.9E+7	5.2E+7	1.0E+11	1.9E+7 (C)	1,500		<100	<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	541-73-1	NA	170	680	26,000	79,000	79,000	1.1E+5	2.0E+8	2.0E+5 (C)	10 (M)		<100	<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	106-46-7	NA	1,700	360	19,000	77,000	77,000	1.1E+5	4.5E+8	4.0E+5	23 (M)		<100	<100	<100	<100	<100	<100	<100
Dichlorodifluoromethane	75-71-8	NA	95,000	ID	9.0E+5	5.3E+7	5.5E+8	1.4E+9	3.3E+12	5.2E+7 (C)	12 (M)		<250	<250	<250	<250	<250	<250	<250

TABLE 2 - SOUTHWEST STOCKPILE ANALYTICAL RESULTS
KETTERING HIGH SCHOOL
6101 VAN DYKE AVE, DETROIT MI

Parameters* *(Refer to detailed laboratory report for method reference data)*	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Residential Soil Volatilization to Indoor Air Inhalation Criteria	Residential Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Residential Finite VSIC for 5 Meter Source Thickness	Residential Finite VSIC for 2 Meter Source Thickness	Residential Particulate Soil Inhalation Criteria	Residential Direct Contact Criteria	Residential Soil Volatilization to Indoor Air Pathway (VIAP) Screening Levels	Sample Location	SW-SB-01	SW-SB-02	SW-SB-03	SW-SB-04	SW-SB-05	SW-SB-06	SW-SB-07
												Collection Date	01/23/24	01/23/24	01/23/24	01/23/24	01/23/24	01/23/24	01/23/24
												Depth	(9-10')	(6-7')	(4-5')	(2-3')	(3-4')	(1-2')	(7-8')
1,1-Dichloroethane	75-34-3	NA	18,000	15,000	2.3E+5	2.1E+6	5.9E+6	1.4E+7	3.3E+10	2.7E+7 (C)	2.6 (M)		<50	<50	<50	<50	<50	<50	<50
1,2-Dichloroethane (I)	107-06-2	NA	100	7,200 (X)	2,100	6,200	11,000	26,000	1.2E+8	91,000	0.82 (M)		<71	<71	<80	<72	<72	<72	<72
cis-1,2-Dichloroethylene	156-59-2	NA	1,400	12,000	22,000	1.8E+5	4.2E+5	9.9E+5	2.3E+9	2.5E+6 (C)	2.1 (M)		<50	<50	<50	<50	<50	<50	<50
trans-1,2-Dichloroethylene	156-60-5	NA	2,000	30,000 (X)	23,000	2.8E+5	8.3E+5	2.0E+6	4.7E+9	3.8E+6 (C)	12 (M)		<50	<50	<50	<50	<50	<50	<50
1,1-Dichloroethylene (I)	75-35-4	NA	140	2,600	62	1,100	5,300	13,000	6.2E+7	2.0E+5	12 (M)		<50	<50	<50	<50	<50	<50	<50
1,2-Dichloropropane (I)	78-87-5	NA	100	4,600 (X)	4,000	25,000	50,000	1.1E+5	2.7E+8	1.4E+5	2.1 (M)		<71	<71	<80	<72	<72	<72	<72
cis-1,3-Dichloropropylene	10061-01-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<71	<71	<80	<72	<72	<72	<72
trans-1,3-Dichloropropylene	10061-02-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<50	<50	<50	<50	<50	<50	<50
Ethylbenzene (I)	100-41-4	NA	1,500	360	87,000	7.2E+5	1.0E+6	2.2E+6	1.0E+10	2.2E+7 (C)	12 (M)		<50	<50	<50	<50	<50	<50	<50
Ethylene dibromide	106-93-4	NA	20 (M); 1.0	110 (X)	670	1,700	1,700	3,300	1.4E+7	92	7.40E-02		<50	<50	<50	<50	<50	<50	<50
2-Hexanone	591-78-6	NA	20,000	ID	9.9E+5	1.1E+6	1.1E+6	1.4E+6	2.7E+9	3.2E+7 (C)	210 (M)		<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500
Isopropyl benzene	98-82-8	NA	91,000	3,200	4.0E+5 (C)	1.7E+6	1.7E+6	2.8E+6	5.8E+9	2.5E+7 (C)	3.8 (M)		<250	<250	<250	<250	<250	<250	<250
4-Methyl-2-pentanone (MIBK) (I)	108-10-1	NA	36,000	ID	3.7E+7 (C)	4.5E+7	4.5E+7	6.7E+7	1.4E+11	5.6E+7 (C)	3,300		<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500
Methylene chloride	75-09-2	NA	100	30,000 (X)	45,000	2.1E+5	5.9E+5	1.4E+6	6.6E+9	1.3E+6	130		<100	<100	<100	<100	<100	<100	<100
Methyl-tert-butyl ether (MTBE)	1634-04-4	NA	800	1.4E+5 (X)	9.9E+6 (C)	2.5E+7	3.9E+7	8.7E+7	2.0E+11	1.5E+6	74 (M)		<250	<250	<250	<250	<250	<250	<250
Naphthalene	91-20-3	NA	35,000	730	2.5E+5	3.0E+5	3.0E+5	3.0E+5	2.0E+8	1.6E+7	67 (M)		<330	<330	<330	<330	<330	<330	<330
n-Propylbenzene (I)	103-65-1	NA	1,600	ID	ID	ID	ID	ID	1.3E+9	2.5E+6	1,800 (DD)		<100	<100	<100	<100	<100	<100	<100
Styrene	100-42-5	NA	2,700	2,100 (X)	2.5E+5	9.7E+5	9.7E+5	1.4E+6	5.5E+9	4.0E+5	150		<50	<50	<50	<50	<50	<50	<50
1,1,1,2-Tetrachloroethane	630-20-6	NA	1,500	ID	6,200	36,000	54,000	1.0E+5	4.2E+8	4.8E+5 (C)	3.2 (M)		<100	<100	<100	<100	<100	<100	<100
1,1,2,2-Tetrachloroethane	79-34-5	NA	170	1,600 (X)	4,300	10,000	10,000	14,000	5.4E+7	53,000	2.7 (M)		<71	<71	<80	<72	<72	<72	<72
Tetrachloroethylene	127-18-4	NA	100	1,200 (X)	11,000	1.7E+5	4.8E+5	1.1E+6	2.7E+9	2.0E+5 (C)	6.2 (M) (EE)		<50	<50	<50	<50	<50	56	<50
Toluene (I)	108-88-3	NA	16,000	5,400	3.3E+5 (C)	2.8E+6	5.1E+6	1.2E+7	2.7E+10	5.0E+7 (C)	3,700		**65**	<50	<50	<50	<50	<50	<50
1,2,4-Trichlorobenzene	120-82-1	NA	4,200	5,900 (X)	9.6E+6 (C)	2.8E+7	2.8E+7	2.8E+7	2.5E+10	9.9E+5 (DD)	53 (M)		<250	<330	<250	<330	<250	<250	<250
1,1,1-Trichloroethane	71-55-6	NA	4,000	1,800	2.5E+5	3.8E+6	1.2E+7	2.8E+7	6.7E+10	5.0E+8 (C)	450 (EE)		<50	<50	<50	<50	<50	<50	<50
1,1,2-Trichloroethane	79-00-5	NA	100	6,600 (X)	4,600	17,000	21,000	44,000	1.9E+8	1.8E+5	0.37 (M)		<71	<71	<80	<72	<72	<72	<72
Trichloroethylene	79-01-6	NA	100	4,000 (X)	1,000	11,000	25,000	57,000	1.3E+8	1.1E+5 (DD)	0.33 (M) (DD)		<50	<50	<50	<50	<50	<50	<50
Trichlorofluoromethane	75-69-4	NA	52,000	NA	2.8E+6 (C)	9.2E+7	6.3E+8	1.5E+9	3.8E+12	7.9E+7 (C)	19 (M)		<100	<100	<100	<100	<100	<100	<100
1,2,3-Trichloropropane	96-18-4	NA	840	NA	4,000	9,200	9,200	11,000	2.0E+7	1.3E+6 (C)	2.6 (M)		<100	<100	<100	<100	<100	<100	<100
1,2,3-Trimethylbenzene	526-73-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<100	<100	<100	<100	<100	<100	<100
1,2,4-Trimethylbenzene (I)	95-63-6	NA	2,100	570	4.3E+6 (C)	2.1E+7	5.0E+8	5.0E+8	8.2E+10	3.2E+7 (C)	150 (JT)		<100	<100	<100	<100	<100	<100	<100
1,3,5-Trimethylbenzene (I)	108-67-8	NA	1,800	1,100	2.6E+6 (C)	1.6E+7	3.8E+8	3.8E+8	8.2E+10	3.2E+7 (C)	100 (JT)		<100	<100	<100	<100	<100	<100	<100
Vinyl chloride	75-01-4	NA	40	260 (X)	270	4,200	30,000	73,000	3.5E+8	3,800	0.082 (MM) (M)		<40	<40	<40	<40	<40	<40	<40
Xylenes (I)	1330-20-7	NA	5,600	980	6.3E+6 (C)	4.6E+7	6.1E+7	1.3E+8	2.9E+11	4.1E+8 (C)	280 (J)		<150	<150	<150	<150	<150	<150	<150

Concentrations are reported in micrograms per kilogram (µg/Kg)
Bold text indicates a compound was detected at the reported concentration
Underlined text indicates an exceedance of the Statewide Default Background Level
Concentrations less than the Statewide Default Background Levels are not indicated as exceedances
Green shaded cells indicate an exceedance of Groundwater Surface Water Interface Protection Criteria
Blue shaded cells indicate an exceedance of both Drinking Water Protection and Groundwater Surface Water Interface Protection Criteria
Orange shaded cells indicates an exceedance of Residential Direct Contact Criteria
Yellow shaded cells indicates an exceedance of Infinite Source Volatile Soil Inhalation Criteria, Finite VSIC for 5 Meter Source Thickness, and/or Finite VSIC for 2 Meter Source Thickness
Pink shaded cells indicate an exceedance of Soil Volatilization to Indoor Air Inhalation Criteria
***Italic* text indicates an exceedance of Residential Particulate Soil Inhalation Criteria**
Red text indicates an exceedance of Soil Volatilization to Indoor Air Pathway (VIAP) Screening Levels
ID - Insufficient data to develop criteria
NA - Not applicable or not available
NCE - No Criteria Established
NLV - Hazardous substance is not likely to volatilize under most conditions
NLL - Hazardous substance is not likely to leach under most conditions
(B) - Background may be substituted if higher than the calculated cleanup criterion
(C) - Calculated criterion exceeds the chemical-specific soil saturation screening level
(D) - Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+9 ppb
(DD) - Hazardous substance causes developmental effects.
(EE) - The acceptable air concentration (AAC) for the volatile hazardous substances is not derived using standard equations. The hazardous substance may cause adverse human health effects for less than chronic exposures.
(G) - GSI criterion depends on the pH or water hardness, or both, of the receiving surface water.
(I) - Hazardous substance may exhibit the characteristic of ignitability
(J) - Hazardous substance may be present in several isomer forms. Isomer-specific concentrations must be added together for comparison to criteria.
(JT) - Hazardous substance may be present in several isomer forms. The VIAP screening level may be used for the individual isomer provided that it is the sole isomer detected; however, when multiple isomers are detected in a medium, the isomer-specific concentrations must be added together and compared to the most restrictive VIAP screening level of the detected isomers.
(M) - Site-specific criterion may be below target detection limits
(MM) - Hazardous substance is a carcinogen with a mutagenic mode of action.
(Q) - Criteria for carcinogenic polycyclic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene
(R) - Hazardous substance may exhibit the characteristic of reactivity as defined under 40 CFR 761
(T) - Refer to federal Toxic Substances Control Act (TSCA) to determine TSCA cleanup standards
(W) - Concentrations of trihalomethanes in soil shall be added together to determine complicance with the drinking water protection criterion of 1,600 ug/kg
(X) - The GSI criterion is not protective of surface water that is used as a drinking water source

ATTACHMENT A
EXHIBIT A – DBA DLBA CONTRACT SPECIFICATION 3.18.19F

SECTION IV: DEMOLITION

Part 1: Execution

A. The Contractor may not commence demolition any sooner than three (3) business days from the date that the Post-Abatement Verification was posted to a designated public website. For the purposes of this stipulation, the Contractor must follow the working calendar of the State of Michigan.

B. If either of the properties immediately adjacent to the demolition site have an occupied structure with an open window(s) on the first floor facing the demolition site, the Contractor must make a reasonable and good faith effort to cover the open window(s) with a material sufficient to prevent fugitive dust from entering the structure. The Contractor must make every effort to ensure that the property is not damaged by the installation of the cover/material. The Contractor must cover the open window(s) unless the Owner or authorized representative has informed the contractor that a resident has opted out of this provision. If covering the windows, the Contractor must take pre- and post-demolition photos of the open window(s) and post them to Salesforce. The contractor is responsible for any damage caused and is required to repair/replace at their cost.

C. The Contractor must ensure that equipment and crews have mobilized to the correct site by reviewing all existing documentation, Salesforce photos (GTJ, Motor City Mapping, City Parcel Viewer) and confirming through on-site visual observation. If any questions arise as to whether or not the site is correct, the Contractor must immediately contact the Owner or its authorized representative for clarification and hold all demolition activities until clarification is received. Contractor must assume responsibility for all costs associated with the demolition of an incorrect structure. The contractor, at the direction of the Owner or authorized representative, must complete the demolition activities in accordance with the scope of service at their cost.

D. Contractor must make a reasonable and good faith effort to politely request any children appearing under the age of 12, who are outside on the block, prior to and during the demolition or load out to go inside. If any child refuses to go inside after one request, the Contractors must contact the assigned field liaison to intervene.

E. Contractor must conduct demolition operations to prevent injury to community, residents and workers, and damage to adjacent buildings and facilities.

F. Contractor must remove structural framing members to ground to avoid free fall and to prevent ground impact and dust generation. Claw bucket excavators are required in the City of Detroit for demolition activities.

G. Contractor must break up, remove, and dispose of concrete slabs on grade, unless otherwise directed by the Owner or its authorized representative.

H. Contractor must completely remove all buildings, structures, facilities, and other debris including brush and fallen trees or logs from the property. This includes all subsurface structures that may be present, including but not limited to, basement exterior walls, basement walls, basement flooring, basement, foundations, footings, and slab-on-grade. Concrete, asphalt and/or gravel driveways, if a shared driveway is encountered the Contractor shall contact BSEED and the Owner or authorized

representative for direction as to whether the entire driveway or a portion of the driveway is to be removed, or other paved areas are to be removed. Sidewalks must remain in place.

I. The use of explosives is not permitted.

J. Crushing of concrete, bricks, and other masonry products is not allowed on the site or in a residential neighborhood.

K. The intentional burning of wood, debris or existing structures is not permitted

L. The work area is limited to the property boundaries. At no time is an adjacent, surrounding property, to be used as any part of the demolition (stockpiling, traversing, parking of vehicles, parking of equipment, etc). If the contractor cannot gain access to the site with their equipment and must traverse on another property or ally to gain access the property, then the Owner or authorized representative must be contacted for permission to do so. However, if the Contractor causes damage to any adjacent or surrounding property in the course of demolition activities, the Contractor assumes responsibility for all costs associated with repairing the damage

M. The creation of a nuisance at the work-site is prohibited.

N. The Contractor must only cross sidewalks that are necessary for demolition. Contractor must take reasonable care to protect sidewalks from damage, and the Contractor must ensure that the sidewalks are left in such condition as to not pose a hazard (i.e. trip hazard) to the public. The Contractor must take and upload to Salesforce pre- and post-demolition photographs (dated and in color) of the sidewalk at every assigned site. The contractor shall ensure that the photographs easily identify the property, that they encompass the entire length and width of the sidewalk, that they are taken from a front view capturing the entire length of the sidewalk, the view from the end of the sidewalk looking right capturing the entire length of the sidewalk, and the view from the end of the sidewalk looking left capturing the entire length of the sidewalk. The photos must enable the Owner or authorized representative to be able to ascertain the condition of the sidewalks without having to visit the site.

O. The Contractor may not remove or damage any existing streets or curbs, and the Contractor must keep all streets open and clear of debris and litter. At the Contractor's expense, the Contractor must replace any portion of street or curb damaged during the project and clean and remove any debris or litter left at the end of the work day. The Contractor must replace streets or curbs in accordance with the specifications of the jurisdiction with authority (City of Detroit, Wayne County, or State of Michigan). The Contractor is responsible for securing all necessary permits and/or approvals, including any costs associated with such permits and/or approvals. The Contractor must take and upload into Salesforce pre- and post-demolition photographs (dated and in color) of the street and curb in front of every assigned site. The Contractor must upload into Salesforce, dated pre-demolition photographs which show damage to the street and curb prior to mobilization to the site in order to waive the replacement requirement.

P. The Contractor must prevent surface water and subsurface or ground water from entering excavations, from ponding on prepared subgrades, or from flooding the project site and surrounding area. If the Owner or its authorized representative determines that flooding creates a public safety hazard, a nuisance, or may cause damage to the surrounding property owner, then the Contractor must pump out the site as directed by the Owner or authorized representative and eliminate the cause of the ponding

or flooding at the Contractor's expense. When pumping out flooded areas, Contractors must adhere to the following protocols:

a. Identify a location as the point of discharge (i.e. manhole)

b. Complete and submit the ***general discharge permit*** application to the Great Lakes Water Authority (GLWA) via e-mail at IWC@glwater.org. Contractor must copy the designated staff of the authorized representative on the e-mail to the GLWA.

c. Once the permit application is approved, pump the water into the manhole using an appropriate filter (i.e. synthetic fiber filter bags) or screening material to remove debris and solids. For emergency ordered demolitions, a licensed abatement contractor must pump the water off of the site.

d. Upon completion of the discharge, appropriately dispose of the filtered material in accordance with all applicable laws, regulations and authorities.

e. Within twenty-four (24) hours of completion of the discharge, submit a report to the GLWA via e-mail at IWC@glwater.org which identifies the date of the discharge and the quantity of the discharge. The Contractor must copy the designated staff of the authorized representative on the e-mail to the GLWA.

If not immediately pumped out, and/or the cause of the ponding or flooding is not eliminated, the Owner reserves the right to charge the Contractor for costs incurred in pumping out and/or eliminating the cause of the ponding or flooding the site or withhold payment to the Contractor in the amount of costs incurred in pumping out the site.

Q. The Contractor must protect sub-grades from softening and damage by rain or water accumulation. If sub-grades softened or damaged the contractor must repair and or replace sub-grades at the contractor's expense.

R. From the commencement of the work until the final completion of the work, the Contractor must ensure that no building or structure is left in a precarious or dangerous condition that may cause direct harm to nearby residents at any time. If the Owner or authorized representative deems that a building or structure is left in a precarious or dangerous condition, the Contractor shall take action to correct the condition(s) at the Contractor's expense.

S. Unless a lead inspection confirms that no lead-based paint is present in a structure, Contractor must perform daily sampling and analysis for airborne concentrations of lead dust in accordance with 29 CFR 1926.62 / MIOSHA, Part 603. Sampling is only required during structure demolition, and Contractor may discontinue sampling during load-out of debris. At no time may any worker be exposed to lead in excess of the permissible exposure limit (PEL) of 50 micrograms per cubic meter of air (ug/m3).

T. Contractor must preserve all surrounding buildings and property. Contractor should note the proximity of surrounding buildings. Contractor must promptly repair damages to adjacent facilities caused by demolition operations. Any damage to surrounding buildings or property will be replaced or repaired at the Contractor's expense. Through dated photographs, Contractor must thoroughly document any damage to any adjacent structure or property which existed prior to mobilization for demolition and immediately upload the photos into Salesforce. Failure to document pre-existing damage will carry

with it the assumption that the damage was caused by the Contractor during the demolition process and the requirement that the contractor repair or replace the property damaged at its own expense.

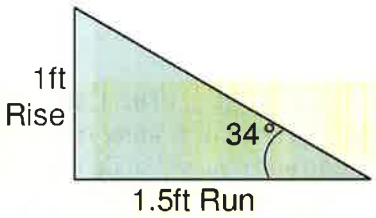
U. Only backhoes, excavators, dozers, crawlers, dumpers, compactors or other gas or diesel-fueled equipment which is compliant with 40 CFR 89; 40 CFR 1039 and 40 CFR1068 shall be used on declared Ozone Action Days. Contractors are encouraged to enroll in the EPA's *EnviroFlash* system to receive six-day Air Quality Index (AQI) forecasts to anticipate Ozone Action Days and adjust demolition schedules as necessary.

V. All demolition activities using gas or diesel-fueled machinery must comply with Detroit City Code, Sections 55-4-101 through 55-4-104 regarding the prohibition of idling for commercial vehicles. Do not direct vehicle or equipment exhaust toward adjacent properties.

W. Any open hole in excess of 3' in depth left unattended is to be extended or partially filled to create a slope 10' in width on one of the four sides that would allow any person or animal falling into the hole to escape by climbing up a reasonably scalable slope. Contractors must take a time and dated stamped photo showing the slope and must immediately upload the photo into Salesforce.

a. The maximum allowable slope must be 34 degrees, as commonly illustrated below.

i.



ii. Stated differently, the maximum rise over run must be 1/1.5 or the H:V ratio must be 1.5:1.

b. Slope must be created out of clean site material free of debris to allow a clear and unobstructed path out of the depression, and must be compacted adequately to allow foot traffic. The front of the slope (rise) shall begin 2 feet outside the original footprint of the structure to allow the Owner, authorized representative, or BSEED inspector to visually ensure that any and all footings and / or debris have been removed.

X. At any time during the demolition process when an open hole and/ or debris pile must be left unattended, a 4' tall perimeter safety barrier fence must be erected and maintained around the entire circumference of the hole and/or any debris pile. No existing fence or structure at the site may be used as part of the required safety barrier.

a. Safety Barrier must be 4' high and must be constructed of orange high-density polyethylene material with 1.75" X 1.75" mesh equal to Tenax Guardian Warning Barrier.

b. Safety Barrier Fence must be installed using commercially available wooden or metal stakes that will secure and hold up the safety barrier.

c. Safety Barrier Fence stakes must be installed in solid ground approximately three feet away from the corners of the open hole or debris pile and driven to a depth of 24" below grade with a minimum of 4' remaining above ground.

d. Safety Barrier Fence spans in excess of 20' must have an interstitial stake, spaced equally between corner stakes.

e. Securely attach the Safety Barrier Fence to each stake using heavy duty cable ties at no less than 4 locations, spaced evenly along the length of the stake.

f. Mend individual pieces of Safety Barrier Fence using cable ties at each row of mesh.

g. Finished installation must yield a taught, secure enclosure with no noticeable sagging and time-stamped photographs shall be taken and uploaded to Salesforce documenting proper installation of the safety barrier fencing. The contractor is responsible for regularly inspecting and maintaining the Safety Barrier and making any corrections needed immediately. If the contractor is notified of an issue with a safety barrier, then within 24 hours of notification the needed correction shall be made or the Owner reserves the right to charge the Contractor for costs incurred in repairing, replacing, or fixing the Safety Barrier or withhold payment to the Contractor in the amount of costs incurred.

Part 2: Dust Suppression

A. Wetting & Dust Control.

a. Procurement of a Consistent Water Source. The Contractor must properly procure a consistent water source, such as a hydrant or a water truck, to control dust on or near the work site throughout the demolition and removal of debris. If the Contractor cannot locate a functioning hydrant, the Contractor must use a water truck or alternate source of water. The Contractor must report any non–functioning hydrant using the Improve Detroit App and notify the Owner or authorized representative.

b. Necessary Equipment. The Contractor must utilize all necessary equipment to effectively wet the structure prior to and during demolition and debris removal. This includes, but is not limited to, the following:

i. Misting Nozzles. The Contractor must use nozzles which create a water mist which can maximize dust suppression and control.

ii. Hoses. The Contractor must use two (2) intact hoses which safely and efficiently deliver water from a source to the target structure.

iii. Hose Ramps (if necessary). The Contractor must use hose ramps if a hose crosses a street, crosses a driveway, or falls into the street where vehicles may come into contact with the hose. The ramps must protect the length of the hose which falls into the street. The Owner or authorized representative reserves the right to require hose ramps in other areas as necessary to protect the fire hydrant being used from damage and to maintain a constant and steady stream of water.

iv. Cherry Picker / Bucket Lift (if necessary). The Contractor must use a cherry picker or bucket lift to ensure proper wetting of structures at higher elevations which may not be accessible from ground level.

v. Salt (if necessary). The Contractor must use salt to spread on sidewalks, streets or alleyways which become wet, during temperatures 32 degrees and below and if the site will be left with wet sidewalks, streets, or alleyways during times when the temperatures are forecasted to fall below 32 degrees

c. Wetting Prior to Demolition. The Contractor must use two (2) hoses and thoroughly wet the structure(s) prior to demolition. The Contractor must then use the excavator to punch two (2) holes near opposite ends of the roof and workers must use two (2) hoses to direct water into the roof openings for a period of no less than five (5) minutes for each opening prior to the commencement of demolition. The Owner or authorized representative reserves the right to require additional wetting as deemed necessary.

d. Frequency and Duration of Wetting. In order to minimize the release of airborne particulates and mitigate the spread of dust, the Contractor must use two (2) hoses with a sufficient water flow to keep all structures and building materials and components adequately wet throughout the demolition and the removal of debris. This includes the removal of both building materials and hard fill materials such as foundations/footings and concrete slabs. The Owner or authorized representative may require at its discretion the use of additional hoses and/or wetting equipment and the demolition contractor must adhere to the direction at their cost.

e. Exceptions to the Wetting Requirements.

i. Precipitation. The Contractor may reduce the frequency and duration of wetting in the event of precipitation and minimal fugitive dust emissions. Precipitation does not absolve the Contractor of compliance with Section IV., Part 2, A.c. of these Services. The owner or authorized representative reserves the right to require additional wetting as deemed necessary.

ii. Sub–Freezing Temperatures. The Contractor may reduce the frequency and duration of wetting in the event of temperatures below 20° Fahrenheit and minimal fugitive dust emissions. During freezing temperatures, the Contractor must keep an actual thermometer and temperature log on each site, and must record the ambient air temperature at the beginning, middle and end of the work day. As necessary, the Contractor must employ an appropriate mixture of water and commercially–available suppressing agents. Suppressing agents must comply with the "MDEQ Guidelines for Selecting Dust Suppressants to Control Dust and Prevent Soil Erosion," dated February 2014. Sub–freezing temperatures do not absolve the Contractor of compliance with Section IV., Part 2, A.c. of these Services. The owner or authorized representative reserves the right to require wetting or additional wetting as deemed necessary.

f. Complaints of Fugitive Dust. If the Contractor receives a complaint of fugitive dust or if the owner or authorized representative advises the contractor that there is fugitive dust , the Contractor must immediately cease demolition or debris removal activities and wet or re-wet the structure and/or building materials and components prior to resuming demolition or debris removal.

g. Prohibition on the Creation of Hazardous or Objectionable Conditions. The Contractor must ensure that the use of water does not create a hazardous or an objectionable condition

on or around the work site. This includes but is not limited to pooling or ponding, flooding, icing, erosion or settling of dust on the work site or adjacent properties.

h. High Wind Conditions. The contractors shall monitor wind conditions at all times by observation and through other sources. When winds become above 20 mph, the contractors must limit the work to those demolition activities that generate the lesser amount of fugitive dust, avoiding or minimizing knockdown and earthwork activities. If a contractor has started a demolition, the contractor is allowed to continue in order to make the structure / site safe before limiting activities. The owner or authorized representative will notify the contractor as soon as possible if any or all work will be required to be suspended. The eontractor must adhere to the limitation of work or requirement to stop work at their cost.

SECTION V: DEMOLITION WASTE AND DEBRIS REMOVAL

A. Clearance of sites includes the proper removal and disposal of all materials and debris, to include illegally dumped debris, in compliance with federal, state, local, and administrative requirements, as required. Contractors must provide for erosion control and other incidentals necessary to satisfactorily complete the removal and disposal of all materials and debris.

B. If the Contractor is unable to load out the building debris (not hard fill, i.e. foundations and footings) within twenty-four (24) hours of knock down, the Contractor must completely cover the debris with high-density polyethylene plastic sheeting/liner until the debris is loaded off of the site and transported for disposal. The Contractor must wet the building debris and adequately secure the sheeting/liner to prevent wind interference and to mitigate dust dispersion.

C. All debris must go to a licensed Type II sanitary landfill, unless otherwise approved by the Owner. Copies of the landfill receipts and invoices for every load removed from the project site must be maintained for each day and made available for inspection and uploaded to a database such as Salesforce or the Backfill Platform as requested and provided with invoice.

D. Demolished and illegally dumped debris/materials become the Contractor's property and must be removed from the site and disposed of legally unless the Owner or authorized representative direct differently. On-site storage or sale of removed items is prohibited. Contractors shall not store debris or equipment on the street at any time.

E. Load-out of demolition debris must be completed within the seven (7) calendar days after knockdown. Contractor must keep materials adequately wet.

F. All excess material (e.g., demolition rubbish, debris) and equipment (e.g., barricades, scaffolds etc.) used by the Contractor must be immediately removed from the premises when no longer required for completion of the Work or as directed by the Owner or authorized representative.

G. Demolition materials and debris must be kept wet and covered during transport to eliminate dust and prevent the release of particulates into the air. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

H. Parking of roll-off bins, tractors, trailers, trucks, or any other vehicles or debris storage is strictly prohibited in front of occupied houses and/or buildings during debris removal.

I. The Contractor must cover all dumpsters after placement of debris therein and must ensure that all dumpsters remain covered when not in use. Full dumpsters must be immediately removed from the site and transported to the selected disposal site.

J. The Contractor is responsible for obtaining approval for transportation and disposal of waste in compliance with applicable Federal, State, and local laws, regulations, and protocols. Copies of the landfill receipts for every load removed from the project site must be maintained for each day and made available for inspection or uploaded into a database such as Salesforce and the Backfill Platform as requested and submitted with the invoice. All generated materials and waste manifests must be furnished to the Owner or its authorized representative or uploaded into a database such as Salesforce and the Backfill Platform upon request and at the time of invoice.

L. At the end of each work day, Contractors must leave adjacent buildings, driveways, and improvements free of dust, dirt and debris caused by demolition operations. Any remediation of dust, dirt or debris will be at the Contractor's expense. Returning all adjacent areas to the condition existing before start of demolition. The Owner or authorized representative reserves the right to inspect and re-direct cleaning activities at their discretion and at the contractor's expense.

K. Any debris or sedimentation deposited in the road right-of-way must be immediately removed by the Contractor and the right of way cleaned at the Contractors expense. No sedimentation on the road will be allowed. Proper cleaning of the right of way may require the use of a street sweeper, therefore the Owner or the authorized representative may require this at the contractor's expense. The Owner or authorized representative reserves the right to inspect and re-direct cleaning activities at their discretion and at the contractor's expense.

SECTION VI: SITE FINISHING

Part 1: Earthwork and Backfill Management

A. All holes or voids which result from the demolition and removal of any structure on site must be backfilled to 12" below the surrounding grade level and compacted with clean backfill per the following requirements:

i. After open hole approval and prior to backfill, Contractors may rake any residual hard fill (See "i." below) on the site into the open hole. Contractors may not rake residual hard fill into any excavation higher than three (3') feet below grade. At the Contractor's expense, the Contractor must immediately remove and dispose of any material which does not meet the standards of this section at the direction of the Owner or authorized representative. Contractors may not rake any residual hard fill with stains or painted surfaces into the open hole. Contractors must properly remove and dispose of any hard fill with any stains or painted surfaces and any residual hard fill that cannot be raked/placed in the excavation 3 feet below grade. "Hard fill" means rock, concrete,

brick, block, or masonry that qualifies as inert material that is no larger than eight (8") inches in diameter.

ii. "Inert Material" means any materials as defined in Section 11504(2) of the Michigan Natural Resources and Environmental Protection Act, Public Act 451, or 1994, being MCL 324.11504(2).

2. All fill material must consist of soil with less than 35% clay content. Contractor must ensure this requirement is being followed whether the source is an approved public or private source. Contractors must comply with all applicable City ordinances and Program standards. Acceptable soil types include crumbling yellow clay, sand, or loam. No blue clay or gray clay may be used for backfill material. The material cannot be stockpiled at the site unless authorized by the Owner or authorized representative. The owner or authorized representative may inspect any fill material upon arrival to the site while still in the transport vehicle prior to off-loading, once off-loaded, or once in the excavation site. The Owner or authorized representative may reject any fill material based on visual observation. If a question arises as to the clay content of the fill material, it is the contractor's responsibility to provide documentation that the fill has less than 35% clay content at the contractor's expense. The contractor is prohibited from using the fill material with suspect clay conditions until the report is provided, accepted, and approved by the Owner or authorized representative.

3. Contractors may not crush any materials on site. Contractors are not allowed to use the material taken off site and then crushed without following the testing requirements listed in this scope of service and the source being approved. Contractors must properly remove and dispose of any materials with painted surfaces, mastics, or oil stains at a licensed Type II landfill.

