

CONTRACT DOCUMENTS  
FOR

**GLENCOE INDUSTRIAL PARK 2025**  
**MUNICIPALITY OF SOUTHWEST MIDDLESEX**



**SPRIET ASSOCIATES**  
engineers & architects

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Our Job No. 225147

February 2026



**SPRIET ASSOCIATES**  
engineers & architects

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## INFORMATION FOR TENDERERS

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1. LOCATION

The work is located adjacent to Industrial Road in Glencoe, Ontario in the Municipality of Southwest Middlesex.

2. OWNER

Where the term "Owner" is used in these specifications and other contract documents, same refers to the Corporation of the Municipality of Southwest Middlesex.

3. ENGINEER

Where the term "Engineer" appears in these specifications, the same shall apply to Spriet Associates London Limited, Consulting Engineers.

The Engineer's site representative (inspector) will be in contact with the Municipality of Southwest Middlesex throughout the duration of construction, particularly with regard to matters of concern or dispute.

4. CONTRACTOR

Where the term "Contractor" is used in these specifications, the same shall apply to the General Contractor who shall be responsible for his sub-contractor's compliance with the requirements of the contract drawings and the specifications.

Nothing contained in the Contract documents shall create any contractual relation between any sub-contractor and the Owner.

The sub-contractor shall be bound to the Contractor by the terms of the General Conditions, drawings and specifications insofar, as they relate or may be applied to the work of the sub-contractor, and the sub-contractor agrees to assume towards the Contractor all the obligations and responsibilities that the Contractor assumes toward the Owner. The Contractor agrees to be bound to the sub-contractor by all the obligations the Owner assumes to the Contractor under the General Conditions, drawings and specifications.

5. TENDER

Tenders to be entitled for consideration must be made on the forms provided herein and shall be submitted within a sealed envelope to the attention of Mauro Castrilli at the Municipality of Southwest Middlesex. Proponents are required to submit two (2) paper copies and one electronic copy (Flash Drive) in **one sealed envelope** marked confidential. No facsimile transmission or electronic delivery of Proposals will be accepted.

Submissions shall be endorsed: "GLENCOE INDUSTRIAL PARK 2025" and shall arrive at the Municipal office (153 McKellar Street, Glencoe ON N0L 1M0) no later than:

**2:00pm, WEDNESDAY, MARCH 11, 2026**



## 5. TENDER (cont'd)

All questions, inquiries and clarifications regarding this Tender are to be submitted to Mauro Castrilli, Municipality of Southwest Middlesex ([mcastrilli@southwestmiddlesex.ca](mailto:mcastrilli@southwestmiddlesex.ca)) and Chris Lierman ([clierman@spriet.on.ca](mailto:clierman@spriet.on.ca)), Spriet Associates, by Friday, March 6, 2026, at 11:00 A.M., local time. Where an inquiry results in a change or a clarification to the tender, the Municipality will issue an addendum. Addenda will not be issued within 48 hours of closing, with the exception of postponing the closing date.

The Owner reserves the right to reject all or any tenders received. The lowest bid may not necessarily be accepted. Tenders that include specific unit prices significantly different than all other submitted tenders for the same item may be rejected by the owner. The Owner reserves the right, upon award of the tender, to reduce the extent of work to be performed in this contract based on higher tendered versus estimated costs. The contract, when awarded, shall be made for each branch or division of the work or for the whole work as deemed in the best interest of the Owner.

This Tender does not commit the Municipality to determining a recommended Bid to this Tender or Awarding a Contract under this Tender. The Municipality reserves the right to accept or reject any or all Bids submitted under this Tender if it is determined by the Municipality, in its sole discretion, that it is in its best interest to do so. Even in the event only one Bid is received, the Municipality reserves the right to reject it. Without limiting the foregoing, the Municipality reserves the right to cancel this Tender without determining a recommended Bid and without awarding a Contract if doing so is determined by the Municipality in its sole discretion to be in its best interest.

Should the Municipality not receive any Bid satisfactory to the Municipality, in its sole and absolute discretion, the Municipality reserves the right to cancel and/or re-procure the project.

In the event that all Bids are rejected by the Municipality or this Tender is cancelled without an award of Contract by Municipal Council, the Bidder hereby agrees that the Municipality shall in no manner be responsible for the payment of any costs incurred in the preparation for the Tender and that Bidder does hereby release the Municipality, its employees, officers, Councilors, or agents from any claims, actions, losses, expenses, costs or damages of every kind and nature whatsoever which in any manner arise out of or are in any way related the Bidders preparation and submission of a Bid for the Glencoe Industrial Park 2025 project.

It is further acknowledged that the release of this Tender does not commit the Municipality to awarding a Contract and that a potential Award of Contract under this Tender is both subject to and entirely conditional upon Municipal Council's approval of a Contract, which cannot be pre-judged or guaranteed. In the event that there is a recommendation made by staff to Municipal Council based on Bids received under this Tender, such constitutes a non-binding recommendation only.



5. TENDER (cont'd)

In the event Municipal Council considers but does not approve the recommendation made by staff for any reason whatsoever and Municipal Council proceeds to cancel this Tender, the Bidder hereby agrees that the Municipality is in no manner responsible for the payment of any costs incurred as a result of Municipal Council's decision or in the preparation for the Tender, and the Bidder hereby releases the Municipality, its employees, officers, Councilors, or agents from any claims, actions, losses, expenses, costs or damages of every kind and nature whatsoever which in any manner arises out of or is in any manner related to the Bidder's preparation and submission of a Bid for the Glencoe Industrial Park 2025 project.

6. TENDER SECURITY

The tender shall be accompanied by a digital copy of the security in the amount equal to ten percent (10%) of the Tender Price. Tender Security shall be in the form of Canadian Currency or Bid Bond, Certified Cheque or a Bank Draft made payable to the Owner. The Bid Bond shall be in digital format, scanned Bid Bonds are not acceptable.

The tenderer shall keep his tender open for acceptance and irrevocable until 45 days have elapsed from the closing date of the tender or a formal contract is executed based on a tender other than this one.

The tender deposits of all but the two (2) lowest tenderers will be returned within ten (10) days after the date of opening tenders. The tender deposits of the two (2) lowest tenderers will be retained until a tender has been accepted and the Performance Bond, the Labour and Material Payment Bond and other documents required herein have been furnished to the satisfaction of the Solicitor and the Engineer for the Owner to execute the Agreement within 45 days after the date of opening tenders or if the Engineer has not issued to the tenderers a written order to commence work within the said 45 days, his tender deposit will be returned, except as otherwise provided herein. After the execution of the Contract and the receipt by the owner of the Performance Bond and the Labour and Material Payment Bond, the tender deposits of the two low tenderers will be returned.

If either of the above-mentioned two (2) tenderers has not been notified within 45 days after the date of opening tenders that his tender has been recommended to the Owner for acceptance, he may apply to the Owner for the return of his tender deposit. Unless otherwise determined by the Owner, the tender deposit of one of the said two (2) tenders (normally the one who submitted the second lowest tender) will be returned when so applied for. The tender deposit of the other tenderer will be retained or returned by the Owner as provided for elsewhere in this clause.

The Owner may, in its discretion:

- (a) cash a tender deposit cheque and deposit the proceeds to its account, without prejudice to the ultimate disposition of such tender deposit as provided for herein; or
- (b) return a tender deposit to a tenderer at an earlier time than provided for herein; or
- (c) return a tender deposit to a tenderer on receipt from the said tenderer of an alternative security acceptable to the Owner in lieu of the said tender deposit; and no such action shall prejudice the validity of the tender to which such tender deposit relates.



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6. TENDER SECURITY (cont'd)

Except as otherwise herein provided, the tenderer guarantees that if his tender is withdrawn before the Owner shall have considered the tenders or before or after he has been notified that his tender has been recommended to the Owner for acceptance or that if the Owner does not for any reason receive within the period of seven (7) days as stipulated and as required herein, the Agreement executed by the tenderer, the Performance Bond and the Labour and material Payment Bond executed by the tenderer and the surety company and other documents required herein, the Owner may retain the tender deposit for the use of the Owner and may accept any tender, advertise for new tenders, negotiate a contract or not accept any tender as the Owner may deem advisable.

7. BONDS

In accordance with Clause 23 of the General Conditions, "Guaranty Bonds", a Bond in the amount of 50 per cent of the Contract Price for Maintenance and Performance and a bond in the amount of 50 per cent of the Contract Price for Labour and Materials with a satisfactory Guaranty Surety Company with Head Office in the Province of Ontario will be required for this Contract. The cost of these Bonds shall be included in the Total Tender Price for this Contract.

Prior to the end of the Period of Maintenance, the Contractor shall obtain a written Release from the Municipality of Southwest Middlesex Engineer confirming that all disturbed areas within the project limits have been restored to the satisfaction of the Municipality. No part of the Maintenance Security shall be released without the written release from the Municipality of Southwest Middlesex.

8. AGREEMENT TO BOND

The Tenderer shall include with his tender an Agreement to Bond executed under its corporate seal by the surety company from which he proposed to obtain the required bonds.

9. INTEREST ON DEPOSITS

Tenderers are notified that they must make their own arrangements with their bankers as to the payment of interest, if any, on the amount of the certified cheque accompanying their tender. The Owner will not pay interest on said cheque pending the awarding of the Contract, nor be responsible for the payment of interest under any arrangement made by the Tenderer.

10. CONTRACT DOCUMENTS

The Contract Documents shall consist of the following and in case of any inconsistency or conflict between the provisions of this Agreement and the Plans and Specifications or General Conditions or Tender or any other document or writing, the provisions of such documents shall take precedence and govern in the following order, namely:

- (1) Form of Agreement
- (2) Addendum
- (3) Special Provisions
- (4) Contract Drawings
- (5) General Conditions
- (6) Information to Tenderers
- (7) Contract Specifications



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10. CONTRACT DOCUMENTS (cont'd)

- i. General Provisions
- ii. Roadway Construction
- iii. Sanitary Sewers and Appurtenances
- iv. Storm Sewers and Appurtenances
- v. Stormwater Management Facility
- vi. Municipal Drainage Works
- vii. Watermain and Appurtenances
- (8) Construction Details
- (9) Form of Tender

11. TENDERER TO INVESTIGATE

Tenderers are required to submit their Tenders upon the following express conditions:

- (a) The Tenderer shall examine the Contract Documents and Drawings and make personal examination of the site in order to acquaint himself with the conditions under which he will be obliged to work.
- (b) The Tenderer shall make all the investigations necessary to thoroughly inform himself regarding all facilities for access to the site such as he may require for his construction operations.
- (c) With regard to existing underground services the Tenderer shall examine the files of the Engineer and of the various local private and public utilities to ascertain their existence and location. The onus shall be on the Tenderer as to the completeness and accuracy of the information obtained, by his personal examination and study. No plea for ignorance of conditions that exist, or that may hereafter exist, or of conditions or difficulties that may be encountered in the execution of the work under this Contract as a result of failure to make the necessary examinations and investigations, or ascertaining the required information will be accepted as an excuse for any failure or omission on the part of the Tenderer to fulfil in every detail all the requirements of the said Contract Documents, or will be accepted as a basis for any claims whatsoever for extra compensation, or for an extension of time.

12. INTERPRETATION OF CONTRACT DOCUMENTS

No oral interpretation will be made. Any interpretations made to Tenderers will be in the form of an Addendum to the Specifications which will be forwarded to all Tenderers.

Discrepancies, omissions, or doubts as to the meaning of drawings and specifications should be communicated at once to the Engineer for interpretation. Tenderers should act promptly to allow sufficient time for a reply to reach them before the submission of their tender and any such interpretation made by the Engineer prior to the receipt of tenders shall be made a part of the Contract.



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13. ABILITY AND EXPERIENCE OF TENDERERS

No Tender will be considered from any Tenderer unless known to be skilled and regularly engaged in work of a character similar to that covered by the Drawings and Specifications. In order to aid the Owner in determining the responsibility of any Tenderer, the Tenderer shall, within 48 hours after being requested in writing by the Engineer to do so furnish evidence satisfactory to the Owner of the Tenderer's experience and familiarity with work of the character specified, and his ability to prosecute the proposed work properly to completion within the specified time. The evidence requested may, without being limited thereto, include the following:

- (a) A tabulation of other work now under contract, giving the location, type, size, required date of completion and the per cent of completion to date of each project.
- (b) Evidence that the Tenderer is licensed to do business in the Province of Ontario; in the case of a corporation organized under the laws of any other Province or Country.

13. ABILITY AND EXPERIENCE OF TENDERERS (cont'd)

- (c) Such additional information as will satisfy the Owner that the Tenderer is adequately prepared to fulfil the Contract.

14. SUB-CONTRACTORS

Each Tenderer shall submit with the Tender a complete list of all the persons or firms to which he proposes to sublet any part of the work and the trades or divisions of the work which are sublet to each. The Owner reserves the right to approve the sub-contractor and the failure of the Tenderer to comply with this requirement may result in rejection of the Tender.

15. INSURANCE

The successful Tenderer shall be required to furnish, in addition to the bonds specified, the following types and amounts of insurance coverage to comply with the provisions of the Contract Documents:

(a) Workplace Safety and Insurance

The Contractor shall effect and maintain insurance to cover his obligations under all applicable Workplace Safety and Insurance laws.

(b) Comprehensive General Liability

The Contractor shall effect and maintain Comprehensive General Liability policies of insurance that will protect the Owner for all sums the Owner may become obligated to pay as damages because of Property Damage, Bodily Injury and Personal Injury which are caused in the course of carrying out the Contract to an inclusive limit not less than five million (\$5,000,000.00) dollars per occurrence.



15. INSURANCE (cont'd)(c) Automobile Insurance

The Contractor shall effect and maintain Automobile Insurance (owned and non-owned or hired units) to an inclusive limit not less than two million (\$2,000,000.00) dollars per occurrence.

The policies referred to above shall not be cancelled, terminated, or significantly modified unless a prior notice of at least thirty (30) days has been given to each insured.

The Municipality of Southwest Middlesex, County of Middlesex, Spriet Associates London Limited, and Englobe shall be named additional insured and held harmless.

16. GUARANTEED MAINTENANCE

The Contractor shall guarantee the whole of the work for a period of twelve (12) months from the date of acceptance of the work by the Engineer, in writing, by means of preparation of the Certificate of Substantial Performance.

17. PROGRESS PAYMENTS

The Owner shall make payments on account of the contract as follows:

- (a) On or before the 15th day of each month ninety percent (90%) of the value of the work completed up to and including the last day of the month preceding.
- (b) Subject to Article 27 of the General Conditions on completion of the entire work and one day after all lien rights have expired the balance due under the contract provided that:
  - (i) If, on account of climatic or other conditions reasonably beyond the Contractor's control, there are items of work that cannot readily be completed, the payment in full for the work which has been completed shall not be delayed on account thereof, but the Owner or Engineer may withhold a sufficient and reasonable sum until the uncompleted work is finished and such sum as will adequately protect the Owner against liens.
  - (ii) If the legislation dealing with construction liens which is applicable at the location of work permits the Owner to release the holdback applicable to a sub-contract to the Contractor within a specified number of days following the completion of the sub-contract then such legislation shall be incorporated as forming a part of this Agreement and the balance applicable to the sub-contract which has been retained by the Owner shall be released by the Owner to the

Contractor in the manner provided for and upon compliance with the terms and conditions of such legislation.

Final payment will be made upon receipt of two copies of a Form of Release, provided by the Contractor and signed by each property owner, upon whose land the Contractor has entered for any purpose in conjunction with the contract.



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17. PROGRESS PAYMENTS (cont'd)

Any liquidated damages costs will be subtracted from all applicable payment certificates being prepared after the date liquidated damages has commenced.

The Municipality of Southwest Middlesex and the Engineer will only prepare one payment certificate per month to include all work completed up to and including the last day of the month preceding.

Payment certificates No. 2, 3, 4, etc. will not be issued by the Engineer until the Contractor has supplied a Statutory Declaration Certificate for the previous payment certificate stating that all sub-contractors and suppliers have been paid.

18. EXTRA WORK

If the Engineer orders in writing the performance of any work not covered by the Drawings or included in the Specifications that cannot be classified as coming under any of the contract units and for which no unit price, lump sum, or other basis can be agreed upon then such extra work shall be performed on a Cost-Plus Percentage basis.

Any extra work ordered by the Engineer to be done on a Cost-Plus basis shall be so done by the Contractor, who shall be paid therefor only the actual cost thereof, as determined by the estimation of the Engineer plus 15 per cent for use of plant, tools, etc., and to cover Contractor's profits, and the Contractor must furnish the Engineer with satisfactory vouchers for all labour and material expended on the work. Where rental charge is made for trucks, equipment, etc. no percentage will be allowed on such rental. When such extra work is required, and is performed by a Sub-contractor, the percentage paid by the Owner for overhead, profit, etc., shall be no greater than the sum that would have been paid had the Contractor himself performed the work.

The Contractor will only be monetarily compensated for performing "extra work" for the actual labour, machinery, and materials requested to perform the work. All attempts shall be made by the Contractor to ensure the labour and machinery not required to perform the extra work is constructing other works outside of the extra work.

All extra work must be approved by the Engineer prior to commencing construction in the field.

The Contractor must inform the Engineer's site representative (inspector) as soon as extra work is anticipated, to ensure the Engineer's approval is received in a timely fashion. The Contractor must also notify the Engineer's inspector when the extra work is being constructed to allow verification of time and materials required to perform the work.

19. SPECIAL PROVISIONS

The attention of all Tenderers is directed to the Special Provisions Section of the Contract Specifications. This Section describes the special or extraordinary requirements of this Contract which are in addition to or which supersede the standards specified in other Sections of the Contract Specifications.



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20. LIQUIDATED DAMAGES

Should the Contractor fail to complete the works to the satisfaction of the Engineer and in accordance with the Contract within the Time for Completion as specified in the Contract or the extended time allowed in writing by the Engineer, the Contractor shall pay to the Owner as liquidated damages (to compensate for tasks including site engineering supervision and contract administration and general supervision of the works) the sum of two thousand (\$2,000.00) for each working day that the works remain uncompleted after the time so specified or allowed.

The work is to be performed during daylight hours from Monday to Friday, between 7:00 a.m. and 6:00 p.m. Once the Contractor has commenced operations, the work shall be continuous and uninterrupted to completion of the project.

21. INFORMAL AND UNBALANCED TENDERS

All entries in the Form of Tender shall be made in ink or by typewriter. Entries or changes made in pencil shall, unless otherwise decided by the Owner, be invalid or informal.

21. INFORMAL AND UNBALANCED TENDERS (cont'd)

Tenders which are incomplete, conditional, illegible, or obscure or that contain additions not called for, reservations, erasures, alterations, (unless properly made and clearly made and initialled by the tenderer's signing officer) or irregularities of any kind may be rejected as informal.

The Owner reserves the right to reject all or any tenders received. The lowest bid may not necessarily be accepted. Tenders that include specific unit prices significantly different than all other submitted tenders for the same item may be rejected by the owner. The Owner reserves the right, upon award of the tender, to reduce the extent of work to be performed in this contract based on higher tendered versus estimated costs. The contract, when awarded, shall be made for each branch or division of the work or for the whole work as deemed in the best interest of the Owner.

The Owner reserves the right to waive informalities at its discretion.

22. ACCEPTANCE OR REJECTION OF TENDERS

The Owner shall not be responsible for any liabilities, costs, expenses, loss or damage incurred, sustained or suffered by any tenderer prior to or subsequent to or by reason of the acceptance or the non-acceptance by the Owner of any tender or by reason of any delay in the acceptance of a tender. Tenders are subject to a formal contract being prepared and executed.

The prices entered by the tenderer in the Form of Tender shall be on the assumption that the Engineer's written order to commence work will be issued to the Tenderer within a 45-day period after the deadline for receiving tenders as described in Clause 5 hereof.

The terms "Total Tender Price" and "Total Contract Price" referred to in these Contract Documents are interchangeable and shall be considered to have the same meaning.

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23. WORKER'S SAFETY AND INSURANCE

The Contractor shall, at all times, pay, or cause to be paid, any assessment or compensation required to be paid pursuant to the Workplace Safety and Insurance Act. The Contractor shall at the time of entering into any contract with the Owner, furnish a satisfactory clearance letter from the Workplace Safety and Insurance Board that the Contractor is in good standing with the said Board. In addition, the Contractor will be required to furnish a clearance letter from the said Board before final payment will be made to the Contractor.

24. TAXES

The Total Contract Price shall include Harmonized Sales Tax (H.S.T.) in respect to all materials, services and equipment required to be incorporated in the work. The Contractor's H.S.T. registration number must be provided with the Tender.

25. START OF CONSTRUCTION

Tenderers are advised that they will be required to commence construction within three weeks of the Engineer's written order to start construction. Construction can take place between April 20, 2026 to October 15, 2026 but must be completed within a maximum of one hundred (100) working days, excluding weekends and statutory holidays, ninety (90) in 2026 and ten (10) in 2027.

The Contractor shall prepare and submit to the Contract Administrator for approval at least five (5) days prior to the pre-construction meeting, three (3) copies of the proposed construction schedule detailing the number of crews and key completion dates for each phase of the project.

The Contractor will be provided a copy of the M.E.C.P. Certificate of Approval for this project which has been received.

26. IRON BAR MONUMENTS

Standard iron bar survey monuments exist in the field. The Tenderer shall allow in his tender, a sum sufficient to cover the resetting, by an Ontario Land Surveyor, of all survey bars displaced during construction.

27. WAGE RATES

The Contractor shall comply with all applicable Municipal Bylaws and any Act and Regulations thereunder of the Province of Ontario that relate to wages, hours of work or other labour conditions.

28. STATEMENTS A TO D

All tenderers are required to complete Statements A to D in the Form of Tender inclusive at the time of submission of any Tender. The Owner reserves the right to accept or reject any or all sub-contractors proposed. Failure of the Tenderer to complete these statements may result in the tender being rejected by the Owner.

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29. TRAFFIC CONTROL

All adjacent roadways, including the existing portion of Industrial Road, will remain open to through traffic during construction.

The Contractor shall be fully responsible for the provision of complete traffic control and signage at all times. All traffic control and signage shall be in accordance with the requirements of the M.T.O. (Ontario) Traffic Control Manual. Sufficient signage must be kept on site for all possible traffic situations. Signage must be of good quality.

The Contractor is also responsible for notifying the necessary Municipal officials, local Ontario Provincial Police detachment, local Fire Department, Middlesex County, Board of Education, Separate School Board, local waste management, and the local Ambulance service a minimum of 24 hours prior to commencement of construction.

30. CONSTRUCTION SPECIFICATIONS

In general, the work shall be carried out in accordance with the Ontario Provincial Standard (O.P.S.) Specifications unless amended in the Contract Documents.

The Contractor shall be obliged to keep a set of the O.P.S. Specifications (Volumes 1 and 2) at the work site at all times during the construction period if so, directed by the Engineer.

31. SOILS INVESTIGATION

A geotechnical investigation, including boreholes and environmental testing, has been performed for this project. Refer to Appendix 'A' which includes the related Geotechnical Report dated February 11, 2026 as prepared by Englobe. Test holes will not be performed as part of this project.

32. TIME FOR COMPLETION

The "Time for Completion" of the works is April 20 to October 15, 2026, commencing three weeks (21-days) from the date of the Engineer's written order to commence work but must be completed within a maximum of One Hundred (100) consecutive working days, with ninety (90) in 2026 and ten (10) in 2027, excluding weekends and statutory holidays. Placement of topsoil and hydroseed is expected to be installed in September – October 2026 and topcoat of roadway asphalt is included in this tender, to be completed by July 2027.

A "working day" shall be as defined under GC1.04 - Definitions of the O.P.S. Specifications.

The works shall be deemed to be substantially completed when:

- (a) the works have satisfactorily passed the required inspection and are ready for use or are being used for the purposes intended, and
- (b) the cost of completion of all outstanding work and known defects is not more than three percent of the Total Contract Price, excluding the value of works which cannot be completed for reasons beyond the control of the Contractor as determined by the Engineer or where the Owner and the Contractor agree to delay completion of certain parts of the works.



33. CONSTRUCTION WORK CREWS

The successful Tenderer will be required to have sufficient equipment, material, and labour on site to complete the project within the prescribed "Time of Completion". The Tenderer awarded the Contract shall satisfy the Engineer in this regard and shall maintain two (2) mainline construction crews working simultaneously if directed by the Engineer.

34. CONTRACTOR'S NOTICE TO RESIDENTS

The Contractor shall provide each householder and/or business establishment on the street within the limits of the Contract with a copy of the letter shown below. This letter, complete in every detail and written on letterhead paper, shall be delivered by the Contractor to each house and/or business establishment prior to commencement of the work and the Contract Administrator shall be notified in writing when such notification has been served.

(SAMPLE LETTER)

Name of Contractor

Date: \_\_\_\_\_

Dear Reader:

The firm of \_\_\_\_\_ has been engaged by the Municipality of Southwest Middlesex to undertake certain construction on your street. This construction is scheduled to commence on or about \_\_\_\_\_.

Our Company will take every reasonable precaution to minimize disruption, but you will appreciate that there must be some inconvenience during the course of the work.

The possibility of vibration due to compaction equipment during construction is not anticipated to be significant during this project. However, the potential for vibration does exist. Therefore, please make arrangements to protect your valuables that may be susceptible to damage due to vibration.

Residents and visitors should take precaution when driving through the construction site.

It is the responsibility of the property owners to remove any owner installed items within the road allowance such as sprinklers, landscaping adornments, lamp post, etc. prior to commencement of construction.

We recommend that all homeowners let all internal taps run for 5-10 minutes to flush the piping immediately after the new water service has been connected outside the home.

Should you require any information or assistance because of our construction, please contact our office at \_\_\_\_\_, the Consultant at (519) 672-4100, or the Municipal Office at (519) 287-2015. As part of our Contract, our Company is assuming full responsibility for the construction work until it is entirely completed. It would be appreciated if any such calls were made promptly to permit us to address the difficulty as quickly as possible.

Yours truly,



**GLENCOE INDUSTRIAL PARK 2025**  
**MUNICIPALITY OF SOUTHWEST MIDDLESEX**

Tender for Glencoe Industrial Park 2025, Glencoe, Ontario in the Municipality of Southwest Middlesex in the Province of Ontario.

Tender By .....

Residing At (or Place of Business) .....

.....

and .....

Residing At (or Place of Business)

.....

Comprising the Firm of .....

.....

A company duly incorporated under the laws of .....

and having its head office at .....

Hereinafter called the "Tenderer".

**NOTE:** The Tenderer's name and residence must be inserted above, and in the case of a firm, the name and residence of each and every member of the firm must be inserted.

TO: The Corporation of the Municipality of Southwest Middlesex  
153 McKellar Street  
Glencoe, Ontario  
N0L 1M0

I (We).....

having carefully examined the locality and site of the proposed works, and all contract documents relating thereto, including the Drawings, Form of Tender, Information for Tenderers, Specifications, General Conditions, Form of Agreement, and Addendum/Addenda No.(s) ..... to .....\* inclusive hereby tender and offer in accordance therewith to enter into a contract within the prescribed time to construct the said works in strict accordance with the Contract Documents and such further detail drawings as may be supplied from time to time and to furnish all materials, labour, tools, plant, matters and things necessary therefore complete and ready for use within the time specified for the sum of

.....  
.....Dollars (\$.....)

or such other sum as may be ascertained in accordance with the Contract.

\* The Tenderer will insert here the numbers of the addenda received by him during the tendering period and taken into account by him in preparing his tender.

In accordance with the first paragraph of this tender, the Contractor hereby offers to complete the work specified for the following prices.

<b>SECTION 1 - ROADWORK</b>					
<b>Item No.</b>	<b>Description of Work</b>	<b>Unit</b>	<b>Estimated Quantity</b>	<b>Unit Price</b>	<b>Total</b>
1	Supply, install, and maintain light duty silt fence as per OPSD 219.110, including removal and disposal following completion of the work.	m	1,755	\$	\$
2	a) Saw cut asphalt roadway up to and including 100mm total thickness. b) Rotomill asphalt road surfaces (40mm x 500mm).	m LS	35 1	\$ \$	\$ \$
3	Remove existing asphalt on Industrial Road for watermain trench and new curb radius	sq.m.	15	\$	\$
4	Earth Excavation and grading				
	a) Strip and stockpile topsoil from R.O.W. (Approx. area 8,577 m2) Strip and stockpile topsoil on Lots 1 through 6, 8, 9, and 11.	LS			\$
	b) (Approx. area 152,726 m2)	LS			\$
	c) Cutting, shaping, filling and compaction of road allowance to subgrade (Approx. Fill +/-2223m3)	LS			\$
	d) Cutting, shaping, filling and compaction of excess fill from sewer spoil and SWM Pond on Lots 1 through 6, 8, 9, and 11 incl. construction of all proposed swales (Approx Cut 22,000m3 and Fill +/-21,330m3) (Total 43,330m3)	LS			\$
	e) Respread stripped topsoil on disturbed areas of Lots 1 through 6, 8, 9, and 11 after placement and compaction of fill (approx. area 152,726m2)	LS			\$
	f) Retain a Qualified Person (QP), as defined in O. Reg 406/19, to prepare and complete all required works and paperwork related to excess soil management as outlined within O. Reg 406/19 for the duration of the project, including all related additional testing as required including ESDAR Report	L.S.	1	\$	\$
5	Supply, place, grade, and compact : a) Granular 'A' under roadway (150mm depth) b) Granular 'B' (Select) under roadway (400mm depth)	tonnes tonnes	1,850 4,500	\$ \$	\$ \$
6	Construct concrete curb and gutter, all types, including transition sections and 'orange' paint to exposed edge above base asphalt. (OPSD 600.040)	m	577	\$	\$
7	Place 150mm of topsoil from stockpile/windrows in grassed/landscaped areas including, but not limited to, ROW and sewer easements, including raking, debris/stone removal and grading.	m <sup>3</sup>	1,550	\$	\$
8	Supply and place hydroseed including watering and maintenance during 60 day warranty period within ROW and easements.	m <sup>2</sup>	11,500	\$	\$
9	Sweep adjacent roadways (as directed by the Contractor Administrator).	hours	20	\$	\$
10	Supply and place hot-mix asphalt on roadway: a) HL8 (80mm depth) (inst. 2026) b) HL3 (50mm depth) (inst. 2027)	tonnes tonnes	780 490	\$ \$	\$ \$
11	Supply and place water for compaction and dust control.	m <sup>3</sup>	40	\$	\$
12	Supply and place Calcium chloride flake for dust control (22.5kg. bags).	ea	90	\$	\$
13	Traffic control, maintenance, construction fencing and signing as per approved Traffic Control Plan.	L.S.			\$
Carried Forward:					\$

In accordance with the first paragraph of this tender, the Contractor hereby offers to complete the work specified for the following prices.

<b>SECTION 1 - ROADWORK (cont'd)</b>					
<b>Item No.</b>	<b>Description of Work</b>	<b>Unit</b>	<b>Estimated Quantity</b>	<b>Unit Price</b>	<b>Total</b>
	Brought Forward:				\$
14	Temporary Drain Outlets				
	a) Supply and install 100mm dia. temporary drainage outlet into all CICB's at low spots (2026)	ea	4	\$	\$
	b) Supply and install lean concrete fill within 100mm dia. temporary drainage outlets (2027)	ea	4	\$	\$
15	Adjust manhole lids and water valve boxes from base to finished asphalt elevation (2027).				
	a) Sanitary and storm MH lids (2027).	ea	7	\$	\$
	b) Water valve boxes (2027)	ea	1	\$	\$
16	Supply and install 5-600mm x 600mm x 1200mm concrete blocks, and Dead End Road sign and post, complete	L.S.			\$
17	Pavement Markings (Temporary) on Proposed Roadway (2026)				
	a) stop bars (300mm)	m	4.6	\$	\$
	b) yellow (100mm wide solid)	m	15	\$	\$
18	Pavement Markings (Permanent) on Proposed Roadway (2027)				
	a) stop bars (300mm)	m	4.6	\$	\$
	b) yellow (100mm wide solid)	m	15	\$	\$
19	Supply, install and maintain straw bales as necessary throughout the site and within the Industrial Road ditch, including removal and disposal following the completion of works	L.S.		\$	\$
<b>TOTAL COST FOR SECTION 1 - ROADWORK</b>					<b>\$</b>



**FORM OF TENDER**  
**GLENCOE INDUSTRIAL PARK**

FT-5

ITEMIZED BID

CONTRACT No. 225147

In accordance with the first paragraph of this tender, the Contractor hereby offers to complete the work specified for the following prices.

<b>SECTION 2 - STORM SEWERS AND APPURTENANCES</b>					
<b>(i) Storm Sewers</b>					
Item No.	Description of Work	Average Depth Between Finished Grade and Invert  (meters)	Estimated Quantity  (meters)	Unit Price	Total Price
1	SWM Pond Inlet - STMH108 incl 45° Bend 1500mm dia.	2.2	41.0	\$	\$
2	STMH108 - STMH106 1500mm dia.	2.4	180.0	\$	\$
3	STMH106 - STMH107 600mm dia.	1.6	53.0	\$	\$
4	STMH106 - STMH105 1350mm dia.	2.6	117.4	\$	\$
5	STMH105 - STMH104 975mm dia.	2.3	90.0	\$	\$
6	STMH104 - STMH103 975mm dia.	2.2	90.0	\$	\$
7	STMH103 - STMH102 900mm dia.	2.1	61.5	\$	\$
8	STMH102 - CBMH101 675mm dia.	1.6	43.8	\$	\$
9	CBMH101 - CBMH101A 375mm dia.	1.2	55.0	\$	\$
<b>TOTAL COST FOR SECTION 2(i) - STORM SEWERS</b>					<b>\$</b>

**FORM OF TENDER  
GLENCOE INDUSTRIAL PARK**

FT-6

ITEMIZED BID

CONTRACT No. 225147

In accordance with the first paragraph of this tender, the Contractor hereby offers to complete the work specified for the following prices.

<b>SECTION 2 - STORM SEWERS AND APPURTENANCES (cont'd)</b>				
<b>(ii) Maintenance Holes</b>				
Item No.	M.H. No.	Depth between invert and finished grade	Type	Total Price
1	STMH108	2.7	2400mm dia. precast	\$
2	STMH107	1.5	1200mm dia. precast	\$
3	STMH106	2.4	2400mm dia. precast	\$
4	STMH105	2.1	3000mm dia. precast	\$
5	STMH104	2.2	1800mm dia. precast	\$
6	STMH103	2.2	1800mm dia. precast	\$
7	STMH102	2.1	2400mm dia. precast	\$
8	CBMH101	1.3	1500mm dia. precast incl. 600mm sump	\$
9	CBMH101A	1.2	1500mm dia. precast incl. 600mm sump	\$
<b>TOTAL COST FOR SECTION 2(ii) - MAINTENANCE HOLES</b>				<b>\$</b>

In accordance with the first paragraph of this tender, the Contractor hereby offers to complete the work specified for the following prices.

<b>SECTION 2 - STORM SEWERS AND APPURTENANCES (cont'd)</b>					
<b>(iii) Storm Miscellaneous</b>					
Item No.	Description of Work	Unit	Quantity	Unit Price	Total
1	Supply and install catchbasins including 900mm sump and frames and grates: a) Curb inlet catchbasins (810mm x 600mm) b) Ditch inlet catchbasin 900 x 1200mm c/w birdcage grate	ea ea	8 1	\$ \$	\$ \$
2	Supply and install 250mm dia. catchbasin leads (SDR-35) including excavation, bedding, backfilling, and connection to main sewer, CB/CICB and/or manholes	m	102	\$	\$
3	a) Video new storm sewer (all sizes) incl. ring deflection testing for all plastic pipe sewers b) Video new storm PDC's (all sizes) incl. ring deflection testing for all plastic pipe sewers	m m	732 88	\$ \$	\$ \$
4	Supply and install new storm private drain connections incl. excavation, bedding, granular backfill and connection to proposed storm sewer incl. all fittings and cap with 2x4 marker stake at P/L or as shown on drawings a) 450mm dia.	ea	11	\$	\$
5	Supply and install oil/debris hood (goss trap) within prop CICB/CB/CBMH	ea	7	\$	\$
6	Supply and install Parson Inserts in all Storm Manholes	ea	8	\$	\$
7	Supply, install, and maintain silt sacks for all catchbasins and curb inlet catchbasins for the duration of the project, including removal and disposal following completion of the work	ea	7	\$	\$
8	Supply and install 450mm HDPE culvert on Lot 6	m	95	\$	\$
9	Supply and install 1630 x 1120mm CSP roadway culvert	m	22	\$	\$
10	(Provisional) Additional costs to supply clear stone storm pipe bedding and geotextile wrap in wet conditions (above prop. granular bedding costs)	m	100	\$	\$
11	Regrade ex. Roadside ditch along Industrial Road incl. placement and fine grading of excess material within subdivision, topsoil salvage and reinstallation, and hydro seeding, complete	L.S.			\$
<b>TOTAL COST FOR SECTION 2(iii) - STORM MISCELLANEOUS</b>					<b>\$</b>

**FORM OF TENDER (cont.'d)  
GLENCOE INDUSTRIAL PARK**

FT-8

ITEMIZED BID

CONTRACT No. 225147

In accordance with the first paragraph of this tender, the Contractor hereby offers to complete the work specified for the following prices.

<b>SECTION 2 - STORM SEWERS AND APPURTENANCES (cont'd)</b>					
<b>(iv) Stormwater Management Pond</b>					
Item No.	Description of Work	Unit	Quantity	Unit Price	Total
1	Supply & install Rip Rap min. 300mm thickness incl. filter	m <sup>2</sup>	300	\$	\$
2	a) Strip topsoil for pond  Earth excavation and grading including cutting to subgrade elevations, disposal of excess excavated material on Lots 1 through 5, shaping, filling, and compaction to 98% SPMDD (approx. 17670m <sup>3</sup> ) (Excess material to go to Lots)	m <sup>3</sup>	530	\$	\$
		L.S.	1		\$
3	Access Road within Pond a) Supply, place, grade and compact 200mm Granular 'A' b) Supply and install 50mm topsoil and seed	tonnes m <sup>2</sup>	260 430	\$ \$	\$ \$
4	Access Road from Industrial Road to Pond a) Supply, place, grade and compact 150mm Granular 'A' b) Suppl, place, grade and compact 300mm Granular 'B' c) Supply and install 1630 x 1120mm Elliptical CSP Culvert pipe Supply and install 2 - 114mm dia. Bollards c/w chain at d) Industrial Road	tonnes tonnes m L.S.	425 770 12 1	\$ \$ \$ \$	\$ \$ \$ \$
5	Respread existing topsoil in pond and seed to water level	m <sup>2</sup>	2500	\$	\$
6	Supply and install grate (OPSD 804.050 Mod.) on 1500mm diameter pond inlet pipe	L.S.	1		\$
7	Supply and install 2 - 600mm diameter Concrete pipes between forebay and main pond, complete	m	28	\$	\$
8	Supply and install pond outlet headwalls (OPSD 804.030) including grate (OPSD 804.050) and handrails (OPSD 980.101) for the following outlet pipes, complete a) 750mm b) 450mm	ea ea	1 1	\$ \$	\$ \$
9	Supply and install 750mm dia. storm pipe from headwall to STMH 109, complete	m	6.9	\$	\$
10	Supply and install 450mm dia. storm pipe from headwall to STMH 109, complete	m	18.2	\$	\$
11	Supply and install 1800 x 2400mm STMH109, including two (2) orifice plates, complete	L.S.	1		\$
Carried Forward:					\$

**FORM OF TENDER (cont.'d)**  
**GLENCOE INDUSTRIAL PARK**

FT-9

ITEMIZED BID

CONTRACT No. 225147

In accordance with the first paragraph of this tender, the Contractor hereby offers to complete the work specified for the following prices.

SECTION 2 - STORM SEWERS AND APPURTENANCES (cont'd)					
(iv) Stormwater Management Pond					
Item No.	Description of Work	Unit	Quantity	Unit Price	Total
	Brought Forward:				\$
12	Supply and install 750mm dia. storm pipe from STMH 109 to Outlet, complete	m	16.5	\$	\$
13	Supply and install 450mm dia. storm pipe from STMH 109 to Outlet, complete	m	16.5	\$	\$
14	Supply and install outlet grates as per OPSD 804.050 Mod.				
	a) 750mm pipe	L.S.	1		\$
	b) 450mm Pipe	L.S.	1		\$
<b>TOTAL COST FOR SECTION 2(iv) - Stormwater Management Pond</b>					<b>\$</b>

TOTAL COST FOR SECTION 2(i) - STORM SEWERS	\$ _____
TOTAL COST FOR SECTION 2(ii) - MAINTENANCE HOLES	\$ _____
TOTAL COST FOR SECTION 2(iii) - STORM MISCELLANEOUS	\$ _____
TOTAL COST FOR SECTION 2(iv) - STORMWATER MANAGEMENT POND	\$ _____
TOTAL COST FOR SECTION 2 - STORM SEWERS AND APPURTENANCES	\$ _____

In accordance with the first paragraph of this tender, the Contractor hereby offers to complete the work specified for the following prices.