4. Manufactured fill from DBA-approved sources may be used as fill material but may be rejected by the Owner or authorized representative at their discretion. It is the responsibility of the contractor to do their due diligence and to ensure that the manufactured fill from DBA-approved source visually looks acceptable (i.e. no chucks of clay material, no hard fill larger than 8 inches, etc.) and that the load ticket(s) reflect the correct information pertaining to the manufactured fill from DBA-approved source.

5. Contractors are required to provide load tickets to the Owner or authorized representative on site upon request. The Owner or authorized representative reserves the right to reject the backfill material if the load ticket is improperly or not completely filled out or if the source of the material cannot be verified as an approved source. The Owner or authorized representative also reserves the right to stop backfilling operations in order to review or verify any of the above at the contractor's expense.

B. See Section VI., Part 4 (grading), for further backfill requirements.

C. Documentation and certification must be provided to the Owner or its authorized representative as to the origin and environmental condition of backfill materials. Specifically, Contractors must input and identify each backfill source, including primary source location address, category type, quantity, and certification. Contractors will upload these sources to DBAs electronic platform for review and approval in accordance with the Salesforce Reporting Policy. These sources will be reviewed to approve or deny, and contractors will be notified via email and through an electronic platform.

D. The allowable types of Backfill source materials suitable for residential demolition sites are as follows:

1. Category 1 - Residential Construction Areas; Residential Landscape Yard Sites; Farming and Row Crop Agricultural
2. Category 2 - Virgin (Native) Commercial Borrow and Sand/Gravel Pit Sites
3. Category 3 - Non-residential: Commercial, Utility, Road, and Construction Sites; Commercial Landscape Sites, and High Risk Agricultural Sites, such as orchards, animal processing, food processing.

. E Category 1 and 2 materials proposed to be relocated for backfill by the Contractor do not require chemical testing for Backfill Materials to be relocated from Category 1 or 2 type sources. Further, Backfill Material relocated from Category 1 or 2 sources will be considered acceptable as backfill material at demolition sites provided that the following conditions are met:

4. Category 1 Sites – Backfill Sources are uploaded to DBA electronic Platform, and a written certification from the Contractor to the, contract holder, identifying the site of origin and providing other details as necessary to support use of these materials for residential backfill.
5. Category 2 Sites - A written certification from the Category 2 Source providers.

For Category 1 and 2 Sources, the written certification must include the following affirmative statements:

i. The origin of the backfill material and address location;

ii. No evidence of known or suspected sources of environmental contamination that may have impacted the proposed backfill materials;

iii. The backfill materials are from a native soil source and are homogeneous in nature and general composition;

iv. The backfill materials are free from debris, large rocks, concrete, and do not exhibit clay content greater than 35%, no blue or gray clay, or other conditions, which would make the material unsuitable for use as backfill;

v. The materials meet the backfill specifications established by the Demolition Program.

vi. The materials were or will be transported directly from the known source to the backfill location

a. Backfill materials removed from Category 1 or 2 Type Sources and relocated to an interim staging area stockpiled at a new location (e.g., Construction, Demolition, or Commercial Landscape yard) are not a Category 1 or 2 Source material.
b. Category 1 and 2 Source material relocated and staged by of for the Contractors use are considered Category 3 Backfill Materials and are subject to Category 3 review and approval.

Source approval of Category 1 and 2 type backfill materials is conditioned upon submittal and review of the information and certification described above. Notification should be provided to the Owner, its

authorized representative, or its designated Backfill Program Manager in advance of backfill but no later than the required time frame for entry as stated in the Salesforce Reporting Policy. A contractor that backfills a location with a Category 1 or 2 material prior to approval of the source may be required to remove the backfill material if it is denied in accordance with G below.

For Category 1 and 2 type backfill materials, Contractors will be notified of approval or denial via email within 3 days after submittal to the electronic platform.

F. Category 3 materials proposed to be relocated for backfill by the Contractor must be evaluated by a qualified Environmental Professional (EP) at the Contractor's expense. The evaluation must adhere to the following Small Scale and Large Scale Backfill Soil Volume Sampling Requirements or Alternate approach as described in 3 below:

6. Small Scale Backfill Soil Volumes (up to 10,000 cubic yards)

For Category 3 Sites with volumes up to 10,000 cubic yards, three (3) discrete soil samples are required with additional composite samples as volumes increase from 2,000 cubic yards to 10,000 cubic yards. For each additional 2,000 cubic yards, 4 samples (one per 500 cubic yards) may be composted, representing one (1) additional sample for laboratory analysis. See table below for a summary of the samples required for backfill materials up to 10,000 cubic yards.

Soil Volume (Cubic Yards)	No. of Discrete Soil Samples Required	No. of Composite Samples allowed for each additional 2,000 cubic yards	Total No. Samples required for Laboratory Analysis
2,000	3	0	3
4,000	3	1	4
6,000	3	2	5
8,000	3	3	6
10,000	3	4	7

All samples should be submitted for laboratory analysis as described below (see Sample Methodology and Laboratory Analysis below B and C). Prepare a complete deliverable package as described Section IX, Part 2 (A and B), Backfill Material Deliverables.

7. Large Scale Backfill Soil Volumes (10,000 cubic yards or more)

For Category 3 Sites with volumes greater than 10,000 cubic yards, seven discrete soil samples are required with additional composite samples as volumes increase from 10,000 cubic yards. For each additional 10,000 cubic yards, 5 samples (one per 2,000 cubic yards) must be collected and may be composted, representing one (1) additional sample for laboratory analysis for each additional 10,000 cubic yards of backfill material. See table below for a summary of the samples required for backfill volumes greater than 10,000 cubic yards.

Soil Volume (Cubic Yards)	No. of Discrete Soil Samples Required	No. of Composite Samples allowed for each additional 10,000 cubic yards	Total No. Samples required for Laboratory Analysis
20,000	7	5 samples composited into 1	8
30,000	7	10 samples composited into 2	9

40,000	7	15 samples composited into 3	10
50,000	7	20 samples composited into 4	11
60,000	7	25 samples composited into 5	12
70,000	7	30 samples composited into 6	13
80,000	7	35 samples composited into 7	14
90,000	7	40 samples composited into 8	15
100,000	7	45 samples composited into 9	16

All samples should be submitted for laboratory analysis as described below (see Sample Methodology and Laboratory Analysis below B and C). Prepare a complete deliverable package as described Section IX, Part 2 (A and B), Backfill Material Deliverables.

8. Independent Evaluations

As an alternative to the above sampling strategies for large backfill sources, the Contractor's qualified Environmental Professional may propose an independent evaluation of the proposed backfill material and gain approval for an alternate sampling plan from DBA prior to sampling and testing. Sampling frequency, methodology, and strategy must be detailed and designed to demonstrate that the proposed backfill materials meet Michigan Department of Environmental Quality (MDEQ) Part 201 Cleanup Criteria for Residential Use. After work plan review and approval by DBA or its designated Backfill Program Manager, the Contractor's Environmental Professional will be required to implement the work plan and prepare a complete deliverable package as described in Section IX, Part 2 (A and B), Backfill Material Deliverables.

Upon receipt of complete information on the designated DBA electronic platform, DBA or its designated Backfill Program Manager will review the information provided within 3 days or less of the request, and either approve the backfill materials for use at City of Detroit sites, request additional information, or deny the proposed backfill material source.

Upon approval, DBA or its designated Backfill Program Manager will issue a notice of approval to the Contractor.

9. Employment of an Environmental Professional (EP) and Sampling Methodology

Contractor is required to use Environmental Professionals (EP) to perform soil sampling to ensure that DBA's guidance is strictly followed, including proper sampling techniques, sample preservation and preparation methods, and handling. DBA reserves the right to reject any sampling and testing data that does not strictly adhere to proper sampling methodology and laboratory analysis best industry practices. Soil sampling methodology is most often contingent upon physical characteristics of the medium to be sampled, in most cases, simple hand tools will suffice. The EP must adhere to best industry practices for sample collection, preservation, container packaging/shipment, and chain of custody requirements.

10. Analytical Parameters and Methods

For each discrete soil sample collected, Contractors are required to adhere to the following laboratory analytical parameters and methods:

i. Volatile organic compounds (EPA Method 8260) – Note: No backfill with detectable concentrations of volatile organic compounds are allowed in the imported fill materials.

ii. Semi-volatile organic compounds (EPA Method 8270)

iii. Polychlorinated biphenyls (EPA Method 8082)

iv. Michigan metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc) (EPA Methods 6020, 7470/7471)

v. Chloride (add for road construction projects or soils located beneath parking lots only) (EPA Method 9056)

vi. Herbicides and pesticides (add for agricultural or commercial landscape yard property) (EPA Method 8081/8082)

D. The Owner reserves the right to reject backfill materials if deliverables are not completed properly and, in the entirety, as described in Section IX., Part 2, Backfill Material Deliverables.

E. The Owner or its authorized representative reserves the right to reject Category 1, 2, or 3 sources if the Contractor cannot demonstrate its origin and/or it does not meet the contract/scope of service specifications, and perform periodic backfill soil testing at demolition locations. If the Owner or authorized representative has reasonable suspicion that backfill material is not from an approved backfill source, the Owner or authorized representative may request, and the Contractor must perform soil testing to determine the suitability of any backfill material at the Contractor's expense. The testing of soil includes the use of the Contractor's equipment to excavate material at the Contractor's expense. In the event that backfill testing shows that the material does not meet specifications and/or is contaminated above a Part 201 residential standard, the Contractor will be required to remove all backfilled materials within forty-eight (48) hours and supply acceptable backfill with test results from an accredited laboratory prior to backfilling. Contractor must assume responsibility for all costs associated with testing and removal of the unacceptable material and the replacement with acceptable material.

F. The Owner reserves the right to refuse any approved backfill material for any breach or suspected breach of policy or specifications and/or any violation of applicable laws and regulations.

G. The Contractor must follow any requirements by the Owner or its authorized representative to upload, enter, or download any information regarding backfill materials into an online or computer database. Failure to do so will result in denial of the use of such backfill materials by the Owner or its authorized representative.

Part 2: Stockpiling

A. All stockpiling locations (i.e., stockyards, staging areas), the operational plan, and the method of documentation must be determined acceptable by the Owner or authorized representative. Any location not deemed appropriate is at contractor's sole risk and may result in denial of material for use as backfill. This includes backfill materials removed from Category 1 and 2 sites and relocated to an interim stockpiling at a new location (e.g., Construction, Demolition, or Commercial Landscape yard). Category 1 and 2 material staged for the Contractors use are considered Category 3 Backfill Materials and are therefore subject to Category 3 review and approval.

B. Authorized agents or representatives of the Owner must be granted reasonable access to inspect the stockpile location, activity conducted thereon, and to review the records of origin

C. Prior to proceeding with stockpiling, the Contractor must submit and implement an approved dust control and monitoring plan to address all sources of fugitive emissions from the site. Dust control measures must be in accordance with City of Detroit BSEED Environmental Affairs Dust Control policy. Contractor must obtain any required permits or approvals to stockpile materials, and Contractor must assume responsibility for any and all costs/fees associated with any required permit.

   The plan must include the following information for each proposed stockpile site:

   1. The means, methods and procedures, including appropriate engineering controls and misting operations to be utilized to control total suspended particulate (TSP) dust and must limit potential fugitive dust emissions offsite.
   2. Soil erosion controls in accordance with Wayne County guidelines.
   3. Wet sweeping of public roads, when significant track-out onto adjacent public roadways at frequency necessary to prevent dust emissions.
   4. Stockpile soil materials away from edge of excavations.
   5. Protect soils from freezing temperatures and frost.
   6. When water sprayers are used to prevent fugitive dust emissions, Contractors are responsible for procurement of consistent water source such as a hydrant permit or water trucks for duration of stockpile use. The Contractor must pay costs for installation and removal of any temporary connections including necessary safety devices and controls. Use of water must not result in or create hazardous or objectionable conditions.
   7. Measures and procedures to prevent track out of soil that may result in a dust problem. When necessary, vehicles must be thoroughly washed prior to leaving the Site.

D. Prior approval must be obtained to transport soil to stockpile site on residential streets.

E. The Contractor may not store contaminated soil at any time.

F. Contractor is required to remedy any damages to the surrounding properties if control measures fail as a result of stockpile operations.

Part 3: Execution of Excavation and Backfill

A. Contractors must provide erosion control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust adjacent properties, drives and walkways.

B. Contractors must protect existing trees that are to remain on the site. Do not stockpile heavy materials or heavy equipment within drip line of remaining trees whenever possible.

C. Contractor must comply with local codes, ordinances, and requirements of authorities having jurisdiction to maintain stable excavations. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by backfilling operations.

D. Contractor must backfill all Open Holes within fourteen (14) calendar days after Open Hole approval, unless otherwise permitted. If open hole must be left overnight or unattended, Contractor must comply with 29 CFR 1926 Subpart M regarding fall protection.

E. Contractor must remove vegetation, topsoil, debris, trash, wet, and unsatisfactory soil materials, obstructions, and deleterious materials (including any illegal dumping) from all disturbed ground surfaces prior to open hole inspection and placement of fills. The Contractor must transport and dispose of these materials in accordance with all applicable Federal, State and local laws and regulations and in accordance with all applicable administrative/program requirements.

F. Contractor must prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding project site and surrounding areas. If flooding occurs and creates a public safety hazard, a nuisance, or the possibility of damage to the surrounding property owner, as determined by the Owner or its authorized representative, then the Contractor must immediately pump out the site or sites and eliminate the cause of the ponding or flooding at the Contractor's expense. When pumping out flooded areas, Contractors must adhere to the following protocols:

   a. Identify a location as the point of discharge (i.e. manhole)

   b. Complete and submit the ***general discharge permit*** application to the Great Lakes Water Authority (GLWA) via e-mail at IWC@glwater.org. Contractor must copy the designated staff of the authorized representative on the e-mail to the GLWA.

   c. Once the permit application is approved, pump the water into the manhole using an appropriate filter (i.e. synthetic fiber filter bags) or screening material to remove debris and solids. For emergency ordered demolitions, a licensed abatement contractor must pump the water off of the site.

   d. Upon completion of the discharge, appropriately dispose of the filtered material in accordance with all applicable laws, regulations and authorities.

   e. Within twenty-four (24) hours of completion of the discharge, submit a report to the GLWA via e-mail at IWC@glwater.org which identifies the date of the discharge and the quantity of the discharge. The Contractor must copy the designated staff of the authorized representative on the e-mail to the GLWA.

   If not immediately pumped out, the Owner reserves the right to charge the Contractor for costs incurred in pumping out the site or withhold payment to the Contractor in the amount of costs incurred in pumping out the site.

G. Contractors must place backfill and fill materials in layers not more than 18 inches in loose depth, using appropriate methods of compaction.

H. When performing backfilling operations during periods of prolonged wet or dry conditions, Contractors must provide adequate measures for surface drainage or ground water and moisture control of the soils (i.e. wetting or drying, scarify and disking) so as to place and compact the soil within the moisture content range of a few percentage points of its optimum water content.

Part 4: Grading

Winter Grade

A. When weather conditions are such that the contractor cannot complete the site finalization as it pertains to the Scope of Service - Final Grade below, the Owner or Owner Representative will announce and allow for sites be brought to "winter grade" status until such time as directed by the Owner or its authorized representative to bring the site to final grade in accordance with the Scope of Service below.

B. For a site to be in winter grade status:

1. All the work in the Scope of Service under Section II, Section III, Section IV, Section V, and Section VI Parts 1, 2, and 3 must be completed. However, the contractor must ensure that the sidewalk condition(s) do not create a public hazard (trip hazard, etc.).

2. After demolition, the lot must be graded uniformly to conform to the grade of the adjoining properties. The leveling of the lot surface must be done in a way to prevent excessive runoff into the abutting street, alley, or property or cause pooling in the lot area and must provide a smooth transition between existing adjacent grades and new grades. If the contractor does not use "clean soil" as defined in the "Final Grade" section immediately below for the top twelve inches (12") of backfill, then the Contractor must remove and dispose of the top twelve inches (12") of material and backfill with twelve inches (12") of "clean soil" at the Contractor's expense when bringing the site to Final Grade.

A. $2,500 will be held back from the contractor's payment at the time of winter grade approval/approved invoice. Upon receipt of final grade approval / approved invoice and replacement of any damaged sidewalks at the City's expense, the $2,500 will be paid to the contractor. For any sidewalks that have been determined to be unnecessarily used and damaged in order to conduct pre and post demolition activities as determined by the Owner or authorized representative the Owner reserves the right to either charge the Contractor for costs incurred in replacing the damaged sidewalk or withhold payment to the Contractor in the amount of costs incurred or require the Contractor to replace the damaged sidewalks whichever the Owner or authorized representative deems as the preferred course of action.

3.

C. Winter Grades must be completed within 45 days of the winter grade status being released by the Owner or the Owner Representative

Final Grade

A. Site restoration includes application of clean soil (as specified and defined in "B." below) and grading all disturbed areas. After demolition, the lot must be graded uniformly to conform to the grade of the adjoining properties. The leveling of the lot surface must be done in a way to prevent excessive runoff into the abutting street, alley, or property or cause pooling in the lot area and must provide a smooth transition between existing adjacent grades and new grades.

B. Contractor must apply twelve inches (12") of clean soil to the open hole or void on top of the approved backfill (See Parts 1 and 2 above). Contractor must apply sufficient clean soil to any other disturbed or excavated areas (such as removed driveways or other paved surfaces) so that the disturbed/excavated

areas are level with the surrounding grade. Clean soil must be lightly compacted using light-weight equipment so as to prevent heavy compaction. Clean soil must meet the following specifications:

1. Clean soil must be free of pulverized building materials and construction debris. It is not acceptable to bring soil to a site with the intention of making it conform to "clean soil" by harley raking, raking, etc., out the pulverized building materials and construction debris.
2. Clean soil must have an organic content of no more than 20 percent.
3. Clay **may not** be used in the top twelve inches (12").
4. Clean soil must be reported, documented, and approved in accordance with the applicable language of Section VI Part 1.

C. The Owner or authorized representative reserves the right to inspect and reject any "clean soil" and not allow it to be used or require it to be removed at the contractor's expense.

D. Contractor must cut out soft spots, fill low spots, and trim high spots to conform to the grade of the surrounding area. At the completion of the work, the premises must be raked clean with a Final Grade.

E. Contractor must repair and re-establish grades to that of the surrounding area(s) where completed or partially completed surfaces become eroded, rutted, settled, or lose compaction due to subsequent construction operations or weather conditions.

F. Contractor must restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to the greatest extent possible.

G. Contractor must re-grade and/or fix any locations where the grade is found to be non-compliant with the Scope of Services. Contractor must assume responsibility for all costs associated with re-grading and/or fixing non-compliant grades. The Owner or its authorized representative may waive this requirement if the Contractor can provide evidence that the non-compliant grade was the result of actions outside the control of the Contractor.

H. Seed and Straw is not to be applied until Final Grade Approval is received from BSEED.

Part 5: Seeding and Watering (Once Final Grade Approval is Received)

A. Contractor must seed the entirety of each lot with a "No Mow" lawn seed comprised of 100% dutch white clover seed and must apply the seed in accordance with the manufacturer's specifications. The Owner or its authorized representative must approve any other proposed contractor grass seed to ensure specifications are met prior to use.

B. Straw blankets and hydroseeding are acceptable seeding methods.

C. Contractors arerequired to water the site upon the application of the straw blanket or hydroseed in accordance with the seed manufactures specifications .

D. Contractor must re grade and re-seed any areas disturbed by construction activities as necessary. The transition between the disturbed areas and the undisturbed areas will be graded to minimize abrupt slope change and possible erosion.

E. After seeding activities, Contractors must sweep clear sidewalks and streets. Proper cleaning of the streets may require the use of a street sweeper, therefore the Owner or the authorized representative may require this at the contractor's expense. The Owner or authorized representative reserves the right to inspect and re-direct cleaning activities of the sidewalks and streets at their discretion at the contractor's expense.

F. At the Contractor's expense, Contractor must replace and/or fix any locations where the seed fails germinate for a period of three hundred and sixty-five (365) calendar days from an approved invoice. The Owner or its authorized representative may waive this requirement if the Contractor can provide evidence that the failure of the seed to germinate was the result of actions outside the control of the Contractor.

Part 6: Sidewalks

B. Contractor must take reasonable care to protect sidewalks from damage by using only cross sidewalks that are necessary for all phases of the pre and post demolition activities. The Contractor must take reasonable care to protect sidewalks from damage, and the Contractor must ensure that the sidewalks are left in such condition as to not pose a hazard (i.e. trip hazard) to the public.

C. The Contractor must take and upload to Salesforce pre- and post-demolition photographs (dated and in color) of the sidewalk at every assigned site. The contractor shall ensure that the photographs easily identify the property, that they encompass the entire length and width of the sidewalk, that they are taken from a front view capturing the entire length of the sidewalk, the view from the end of the sidewalk looking right capturing the entire length of the sidewalk, and the view from the end of the sidewalk looking left capturing the entire length of the sidewalk. The photos must enable the Owner or authorized representative to be able to ascertain the condition of the sidewalks without having to visit the site.

D. For any sidewalks that are determined to have been unnecessarily used and damaged in order to conduct pre and post demolition activities as determined by the Owner or authorized representative the Owner reserves the right to either charge the Contractor for costs incurred in replacing the damaged sidewalk or withhold payment to the Contractor in the amount of costs incurred or require the Contractor to replace the damaged sidewalks whichever the Owner or authorized representative deems as the preferred course of action.

SECTION VII: INSPECTIONS

A. All requests for inspections must be made at least twenty-four (24) hours prior to the date of the requested inspection. The following inspections are required for every non-emergency demolition:

INSPECTION #	DESCRIPTION	REQUIRED FOR DEMOLITION	AGENCY
1	Open Hole	YES	BSEED
2	Winter Grade (when applicable)	YES	BSEED
3	Final Grade	YES	BSEED

B. Contractor must submit Open Hole, Winter Grade (when applicable), and Final Grade requests on Salesforce. For Open Hole Inspection results, the contractor is responsible for checking Salesforce for the inspection results and the fail reason as applicable. For Winter and Final Grade Inspections letters will be provided to the Contractor as appropriate. Ultimately, the Contractor is responsible for following up with BSEED as necessary to check on the status of the request(s) and/or the results of the inspection(s).

C. The Owner or its authorized representative may monitor the site during all phases of pre and post demolition activities to include but not limited to backfilling to include examination and / or rejection of the type of backfill and final grade material used, winter and final grading to ensure that all enumerated demolition protocols are followed, etc. The Owner or its authorized representative may stop work at any time and / or redirect activities to ensure compliance with the Scope of Service and any applicable laws (Federal, State, Local), regulations, ordinances, rules, protocol, administrative requirements which will ensure that all work is executed in a safe (defined by this Scope of Services and industry practice) and timely manner (defined within the Agreement and / or the Scope of Services). The stop of work may also occur in order that the matter / issue can be referred to the appropriate regulatory agency for investigation and / or direction.

D. Additionally, Contractors are required under authority of Section 114 (a) to follow EPA personnel to freely enter any of your facilities or demolition sites, to review any records, inspect any demolition method, and sample or observe any emissions.

SECTION VIII: TIMELINE

A. Standard Demolition

1. After receipt of a Notice to Proceed from the Owner or authorized representative, and at least 10 days prior to the start of any planned demolition activities, the Contractor must file an electronic notification of Intent to Renovate/Demolish with the Michigan Department of Environmental Quality via the State online platform, with copies to the Michigan Occupational Health Division, Asbestos Program and the Owner or its authorized representative.
2. It is the Contractor responsibility to notify the Owner or its authorized representative within 10 days from the receipt of a Notice to Proceed if the site is not accessible Failure to make notification within 10 days does not give the contractor an acceptable reason to extend the time lines of the scope of service or the contract.
3. Complete excavation and loading of debris within seven (7) calendar days after knockdown.
4. Backfill open holes within fourteen (14) calendar days after Open Hole approval

5. Complete all demolition activities including clean-up and site finishing within 30 days from the date of demolition.

B. Ordered / Emergency Demolition

1. The Contractor must file an electronic notification of Intent to Renovate/Demolish with the Michigan Department of Environmental Quality within twenty-four (24) hours of commencement of demolition.

2. Upon receipt of a Notice to Proceed from the Owner, Contractors must mobilize to the site within 24 hours and at minimum tape off the site in accordance with applicable laws and notify the Owner or authorized representative if the site is not accessible.
    a. Contractor may not begin work without a Notice to Proceed and utility clearances.
    b. Contractor will receive all necessary permits and submit bonds after mobilization.
3. Contractors must demolish the structure(s) within 7 days of Notice to Proceed / Utility Clearances being received
4. Complete excavation and loading of debris within forty-eight (48) hours of knockdown.
5. Complete backfill within fourteen (14) calendar days after Open Hole approval.
6. Complete all demolition activities including clean-up and site finishing within thirty (30) calendar days of Notice to Proceed.

SECTION IX: SUBMITTALS

Part 1: Notifications

A. Contractors must coordinate demolition and clearance activities and ensure that all approvals and permits are in place prior to the start of work for planned demolitions. As required, notify appropriate State or local agencies of structures containing asbestos and notify the Owner or its authorized representative of identification of other suspected hazardous materials or contaminants.

B. At least 10 days prior to the start of any planned demolition activities, the Contractor must file an electronic notification of Intent to Renovate/Demolish with the Michigan Department of Environmental Quality via the State online platform, with copies to the Michigan Occupational Health Division, Asbestos Program and the Owner or its authorized representative. For Emergency Ordered Demolitions, the Contractor must file an electronic notification of Intent to Renovate/Demolish with the Michigan Department of Environmental Quality within twenty-four (24) hours of commencement of demolition.

Part 2: Backfill Material Deliverables

A. Contractors must submit Category 1, 2, and 3 material sources for each backfill location to the DBA designated platform for review and approval.

B. Contractors seeking review and approval to use Category 3 backfill materials must provide the following, to Owner or designated electronic platform before relocating Category 3 Backfill Matcrials to a demolition site for backfill:

1. Address of the proposed source material.
2. Volume of proposed source material.
3. Source and composition of backfill material (e.g., sand, gravel, etc.).
4. A scaled site map or Google Earth type aerial photograph depicting key property features, including, adjacent roads, and sample locations in relation to the area of soil proposed for relocation.
5. Photographs representative of soil backfill piles proposed for relocation, or soil boring logs of proposed soil backfill excavation area.
6. Description of Sampling Methodology
7. Required analytical data, including laboratory QA/QC, from a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory with proper chain of custody documentation.
8. Provide tabulated data as compared to MDEQ Part 201 Residential Cleanup Criteria.

C. Contractors seeking review and approval of Category 3 backfill materials must provide the following certification statements and insurance requirements from an Environmental Professional (EP) as part of any Request for approval to use Category 3 Backfill Material submitted to Owner or its dcsignatcd electronic platform

1. On behalf of **NAME OF CONTRACTOR**, **NAME OF CONSULTANT** has completed its evaluation of approximately **XXXX** cubic yards of stockpiled backfill materials located at **SITE ADDRESS**. Based on the analytical results, these soils are not contaminated above MDEQ Part 201 Residential Cleanup Criteria. Furthermore, in **NAME OF CONSULTANT** professional opinion, the materials are suitable for relocation to City of Detroit residential and/or commercial demolition sites to backfill basement excavations.

2. **CONSULTANT** understands that the Detroit Building Authority relies upon the overall completeness, accuracy, and conclusions in this report and hereby provides reliance on the contents and conclusions presented in the report. No information has been deleted, omitted, or changed that would otherwise have caused the Detroit Building Authority to reach a different conclusion.

For Contractors that propose an alternate sampling plan which deviates from the prescribed methodologies described herein, Contractors Consultants must also provide the following:

1. A copy of **NAME OF CONSULTANTS** professional errors and omissions liability insurance in the amount of no less than $1M per occurrence and $2M aggregate which identifies the Detroit Building Authority located at 1301 Third Street, Suite 328, Detroit, Michigan 48226, as a certificate holder.

D. Contractors must report to DBA on its designated electronic platform the following as it relates to final residential demolition backfill activities:

a. primary Backfill Source address (of origin) for an approved source

b. destination location address of backfill as described by DBA

c. quantity of approved backfill in cubic yards

d. trip/load tickets

e. Load/Trip ticket compliance form

DBA reserves the right to request other details to support Contractors claim as it relates to backfill

E. TRIP/LOAD TICKET REQUIREMENTS

DBA requires contractors to maintain trip/load tickets for all backfill source materials being deposited on at residential demolition sites. The trip/load tickets must include the minimum level of information as described below. It is the Contractors responsibility to maintain compliance with MDOT, State of Michigan, or other transportation compliance requirements.

- Load Ticket Number
- Materials Quantity
- Load/Unload Date/Time
- Material Origin and Destination Address (including city)
- Carrier Name/Phone
- Project Demolition Contractor
- Source Material Type (i.e., Category 1, 2 or 3)
- Carrier Driver Signature and Date
- Field tickets

Part 3: Request for Payment

A. All documentation must be submitted on organization's letterhead.

B. Invoicing must follow the format and/or template provided or approved by the Owner.

C. Unless otherwise directed by the Owner, Request for Payment Packet must include:

1. A cover letter identifying individual billing by property address for each property included in this payment request.
2. Schedule of Values and Sworn Statement for each property address.
3. Conditional or Unconditional waivers of lien from yourself (Contractor), as well as all Subcontractors listed on sworn statement.
4. Wrecking Permit
5. Notification of Intent to Renovate/Demolish

6. Final Grade or Winter Grade (when applicable) approval notification from BSEED
7. Documentation of abatement activities and waste disposal in compliance with Environmental Inspection Report or authorized change orders.
    i. Authorization to re-occupy previously abated area
    ii. Post-Abatement Verification Statement
    iii. Asbestos Quantity Sheet
    iv. Michigan Department of Natural Resources Air Quality Division/Waste Management Record
    v. A copy of the disposal manifest and/or shipping papers used to dispose of materials/wastes from each disposal/recycling facility with load description and time stamps.
    vi. When applicable, a copy of the CFC recovery certificate signed and certified by the licensed CFC recovery professional.
    vii. When applicable, a copy of the scrap metal receipt for AST/USTs and other metals.
8. Documentation of origin of backfill and topsoil sources, and certification or analytical data where appropriate, verifying material is uncontaminated.
9. At the time of invoice, the Contractor will be required to substantiate all costs associated with backfill (dirt) and must provide any and all documentation related to backfill (dirt) costs. Documentation must include, but is not limited to, invoices and trip/load tickets.
10. Documentation that any Subcontractors are in compliance with the Michigan Workers' Disability Compensation Act requirements and appropriately licensed.
11. Seeding and Watering Report
12. Seed tags identifying correct seed used per specification
13. Pre and Post Demolition photographs of the site (labeled with property address)
    i. From the front of the property to include the curbs, sidewalks and the lot itself while making sure to include landmarks so the photo can be easily identifiable between pre and post demolition pictures. Post demolition: the lot must be free from debris, equipment, bikes, cars, piles of dirt, etc.
    ii. All sidewalk flags from the right
    iii. All sidewalk flags from the left
14. Contractor Attestation Form
15. Any other documents requested by Owner in order to process the invoice

SECTION X: ADJUSTMENTS TO BID

A. In the event a structure or structures itemized on this bid is/are destroyed or substantially destroyed by fire or other calamity beyond its present condition as determined by the Owner, or environmental hazards or concerns are found, at any time prior to actual demolition, the Owner reserves the right to remove the structure from the bid; or in the event of bid award, to remove the structures(s) from the award and reduce the price by the Contractors' bid for that structure(s).

B. If unforeseen circumstances arise or work must be performed outside of the Contractors usual workweek, modifications to schedules may be requested and written approval must be received in writing from the Owner or its authorized representative.

C. The Owner reserves the right to revise these protocols over time to maximize efficiency and minimize demolition-associated hazards.

SECTION XI: REFERENCES

The Contractor must comply with all applicable laws, ordinances, rules, regulations, whether stated or omitted from bidding documents, including, but not limited to the following:

1. US EPA, 40 CFR Part 61, Subpart M: "National Emission Standards for Hazardous Air Pollutants"
2. OSHA, 29 CFR Part 1926.1101/MIOSHA Part 602: "Asbestos in Construction Standard"
3. Michigan Public Act 154 of 1974: "Michigan Occupational Safety and Health Act"
4. Michigan Public Act 135 of 1986: "Asbestos Abatement Contractors Licensing Act"
5. Michigan Public Act 440 of 1988: "Asbestos Workers Accreditation Act"
6. US DOT, 49 CFR Parts 171 and 172: "Hazardous Materials Regulations"
7. US EPA, "Clean Air Act" Section 114 A
8. US EPA, NESHAP standard subpart M, Sec 61.145 (a): "Standard for Demolition and Renovation"
9. US EPA, 40 CFR 89: "Control of Emissions from New and In-Use Non-Road Compression Ignitions"
10. US EPA, 40 CFR 1039: "Control of Emissions from New and In-Use Non-Road Compression Ignitions"
11. US EPA, 40 CFR 1068: "General Compliance Provisions For Highway, Stationary, And Non-Road Programs"
12. Detroit City Code, Sections 55-4-101 through 55-4-104: "Traffic and Motor Vehicles"
13. MDEQ, Natural Resources and Environmental Protection Act, Part 201: "Environmental Remediation: Generic Cleanup Criteria for Unrestricted Residential Use"
14. OSHA, 29 CFR 1926 Subpart M: "Fall Protection".