<b>SECTION 3 - SANITARY SEWERS AND APPURTENANCES</b>					
<b>(i) Sanitary Sewers</b>					
Item No.	Description of Work	Average Depth Between Finished Grade and Invert (metres)	Estimated Quantity (metres)	Unit Price	Total Price
1	SANMH201 - SANMH202 200mm dia.	4.7	90.0	\$	\$
2	SANMH202 - SANMH203 200mm dia.	3.4	90.0	\$	\$
3	SANMH203 - SANMH204 200mm dia.	2.8	90.0	\$	\$
4	SANMH205 - SANMH206 200mm dia.	2.9	90.0	\$	\$
5	SANMH206 - SANMH207 200mm dia.	3.1	62.0	\$	\$
<b>TOTAL COST FOR SECTION 3(i) - SANITARY SEWERS</b>					<b>\$</b>

<b>SECTION 3 - SANITARY SEWERS AND APPURTENANCES</b>				
<b>(ii) Maintenance Holes</b>				
Item No.	M.H. No.	Depth between invert and finished grade	Type	Total Price
1	SANMH201	5.6	1200mm dia. precast doghouse	\$
2	SANMH202	4.0	1200mm dia. precast	\$
3	SANMH203	2.9	1200mm dia. precast	\$
4	SANMH204	2.4	1200mm dia. precast	\$
5	SANMH205	3.2	1200mm dia. precast doghouse	\$
6	SANMH206	3.0	1200mm dia. precast	\$
7	SANMH207	3.2	1200mm dia. precast	\$
<b>TOTAL COST FOR SECTION 3(ii) - MAINTENANCE HOLES</b>				<b>\$</b>

In accordance with the first paragraph of this tender, the Contractor hereby offers to complete the work specified for the following prices.

<b>SECTION 3 - SANITARY SEWERS AND APPURTENANCES (cont'd)</b>					
<b>(iii) Sanitary Miscellaneous</b>					
Item No.	Description of Work	Unit	Estimated Quantity	Unit Price	Total Price
1	Supply and install new sanitary private drain connections (150mm dia.) incl. excavation, bedding, granular backfill, connection to proposed sanitary sewer, cap and marker stake at P/L.	ea	8	\$	\$
2	Connect proposed sanitary manhole to existing sanitary sewer, complete.				
	a) SANMH201 Doghouse	L.S.	1	\$	\$
	b) SANMH205 Doghouse	L.S.	1	\$	\$
3	Infiltration/Exfiltration Testing of Sanitary Sewer/Manholes				
	a) Sanitary Sewer including PDC's	m	520	\$	\$
	b) Sanitary Manholes	m	8	\$	\$
4	Video new sanitary sewer and services (all sizes).				
	a) Sanitary sewer	m	422	\$	\$
	b) Sanitary PDC's (8 locations)	ea	8	\$	\$
5	Supply and install Parson Inserts in all Sanitary Manholes	ea	7	\$	\$
<b>TOTAL COST FOR SECTION 3(iii) - SANITARY MISCELLANEOUS</b>					<b>\$</b>

TOTAL COST FOR SECTION 3(i) - SANITARY SEWERS	\$ _____
TOTAL COST FOR SECTION 3(ii) - MAINTENANCE HOLES	\$ _____
TOTAL COST FOR SECTION 3(iii) - SANITARY MISCELLANEOUS	\$ _____
TOTAL COST FOR SECTION 3 - SANITARY SEWERS AND APPURTENANCES	\$ _____

**FORM OF TENDER (cont'd)**  
**GLENCOE INDUSTRIAL PARK**

FT-12

ITEMIZED BID

CONTRACT No. 225147

In accordance with the first paragraph of this tender, the Contractor hereby offers to complete the work specified for the following prices.

<b>SECTION 4 - WATERMAINS</b>					
Item No.	Description of Work	Unit	Estimated Quantity	Unit Price	Total Price
1	Supply and install PVC Class 150 DR 18 watermain including Granular 'A' bedding, backfilling, fittings, restraints, and cathodic protection a) 200mm dia.	m	286	\$	\$
2	Supply and install 300 x 200mm tapping sleeve and valve complete, including valve box, cathodic protection, and all other associated costs (Industrial Road)	LS	1	\$	\$
3	Supply and install 200mm dia. watermain offset including restraints, cathodic protection and insulation as shown on drawings and SD-23	ea	1	\$	\$
4	Supply and install new 3-way hydrant set with storz connection, complete with tee, couplings, 150mm valve c/w rod and box, 150mm lead and mech. joint thrust restrainers, complete	ea	2	\$	\$
5	Supply and install 150mm dia. water service, c/w tee, 150mm gate valve, cap and blowoff, restraints, cathodic protection and marker stake at property line (6 locations)	ea	6	\$	\$
6	Pressure testing, swabbing, flushing, chlorination, de-chlorination, and assisting with water sample testing of proposed watermain and water services, complete.	LS	1	\$	\$
<b>TOTAL COST FOR SECTION 4 - WATERMAINS</b>					<b>\$</b>



FORM OF TENDER (cont.'d)  
GLENCOE INDUSTRIAL PARK

FT-13

ITEMIZED BID

CONTRACT No. 225147

In accordance with the first paragraph of this tender, the Contractor hereby offers to complete the work specified for the following prices.

SECTION 5 - STREET LIGHTING					
Item No.	Description of Work	Unit	Quantity	Unit Price	Total
1	Supply and install Street Light Fixtures	each	11	\$	\$
2	Supply and install Street Light Poles	each	11	\$	\$
3	Supply and install Elliptical Arms & Brackets	each	11	\$	\$
4	2-#8CU+GRD in 2" rPVC Conduit x 350m	L.S.	1		\$
5	Miscellaneous Electrical Work & Accessories	L.S.	1		\$
6	Permits/Inspections & ESA	L.S.	1		\$
TOTAL COST FOR SECTION 5 - STREET LIGHTING					\$



**FORM OF TENDER (cont.'d)  
GLENCOE INDUSTRIAL PARK**

FT-14

ITEMIZED BID

CONTRACT No. 225147

In accordance with the first paragraph of this tender, the Contractor hereby offers to complete the work specified for the following prices.

<b>SECTION 6 - MISCELLANEOUS</b>					
Item No.	Description of Work	Unit	Quantity	Unit Price	Total
1	50% Performance Bond.	L.S.	1		\$
2	50% Labour and Material Bond.	L.S.	1		\$
3	Engineer's Site Office	L.S.	1		\$
4	Cost to expose and determine elevation and location of existing utilities by hydro-excavation or open-cut methods at locations labelled as (A) on the drawing.	each	5	\$	\$
5	Cost to support 750mm storm drain as required to install 200mm sanitary sewer, including engineered stamped drawing if required, complete	L.S.	1		\$
6	Cost to support 50mm Gas main as required to install 200mm sanitary sewer, complete	L.S.	1		\$
7	Prepare and submit a Spill Response Plan (SPR)	L.S.	1		\$
8	Clear and grub trees as shown on drawings (100 - 400mm dia.)	each	6		\$
<b>TOTAL COST FOR SECTION 6 - MISCELLANEOUS</b>					<b>\$</b>



In accordance with the first paragraph of this tender, the Contractor hereby offers to complete the work specified for the following prices.

**SUMMARY OF TENDER**

SECTION 1 - ROADWORK	\$ _____
SECTION 2 - STORM SEWERS AND APPURTANANCES	\$ _____
SECTION 3 - SANITARY SEWERS AND APPURTENANCES	\$ _____
SECTION 4 - WATERMAINS	\$ _____
SECTION 5 - STREET LIGHTING	\$ _____
SECTION 6 - MISCELLANEOUS	\$ _____
CONTINGENCY ALLOWANCE	\$ _____ 120,000.00
SUBTOTAL - CONTRACT PRICE	\$ _____
H.S.T. (13%)	\$ _____
<b>TOTAL CONTRACT PRICE</b>	\$ _____

Tenderer's H.S.T. Registration No. \_\_\_\_\_

The amount referred to in this Tender as the Contingencies shall constitute the total of that part of the Schedule. The Tenderer agrees that he is not entitled to payment of any portion of the Contingencies except for the additional work carried out by him in accordance with the Contract and as directed by the Contract Administrator and only to the extent of such additional work.

AGREEMENTS REGARDING EXTRA WORK AND PAYMENTS

The Tenderer agrees that if this Tender is accepted by the Owner,

- (1) He will carry out any additional or extra work (including the supplying of any additional materials or equipment pertaining thereto) or will delete any work as may be required by the Engineer in accordance with the Contract.
- (2) The carrying out of any work referred to in paragraph (1) above or the issuance by the Engineer of a Contract Change Order relating to such work or the acceptance by the Tenderer of such Contract Change Order shall not, except as expressly stated in such Contract Change Order, waive or impair any of the terms of the Contract or of any Contract Change Order previously issued by the Engineer or any of the rights of the Owner or of the Engineer under the Contract.
- (3) He will pay to the Owner (in addition to amounts payable by the Owner in respect of site supervision of the work) the sum specified in the contract as liquidated damages for each working day that the work under the Contract, as expressly modified by all Contract Change Orders issued by the Engineer, remains uncompleted after the expiry of the Time for Completion specified in the Contract or the extended time for completion allowed in writing by the Engineer.
- (4) The prices applicable to work referred to in paragraph (1) above shall be determined as follows:
  - a) The Schedule of Items and Prices shall apply where applicable;
  - b) If the Schedule of Items and Prices is not applicable, the Schedule of Additional Unit Prices shall apply, where applicable;
  - c) If, in the opinion of the Engineer, both of the above Schedules are not applicable, the Contractor and the Engineer may agree on a price for extra work to be done, or for work to be omitted prior to its being performed, in which case the price shall be comparable to prices quoted on work of a similar nature;
  - d) If the methods of evaluating extras described in (a), (b) and (c) above are, in the opinion of the Engineer, clearly not applicable, then the Engineer may direct that such extra work shall be done on a Cost-Plus basis, in accordance with Clause 18 of the Information to Tenderers.

The amount of \$120,000.00 is referred to in this Tender as the Contingency Allowance. The Tenderer agrees that he is not entitled to payment of any part of the Contingency Allowance except for additional work carried out by him in accordance with the Contract and only to the extent of such additional work.

The Tenderer agrees that he is not entitled to payment of any part of the Contingency Allowance except for additional work carried out by him in accordance with the Contract and only to the extent of such additional work.



AGREEMENTS REGARDING EXTRA WORK AND PAYMENTS (cont'd)

It is understood and agreed that such Contingency Allowance is merely for the convenience of accounting by the Corporation, and the Contractor is not entitled to payment thereof except for extra or additional work carried out by the Contractor in accordance with the Contract and only to the extent of such extra or additional work.

If additional costs are to be incurred over the **upset limit**, written authority to proceed with these additional costs must be obtained prior to the additional changes being incurred. Further, no invoice will be honored for any work whatsoever that was not authorized. Any invoice received, which does not meet the above requirements, will be returned unpaid.

TERMS AND CONDITIONS

- a) The Tenderer agrees that this Tender is to continue open for acceptance and irrevocable until 45 days have elapsed from the closing date of the Tender or a formal contract is executed based on a Tender other than this one.
- b) The Tenderer also agrees that if the Tenderer withdraws his Tender before 45 days have elapsed from the closing date of Tender before the said Council shall have considered the Tender, the amount of the Tender Deposit shall be forfeited to the Corporation.
- c) The Tenderer also agrees that the awarding of the Contract, based on this Tender by the said Council, shall constitute and be an acceptance of this Tender without communication with or any notice thereof to the Tenderer.
- d) If this Tender is accepted, the Tenderer also agrees that, as aforesaid, the Tenderer will forthwith furnish an approved surety for the proper fulfilment of the Contract as required under the terms of Clause 23 of the General Conditions and will execute an Agreement, Bond, and Statutory Declaration, in triplicate, in form satisfactory to the said Corporation within seven (7) days after being notified so to do by, or by anyone acting on behalf of the Corporation.
- e) The Tenderer also agrees, that, should the Tenderer for any reason default or fail in any matter or thing hereinbefore contained, the said Corporation shall be at liberty to retain the money deposited by the Tenderer to the use of the said Corporation as liquidated damages, and to accept any other Tender or advertise for new Tenders or carry out the work in any other way as the said Corporation may in its sole discretion deem best; and also agrees to pay to the said Corporation the difference between the price or prices set out in this Tender and any greater sum or sums which the said Corporation may expend or for which it may become liable by reason of such default or failure, including the cost of any advertisement for new Tenders, and fully to indemnify and save harmless the said Corporation and/or its officers, agents, or servants from all loss, damage, liability, cost charges, or expense whatever which it, they or any of them may suffer, incur or be put to by reason of any such default or failure.
- f) The Tenderer agrees to complete the works within a time, to be known as the "Time for Completion". The "Time for Completion" shall be April 20, 2025 to October 15, 2026, within ninety (90) working days in 2026, ten (10) working days are anticipated in 2027 to complete installation of the top lift of asphalt. Hydroseed shall be placed September - October 2026.



AGREEMENTS REGARDING EXTRA WORK AND PAYMENTS (cont'd)

- g) The Tenderer agrees that he will furnish the Engineer with a copy of his latest financial statement within 4 days after being required so to do by the Engineer.
- h) The Tenderer agrees that this Tender is subject to a formal contract being prepared and executed.

DECLARATIONS

The Tenderer declares that no person, firm, or corporation other than the Tenderer has any interest in this Tender or in the proposed contract for which this Tender is made.

The Tenderer further declares that this Tender is made without any connection, comparison of figures or arrangements with, or knowledge of, any other corporation, firm or person making a tender for the same work and is in all respects fair and without collusion or fraud.

The Tenderer further declares that no member of the Council and no officer or employee of the Corporation and no officer or employee will become interested directly or indirectly as a contracting party, partner, shareholder, surety or otherwise in or in the performance of the Contract or in the supplies, work or business to which it relates, or in any portion of the profits thereof, or in any of the monies to be derived therefrom.

Enclosed herewith is security in the amount of 10% of the Tender Price as Tender Deposit.

SURETY MUST BE A SATISFACTORY GUARANTEE COMPANY AUTHORIZED BY LAW TO CARRY ON BUSINESS IN THE PROVINCE OF ONTARIO.

NOTE:

If tender is submitted by or on behalf of any Corporation it must be signed in the name of such Corporation by some duly authorized officer or agent thereof who shall also subscribe his own name and office. The seal of the Corporation shall also be affixed

( \_\_\_\_\_  
 ( \_\_\_\_\_  
 ( \_\_\_\_\_  
 Tenderer's ( \_\_\_\_\_  
 Signature ( \_\_\_\_\_  
 ( \_\_\_\_\_  
 ( \_\_\_\_\_

Witness \_\_\_\_\_

Dated at \_\_\_\_\_

This \_\_\_\_ day of \_\_\_\_\_, 2026









DOMINION OF CANADA  
CORPORATION OF THE  
MUNICIPALITY OF  
SOUTHWEST MIDDLESEX  
TO WIT

)IN THE MATTER of a proposed contract  
)for the Glencoe Industrial Park 2025  
)Glencoe, Ontario  
)Municipality of Southwest Middlesex, Province of Ontario

I \_\_\_\_\_ Do Solemnly Swear that the several matters stated  
in the foregoing Tender are in all respects true.

AND \_\_\_\_\_ make this solemn declaration, conscientiously  
believing it to be true, and knowing that it is of the same force and effect as if made under oath, and by  
virtue of "The Canada Evidence Act."

DECLARED before me at

\_\_\_\_\_)  
of \_\_\_\_\_)  
in the County of \_\_\_\_\_)  
this \_\_\_\_\_)  
day of \_\_\_\_\_ 20 \_\_\_\_\_)

\_\_\_\_\_  
A Commissioner, Etc. (or Notary Public)

Failure of the Tenderer to include the properly completed statutory declaration with his Tender may result  
in the Tender being ruled invalid by the Owner.

THIS AGREEMENT made in triplicate this ..... day of ....., 2026

BETWEEN:

THE CORPORATION OF THE MUNICIPALITY OF SOUTHWEST MIDDLESEX

(hereinafter called "the Owner")

OF THE FIRST PART

and

.....  
(hereinafter called "the Contractor")

OF THE SECOND PART

WITNESSETH

That the owner and the contractor in consideration of the fulfilment of their respective promises and obligations herein set forth covenant and agree with each other as follows:

ARTICLE 1

- (a) A general description of the work is:  
Construction of Glencoe Industrial Park 2025 - including Roads, Sanitary Sewers, Storm Sewers, Stormwater Management Facility, Watermains and miscellaneous appurtenant works along Industrial Drive in Glencoe, Ontario.
- (b) The Contractor shall, for the prices set out in the Form of Tender and except as otherwise specifically provided, provide at no additional cost to the Owner all and every kind of labour, machinery, plant, structures, roads, ways, materials, appliances, articles and things necessary for the due execution and completion of all the work set out in this Contract and shall forthwith according to the instructions of the Engineer, commence the works and diligently execute the respective portions thereof, and deliver the works complete in every particular to the Owner within the time specified in the Contract.

ARTICLE 2

In the event that the Tender provides for and contains a Contingency Allowance, it is understood and agreed that such Contingency Allowance is merely for the convenience of accounting by the Owner, and the Contractor is not entitled to payment thereof except for extra or additional work carried out by him as directed by the Engineer and in accordance with the Contract and only to the extent of such extra or additional work.

## ARTICLE 3

In case of any inconsistency or conflict between the provisions of this Agreement and the Plans or Specifications or General Conditions or Tender or any other document or writing, the provisions of such documents shall take precedence and govern in the following order, namely:

- (1) This Agreement,
- (2) Addendum (if any),
- (3) Special Provisions if any,
- (4) Contract Drawings,
- (5) General Conditions,
- (6) Information for Tenderers,
- (7) Contract Specifications,
- (8) Construction Details,
- (9) Form of Tender

## ARTICLE 4

The Contractor shall not without the consent in writing of the Owner and without restricting in any way the provisions of the Section of the General Conditions headed "Sub-Contracts", make any assignment of any part or the whole of any monies due or to be come due under the provisions of this Contract.

## ARTICLE 5

The Owner covenants with the Contractor that the Contractor having in all respects complied with the provisions of this Contract will be paid for and in respect of the works the sum of

\_\_\_\_\_ /100Dollars (\$\_\_\_\_\_)

subject to Article 2 hereof and subject to such additions and deductions as may properly be made under the terms hereof, subject to the provision that the Owner may make payments on account monthly or otherwise as may be provided in the General Conditions attached hereto.

## ARTICLE 6

Where any notice, direction or other communication is required to be or may be given or made by one of the parties hereto to the other or to the Engineer, it shall be deemed sufficiently given or made if mailed or delivered in writing to such party or to the Engineer at the following addresses:

THE OWNER: The Corporation of the  
Municipality of Southwest Middlesex  
153 McKellar Street  
Glencoe, Ontario  
N0L 1M0



## ARTICLE 6 (cont'd)

THE CONTRACTOR:

THE ENGINEER:

Spriet Associates London Limited  
Consulting Engineers  
155 York Street  
London, Ontario  
N6A 1A8

## ARTICLE 7

A copy of each of the Contract Specifications, General Conditions, Supplementary General Conditions if any, Tender, and Information for Tenderers is hereto annexed and together with the Drawings relating thereto and listed in the Specifications are made part of this Contract as fully to all intents and purposes as though recited in full herein.

## ARTICLE 8

No implied contract of any kind whatsoever by or on behalf of the Owner shall arise or be implied by or inferred from anything in this Contract contained, nor from any position or situation of the parties at any time, it being clearly understood that the express covenants and agreements herein contained made by the Owner shall be the only covenants and agreements upon which any rights against the Owner may be founded.

## ARTICLE 9

Time shall be deemed of the essence of this Contract.

## ARTICLE 10

The Contractor declares that in tendering for the works and in entering into this Contract he has either investigated for himself the character of the work and all local conditions that might affect his tender or his acceptance or performance of the work, or that not having so investigated, he acknowledges that his responsibility under the Contract is in no way reduced or limited thereby and, in either case, he is willing to assume and does hereby assume all risk of conditions arising, developing, or being revealed in the course of the work which might or could make the work, or any items thereof, more expensive in character, or more onerous to fulfil, than was contemplated or known when the tender was made or the contract signed. The contractor also declares that he did not and does not rely upon information furnished by any methods whatsoever by the Owner or its officers, employees, or agents, being aware that any information from such sources was and is approximate and speculative only and was not in any manner warranted or guaranteed by the Owner.



ARTICLE 11

The Contract shall apply to and be binding on the parties hereto and their successors, administrators, executors and assigns and each of them.

IN WITNESS WHEREOF the parties have hereunto set their hands and seals the day and year first above written or caused their corporate seals to be affixed, attested by the signature of their proper officers, as the case may be.

.....  
Witness as to signature of Contractor\*

Address .....

.....

Occupation .....

\* Not necessary if corporate seal is affixed

.....  
Contractor

.....  
Signing Officer

The Corporation of the Municipality of Southwest Middlesex

.....  
Mayor

.....  
Clerk

(Seal)



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DRAWING NO.	DESCRIPTION
	Cover Sheet
1.	Master Plan of Services & Erosion Control
2.	Industrial Road – 110.0m West of Rear Lot Easement to 0+240.0
3.	Industrial Road – from Sta. 0+240 to 32m East of Tower Avenue
4.	Industrial Road – 17.0m East of Tower Avenue to Glencoe Outlet Drain
5.	Proposed Easement – from Sta. 0+000 to Sta. 0+060
6.	Rear Lot Easement – from Industrial Road to 163.0m South of Industrial Road
7.	Proposed Easement – from Sta. 0+000 to Sta. 0+170
8.	Proposed Easement – from Sta. 0+160 to Sta. 0+245
9.	Proposed Roadway – from Industrial Road to Sta. 0+170
10.	Proposed Roadway – from Sta. 0+155 to Sta. 0+334
11.	Proposed Swale – from Proposed Roadway to Sta. 0+175
12.	Proposed Swale – from Sta. 0+160 to SWM Pond
13.	Proposed SWM Pond
14.	Lot Grading Plan No. 1
15.	Lot Grading Plan No. 2
16.	Lot Grading Plan No. 3
17.	Typical Cross-Sections
D1	General Notes and Miscellaneous Details



## SECTION 1

### GENERAL PROVISIONS

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**101. WORK TO BE DONE**

The Contractor shall perform all items of work covered and stipulated in the Specifications, Tender and Contracts, together with any authorized alterations, special provisions, extra work, and supplemental agreements, all in accordance with the lines, grades, cross sections, and dimensions shown on the Contract Drawings. The Contractor shall furnish all materials, implements, machinery, equipment, tools, supplies, transportation, and labour necessary to the prosecution and completion of the work.

On the completion of construction, the Contractor shall leave the entire work in a clean and orderly condition to the satisfaction of the Engineer.

**102. CONTRACT DRAWINGS**

The location, general characteristics, and principal details of work are shown on the Contract Drawings. A list of Contract Drawings is included on Page D-1 in the Contract Documents.

Additional drawings may be furnished from time to time by the Engineer and such additional drawings shall form a part of this Contract. The Contractor shall be governed by figures and dimensions as given on the drawings. Where essential dimensions are not shown, the Contractor shall obtain the required dimensions from the Engineer before proceeding with the construction of the portion of work to which they refer. In every case, detail drawings shall take preference over general drawings. In the event that any conflict should exist between the specifications and drawings, the Contract Drawings shall prevail.

**103. ACCESS TO WORK**

The Engineer may at any time, enter upon the site of the work and the premises used by the Contractor. The Contractor shall provide proper and safe facilities for the inspection of and convenient access to all parts of the work as may be required by the Engineer.

**104. TEMPORARY BUILDINGS**

Temporary construction buildings may be erected by the Contractor at the site of the work, but the location of all temporary buildings used for construction purposes must be submitted to the Engineer for approval prior to the commencement of the work. In the event that there is inadequate space for the contractor's office space, storage yard, etc. the Contractor shall obtain same at his own cost and payment will be on the basis that such costs are included in the Lump Sum for other Requirements in the Form of Tender.

Adequate fire extinguishers must be provided at the site of any temporary building to be used in case of fire and all temporary buildings shall comply in all respects with the requirements of any local, national, or provincial legislation pertaining thereto.

The Contractor shall pay for all permits and fees in connection with the erection, movement or placing of any temporary building used by him.

Should any of the Contractor's structures be placed on private property, two (2) copies of a Form of Release signed by each property owner affected shall be provided by the Contractor.



**105. PERMITS, INSPECTIONS AND ORDINANCES**

The Contractor shall obtain and pay for all permits and inspections, except charges for power contracts with the Owner relative to the completed work and the building permits for any permanent structures. The Contractor shall obtain and deliver to the Owner, all certificates of inspection and approval that may be required by Provincial or local laws, rules, codes, regulations, or ordinances. Fees for building permits will be paid for by the Owner.

The drawings accompanying these specifications are intended to show the general design and arrangement of the installation and in some details may be diagrammatic only.

Should more detailed drawings be required for obtaining permits or for installation, the Contractor shall prepare and submit them to the Engineer for approval.

The Contractor shall notify in writing the Police Department, Fire Department, Ambulance Services, School Boards, and the Road Authority at least 48 hours prior to commencing construction on any roadways. No road closures will be allowed under this Contract. A copy should be provided to the Engineer.

**106. LAWS, CODES, ETC.**

If any Federal, Provincial, or local laws, codes, regulations, or ordinances impose a higher standard than is required by the Drawings and Specifications, the Contractor shall execute the work in accordance with those laws, codes, regulations, or ordinances rather than as shown on the Drawings and Specifications.

Should any changes in the Drawings and Specifications be required to conform to the aforementioned laws, codes, regulations or ordinances, the Contractor shall notify the Owner at the time of submission of his Tender. After entering into a Contract, the Contractor will be held to complete all work necessary to meet these requirements without extra expense to the Owner. The entire installation shall be made in full accordance with the latest regulations issued by the Ontario Hydro governing electrical installations and also all rules, regulations and ordinances of the Provincial and Municipal Departments which apply.

**107. OCCUPATIONAL HEALTH AND SAFETY ACT**

The Contractor shall execute all construction under this Contract in strict conformance with the current requirements of the Occupational Health and Safety Act and Regulations for Construction Projects.

**108. PROGRESS SCHEDULE AND SCHEDULING OF WORK**

Within two weeks after receipt by him of his instructions to commence work, the Contractor shall prepare and submit to the Engineer three (3) copies of a Construction Progress Schedule, showing clearly the proposed rate of progress of construction in weekly stages. When approved by the Engineer, the sequence of work shall be strictly adhered to by the Contractor.



**109. MATERIALS TO BE SUPPLIED BY THE CONTRACTOR**

The Contractor shall supply all materials necessary for the completion of the work. The Contractor shall assume complete responsibility for ordering, deliveries, checking, rejecting, breakage, theft, unloading and storage for all materials, in a manner satisfactory to the Engineer.

All granular/asphaltic materials must be from sources that are either on the Designated Sources List, the Aggregate Sources List, or approved by the Ministry of Transportation.

Copies of geotechnical sampling reports must be submitted for review and approval prior to delivery of any granular or asphaltic materials to the site. Random testing will be performed to ensure compliance. Failed tests will result in removal of the material and rejection of the relevant work.

**110. ALTERATIONS**

The Owner or the Engineer reserves the right to make such alterations to the design, length, grade, location, depth, and other features of the work as it deems necessary prior to or during the progress of the work.

**111. TRAFFIC**

The Contractor shall avoid the blocking of vehicular and pedestrian traffic for a longer period than is necessary for the proper construction of the work. Traffic may not be prevented from entering roads on which the work is proceeding.

**112. NOISE ABATEMENT**

The Contractor shall, at all times, attempt to keep the noise level caused by his operations to a minimum. The contractor will not be permitted to carry out any work where excessive noise is created at any time except with the approval of the Engineer, and the Contractor will not be able to carry out any work at night or Sundays, or Holidays without the consent of the Engineer.

The Contractor shall take all reasonable precautions to minimize the noise from his construction operations by providing effective mufflers, or other devices for his equipment and silencers on his compressors, so that the noise level is kept to a tolerable minimum.

**113. CONSTRUCTION EQUIPMENT**

If, in the opinion of the Engineer, the contractor is not using suitable equipment for the work, he may direct the Contractor to suspend operations forthwith and such suspension shall remain in effect until the Contractor has provided satisfactory equipment.

If the Contractor does not have sufficient equipment on the job in the opinion of the Engineer to carry out the work satisfactorily, the Engineer may direct that the Contractor supply additional equipment immediately or the Engineer may suspend the work forthwith. Any suspension of the work by the Engineer on account of improper equipment or lack of equipment to carry out the work satisfactorily, shall not entitle the Contractor to an extension of Time for Completion and he shall remain liable for any liquidating damages caused by his failure to complete the Contract within the time specified.



**114. WORKING AREAS**

The Contractor's working areas shall be within the public rights-of-way, acquired easements as designated, and the property of the Owner as shown on the Drawings, unless other satisfactory arrangements are made by the Contractor and approved by the Engineer. The area utilized for the construction shall be the minimum possible consistent with efficient operation.

Working areas used by the Contractor shall be restored to their original condition and all excavated or stockpiled materials shall be removed completely from the site, as stipulated in Item 129.

All shafts, sites and working areas shall be enclosed by temporary fences as required by the appropriate local authority or as required by the Engineer.

Due to the nature of this project site, the Contractor and Engineer must work together to coordinate any efforts required on private property, including discussions with affected residents. Care must be taken when working within these areas, to limit any disturbance to existing structures. All disturbed structures must be restored to a condition at least as good as the original existing pre-construction condition.

**115. QUALITY OF WORK**

The work shall be executed in the best and most workmanlike manner by qualified, careful, and efficient mechanics. Unless otherwise specified, all materials to be incorporated in the work shall be new, unused and of recent manufacture.

**116. APPROVALS AND TESTING**

Samples, drawings, and other data shall be submitted for approval of the Engineer as required by the various sections of these specifications. Only materials that have been approved in writing shall be used in the work. No compensation or allowance resulting from delays due to testing will be allowed the Contractor. The cost of carrying out all testing shall be borne by the contractor unless specified otherwise in these specifications.

All material testing shall be done by an inspection laboratory designated by the Engineer. The supply, handling, checking and shipping of test specimens and the replacing of rejected materials shall be done by the Contractor at his expense. Satisfactory proof of compliance with the specifications shall be submitted as directed by the Engineer in one or more of the following ways:

(a) Manufacturer's Certificate of Compliance

In case of standard labelled stock products of Standard manufacture which have a record of a period of not less than two years, the Engineer may accept a notarized statement from the manufacturer certifying that the product conforms to the applicable specifications.

(b) Mill Certificates

For materials where such practice is the usual standard, the Engineer may accept the manufacturer's certified mill and laboratory certificate.



**116. APPROVALS AND TESTING (cont'd)****(c) Testing Laboratory Certificates**

The Engineer may accept a certificate from a commercial testing laboratory satisfactory to him certifying that the product has been tested within a period acceptable to the Engineer and that it conforms to the Specifications.

**(d) Report of Actual Laboratory Test**

The Engineer may require that the Contractor make actual tests of any product and submit a report of the specified test. Such tests shall be made by a commercial testing laboratory designated by the Engineer.

**Construction Control Tests**

The Engineer will carry out construction control tests to verify the quality of construction. The cost of such initial tests will be borne by the Owner. Subsequent tests on account of failure of the initial tests to meet the specified requirements will be borne by the Contractor.

**117. STANDARD SPECIFICATIONS**

In all cases where standard specifications, such as the American Society for Testing Materials, Ontario Ministry of the Environment and Ontario Provincial Standard Specifications, are referred to in this Contract, the latest revision of the pertinent specification, in effect as of the date of the bid opening shall be considered effective. Special care shall be exercised to refer to the standard specifications and to any modification thereof in requests for quotations, purchase orders and subcontracts.

**118. LINES AND GRADES**

The Engineer will provide the Contractor, in writing, with Bench Marks and points of reference to be used by him in setting out the work. The Engineer will be responsible only for the correctness of the information so supplied.

The Contractor shall be responsible for the true and proper setting out of the works and for the correctness of the position, levels, dimensions, and alignment of all parts of the works and for the provision of all necessary instruments and labour in connection therewith. If at any time during the progress of the works any error shall appear or arise in the position, levels, dimensions, or alignment of any parts of the works, the Contractor shall at his own expense rectify such error to the satisfaction of the Engineer, unless such error is based on incorrect data supplied in writing by the Engineer. The checking of the setting out of any lines or levels by the Engineer shall not in any way release the Contractor of his responsibility for the correctness thereof, and the Contractor shall carefully protect and preserve all Bench Mark stakes and other items used in setting out the works.

**119. CLEANING OF PIPES**

During the progress of the work, and until the entire completion and acceptance thereof, all pipes shall be kept clean throughout. Following the completion of construction, the pipes shall be thoroughly cleaned. The pipes shall be cleaned of all material and debris, either by flushing or by other approved methods, to the satisfaction of the Engineer.



**119. CLEANING OF PIPES (cont'd)**

The cost of all pipe cleaning operations shall be included in the Contract Price. Swabbing of watermain will not be paid separately but will be deemed to have been included in the payment for "Supply and install watermain pipe".

**120. DEFECTS TO BE MADE GOOD**

If, in the final inspection of the work, any broken or crushed pipes or specials or any defects are found in connections or in any equipment and appurtenances, the Contractor shall cause the same to be repaired or removed and replaced by proper materials and workmanship, without extra compensation for labour and materials required.

**121. CONDITION OF STREETS, SIDEWALKS AND BRIDGES**

The Contractor shall include in his Total Contract Price the cost of removing all materials, earth or debris which falls out of his vehicles; his sub-contractor's vehicles; and his supplier's vehicles on to streets, sidewalks and bridges used as a route between sources of material and the site and dumping of materials and the site. The Contractor shall employ workmen sufficient in number or shall use some other means necessary to keep such streets, sidewalks, and bridges in a clean condition free from material, earth, or debris.

Should the Contractor be negligent in his duties in maintaining the proper cleanliness in the opinion of the Engineer, the Owner will take the necessary steps to perform such cleaning and shall charge the Contractor all costs therefor.

The Contractor shall familiarize himself with any and all load limits in force and also on those portions of the works to be constructed outside the limits of the works and should such load limits exist, he shall comply with the requirements.

**122. MAINTENANCE WORK**

Prior to commencement of the one-year maintenance period the Contractor shall provide the Consulting Engineer and the Owner with a letter supplying a telephone number and address to which the Engineer or the Owner may refer in the event that deficiencies in the work occur and maintenance is required.

If the Contractor's headquarters are not local or close to the site of the works, he shall make arrangements satisfactory to the Engineer to have a local Contractor available to carry out this type of work, and this information should be forwarded to the Engineer and the Owner.

**123. SUPPLY OF WORKING DRAWINGS**

The Contractor shall supply working drawings or shop drawings showing the dimensions and layout of all and every part of the equipment and structures which have not been supplied in the contract Documents. The Engineer may reject any drawing which does not conform with the Drawings and Specifications and instruct the Contractor to revise and resubmit same.



**123. SUPPLY OF WORKING DRAWINGS (cont'd)**

Any discrepancies or errors in these Drawings shall be the entire responsibility of the Contractor and any works necessitated by such errors or omissions or discrepancies shall be paid for by the Contractor. Such drawings shall be supplied when called for by the Engineer or prior to the commencement of manufacture of any item included in this Contract.

In the event of such Drawings not being supplied to the Engineer in adequate time, the Engineer shall have the right to order such Drawings to be prepared at the source of manufacture and the cost of any such preparation shall be paid for by the contractor. The contractor is to ensure that access to equipment for maintenance and repair purposes shall be easily obtainable in the space provided.

Working drawings for any falsework, shoring, forms, or other incidental details of construction, shall be prepared and stamped by a Professional Engineer experienced in structural design of falsework and registered in the Province of Ontario. The Engineer whose stamp appears on the working drawings of such falsework or formwork shall inspect and approve, in writing, that all work has been carried out in accordance with the Drawings and to his own satisfaction.

The Contractor shall allow in his Tender for the provision of not less than three (3) copies of all drawings for approval and three (3) copies of all working or shop drawings and one clear transparency after the final approval.

Only working drawings which are to scale and incorporate all the scaled dimensions and arrangements of details will be accepted as working drawings.

**124. CERTIFIED EQUIPMENT OUTLINES**

After entering into Contract, the Contractor shall furnish to the Engineer for his approval not less than four (4) copies of the manufacturer's catalogue description of all equipment he proposes to supply on the project. Approval of equipment shall be based on manufacturer's published ratings. Any items not in accordance with these Specifications shall be rejected. It shall be the responsibility of the Contractor to check shop drawings prior to submitting them for the Engineer's approval to ensure that the equipment he proposes to furnish fulfils the specified requirements and is suitable for the particular application.

**125. LITERATURE DESCRIBING FULLY ALL EQUIPMENT**

Complete literature describing all materials and equipment to be used on the works is to be submitted for the information of the Engineer and they shall receive his approval before any equipment or materials are used on the works.

Notwithstanding any equipment or materials having been approved by the Engineer if at any time any equipment or materials used on the works purporting to be equivalent to those submitted, do not meet the standard quality of such submitted details or the requirements of this Specification, then the Engineer may cancel such approval at any time and have such material removed from the site and replaced by an approved material at the Contractor's expense.



**125. LITERATURE DESCRIBING FULLY ALL EQUIPMENT (cont'd)**

The equipment or materials furnished by the Contractor may be inspected by the Engineer at the time of delivery and at such times as the Engineer may elect. Any equipment or materials rejected by the Engineer after delivery, shall be replaced by the Contractor at the Contractor's own expense.

All work done and equipment or materials furnished by the Contractor shall be subject to inspection by the Engineer and defective equipment or materials shall be removed from the site of the work and faulty workmanship be repaired notwithstanding prior inspection and acceptance thereof by the Engineer. The Contractor shall provide facilities for the handling, inspection and storing of all equipment and materials at his own expense.

**126. PROTECTION AND RELOCATION OF STRUCTURES AND UTILITIES**

All structures and utilities known to the Owner to be in existence above ground (i.e., hydro/bell poles, transformers, pedestals) and below ground are shown on the Drawings. The Contractor shall examine the location of the work and shall make such enquiries necessary to determine the existence and location of structures and utilities which may be encountered in the line of work. The Owner will assume no responsibility for structures and utilities inaccurately shown on, or omitted from, the Drawings.

The Contractor shall, at his own expense, and in a manner approved by the Engineer, sustain in their places and protect from injury and damage any and all poles, posts, water or gas mains, public or private sewers or drains, conduit, cables, service pipes, ducts, culverts, sidewalks, curbs and gutters, and all other services, structures or property in the vicinity of the work, whether above or below ground, or which appear in the excavation. The Contractor shall assume all costs and expenses for damage which may be occasioned by injury to any structure or utility, and for any temporary relocation, replacement or adjustment required to facilitate the proper execution of the work. If damage to any structure, utility or service occurs by reason of the contractor's operations, even though special precautions have been employed, the Contractor shall be entirely responsible for such damage, whether such operations and the work resulting therefrom have received the approval of the Engineer, or not, and all such damage shall be satisfactorily rectified at the Contractor's expense.

It shall be the Contractor's responsibility to inform the utility companies, or owners, involved, of his intention to work in the vicinity of their services. The Contractor shall request that an inspector be on the site at the time to protect the interests of the company or owner involved. Should any costs arise from this inspection, they shall be borne by the Contractor.

Before commencing any excavations, the Contractor shall have the location of all utility lines, conduits, pipes, cables, etc. located by a representative of the appropriate utility company, or municipality. Should the exact location of the utilities not be known, then it will be the Contractor's responsibility to search for and uncover them. Excavation will be commenced only after sufficient precautions have been taken to protect all utilities.



**126. PROTECTION AND RELOCATION OF STRUCTURES AND UTILITIES (cont'd)**

The cost of exploratory excavation shall be borne by the Contractor and no claim shall be made for any necessary excavation, sheeting, shoring, bracing, equipment, labour, standby time, traffic control, detours, barricades, etc. The Contractor shall provide the Engineer with all the necessary assistance to enable the Engineer to make the necessary measurements and take the necessary levels. In addition, the Contractor shall take note that the Engineer may vary the grade of the watermain to suit conditions which are encountered or he may require additional work to be carried out in order to solve any problem which may occur. Extra work, if required, will be carried out and will be paid for in accordance with the Provisions of the Contract for extra work.

**127. MAINTAINING FLOW OF SEWERS, DRAINS AND DITCHES**

The Contractor shall, at his expense, permanently and temporarily provide for and maintain the flow, where required, of all sewers, drains, ditches, house or inlet connections, and all watercourses that may be encountered during the progress of the work and shall maintain the site of the work free from surface and ground water so that construction can proceed "in the dry". He shall not allow the contents of any sewer, drain, ditch or house inlet connection to flow into the trench to be constructed under this contract, unless he has written permission from the Engineer and shall at his own cost and expense, immediately remove from the proximity of the work all offensive matter, using such precautions in so doing, as may be directed by the Engineer.

Drainage ditches shall be kept open at all times for surface drainage. Damming or impounding of water in ditches or other waterways will not be permitted, except where the Engineer considers it necessary. The Contractor shall not direct any flow of water across or over pavements, except through approved pipes or properly constructed troughs, and he shall, when required by the Engineer, provide pipes or troughs of such sizes and lengths as may be required, and place the same as may be directed, at his own cost and expense.

**128. RELOCATION OF THE WORK**

The Engineer may relocate the work at any time to suit the interest of the Owner. The relocation of such work shall not invalidate the Contract and the Contractor shall be required to carry out all of the terms and conditions of the Contract despite such relocation. However, the Contractor will be entitled to payment for any extra work caused on account of such relocation in accordance with the unit prices quoted in the Form of Tender or as calculated by such other means as provided in the Contract. Relocation of any work will only be carried out with the written instructions of the Engineer and the Contractor may not relocate any work for his own purpose except with such written approval of the Engineer.

Should the relocation of any work result in a lesser amount of work required to be done, the cost of such reduction will be deducted from the Contractor's final contract price in accordance with the Unit Prices shown on the Schedule or such other sum as agreed between the Engineer and the Contractor.