ATTACHMENT B
LABORATORY ANALYTICAL REPORTS

FK Engineering Associates
Excellence in Infrastructure and Underground Engineering

30425 Stephenson Highway
Madison Heights, Michigan 48071
Phone: 248-817-2946

PROJECT MEMORANDUM

To: D. McNeely, D. Brown – DLZ
From: L. Sarnowsky; Z. Carr, P.E. - FKE
Re: Kettering Soil Testing
Hydrometer Lab Testing Results
Detroit, Michigan

Date: February 8, 2024
FKE Project No. 23-018

In accordance with your request, FK Engineering Associates (FKE) has performed hydrometer testing for fifteen (15) soil samples that were delivered to our office by DLZ from the Kettering project.

Scope of Work

Provided samples were tested in our laboratory to determined soil gradation, specifically clay content percentage. Laboratory testing performed includes:

- Standard Test Methods for Particle Size Distribution (Gradation) of Soils Using Sieve Analysis (ASTM D6913)
- Standard Test Methods for Particle Size Distribution (Gradation) of Fine-Grained Soils Using the Sedimentation (Hydrometer) Analysis (ASTM D7928)
- Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass (ASTM D2216)

The laboratory tabulation is shown in Figure 1 of the Appendix, while the individual laboratory testing results for each sample are provided in Figure Nos. 2 through 16.

TABULATION OF LABORATORY TEST DATA

Boring / Test Pit / Probe Designation	Sample Number	Depth of Sample Tip (ft)	Elevation of Sample Tip (ft)	Unconfined Compressive Strength (psf)	Failure Strain (%)	Natural Water Content (% of dry weight)	In-Place Dry Density (lbs/cu.ft)	Permeability (cm/sec)	PARTICLE SIZE DISTRIBUTION (%)						ATTERBERG LIMITS (%)			Apparent Specific Gravity	ASTM D2974 Organic Matter (%)	Unified Soil Classification
									Clay	Silt	Fine Sand	Medium Sand	Coarse Sand	Gravel	Liquid Limit	Plastic Limit	Plasticity Index			
-	NE SB-01	-	-	-	-	17.4	-	-	6.6	7.5	52.2	25.4	4.3	4.0	-	-	-	-	-	-
-	NE SB-03	-	-	-	-	15.3	-	-	8.2	12.4	50.9	23.5	2.6	2.3	-	-	-	-	-	-
-	NE SB-04	-	-	-	-	15.3	-	-	9.6	12.6	47.0	26.2	3.6	1.0	-	-	-	-	-	-
-	NE SB-05	-	-	-	-	18.5	-	-	8.5	10.6	47.4	30.1	2.7	0.7	-	-	-	-	-	-
-	NE SB-07	-	-	-	-	18.0	-	-	7.3	10.5	51.4	25.5	2.6	2.7	-	-	-	-	-	-
-	NE SB-09	-	-	-	-	19.8	-	-	7.3	11.3	41.3	29.3	8.2	2.6	-	-	-	-	-	-
-	NE SB-10	-	-	-	-	16.7	-	-	7.1	9.6	45.0	32.9	3.8	1.6	-	-	-	-	-	-
-	NE SB-12	-	-	-	-	14.3	-	-	6.7	8.5	44.6	34.3	2.9	3.0	-	-	-	-	-	-
-	SW SB-01	-	-	-	-	19.8	-	-	4.1	8.2	44.6	24.9	7.0	11.1	-	-	-	-	-	-
-	SW SB-02	-	-	-	-	21.8	-	-	6.8	11.3	51.9	21.1	4.9	3.9	-	-	-	-	-	-
-	SW SB-03	-	-	-	-	17.0	-	-	3.6	10.9	50.1	23.9	5.2	6.3	-	-	-	-	-	-
-	SW SB-04	-	-	-	-	17.1	-	-	5.3	6.4	38.6	37.8	8.0	3.8	-	-	-	-	-	-
-	SW SB-05	-	-	-	-	19.2	-	-	3.5	6.7	47.3	30.7	5.6	6.2	-	-	-	-	-	-
-	SW SB-06	-	-	-	-	17.0	-	-	6.9	8.2	37.2	29.2	5.2	13.3	-	-	-	-	-	-
-	SW SB-07	-	-	-	-	18.1	-	-	6.7	8.5	42.7	31.3	6.4	4.5	-	-	-	-	-	-

30425 Stephenson Hwy.
Madison Heights, MI 48071

Sieve and Hydrometer Gradation Determination

Job Number	24-018	Tester	LKS/JAG
Sample Number	NE SB-01	Dry Density	N/A
Date	1/25/2024	Water Content	17.4%

% Gravel (> No. 4)	4.0%
% Coarse Sand (No. 4 to No. 10)	4.3%
% Medium Sand (No. 10 to No. 40)	25.4%
% Fine Sand (No. 40 to No. 200)	52.2%
% Silt (0.075 to 0.005 mm)	7.5%
% Clay (< 0.005 mm)	6.6%

D_{10}	D_{30}	D_{60}
0.0253	0.1499	0.3723

C_u
14.7

C_C
2.39

Diameter	% Passing
4.75	96.0%
2	91.7%
0.85	82.9%
0.425	66.3%
0.25	45.4%
0.15	30.0%
0.075	14.1%
0.03064	10.2%
0.01965	9.8%
0.01575	9.3%
0.01173	8.6%
0.00841	7.9%
0.00606	7.0%
0.00298	5.9%

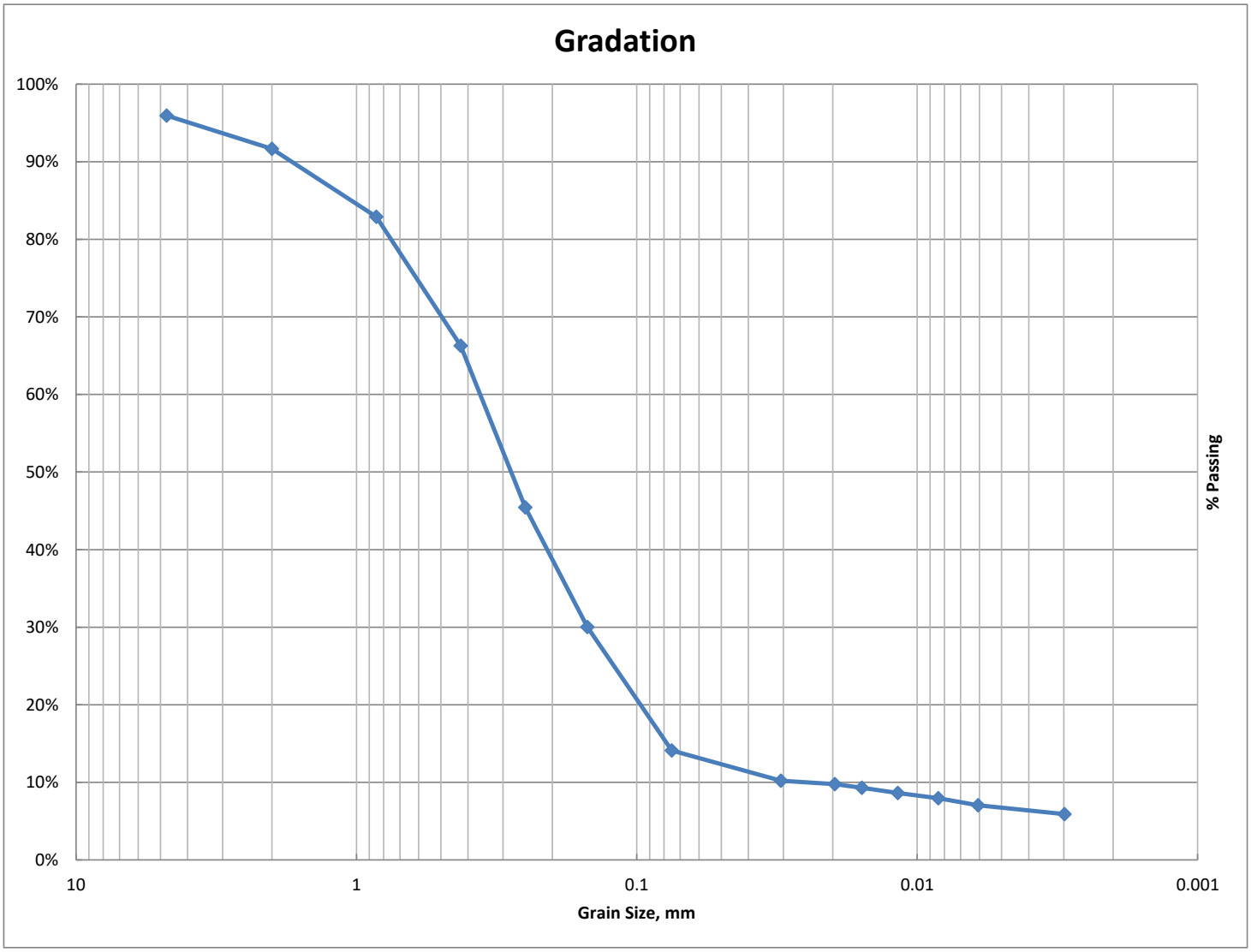


Figure No. 2

FKE

Sieve and Hydrometer Gradation Determination

30425 Stephenson Hwy.
Madison Heights, MI 48071

Job Number	24-018
Sample Number	NE SB-03
Date	1/25/2024

Tester	LKS/JAG
Dry Density	N/A
Water Content	15.3%

% Gravel (> No. 4)	2.3%
% Coarse Sand (No. 4 to No. 10)	2.6%
% Medium Sand (No. 10 to No. 40)	23.5%
% Fine Sand (No. 40 to No. 200)	50.9%
% Silt (0.075 to 0.005 mm)	12.4%
% Clay (< 0.005 mm)	8.2%

D_{10}	D_{30}	D_{60}
0.0080	0.1164	0.3149

C_u
39.5

C_C
5.40

Diameter	% Passing
4.75	97.7%
2	95.1%
0.85	87.2%
0.425	71.6%
0.25	53.2%
0.15	37.6%
0.075	20.7%
0.02977	15.6%
0.01965	13.6%
0.01586	12.6%
0.01180	11.6%
0.00851	10.3%
0.00613	9.0%
0.00303	7.0%

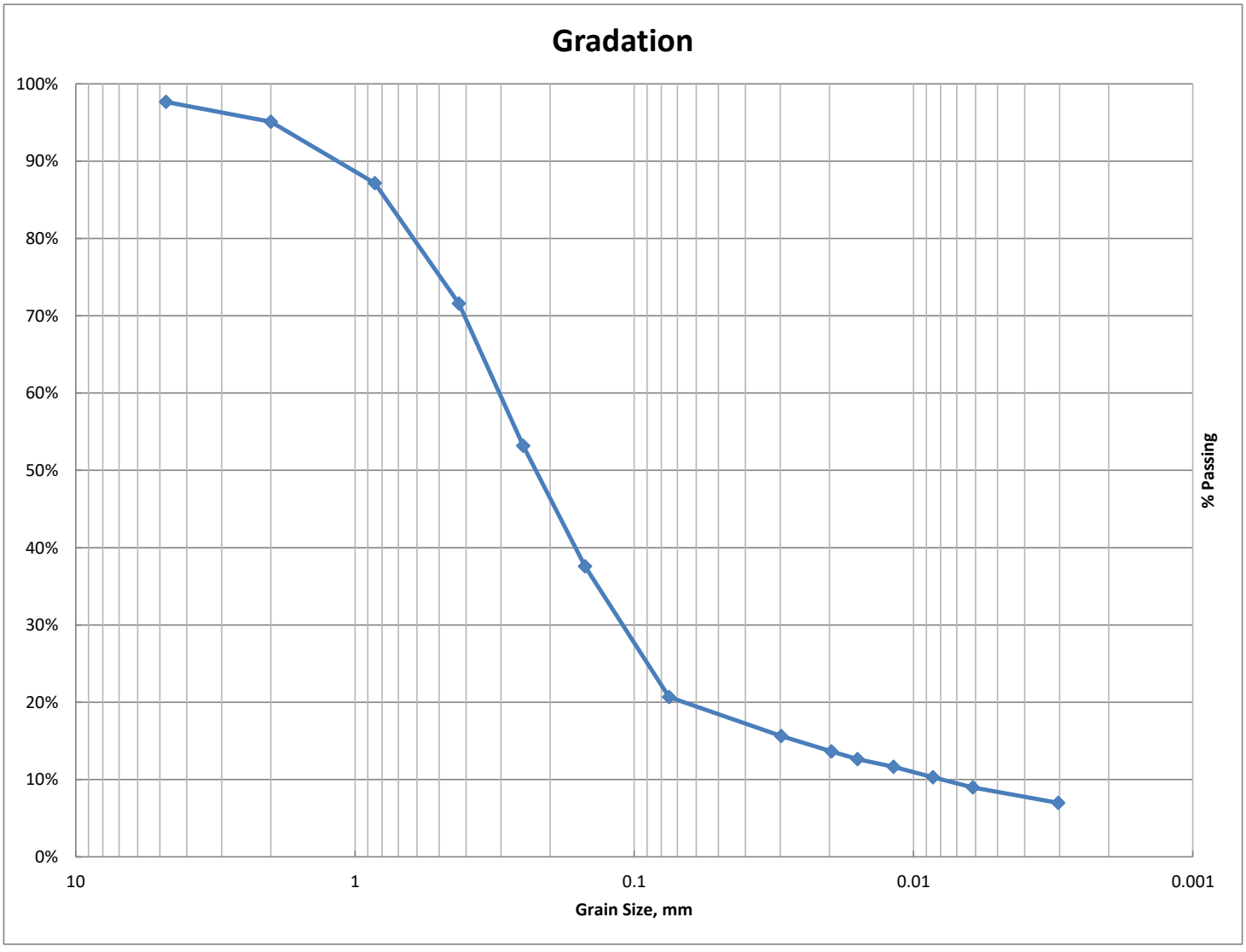


Figure No. 3

FKE

Sieve and Hydrometer Gradation Determination

30425 Stephenson Hwy.
Madison Heights, MI 48071

Job Number	24-018
Sample Number	NE SB-04
Date	1/25/2024

Tester	LKS/JAG
Dry Density	N/A
Water Content	15.3%

% Gravel (> No. 4)	1.0%
% Coarse Sand (No. 4 to No. 10)	3.6%
% Medium Sand (No. 10 to No. 40)	26.2%
% Fine Sand (No. 40 to No. 200)	47.0%
% Silt (0.075 to 0.005 mm)	12.6%
% Clay (< 0.005 mm)	9.6%

D_{10}	D_{30}	D_{60}
0.0056	0.1137	0.3356

C_u
60.1

C_C
6.91

Diameter	% Passing
4.75	99.0%
2	95.4%
0.85	85.1%
0.425	69.2%
0.25	51.2%
0.15	37.3%
0.075	22.2%
0.02977	16.8%
0.01952	15.0%
0.01575	13.9%
0.01180	12.5%
0.00841	11.8%
0.00606	10.3%
0.00300	8.2%

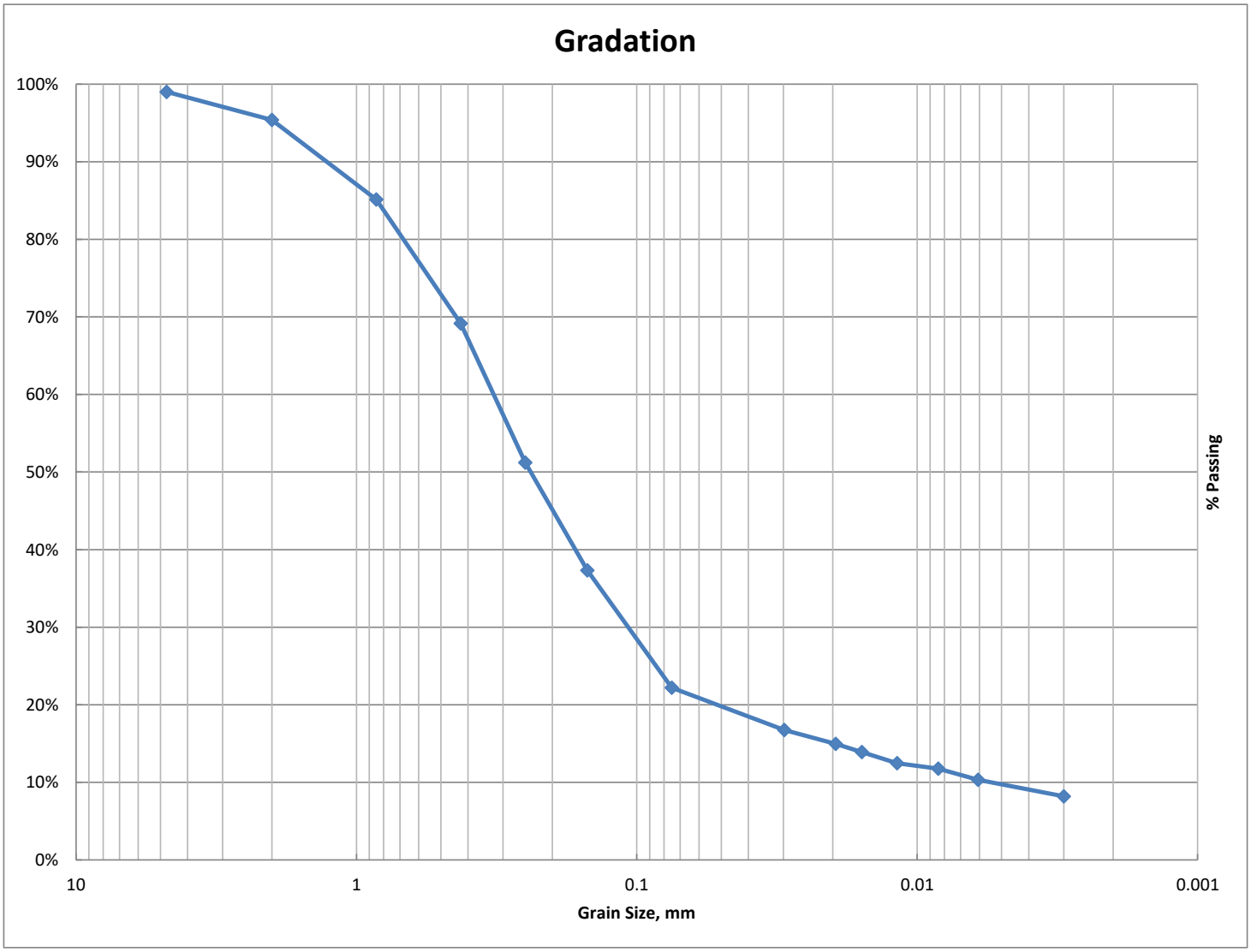


Figure No. 4

30425 Stephenson Hwy.
Madison Heights, MI 48071

Sieve and Hydrometer Gradation Determination

Job Number	24-018	Tester	LKS/JAG
Sample Number	NE SB-05	Dry Density	N/A
Date	1/25/2024	Water Content	18.5%

% Gravel (> No. 4)	0.7%
% Coarse Sand (No. 4 to No. 10)	2.7%
% Medium Sand (No. 10 to No. 40)	30.1%
% Fine Sand (No. 40 to No. 200)	47.4%
% Silt (0.075 to 0.005 mm)	10.6%
% Clay (< 0.005 mm)	8.5%

D_{10}	D_{30}	D_{60}
0.0076	0.1263	0.3639

C_u
48.1

C_C
5.79

Diameter	% Passing
4.75	99.3%
2	96.6%
0.85	85.5%
0.425	66.5%
0.25	47.8%
0.15	35.0%
0.075	19.1%
0.02886	15.6%
0.01911	13.8%
0.01543	12.9%
0.01158	11.6%
0.00836	10.4%
0.00603	9.2%
0.00300	7.0%

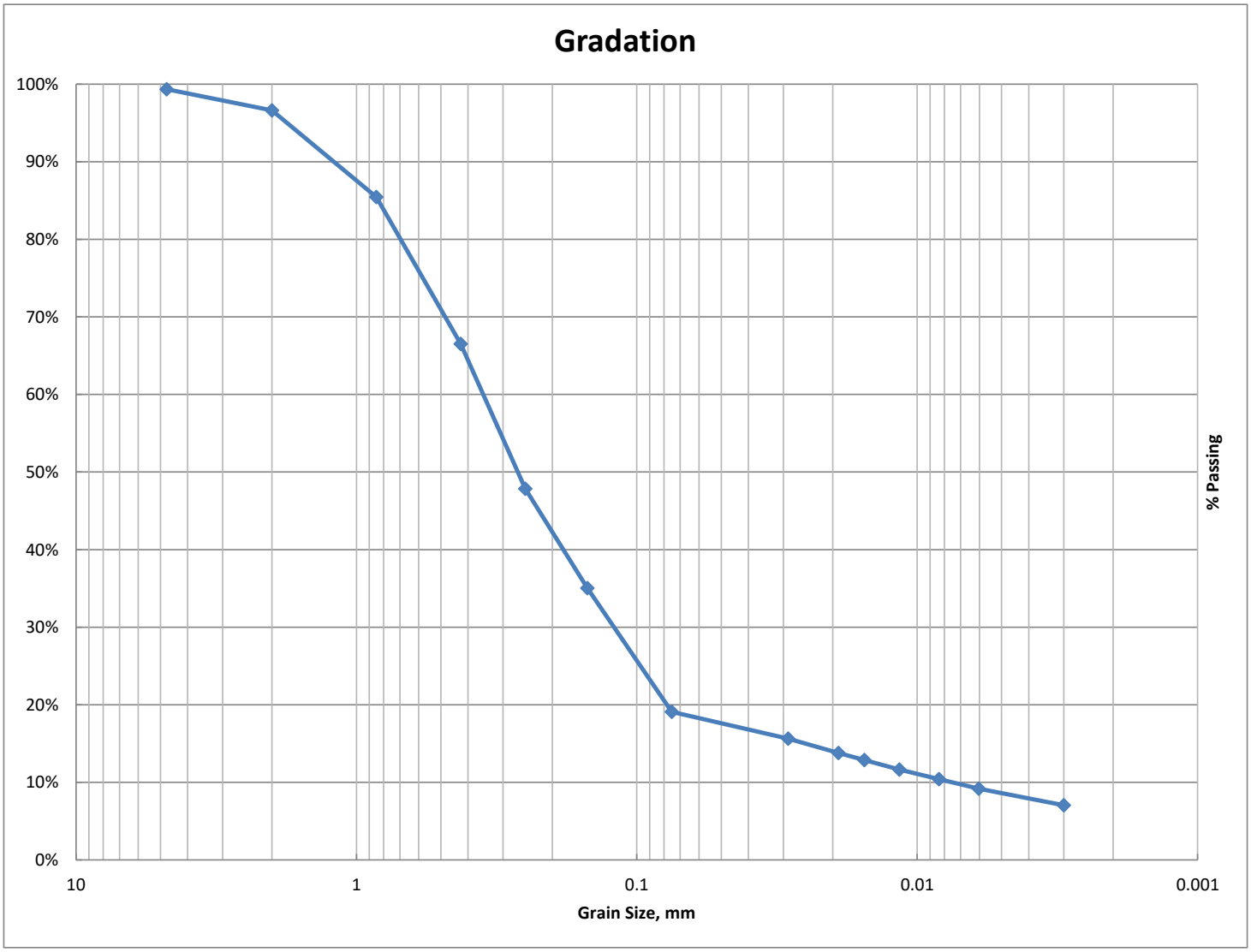


Figure No. 5

30425 Stephenson Hwy.
Madison Heights, MI 48071

Sieve and Hydrometer Gradation Determination

Job Number	24-018	Tester	LKS/JAG
Sample Number	NE SB-07	Dry Density	N/A
Date	1/25/2024	Water Content	18.0%

% Gravel (> No. 4)	2.7%
% Coarse Sand (No. 4 to No. 10)	2.6%
% Medium Sand (No. 10 to No. 40)	25.5%
% Fine Sand (No. 40 to No. 200)	51.4%
% Silt (0.075 to 0.005 mm)	10.5%
% Clay (< 0.005 mm)	7.3%

D_{10}	D_{30}	D_{60}
0.0108	0.1370	0.3493

C_u
32.2

C_C
4.95

Diameter	% Passing
4.75	97.3%
2	94.7%
0.85	85.8%
0.425	69.3%
0.25	47.8%
0.15	32.5%
0.075	17.8%
0.02955	13.7%
0.01924	12.6%
0.01564	11.5%
0.01173	10.3%
0.00846	9.2%
0.00610	8.0%
0.00303	6.0%

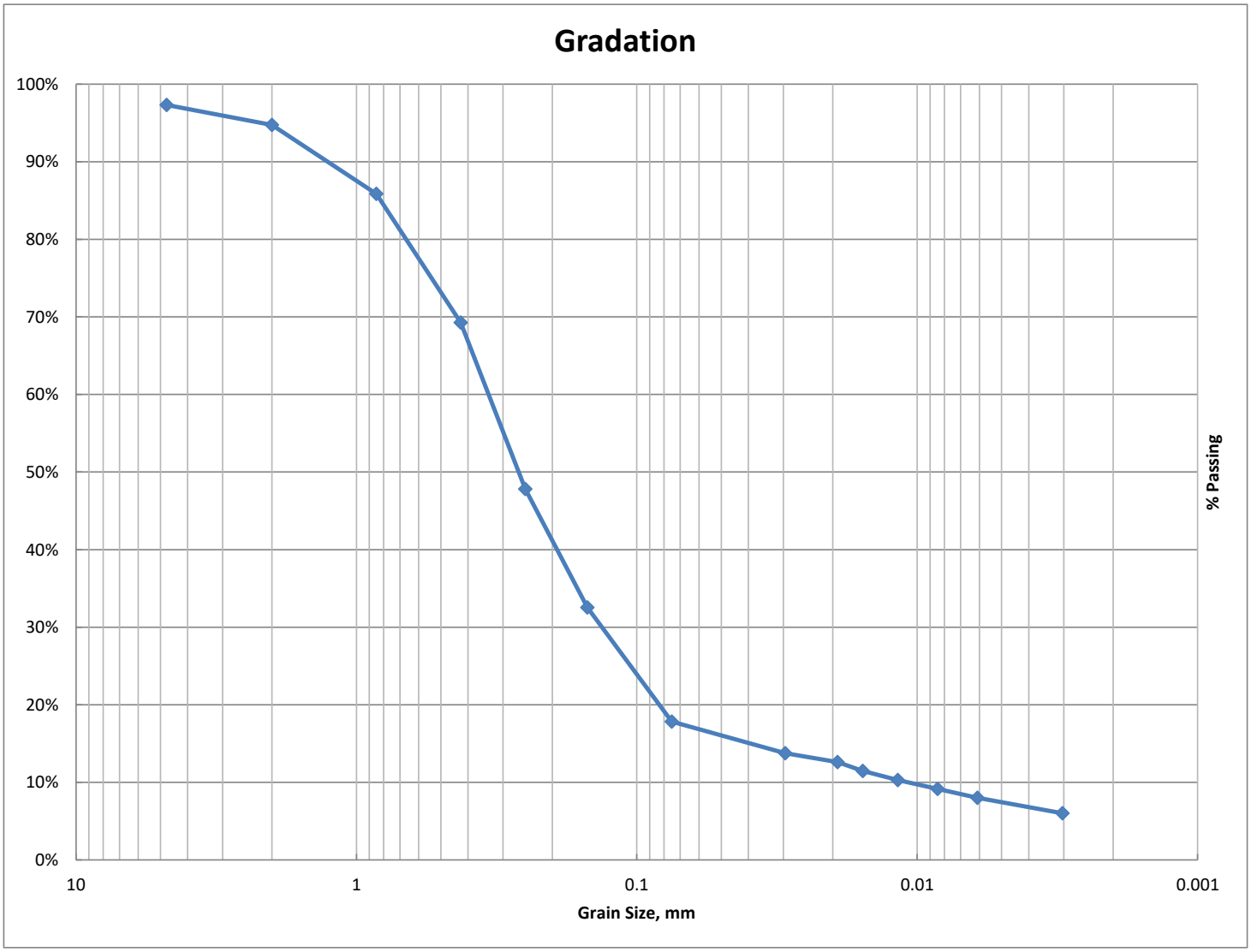


Figure No. 6

FKE

Sieve and Hydrometer Gradation Determination

30425 Stephenson Hwy.
Madison Heights, MI 48071

Job Number	24-018
Sample Number	NE SB-09
Date	1/25/2024

Tester	LKS/JAG
Dry Density	N/A
Water Content	19.8%

% Gravel (> No. 4)	2.6%
% Coarse Sand (No. 4 to No. 10)	8.2%
% Medium Sand (No. 10 to No. 40)	29.3%
% Fine Sand (No. 40 to No. 200)	41.3%
% Silt (0.075 to 0.005 mm)	11.3%
% Clay (< 0.005 mm)	7.3%

D_{10}	D_{30}	D_{60}
0.0113	0.1432	0.4276

C_u
37.7

C_C
4.23

Diameter	% Passing
4.75	97.4%
2	89.2%
0.85	74.4%
0.425	59.9%
0.25	43.2%
0.15	31.1%
0.075	18.6%
0.03043	13.1%
0.01965	12.2%
0.01586	11.3%
0.01188	10.1%
0.00851	9.2%
0.00613	8.1%
0.00305	6.0%

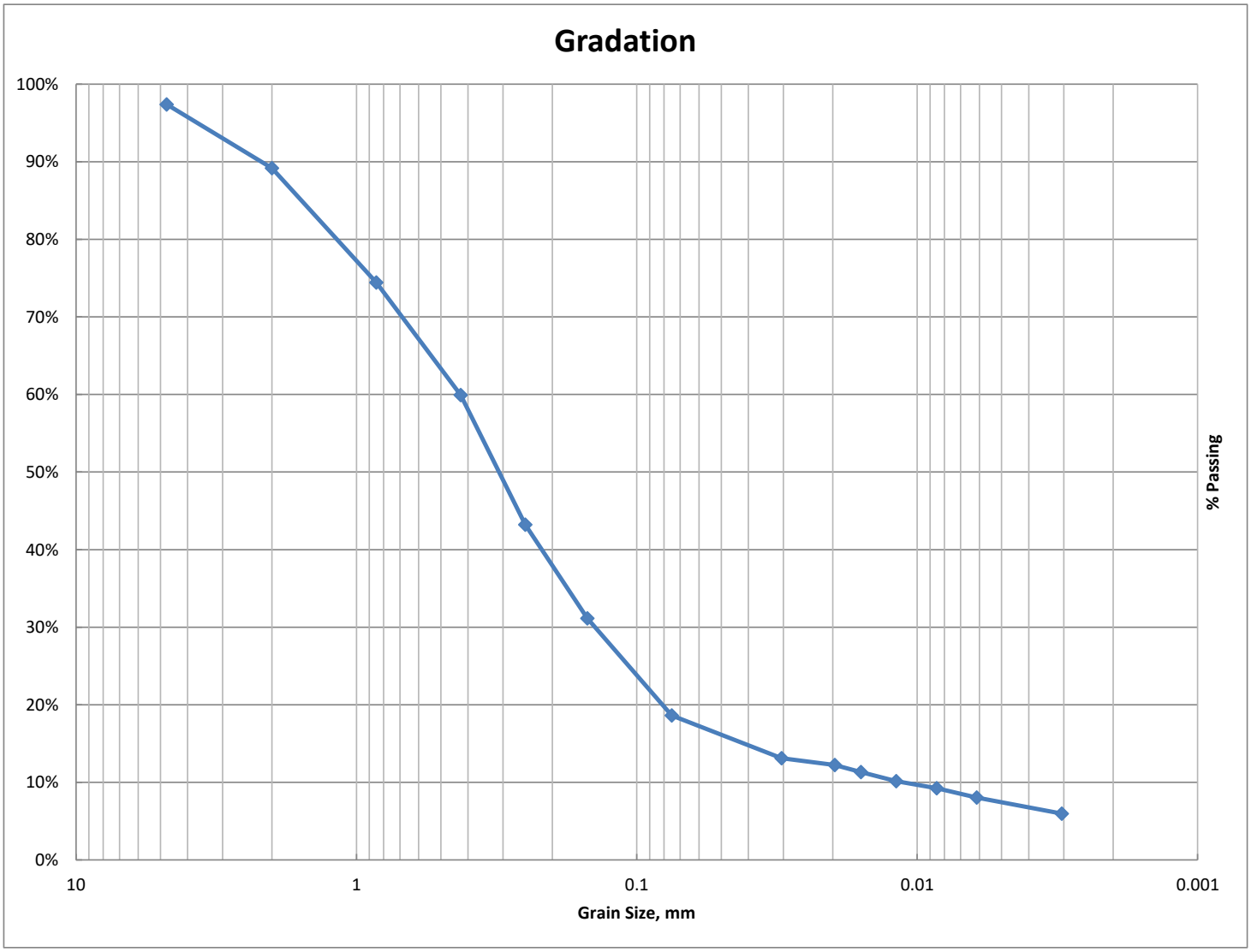


Figure No. 7

30425 Stephenson Hwy.
Madison Heights, MI 48071

Sieve and Hydrometer Gradation Determination

Job Number	24-018	Tester	LKS/JAG
Sample Number	NE SB-10	Dry Density	N/A
Date	1/25/2024	Water Content	16.7%

% Gravel (> No. 4)	1.6%
% Coarse Sand (No. 4 to No. 10)	3.8%
% Medium Sand (No. 10 to No. 40)	32.9%
% Fine Sand (No. 40 to No. 200)	45.0%
% Silt (0.075 to 0.005 mm)	9.6%
% Clay (< 0.005 mm)	7.1%

D_{10}	D_{30}	D_{60}
0.0137	0.1498	0.4087

C_u
29.8

C_C
4.00

Diameter	% Passing
4.75	98.4%
2	94.6%
0.85	82.7%
0.425	61.7%
0.25	43.4%
0.15	30.0%
0.075	16.7%
0.02977	12.5%
0.01952	11.2%
0.01575	10.4%
0.01173	9.6%
0.00841	8.8%
0.00606	7.7%
0.00301	5.9%

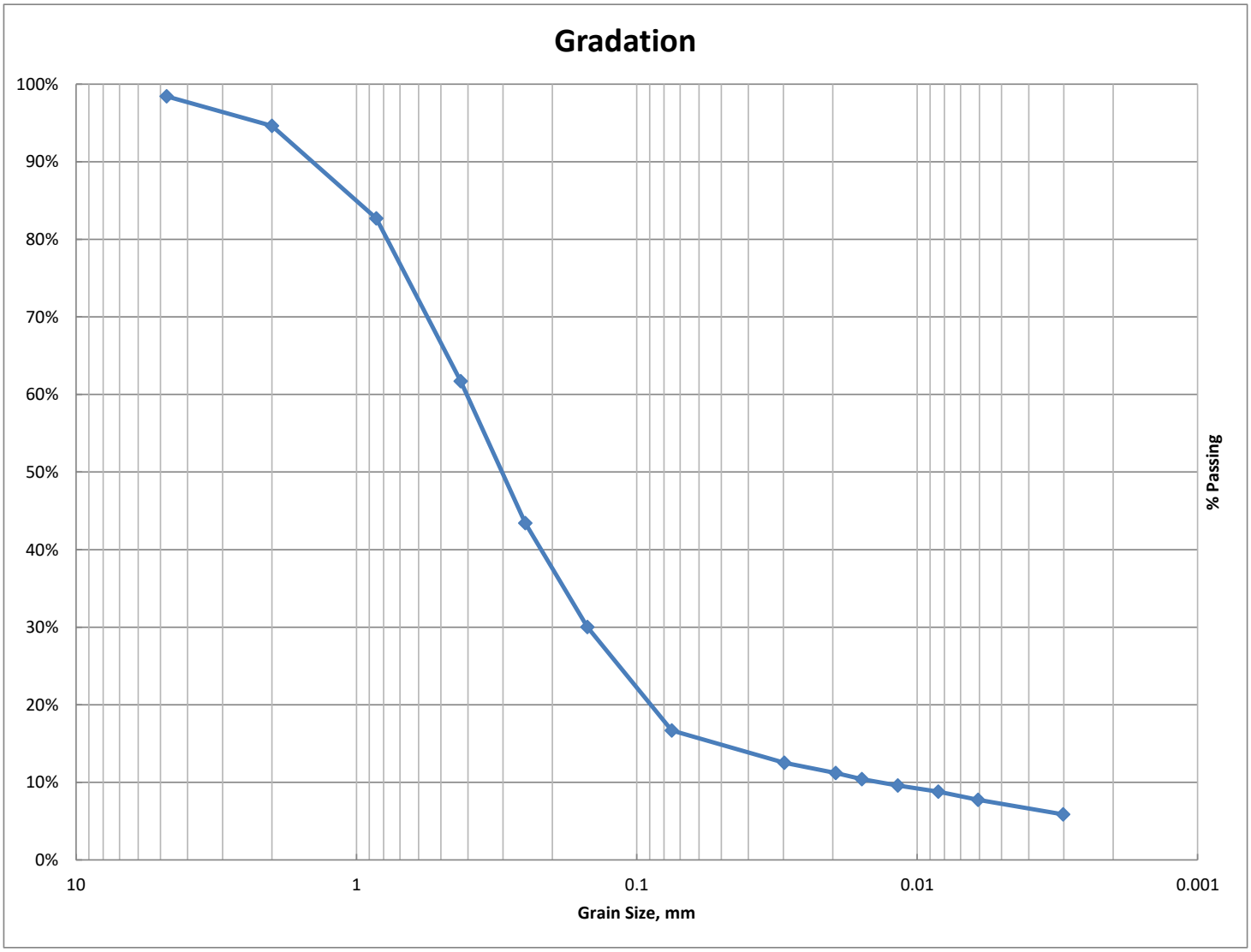


Figure No. 8

FKE

Sieve and Hydrometer Gradation Determination

30425 Stephenson Hwy.
Madison Heights, MI 48071

Job Number	24-018
Sample Number	NE SB-12
Date	1/25/2024

Tester	LKS/JAG
Dry Density	N/A
Water Content	14.3%

% Gravel (> No. 4)	3.0%
% Coarse Sand (No. 4 to No. 10)	2.9%
% Medium Sand (No. 10 to No. 40)	34.3%
% Fine Sand (No. 40 to No. 200)	44.6%
% Silt (0.075 to 0.005 mm)	8.5%
% Clay (< 0.005 mm)	6.7%

D_{10}	D_{30}	D_{60}
0.0144	0.1562	0.4288

C_u
29.7

C_C
3.94

Diameter	% Passing
4.75	97.0%
2	94.1%
0.85	82.0%
0.425	59.8%
0.25	41.6%
0.15	29.2%
0.075	15.2%
0.02910	12.2%
0.01924	10.7%
0.01543	10.2%
0.01158	9.3%
0.00836	8.3%
0.00603	7.3%
0.00300	5.6%

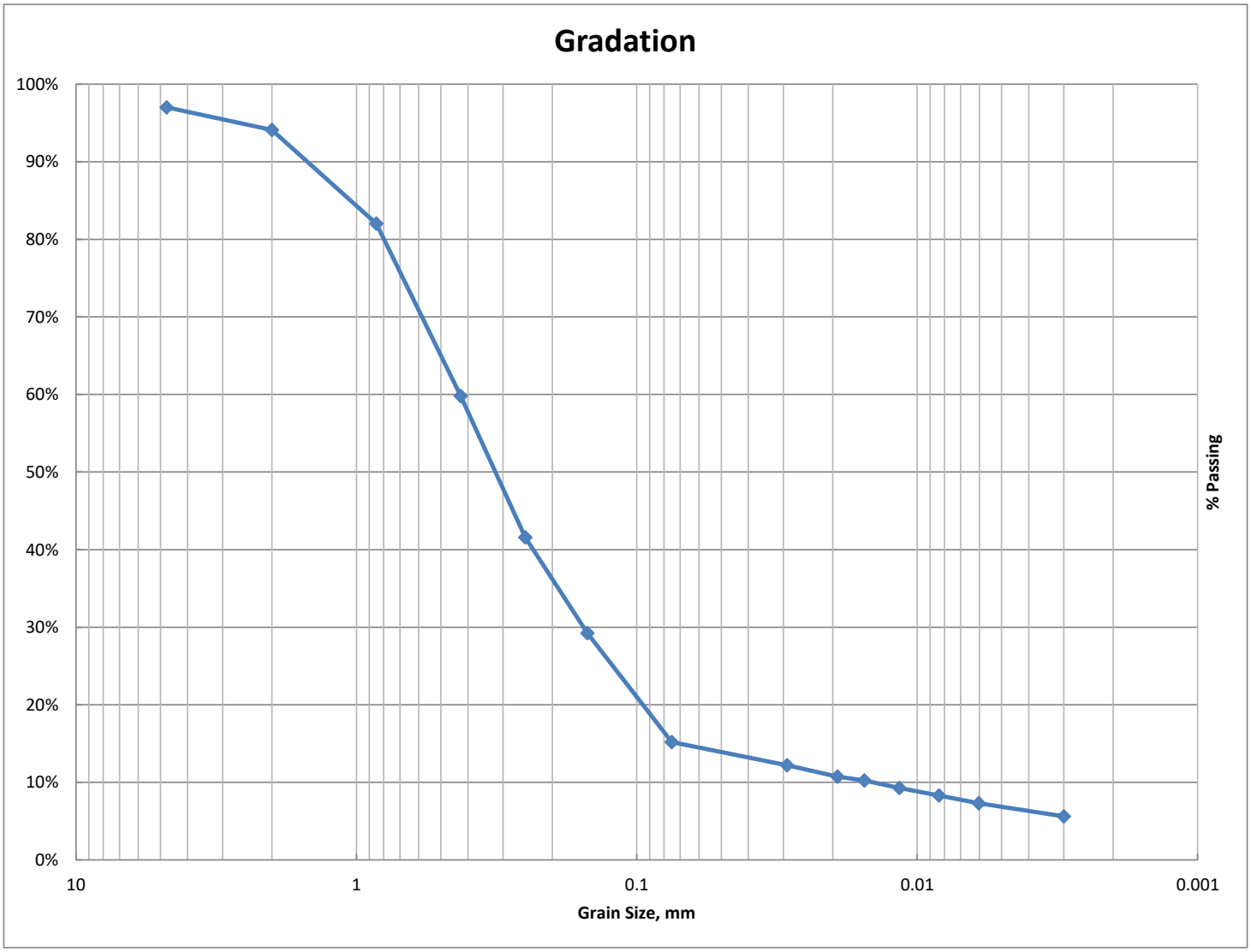


Figure No. 9

FKE

Sieve and Hydrometer Gradation Determination

30425 Stephenson Hwy.
Madison Heights, MI 48071

Job Number	24-018
Sample Number	SW SB-01
Date	1/23/2024

Tester	LKS/LKG
Dry Density	N/A
Water Content	19.8%

% Gravel (> No. 4)	11.1%
% Coarse Sand (No. 4 to No. 10)	7.0%
% Medium Sand (No. 10 to No. 40)	24.9%
% Fine Sand (No. 40 to No. 200)	44.6%
% Silt (0.075 to 0.005 mm)	8.2%
% Clay (< 0.005 mm)	4.1%

D_{10}	D_{30}	D_{60}
0.0606	0.1908	0.5042

C_u
8.3

C_C
1.19

Diameter	% Passing
4.75	88.9%
2	81.8%
0.85	73.1%
0.425	57.0%
0.25	38.4%
0.15	24.2%
0.075	12.4%
0.03598	5.9%
0.02544	5.9%
0.01793	5.9%
0.01312	5.6%
0.00891	5.2%
0.00651	4.5%
0.00317	3.8%

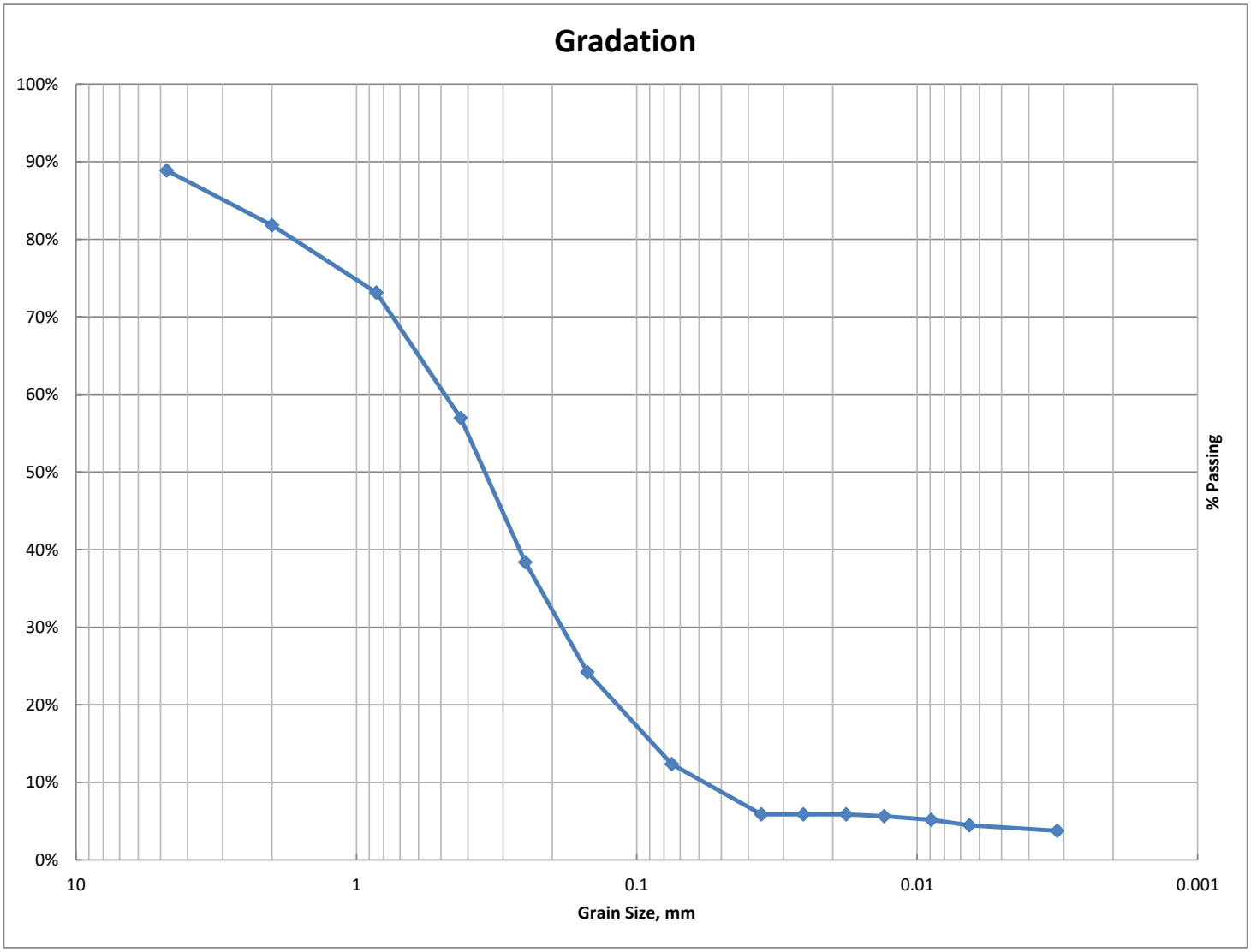


Figure No. 10

30425 Stephenson Hwy.
Madison Heights, MI 48071

Sieve and Hydrometer Gradation Determination

Job Number	24-018
Sample Number	SW SB-02
Date	1/23/2024

Tester	LKS/LKG
Dry Density	N/A
Water Content	21.8%

% Gravel (> No. 4)	3.9%
% Coarse Sand (No. 4 to No. 10)	4.9%
% Medium Sand (No. 10 to No. 40)	21.1%
% Fine Sand (No. 40 to No. 200)	51.9%
% Silt (0.075 to 0.005 mm)	11.3%
% Clay (< 0.005 mm)	6.8%

D_{10}	D_{30}	D_{60}
0.0228	0.1280	0.3614

C_u
15.9

C_C
1.99

Diameter	% Passing
4.75	96.1%
2	91.2%
0.85	85.6%
0.425	70.1%
0.25	42.3%
0.15	34.9%
0.075	18.2%
0.03267	9.6%
0.02279	10.0%
0.01633	9.6%
0.01208	9.1%
0.00845	8.4%
0.00608	7.4%
0.00307	5.7%

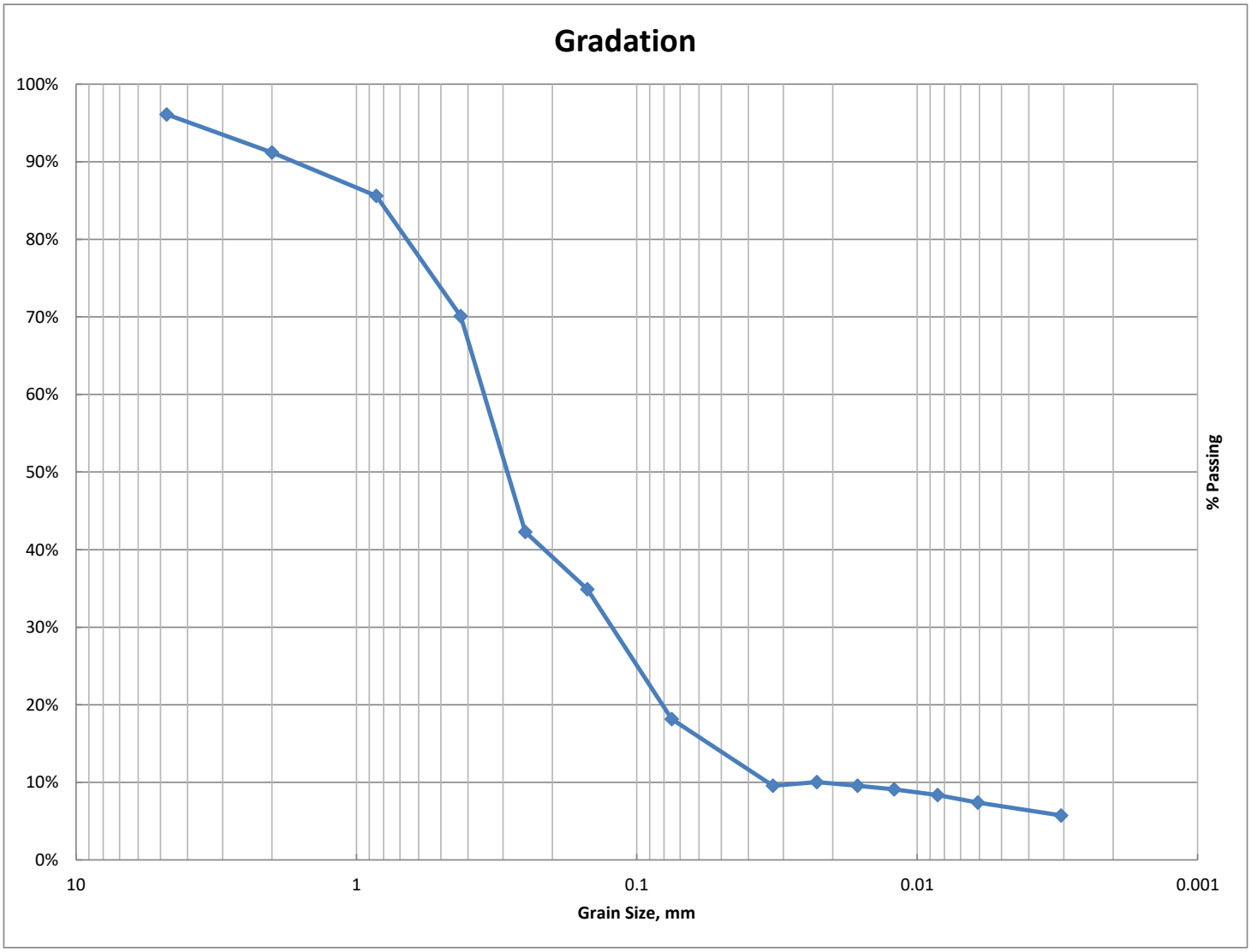


Figure No. 11

FKE

Sieve and Hydrometer Gradation Determination

30425 Stephenson Hwy.
Madison Heights, MI 48071

Job Number	24-018
Sample Number	SW SB-03
Date	1/23/2024

Tester	LKS/LKG
Dry Density	N/A
Water Content	17.0%

% Gravel (> No. 4)	6.3%
% Coarse Sand (No. 4 to No. 10)	5.2%
% Medium Sand (No. 10 to No. 40)	23.9%
% Fine Sand (No. 40 to No. 200)	50.1%
% Silt (0.075 to 0.005 mm)	10.9%
% Clay (< 0.005 mm)	3.6%

D_{10}	D_{30}	D_{60}
0.0563	0.1590	0.3857

C_u
6.8

C_C
1.16

Diameter	% Passing
4.75	93.7%
2	88.5%
0.85	80.5%
0.425	64.6%
0.25	44.1%
0.15	28.6%
0.075	14.5%
0.03444	5.1%
0.02435	5.1%
0.01722	5.1%
0.01264	4.9%
0.00902	4.5%
0.00645	3.9%
0.00311	3.3%

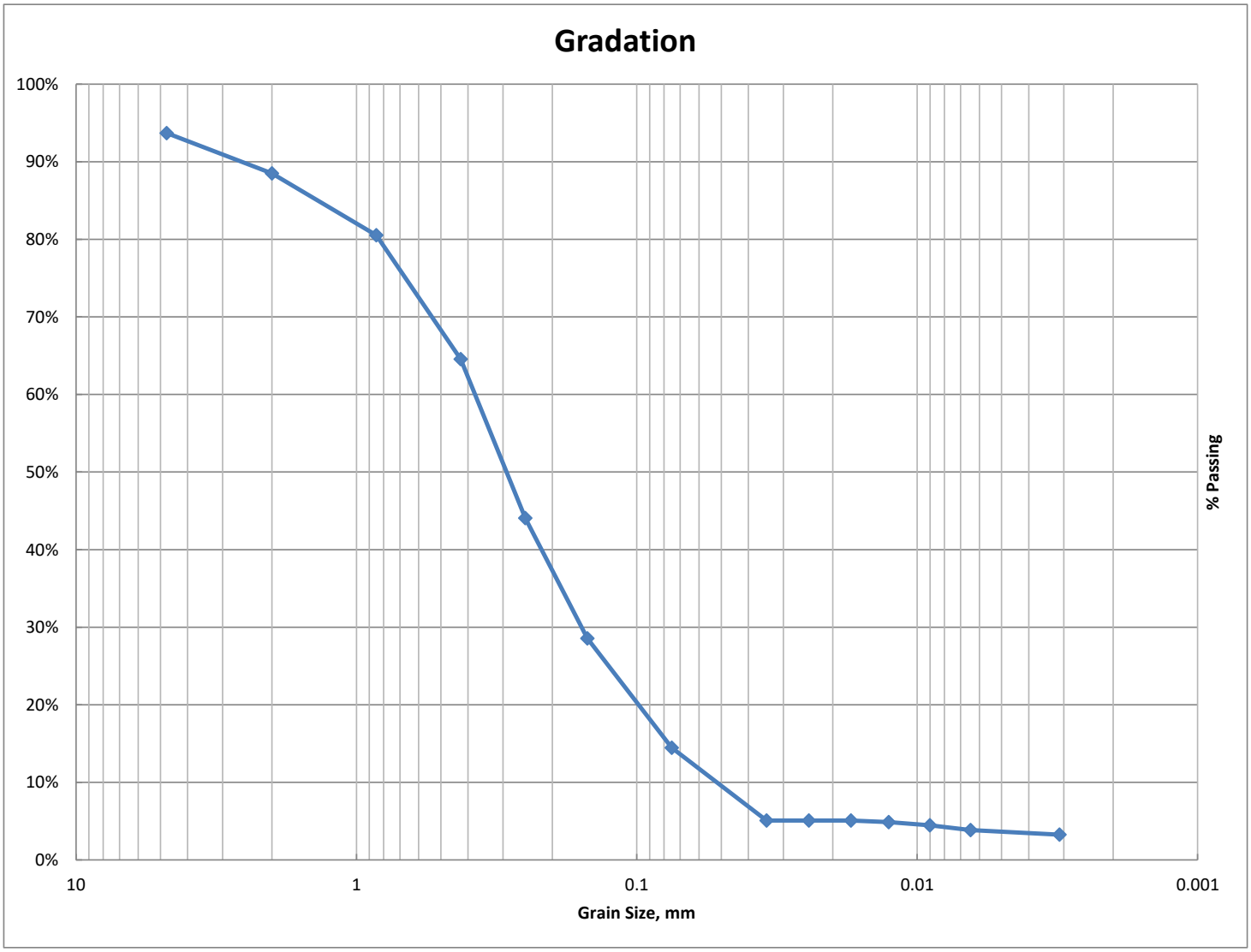


Figure No. 12

30425 Stephenson Hwy.
Madison Heights, MI 48071

Sieve and Hydrometer Gradation Determination

Job Number	24-018	Tester	LKS/LKG
Sample Number	SW SB-04	Dry Density	N/A
Date	1/24/2024	Water Content	17.1%

% Gravel (> No. 4)	3.8%
% Coarse Sand (No. 4 to No. 10)	8.0%
% Medium Sand (No. 10 to No. 40)	37.8%
% Fine Sand (No. 40 to No. 200)	38.6%
% Silt (0.075 to 0.005 mm)	6.4%
% Clay (< 0.005 mm)	5.3%

D_{10}	D_{30}	D_{60}
0.0409	0.2027	0.6633

C_u
16.2

C_C
1.51

Diameter	% Passing
4.75	96.2%
2	88.2%
0.85	67.6%
0.425	50.3%
0.25	35.2%
0.15	24.2%
0.075	11.7%
0.02891	9.4%
0.02073	9.1%
0.01518	8.1%
0.01139	7.4%
0.00830	6.4%
0.00599	5.7%
0.00303	4.5%

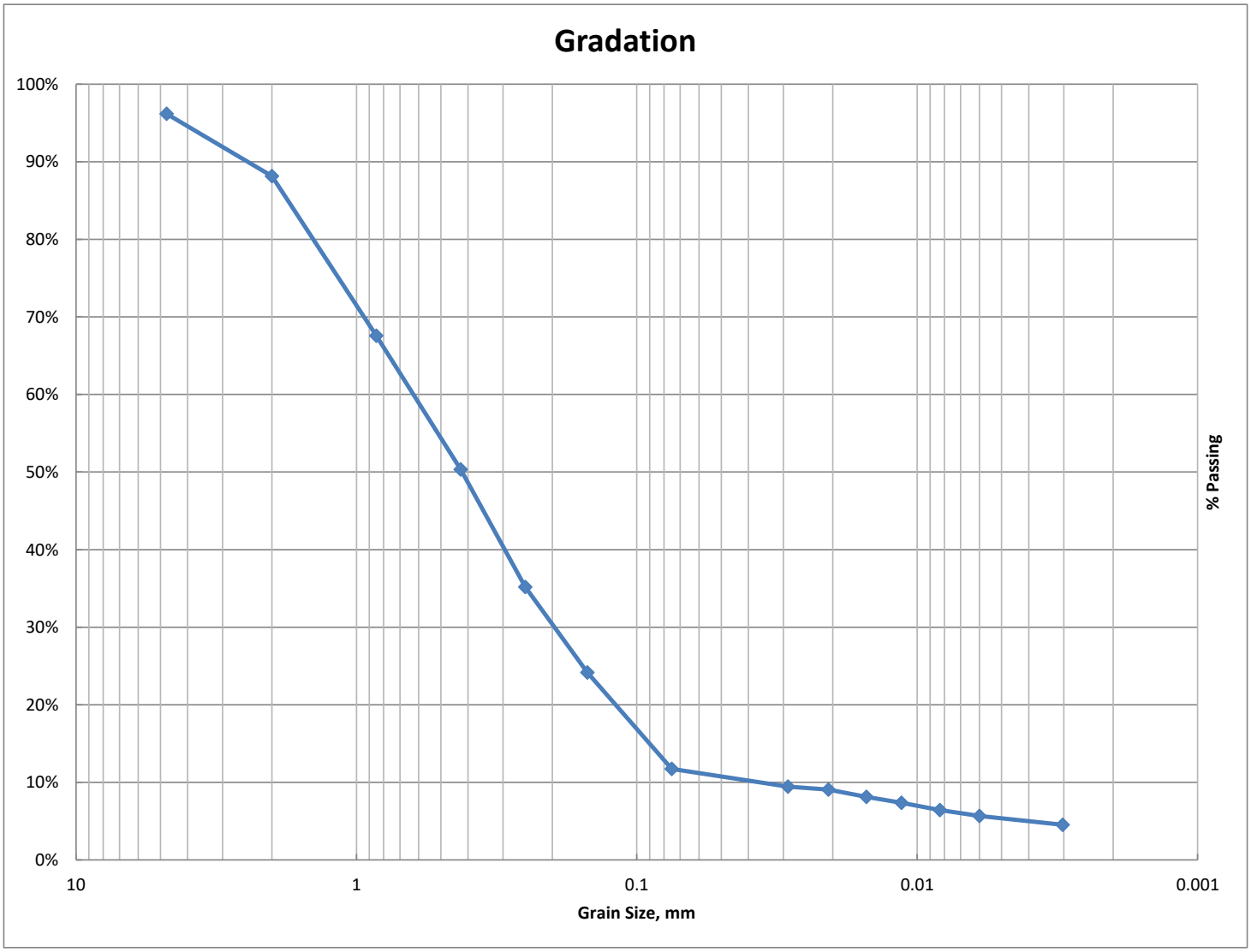


Figure No. 13

FKE

Sieve and Hydrometer Gradation Determination

30425 Stephenson Hwy.
Madison Heights, MI 48071

Job Number	24-018
Sample Number	SW SB-05
Date	1/24/2024

Tester	LKS/LKG
Dry Density	N/A
Water Content	19.2%

% Gravel (> No. 4)	6.2%
% Coarse Sand (No. 4 to No. 10)	5.6%
% Medium Sand (No. 10 to No. 40)	30.7%
% Fine Sand (No. 40 to No. 200)	47.3%
% Silt (0.075 to 0.005 mm)	6.7%
% Clay (< 0.005 mm)	3.5%

D_{10}	D_{30}	D_{60}
0.0740	0.2086	0.4812

C_u
6.5

C_C
1.22

Diameter	% Passing
4.75	93.8%
2	88.2%
0.85	76.4%
0.425	57.5%
0.25	36.0%
0.15	21.5%
0.075	10.2%
0.03663	2.7%
0.02475	5.0%
0.01774	4.3%
0.01299	4.3%
0.00918	4.1%
0.00654	3.6%
0.00321	3.4%

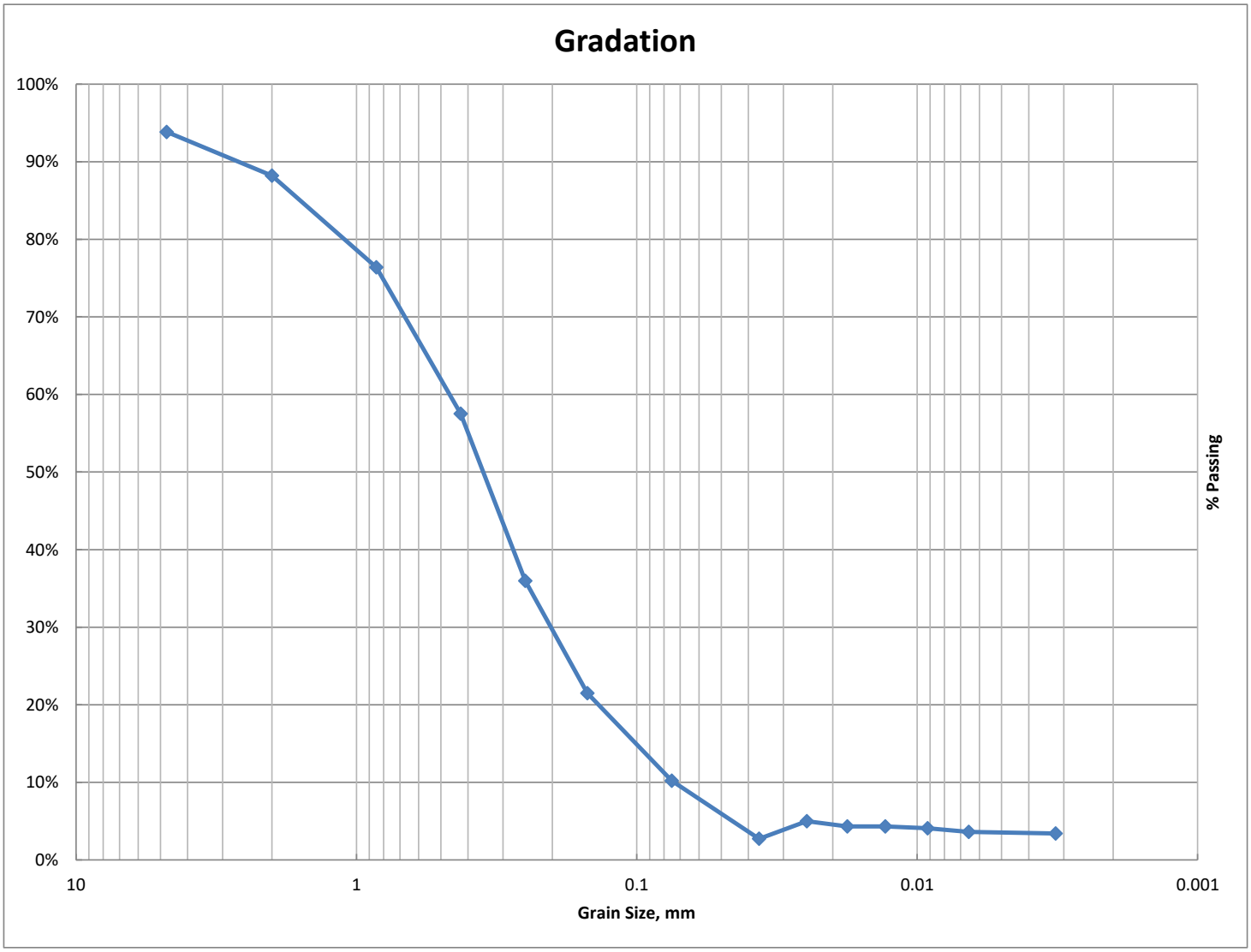


Figure No. 14

FKE

Sieve and Hydrometer Gradation Determination

30425 Stephenson Hwy.
Madison Heights, MI 48071

Job Number	24-018
Sample Number	SW SB-06
Date	1/24/2024

Tester	LKS/LKG
Dry Density	N/A
Water Content	17.0%

% Gravel (> No. 4)	13.3%
% Coarse Sand (No. 4 to No. 10)	5.2%
% Medium Sand (No. 10 to No. 40)	29.2%
% Fine Sand (No. 40 to No. 200)	37.2%
% Silt (0.075 to 0.005 mm)	8.2%
% Clay (< 0.005 mm)	6.9%