**129. GENERAL RESTORATION AND SITE CLEAN-UP**

Following the completion of the work, the Contractor shall clean up the site, remove all materials and restore the site to at least its original condition, to the satisfaction of the Engineer. The cost of general restoration and site clean-up shall be deemed to have been included in the Total Contract Price i.e., asphalt, tar and chip, and granular removal and replacement, curb and gutter removal and replacement, open ditch, access culvert and headwall salvage, removal and replacement, driveway removal and replacement, will be paid for separately within the related items in the ARoadworks@ Section of the Form of Tender. Since there are several types of restoration work involved in the project, the various types of restoration work shall be as specified herein.

Note that topsoil removal, stockpiling and replacement and sodding of all disturbed grass and topsoil areas, in accordance with O.P.S.S.572 will be required along all boulevard and lawn areas, disturbed as part of this project.

(i) Hot-Mixed Paved Roads

Along Tower Avenue (proposed industrial roadway) a 150mm compacted layer of Granular 'A' compacted to 100% Standard Proctor Density shall be placed over a 450mm compacted layer of Granular 'B' (Select) compacted to 100% Standard Proctor Density. The finished grade of the Granular 'A' shall be such to allow placement of two courses of Hot-Mix Asphalt (OPSS 310) (50mm of HL3 surface course and 80mm of HL8 base asphalt or to such greater thickness as may be required to match the existing). The top of the asphaltic concrete surface shall conform to the original road grade.

Before the restoration work is carried out, the Contractor shall carefully cut any broken or irregular pavement edges, to a neat, straight vertical face. These edges will then be thoroughly coated with SS-1 emulsion, or other approved sealer, so as to ensure a continuous bond between the old and new asphaltic concrete pavements.

The Contractor shall note that the top 50mm course of HL3 asphalt shall be installed in 2027.

(ii) Concrete Sidewalks (N/A)

In these areas the Contractor will place a 150mm layer of Granular 'A' compacted to 100% Standard Proctor Density on the prepared sub-grade.

The finished grade of the Granular 'A' shall be such to allow the placement of 125mm thick concrete sidewalk increased to 150mm thick at all driveways, as per OPSD 310.010. The grade and width of the sidewalk shall match the original. Before restoration work begins, broken or irregular concrete edges will be cut back to a straight and vertical face.

(iii) Curbs, Gutters, etc.

The curb and gutter type proposed in this project includes OPSD 600.060, semi-mountable curb with standard gutter.



**129. GENERAL RESTORATION AND SITE CLEAN-UP (cont'd)**

Where the Contractor's operations damage any of the existing curbs, gutters, catchbasins, sewers, and other roadside appurtenances, these shall be replaced and/or restored to at least the original condition prior to construction or as described below.

The current OPSS Form 353 - "Specifications for Concrete Curb and Gutter Systems" shall apply. Expansion joints shall be provided in conformity with the original or as directed by the Engineer.

Damaged sewer pipes shall be replaced by pipes of the same materials, class and size as were the original pipes. Replaced portions of pipe shall be properly bedded and backfilled to the satisfaction of the Engineer.

**( iv) Roadside Ditches (N/A)**

Where the Contractor's excavations appear within the limits of an existing roadside ditch or Municipal open drain, the Contractor will, after backfilling, regrade the ditch to its original grade. Should there be any culverts along the line of the trench, these should be carefully removed prior to excavation, and then replaced at their original inverts upon restoration. Generally, the contractor will be required to sod the slopes of the re-graded ditches.

**( v) Boulevards and Private Lawns  
(Manicured Areas and Right-of-Way)**

Where the Contractor's operations have damaged these areas he will be required to remove, salvage, re-grade and reinstall existing topsoil and apply hydroseed to the complete satisfaction of the Engineer and/or property owner affected. Topsoil and hydroseed shall be placed September – October 2026.

**130. STANDARD ABBREVIATIONS**

The following standard abbreviations may be used in the Contract Documents and the meaning thereof is given herewith:

N.B.C.	-	National Building Code of Canada
C.S.A.	-	Canadian Standards Association
A.S.A.	-	American Standards Association
A.W.W.A.	-	American Waterworks Association
A.S.T.M.	-	American Society for Testing Materials
A.I.S.C.	-	American Institute of Steel Construction
C.I.S.C.	-	Canadian institute of Steel Construction
A.C.I.	-	American Concrete Institute
P.C.I.	-	Pre-stressed Concrete Institute
P.C.A.	-	Portland Cement Association
M.T.O.	-	Ministry of Transportation of Ontario
M.O.E.	-	Ontario Ministry of the Environment
O.P.S.S.	-	Ontario Provincial Standard Specification
O.P.S.D.	-	Ontario Provincial Standard Drawing



**131. DUST CONTROL**

The Contractor shall be responsible for the control of all dust nuisance resulting from his operations and shall supply water to areas where, in the opinion of the Engineer, it is required to control dust caused by or as a result of the Contractor's operations. If in the opinion of the Engineer the application of water is not sufficient to control the dust, the Engineer may order the Contractor to apply calcium chloride to selected areas of the operations, all to be paid under the related items in the Form of Tender.

**132. FREEZING WEATHER**

During freezing weather, all work shall be adequately protected with straw, tarpaulins or wet steam, or any combination of these methods, as considered necessary by the Engineer. The cost of all such special precautions during freezing weather shall be the Contractor's expense. No payment will be made for frost-ripping regardless of the depth.

**133. CONTRACTOR'S STANDING WITH WORKPLACE SAFETY AND INSURANCE BOARD**

Prior to construction, and prior to the Final Payment Certificate submission, the Contractor shall supply the Engineer with a letter from the Workplace Safety and Insurance Board stating that his firm is in good standing with the Workplace Safety and Insurance Board. This letter shall be in the form of a declaration as provided by the Workplace Safety and Insurance Board.

**134. FIRST AID EQUIPMENT**

The Contractor shall provide and maintain on the site, in a clean orderly condition, completely equipped first aid facilities which shall be readily accessible at all times to all his employees and the Engineer and his staff. The Contractor shall designate certain employees who are appropriately instructed to be in charge of first aid. At least one such employee shall always be available on the site while work is being carried on. A telephone call list for summoning aid, such as doctors, ambulances, and rescue squads from outside sources shall be conspicuously posted.

**135. IRON BAR MONUMENTS**

The Contractor shall take every precaution not to disturb any iron bars or witness posts. The contractor shall provide an Ontario Land surveyor at no expense to the Owner to replace all iron bars and witness posts that have been disturbed by the contractor's operations. This includes all survey bars, etc. shown or not shown on the Contract Drawings.

**136. COMPLAINTS AND CLAIMS FROM THE PUBLIC**

The Contractor shall assign an employee to investigate all complaints from the public resulting from his work during the course of the project and to immediately rectify any situation from which the public has just cause for complaint. This employee shall keep a diary listing all complaints, the time and date that they were received, and the action taken by the Contractor to rectify the situation. One copy of this diary will be submitted to the Engineer every week. The employee designated by the Contractor to investigate these complaints will be on-site on a full-time basis and will co-operate fully with the Engineer's staff.

The Contractor shall immediately investigate all claims from the public regarding damage to private property. The Contractor shall also notify the Engineer and the property owner in writing if their claim is submitted to the Contractor's Insurance Agent by the Contractor for investigation.

**137. SITE OFFICE**

The Contractor shall provide on the site a weathertight office (200ft<sup>2</sup> min. floor space) for the contractor's use and that of the Engineer's inspector, the cost of which shall be included in Form of Tender Item No. 3, Section 6, and page FT-14. As a minimum, the office shall be provided with internal lighting, a table (1.2m x 2.4m minimum), eight (8) chairs, lockable 2-drawer filing cabinet, and air conditioning/heating. Adequate road access, parking facilities, and temporary sanitary facilities shall be provided adjacent to the office.



## SECTION 2

### ROADWAY RECONSTRUCTION

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210.	Tactile Plates (N/A)	RR-6
211.	Adjust Existing Manholes, Catchbasins, Valve Chambers	RR-6



**201. GENERAL**

The work shall consist generally of the supply of all labour, equipment, and materials necessary to construct the concrete curb and gutter, asphalt parking lanes, concrete walls, combined concrete curb and sidewalk and all associated works as shown on the Contract Drawings or as directed by the Contract Administrator.

**202. CLEARING, GRUBBING AND REMOVALS**

The Contractor will be responsible for the clearing and grubbing of all trees as shown on the Contract Drawings including hauling and disposal.

Removal of existing stone and concrete walls shall be as shown on the Contract Drawings. The Contractor will be responsible for the loading, hauling and disposal of all materials and structures designated for removal.

This work shall also include the removal and disposal of asphalt pavement necessary to install the new concrete curb and gutter. Payment for sawcutting will be made under the appropriate item in the Form of Tender.

Payment for clearing, grubbing and removals shall be by lump sum, such amount to be compensation in full for the Contractor's efforts to remove and dispose of all items designated for removal.

**203. SAWCUTTING ASPHALT PAVEMENT**

This work consists of the sawcutting of existing asphalt pavements to allow removal of asphalt for construction of the new concrete curb and gutter. Sawcutting shall be by approved methods and shall provide a straight clean edge and include a milled lap joint and tack coat.

Payment for sawcutting shall be at the unit price tendered for the appropriate item in the Form of Tender and shall be compensation in full to complete the sawcutting as shown on the Contract Drawings or as directed by the Contract Administrator.

**204. EARTH EXCAVATION AND GRADING****( i) Site Preparation**

Before proceeding with excavation to the sub-grade of the work, the Contractor shall remove, at his own expense, all the existing rubbish and refuse.

**( ii) Earth Excavation**

Earth excavation shall include the removal of natural soils or fill, of foundation walls or any other artificial work, concrete and/or bituminous pavements and concrete curb and gutters. It is understood that no special remuneration will be paid to the Contractor for excavation in quick-sand, in hardpan, in thin clay-bound layers of strata of stones, in broken and loose schists, in cemented gravels or in any material other than solid ledge rock, and also for the extraction of any boulder without the use of explosives. Where ordered to do so by the Contract Administrator, the Contractor shall excavate below nominal sub-grade depth.



**204. EARTH EXCAVATION AND GRADING (cont'd)****(iii) Excess Excavation**

Should the Contractor excavate below the requirements of the typical cross-section without the prior written approval of the Contract Administrator, he shall not be entitled to any additional remuneration for the resultant additional excavation and fill quantities.

**(iv) Fills**

For any embankment fills required, the Contractor shall use approved material excavated from on-site roadway cuts. All fill materials are to be to the approval of the Contract Administrator prior to their use on the Contract.

Within roadways, the fill shall be placed in successive layers of not more than 150 millimetres in compacted depth, and each layer shall be compacted by rolling. Unless otherwise specified, a minimum degree of compaction shall be 95% Standard Proctor Density.

**(v) Surplus Excavated Material**

Excavated material, which is surplus, frozen, or deemed unsuitable for use shall be loaded, hauled, dumped, and spread by the Contractor in locations approved by or designated by the Owner or his Contract Administrator.

The Earth Excavation item in the Form of Tender has been revised to take into account O. Reg 406/19 which came into effect January 1, 2023. Disposal of excess soils off-site is not anticipated for this project. All excess soils are expected to be re-used on site.

All costs associated with handling, reusing onsite and/or disposal of excess material at disposal locations arranged by the contractor shall be included in these items. A signed letter from all disposal sites indicating their acceptance of the material must be provided to the Contract Administrator. The Form of Tender quantities are estimates and will be confirmed during construction. The unit price tendered for these items will apply to the ultimate construction quantities.

Payment shall be per m<sup>3</sup> of material excavation undertaken and disposed of offsite under the appropriate items.

**(vi) Grading and Compaction**

Grading shall include all earthwork and other work necessary to give to the sub-grade the slopes and grades as shown on the drawings. All stones or boulders over 150 millimetres in greatest diameter shall be removed and disposed of, as directed.

All the sub-grade surfaces shall, on completion, be compacted and shaped to the specified grade and cross-section. The finished surfaces shall not deviate more than 30 millimetres from the specified grade and cross-section and shall be compacted to a minimum dry density of 95 per cent of the maximum dry density, as determined by Standard Proctor Tests. The surfaces shall be maintained to these grades and cross-section tolerances, and to a density of not less than that specified, until the sub-grade surfaces are covered with the granular base course.



**204. EARTH EXCAVATION AND GRADING (cont'd)****(vi) Grading and Compaction (cont'd)**

The Contractor shall compact the roadway sub-grade with equipment approved by the Contract Administrator.

**(vii) Stability of the Sub-Grade**

The Contractor is entirely responsible for the stability of the pavement sub-grade, and shall, therefore, take all necessary precautions in the preparation of the pavement sub-grade in order that the future pavement shall be permanently supported.

He shall not be relieved of the responsibility imposed by this clause because of soils of poor quality or of trenches or tunnels which have been made at or near the proposed pavement or curb and gutter, prior to the date of calling for tenders, or during the tender period, or during road construction.

**(viii) Protection of the Sub-Grade**

When the sub-grade has been completed, the Contractor shall take the necessary measures to prevent the formation of ruts. Should such ruts occur, and should re-rolling of the surface be impossible, then these ruts shall be cleaned, filled with crushed stone and 100% compacted.

**(ix) Measurement and Payment**

Quantities for earth excavation and grading shall be measured in cubic meters based on original cross-sections. Payment for earth excavation and grading shall be at the unit price tendered in the Form of Tender and shall be compensation in full to complete the work as specified herein and as shown on the Contract Drawings. No separate payments will be made for grading and the construction of embankment fills as specified.

**205. ROAD GRANULAR BASE CONSTRUCTION****(i) Description**

This work shall consist of the supply and placing of granular material for the use as base course on roadways, driveways, and curb and gutter as shown on the Contract Drawings or required by the Contract Administrator. The latest Ontario Provincial Standard Specification No. 314 shall apply and govern except as may be extended or amended herein or in the Special Provisions.

**(ii) Materials**

Granular 'A' and 'B' (Select) material shall conform to the latest O.P.S.S. 1010. Subsection 1010.05.03 is amended by the addition of the following: "Granular 'B' - Select" physical requirements shall conform with "Table I Physical Requirements" Granular 'B' Type I and the following gradation chart:

**205. ROAD GRANULAR BASE CONSTRUCTION** (cont'd)

GRANULAR 'B' SELECT	
SIEVE SIZE	% PASSING
100.0mm	100
37.5mm	65-100
22.4mm	57-90
4.75mm	25-75
1.18mm	10-65
0.300mm	5-35
0.075mm	0-8

**(iii) Construction**

Granular base course materials shall be placed in uniform layers shaped and graded to the lines and dimensions shown on the plans or as directed by the Contract Administrator. Each layer shall be mechanically compacted with equipment approved by the Contract Administrator and the rate of placing granular materials shall be governed by the adequacy of the compaction equipment.

Water shall be used as an aid to compaction of granular base course materials as directed by the Contract Administrator. Water shall be applied using approved equipment capable of distributing the water uniformly and with proper shut-off controls.

The whole width of all granular base course materials shall be thoroughly compacted to a minimum of 100% of the maximum Proctor Density as determined by the current Standard Method of Test for "The Compaction and Density of Soils" A.A.S.H.O. Designation T99.

**(iv) Measurement and Payment**

Granular 'A' and Granular 'B' materials shall be measured in tonnes for the amount supplied, placed and compacted as specified herein and to the compacted depths as shown on the Contract Drawings. Payment will be made at the unit price bid per unit of measurement and such payment shall be full compensation for the supply of all labour, equipment, and materials necessary to complete the work as specified herein. Water for compaction shall be measured in cubic meters for that amount supplied and applied.



**206. ROAD PAVEMENT CONSTRUCTION**

This work shall consist of aggregate and bituminous material mixed in a central plant and spread and compacted on a prepared roadbed in accordance with the latest edition of the Ontario Provincial Standard Specification for "Hot Mix, Hot Laid Asphaltic Concrete" Form No. 310 and in conformity with the lines, grades and typical cross-sections as shown on the plans or given in the field by the Contract Administrator.

Measurement of asphalt pavement will be in tonnes for types of asphalt specified in the Form of Tender and as shown on the Contract Drawings.

Payment of asphalt pavement will be made at the Contract Unit Price appearing in the Form of Tender based on weigh tickets from commercial scales, and will be payment in full for the supply, placing and compacting of asphalt pavement.

**207. HOT MIX ASPHALT MISCELLANEOUS**

This work shall consist of the supply of all labour, equipment, and materials necessary to install hand laid mix asphalt for driveways as shown on the Contract Drawings or as directed by the Contract Administrator. Supply and placing of hand laid hot mix asphalt shall be in accordance with OPSS 310. Construction Specification for Hot Mix, Hot Laid Asphaltic Concrete, Hot Mix Patching.

Measurement for payment of Hot Mix Asphalt Miscellaneous will be in tonnes. Payment at the unit price for tender item Hot Mix Miscellaneous shall be compensation in full for all labour, equipment, and materials necessary to complete the work as shown on the Contract Drawings and as directed by the Contract Administrator.

**208. CONCRETE CURB AND GUTTER**

This work consists of the supply of all labour, materials, and equipment necessary to properly construct the concrete curb and gutter in accordance with Ontario Provincial Standard Specification 353 - Concrete Curb and Gutter Systems. The curb and gutter shall be barrier type OPSD 600.040, as noted on the drawings.

Measurement of curb and gutter will be in lineal meters along the gutter line for all curb and gutter installed.

Payment for curb and gutter will be made at the unit price appearing in the Form of Tender and shall be compensation in full for all efforts required to properly construct the curb and gutter. The Granular 'A' base under the curb and gutter will be paid under the tender item for the supply and placing of Granular 'A'.



**209. CONCRETE SIDEWALK (N/A)**

This work consists of the supply of all labour, materials, and equipment necessary to properly construct concrete sidewalk in accordance with OPSS 351 - Construction Specifications for Concrete Sidewalk. The concrete sidewalk shall be constructed as designated by the Contract Administrator. The concrete sidewalk shall be constructed to the liens and at the grades indicated on the Contract Drawings or as designated by the Contract Administrator.

Concrete sidewalk shall be standard concrete sidewalk 125mm thick in accordance with OPSD - 310-010. Sidewalk ramps (OPSD - 310.03) shall be provided where shown on the Contract Drawings or as directed by the Contract Administrator. Sidewalk to be constructed on 150mm Granular 'A'.

Measurement for concrete in sidewalk will be by square meters. Payment at the unit prices appearing in the Form of Tender for the appropriate items shall be compensation in full for all labour, equipment and material required to complete the work as specified.

**210. TACTILE PLATES (N/A)**

Under this item, the Contractor shall provide all labour, materials and equipment necessary to install cast iron detectable tactile plates to meet the needs of ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT (AODA). The Tactile Plates must have:

- i) Raised tactile profiles,
- ii) High tonal contrast with adjacent surface,
- iii) Located at the bottom portion of the ramp,
- iv) Set back between 150mm and 200mm from the curb edge,
- v) Minimum of 600mm in depth.

Approved manufacturers are East Jordan Iron Works Inc., Iron Ped LLC, Neenah Foundry Co. and Bibby-Ste- Croix.

**211. ADJUST EXISTING MANHOLES, CATCHBASINS, VALVE CHAMBERS**

Under this item and for the contract price, the Contractor shall adjust the elevation of the existing manholes or catchbasins to fit the new construction as shown on the Contract Drawings and/or as directed by the Contract Administrator and shall include removal of frame and cover/grate, removal of adjustment bricks/rings, supply and installation of new adjustment units, replacement of frame and cover/grate and parging of the adjustment units. The top of manhole cover shall be set to base asphalt elevation and the top of catchbasin grate shall be set to final elevation.

Section 408.09 of OPSS 408 is amended in that the adjustment to each frame and grate or frame and cover shall be considered a single unit.



SECTION 3  
SANITARY SEWERS AND APPURTENANCES

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**301. SUPPLY, EXCAVATE FOR, BED, PLACE, AND BACKFILL SANITARY SEWER**

See OPSS 410 with the following exceptions/amendments.

The Contractor will provide sanitary sewer pipes to the following minimum specification(s):

200 mm and larger diameter: PVC SDR 35 as per O.P.S.S. 1841 (main sewer and P.D.C.'s)

The Contractor shall receive approval for pipe selection prior to supplying the material to the site.

All caps, plugs and tees used on the project will be factory manufactured. Field cut tees will not be permitted.

All pipe supplied will be bell and spigot and rubber gasket joints.

Sanitary services, placed at 2% minimum grade or as directed by the Contract Administrator, shall be capped at property line and marked with a 50 mm x 100 mm wood marker painted green.

The price bid will include all fittings. End caps and/or plugs will be paid for under the appropriate items.

Bedding will be Granular 'A', as specified on the drawings.

**Approved and non-contaminated existing material excavated from the roadway may be used as backfill (subgrade) material and may be installed to the underside of the roadwork Granular 'B' (select).**

Trenches excavated under grassed areas may be backfilled with select excavated material and compacted to 95% SPMDD.

After base coat asphalt has been placed and manholes have been adjusted to grade as required, and prior to acceptance of this contract, the Contractor will flush and video the mainline sanitary sewer and provide the owner with two (2) copies of the video including certification of successful mandrel insertion through the new sewers. The cost of the flush and video work, if not specified elsewhere, shall be included in the unit price bid for the pipe.

Measurement for payment will be in metres of pipe placed. Payment for the sanitary sewer installation shall include the supply and installation of all required bedding and trench backfill materials up to the underside of the proposed road sub-base material.



**302. SANITARY MAINTENANCE HOLES**

See OPSS 407 with the following exceptions/amendments.

The Contractor will supply precast concrete maintenance holes, complete with OPSD 401.010, Type 'A' frames and covers as shown on the drawings.

All connections required at the manholes will be part of this item.

Backfill will be Granular 'A' gradation and will be part of this item. Compaction around manholes will be done using a "hoepac" type of compaction unit.

Grade adjustments of the frame and cover will be part of this item.

Benching in maintenance hole shall be as per OPSD 701.021.

Measurement for payment will be for each structure installed.

**303. CLOSED CIRCUIT TELEVISION INSPECTION**

See O.P.S.S. 409 with the following exceptions/amendments.

All sanitary sewer pipes and maintenance holes shall be cleaned and flushed prior to closed circuit television inspections.

The Contractor will provide the Owner with two (2) copies of the video and report including certificate of successful mandrel insertion through the new sewers.

Measurement for payment will be in metres.

**304. SUPPLY AND PLACE CLEAR STONE BEDDING (PROVISIONAL)**

See OPSS 314 with the following exceptions/amendments.

This is a provisional item and will not be used without prior approval of the Contract Administrator.

The Contractor will provide and place the clear stone as a bedding or backfill item for the sewer and/or structure or where the conditions require the use of clear stone.

The Contractor will bid his price to supply clear stone over his normal Granular 'A' bedding cost.

Measurement for payment will be in tonnes.



SECTION 4

STORM SEWERS AND APPURTENANCES

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**401. GENERAL**

The work to be done shall consist generally of the supply of all materials, labour and equipment necessary to complete the installation of storm sewers and appurtenances of the sizes, to the lines and at the elevations shown on the Contract Drawings, as specified herein or as directed by the Engineer.

**402. CONSTRUCTION SPECIFICATIONS**a) General

The construction of storm sewers and appurtenances shall be in accordance with the applicable section of the Municipality of Southwest Middlesex Servicing Standards if available and the following Construction Specifications from the Ontario Provincial Standard Specifications:

OPSS 405	Pipe Subdrains
OPSS 407	Construction of Manholes, Catchbasins, Ditch Inlets and Valve Chamber
OPSS 408	Adjusting or Rebuilding Manholes, Catchbasins, Ditch Inlets and Valve Chambers
OPSS 410	Pipe Sewer Construction by Open Cut Method
OPSS 501	Compacting
OPSS 503	Site Preparation
OPSS 504	Preservation, Protection and Reconstruction of Existing Facilities
OPSS 507	Restoration
OPSS 514	Trenching, Backfilling and Compacting
OPSS 516	Excavating, Backfilling and Compacting for Manholes, Catchbasins, Ditch Inlets and Valve Chambers
OPSS 517	Dewatering
OPSS 538	Shoring and Bracing and all referenced Specifications.



**402. CONSTRUCTION SPECIFICATIONS** (cont'd)**b) Material**

The storm sewer shall be as specified on the Contract Drawings or as listed in the Form of Tender. All pipe, couplings and fittings shall be watertight and free from defects. The following material specifications shall apply:

**i) Concrete Pipe**

All non-reinforced concrete sewer pipes shall conform to CSA and A.S.T.M. standards manufactured in accordance with CAN/CSA A257.1 (100mm - 250mm dia.).

All reinforced concrete sewer pipe shall conform to CSA and A.S.T.M. standards manufactured in accordance with CAN/CSA 257.2 (300mm and larger).

All joints shall be rubber gasket conforming to CSA A257.3 and ASTM C443M94.

**ii) PVC Pipe**

All PVC storm sewer shall conform to CSA B182.1 and CSA B182.2 and conform to ASTM D3034. The pipe is to have a maximum Dimensional Ratio (DR) of 35 and where the pipe diameter is less than 200 mm diameter shall be SDR 28. Minimum pipe stiffness shall not be less than 320 kPa at 5% deflection when tested in accordance with A.S.T.M. D2412. Sealing gaskets shall meet the requirements of CSA B182.2 and ASTM F477. All PVC fabricated and molded fittings shall be CSA certified. The use of PVC pipe is approved for use on storm sewers for sizes of 100mm to 600mm inclusive.

**iii) Ribbed Polyvinyl Chloride**

The use of Ribbed Polyvinyl Chloride (PVC) pipe is approved for use on storm sewers for sizes of 200mm to 600mm inclusive. Ribbed pipe and fittings shall be certified to CSA B182.4 and meet the requirements of ASTM F794. All PVC Fittings shall be in compliance with CSA B-182.1, CSA B-182-2 and CSA B-182A, ASTM.

**iv) HDPE Pipe**

The use of high-density polyethylene (HDPE) with integral bell and spigot, shall be certified to CSA B182.6 and is approved for use on storm sewers only for sizes of 200mm to 600mm inclusive. All HDPE fabricated pipe and molded fittings shall be CSA certified. "Challenger" pipe is not acceptable.

**v) Appurtenances**

Manholes may be either poured-in-place concrete or precast concrete conforming to the applicable Ontario Provincial Standards and the Municipality of Southwest Middlesex Servicing Standards. Safety landings will be required in manholes deeper than 5.0 meters measured from the top of frame to the lowest invert. Manhole frame and cover shall be in accordance with OPSD-401.01 Type 'A'.



**402. CONSTRUCTION SPECIFICATIONS (cont'd)****v) Appurtenances (cont'd)**

Catchbasins shall be standard 600mmx600mm precast catchbasins conforming to OPSD-705.010. Twin inlet catchbasins shall be standard precast catchbasins conforming to OPSD-705.020. Curb inlet catchbasins shall conform to detail in Appendix B. Frame and grates shall be standard cast iron conforming to OPSD-400.020 (CB) and 400.090 (CICB). All proposed CB's (excluding CB's adjacent to curb-faced sidewalk) shall be installed with the roadside grate edge in line with the proposed edge of asphalt/curb and gutter line.

Catch basin leads shall not be less than 250 mm in diameter with a minimum grade of 1.0% and shall connect to the storm sewer as shown in OPSD 708.010 or OPSD 708.030. Support for pipe at catch basin to be in accordance with OPSD 708.020.

Pipe subdrain shall be 150mm diameter perforated corrugated polyethylene tubing with knit filter sock conforming to the requirements of OPSS 1840/1860 and CGSB 41-GP-29M or perforated CSP (OPSS 1801) and installed in accordance with OPSD-216.03. Bedding and backfill material shall be coarse sand or approved granular material conforming to the requirements of OPSS 405.

All storm private drain connections (PDC) shall be 450mm diameter PVC DR35 conforming to ASTM D3034, CSA B182.1 and CSA B182.2 or approved equal.

PDC's shall be placed at 2% minimum grade and will be capped off 1.0m beyond property line (outside R.O.W.) and marked with a 50mm x 100mm wood marker painted red.

**c) Bedding and Backfill**

Bedding material for both rigid pipe (concrete) and flexible pipe (PVC, polyethylene, steel, ductile iron) shall be Granular 'A'. Cover material for both rigid and flexible pipe within the excavated trench may be approved and non-contaminated existing material installed to the underside of the roadwork Granular 'B' (select). See detail on Drawing No. D1 regarding trench backfill.

Bedding and cover material shall be compacted to 98% standard proctor maximum dry density (S.P.M.D.D.).

In general, trench backfill for storm sewers and catchbasin leads located within existing or future roadways shall be full Granular 'B' to the underside of the proposed road subbase granular material. The use of approved on-site or other materials for trench backfill outside the limits of existing or future roadways will be permitted at the discretion of the Contract Administrator.

The backfill materials shall be compacted in the trench in maximum 150mm thick layers. The material shall have sufficient moisture to achieve maximum density specified. If needed, the Contractor shall supply at his expense, all water needed for the proper compaction of materials.



**402. CONSTRUCTION SPECIFICATIONS (cont'd)****c) Bedding and Backfill (cont'd)**

The compaction tests when required by the Contract Administrator shall be carried out by an approved Soil Testing Company selected and paid by the Owner. The Contractor shall note that upon his request to have the backfill material tested and the densities obtained are below the specified, then the Contractor shall carry out further compaction under the Contract Administrator's supervision. The Contract Administrator may order the Contractor to remove all or part of the material in the trench and same to be placed back and compacted to the satisfaction of the Contract Administrator, all at the Contractor's expense. Density tests taken following the remedial work on trench backfill shall be charged to the Contractor.

Surplus shall be disposed of at the Contractor's expense.

**403. CLOSED CIRCUIT TELEVISION INSPECTION**

See OPSS 409 with the following exceptions/amendments.

All pipes and maintenance holes shall be cleaned and flushed prior to closed circuit television inspections.

The Contractor will provide the Owner with two (2) copies of the video and report on USB (thumb drive) including certificate of successful mandrel insertion through the new sewers.

Measurement for payment will be in meters.

**404. MEASUREMENT AND PAYMENT**

Measurement for storm sewers and appurtenances will be in accordance with the applicable Ontario Provincial Standard specification for the work involved and the appropriate units specified in the Form of Tender.

Payment for the storm sewer and CB/DICB/CICB lead installation shall include the supply and installation of all required bedding and trench backfill materials up to the underside of the proposed road sub-base material and the removal and disposal off site of existing native materials within the trench limits.

Payment will be made in accordance with the appropriate tendered unit price appearing in the Form of Tender and such payment shall be compensation in full for the supply of all labour, materials and equipment to complete the work as specified herein and on the Contract Drawings including connection to existing storm manholes and the supply and installation of frames and grates.



SECTION 5

STORMWATER MANAGEMENT FACILITY

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**501. GENERAL**

The work to be done shall consist generally of the supply of all materials, labour and equipment necessary to complete the installation of the stormwater management facility and appurtenances of the sizes, to the lines and at the elevations shown on the Contract Drawings, as specified herein or as directed by the Engineer.

**502. TOPSOIL**

Areas noted on the drawings to be restored with seeding shall conform to this specification, and the contractor shall allow for all costs in his lump sum bid for the following works. Prior to excavation, the working area shall be stripped of existing topsoil. The topsoil stockpile shall be located so as to prevent contamination with material excavated from the trench. Upon completion of backfilling operations, topsoil shall be spread over the working area to a depth to that which previously existed but not less than a depth of 150mm.

**503. EXCAVATION**

Work to be completed under this item shall include all labour and materials to excavated the stormwater management facility to the specified dimensions and elevations including allowance for topsoil restoration where applicable. This item shall also include transporting and shaping excavated material in deposit areas as shown on the drawings.

**504. PLANTINGS (N/A)**

1. All workmanship shall meet the standards of the Ontario Landscape Contractors' Association.
2. Install plant material true to name, size and condition as specified.
3. All plant material shall be nursery grown and shall conform to the standards of the Canadian Nursery Trades Association.
4. All plant material shall be staked or placed by landscape contractor for review and approval by owner prior to installation.
5. All tree pits and planting beds shall be mulched with a minimum depth of 75mm (3") of "Gro-Bark" shredded pine mulch as specified.
6. All trees shall be planted by approved procedures and oriented to provide best appearance.
7. All trees to be staked upon planting as specified.
8. All trees to have plastic mower guard installed around trunk as specified.
9. All plant material shall be guaranteed for one year from date of acceptance. Plant material which does not survive satisfactorily during the guarantee period shall be replaced at no extra cost to the owner.



**504. PLANTINGS (N/A) (cont'd)**

10. All substitutions must receive written approval by the landscape architect prior to delivery on site.

**505. RIP-RAP**

Rip-rap shall be specified on the drawings and shall conform to the following:

Quarry stone shall range in size from 150mm to 300mm evenly distributed and shall be placed to a 300mm thickness on filter blanket at a 1.5:1 slope unless otherwise noted. Filter blanket to be Terrafix 270R or approved equal.

**506. EROSION CONTROL MAT (N/A)**

Erosion control mat shall be "North American Green C350", erosion control blanket shall be "N.A.G. S-75", or approved equals. Mat and blanket shall be installed on seeded bank as shown on the drawings in accordance with manufacturer's specifications with the following exceptions:

- a) Staples to be 200mm long and shall be installed to manufacturer's "D" pattern.
- b) Mat and blanket to be keyed 200mm into bank slope at upstream limit.



SECTION 6

WATERMAINS AND APPURTENANCES

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**601. GENERAL**

The work to be done under this Section shall consist of supplying all materials, labour, equipment, and transportation necessary to complete the watermain installation, including various fittings and appurtenances, of the sizes, to the lines, and at the depths shown on the Contract Drawings, as specified herein or as designated by the Engineer.

The Contractor shall note that all time and materials costs incurred by Southwest Middlesex Operating Authority, including water, material, supplies, etc. will be charged back to the General Contractor upon project completion.

**602. MATERIALS****602.1 DUCTILE IRON PIPE**

Ductile iron is not acceptable to the Owner.

**602.2 ASBESTOS CEMENT PIPE**

Asbestos Cement Pipe is not acceptable to the Owner.

**602.3 POLYVINYL CHLORIDE (PVC) PIPE – FLEXIBLE PIPE**

The Polyvinyl Chloride (PVC) plastic pipe shall be constructed of rigid polyvinyl chloride compound and shall conform to the current AWWA C-900 (CSA B-137.3). Polyvinyl chloride plastic pipe shall be Class 150 (SDR 18) for sizes up to and including 300mm diameter.

All watermain pipe delivered to site shall be "Factory Capped". For watermains larger than 300mm diameter the type of watermain shall be determined in consultation with the Municipality.

Pipes shall be supplied in standard lengths of not less than 6 meters nor more than 11.6 meters except that short lengths and special adaptor shall be provided as required for completing connections or where ground conditions are such that shorter lengths are necessary. Pipes shall be joined by means of a "Tyton" type rubber ring bell joint which shall be an integral and homogeneous part of the pipe barrel. Rubber rings shall conform to ASTM Specifications D1869.

The class and type of pipe shall be stenciled on each length of pipe.

Joints shall be bell and spigot with rubber gaskets. The spigot shall be lubricated. A solid 12 gauge TWN copper wire must be supplied along the full length of the pipe to provide electrical continuity for location purposes.

**602.4 HIGH DENSITY POLYETHYLENE (H.D.P.E.) PIPE**

High density polyethylene (H.D.P.E.) pipe is not acceptable to the Owner.



602. **MATERIALS** (cont'd)602.5 CONSTRUCTION

The Contractor shall install the PVC watermain pipe at the locations shown on the drawings and to the specified grade.

602.6 FITTINGS

Watermain fittings to be used with the various pipe materials shall be as follows:

- .1 Ductile Iron Pipe **(N/A)**  
Ductile iron or cast iron with either mechanical or push-on ends in accordance with AWWA C110 and C111. All fittings shall be cement lined in accordance with AWWA C104.
- .2 PVC Pipe  
PVC Injection Molded Fittings with push-on joints (for use with PVC and PVC Pressure Pipe conforming to AWWA C900, CSA 137.3, and AWWA [C909], CSA B137.3.1 having cast iron OD) shall conform to AWWA C907, shall be UL listed and FM approved and shall be certified by the Canadian Standards Association to CSA Standard B137.2.

- .3 Watermain Fittings

Watermain fittings to be used with the various pipe materials shall be as follows:

- (i) PVC injection moulded fittings rated for 1.39 MPa (200 psi) in sizes up to and including 200mm with push-on joints shall conform to AWWA Standard C907, shall be UL listed and FM approved and shall be certified to CSA Standard B137.2.
- (N/A) (ii) PVC fabricated fittings rated for 1.10 MPa (160 psi) in sizes 250mm to 750mm with push-on joints shall be UL listed and FM approved and shall be certified to CSA Standard B137.3.

602.7 CATHODIC PROTECTION

All Cast Iron (CI) fittings shall be protected with 14.5 kg (32 lb.) high purity magnesium anode. The anode shall be attached to the fitting used a Cadwell and coated with mastic (Handy Cap IP).

Epoxy coated gate valves do not require cathodic protection unless, in the opinion of the Municipality, the epoxy coating is compromised.

All exposed nuts and bolts shall be protected using Denso Paste, Mastic and Tape. All pipe and/or fitting restraints and rods shall be protected using Denso paste, mastic, and tape.



**602. MATERIALS** (cont'd)**602.8 WATERMAIN VALVES**

All watermain valves shall be Mueller resilient gate valves. All nuts and bolts shall be protected by Denso Paste, Mastic, and tape.

Gate valves shall be iron body, epoxy coated, 50mm operating nut, non-rising stem with mechanical joints. MJXMJ, AWWA, UL/FM. Gate valves to be resilient wedge only. Minimum design working water pressure shall be 1.21 MPa (175 psi). "O" rings shall be used for valve stem stuffing box packing.

Valves to open to the LEFT i.e., counter-clockwise and stems fitted with 50mm square operating nut with arrow showing opening direction.

**602.9 VALVE CHAMBERS**

A valve box shall be supplied and installed on every watermain valve and hydrant shut-off valve.

**602.10 FIRE HYDRANTS**

Fire hydrants shall be Canada Valve "Century" with break flange manufactured in accordance with AWWA C502 for dry barrel hydrants. Hydrants shall be post type with compression valve control designed for a working pressure of 1.03 MPa (150 psi) and to close with water pressure. Hydrants shall be suitable for a minimum 1830mm trench and shall be supplied with two Standard 64mm hose nozzle connections and a 100mm "Storz" centre port pumper nozzle with caps. Hose connection threads and operating nut shall be Ontario Provincial Standard Specifications. Barrel to have ground line flange and designed so that all internal parts can be removed through the top of hydrant. Hydrant shall have mechanical joints. Base connection shall be 150mm. Hydrant must open LEFT i.e., counter clockwise. Hydrants must be plugged.

Hydrants shall be shop painted YELLOW epoxy all over. All field painting shall be carried out in accordance with the AWWA Standards for fire-hydrant designations as indicated in the Hydrant Paint Code. All scratched or dirty hydrants disturbed during construction shall be re-painted YELLOW epoxy.

Hydrant installation including mechanical joint restraint.

**602.11 SERVICE PIPE**

PVC Class 150 (SDR 18) - of not less than 150mm nominal size with a working pressure of 1.10 Mpa. (200 psi).

Water service pipe shall be installed with 12-gauge TWN copper tracer wire, to be included in the water service item in the Form of Tender.

Bedding to be Granular 'A'.



**602. MATERIALS** (cont'd)**602.12 SERVICE MAIN STOP** (N/A)

Main stop for plastic tube shall be round way bronze stop with inlet AWWA thread. Outlet plastic tube compression. 25mm shall have stainless steel insert. Main stop to be as per Municipal Standards.

Main stop shall open LEFT i.e., counter clockwise.

**602.13 SERVICE CURB STOP** (N/A)

Curb stop and drain for 25mm plastic tube shall be bronzed inverted ground plug type with inlet and outlet plastic tube compression with stainless steel insert as per Municipal Standards.

Curb stop and drain for 38mm and 50mm plastic tube shall be bronze ball valve or oriseal type bronze valve with inlet and outlet plastic tube compression as per Municipal Standards. Curb stops shall be non-draining type with ball valve.

Curb stop shall open LEFT i.e., counter-clockwise.

All curb stops shall be placed on a minimum 200mm x 200mm x 50mm thick prefabricated concrete block.

**602.14 SERVICE CURB BOX** (N/A)

All curb stops shall have adjustable service boxes with stainless steel rods, 0.90m (35") length, brass cotter pin of sufficient length to suit bury of valve. Base shall be cast iron. Cover shall be cast iron A726 or equivalent. Service boxes for valves up to 50mm shall be similar to Mueller A726 or approved equal. Rods and related hardware will be stainless steel including cotter pin. Marker post to be 38mm x 89mm by 1.2m long and 0.6m exposed above grade. Exposed wood to be painted blue.

12-gauge TWN solid copper tracer wire shall be raised along the outside of the curb box to within 100mm of ground surface.

**602.15 SERVICE SADDLE** (N/A)

Service saddles shall be used where specified. On installation of saddle, neoprene gasket shall be soap lubricated.

Service clamps shall be used on:

- All Class 150 plastic pipe shall have double bolt stainless steel service saddle to suit AWWA thread of corporation.



**602. MATERIALS** (cont'd)**602.16 HANDLING OF MATERIALS**

Pipe, fittings, valves, hydrants, and all accessories shall be loaded and unloaded by lifting with a hoist or skidding, so as to avoid shock or damage. Under no circumstances shall such materials be dropped. Pipe handled on skidways shall not be skidded or rolled against pipe previously unloaded.