D_{10}	D_{30}	D_{60}
0.0221	0.1866	0.6334

C_u
28.7

C_C
2.49

Diameter	% Passing
4.75	86.7%
2	81.5%
0.85	68.0%
0.425	52.3%
0.25	37.1%
0.15	25.9%
0.075	15.1%
0.02720	10.2%
0.01956	9.9%
0.01418	9.3%
0.01044	9.2%
0.00778	8.0%
0.00563	7.3%
0.00291	5.7%

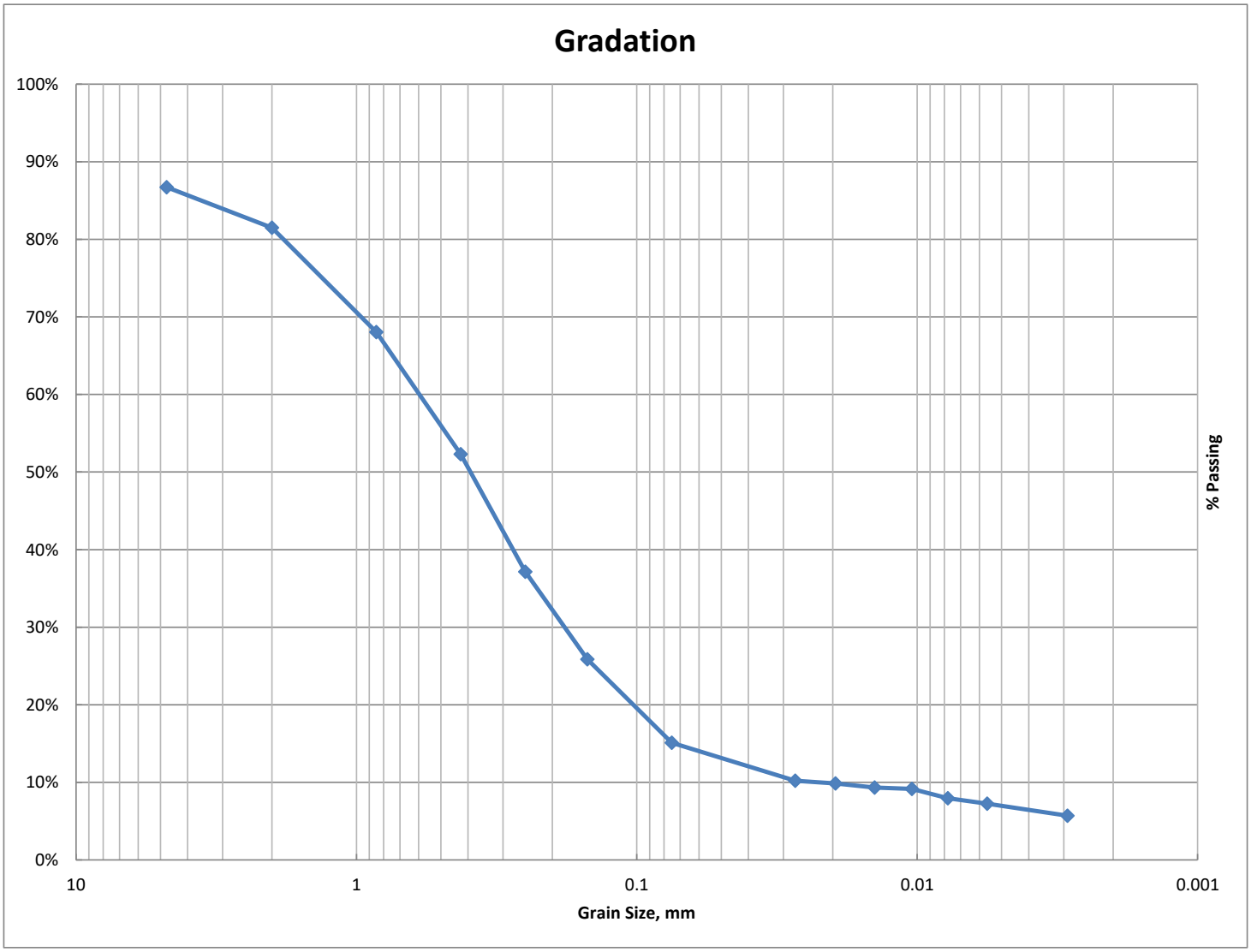


Figure No. 15

FKE

Sieve and Hydrometer Gradation Determination

30425 Stephenson Hwy.
Madison Heights, MI 48071

Job Number	24-018
Sample Number	SW SB-07
Date	1/25/2024

Tester	LKS/JAG
Dry Density	N/A
Water Content	18.1%

% Gravel (> No. 4)	4.5%
% Coarse Sand (No. 4 to No. 10)	6.4%
% Medium Sand (No. 10 to No. 40)	31.3%
% Fine Sand (No. 40 to No. 200)	42.7%
% Silt (0.075 to 0.005 mm)	8.5%
% Clay (< 0.005 mm)	6.7%

D_{10}	D_{30}	D_{60}
0.0296	0.1737	0.4791

C_u
16.2

C_C
2.13

Diameter	% Passing
4.75	95.5%
2	89.1%
0.85	75.0%
0.425	57.8%
0.25	39.8%
0.15	27.0%
0.075	15.1%
0.03064	10.1%
0.01979	9.5%
0.01575	9.3%
0.01188	8.3%
0.00846	7.9%
0.00610	7.2%
0.00303	5.8%

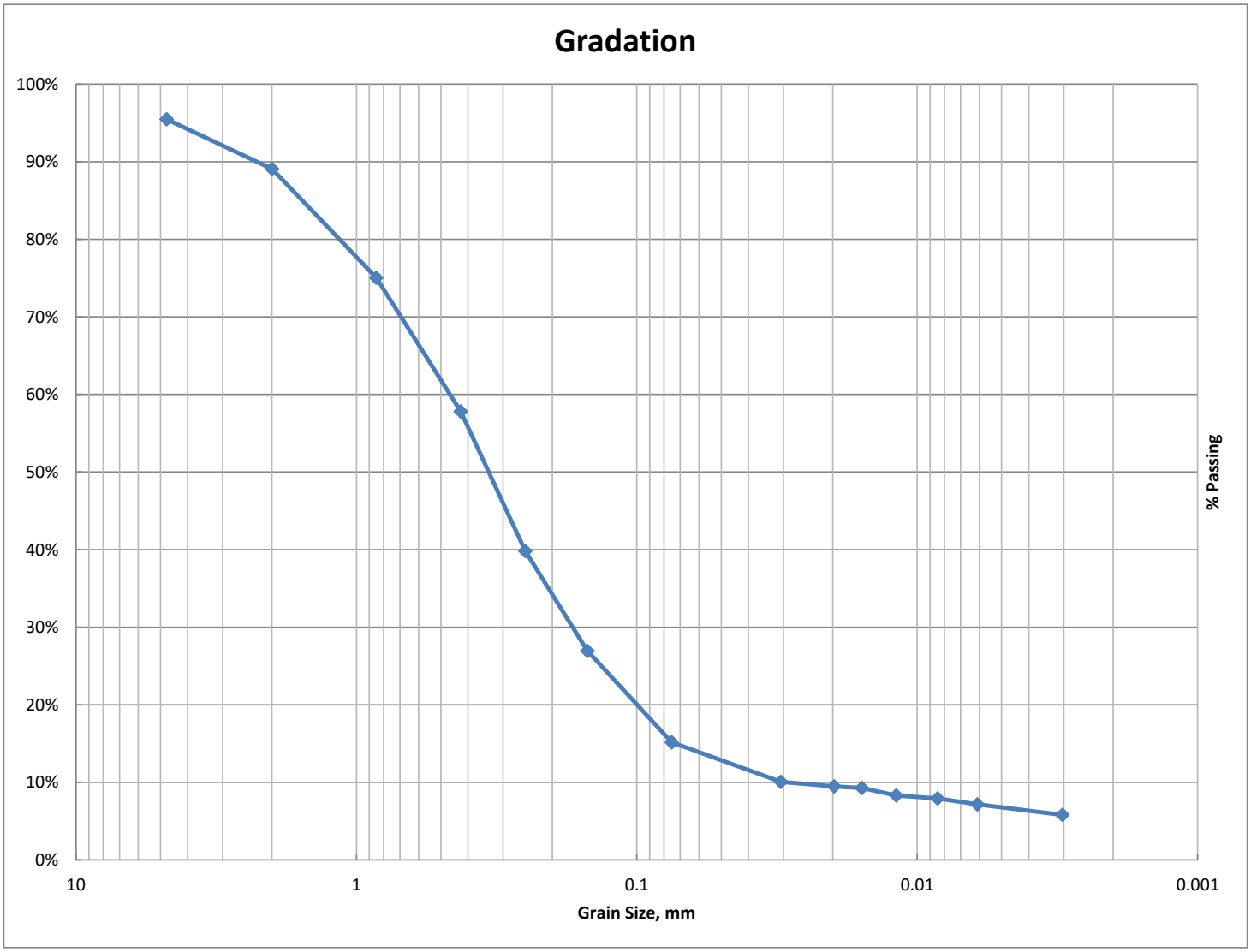


Figure No. 16

Fibertec environmental services
A METIRI GROUP COMPANY

Friday, February 9, 2024

Fibertec Project Number:	A19389
Project Identification:	Kettering SW Stockpile (2444-7114-00) /2444-7114-00
Submittal Date:	01/25/2024

Mr. Dan McNeely
DLZ Michigan, Inc - Detroit
607 Shelby St. #650
Detroit, MI 48226

Dear Mr. McNeely,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

Bailey Welch

By Bailey Welch at 11:35 AM, Feb 09, 2024

For Heather L. Smith
Director of Laboratory Operations

Enclosures

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-01 (Comp)**	Chain of Custody:	**205266**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:05**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19389-001** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SW-SB-01 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**22**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Toxicity Characteristic Leaching Procedure (TCLP) **Aliquot ID: A19389-001** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: SW-SB-01 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**1/3/2024**		NA	NA	1.0	NA	NA	01/03/24	NA	EZ

Toxicity Characteristic Leaching Procedure (TCLP) (Re-extraction) **Aliquot ID: A19389-001** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: SW-SB-01 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**2/6/2024**		NA	NA	1.0	NA	NA	02/06/24	NA	ARC

Toxicity Characteristic Leaching Procedure (TCLP), Zero Headspace **Aliquot ID: A19389-001** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: SW-SB-01 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**1/31/2024**		NA	NA	1.0	NA	NA	02/01/24	NA	SNC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19389-001** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: SW-SB-01 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:00	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:00	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:00	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:00	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:00	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:00	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:00	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:00	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:00	SO24A30A	BRC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-01 (Comp)**	Chain of Custody:	**205266**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:05**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TCLP RCRA-8 Metals by ICP-MS **Aliquot ID: A19389-001B** **Matrix: TCLP Extract**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: SW-SB-01 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
2. Barium	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
3. Cadmium	U		mg/L	0.20	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
4. Chromium	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
5. Lead	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
6. Selenium	U		mg/L	0.20	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
7. Silver	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS

TCLP Mercury **Aliquot ID: A19389-001B** **Matrix: TCLP Extract**
Method: EPA 7470A **Description: SW-SB-01 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		mg/L	0.050	1.0	02/02/24	PM24B02A	02/02/24	M724B02B	JLH

TCLP Volatiles **Aliquot ID: A19389-001C** **Matrix: TCLP Extract**
Method: EPA 5030C/EPA 8260D **Description: SW-SB-01 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Benzene	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 15:03	VM24A31B	KYD
2. 2-Butanone	U		mg/L	40	20	01/31/24	VM24A31B	01/31/24 15:03	VM24A31B	KYD
3. Carbon Tetrachloride	U	V+	mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 15:03	VM24A31B	KYD
4. Chlorobenzene	U		mg/L	20	20	01/31/24	VM24A31B	01/31/24 15:03	VM24A31B	KYD
5. Chloroform	U		mg/L	1.2	20	01/31/24	VM24A31B	01/31/24 15:03	VM24A31B	KYD
6. 1,4-Dichlorobenzene	U		mg/L	1.5	20	01/31/24	VM24A31B	01/31/24 15:03	VM24A31B	KYD
7. 1,2-Dichloroethane	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 15:03	VM24A31B	KYD
8. 1,1-Dichloroethene	U		mg/L	0.14	20	01/31/24	VM24A31B	01/31/24 15:03	VM24A31B	KYD
9. Tetrachloroethene	U		mg/L	0.14	20	01/31/24	VM24A31B	01/31/24 15:03	VM24A31B	KYD
10. Trichloroethene	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 15:03	VM24A31B	KYD
11. Vinyl Chloride	U	V+	mg/L	0.040	20	01/31/24	VM24A31B	01/31/24 15:03	VM24A31B	KYD

TCLP Semivolatiles **Aliquot ID: A19389-001A** **Matrix: TCLP Extract**
Method: EPA 3510C/EPA 8270E **Description: SW-SB-01 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-01 (Comp)**	Chain of Custody:	**205266**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:05**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TCLP Semivolatiles **Aliquot ID: A19389-001A** **Matrix: TCLP Extract**
Method: EPA 3510C/EPA 8270E **Description: SW-SB-01 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-Dinitrotoluene	U	G+	mg/L	0.025	1.0	02/08/24	PS24B08I	02/08/24 17:29	S524B08B	KDG
2. Hexachlorobenzene	U	G+ V-	mg/L	0.025	1.0	02/08/24	PS24B08I	02/08/24 17:29	S524B08B	KDG
3. Hexachlorobutadiene	U	G+ V+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 17:29	S524B08B	KDG
4. Hexachloroethane	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 17:29	S524B08B	KDG
5. 2-Methylphenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 17:29	S524B08B	KDG
‡ 6. 3&4-Methylphenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 17:29	S524B08B	KDG
7. Nitrobenzene	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 17:29	S524B08B	KDG
8. Pentachlorophenol	U	G+ V-	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 17:29	S524B08B	KDG
9. Pyridine	U	G+ V+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 17:29	S524B08B	KDG
10. 2,4,5-Trichlorophenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 17:29	S524B08B	KDG
11. 2,4,6-Trichlorophenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 17:29	S524B08B	KDG

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-03 (Comp)**	Chain of Custody:	**205266**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19389-002** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SW-SB-03 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**17**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Toxicity Characteristic Leaching Procedure (TCLP) **Aliquot ID: A19389-002** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: SW-SB-03 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**1/3/2024**		NA	NA	1.0	NA	NA	01/03/24	NA	EZ

Toxicity Characteristic Leaching Procedure (TCLP) (Re-extraction) **Aliquot ID: A19389-002** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: SW-SB-03 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**2/6/2024**		NA	NA	1.0	NA	NA	02/06/24	NA	ARC

Toxicity Characteristic Leaching Procedure (TCLP), Zero Headspace **Aliquot ID: A19389-002** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: SW-SB-03 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**1/31/2024**		NA	NA	1.0	NA	NA	02/01/24	NA	SNC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19389-002** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: SW-SB-03 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:12	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:12	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:12	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:12	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:12	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:12	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:12	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:12	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:12	SO24A30A	BRC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-03 (Comp)**	Chain of Custody:	**205266**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TCLP RCRA-8 Metals by ICP-MS **Aliquot ID: A19389-002B** **Matrix: TCLP Extract**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: SW-SB-03 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
2. Barium	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
3. Cadmium	U		mg/L	0.20	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
4. Chromium	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
5. Lead	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
6. Selenium	U		mg/L	0.20	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
7. Silver	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS

TCLP Mercury **Aliquot ID: A19389-002B** **Matrix: TCLP Extract**
Method: EPA 7470A **Description: SW-SB-03 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		mg/L	0.050	1.0	02/02/24	PM24B02A	02/02/24	M724B02B	JLH

TCLP Volatiles **Aliquot ID: A19389-002C** **Matrix: TCLP Extract**
Method: EPA 5030C/EPA 8260D **Description: SW-SB-03 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Benzene	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 15:29	VM24A31B	KYD
2. 2-Butanone	U		mg/L	40	20	01/31/24	VM24A31B	01/31/24 15:29	VM24A31B	KYD
3. Carbon Tetrachloride	U	V+	mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 15:29	VM24A31B	KYD
4. Chlorobenzene	U		mg/L	20	20	01/31/24	VM24A31B	01/31/24 15:29	VM24A31B	KYD
5. Chloroform	U		mg/L	1.2	20	01/31/24	VM24A31B	01/31/24 15:29	VM24A31B	KYD
6. 1,4-Dichlorobenzene	U		mg/L	1.5	20	01/31/24	VM24A31B	01/31/24 15:29	VM24A31B	KYD
7. 1,2-Dichloroethane	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 15:29	VM24A31B	KYD
8. 1,1-Dichloroethene	U		mg/L	0.14	20	01/31/24	VM24A31B	01/31/24 15:29	VM24A31B	KYD
9. Tetrachloroethene	U		mg/L	0.14	20	01/31/24	VM24A31B	01/31/24 15:29	VM24A31B	KYD
10. Trichloroethene	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 15:29	VM24A31B	KYD
11. Vinyl Chloride	U	V+	mg/L	0.040	20	01/31/24	VM24A31B	01/31/24 15:29	VM24A31B	KYD

TCLP Semivolatiles **Aliquot ID: A19389-002A** **Matrix: TCLP Extract**
Method: EPA 3510C/EPA 8270E **Description: SW-SB-03 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-03 (Comp)**	Chain of Custody:	**205266**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TCLP Semivolatiles **Aliquot ID: A19389-002A** **Matrix: TCLP Extract**
Method: EPA 3510C/EPA 8270E **Description: SW-SB-03 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-Dinitrotoluene	U	G+	mg/L	0.025	1.0	02/08/24	PS24B08I	02/08/24 18:07	S524B08B	KDG
2. Hexachlorobenzene	U	G+ V-	mg/L	0.025	1.0	02/08/24	PS24B08I	02/08/24 18:07	S524B08B	KDG
3. Hexachlorobutadiene	U	G+ V+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:07	S524B08B	KDG
4. Hexachloroethane	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:07	S524B08B	KDG
5. 2-Methylphenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:07	S524B08B	KDG
‡ 6. 3&4-Methylphenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:07	S524B08B	KDG
7. Nitrobenzene	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:07	S524B08B	KDG
8. Pentachlorophenol	U	G+ V-	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:07	S524B08B	KDG
9. Pyridine	U	G+ V+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:07	S524B08B	KDG
10. 2,4,5-Trichlorophenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:07	S524B08B	KDG
11. 2,4,6-Trichlorophenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:07	S524B08B	KDG

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-06 (Comp)**	Chain of Custody:	**205266**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19389-003** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SW-SB-06 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**19**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Toxicity Characteristic Leaching Procedure (TCLP) **Aliquot ID: A19389-003** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: SW-SB-06 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**1/3/2024**		NA	NA	1.0	NA	NA	01/03/24	NA	EZ

Toxicity Characteristic Leaching Procedure (TCLP) (Re-extraction) **Aliquot ID: A19389-003** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: SW-SB-06 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**2/6/2024**		NA	NA	1.0	NA	NA	02/06/24	NA	ARC

Toxicity Characteristic Leaching Procedure (TCLP), Zero Headspace **Aliquot ID: A19389-003** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: SW-SB-06 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**1/31/2024**		NA	NA	1.0	NA	NA	02/01/24	NA	SNC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19389-003** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: SW-SB-06 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:23	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:23	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:23	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:23	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:23	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:23	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:23	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:23	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:23	SO24A30A	BRC

Analytical Laboratory Report
Laboratory Project Number: A19389
Laboratory Sample Number: A19389-003

Order: A19389
Date: 02/09/24

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-06 (Comp)**	Chain of Custody:	**205266**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TCLP RCRA-8 Metals by ICP-MS **Aliquot ID: A19389-003B** **Matrix: TCLP Extract**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: SW-SB-06 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
2. Barium	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
3. Cadmium	U		mg/L	0.20	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
4. Chromium	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
5. Lead	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
6. Selenium	U		mg/L	0.20	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
7. Silver	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS

TCLP Mercury **Aliquot ID: A19389-003B** **Matrix: TCLP Extract**
Method: EPA 7470A **Description: SW-SB-06 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		mg/L	0.050	1.0	02/02/24	PM24B02A	02/02/24	M724B02B	JLH

TCLP Volatiles **Aliquot ID: A19389-003C** **Matrix: TCLP Extract**
Method: EPA 5030C/EPA 8260D **Description: SW-SB-06 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Benzene	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 15:56	VM24A31B	KYD
2. 2-Butanone	U		mg/L	40	20	01/31/24	VM24A31B	01/31/24 15:56	VM24A31B	KYD
3. Carbon Tetrachloride	U	V+	mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 15:56	VM24A31B	KYD
4. Chlorobenzene	U		mg/L	20	20	01/31/24	VM24A31B	01/31/24 15:56	VM24A31B	KYD
5. Chloroform	U		mg/L	1.2	20	01/31/24	VM24A31B	01/31/24 15:56	VM24A31B	KYD
6. 1,4-Dichlorobenzene	U		mg/L	1.5	20	01/31/24	VM24A31B	01/31/24 15:56	VM24A31B	KYD
7. 1,2-Dichloroethane	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 15:56	VM24A31B	KYD
8. 1,1-Dichloroethene	U		mg/L	0.14	20	01/31/24	VM24A31B	01/31/24 15:56	VM24A31B	KYD
9. Tetrachloroethene	U		mg/L	0.14	20	01/31/24	VM24A31B	01/31/24 15:56	VM24A31B	KYD
10. Trichloroethene	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 15:56	VM24A31B	KYD
11. Vinyl Chloride	U	V+	mg/L	0.040	20	01/31/24	VM24A31B	01/31/24 15:56	VM24A31B	KYD

TCLP Semivolatiles **Aliquot ID: A19389-003A** **Matrix: TCLP Extract**
Method: EPA 3510C/EPA 8270E **Description: SW-SB-06 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-06 (Comp)**	Chain of Custody:	**205266**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TCLP Semivolatiles **Aliquot ID: A19389-003A** **Matrix: TCLP Extract**
Method: EPA 3510C/EPA 8270E **Description: SW-SB-06 (Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-Dinitrotoluene	U	G+	mg/L	0.025	1.0	02/08/24	PS24B08I	02/08/24 18:44	S524B08B	KDG
2. Hexachlorobenzene	U	G+ V-	mg/L	0.025	1.0	02/08/24	PS24B08I	02/08/24 18:44	S524B08B	KDG
3. Hexachlorobutadiene	U	G+ V+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:44	S524B08B	KDG
4. Hexachloroethane	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:44	S524B08B	KDG
5. 2-Methylphenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:44	S524B08B	KDG
‡ 6. 3&4-Methylphenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:44	S524B08B	KDG
7. Nitrobenzene	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:44	S524B08B	KDG
8. Pentachlorophenol	U	G+ V-	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:44	S524B08B	KDG
9. Pyridine	U	G+ V+ F+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:44	S524B08B	KDG
10. 2,4,5-Trichlorophenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:44	S524B08B	KDG
11. 2,4,6-Trichlorophenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 18:44	S524B08B	KDG

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QC limits

Exception Summary:

F+ : Recovery from the spiked aliquot exceeds the upper control limit (matrix spike or matrix spike duplicate).
G+ : Recovery of the associated Surrogate Compound exceeds the upper control limit. Results may be biased high.
V- : Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.
V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.

NELAP ACCREDITED TNI LABORATORY

Accreditation Number(s):

TX-C24-00039 (TX)

Fibertec environmental services

Analytical Laboratory
1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
Fax: 517 699 0388
email: lab@fibertec.us

8660 S. Mackinaw Trail
Cadillac, MI 49601
Phone: 231 775 8368
Fax: 231 775 8584

Geoprobe
11766 E. Grand River Rd.
Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody #
205266
PAGE 1 of 1

Client Name: DZ Michigan, Inc.
Contact Persan: Dan McNeely
Project Name/ Number: Kettering SW Stockpile 2444-7114-00
Email distribution list: dmcneely@edlz.com; mthompson@edlz.com
Quote#
Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	TCLP VOCs	TCLP SVOCs	TCLP RCRA 8 metals	PCBs	HOLD SAMPLE
1-23-24	1005		SW-SB-01 (Comp)	S	1	X	X	X	X	
1-23-24	1100		SW-SB-03 (Comp)	S	1	X	X	X	X	
1-23-24	1330		SW-SB-06 (Comp)	S	1	X	X	X	X	

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; EDD

Remarks:

Received By Lab
JAN 26 2024
Initials: JS

Comments:

	Date/ Time	
Sampled/Relinquished By: Dan McNeely	1-25-24 1600	Received By: Russ Scott
Relinquished By: Russ Scott J. Brooks	1/26/24 12:00	Received By:
Relinquished By:	1/26/24 13:00	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number: A19389

Temperature upon receipt at Lab: 2.2°C

Received On Ice

Please see back for terms and conditions

Fibertec environmental services
A METIRI GROUP COMPANY

Monday, February 12, 2024

Fibertec Project Number:	A19391
Project Identification:	Kettering NE Stockpile (2444-7114-00) /2444-7114-00
Submittal Date:	01/25/2024

Mr. Dan McNeely
DLZ Michigan, Inc - Detroit
607 Shelby St. #650
Detroit, MI 48226

Dear Mr. McNeely,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

Bailey Welch

By Bailey Welch at 11:55 AM, Feb 12, 2024

For Heather L. Smith
Director of Laboratory Operations

Enclosures

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-02(Comp)**	Chain of Custody:	**205254**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19391-001** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: NE-SB-02(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**19**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Toxicity Characteristic Leaching Procedure (TCLP) **Aliquot ID: A19391-001** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: NE-SB-02(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**1/3/2024**		NA	NA	1.0	NA	NA	01/03/24	NA	EZ

Toxicity Characteristic Leaching Procedure (TCLP) (Re-extraction) **Aliquot ID: A19391-001** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: NE-SB-02(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**2/6/2024**		NA	NA	1.0	NA	NA	02/06/24	NA	ARC

Toxicity Characteristic Leaching Procedure (TCLP), Zero Headspace **Aliquot ID: A19391-001** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: NE-SB-02(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**1/31/2024**		NA	NA	1.0	NA	NA	02/01/24	NA	SNC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19391-001** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: NE-SB-02(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:35	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:35	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:35	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:35	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:35	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:35	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:35	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:35	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:35	SO24A30A	BRC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-02(Comp)**	Chain of Custody:	**205254**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TCLP RCRA-8 Metals by ICP-MS **Aliquot ID: A19391-001B** **Matrix: TCLP Extract**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: NE-SB-02(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
2. Barium	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
3. Cadmium	U		mg/L	0.20	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
4. Chromium	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
5. Lead	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
6. Selenium	U		mg/L	0.20	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
7. Silver	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS

TCLP Mercury **Aliquot ID: A19391-001B** **Matrix: TCLP Extract**
Method: EPA 7470A **Description: NE-SB-02(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		mg/L	0.050	1.0	02/02/24	PM24B02A	02/02/24	M724B02B	JLH

TCLP Volatiles **Aliquot ID: A19391-001C** **Matrix: TCLP Extract**
Method: EPA 5030C/EPA 8260D **Description: NE-SB-02(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Benzene	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 16:48	VM24A31B	KYD
2. 2-Butanone	U		mg/L	40	20	01/31/24	VM24A31B	01/31/24 16:48	VM24A31B	KYD
3. Carbon Tetrachloride	U	V+	mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 16:48	VM24A31B	KYD
4. Chlorobenzene	U		mg/L	20	20	01/31/24	VM24A31B	01/31/24 16:48	VM24A31B	KYD
5. Chloroform	U		mg/L	1.2	20	01/31/24	VM24A31B	01/31/24 16:48	VM24A31B	KYD
6. 1,4-Dichlorobenzene	U		mg/L	1.5	20	01/31/24	VM24A31B	01/31/24 16:48	VM24A31B	KYD
7. 1,2-Dichloroethane	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 16:48	VM24A31B	KYD
8. 1,1-Dichloroethene	U		mg/L	0.14	20	01/31/24	VM24A31B	01/31/24 16:48	VM24A31B	KYD
9. Tetrachloroethene	U		mg/L	0.14	20	01/31/24	VM24A31B	01/31/24 16:48	VM24A31B	KYD
10. Trichloroethene	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 16:48	VM24A31B	KYD
11. Vinyl Chloride	U	V+ F+	mg/L	0.040	20	01/31/24	VM24A31B	01/31/24 16:48	VM24A31B	KYD

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-02(Comp)**	Chain of Custody:	**205254**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TCLP Semivolatiles **Aliquot ID: A19391-001A** **Matrix: TCLP Extract**
Method: EPA 3510C/EPA 8270E **Description: NE-SB-02(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-Dinitrotoluene	U	G+	mg/L	0.025	1.0	02/08/24	PS24B08I	02/08/24 19:58	S524B08B	KDG
2. Hexachlorobenzene	U	G+ V-	mg/L	0.025	1.0	02/08/24	PS24B08I	02/08/24 19:58	S524B08B	KDG
3. Hexachlorobutadiene	U	G+ V+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 19:58	S524B08B	KDG
4. Hexachloroethane	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 19:58	S524B08B	KDG
5. 2-Methylphenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 19:58	S524B08B	KDG
‡ 6. 3&4-Methylphenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 19:58	S524B08B	KDG
7. Nitrobenzene	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 19:58	S524B08B	KDG
8. Pentachlorophenol	U	G+ V-	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 19:58	S524B08B	KDG
9. Pyridine	U	G+ V+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 19:58	S524B08B	KDG
10. 2,4,5-Trichlorophenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 19:58	S524B08B	KDG
11. 2,4,6-Trichlorophenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 19:58	S524B08B	KDG

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-06(Comp)**	Chain of Custody:	**205254**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19391-002** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: NE-SB-06(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**17**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Toxicity Characteristic Leaching Procedure (TCLP) **Aliquot ID: A19391-002** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: NE-SB-06(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**1/3/2024**		NA	NA	1.0	NA	NA	01/03/24	NA	EZ

Toxicity Characteristic Leaching Procedure (TCLP) (Re-extraction) **Aliquot ID: A19391-002** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: NE-SB-06(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**2/6/2024**		NA	NA	1.0	NA	NA	02/06/24	NA	ARC

Toxicity Characteristic Leaching Procedure (TCLP), Zero Headspace **Aliquot ID: A19391-002** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: NE-SB-06(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**1/31/2024**		NA	NA	1.0	NA	NA	02/01/24	NA	SNC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19391-002** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: NE-SB-06(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:47	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:47	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:47	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:47	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:47	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:47	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:47	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:47	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:47	SO24A30A	BRC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-06(Comp)**	Chain of Custody:	**205254**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TCLP RCRA-8 Metals by ICP-MS **Aliquot ID: A19391-002B** **Matrix: TCLP Extract**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: NE-SB-06(Comp)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
2. Barium	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
3. Cadmium	U		mg/L	0.20	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
4. Chromium	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
5. Lead	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
6. Selenium	U		mg/L	0.20	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
7. Silver	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS

TCLP Mercury **Aliquot ID: A19391-002B** **Matrix: TCLP Extract**
Method: EPA 7470A **Description: NE-SB-06(Comp)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	U		mg/L	0.050	1.0	02/02/24	PM24B02A	02/02/24	M724B02B	JLH

TCLP Volatiles **Aliquot ID: A19391-002C** **Matrix: TCLP Extract**
Method: EPA 5030C/EPA 8260D **Description: NE-SB-06(Comp)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Benzene	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 16:22	VM24A31B	KYD
2. 2-Butanone	U		mg/L	40	20	01/31/24	VM24A31B	01/31/24 16:22	VM24A31B	KYD
3. Carbon Tetrachloride	U	V+	mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 16:22	VM24A31B	KYD
4. Chlorobenzene	U		mg/L	20	20	01/31/24	VM24A31B	01/31/24 16:22	VM24A31B	KYD
5. Chloroform	U		mg/L	1.2	20	01/31/24	VM24A31B	01/31/24 16:22	VM24A31B	KYD
6. 1,4-Dichlorobenzene	U		mg/L	1.5	20	01/31/24	VM24A31B	01/31/24 16:22	VM24A31B	KYD
7. 1,2-Dichloroethane	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 16:22	VM24A31B	KYD
8. 1,1-Dichloroethene	U		mg/L	0.14	20	01/31/24	VM24A31B	01/31/24 16:22	VM24A31B	KYD
9. Tetrachloroethene	U		mg/L	0.14	20	01/31/24	VM24A31B	01/31/24 16:22	VM24A31B	KYD
10. Trichloroethene	U		mg/L	0.10	20	01/31/24	VM24A31B	01/31/24 16:22	VM24A31B	KYD
11. Vinyl Chloride	U	V+	mg/L	0.040	20	01/31/24	VM24A31B	01/31/24 16:22	VM24A31B	KYD