**603. TRENCH EXCAVATION****603.1 UNCLASSIFIED EXCAVATION**

All excavation shall be unclassified and shall consist of and include all necessary excavation, clearing and grubbing, removal of pavements, structures and obstructions and the satisfactory disposal of all material and covers all classes of excavation. Excavated material shall not be stockpiled along any roadway surface or shoulder and shall be cast away from any travelled road surface.

**603.2 LENGTH OF OPEN TRENCH**

No greater length of trench in any location shall be left open, in advance of the completed structure placed therein, than shall be authorized or directed. The Engineer shall be empowered, at any time to require the refilling of open trenches over completed pipelines, if in his judgement, such action is necessary, and the Contractor shall thereby have no claim for extra compensation, even though to accomplish said refilling he is compelled temporarily to stop excavation of other work at any place.

If work is stopped on any trench, for any reason except by order of the Engineer, and the excavation is left open for an unreasonable length of time in advance of construction, the Contractor shall, if so directed, refill such trench at his own cost, and shall not again open said trench until he is ready to complete the structure therein.

The excavation of all trenches shall be fully completed at least seven (7) meters in advance of pipe laying, unless otherwise authorized.

**603.3 WIDTH AND DEPTH OF TRENCHES**

All trench and boring pit excavation shall be carried out in conformance with the requirements of the Occupational Health and Safety Act.

Trenches shall be excavated to the necessary width and depth as may be shown on the drawings, or as directed. The bottom of the trench shall be solid undisturbed ground. Any part of the bottom of the trench sub-excavated below the specified sub-grade shall be backfilled with approved material, thoroughly compacted.



**603. TRENCH EXCAVATION (cont'd)****603.3 WIDTH AND DEPTH OF TRENCHES (cont'd)**

Where the bottom of the trench at sub-grade is in unstable or unsuitable material, excavation shall be carried to such depth as ordered by the Engineer. The trench bottom shall be restored to sub-grade with approved granular stabilizing material.

All excavation in excess of 300mm below sub-grade will be paid for as sub-excavation, where ordered.

The trench shall be drained or pumped to avoid the making of joints under water and to prevent water from entering the pipe. Tendered prices shall include the cost of dewatering of the trench wherever required and by whatever method.

Depth - In general, all watermain pipe shall have not less than 1700mm and not greater than 1850mm of cover when final grade is established unless otherwise shown on the Contract Drawings. The correct depth of main and service pipe shall be maintained regardless of ground and other site conditions. Caution shall be exercised in this respect where mains, services and hydrant laterals cross drainage ditches or other low areas. A minimum 400mm vertical clearance shall be provided between the proposed watermain and existing culverts, tiles or municipal drains.

The trench shall be excavated to the depth required so as to provide a uniform and continuous bearing and support for the pipe on solid and undisturbed ground at every point between bell holes, except that it will be permissible to disturb and otherwise damage the finished surface over a maximum length of 0.5 meters near the middle of each length of pipe by a withdrawal of pipe slings or other lifting tackle.

Width - The width of the trench shall be sufficient to permit the pipe to be laid and jointed properly and to permit trench backfill to be placed and compacted as specified. Trenches shall be of such extra width, when required, as will permit the convenient placing of timber supports, sheeting and bracing and handling of materials.

**604. INSTALLATION OF PIPE AND APPURTENANCES****604.1 GENERAL**

Proper implements, tools, and facilities satisfactory to the Engineer shall be provided and used by the Contractor for the efficient laying of the pipe and the setting of the required fittings. All materials shall be lowered into the trench by suitable means. Under no circumstances shall these materials be dropped or dumped into the trench.



**604. INSTALLATION OF PIPE AND APPURTENANCES (cont'd)****604.1 GENERAL (cont'd)**

The inside of the bell and the outside of the spigot shall be wire brushed and wiped clean and free from oil and grease before the pipe is laid. Every precaution shall be taken to prevent foreign material from entering the pipe while it is being placed in the line.

Where it is required that the new watermain shall cross under existing utilities, the Engineer may order the installation of concrete support beams and columns for the utilities.

Watermain pipe shall not be laid on blocks. The pipe shall be placed on a prepared granular bedding and shall bear uniformly and continuously along its full length, except for that portion of the bell hole. Bell holes shall be made at all pipe joints.

**604.2 PIPE DEFLECTION**

Wherever it is necessary to deflect the pipe from a straight line either in the vertical or horizontal plane, the amount of deflection shall not exceed that required for satisfactory making up of the joint and shall not exceed that recommended by the manufacturer. If in the opinion of the Engineer, the deflection is excessive, the Engineer will order the use of specials in order to provide the necessary deflection.

**604.3 CUTTING PIPE**

The field cutting of pipe for the insertion of valves, fittings or closure pieces shall be done in a neat and workmanlike manner, using the proper tools.

**604.4 PIPE JOINT**

Lubricants used shall be PVC pipe lube as supplied by the pipe supplier.

**604.5 SHUT-DOWN PRECAUTIONS**

At times when pipe laying is not in progress, the open ends of pipe shall be closed by a watertight plug or other means approved by the Engineer. This provision shall apply during the noon hour as well as overnight. If water is in the trench, the seal shall remain in place until the trench is pumped completely dry. Every precaution shall be taken to prevent foreign material from entering the pipe.

**604.6 SETTING VALVES AND FITTINGS**

Valves, fittings, and other accessories shall be fitted and jointed to the pipe in the manner heretofore specified for the cleaning, laying, and jointing of pipe.



**604. INSTALLATION OF PIPE AND APPURTENANCES (cont'd)****604.6 SETTING VALVES AND FITTINGS (cont'd)**

Valves shall be located on the street property lines extended, unless shown otherwise on the approved plans. The chamber shall be plumb and centered on the extension rod. The top of the valve chamber shall be set flush with the finished grade of the road or boulevard.

**604.7 HYDRANT INSTALLATION**

Hydrants shall be set at a grade whereby the final grading of the street or boulevard area shall be 75mm below the breakaway flange. A hydrant installation will not be accepted where any portion of the hose nozzle cap is less than 300mm from the finished grade.

Hydrants will be set as shown or as directed by the Engineer, and in a manner so as to provide complete accessibility and so that the possibility of damage by vehicles and injury to pedestrians are minimized.

All hydrants shall stand plumb and shall have their nozzles parallel with the road and be set so that the breakaway flange is 75mm above the existing grade.

Hydrants will be mechanically restrained.

In order to provide barrel drainage, the hydrant shall be set into a pocket of 19mm clear stone.

This pocket shall measure not less than 900mm by 900mm by 450mm. The clear stone shall extend to at least 150mm above the waste opening in the hydrant. The cost of the porous material around the hydrant and the bracing shall be included in the Contractor's price for setting the hydrants.

Hydrants shall be installed with appropriate barrel length to be determined by the Contractor based on the proposed watermain depth at each hydrant location. Each hydrant shall be connected to the main with a 150mm lateral, controlled by an independent gate valve. P.V.C. pipe from valve to hydrant.

Hydrants shall be placed on a 600mmx600mmx50mm thick prefabricated concrete slab. Boot of hydrants to be protected with "denso" paste, profiling mastic and LT tape.

**604.8 ANCHORAGE FOR PLUGS, CAPS, TEES, BENDS AND OTHER FITTINGS**

No concrete thrust blocks will be permitted. All plugs, caps, fittings, etc. must be installed with mechanically restrained joints as per Municipality of Southwest Middlesex Drawing SD-24.



**604. INSTALLATION OF PIPE AND APPURTENANCES (cont'd)****604.9 ELECTRICAL CONDUCTIVITY**

It shall be the responsibility of the Contractor to use such materials and methods in making joints as to ensure continuity of electrical conductivity in any IRON watermain piping. Such materials and methods shall be in accordance with the manufacturer's specifications and shall meet with the approval of the Engineer.

**605. PIPE BEDDING**

Watermain pipe shall be placed on a prepared granular bedding. Granular material shall be Granular 'A' conforming to the current O.P.S.S. 1010 material specifications.

Bedding shall extend to a minimum depth of 150mm below the pipe barrel and shall be brought up around the pipe to a minimum depth of 300mm above the top of pipe and shall be compacted to 98% modified Proctor Density. The width of granular bedding shall be the full width of the trench.

**606. TRENCH BACKFILL**

The Contractor shall carefully study and familiarize himself with the locations of the proposed watermain as indicated on the Contract Drawings so as to establish the backfill requirements to be used as specified.

In general, trench backfill for watermains and water services located within the existing travelled roadways shall be approved and non-contaminated existing material installed to the underside of the roadwork Granular 'B' (select).

All costs related to removal and disposal of existing native materials within the watermain or water service trenches (located within the existing travelled roadways) as well as supply and installation of the Granular 'B' (Select) within the trenches shall be included in the "Supply and install watermain and water services" items in the Form of Tender.

Where watermains or water services are constructed in the boulevard or grass areas the contractor shall use selected native material to backfill trenches above the pipe bedding. The native material shall be placed in layers of not more than 300mm thick and compacted to 95% Standard Proctor Density. The native backfill shall be terminated 150mm below grade to allow placement of topsoil and seed, as per O.P.S.S.572. All topsoil within the limits of the project shall be stripped and stockpiled for re-use. Upon watermain and native backfill installation, all stockpiled topsoil shall be graded to pre-construction elevations.

Above the upper limit of the trench backfill the travelled portion of the roadway structure for each type shall be restored in accordance with the requirements as set out in Sub-Section 129 - "General Restoration and Site Clean Up" of the General Provisions.



**606. TRENCH BACKFILL** (cont`d)

All equipment used in backfilling of the trenches shall be approved by the Engineer. No work shall be allowed until the Contractor has satisfied the Engineer that equipment on the site is in good working order and suitable to carry out the specific function.

The Granular 'A' and Granular 'B' backfill materials shall be compacted in the trench in maximum 150mm thick layers. The material shall have sufficient moisture to achieve maximum density specified. If needed, the Contractor shall supply at his expense, all water needed for the proper compaction of materials.

The compaction tests when required by the Engineer, shall be carried out by an approved Soil Testing Company selected and paid by the Owner. The Contractor shall note that upon his request to have the backfill material tested and the densities obtained are below the specified, then the Contractor shall carry out further compaction under the Engineer's supervision. The Engineer may order the Contractor to remove all or part of the material in the trench and same to be placed back and compacted to the satisfaction of the Engineer, all at the Contractor's expense. Density tests taken following the remedial work on trench backfill shall be charged to the Contractor.

The Contractor shall save all the selected excavated native material and shall incorporate same in the proposed works. Surplus shall be disposed of at the Contractor's expense.

In general, selected native materials shall be free from cinders, ashes, refuse, vegetable or organic material, boulders, rocks or stones, or any other material which in the opinion of the Engineer is unsuitable. However, from 300mm above the top of the pipe, material containing stones up to 75mm in their greatest dimension may be used, unless specified otherwise.

Stones or boulders larger than 75mm in any dimension shall have at least a 300mm clearance from all mains, valves, and fittings.

No frozen material shall be used as backfill in the trench.

No excavated material shall be cast or deposited on the travelled portion or shoulders of roads or streets even as a temporary measure unless approved by the Engineer. Where circumstances do not permit the casting of excavated material clear of roads and shoulder the excavated material shall be loaded onto trucks or other approved equipment and transported for use as trench backfill or transported to an approved disposal site.

For clarification, the Contractor shall be responsible for finding a location suitable to the Engineer for disposal of all excess materials and shall provide the Engineer with the written permission of the owner of the property concerned.

The Contractor shall provide for all the labour necessary to continuously maintain the condition of the trench in a satisfactory manner and to provide for all necessary grading, levelling, water, dust control, etc.



**606. TRENCH BACKFILL (cont`d)**

The Contractor shall quickly fill the trench wherever any settlement occurs and if it is impossible to make speedy repairs to any area requiring treatment, the Contractor shall immediately place all necessary lights, barricades or watchmen as may be required to provide for the safety of the traffic and pedestrians alike until the necessary restoration or repair has been made.

The Contractor shall not be paid for any materials, plant, labour, or equipment required to carry out the backfilling operations to meet with the requirements of this sub-section and he shall provide for all such times in his Total Tender Price for the work.

The Contractor shall not backfill around any concrete structure or any concrete thrust block for a period of at least 24 hours after the concrete has been placed and he shall then take special care to backfill very carefully around such structure or thrust block so as not to disturb the fresh concrete or to cause any damage to same.

The granular backfill material supplied shall conform to the current O.P.S.S. material specifications.

**607. PRESSURE TEST AND ALLOWABLE LEAKAGE**

Hydrostatic testing shall be conducted under the supervision of the Owner's representative and the Project Engineer's representative upon completion of the watermain installation including services and backfilling.

Hydrostatic testing of new watermain and appurtenances (fire hydrants and laterals, etc.) including water services to the curb box shall be performed on new watermain infrastructure.

All caps and/or plugs used for testing process to be supplied by the Contractor at their expense.

Hydrostatic pressure test and hydrostatic leakage test may be conducted either simultaneously or separately.

Duration of test shall be two (2) hours or longer if so directed by Owner or Project Engineer, if tests are performed simultaneously.

If two tests are performed separately, conduct hydrostatic pressure test before hydrostatic leakage test. Duration of pressure test shall be two (2) hours or longer if so directed. Duration of leakage test shall be two (2) hours or longer if so directed.

The Contractor shall assume all responsibility when testing against existing or new line valves. The Contractor is to provide all bulkheads, taps, fittings, and pipe thrust restraint necessary to undertake pre-qualification or final testing at their expense.

Testing for polyethylene pipe shall be performed in accordance with the manufactured specifications and AWWA M55.



**607. PRESSURE TEST AND ALLOWABLE LEAKAGE (cont`d)**

The Contractor is to provide all means of obtaining water for performing the pressure and leakage tests. Existing hydrants must not be used by Contractor to obtain water during this project.

Fill test section slowly with water making sure that all air is removed from pipeline. Allow a period of 24 hours before starting test. Subject test section to continuous test pressure specified for two hours or as directed. Test pressure shall be 1035 kPa (150 psi).

Examine all parts of test section while under pressure. If test pressure is maintained with no pressure drop for specified test duration, test result is satisfactory. If test result is not satisfactory, repair all deficient parts of section and retest until a satisfactory result is attained.

No leakage is accepted.

The Contractor shall note that all time and materials costs incurred by Southwest Middlesex Operating Authority, including water, material, supplies, etc. will be charged back to the General Contractor upon project completion.

**608. SWABBING, FLUSHING, AND DISINFECTION OF WATERMAIN****a) Swabbing and Flushing**

When the Contractor has completed the installation of the watermain and has carried out satisfactorily the specified pressure and leakage test thereon, he shall thoroughly flush the whole system so as to remove completely from the system all unwanted matter.

Watermains shall be swabbed and flushed in a sequence and in accordance with procedure approved by the Municipality of Southwest Middlesex Representative. The Contractor must submit a swabbing, flushing and disinfection procedure to the Municipality of Southwest Middlesex and Engineer for approval two (2) weeks prior to the operation for approval.

All watermains shall be cleaned by the use of a minimum of three (3) foam swabs introduced at hydrants or at special entry sections and forced by water pressure through the main. Cleaning shall be repeated until 2 consecutive clean swabs (no discolouration of swab) and the discharge water is clear and approved by the Municipality of Southwest Middlesex Representative.

Hydrants laterals shall be manually swabbed using a chlorine slurry as directed by the Municipality of Southwest Middlesex Representative. Method for swabbing watermains larger than 450mm in diameter shall be as specified in the Contract, if applicable.



**608. SWABBING, FLUSHING AND DISINFECTION OF WATERMAIN (cont'd)**

Foam swabs to be supplied by the Contractor. Mains shall be cleaned or flushed before hydrostatic testing and disinfection is done.

When the required flushing has been completed satisfactorily, the Contractor shall proceed with disinfection of the system as specified below, in accordance with O.P.S.S. 701.

The Contractor shall note that all time and materials costs incurred by Southwest Middlesex Operating Authority, including water, material, supplies, etc. will be charged back to the General Contractor upon project completion.

**b) Disinfection**

The main shall be disinfected according to instructions listed in AWWA C651 and the "Procedure for Disinfection of Drinking Water in Ontario" as adopted by reference by Ontario Regulation 170/03 under the Safe Drinking Water Act. Sections 4.3.9 Backflow Protection and 4.6 Final Connections to Existing Mains of AWWA C651 are required and are not optional. The backflow device certification (certification tag on device) is to be witnessed by the Municipality of Southwest Middlesex Water Operations and/or Contract Administrator. The Contractor must supply all labour and materials necessary for the sterilization of the pipe. Places where flushing may be done, rates of flushing and location of drainage points must be approved by the Municipality of Southwest Middlesex Water Operations Representative and in accordance with the Contract Administrator prior to the operation as noted above.

The Municipality of Southwest Middlesex Water Operations Representative may permit or require the swabbing, flushing and disinfection to be carried out in stages as sections of the system are completed. Swabbed, flushed, and disinfected sections shall be protected from contamination.

The system shall be left charged with the chlorine solutions for 24 hours. Samples shall be taken by the Municipality of Southwest Middlesex Water Operations Representative. If there is indication of contamination, the disinfection procedure shall be repeated.

More than two (2) samples will be taken, in accordance with the Ontario Watermain Disinfection Procedure and AWWA.

After final flushing and before the new watermain is connected to the distribution system, two (2) consecutive sets of acceptable samples, taken at least twenty-four (24) hours apart, shall be collected from the new main.

The new watermain will not be connected to the Municipality's distribution system until all samples show the absence of Total Coliform, E.Coli and Background. Once all sampling is to the satisfaction of the Operating Authority, clearance will be given to connect to the Municipality's distribution system. The Contractor will not be reimbursed for any down time associated with awaiting test results.



**608. SWABBING, FLUSHING AND DISINFECTION OF WATERMAIN (cont`d)**

The Contractor shall note that the Municipality of Southwest Middlesex will take two (2) water samples from each section of watermain to be tested, and deliver the samples to the laboratory for analysis, at the cost of the Contractor. The timing for obtaining the water samples shall be co-ordinated by the Contractor with the Municipality of Southwest Middlesex. All costs related to performing sampling, delivery, and laboratory analysis required due to failed samples shall be paid in full by the Contractor.

The Contractor shall note that all time and materials costs incurred by Southwest Middlesex Operating Authority, including water, material, supplies, etc. will be charged back to the General Contractor upon project completion.

**609. INSTALLATION OF WATER SERVICES****609.1 GENERAL**

This specification covers the installation of water services up to 150mm in diameter. Services of larger diameter shall be installed in accordance with the preceding specifications governing watermain construction.

The Contractor shall furnish all materials and lay all services as shown on the Contract Drawings and as specified herein.

Prior to the start of service installation a qualified representative of the pipe manufacturer shall demonstrate to the contractor and the Engineer the proper tools and method of tapping the pipe. The Contractor shall follow this recommended procedure.

The Engineer will not allow the service installation to proceed until stakes are set to indicate boundaries of the lot and the exact location of the service.

Where water is to be taken into a building lot from a watermain located upon or under an adjacent thoroughfare, the stub service shall be installed in a straight line from and measured at right angles to the watermain. The curb stop shall be located 300mm from the street line on the Municipal side of the line, unless otherwise noted on the drawings.

The Contractor is responsible for verifying the exact location of all proposed individual water services and curb stops in the field prior to construction in consultation with the Engineer and the Municipality of Southwest Middlesex. All water service locations both shown and not shown on the drawings are not guaranteed.

The property owner may, with the written permission of the Engineer, install the stub service at any point on the lot frontage, provided that the finished service shall be at right angles to the main, in a straight line from the main to the street line.



**609. INSTALLATION OF WATER SERVICES (cont'd)****609.2 LOCATION OF SERVICE**

The Contractor is responsible for verifying the exact location of all proposed individual water services and curb stops/valves in the field prior to construction in consultation with the Engineer and the Municipality of Southwest Middlesex. All water service locations both shown and not shown on the drawings are not guaranteed.

The property owner may, with the written permission of the Engineer, install the stub service at any point on the lot frontage, provided that the finished service shall be at right angles to the main, in a straight line from the main to the street line.

**609.3 INSTALLATION OF SERVICES**

Main cocks shall not be spaced closer than 450mm and shall be tapped at the 2:00 o'clock or 10:00 o'clock position only and left fully open by the Contractor. Service pipe shall be at a depth of not less than 1700mm and not more than 2000mm below the final grade.

Service connections passing under roadside ditches shall have a minimum of 1700mm cover at all times and shall be installed at a depth of not less than 1850mm at the property line.

A "Goose Neck" shall be formed into the service pipe, "laid over" into a horizontal position. Service pipe shall be continued to the curb stop, which shall be located 300mm from the street line, and on the street side of the property line. The curb stop shall be securely positioned on a standard bottom board and left fully closed. No other method of positioning the curb stop will be accepted. The curb box shall sit squarely over the curb stop and the bottom board. The top section of the box shall be adjusted to grade.

Service taps shall be done with a tapping machine. Any other method is not acceptable. Saddles shall be torqued as per manufacturers specifications.