TCLP Semivolatiles **Aliquot ID: A19391-002A** **Matrix: TCLP Extract**
Method: EPA 3510C/EPA 8270E **Description: NE-SB-06(Comp)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-06(Comp)**	Chain of Custody:	**205254**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TCLP Semivolatiles **Aliquot ID: A19391-002A** **Matrix: TCLP Extract**
Method: EPA 3510C/EPA 8270E **Description: NE-SB-06(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-Dinitrotoluene	U	G+	mg/L	0.025	1.0	02/08/24	PS24B08I	02/08/24 20:36	S524B08B	KDG
2. Hexachlorobenzene	U	G+ V-	mg/L	0.025	1.0	02/08/24	PS24B08I	02/08/24 20:36	S524B08B	KDG
3. Hexachlorobutadiene	U	G+ V+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 20:36	S524B08B	KDG
4. Hexachloroethane	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 20:36	S524B08B	KDG
5. 2-Methylphenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 20:36	S524B08B	KDG
‡ 6. 3&4-Methylphenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 20:36	S524B08B	KDG
7. Nitrobenzene	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 20:36	S524B08B	KDG
8. Pentachlorophenol	U	G+ V-	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 20:36	S524B08B	KDG
9. Pyridine	U	G+ V+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 20:36	S524B08B	KDG
10. 2,4,5-Trichlorophenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 20:36	S524B08B	KDG
11. 2,4,6-Trichlorophenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 20:36	S524B08B	KDG

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-08(Comp)**	Chain of Custody:	**205254**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:40**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19391-003** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: NE-SB-08(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**19**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Toxicity Characteristic Leaching Procedure (TCLP) **Aliquot ID: A19391-003** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: NE-SB-08(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**1/3/2024**		NA	NA	1.0	NA	NA	01/03/24	NA	EZ

Toxicity Characteristic Leaching Procedure (TCLP) (Re-extraction) **Aliquot ID: A19391-003** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: NE-SB-08(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**2/6/2024**		NA	NA	1.0	NA	NA	02/06/24	NA	ARC

Toxicity Characteristic Leaching Procedure (TCLP), Zero Headspace **Aliquot ID: A19391-003** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: NE-SB-08(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**1/31/2024**		NA	NA	1.0	NA	NA	02/01/24	NA	SNC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19391-003** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: NE-SB-08(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:58	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:58	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:58	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:58	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:58	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:58	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:58	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:58	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 17:58	SO24A30A	BRC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-08(Comp)**	Chain of Custody:	**205254**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:40**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TCLP RCRA-8 Metals by ICP-MS **Aliquot ID: A19391-003B** **Matrix: TCLP Extract**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: NE-SB-08(Comp)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
2. Barium	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
3. Cadmium	U		mg/L	0.20	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
4. Chromium	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
5. Lead	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
6. Selenium	U		mg/L	0.20	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
7. Silver	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS

TCLP Mercury **Aliquot ID: A19391-003B** **Matrix: TCLP Extract**
Method: EPA 7470A **Description: NE-SB-08(Comp)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	U		mg/L	0.050	1.0	02/02/24	PM24B02A	02/02/24	M724B02B	JLH

TCLP Volatiles **Aliquot ID: A19391-003C** **Matrix: TCLP Extract**
Method: EPA 5030C/EPA 8260D **Description: NE-SB-08(Comp)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Benzene	U		mg/L	0.10	20	02/01/24	VM24B01A	02/01/24 13:02	VM24B01A	KYD
2. 2-Butanone	U		mg/L	40	20	02/01/24	VM24B01A	02/01/24 13:02	VM24B01A	KYD
3. Carbon Tetrachloride	U	V+	mg/L	0.10	20	02/01/24	VM24B01A	02/01/24 13:02	VM24B01A	KYD
4. Chlorobenzene	U		mg/L	20	20	02/01/24	VM24B01A	02/01/24 13:02	VM24B01A	KYD
5. Chloroform	U		mg/L	1.2	20	02/01/24	VM24B01A	02/01/24 13:02	VM24B01A	KYD
6. 1,4-Dichlorobenzene	U		mg/L	1.5	20	02/01/24	VM24B01A	02/01/24 13:02	VM24B01A	KYD
7. 1,2-Dichloroethane	U		mg/L	0.10	20	02/01/24	VM24B01A	02/01/24 13:02	VM24B01A	KYD
8. 1,1-Dichloroethene	U		mg/L	0.14	20	02/01/24	VM24B01A	02/01/24 13:02	VM24B01A	KYD
9. Tetrachloroethene	U		mg/L	0.14	20	02/01/24	VM24B01A	02/01/24 13:02	VM24B01A	KYD
10. Trichloroethene	U		mg/L	0.10	20	02/01/24	VM24B01A	02/01/24 13:02	VM24B01A	KYD
11. Vinyl Chloride	U	L+	mg/L	0.040	20	02/01/24	VM24B01A	02/01/24 13:02	VM24B01A	KYD

TCLP Semivolatiles **Aliquot ID: A19391-003A** **Matrix: TCLP Extract**
Method: EPA 3510C/EPA 8270E **Description: NE-SB-08(Comp)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-08(Comp)**	Chain of Custody:	**205254**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:40**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TCLP Semivolatiles **Aliquot ID: A19391-003A** **Matrix: TCLP Extract**
Method: EPA 3510C/EPA 8270E **Description: NE-SB-08(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-Dinitrotoluene	U	G+	mg/L	0.025	1.0	02/08/24	PS24B08I	02/08/24 21:13	S524B08B	KDG
2. Hexachlorobenzene	U	G+ V-	mg/L	0.025	1.0	02/08/24	PS24B08I	02/08/24 21:13	S524B08B	KDG
3. Hexachlorobutadiene	U	G+ V+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 21:13	S524B08B	KDG
4. Hexachloroethane	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 21:13	S524B08B	KDG
5. 2-Methylphenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 21:13	S524B08B	KDG
‡ 6. 3&4-Methylphenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 21:13	S524B08B	KDG
7. Nitrobenzene	U	G+ F+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 21:13	S524B08B	KDG
8. Pentachlorophenol	U	G+ V-	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 21:13	S524B08B	KDG
9. Pyridine	U	G+ V+ F+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 21:13	S524B08B	KDG
10. 2,4,5-Trichlorophenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 21:13	S524B08B	KDG
11. 2,4,6-Trichlorophenol	U	G+ F+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 21:13	S524B08B	KDG

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-11(Comp)**	Chain of Custody:	**205254**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19391-004** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: NE-SB-11(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**18**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Toxicity Characteristic Leaching Procedure (TCLP) **Aliquot ID: A19391-004** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: NE-SB-11(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**1/3/2024**		NA	NA	1.0	NA	NA	01/03/24	NA	EZ

Toxicity Characteristic Leaching Procedure (TCLP) (Re-extraction) **Aliquot ID: A19391-004** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: NE-SB-11(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**2/6/2024**		NA	NA	1.0	NA	NA	02/06/24	NA	ARC

Toxicity Characteristic Leaching Procedure (TCLP), Zero Headspace **Aliquot ID: A19391-004** **Matrix: Soil/Solid**
Method: EPA 1311 **Description: NE-SB-11(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. TCLP Date	**1/31/2024**		NA	NA	1.0	NA	NA	02/01/24	NA	SNC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19391-004** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: NE-SB-11(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 18:10	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 18:10	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 18:10	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 18:10	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 18:10	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 18:10	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 18:10	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 18:10	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/29/24	PS24A29F	01/30/24 18:10	SO24A30A	BRC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-11(Comp)**	Chain of Custody:	**205254**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TCLP RCRA-8 Metals by ICP-MS **Aliquot ID: A19391-004B** **Matrix: TCLP Extract**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: NE-SB-11(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
2. Barium	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
3. Cadmium	U		mg/L	0.20	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
4. Chromium	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
5. Lead	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
6. Selenium	U		mg/L	0.20	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS
7. Silver	U		mg/L	1.0	20	02/02/24	PT24B02A	02/02/24	T424B02C	JJS

TCLP Mercury **Aliquot ID: A19391-004B** **Matrix: TCLP Extract**
Method: EPA 7470A **Description: NE-SB-11(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		mg/L	0.050	1.0	02/02/24	PM24B02A	02/02/24	M724B02B	JLH

TCLP Volatiles **Aliquot ID: A19391-004C** **Matrix: TCLP Extract**
Method: EPA 5030C/EPA 8260D **Description: NE-SB-11(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Benzene	U		mg/L	0.10	20	02/01/24	VM24B01A	02/01/24 13:28	VM24B01A	KYD
2. 2-Butanone	U		mg/L	40	20	02/01/24	VM24B01A	02/01/24 13:28	VM24B01A	KYD
3. Carbon Tetrachloride	U	V+	mg/L	0.10	20	02/01/24	VM24B01A	02/01/24 13:28	VM24B01A	KYD
4. Chlorobenzene	U		mg/L	20	20	02/01/24	VM24B01A	02/01/24 13:28	VM24B01A	KYD
5. Chloroform	U		mg/L	1.2	20	02/01/24	VM24B01A	02/01/24 13:28	VM24B01A	KYD
6. 1,4-Dichlorobenzene	U		mg/L	1.5	20	02/01/24	VM24B01A	02/01/24 13:28	VM24B01A	KYD
7. 1,2-Dichloroethane	U		mg/L	0.10	20	02/01/24	VM24B01A	02/01/24 13:28	VM24B01A	KYD
8. 1,1-Dichloroethene	U		mg/L	0.14	20	02/01/24	VM24B01A	02/01/24 13:28	VM24B01A	KYD
9. Tetrachloroethene	U		mg/L	0.14	20	02/01/24	VM24B01A	02/01/24 13:28	VM24B01A	KYD
10. Trichloroethene	U		mg/L	0.10	20	02/01/24	VM24B01A	02/01/24 13:28	VM24B01A	KYD
11. Vinyl Chloride	U	L+ F+	mg/L	0.040	20	02/01/24	VM24B01A	02/01/24 13:28	VM24B01A	KYD

Analytical Laboratory Report
Laboratory Project Number: A19391
Laboratory Sample Number: A19391-004

Order: A19391
Date: 02/12/24

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-11(Comp)**	Chain of Custody:	**205254**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TCLP Semivolatiles **Aliquot ID: A19391-004A** **Matrix: TCLP Extract**
Method: EPA 3510C/EPA 8270E **Description: NE-SB-11(Comp)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-Dinitrotoluene	U	G+	mg/L	0.025	1.0	02/08/24	PS24B08I	02/08/24 22:28	S524B08B	KDG
2. Hexachlorobenzene	U	G+ V-	mg/L	0.025	1.0	02/08/24	PS24B08I	02/08/24 22:28	S524B08B	KDG
3. Hexachlorobutadiene	U	G+ V+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 22:28	S524B08B	KDG
4. Hexachloroethane	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 22:28	S524B08B	KDG
5. 2-Methylphenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 22:28	S524B08B	KDG
‡ 6. 3&4-Methylphenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 22:28	S524B08B	KDG
7. Nitrobenzene	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 22:28	S524B08B	KDG
8. Pentachlorophenol	U	G+ V-	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 22:28	S524B08B	KDG
9. Pyridine	U	G+ V+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 22:28	S524B08B	KDG
10. 2,4,5-Trichlorophenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 22:28	S524B08B	KDG
11. 2,4,6-Trichlorophenol	U	G+	mg/L	0.10	1.0	02/08/24	PS24B08I	02/08/24 22:28	S524B08B	KDG

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QC limits

Exception Summary:

F+ : Recovery from the spiked aliquot exceeds the upper control limit (matrix spike or matrix spike duplicate).
G+ : Recovery of the associated Surrogate Compound exceeds the upper control limit. Results may be biased high.
L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
V- : Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.
V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.

NELAP ACCREDITED TNI LABORATORY

Accreditation Number(s):

TX-C24-00039 (TX)

Fibertec environmental services

Analytical Laboratory

1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
Fax: 517 699 0388
email: lab@fibertec.us

8660 S. Mackinaw Trail
Cadillac, MI 49601
Phone: 231 775 8368
Fax: 231 775 8584

Geoprobe

11766 E. Grand River Rd.
Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody # 205254

PAGE 1 of 1

Client Name: DLZ Michigan, Inc.

Contact Person: Dan McNeely

Project Name/ Number: Kettering NE Stockpile 2444-71M-00

Email distribution list:

Quote#

Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	TCLP VOCs	TCLP SVOCs	TCLP RCRA 8 metals	PCBs	HOLD SAMPLE	Remarks:
1-23-24	1450		NE-SB-02 (Comp)	S	1	X	X	X	X		
1-25-24	1050		NE-SB-06 (Comp)	S	1	X	X	X	X		
	1140		NE-SB-08 (Comp)	S	1	X	X	X	X		
↓	1325		NE-SB-11 (Comp)	S	1	X	X	X	X		

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; EDD

Received By Lab
JAN 26 2024
Initials: JJ

Comments:

Sampled/Relinquished By: Dan McNeely	Date/ Time 1-25-24 1600	Received By: Kriss Scott
Relinquished By: Kriss Scott J. Bronder	Date/ Time 1/26/24 12:00	Received By:
Relinquished By:	Date/ Time 1/26/24 13:00	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number: A19391

Temperature upon receipt at Lab: 2.6°C

Received On Ice

Please see back for terms and conditions

Fibertec environmental services
A METIRI GROUP COMPANY

Wednesday, February 14, 2024

Fibertec Project Number:	A19404
Project Identification:	Kettering SW Stockpile (2444-7114-00) /2444-7114-00
Submittal Date:	01/25/2024

Mr. Dan McNeely
DLZ Michigan, Inc - Detroit
607 Shelby St. #650
Detroit, MI 48226

Dear Mr. McNeely,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Rikki Lott at 4:48 PM, Feb 14, 2024

For Heather L. Smith
Director of Laboratory Operations

Enclosures

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-01 (9-10')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19404-001** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SW-SB-01 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**17**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19404-001** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SW-SB-01 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**5300**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**69000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**190**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**15000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**10000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**46000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**310**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**72000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19404-001** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: SW-SB-01 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	10	01/31/24	PM24A31A	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19404-001** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: SW-SB-01 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	16	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
6. Chlordane	**120**		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-01 (9-10')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19404-001** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: SW-SB-01 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U	V-P2	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
17. Heptachlor Epoxide	U	L-V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 19:36	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19404-001** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: SW-SB-01 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:24	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:24	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:24	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:24	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:24	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:24	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:24	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:24	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:24	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19404-001** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: SW-SB-01 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 21:31	SF24B12B	TKT
‡ 2. Dalapon	U	F-	µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 21:31	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 21:31	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-01 (9-10')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19404-001** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: SW-SB-01 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 4. Dicamba	U	F-*	µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 21:31	SF24B12B	TKT
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 21:31	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 21:31	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 21:31	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 21:31	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-001A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-01 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+ L+	µg/kg	1000	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
‡ 2. Acrylonitrile	U		µg/kg	140	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
3. Benzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
9. 2-Butanone	U	V+	µg/kg	750	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
10. n-Butylbenzene	U		µg/kg	71	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
14. Carbon Tetrachloride	U	V+	µg/kg	71	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-01 (9-10')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-001A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-01 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
28. 1,2-Dichloroethane	U		µg/kg	71	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
29. 1,1-Dichloroethene	U	L+	µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
32. 1,2-Dichloropropane	U		µg/kg	71	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	71	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
37. 2-Hexanone	U	L+	µg/kg	2500	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
42. MTBE	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
45. Styrene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	71	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
49. Toluene	**65**		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	71	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-01 (9-10')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-001A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-01 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC
‡ 62. Xylenes	U		µg/kg	150	1.0	01/30/24	VP24A30A	01/30/24 18:09	VP24A30A	SNC

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19404-001** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: SW-SB-01 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
2. Acenaphthylene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
3. Aniline	U	V-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
4. Anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
‡ 5. Azobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
6. Benzo(a)anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
7. Benzo(a)pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
8. Benzo(b)fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
9. Benzo(ghi)perylene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
10. Benzo(k)fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
11. Benzyl Alcohol	U		µg/kg	3300	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
12. Bis(2-chloroethoxy)methane	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
13. Bis(2-chloroethyl)ether	U		µg/kg	100	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
14. Bis(2-ethylhexyl)phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
15. 4-Bromophenyl Phenylether	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
16. Butyl Benzyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
17. Di-n-butyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
‡ 18. Carbazole	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
19. 4-Chloro-3-methylphenol	U		µg/kg	280	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
20. 2-Chloronaphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
21. 2-Chlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
22. 4-Chlorophenyl Phenylether	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
23. Chrysene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
24. Dibenzo(a,h)anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
25. Dibenzofuran	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
26. 2,4-Dichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
27. Diethyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
28. 2,4-Dimethylphenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-01 (9-10')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19404-001** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: SW-SB-01 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
30. 2,4-Dinitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
‡ 31. 2,4-Dinitrotoluene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
‡ 32. 2,6-Dinitrotoluene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
33. Fluoranthene	**390**		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
34. Fluorene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
35. Hexachlorobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
36. Hexachlorobutadiene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
37. Hexachlorocyclopentadiene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
38. Hexachloroethane	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
39. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
‡ 40. Isophorone	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
41. 2-Methyl-4,6-dinitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
42. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
43. 2-Methylphenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
‡ 44. 3&4-Methylphenol	U		µg/kg	660	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
45. Naphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
46. 2-Nitroaniline	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
47. 3-Nitroaniline	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
48. 4-Nitroaniline	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
49. Nitrobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
50. 2-Nitrophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
51. 4-Nitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
52. N-Nitrosodimethylamine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
53. N-Nitrosodi-n-propylamine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
54. N-Nitrosodiphenylamine	U	L+	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
55. Di-n-octyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
56. 2,2'-Oxybis(1-chloropropane)	U	L- V-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
57. Pentachlorophenol	U	V-	µg/kg	800	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
58. Phenanthrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
59. Phenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
60. Pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
61. Pyridine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
‡ 62. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
63. 2,4,5-Trichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA
64. 2,4,6-Trichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 16:34	S624B01B	WTA

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Analytical Laboratory Report
Laboratory Project Number: A19404
Laboratory Sample Number: A19404-001

Order: A19404
Date: 02/14/24

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-01 (9-10')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: A19404-001** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: SW-SB-01 (9-10')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 11:58	PW24A30F	01/30/24	W424A30A	MJS

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-02 (6-7')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19404-002** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SW-SB-02 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**18**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19404-002** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SW-SB-02 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**6900**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**51000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**140**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**16000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**14000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**7900**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**220**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**41000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19404-002** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: SW-SB-02 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	10	01/31/24	PM24A31A	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19404-002** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: SW-SB-02 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	16	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
6. Chlordane	U		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-02 (6-7')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19404-002** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: SW-SB-02 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
17. Heptachlor Epoxide	U	L- V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 19:53	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19404-002** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: SW-SB-02 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:36	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:36	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:36	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:36	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:36	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:36	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:36	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:36	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:36	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19404-002** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: SW-SB-02 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 21:51	SF24B12B	TKT
‡ 2. Dalapon	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 21:51	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 21:51	SF24B12B	TKT
‡ 4. Dicamba	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 21:51	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-02 (6-7')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19404-002** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: SW-SB-02 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 21:51	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 21:51	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 21:51	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 21:51	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-002A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-02 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+ L+	µg/kg	1000	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
‡ 2. Acrylonitrile	U		µg/kg	140	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
3. Benzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
9. 2-Butanone	U	V+	µg/kg	750	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
10. n-Butylbenzene	U		µg/kg	71	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
14. Carbon Tetrachloride	U	V+	µg/kg	71	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-02 (6-7')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-002A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-02 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
28. 1,2-Dichloroethane	U		µg/kg	71	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
29. 1,1-Dichloroethene	U	L+	µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
32. 1,2-Dichloropropane	U		µg/kg	71	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	71	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
37. 2-Hexanone	U	L+	µg/kg	2500	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
42. MTBE	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
45. Styrene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	71	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
49. Toluene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	71	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
60. m&p-Xylene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-02 (6-7')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-002A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-02 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 62. Xylenes	U		µg/kg	150	1.0	01/30/24	VP24A30A	01/30/24 18:35	VP24A30A	SNC

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19404-002** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: SW-SB-02 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
2. Acenaphthylene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
3. Aniline	U	V-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
4. Anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
‡ 5. Azobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
6. Benzo(a)anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
7. Benzo(a)pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
8. Benzo(b)fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
9. Benzo(ghi)perylene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
10. Benzo(k)fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
11. Benzyl Alcohol	U		µg/kg	3300	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
12. Bis(2-chloroethoxy)methane	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
13. Bis(2-chloroethyl)ether	U		µg/kg	100	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
14. Bis(2-ethylhexyl)phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
15. 4-Bromophenyl Phenylether	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
16. Butyl Benzyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
17. Di-n-butyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
‡ 18. Carbazole	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
19. 4-Chloro-3-methylphenol	U		µg/kg	280	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
20. 2-Chloronaphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
21. 2-Chlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
22. 4-Chlorophenyl Phenylether	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
23. Chrysene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
24. Dibenzo(a,h)anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
25. Dibenzofuran	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
26. 2,4-Dichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
27. Diethyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
28. 2,4-Dimethylphenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
29. Dimethyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
30. 2,4-Dinitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-02 (6-7')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19404-002** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: SW-SB-02 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 31. 2,4-Dinitrotoluene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
‡ 32. 2,6-Dinitrotoluene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
33. Fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
34. Fluorene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
35. Hexachlorobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
36. Hexachlorobutadiene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
37. Hexachlorocyclopentadiene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
38. Hexachloroethane	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
39. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
‡ 40. Isophorone	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
41. 2-Methyl-4,6-dinitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
42. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
43. 2-Methylphenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
‡ 44. 3&4-Methylphenol	U		µg/kg	660	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
45. Naphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
46. 2-Nitroaniline	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
47. 3-Nitroaniline	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
48. 4-Nitroaniline	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
49. Nitrobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
50. 2-Nitrophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
51. 4-Nitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
52. N-Nitrosodimethylamine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
53. N-Nitrosodi-n-propylamine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
54. N-Nitrosodiphenylamine	U	L+	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
55. Di-n-octyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
56. 2,2'-Oxybis(1-chloropropane)	U	L- V-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
57. Pentachlorophenol	U	V-	µg/kg	810	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
58. Phenanthrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
59. Phenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
60. Pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
61. Pyridine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
‡ 62. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
63. 2,4,5-Trichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA
64. 2,4,6-Trichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 17:13	S624B01B	WTA

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Analytical Laboratory Report
Laboratory Project Number: A19404
Laboratory Sample Number: A19404-002

Order: A19404
Date: 02/14/24

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-02 (6-7')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: A19404-002** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: SW-SB-02 (6-7')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 11:58	PW24A30F	01/30/24	W424A30A	MJS

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-03 (4-5')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:55**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19404-003** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SW-SB-03 (4-5')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**22**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19404-003** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SW-SB-03 (4-5')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**11000**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**69000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**310**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**19000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**19000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**18000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**340**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**58000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19404-003** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: SW-SB-03 (4-5')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	10	01/31/24	PM24A31A	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19404-003** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: SW-SB-03 (4-5')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	17	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
6. Chlordane	U		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-03 (4-5')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:55**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19404-003** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: SW-SB-03 (4-5')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
17. Heptachlor Epoxide	U	L- V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 20:09	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19404-003** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: SW-SB-03 (4-5')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:47	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:47	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:47	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:47	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:47	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:47	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:47	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:47	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:47	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19404-003** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: SW-SB-03 (4-5')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:11	SF24B12B	TKT
‡ 2. Dalapon	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 22:11	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:11	SF24B12B	TKT
‡ 4. Dicamba	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 22:11	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-03 (4-5')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:55**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19404-003** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: SW-SB-03 (4-5')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:11	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 22:11	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:11	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:11	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-003A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-03 (4-5')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+ L+	µg/kg	1000	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
‡ 2. Acrylonitrile	U		µg/kg	160	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
3. Benzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
9. 2-Butanone	U	V+	µg/kg	750	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
10. n-Butylbenzene	U		µg/kg	80	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
14. Carbon Tetrachloride	U	V+	µg/kg	80	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-03 (4-5')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:55**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-003A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-03 (4-5')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
28. 1,2-Dichloroethane	U		µg/kg	80	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
29. 1,1-Dichloroethene	U	L+	µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
32. 1,2-Dichloropropane	U		µg/kg	80	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	80	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
37. 2-Hexanone	U	L+	µg/kg	2500	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
42. MTBE	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
45. Styrene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	80	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
49. Toluene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	80	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
60. m&p-Xylene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-03 (4-5')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:55**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-003A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-03 (4-5')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 62. Xylenes	U		µg/kg	150	1.0	01/30/24	VP24A30A	01/30/24 19:01	VP24A30A	SNC

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19404-003** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: SW-SB-03 (4-5')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
2. Acenaphthylene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
3. Aniline	U	V-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
4. Anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
‡ 5. Azobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
6. Benzo(a)anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
7. Benzo(a)pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
8. Benzo(b)fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
9. Benzo(ghi)perylene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
10. Benzo(k)fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
11. Benzyl Alcohol	U		µg/kg	3300	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
12. Bis(2-chloroethoxy)methane	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
13. Bis(2-chloroethyl)ether	U		µg/kg	100	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
14. Bis(2-ethylhexyl)phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
15. 4-Bromophenyl Phenylether	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
16. Butyl Benzyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
17. Di-n-butyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
‡ 18. Carbazole	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
19. 4-Chloro-3-methylphenol	U		µg/kg	280	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
20. 2-Chloronaphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
21. 2-Chlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
22. 4-Chlorophenyl Phenylether	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
23. Chrysene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
24. Dibenzo(a,h)anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
25. Dibenzofuran	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
26. 2,4-Dichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
27. Diethyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
28. 2,4-Dimethylphenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
29. Dimethyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
30. 2,4-Dinitrophenol	U		µg/kg	850	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-03 (4-5')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:55**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19404-003** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: SW-SB-03 (4-5')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 31. 2,4-Dinitrotoluene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
‡ 32. 2,6-Dinitrotoluene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
33. Fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
34. Fluorene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
35. Hexachlorobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
36. Hexachlorobutadiene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
37. Hexachlorocyclopentadiene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
38. Hexachloroethane	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
39. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
‡ 40. Isophorone	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
41. 2-Methyl-4,6-dinitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
42. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
43. 2-Methylphenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
‡ 44. 3&4-Methylphenol	U		µg/kg	660	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
45. Naphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
46. 2-Nitroaniline	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
47. 3-Nitroaniline	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
48. 4-Nitroaniline	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
49. Nitrobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
50. 2-Nitrophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
51. 4-Nitrophenol	U		µg/kg	850	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
52. N-Nitrosodimethylamine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
53. N-Nitrosodi-n-propylamine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
54. N-Nitrosodiphenylamine	U	L+	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
55. Di-n-octyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
56. 2,2'-Oxybis(1-chloropropane)	U	L- V-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
57. Pentachlorophenol	U	V-	µg/kg	850	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
58. Phenanthrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
59. Phenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
60. Pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
61. Pyridine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
‡ 62. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
63. 2,4,5-Trichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA
64. 2,4,6-Trichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:16	S624B01B	WTA

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Analytical Laboratory Report
Laboratory Project Number: A19404
Laboratory Sample Number: A19404-003

Order: A19404
Date: 02/14/24

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-03 (4-5')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:55**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: A19404-003** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: SW-SB-03 (4-5')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 11:58	PW24A30F	01/30/24	W424A30A	MJS

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-04 (2-3')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19404-004** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SW-SB-04 (2-3')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**17**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19404-004** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SW-SB-04 (2-3')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**6000**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**46000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**190**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**17000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**12000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**22000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**210**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**49000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19404-004** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: SW-SB-04 (2-3')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	10	01/31/24	PM24A31A	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19404-004** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: SW-SB-04 (2-3')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	16	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
6. Chlordane	**56**		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-04 (2-3')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19404-004** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: SW-SB-04 (2-3')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
17. Heptachlor Epoxide	U	L- V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 20:26	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19404-004** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: SW-SB-04 (2-3')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:59	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:59	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:59	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:59	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:59	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:59	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:59	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:59	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:59	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19404-004** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: SW-SB-04 (2-3')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:31	SF24B12B	TKT
‡ 2. Dalapon	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 22:31	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:31	SF24B12B	TKT
‡ 4. Dicamba	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 22:31	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-04 (2-3')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19404-004** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: SW-SB-04 (2-3')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:31	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 22:31	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:31	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:31	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-004A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-04 (2-3')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+ L+	µg/kg	1000	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
‡ 2. Acrylonitrile	U		µg/kg	140	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
3. Benzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
9. 2-Butanone	U	V+	µg/kg	750	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
10. n-Butylbenzene	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
14. Carbon Tetrachloride	U	V+	µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-04 (2-3')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-004A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-04 (2-3')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
28. 1,2-Dichloroethane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
29. 1,1-Dichloroethene	U	L+	µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
32. 1,2-Dichloropropane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
37. 2-Hexanone	U	L+	µg/kg	2500	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
42. MTBE	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
45. Styrene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
49. Toluene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
60. m&p-Xylene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-04 (2-3')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-004A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-04 (2-3')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 62. Xylenes	U		µg/kg	150	1.0	01/30/24	VP24A30A	01/30/24 19:27	VP24A30A	SNC

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19404-004** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: SW-SB-04 (2-3')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
2. Acenaphthylene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
3. Aniline	U	V-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
4. Anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
‡ 5. Azobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
6. Benzo(a)anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
7. Benzo(a)pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
8. Benzo(b)fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
9. Benzo(ghi)perylene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
10. Benzo(k)fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
11. Benzyl Alcohol	U		µg/kg	3300	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
12. Bis(2-chloroethoxy)methane	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
13. Bis(2-chloroethyl)ether	U		µg/kg	100	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
14. Bis(2-ethylhexyl)phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
15. 4-Bromophenyl Phenylether	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
16. Butyl Benzyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
17. Di-n-butyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
‡ 18. Carbazole	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
19. 4-Chloro-3-methylphenol	U		µg/kg	280	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
20. 2-Chloronaphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
21. 2-Chlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
22. 4-Chlorophenyl Phenylether	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
23. Chrysene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
24. Dibenzo(a,h)anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
25. Dibenzofuran	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
26. 2,4-Dichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
27. Diethyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
28. 2,4-Dimethylphenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
29. Dimethyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
30. 2,4-Dinitrophenol	U	F-	µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-04 (2-3')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19404-004** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: SW-SB-04 (2-3')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 31. 2,4-Dinitrotoluene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
‡ 32. 2,6-Dinitrotoluene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
33. Fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
34. Fluorene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
35. Hexachlorobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
36. Hexachlorobutadiene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
37. Hexachlorocyclopentadiene	U	F-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
38. Hexachloroethane	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
39. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
‡ 40. Isophorone	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
41. 2-Methyl-4,6-dinitrophenol	U	F-	µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
42. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
43. 2-Methylphenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
‡ 44. 3&4-Methylphenol	U		µg/kg	660	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
45. Naphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
46. 2-Nitroaniline	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
47. 3-Nitroaniline	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
48. 4-Nitroaniline	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
49. Nitrobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
50. 2-Nitrophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
51. 4-Nitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
52. N-Nitrosodimethylamine	U	F+	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
53. N-Nitrosodi-n-propylamine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
54. N-Nitrosodiphenylamine	U	L+	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
55. Di-n-octyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
56. 2,2'-Oxybis(1-chloropropane)	U	L- F- V-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
57. Pentachlorophenol	U	V-	µg/kg	800	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
58. Phenanthrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
59. Phenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
60. Pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
61. Pyridine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
‡ 62. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
63. 2,4,5-Trichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA
64. 2,4,6-Trichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 15:55	S624B01B	WTA

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Analytical Laboratory Report
Laboratory Project Number: A19404
Laboratory Sample Number: A19404-004

Order: A19404
Date: 02/14/24

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-04 (2-3')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: A19404-004** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: SW-SB-04 (2-3')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 11:59	PW24A30F	01/30/24	W424A30A	MJS

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-05 (3-4')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19404-005** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SW-SB-05 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**18**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19404-005** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SW-SB-05 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**8100**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**61000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**210**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**17000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**15000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**18000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**300**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**60000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19404-005** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: SW-SB-05 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**70**		µg/kg	50	10	01/31/24	PM24A31A	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19404-005** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: SW-SB-05 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	16	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
6. Chlordane	U		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-05 (3-4')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19404-005** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: SW-SB-05 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
17. Heptachlor Epoxide	U	L- V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 20:43	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19404-005** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: SW-SB-05 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:12	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:12	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:12	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:12	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:12	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:12	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:12	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:12	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/30/24 23:12	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19404-005** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: SW-SB-05 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:51	SF24B12B	TKT
‡ 2. Dalapon	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 22:51	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:51	SF24B12B	TKT
‡ 4. Dicamba	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 22:51	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-05 (3-4')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19404-005** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: SW-SB-05 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:51	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 22:51	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:51	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 22:51	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-005A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-05 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+ L+	µg/kg	1000	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
‡ 2. Acrylonitrile	U		µg/kg	140	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
3. Benzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
9. 2-Butanone	U	V+	µg/kg	750	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
10. n-Butylbenzene	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
14. Carbon Tetrachloride	U	V+	µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-05 (3-4')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-005A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-05 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
28. 1,2-Dichloroethane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
29. 1,1-Dichloroethene	U	L+	µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
32. 1,2-Dichloropropane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
37. 2-Hexanone	U	L+	µg/kg	2500	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
42. MTBE	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
45. Styrene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
49. Toluene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
60. m&p-Xylene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-05 (3-4')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-005A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-05 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 62. Xylenes	U		µg/kg	150	1.0	01/30/24	VP24A30A	01/30/24 19:53	VP24A30A	SNC

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19404-005** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: SW-SB-05 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
2. Acenaphthylene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
3. Aniline	U	V-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
4. Anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
‡ 5. Azobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
6. Benzo(a)anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
7. Benzo(a)pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
8. Benzo(b)fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
9. Benzo(ghi)perylene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
10. Benzo(k)fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
11. Benzyl Alcohol	U		µg/kg	3300	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
12. Bis(2-chloroethoxy)methane	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
13. Bis(2-chloroethyl)ether	U		µg/kg	100	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
14. Bis(2-ethylhexyl)phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
15. 4-Bromophenyl Phenylether	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
16. Butyl Benzyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
17. Di-n-butyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
‡ 18. Carbazole	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
19. 4-Chloro-3-methylphenol	U		µg/kg	280	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
20. 2-Chloronaphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
21. 2-Chlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
22. 4-Chlorophenyl Phenylether	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
23. Chrysene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
24. Dibenzo(a,h)anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
25. Dibenzofuran	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
26. 2,4-Dichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
27. Diethyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
28. 2,4-Dimethylphenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
29. Dimethyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
30. 2,4-Dinitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-05 (3-4')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19404-005** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: SW-SB-05 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 31. 2,4-Dinitrotoluene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
‡ 32. 2,6-Dinitrotoluene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
33. Fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
34. Fluorene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
35. Hexachlorobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
36. Hexachlorobutadiene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
37. Hexachlorocyclopentadiene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
38. Hexachloroethane	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
39. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
‡ 40. Isophorone	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
41. 2-Methyl-4,6-dinitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
42. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
43. 2-Methylphenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
‡ 44. 3&4-Methylphenol	U		µg/kg	660	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
45. Naphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
46. 2-Nitroaniline	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
47. 3-Nitroaniline	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
48. 4-Nitroaniline	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
49. Nitrobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
50. 2-Nitrophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
51. 4-Nitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
52. N-Nitrosodimethylamine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
53. N-Nitrosodi-n-propylamine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
54. N-Nitrosodiphenylamine	U	L+	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
55. Di-n-octyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
56. 2,2'-Oxybis(1-chloropropane)	U	L- V-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
57. Pentachlorophenol	U	V-	µg/kg	810	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
58. Phenanthrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
59. Phenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
60. Pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
61. Pyridine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
‡ 62. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
63. 2,4,5-Trichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA
64. 2,4,6-Trichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:09	S624B01B	WTA

Analytical Laboratory Report
Laboratory Project Number: A19404
Laboratory Sample Number: A19404-005

Order: A19404
Date: 02/14/24

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-05 (3-4')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: A19404-005** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: SW-SB-05 (3-4')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 11:59	PW24A30F	01/31/24	W424A30A	MJS

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-06 (1-2')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19404-006** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SW-SB-06 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**18**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19404-006** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SW-SB-06 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**6700**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**110000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**290**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**19000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**14000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**110000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**260**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**99000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19404-006** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: SW-SB-06 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**81**		µg/kg	50	10	01/31/24	PM24A31A	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19404-006** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: SW-SB-06 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	16	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
6. Chlordane	U		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-06 (1-2')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19404-006** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: SW-SB-06 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
17. Heptachlor Epoxide	U	L- V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 21:00	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19404-006** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: SW-SB-06 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:11	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:11	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:11	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:11	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:11	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:11	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:11	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:11	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:11	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19404-006** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: SW-SB-06 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:11	SF24B12B	TKT
‡ 2. Dalapon	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 23:11	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:11	SF24B12B	TKT
‡ 4. Dicamba	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 23:11	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-06 (1-2')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19404-006** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: SW-SB-06 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:11	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 23:11	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:11	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:11	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-006A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-06 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+ L+	µg/kg	1000	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
‡ 2. Acrylonitrile	U		µg/kg	140	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
3. Benzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
9. 2-Butanone	U	V+	µg/kg	750	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
10. n-Butylbenzene	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
14. Carbon Tetrachloride	U	V+	µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-06 (1-2')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-006A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-06 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
28. 1,2-Dichloroethane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
29. 1,1-Dichloroethene	U	L+	µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
32. 1,2-Dichloropropane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
37. 2-Hexanone	U	L+	µg/kg	2500	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
42. MTBE	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
45. Styrene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
48. Tetrachloroethene	**56**		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
49. Toluene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
60. m&p-Xylene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-06 (1-2')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-006A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-06 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 62. Xylenes	U		µg/kg	150	1.0	01/30/24	VP24A30A	01/30/24 20:19	VP24A30A	SNC

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19404-006** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: SW-SB-06 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
2. Acenaphthylene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
3. Aniline	U	V-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
4. Anthracene	**910**		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
‡ 5. Azobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
6. Benzo(a)anthracene	**3500**		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
7. Benzo(a)pyrene	**3400**		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
8. Benzo(b)fluoranthene	**5500**		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
9. Benzo(ghi)perylene	**1200**		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
10. Benzo(k)fluoranthene	**2000**		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
11. Benzyl Alcohol	U		µg/kg	3300	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
12. Bis(2-chloroethoxy)methane	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
13. Bis(2-chloroethyl)ether	U		µg/kg	100	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
14. Bis(2-ethylhexyl)phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
15. 4-Bromophenyl Phenylether	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
16. Butyl Benzyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
17. Di-n-butyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
‡ 18. Carbazole	**430**		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
19. 4-Chloro-3-methylphenol	U		µg/kg	280	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
20. 2-Chloronaphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
21. 2-Chlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
22. 4-Chlorophenyl Phenylether	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
23. Chrysene	**3500**		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
24. Dibenzo(a,h)anthracene	**370**		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
25. Dibenzofuran	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
26. 2,4-Dichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
27. Diethyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
28. 2,4-Dimethylphenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
29. Dimethyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
30. 2,4-Dinitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-06 (1-2')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19404-006** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: SW-SB-06 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 31. 2,4-Dinitrotoluene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
‡ 32. 2,6-Dinitrotoluene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
33. Fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
34. Fluorene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
35. Hexachlorobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
36. Hexachlorobutadiene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
37. Hexachlorocyclopentadiene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
38. Hexachloroethane	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
39. Indeno(1,2,3-cd)pyrene	**1300**		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
‡ 40. Isophorone	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
41. 2-Methyl-4,6-dinitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
42. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
43. 2-Methylphenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
‡ 44. 3&4-Methylphenol	U		µg/kg	660	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
45. Naphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
46. 2-Nitroaniline	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
47. 3-Nitroaniline	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
48. 4-Nitroaniline	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
49. Nitrobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
50. 2-Nitrophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
51. 4-Nitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
52. N-Nitrosodimethylamine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
53. N-Nitrosodi-n-propylamine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
54. N-Nitrosodiphenylamine	U	L+	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
55. Di-n-octyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
56. 2,2'-Oxybis(1-chloropropane)	U	L- V-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
57. Pentachlorophenol	U	V-	µg/kg	810	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
58. Phenanthrene	**5000**		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
59. Phenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
60. Pyrene	**7600**		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
61. Pyridine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
‡ 62. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
63. 2,4,5-Trichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA
64. 2,4,6-Trichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 19:48	S624B01B	WTA

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Analytical Laboratory Report
Laboratory Project Number: A19404
Laboratory Sample Number: A19404-006

Order: A19404
Date: 02/14/24

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-06 (1-2')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: A19404-006** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: SW-SB-06 (1-2')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 11:59	PW24A30F	01/31/24	W424A30A	MJS

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-07 (7-8')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19404-007** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SW-SB-07 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**17**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19404-007** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SW-SB-07 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**7500**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**58000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**140**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**16000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**11000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**11000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**220**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**40000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19404-007** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: SW-SB-07 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	10	01/31/24	PM24A31A	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19404-007** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: SW-SB-07 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	16	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
6. Chlordane	U		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-07 (7-8')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19404-007** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: SW-SB-07 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
17. Heptachlor Epoxide	U	L- V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 21:16	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19404-007** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: SW-SB-07 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:22	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:22	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:22	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:22	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:22	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:22	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:22	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:22	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:22	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19404-007** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: SW-SB-07 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:31	SF24B12B	TKT
‡ 2. Dalapon	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 23:31	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:31	SF24B12B	TKT
‡ 4. Dicamba	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 23:31	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-07 (7-8')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19404-007** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: SW-SB-07 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:31	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 23:31	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:31	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:31	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-007A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-07 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+ L+	µg/kg	1000	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
‡ 2. Acrylonitrile	U		µg/kg	140	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
3. Benzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
9. 2-Butanone	U	V+	µg/kg	750	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
10. n-Butylbenzene	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
14. Carbon Tetrachloride	U	V+	µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-07 (7-8')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-007A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-07 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
28. 1,2-Dichloroethane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
29. 1,1-Dichloroethene	U	L+	µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
32. 1,2-Dichloropropane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
37. 2-Hexanone	U	L+	µg/kg	2500	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
42. MTBE	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
45. Styrene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
49. Toluene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	72	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
60. m&p-Xylene	U		µg/kg	100	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-07 (7-8')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19404-007A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SW-SB-07 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 62. Xylenes	U		µg/kg	150	1.0	01/30/24	VP24A30A	01/30/24 20:45	VP24A30A	SNC

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19404-007** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: SW-SB-07 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
2. Acenaphthylene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
3. Aniline	U	V-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
4. Anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
‡ 5. Azobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
6. Benzo(a)anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
7. Benzo(a)pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
8. Benzo(b)fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
9. Benzo(ghi)perylene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
10. Benzo(k)fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
11. Benzyl Alcohol	U		µg/kg	3300	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
12. Bis(2-chloroethoxy)methane	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
13. Bis(2-chloroethyl)ether	U		µg/kg	100	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
14. Bis(2-ethylhexyl)phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
15. 4-Bromophenyl Phenylether	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
16. Butyl Benzyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
17. Di-n-butyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
‡ 18. Carbazole	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
19. 4-Chloro-3-methylphenol	U		µg/kg	280	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
20. 2-Chloronaphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
21. 2-Chlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
22. 4-Chlorophenyl Phenylether	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
23. Chrysene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
24. Dibenzo(a,h)anthracene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
25. Dibenzofuran	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
26. 2,4-Dichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
27. Diethyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
28. 2,4-Dimethylphenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
29. Dimethyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
30. 2,4-Dinitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-07 (7-8')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19404-007** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: SW-SB-07 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 31. 2,4-Dinitrotoluene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
‡ 32. 2,6-Dinitrotoluene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
33. Fluoranthene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
34. Fluorene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
35. Hexachlorobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
36. Hexachlorobutadiene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
37. Hexachlorocyclopentadiene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
38. Hexachloroethane	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
39. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
‡ 40. Isophorone	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
41. 2-Methyl-4,6-dinitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
42. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
43. 2-Methylphenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
‡ 44. 3&4-Methylphenol	U		µg/kg	660	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
45. Naphthalene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
46. 2-Nitroaniline	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
47. 3-Nitroaniline	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
48. 4-Nitroaniline	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
49. Nitrobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
50. 2-Nitrophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
51. 4-Nitrophenol	U		µg/kg	830	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
52. N-Nitrosodimethylamine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
53. N-Nitrosodi-n-propylamine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
54. N-Nitrosodiphenylamine	U	L+	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
55. Di-n-octyl Phthalate	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
56. 2,2'-Oxybis(1-chloropropane)	U	L- V-	µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
57. Pentachlorophenol	U	V-	µg/kg	810	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
58. Phenanthrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
59. Phenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
60. Pyrene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
61. Pyridine	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
‡ 62. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
63. 2,4,5-Trichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA
64. 2,4,6-Trichlorophenol	U		µg/kg	330	1.0	01/31/24	PS24A31H	02/01/24 20:27	S624B01B	WTA

Fibertec environmental services
A METIRI GROUP COMPANY

Analytical Laboratory Report
Laboratory Project Number: A19404
Laboratory Sample Number: A19404-007

Order: A19404
Date: 02/14/24

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**SW-SB-07 (7-8')**	Chain of Custody:	**205264**
Client Project Name:	**Kettering SW Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: A19404-007** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: SW-SB-07 (7-8')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 11:59	PW24A30F	01/31/24	W424A30A	MJS

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QC limits

Exception Summary:

*	:	Duplicate analysis not within control limits.
F-	:	Recovery from the spiked aliquot exceeds the lower control limit (matrix spike or matrix spike duplicate).
F+	:	Recovery from the spiked aliquot exceeds the upper control limit (matrix spike or matrix spike duplicate).
L-	:	Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
L+	:	Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
P2	:	This flag is used when there is greater than 40% difference for detected concentrations between the two GC columns.
V-	:	Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.
V+	:	Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.

NELAP ACCREDITED TNI LABORATORY

Accreditation Number(s):

TX-C24-00039 (TX)

Fibertec environmental services

Analytical Laboratory
1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
Fax: 517 699 0388
email: lab@fibertec.us

8660 S. Mackinaw Trail
Cadillac, MI 49601
Phone: 231 775 8368
Fax: 231 775 8584

Geoprobe
11766 E. Grand River Rd.
Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody # 205264
PAGE 1 of 1

Client Name: DLZ Michigan, Inc.
Contact Person: Dan McNeely
Project Name/ Number: Kettering SW Stockpile 2444-7114-00
Email distribution list: dmcneely@dlz.com; mthompson@dlz.com
Quote#
Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	VOCs	SVOCs	PCBs	MI 10 metals	Chloride	Pest/Herb	HOLD SAMPLE
1-23-24	1000		SW-SB-01 (9-10')	S	2	X	X	X	X	X	X	
	1030		SW-SB-02 (6-7')	S	2	X	X	X	X	X	X	
	1055		SW-SB-03 (4-5')	S	2	X	X	X	X	X	X	
	1125		SW-SB-04 (2-3')	S	2	X	X	X	X	X	X	
	1300		SW-SB-05 (3-4')	S	2	X	X	X	X	X	X	
	1325		SW-SB-06 (1-2')	S	2	X	X	X	X	X	X	
↓	1400		SW-SB-07 (7-8')	S	2	X	X	X	X	X	X	

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; EDD

Remarks:

Received By Lab
JAN 26 2024
Initials: JT

Comments:

	Date/ Time	
Sampled/Relinquished By: Dan McNeely	1-25-24 1600	Received By: Briss Scott
Relinquished By: Briss Scott J. Grondal	1/26/24 12:00	Received By:
Relinquished By:	1/26/24 13:00	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number: A19404

Temperature upon receipt at Lab: 2.6°C

Received On Ice

Please see back for terms and conditions

Fibertec environmental services
A METIRI GROUP COMPANY

Wednesday, February 14, 2024

Fibertec Project Number:	A19405
Project Identification:	Kettering NE Stockpile (2444-7114-00) /2444-7114-00
Submittal Date:	01/25/2024

Mr. Dan McNeely
DLZ Michigan, Inc - Detroit
607 Shelby St. #650
Detroit, MI 48226

Dear Mr. McNeely,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Rikki Lott at 5:03 PM, Feb 14, 2024

For Heather L. Smith
Director of Laboratory Operations

Enclosures

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-01 (7-8')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19405-001** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: NE-SB-01 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**19**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19405-001** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: NE-SB-01 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**10000**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**76000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**390**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**20000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**21000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**180000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**350**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**79000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19405-001** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: NE-SB-01 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	10	01/31/24	PM24A31C	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19405-001** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-01 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	17	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
6. Chlordane	**43**		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-01 (7-8')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19405-001** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-01 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
17. Heptachlor Epoxide	U	L- V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 17:22	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19405-001** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: NE-SB-01 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:34	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:34	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:34	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:34	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:34	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:34	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:34	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:34	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:34	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19405-001** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-01 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:51	SF24B12B	TKT
‡ 2. Dalapon	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 23:51	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:51	SF24B12B	TKT
‡ 4. Dicamba	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 23:51	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-01 (7-8')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19405-001** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-01 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:51	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/12/24 23:51	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:51	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/12/24 23:51	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-001A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-01 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+	µg/kg	1000	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
‡ 2. Acrylonitrile	U		µg/kg	140	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
3. Benzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
9. 2-Butanone	U		µg/kg	750	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
10. n-Butylbenzene	U		µg/kg	72	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
14. Carbon Tetrachloride	U		µg/kg	72	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-01 (7-8')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-001A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-01 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
28. 1,2-Dichloroethane	U		µg/kg	72	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
32. 1,2-Dichloropropane	U		µg/kg	72	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	72	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
37. 2-Hexanone	U		µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
42. MTBE	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
45. Styrene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	72	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
49. Toluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	72	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
60. m&p-Xylene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC
‡ 62. Xylenes	U		µg/kg	150	1.0	01/29/24	VP24A29A	01/29/24 16:32	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-01 (7-8')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-001** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-01 (7-8')**

							Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acenaphthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
2. Acenaphthylene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
3. Aniline	U	V-G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
4. Anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
‡ 5. Azobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
6. Benzo(a)anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
7. Benzo(a)pyrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
8. Benzo(b)fluoranthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
9. Benzo(ghi)perylene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
10. Benzo(k)fluoranthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
11. Benzyl Alcohol	U	G+	µg/kg	3300	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
12. Bis(2-chloroethoxy)methane	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
13. Bis(2-chloroethyl)ether	U	G+	µg/kg	100	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
15. 4-Bromophenyl Phenylether	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
16. Butyl Benzyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
17. Di-n-butyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
‡ 18. Carbazole	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
19. 4-Chloro-3-methylphenol	U	G+	µg/kg	280	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
20. 2-Chloronaphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
21. 2-Chlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
22. 4-Chlorophenyl Phenylether	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
23. Chrysene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
24. Dibenzo(a,h)anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
25. Dibenzofuran	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
26. 2,4-Dichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
27. Diethyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
28. 2,4-Dimethylphenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
29. Dimethyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
30. 2,4-Dinitrophenol	U	L-G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
‡ 31. 2,4-Dinitrotoluene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
‡ 32. 2,6-Dinitrotoluene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
33. Fluoranthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
34. Fluorene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-01 (7-8')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-001** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-01 (7-8')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
35. Hexachlorobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
36. Hexachlorobutadiene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
37. Hexachlorocyclopentadiene	U	L- G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
38. Hexachloroethane	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
‡ 40. Isophorone	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
41. 2-Methyl-4,6-dinitrophenol	U	L- G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
42. 2-Methylnaphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
43. 2-Methylphenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
‡ 44. 3&4-Methylphenol	U	G+	µg/kg	660	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
45. Naphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
46. 2-Nitroaniline	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
47. 3-Nitroaniline	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
48. 4-Nitroaniline	U	G+ V+	µg/kg	830	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
49. Nitrobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
50. 2-Nitrophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
51. 4-Nitrophenol	U	G+ V-	µg/kg	830	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
52. N-Nitrosodimethylamine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
53. N-Nitrosodi-n-propylamine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
54. N-Nitrosodiphenylamine	U	L+ G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
55. Di-n-octyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
56. 2,2'-Oxybis(1-chloropropane)	U	L- V- G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
57. Pentachlorophenol	U	G+ V-	µg/kg	830	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
58. Phenanthrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
59. Phenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
60. Pyrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
61. Pyridine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
‡ 62. 1,2,4-Trichlorobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
63. 2,4,5-Trichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA
64. 2,4,6-Trichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:58	S624B02A	WTA

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Analytical Laboratory Report
Laboratory Project Number: A19405
Laboratory Sample Number: A19405-001

Order: A19405
Date: 02/14/24

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-01 (7-8')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/23/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: A19405-001** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: NE-SB-01 (7-8')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 11:59	PW24A30F	01/30/24	W424A30A	MJS

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-03 (13-14')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:15**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19405-002** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: NE-SB-03 (13-14')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**21**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19405-002** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: NE-SB-03 (13-14')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**9000**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**86000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**140**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**26000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**15000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**16000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**210**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**79000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19405-002** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: NE-SB-03 (13-14')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	10	01/31/24	PM24A31C	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19405-002** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-03 (13-14')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	17	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
6. Chlordane	U		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-03 (13-14')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:15**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19405-002** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-03 (13-14')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
17. Heptachlor Epoxide	U	L- V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 17:39	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19405-002** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: NE-SB-03 (13-14')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:46	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:46	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:46	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:46	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:46	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:46	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:46	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:46	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:46	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19405-002** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-03 (13-14')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:11	SF24B12B	TKT
‡ 2. Dalapon	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 00:11	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:11	SF24B12B	TKT
‡ 4. Dicamba	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 00:11	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-03 (13-14')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:15**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19405-002** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-03 (13-14')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:11	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 00:11	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:11	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:11	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-002A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-03 (13-14')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	µg/kg	1000	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
‡ 2. Acrylonitrile	U		µg/kg	150	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
3. Benzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
9. 2-Butanone	U		µg/kg	750	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
10. n-Butylbenzene	U		µg/kg	76	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
14. Carbon Tetrachloride	U		µg/kg	76	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-03 (13-14')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:15**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-002A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-03 (13-14')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
28. 1,2-Dichloroethane	U		µg/kg	76	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
32. 1,2-Dichloropropane	U		µg/kg	76	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	76	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
37. 2-Hexanone	U		µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
42. MTBE	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
45. Styrene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	76	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
49. Toluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	76	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
60. m&p-Xylene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC
‡ 62. Xylenes	U		µg/kg	150	1.0	01/29/24	VP24A29A	01/29/24 16:58	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-03 (13-14')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:15**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-002** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-03 (13-14')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
2. Acenaphthylene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
3. Aniline	U	G+ ICV-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
4. Anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
‡ 5. Azobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
6. Benzo(a)anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
7. Benzo(a)pyrene	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/07/24 15:45	S524B07B	KDG
8. Benzo(b)fluoranthene	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/07/24 15:45	S524B07B	KDG
9. Benzo(ghi)perylene	U	V+	µg/kg	330	2.0	02/07/24	PS24B02N	02/07/24 15:45	S524B07B	KDG
10. Benzo(k)fluoranthene	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/07/24 15:45	S524B07B	KDG
11. Benzyl Alcohol	U	G+	µg/kg	3300	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
12. Bis(2-chloroethoxy)methane	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
13. Bis(2-chloroethyl)ether	U	G+	µg/kg	100	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
15. 4-Bromophenyl Phenylether	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
16. Butyl Benzyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
17. Di-n-butyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
‡ 18. Carbazole	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
19. 4-Chloro-3-methylphenol	U	G+	µg/kg	280	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
20. 2-Chloronaphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
21. 2-Chlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
22. 4-Chlorophenyl Phenylether	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
23. Chrysene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
24. Dibenzo(a,h)anthracene	U	V+	µg/kg	330	2.0	02/07/24	PS24B02N	02/07/24 15:45	S524B07B	KDG
25. Dibenzofuran	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
26. 2,4-Dichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
27. Diethyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
28. 2,4-Dimethylphenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
29. Dimethyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
30. 2,4-Dinitrophenol	U	G+ L-	µg/kg	850	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
‡ 31. 2,4-Dinitrotoluene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
‡ 32. 2,6-Dinitrotoluene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
33. Fluoranthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
34. Fluorene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-03 (13-14')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:15**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-002** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-03 (13-14')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
35. Hexachlorobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
36. Hexachlorobutadiene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
37. Hexachlorocyclopentadiene	U	G+ L-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
38. Hexachloroethane	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
39. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/07/24 15:45	S524B07B	KDG
‡ 40. Isophorone	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
41. 2-Methyl-4,6-dinitrophenol	U	G+ L-	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
42. 2-Methylnaphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
43. 2-Methylphenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
‡ 44. 3&4-Methylphenol	U	G+	µg/kg	660	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
45. Naphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
46. 2-Nitroaniline	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
47. 3-Nitroaniline	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
48. 4-Nitroaniline	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
49. Nitrobenzene	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
50. 2-Nitrophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
51. 4-Nitrophenol	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
52. N-Nitrosodimethylamine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
53. N-Nitrosodi-n-propylamine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
54. N-Nitrosodiphenylamine	U	G+ L+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
55. Di-n-octyl Phthalate	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/07/24 15:45	S524B07B	KDG
56. 2,2'-Oxybis(1-chloropropane)	U	G+ L-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
57. Pentachlorophenol	U	G+	µg/kg	800	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
58. Phenanthrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
59. Phenol	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
60. Pyrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
61. Pyridine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
‡ 62. 1,2,4-Trichlorobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
63. 2,4,5-Trichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC
64. 2,4,6-Trichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 19:37	S524B06B	CRC

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Analytical Laboratory Report
Laboratory Project Number: A19405
Laboratory Sample Number: A19405-002

Order: A19405
Date: 02/14/24

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-03 (13-14')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:15**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: A19405-002** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: NE-SB-03 (13-14')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 11:59	PW24A30F	01/30/24	W424A30A	MJS

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-04 (9-10')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19405-003** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: NE-SB-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**23**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19405-003** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: NE-SB-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**8300**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**66000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**220**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**16000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**15000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**37000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**280**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**62000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19405-003** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: NE-SB-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	10	01/31/24	PM24A31C	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19405-003** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	17	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
6. Chlordane	U		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-04 (9-10')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19405-003** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
17. Heptachlor Epoxide	U	L- V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 17:56	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19405-003** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: NE-SB-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:58	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:58	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:58	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:58	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:58	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:58	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:58	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:58	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 00:58	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19405-003** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:32	SF24B12B	TKT
‡ 2. Dalapon	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 00:32	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:32	SF24B12B	TKT
‡ 4. Dicamba	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 00:32	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-04 (9-10')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19405-003** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:32	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 00:32	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:32	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:32	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-003A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+	µg/kg	1000	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
‡ 2. Acrylonitrile	U		µg/kg	160	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
3. Benzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
9. 2-Butanone	U		µg/kg	750	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
10. n-Butylbenzene	U		µg/kg	81	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
14. Carbon Tetrachloride	U		µg/kg	81	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-04 (9-10')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-003A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
28. 1,2-Dichloroethane	U		µg/kg	81	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
32. 1,2-Dichloropropane	U		µg/kg	81	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	81	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
37. 2-Hexanone	U		µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
42. MTBE	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
45. Styrene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	81	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
49. Toluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	81	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
59. Vinyl Chloride	U		µg/kg	41	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
60. m&p-Xylene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC
‡ 62. Xylenes	U		µg/kg	150	1.0	01/29/24	VP24A29A	01/29/24 17:24	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-04 (9-10')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-003** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
2. Acenaphthylene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
3. Aniline	U	G+ ICV-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
4. Anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
‡ 5. Azobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
6. Benzo(a)anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
7. Benzo(a)pyrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
8. Benzo(b)fluoranthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
9. Benzo(ghi)perylene	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
10. Benzo(k)fluoranthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
11. Benzyl Alcohol	U	G+	µg/kg	3300	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
12. Bis(2-chloroethoxy)methane	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
13. Bis(2-chloroethyl)ether	U	G+	µg/kg	100	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
15. 4-Bromophenyl Phenylether	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
16. Butyl Benzyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
17. Di-n-butyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
‡ 18. Carbazole	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
19. 4-Chloro-3-methylphenol	U	G+	µg/kg	280	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
20. 2-Chloronaphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
21. 2-Chlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
22. 4-Chlorophenyl Phenylether	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
23. Chrysene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
24. Dibenzo(a,h)anthracene	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
25. Dibenzofuran	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
26. 2,4-Dichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
27. Diethyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
28. 2,4-Dimethylphenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
29. Dimethyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
30. 2,4-Dinitrophenol	U	G+ L-	µg/kg	860	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
‡ 31. 2,4-Dinitrotoluene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
‡ 32. 2,6-Dinitrotoluene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-04 (9-10')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-003** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
33. Fluoranthene	**420**	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
34. Fluorene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
35. Hexachlorobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
36. Hexachlorobutadiene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
37. Hexachlorocyclopentadiene	U	G+ L-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
38. Hexachloroethane	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
‡ 40. Isophorone	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
41. 2-Methyl-4,6-dinitrophenol	U	G+ L-	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
42. 2-Methylnaphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
43. 2-Methylphenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
‡ 44. 3&4-Methylphenol	U	G+	µg/kg	660	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
45. Naphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
46. 2-Nitroaniline	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
47. 3-Nitroaniline	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
48. 4-Nitroaniline	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
49. Nitrobenzene	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
50. 2-Nitrophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
51. 4-Nitrophenol	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
52. N-Nitrosodimethylamine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
53. N-Nitrosodi-n-propylamine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
54. N-Nitrosodiphenylamine	U	G+ L+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
55. Di-n-octyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
56. 2,2'-Oxybis(1-chloropropane)	U	G+ L-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
57. Pentachlorophenol	U	G+	µg/kg	800	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
58. Phenanthrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
59. Phenol	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
60. Pyrene	**340**	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
61. Pyridine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
‡ 62. 1,2,4-Trichlorobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-04 (9-10')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-003** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
63. 2,4,5-Trichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC
64. 2,4,6-Trichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:14	S524B06B	CRC

Inorganic Anions by IC **Aliquot ID: A19405-003** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: NE-SB-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 11:59	PW24A30F	01/30/24	W424A30A	MJS

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-05 (6-7')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19405-004** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: NE-SB-05 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**21**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19405-004** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: NE-SB-05 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**8500**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**65000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**260**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**17000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**17000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**34000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**300**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**69000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19405-004** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: NE-SB-05 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	10	01/31/24	PM24A31C	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19405-004** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-05 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	17	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
6. Chlordane	**120**		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-05 (6-7')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19405-004** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-05 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
17. Heptachlor Epoxide	U	L- V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 18:12	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19405-004** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: NE-SB-05 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:09	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:09	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:09	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:09	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:09	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:09	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:09	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:09	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:09	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19405-004** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-05 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:52	SF24B12B	TKT
‡ 2. Dalapon	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 00:52	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:52	SF24B12B	TKT
‡ 4. Dicamba	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 00:52	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-05 (6-7')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19405-004** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-05 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:52	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 00:52	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:52	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 00:52	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-004A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-05 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+	µg/kg	1000	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
‡ 2. Acrylonitrile	U		µg/kg	150	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
3. Benzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
9. 2-Butanone	U		µg/kg	750	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
10. n-Butylbenzene	U		µg/kg	76	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
14. Carbon Tetrachloride	U		µg/kg	76	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-05 (6-7')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-004A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-05 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
28. 1,2-Dichloroethane	U		µg/kg	76	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
32. 1,2-Dichloropropane	U		µg/kg	76	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	76	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
37. 2-Hexanone	U		µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
42. MTBE	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
45. Styrene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	76	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
49. Toluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	76	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
60. m&p-Xylene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC
‡ 62. Xylenes	U		µg/kg	150	1.0	01/29/24	VP24A29A	01/29/24 17:50	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-05 (6-7')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-004** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-05 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
2. Acenaphthylene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
3. Aniline	U	G+ ICV-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
4. Anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
‡ 5. Azobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
6. Benzo(a)anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
7. Benzo(a)pyrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
8. Benzo(b)fluoranthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
9. Benzo(ghi)perylene	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
10. Benzo(k)fluoranthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
11. Benzyl Alcohol	U	G+	µg/kg	3300	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
12. Bis(2-chloroethoxy)methane	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
13. Bis(2-chloroethyl)ether	U	G+	µg/kg	100	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
15. 4-Bromophenyl Phenylether	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
16. Butyl Benzyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
17. Di-n-butyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
‡ 18. Carbazole	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
19. 4-Chloro-3-methylphenol	U	G+	µg/kg	280	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
20. 2-Chloronaphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
21. 2-Chlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
22. 4-Chlorophenyl Phenylether	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
23. Chrysene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
24. Dibenzo(a,h)anthracene	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
25. Dibenzofuran	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
26. 2,4-Dichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
27. Diethyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
28. 2,4-Dimethylphenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
29. Dimethyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
30. 2,4-Dinitrophenol	U	G+ L-	µg/kg	840	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
‡ 31. 2,4-Dinitrotoluene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
‡ 32. 2,6-Dinitrotoluene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-05 (6-7')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-004** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-05 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
33. Fluoranthene	**450**	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
34. Fluorene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
35. Hexachlorobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
36. Hexachlorobutadiene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
37. Hexachlorocyclopentadiene	U	G+ L-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
38. Hexachloroethane	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
‡ 40. Isophorone	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
41. 2-Methyl-4,6-dinitrophenol	U	G+ L-	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
42. 2-Methylnaphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
43. 2-Methylphenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
‡ 44. 3&4-Methylphenol	U	G+	µg/kg	660	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
45. Naphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
46. 2-Nitroaniline	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
47. 3-Nitroaniline	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
48. 4-Nitroaniline	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
49. Nitrobenzene	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
50. 2-Nitrophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
51. 4-Nitrophenol	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
52. N-Nitrosodimethylamine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
53. N-Nitrosodi-n-propylamine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
54. N-Nitrosodiphenylamine	U	G+ L+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
55. Di-n-octyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
56. 2,2'-Oxybis(1-chloropropane)	U	G+ L-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
57. Pentachlorophenol	U	G+	µg/kg	800	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
58. Phenanthrene	**440**	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
59. Phenol	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
60. Pyrene	**350**	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
61. Pyridine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
‡ 62. 1,2,4-Trichlorobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-05 (6-7')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-004** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-05 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
63. 2,4,5-Trichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC
64. 2,4,6-Trichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 20:52	S524B06B	CRC

Inorganic Anions by IC **Aliquot ID: A19405-004** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: NE-SB-05 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 11:59	PW24A30F	01/30/24	W424A30A	MJS

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-07 (3-4')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:10**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19405-005** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**22**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19405-005** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**7500**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**120000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**560**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**13000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**24000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**170000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**360**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**210000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19405-005** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**95**		µg/kg	50	10	01/31/24	PM24A31C	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19405-005** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	17	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
6. Chlordane	**42**		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-07 (3-4')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:10**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19405-005** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U	V-P2	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
17. Heptachlor Epoxide	U	L-V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 18:29	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19405-005** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:21	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:21	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:21	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:21	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:21	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:21	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:21	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:21	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:21	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19405-005** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:12	SF24B12B	TKT
‡ 2. Dalapon	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 01:12	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:12	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-07 (3-4')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:10**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19405-005** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 4. Dicamba	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 01:12	SF24B12B	TKT
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:12	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 01:12	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:12	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:12	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-005A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+	µg/kg	1000	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
‡ 2. Acrylonitrile	U		µg/kg	160	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
3. Benzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
9. 2-Butanone	U		µg/kg	750	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
10. n-Butylbenzene	U		µg/kg	78	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
14. Carbon Tetrachloride	U		µg/kg	78	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-07 (3-4')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:10**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-005A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
28. 1,2-Dichloroethane	U		µg/kg	78	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
32. 1,2-Dichloropropane	U		µg/kg	78	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	78	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
37. 2-Hexanone	U		µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
42. MTBE	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
45. Styrene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	78	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
49. Toluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	78	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
60. m&p-Xylene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-07 (3-4')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:10**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-005A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 62. Xylenes	U		µg/kg	150	1.0	01/29/24	VP24A29A	01/29/24 18:15	VP24A29A	SNC

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-005** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
2. Acenaphthylene	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
3. Aniline	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
4. Anthracene	**830**		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
‡ 5. Azobenzene	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
6. Benzo(a)anthracene	**2000**		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
7. Benzo(a)pyrene	**1800**		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
8. Benzo(b)fluoranthene	**3100**		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
9. Benzo(ghi)perylene	**550**		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
10. Benzo(k)fluoranthene	**1200**		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
11. Benzyl Alcohol	U		µg/kg	3300	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
12. Bis(2-chloroethoxy)methane	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
13. Bis(2-chloroethyl)ether	U		µg/kg	100	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
14. Bis(2-ethylhexyl)phthalate	U	V-	µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
15. 4-Bromophenyl Phenylether	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
16. Butyl Benzyl Phthalate	U	V-	µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
17. Di-n-butyl Phthalate	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
‡ 18. Carbazole	**460**		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
19. 4-Chloro-3-methylphenol	U		µg/kg	280	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
20. 2-Chloronaphthalene	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
21. 2-Chlorophenol	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
22. 4-Chlorophenyl Phenylether	U	V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
23. Chrysene	**2200**		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
24. Dibenzo(a,h)anthracene	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
25. Dibenzofuran	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
26. 2,4-Dichlorophenol	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
27. Diethyl Phthalate	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
28. 2,4-Dimethylphenol	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
29. Dimethyl Phthalate	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-07 (3-4')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:10**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-005** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. 2,4-Dinitrophenol	U	L- V-	µg/kg	850	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
‡ 31. 2,4-Dinitrotoluene	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
‡ 32. 2,6-Dinitrotoluene	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
33. Fluoranthene	**6200**		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
34. Fluorene	**330**		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
35. Hexachlorobenzene	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
36. Hexachlorobutadiene	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
37. Hexachlorocyclopentadiene	U	L-	µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
38. Hexachloroethane	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
39. Indeno(1,2,3-cd)pyrene	**580**		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
‡ 40. Isophorone	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
41. 2-Methyl-4,6-dinitrophenol	U	L-	µg/kg	830	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
42. 2-Methylnaphthalene	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
43. 2-Methylphenol	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
‡ 44. 3&4-Methylphenol	U		µg/kg	660	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
45. Naphthalene	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
46. 2-Nitroaniline	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
47. 3-Nitroaniline	U	V-	µg/kg	830	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
48. 4-Nitroaniline	U		µg/kg	830	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
49. Nitrobenzene	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
50. 2-Nitrophenol	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
51. 4-Nitrophenol	U		µg/kg	850	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
52. N-Nitrosodimethylamine	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
53. N-Nitrosodi-n-propylamine	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
54. N-Nitrosodiphenylamine	U	L+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
55. Di-n-octyl Phthalate	U	V-	µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
56. 2,2'-Oxybis(1-chloropropane)	U	L- V-	µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
57. Pentachlorophenol	U		µg/kg	850	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
58. Phenanthrene	**4900**		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
59. Phenol	U	V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
60. Pyrene	**4600**		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
61. Pyridine	U		µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
‡ 62. 1,2,4-Trichlorobenzene	U	V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA
63. 2,4,5-Trichlorophenol	U	V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-07 (3-4')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:10**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-005** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
64. 2,4,6-Trichlorophenol	U	V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/05/24 13:32	S624B05E	WTA

Inorganic Anions by IC **Aliquot ID: A19405-005** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: NE-SB-07 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 11:59	PW24A30F	01/30/24	W424A30A	MJS

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-09 (1-2')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19405-006** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: NE-SB-09 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**17**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19405-006** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: NE-SB-09 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**8200**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**69000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**260**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**17000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**16000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**30000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**290**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**67000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19405-006** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: NE-SB-09 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	10	01/31/24	PM24A31C	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19405-006** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-09 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	16	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
6. Chlordane	U		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-09 (1-2')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19405-006** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-09 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
17. Heptachlor Epoxide	U	L- V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 18:46	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19405-006** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: NE-SB-09 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:33	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:33	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:33	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:33	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:33	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:33	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:33	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:33	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:33	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19405-006** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-09 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:32	SF24B12B	TKT
‡ 2. Dalapon	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 01:32	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:32	SF24B12B	TKT
‡ 4. Dicamba	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 01:32	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-09 (1-2')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19405-006** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-09 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:32	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 01:32	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:32	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:32	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-006A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-09 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+	µg/kg	1000	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
‡ 2. Acrylonitrile	U		µg/kg	140	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
3. Benzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
9. 2-Butanone	U		µg/kg	750	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
10. n-Butylbenzene	U		µg/kg	68	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
14. Carbon Tetrachloride	U		µg/kg	68	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-09 (1-2')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-006A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-09 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
28. 1,2-Dichloroethane	U		µg/kg	68	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
32. 1,2-Dichloropropane	U		µg/kg	68	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	68	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
37. 2-Hexanone	U		µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
42. MTBE	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
45. Styrene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	68	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
49. Toluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	68	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
60. m&p-Xylene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC
‡ 62. Xylenes	U		µg/kg	150	1.0	01/29/24	VP24A29A	01/29/24 18:41	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-09 (1-2')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-006** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-09 (1-2')**

							Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acenaphthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
2. Acenaphthylene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
3. Aniline	U	* V- G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
4. Anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
‡ 5. Azobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
6. Benzo(a)anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
7. Benzo(a)pyrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
8. Benzo(b)fluoranthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
9. Benzo(ghi)perylene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
10. Benzo(k)fluoranthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
11. Benzyl Alcohol	U	G+	µg/kg	3300	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
12. Bis(2-chloroethoxy)methane	U	G+ F-	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
13. Bis(2-chloroethyl)ether	U	F- * G+	µg/kg	100	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
15. 4-Bromophenyl Phenylether	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
16. Butyl Benzyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
17. Di-n-butyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
‡ 18. Carbazole	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
19. 4-Chloro-3-methylphenol	U	G+	µg/kg	280	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
20. 2-Chloronaphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
21. 2-Chlorophenol	U	G+ F- *	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
22. 4-Chlorophenyl Phenylether	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
23. Chrysene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
24. Dibenzo(a,h)anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
25. Dibenzofuran	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
26. 2,4-Dichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
27. Diethyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
28. 2,4-Dimethylphenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
29. Dimethyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
30. 2,4-Dinitrophenol	U	F- L- G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-09 (1-2')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-006** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-09 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 31. 2,4-Dinitrotoluene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
‡ 32. 2,6-Dinitrotoluene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
33. Fluoranthene	**360**	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
34. Fluorene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
35. Hexachlorobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
36. Hexachlorobutadiene	U	* G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
37. Hexachlorocyclopentadiene	U	F- L- G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
38. Hexachloroethane	U	* G+ F-	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
‡ 40. Isophorone	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
41. 2-Methyl-4,6-dinitrophenol	U	F- L- G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
42. 2-Methylnaphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
43. 2-Methylphenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
‡ 44. 3&4-Methylphenol	U	G+	µg/kg	660	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
45. Naphthalene	U	* G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
46. 2-Nitroaniline	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
47. 3-Nitroaniline	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
48. 4-Nitroaniline	U	G+ V+	µg/kg	830	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
49. Nitrobenzene	U	F- * G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
50. 2-Nitrophenol	U	F- G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
51. 4-Nitrophenol	U	G+ F-	µg/kg	830	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
52. N-Nitrosodimethylamine	U	* G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
53. N-Nitrosodi-n-propylamine	U	* G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
54. N-Nitrosodiphenylamine	U	F+ L+ G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-09 (1-2')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-006** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-09 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
55. Di-n-octyl Phthalate	U	F+ G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
56. 2,2'-Oxybis(1-chloropropane)	U	L- F- V- * G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
57. Pentachlorophenol	U	F- G+ V-	µg/kg	800	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
58. Phenanthrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
59. Phenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
60. Pyrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
61. Pyridine	U	* G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
‡ 62. 1,2,4-Trichlorobenzene	U	* G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
63. 2,4,5-Trichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA
64. 2,4,6-Trichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/02/24 18:19	S624B02A	WTA

Inorganic Anions by IC **Aliquot ID: A19405-006** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: NE-SB-09 (1-2')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 12:00	PW24A30F	01/30/24	W424A30A	MJS

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-10 (11-12')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19405-007** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: NE-SB-10 (11-12')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**20**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19405-007** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: NE-SB-10 (11-12')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**5900**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**53000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**630**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**16000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**11000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**39000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**240**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**67000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19405-007** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: NE-SB-10 (11-12')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	10	01/31/24	PM24A31C	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19405-007** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-10 (11-12')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	17	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
6. Chlordane	U		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-10 (11-12')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19405-007** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-10 (11-12')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
17. Heptachlor Epoxide	U	L- V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 19:02	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19405-007** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: NE-SB-10 (11-12')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:44	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:44	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:44	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:44	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:44	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:44	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:44	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:44	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:44	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19405-007** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-10 (11-12')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:52	SF24B12B	TKT
‡ 2. Dalapon	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 01:52	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:52	SF24B12B	TKT
‡ 4. Dicamba	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 01:52	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-10 (11-12')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19405-007** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-10 (11-12')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:52	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 01:52	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:52	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 01:52	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-007A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-10 (11-12')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	µg/kg	1000	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
‡ 2. Acrylonitrile	U		µg/kg	150	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
3. Benzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
9. 2-Butanone	U		µg/kg	750	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
10. n-Butylbenzene	U		µg/kg	75	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
14. Carbon Tetrachloride	U		µg/kg	75	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-10 (11-12')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-007A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-10 (11-12')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
28. 1,2-Dichloroethane	U		µg/kg	75	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
32. 1,2-Dichloropropane	U		µg/kg	75	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	75	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
37. 2-Hexanone	U		µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
42. MTBE	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
45. Styrene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	75	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
49. Toluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	75	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
60. m&p-Xylene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC
‡ 62. Xylenes	U		µg/kg	150	1.0	01/29/24	VP24A29A	01/29/24 19:07	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-10 (11-12')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-007** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-10 (11-12')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
2. Acenaphthylene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
3. Aniline	U	G+ ICV-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
4. Anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
‡ 5. Azobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
6. Benzo(a)anthracene	**340**	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
7. Benzo(a)pyrene	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/08/24 10:53	S524B08A	CRC
8. Benzo(b)fluoranthene	**510**		µg/kg	330	2.0	02/07/24	PS24B02N	02/08/24 10:53	S524B08A	CRC
9. Benzo(ghi)perylene	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/08/24 10:53	S524B08A	CRC
10. Benzo(k)fluoranthene	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/08/24 10:53	S524B08A	CRC
11. Benzyl Alcohol	U	G+	µg/kg	3300	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
12. Bis(2-chloroethoxy)methane	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
13. Bis(2-chloroethyl)ether	U	G+	µg/kg	100	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
15. 4-Bromophenyl Phenylether	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
16. Butyl Benzyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
17. Di-n-butyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
‡ 18. Carbazole	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
19. 4-Chloro-3-methylphenol	U	G+	µg/kg	280	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
20. 2-Chloronaphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
21. 2-Chlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
22. 4-Chlorophenyl Phenylether	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
23. Chrysene	**410**	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
24. Dibenzo(a,h)anthracene	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/08/24 10:53	S524B08A	CRC
25. Dibenzofuran	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
26. 2,4-Dichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
27. Diethyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
28. 2,4-Dimethylphenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
29. Dimethyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
30. 2,4-Dinitrophenol	U	G+ L-	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
‡ 31. 2,4-Dinitrotoluene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
‡ 32. 2,6-Dinitrotoluene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
33. Fluoranthene	**790**	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
34. Fluorene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-10 (11-12')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-007** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-10 (11-12')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
35. Hexachlorobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
36. Hexachlorobutadiene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
37. Hexachlorocyclopentadiene	U	G+ L-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
38. Hexachloroethane	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
39. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/08/24 10:53	S524B08A	CRC
‡ 40. Isophorone	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
41. 2-Methyl-4,6-dinitrophenol	U	G+ L-	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
42. 2-Methylnaphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
43. 2-Methylphenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
‡ 44. 3&4-Methylphenol	U	G+	µg/kg	660	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
45. Naphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
46. 2-Nitroaniline	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
47. 3-Nitroaniline	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
48. 4-Nitroaniline	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
49. Nitrobenzene	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
50. 2-Nitrophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
51. 4-Nitrophenol	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
52. N-Nitrosodimethylamine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
53. N-Nitrosodi-n-propylamine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
54. N-Nitrosodiphenylamine	U	G+ L+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
55. Di-n-octyl Phthalate	U	V-	µg/kg	330	2.0	02/07/24	PS24B02N	02/08/24 10:53	S524B08A	CRC
56. 2,2'-Oxybis(1-chloropropane)	U	G+ L-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
57. Pentachlorophenol	U	G+	µg/kg	800	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
58. Phenanthrene	**430**	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
59. Phenol	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
60. Pyrene	**860**	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
61. Pyridine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
‡ 62. 1,2,4-Trichlorobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
63. 2,4,5-Trichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC
64. 2,4,6-Trichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:06	S524B06B	CRC

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Analytical Laboratory Report
Laboratory Project Number: A19405
Laboratory Sample Number: A19405-007

Order: A19405
Date: 02/14/24

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-10 (11-12')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: A19405-007** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: NE-SB-10 (11-12')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 12:00	PW24A30F	01/30/24	W424A30A	MJS

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-12 (8-9')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:45**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A19405-008** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: NE-SB-12 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**16**		%	1	1.0	01/30/24	MC240130	02/01/24	MC240130	LJK

Michigan 10 Elements by ICP/MS **Aliquot ID: A19405-008** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: NE-SB-12 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**8000**		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
2. Barium	**56000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
3. Cadmium	**150**		µg/kg	50	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
4. Chromium	**16000**		µg/kg	500	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
5. Copper	**15000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
6. Lead	**13000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
7. Selenium	**240**		µg/kg	200	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
8. Silver	U		µg/kg	100	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS
9. Zinc	**45000**		µg/kg	1000	20	01/31/24	PT24A31E	01/31/24	T424A31E	JJS

Mercury by CVAAS **Aliquot ID: A19405-008** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: NE-SB-12 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	10	01/31/24	PM24A31C	02/01/24	M724B01A	JLH

Organochlorine Pesticides **Aliquot ID: A19405-008** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-12 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
2. alpha-BHC	U		µg/kg	16	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
3. beta-BHC	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
4. delta-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
5. gamma-BHC	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
6. Chlordane	U		µg/kg	25	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
7. 4,4'-DDD	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
8. 4,4'-DDE	U	V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-12 (8-9')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:45**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Pesticides **Aliquot ID: A19405-008** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8081B **Description: NE-SB-12 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
9. 4,4'-DDT	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
10. Dieldrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
11. Endosulfan I	U	L-	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
12. Endosulfan II	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
13. Endosulfan Sulfate	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
14. Endrin	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
15. Endrin Aldehyde	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
16. Heptachlor	U		µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
17. Heptachlor Epoxide	U	L- V+	µg/kg	20	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
18. Methoxychlor	U		µg/kg	50	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT
19. Toxaphene	U		µg/kg	170	5.0	01/30/24	PS24A30G	02/05/24 19:19	SF24B05B	TKT

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A19405-008** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: NE-SB-12 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:56	SO24A30A	BRC
2. Aroclor-1221	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:56	SO24A30A	BRC
3. Aroclor-1232	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:56	SO24A30A	BRC
4. Aroclor-1242	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:56	SO24A30A	BRC
5. Aroclor-1248	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:56	SO24A30A	BRC
6. Aroclor-1254	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:56	SO24A30A	BRC
7. Aroclor-1260	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:56	SO24A30A	BRC
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:56	SO24A30A	BRC
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/30/24	PS24A30G	01/31/24 01:56	SO24A30A	BRC

Organochlorine Herbicides **Aliquot ID: A19405-008** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-12 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. 2,4-D	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 02:12	SF24B12B	TKT
‡ 2. Dalapon	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 02:12	SF24B12B	TKT
‡ 3. 2,4-DB	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 02:12	SF24B12B	TKT
‡ 4. Dicamba	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 02:12	SF24B12B	TKT

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-12 (8-9')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:45**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Organochlorine Herbicides **Aliquot ID: A19405-008** **Matrix: Soil/Solid**
Method: EPA 8151A **Description: NE-SB-12 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 5. Dichlorprop	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 02:12	SF24B12B	TKT
‡ 6. Dinoseb	U		µg/kg	100	5.0	02/05/24	PS24B05I	02/13/24 02:12	SF24B12B	TKT
‡ 7. 2,4,5-T	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 02:12	SF24B12B	TKT
‡ 8. 2,4,5-TP	U		µg/kg	200	5.0	02/05/24	PS24B05I	02/13/24 02:12	SF24B12B	TKT

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-008A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-12 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+	µg/kg	1000	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
‡ 2. Acrylonitrile	U		µg/kg	140	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
3. Benzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
4. Bromobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
5. Bromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
7. Bromoform	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
8. Bromomethane	U		µg/kg	200	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
9. 2-Butanone	U		µg/kg	750	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
10. n-Butylbenzene	U		µg/kg	69	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
14. Carbon Tetrachloride	U		µg/kg	69	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
15. Chlorobenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
16. Chloroethane	U	V+ L+	µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
17. Chloroform	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
18. Chloromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
22. Dibromomethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-12 (8-9')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:45**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A19405-008A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: NE-SB-12 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
28. 1,2-Dichloroethane	U		µg/kg	69	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
32. 1,2-Dichloropropane	U		µg/kg	69	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
33. cis-1,3-Dichloropropene	U		µg/kg	69	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
35. Ethylbenzene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
37. 2-Hexanone	U		µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
40. Methylene Chloride	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
42. MTBE	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
43. Naphthalene	U		µg/kg	330	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
45. Styrene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	69	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
49. Toluene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
52. 1,1,2-Trichloroethane	U		µg/kg	69	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
53. Trichloroethene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
54. Trichlorofluoromethane	U	V+ L+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
55. 1,2,3-Trichloropropane	U	V+	µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
60. m&p-Xylene	U		µg/kg	100	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
61. o-Xylene	U		µg/kg	50	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC
‡ 62. Xylenes	U		µg/kg	150	1.0	01/29/24	VP24A29A	01/29/24 19:33	VP24A29A	SNC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-12 (8-9')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:45**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-008** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-12 (8-9')**

							Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acenaphthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
2. Acenaphthylene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
3. Aniline	U	G+ ICV-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
4. Anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
‡ 5. Azobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
6. Benzo(a)anthracene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
7. Benzo(a)pyrene	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/07/24 17:00	S524B07B	KDG
8. Benzo(b)fluoranthene	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/07/24 17:00	S524B07B	KDG
9. Benzo(ghi)perylene	U	V+	µg/kg	330	2.0	02/07/24	PS24B02N	02/07/24 17:00	S524B07B	KDG
10. Benzo(k)fluoranthene	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/07/24 17:00	S524B07B	KDG
11. Benzyl Alcohol	U	G+	µg/kg	3300	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
12. Bis(2-chloroethoxy)methane	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
13. Bis(2-chloroethyl)ether	U	G+	µg/kg	100	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
15. 4-Bromophenyl Phenylether	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
16. Butyl Benzyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
17. Di-n-butyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
‡ 18. Carbazole	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
19. 4-Chloro-3-methylphenol	U	G+	µg/kg	280	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
20. 2-Chloronaphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
21. 2-Chlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
22. 4-Chlorophenyl Phenylether	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
23. Chrysene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
24. Dibenzo(a,h)anthracene	U	V+	µg/kg	330	2.0	02/07/24	PS24B02N	02/07/24 17:00	S524B07B	KDG
25. Dibenzofuran	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
26. 2,4-Dichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
27. Diethyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
28. 2,4-Dimethylphenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
29. Dimethyl Phthalate	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
30. 2,4-Dinitrophenol	U	G+ L-	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
‡ 31. 2,4-Dinitrotoluene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
‡ 32. 2,6-Dinitrotoluene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
33. Fluoranthene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
34. Fluorene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-12 (8-9')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:45**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: A19405-008** **Matrix: Soil/Solid**
Method: EPA 3550C/EPA 8270E **Description: NE-SB-12 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
35. Hexachlorobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
36. Hexachlorobutadiene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
37. Hexachlorocyclopentadiene	U	G+ L-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
38. Hexachloroethane	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
39. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/07/24 17:00	S524B07B	KDG
‡ 40. Isophorone	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
41. 2-Methyl-4,6-dinitrophenol	U	G+ L-	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
42. 2-Methylnaphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
43. 2-Methylphenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
‡ 44. 3&4-Methylphenol	U	G+	µg/kg	660	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
45. Naphthalene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
46. 2-Nitroaniline	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
47. 3-Nitroaniline	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
48. 4-Nitroaniline	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
49. Nitrobenzene	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
50. 2-Nitrophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
51. 4-Nitrophenol	U	G+	µg/kg	830	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
52. N-Nitrosodimethylamine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
53. N-Nitrosodi-n-propylamine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
54. N-Nitrosodiphenylamine	U	G+ L+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
55. Di-n-octyl Phthalate	U		µg/kg	330	2.0	02/07/24	PS24B02N	02/07/24 17:00	S524B07B	KDG
56. 2,2'-Oxybis(1-chloropropane)	U	G+ L-	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
57. Pentachlorophenol	U	G+	µg/kg	800	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
58. Phenanthrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
59. Phenol	U	G+ V+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
60. Pyrene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
61. Pyridine	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
‡ 62. 1,2,4-Trichlorobenzene	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
63. 2,4,5-Trichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC
64. 2,4,6-Trichlorophenol	U	G+	µg/kg	330	1.0	02/02/24	PS24B02N	02/06/24 22:43	S524B06B	CRC

Analytical Laboratory Report
Laboratory Project Number: A19405
Laboratory Sample Number: A19405-008

Order: A19405
Date: 02/14/24

Client Identification:	**DLZ Michigan, Inc - Detroit**	Sample Description:	**NE-SB-12 (8-9')**	Chain of Custody:	**205253**
Client Project Name:	**Kettering NE Stockpile (2444-7114-00)**	Sample No:		Collect Date:	**01/25/24**
Client Project No:	**2444-7114-00**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:45**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: A19405-008** **Matrix: Soil/Solid**
Method: EPA 0300.0 (Solids Prep)/EPA 9056A **Description: NE-SB-12 (8-9')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	U		µg/kg	100000	1.0	01/30/24 12:00	PW24A30F	01/30/24	W424A30A	MJS

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QC limits

Exception Summary:

*	:	Duplicate analysis not within control limits.
F-	:	Recovery from the spiked aliquot exceeds the lower control limit (matrix spike or matrix spike duplicate).
F+	:	Recovery from the spiked aliquot exceeds the upper control limit (matrix spike or matrix spike duplicate).
G+	:	Recovery of the associated Surrogate Compound exceeds the upper control limit. Results may be biased high.
ICV-	:	Recovery in the associated initial calibration verification sample exceeds the lower control limit. Results may be biased low.
L-	:	Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
L+	:	Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
P2	:	This flag is used when there is greater than 40% difference for detected concentrations between the two GC columns.
V-	:	Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.
V+	:	Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.

NELAP ACCREDITED TNI LABORATORY

Accreditation Number(s):

TX-C24-00039 (TX)

Fibertec environmental services

Analytical Laboratory
1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
Fax: 517 699 0388
email: lab@fibertec.us

8660 S. Mackinaw Trail
Cadillac, MI 49601
Phone: 231 775 8368
Fax: 231 775 8584

Geoprobe
11766 E. Grand River Rd.
Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody # **205253**
PAGE 1 of 1

Client Name: DLZ Michigan, Inc.
Contact Person: Dan McNeely
Project Name/ Number: Kettering NE Stockpile 2444-7114-00
Email distribution list: dmcneely@dlz.com; mthompson@dlz.com
Quote#
Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	VOCs	SVOCs	PCBs	MI 10 metals	Chloride	Pest/Herb					HOLD SAMPLE
1-23-24	1425		NE-SB-01(7-8')	S	2	X	X	X	X	X	X					
1-25-24	0915		NE-SB-03(13-14')	S	2	X	X	X	X	X	X					
	1000		NE-SB-04(9-10')	S	2	X	X	X	X	X	X					
	1030		NE-SB-05(6-7')	S	2	X	X	X	X	X	X					
	1110		NE-SB-07(3-4')	S	2	X	X	X	X	X	X					
	1200		NE-SB-09(1-2')	S	2	X	X	X	X	X	X					
	1300		NE-SB-10(11-12')	S	2	X	X	X	X	X	X					
	1345		NE-SB-12(8-9')	S	2	X	X	X	X	X	X					

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; EDD

Remarks:

Received By Lab
JAN 26 2024
Initials: JS

Comments:

Sampled/Relinquished By: Dan McNeely	Date/ Time 1-25-24 1600	Received By: Russ Scott
Relinquished By: Russ Scott	Date/ Time 1/26/24 12:00	Received By:
Relinquished By:	Date/ Time 1/26/24 1300	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. doys _____3 bus. doys _____4 bus. doys

__X__5-7 bus. days (stondord) Other (specify time/date requirement): _____

LAB USE ONLY

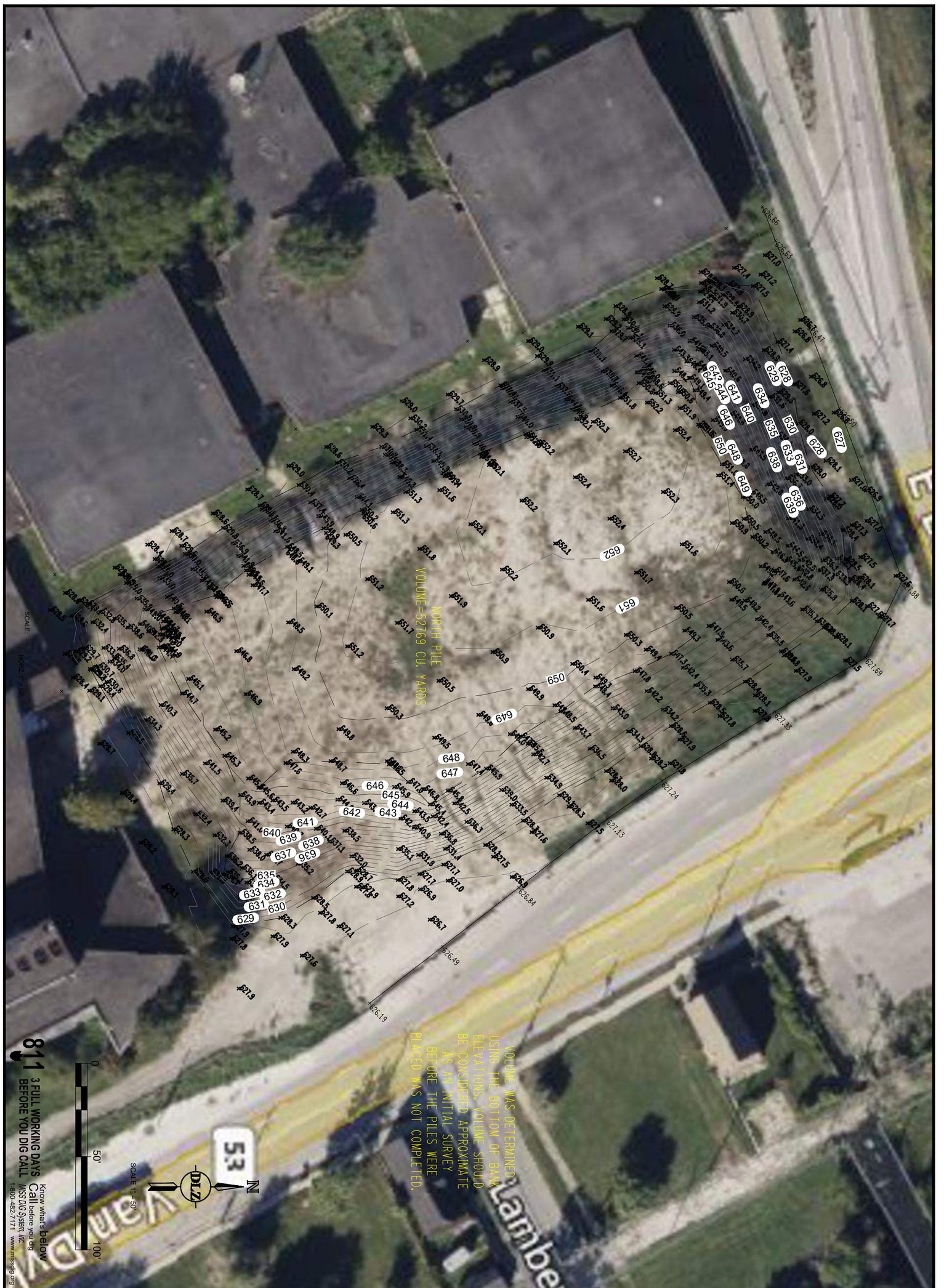
Fibertec project number: A19405

Temperoture upon receipt at Lab: 2.7 °C

Received On Ice

Please see back for terms and conditions

ATTACHMENT C
STOCKPILE VOLUME SURVEY(S)



DLZ JOB NUMBER:	2444-7114-00
SHEET NO.	2 OF 2
1/15/2024	
DRAWN BY:	DRW
DESIGN BY:	-
CHECKED BY:	-

City of Detroit Brownfield
Redevelopment Authority
500 Griswold St., Ste 2200
Detroit, Michigan 48226

VOLUME SURVEY
North Pile

Van Dyke St and E Edsel Ford FWY
Detroit, Michigan

WARNING

UTILITY LOCATIONS ARE NOT CONFIRMED. THOSE SHOWN WERE OBTAINED FROM UTILITY OWNERS OR PLANS. THREE FULL WORKING DAYS PRIOR TO BEGINNING WORK THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS TO HAVE WORK AREA STAKED AND HE SHALL PROTECT OR HAVE RELOCATED, AS NOTED IN THE SPECIFICATIONS, ALL UTILITIES THAT MIGHT INTERFERE WITH CONSTRUCTION.

DLZ
ARCHITECTURE • ENGINEERING • PLANNING
SURVEYING • CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

CITY OF DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY
500 GRISWOLD ST., STE 2200
DETROIT, MICHIGAN 48226

Volume Survey
South Pile

Townsend St. and Kettering High School
Detroit, Michigan

WARNING

UTILITY LOCATIONS ARE NOT CONFIRMED. THOSE SHOWN WERE OBTAINED FROM UTILITY OWNERS OR PLANS. THREE FULL WORKING DAYS PRIOR TO BEGINNING WORK THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS TO HAVE WORK AREA STAKED AND HE SHALL PROTECT OR HAVE RELOCATED, AS NOTED IN THE SPECIFICATIONS, ALL UTILITIES THAT MIGHT INTERFERE WITH CONSTRUCTION.

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SURVEYING • CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

DLZ JOB NUMBER: 2444-7114-00
DRAWN BY: DRW
DESIGN BY: -
CHECKED BY: -
1/15/2024
SHEET NO. 1 OF 2