**610. MEASUREMENT AND PAYMENT****610.1 MEASUREMENT**

Measurements for payment for the watermain will be made horizontally along the centerline of the trench through all fittings and valves except between vertical bends where measurement will be made along the centre of the pipe including all fittings. Water services will be measured along the centerline of the pipe and through the fittings.

Separate measurements will not be made for watermain pipe fittings.

Measurements for payment of service fittings if paid for under a separate item in the Schedule of Items and Prices will be made for each of the type and size used as specified herein. Service boxes for curb stops will not be measured.



**610. MEASUREMENT AND PAYMENT (cont'd)**

Gate valves, including hydrant shut-off valves, will be measured for each of the size supplied, complete with valve box.

Hydrants will be measured for each supplied, complete, including hydrant laterals between the main and hydrant.

**610.2 PAYMENT**

Payment will be made in accordance with the following methods:

Watermain - The unit price tendered per linear meter of watermain installation appearing in the Form of Tender shall be compensation in full for the installation of the pipe conforming to specifications described herein, including equipment to satisfactorily complete the work in all respects as specified herein and as shown on the Contract Drawings. Swabbing, pressure testing, leakage tests, chlorination, and pipe disinfection, including recapping of swab tee(s) will not be paid for separately but shall be deemed to have been included in the payment for "Supply and Install Watermain Pipe".

Pipe Fittings - Supply and installation of all required fittings, including tees, bends, and reducers, will not be paid for separately but shall be deemed to have been included in the payment for "Supply and Install Watermain Pipe".

Gate Valves - The unit price tendered per valve supplied and installed, complete with extensions of valve box to satisfaction of the Engineer.

Fire Hydrants - The unit price tendered per fire hydrant supplied and installed, complete, including all excavation and backfill, stone or gravel fill, the section of P.V.C. lateral pipe between the main and hydrant, 300mm riser section, hydrant shut-off valve and box, and the concrete backing as specified herein.

Service Connection - The unit price tendered per linear meter of service pipe laid to include for the supply of all labour, materials, and equipment to satisfactorily complete the work in every respect as specified herein and as shown on the work in every respect as specified herein and as shown on the Contract Drawings. Payment for the main stop and curb stop including service shut-off box will be made in accordance with the tendered unit prices for these items appearing in the Form of Tender for the sizes specified and shall be deemed to be compensation in full for the supply of all labour, materials, and equipment.

Measurement and payment for watermain and service connections installed by boring or augering methods shall be as specified elsewhere in these specifications.

50mm Blowoff - The unit price tendered per blowoff to include for the supply of all labour, materials, and equipment to satisfactorily complete the work in every respect. Blowoffs not installed at watermain dead ends shall be connected to the watermain using service clamps and saddles as specified herein.



**611. RESTRAINED PIPE JOINT SYSTEM**

All fittings shall be installed with mechanical restraints. Restraint devices to meet or exceed the minimum requirements of ASTM F 1674-96, be UL listed and FM approved.

Restraining glands (100 to 300mm) to be manufactured of high strength ductile iron conforming to the requirements of ASTM A536, Grade 65 45 12 m (min) (400 to 600mm) shall be manufactured of structural steel conforming to the requirements of ASTM A36. Pipe joint restraints shall be designed for the same design, test, and surge pressure ratings as the pipeline in accordance with AWWA-M23 PVC pipe design and installation.

All restraints are to be installed as per the manufacturer's specifications and torqued using a calibrated torque wrench. If the contractor uses power equipment during installation, it shall be set so as not to over torque the bolts. Final torquing of bolt shall be done using a torque wrench set to the proper torque.

All fittings and joints must be restrained as determined by the manufacturer and approved by the Municipality and noted on the drawings. At minimum, no less than three (3) joints (minimum 18.0 m length) in each direction from each fitting, valve and dead end must be restrained. Refer to Standard Drawing SD-24.

**612. THRUST RESTRAINT**

Thrust restraints shall be designed to be adequately provided by mechanical restraint devices as detailed on Drawing SD-24 of the current Municipality of Southwest Middlesex Design Standards.



SECTION 7

SPECIAL PROVISIONS

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**701. REMOVAL OF TREES**

It is the intent of this Contract to preserve as many trees as possible along the line of the work. Where a tree not noted for removal appears along or adjacent to the line of the work, the Contractor shall either re-route the line or bore under the tree as ordered by the Engineer. The Contractor shall not remove any trees unless ordered to do so by the Engineer or as noted on the drawings and within the Form of Tender.

The installation of pipe sleeve, measurement and payment if required by the Engineer under a tree, shall be as specified in OPSS.

**702. RESTORATION OF TILE DRAINS**

The Contractor may encounter tile drains in the process of installing the watermain or sanitary sewer and appurtenances as specified herein. The Municipality of Southwest Middlesex will provide personnel to supervise the replacement or correction of tile drains encountered during construction.

Any damaged corrugated steel pipe (CSP) or plastic pipe must be replaced with the same size and type of material with the appropriate manufacturer supplied clamp or coupler. Filter cloth shall be wrapped around each repair location. Backfill with approved native material.

**703. WORKING DAY, CONSTRUCTION SCHEDULE, WINTER HEAT**

A Working Day is as defined in OPSS GC1.04 DEFINITIONS.

The Engineer will furnish the Contractor with a weekly statement showing the number of working days charged to the Contract for the preceding week, the number of working days specified for completion of the Contract, and the number of working days remaining to complete the Contract. The Contractor will be allowed one week in which to file a written protest setting forth in what respects the said weekly statement is incorrect, otherwise, the statement shall be deemed to have been accepted by the Contractor as correct.

The number of working days to complete all work including stripping topsoil, earthworks, watermains, storm and sanitary sewers, SWM pond, and all surface works shall be ninety (90) days in 2026. The anticipated start date is April 20, 2026. Surface paving shall be completed in 2027, no later than the end of June 2027.

Two weeks in advance of construction the contractor will be required to submit a detailed construction schedule for review by the Municipality and the Contract Administrator.

Tenderers are to note that compensation for winter heat or delays/slowdowns for work completed after October 31, 2026, shall not apply, under any circumstances. An April 20, 2026, start date with a September 19, 2026, completion date allows for 90 working days, 19 rain days and 4 statutory holidays.

**704. WORK PERFORMED WITHIN ROAD RIGHT-OF-WAY**

The Contractor will be required to notify the Municipality of Southwest Middlesex and Engineer at least 7 days prior to the commencement of work within the road rights-of-way.



**704. WORK PERFORMED WITHIN ROAD RIGHT-OF-WAY (cont'd)**

The Contractor will be required to obtain a Road Opening Permit from the Municipality of Southwest Middlesex for work to be undertaken within their roadway.

At locations where "open cut" trench excavation method is employed the surface trench width is not to exceed the width to conform with the requirements of the Occupational Health and Safety Act and approved by the Municipality of Southwest Middlesex. The trench shall be backfilled with granular material compacted to 100% Standard Proctor Density for the full depth. The use of native material will only be Permitted upon approval of the Engineer and Municipality of Southwest Middlesex. Granular 'B' shall extend from the top of pipe bedding to the underside of the Granular 'A' compacted in layers to achieve the required result. Granular 'A' shall not be less than 150mm compacted depth. The finished grade of the Granular 'A' shall be such to allow the required courses of hot-mix asphalt as noted on the Design Cross-Section Drawing. No settlement of the pavement

structure will be acceptable when the work is completed and if settlement occurs and is evident during the final inspection at the end of the warranty period the Contractor shall repair the pavement structure to the satisfaction of the Engineer and the Municipality of Southwest Middlesex. Such repair may require and not be limited to re-excavation of the trench and supply and place non-shrinking cement grout mixed with the granular materials.

No additional measurement and payment will be made for the special provisions described herein or required by the Municipality of Southwest Middlesex. The cost shall be deemed to have been included in the unit prices submitted in the Form of Tender.

**705. CONNECTION TO EXISTING WATERMAIN**

Under this Item, the Contractor shall supply all labour, materials, and equipment to connect to the existing watermain at the locations indicated on the Contract Drawings and described in the Form of Tender.

Connection to the existing watermain shall not be effected until after the completion of successful pressure testing, disinfection and sampling of the watermain constructed under this Contract. The connection shall be undertaken in such a manner so as to minimize the interruption of water service to customers to be fully co-ordinated with the Municipality of Southwest Middlesex.

No measurement for payment will be made for this Item. Payment will be made in accordance with the lump sum price tendered for the connection complete in every respect to the satisfaction of the Engineer.

**706. SWABBING OF WATERMANS**

Swabbing operation shall be under the control of the Engineer. The Engineer shall be notified at least 48 hours in advance of the proposed date on which such operation is commenced. The Contractor shall submit his plan for the swabbing operation to the Engineer for approval.

A minimum of three (3) foam swabs shall be supplied by the Contractor. Mains shall be cleaned and flushed before hydrostatic testing and disinfection are done.



**706. SWABBING OF WATERMAINS (cont'd)**

All watermains shall be swabbed and flushed in a sequence and in accordance with procedure approved by the Engineer. The Engineer may permit or request the swabbing and flushing to be carried out in stages. Swabbed and flushed sections shall be protected from contamination.

All watermains up to 300mm diameter shall be cleaned by the use of a minimum of three (3) foam swabs introduced at hydrants or at special entering sections and forced by water pressure through the main to exit points approved by the Engineer. Cleaning shall be repeated until the discharge water is clear and approved by the Engineer/Municipality.

At all locations where connection is to be made to the existing watermain, a swab launch of the appropriate size shall be used.

**707. ENVIRONMENTAL PROTECTION**

The Contractor shall include with the construction schedule required an environmental protection scheme detailing environmental protection measures proposed by the Contractor. This scheme should include but not be limited to spills response, contact numbers, location of storage of onsite materials, i.e., diesel fuel tanks and containment measurements, spoil management, equipment refuelling and maintenance areas, etc.

**708. ASPHALT CEMENT PAYMENT ADJUSTMENT**

The Contract Administrator shall make an Asphalt Cement Payment Adjustment to reflect OHMPA formula which states:

The payment adjustment per tonne will apply to the quantity of asphalt cement in the hot mix accepted into the work during the month for which it is established. The payment adjustment for the month will be calculated by the following:

1. When AC Prices are Rising by more than \$15.00/tonne difference: the payment adjustment to be paid to the Contractor is the result of subtracting the latest published price index when the tender closed from the price index in effect when paving took place, minus the \$15.00 float, multiplied by the number of tonnes of PGAC incorporated in the mix as determined by the job mix formula. If the answer is negative, no adjustment is made.
2. When AC Prices are Falling by more than \$15.00/tonne difference: the payment adjustment made in favour of the Owner is the result of subtracting the price index in effect when paving took place, plus \$15.00 float from the latest published price index when the tender closed, multiplied by the number of tonnes PGAC incorporated in the mix as determined by the job mix formula.

The quantity of new asphalt cement includes all grades of asphalt cement supplied by the Contractor with and without polymer modifiers. For each month in which a payment adjustment has been established, the quantity of the escalation/de-escalation will be calculated using the hot mix quantity accepted into the work and its corresponding asphalt cement content as required by the job mix formula.



**708. ASPHALT CEMENT PAYMENT ADJUSTMENT (cont'd)**

A mark up on the Payment Adjustment will not apply to the asphalt Cement Payment Adjustment.

Payment adjustment may result in additional compensation to the Contractor or a rebate to the Owner.

The Municipality of Southwest Middlesex will not compensate the general contractor for any mark-ups above the calculated A/C adjustment.

**709. WATER REQUIRED FOR TESTING**

All water required by the Contractor to perform the required flushing, swabbing, pressure testing, chlorination, de-chlorination, hydro-excavation, etc. of the proposed watermain will be supplied by the Municipality of Southwest Middlesex at no charge. The Municipality of Southwest Middlesex may measure the volume of water supplied to the project at meters to be installed during construction

Requests for volume and timing for water to be supplied for this project must be fully coordinated with Mr. Mauro Castrilli, Municipality of Southwest Middlesex, to ensure the capacity of the existing water network is not compromised.

**710. HALF-LOAD ROAD RESTRICTIONS**

The Contractor shall familiarize himself with any/all half-load restrictions on Municipality and County roads.

**711. EXISTING WATERMAIN AND GAS LINE MARKER**

As noted in the Form of Tender, the Contractor is required to expose the existing watermains and/or utilities/sewers at locations specified on the plans to determine their respective location and depth. This shall be performed by hydro-excavation. All exposed watermain and utilities or sewers shall be "marked" by the Contractor in such a manner as to allow simple verification by both the Contractor and Engineer of its location and depth. Placement of a set length or calibrated 50mmx100mm wood board or 75mm diameter PVC DR28 pipe would be possible options. Such markers must remain in place until both proposed watermain and/or water services, including surface and ditch restoration, has been completed. The gap between the hydro-excavated hole and the marker must be filled with imported bedding sand.

**712. DISPOSAL OF EXCESS MATERIAL**

The Earth Excavation item in the Form of Tender has been revised to take into account O. Reg 406/19 which came into effect January 1, 2023. The disposal of excess soils off-site is not anticipated for this project. Any excess soils are anticipated to be re-used on site.

All costs associated with handling and reusing excess material onsite shall be included in these items. The Form of Tender quantities are estimates and will be confirmed during construction. The unit price tendered for these items will apply to the ultimate construction quantities. Payment shall be per m<sup>3</sup> of material excavation undertaken and disposed of onsite under the appropriate items.



**713. DENSO TAPE**

For clarification, all proposed mechanical joint fittings, valves, tees, bends, hydrants, etc. shall be protected with "denso" paste, profiling mastic and LT tape as per the manufacturer's instructions.

**714. GRANULAR 'A' AND 'B' (SELECT)**

Granular 'A' and 'B' (Select) material shall conform to the latest O.P.S.S. 1010. Subsection 1010.05.03 is amended by the addition of the following: "Granular 'B' - Select" physical requirements shall conform with "Table 1 Physical Requirements" Granular 'B' Type 1 and the following gradation chart:

GRANULAR 'B' SELECT	
SIEVE SIZE	% PASSING
100.0mm	100
37.5mm	65-100
22.4mm	57-90
4.75mm	25-75
1.18mm	10-65
0.300mm	5-35
0.075mm	0-8

**715. LANE MARKINGS**

Pavement markings shall be paint in accordance with O.P.S.S. 532 Standards and Specifications. Lengths to be paid in this item shall be for "installed" lengths.

**716. ROADWAY CATCHBASINS**

For clarification, all existing catchbasins located along Industrial Road must remain in place during construction.

**717. BOULEVARDS**

Sub-Section 129(X) General Restoration and Site Cleanup of Section 1 General Provisions shall apply except as modified herein.

The Contractor shall place 150mm salvaged topsoil on the boulevard areas between the property line and the new curbs. The Contractor shall apply maintenance watering and shall repair any break or displacement of hydroseed, until thirty (30) days after hydroseed placement. Cost for this restoration shall be made at the unit prices tendered under the applicable items in the Form of Tender.

The finished grade of the boulevards shall match into proposed grades at property line. The topsoiled areas shall be hydroseeded.



**718. HYDROSEED AND MULCH**

All materials shall be measured accurately before being charged into the seeder at the following rates:

- |  |                                       |
|--|---------------------------------------|
| 1. Grass seed at 168 kg/ha.                      | 3. Water at 5,617 L/min/ha.           |
| 2. Nurse crop seed, where specified at 67 kg/ha. | 4. Fertilizers at the specified rates |

Fertilizers shall be based on the following minimum rates and shall be considered as being included in the contract price: superphosphate at 560 kg/ha. and 5-20-20 at 560 kg/ha.

**719. FROST STRAPS AND WATERPROOFING (SANITARY MANHOLES)**

All sanitary manholes are required to have Frost Straps as per OPSD 701.100. Frost Straps shall be hot dipped galvanized. Frost Straps may be modified with the approval of the Contract Administrator.

Sanitary manholes shall be externally wrapped with waterproof membrane placed around all precast joints, including joints below the maintenance hole frame and cover, with a 300mm wide strip of Mel-Rol/Mel-Prime or equivalent. Substitutions must be approved by the Contract Administrator.

The cost of the Frost Straps and waterproofing shall be included in the appropriate sanitary manhole items in the Form of Tender.

**720 CONSTRUCTION LAYOUT AND GRADE CONTROL**

The Contractor shall furnish, at his own cost, all survey stakes, grade sheets, lines and levels on the Contract.

Marks and points of reference are shown on the drawings and are to be used by the Contractor in setting out the work. From the benchmarks and points of reference, the Contractor shall perform his own layout.

The Contract Administrator may check the Contractor's surveys and the Contractor shall make all relevant data available and ensure that the Contract Administrator is provided convenient access to all locations where the work is to be carried out.

The Contractor shall supply and maintain road station markers along both sides of the ROW at 20-meter intervals for the duration of the work. The use of GPS equipment does not negate this requirement.

When installing new sewers, the Contractor shall set the next upstream or downstream manhole on the proposed run for proper alignment of proposed stubs. If manhole locations are not provided, a point 100 meters away (or as the site will allow) is to be set for use as line.

The Contractor shall be responsible for the true and proper setting out of the works and for the correctness of the position, levels, dimensions and alignment of all parts of the works and for the provision of all necessary instruments and labour in connection therewith.



**720. CONSTRUCTION LAYOUT AND GRADE CONTROL (cont'd)**

If at any time during the progress of the works any error shall appear or arise in the position, levels, dimensions or alignments of any part of the works, the Contractor shall, at his own expense, rectify such error to the satisfaction of the Contract Administrator, unless such error is based on incorrect data supplied in writing by the Contract Administrator.

All centerlines and grades shall be subject to checking by the Contract Administrator and the Contractor shall cooperate with such checking at suitable intervals as required by the Contract Administrator.

The checking of the layout of any lines or levels by the Contract Administrator shall not in any way release the Contractor of his responsibility for the correctness thereof, and the Contractor shall carefully protect and preserve all benchmarks, stakes and other items used in setting out the works.

The Contractor shall have a competent representative record lines and grades of new installations which shall be made available to the Contract Administrator as requested.

The Contractor shall provide the Contract Administrator at least 24 hours' notice for checking of layout work.

The Contractor shall allow for supervised use of the handheld GPS equipment by the Contract Administrator.

**721. COLD WEATHER WORK**

The intent is for this Contract to be complete before the cold weather season starts. Should the Contractor be on site during weather that does not meet specification for placement of material, i.e. asphalt and concrete, the Owner requires, at minimum, a warranty for those products supplied. If, at any time, the temperatures during placement of materials meet the required specification, a full warranty on product and workmanship is required by the Owner whether before or after the Contract Completion date.

Delays by the Contractor (including scheduling of subcontractors, or procurement of products) causing the working time to run past the Contract Completion date and into the cold weather season do not negate the above. Cold weather protection of material placed will be required at the sole expense of the Contractor.

Potential Contract extension time granted by the Contract Administrator for unrelated works, which extends the project past the original Contract Completion date and into the cold weather season will be evaluated on a case by case basis for payment.



# GENERAL CONDITIONS

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## 1. DEFINITIONS

- (a) The Contract Documents shall consist of the Signed Agreement, the General Conditions of Contract, the Drawings, and the Specifications, including all modifications thereof incorporated in any of the documents before the execution of the Agreement.
- (b) The Owner, the Contractor and the Engineer are those named as such in the Agreement. They are treated throughout the Contractor Documents as if each were of the singular number and masculine gender.
- (c) Wherever in this Contract the word "Engineer" is used it shall be understood as referring to the Engineer of the Owner, acting personally or through any assistants duly authorized in writing for such act by the Engineer.
- (d) The term "Sub-Contractor" includes only a person, firm or corporation having a contract for the execution of a part or parts of the work included in the general contract, and a person, firm or corporation furnishing material called for in the general contract and worked to a special design according to the plans or specifications but does not include one who merely furnishes material not so worked.
- (e) The term "other Contractor" means any person, firm, or corporation employed by, or having a contract directly or indirectly with, the Owner otherwise than through the Contractor.
- (f) The law of the location of the work shall govern the construction under this contract.

## 2. DOCUMENTS

The contract documents shall be signed in triplicate by the Owner and Contractor. The contract documents are complementary, and what is called for by anyone shall be as binding as if called for by all. The intention of the documents is to include all labour and materials reasonably necessary for the proper execution of the work. It is not intended, however, that materials or work not covered by or properly inferable from any heading, section or trade in the specifications shall be supplied unless distinctly so noted on the drawings. Descriptions of materials or work in words which so applied have well known technical or trade meanings shall be held to refer to such recognized standards. Should the specifications conflict with the drawings, the specifications shall govern.

In the case of discrepancies between drawings, those of larger scale, or if the scales are the same, those of later date shall govern. All drawings and specifications shall be interpreted in conformity with the Agreement and these General Conditions which shall govern.



### 3. DETAIL DRAWINGS AND INSTRUCTIONS

The Engineer shall furnish as necessary for the execution of the work additional instructions, by means of drawings or otherwise. All such additional instructions shall be consistent with the contract documents. The work shall be executed in conformity therewith and the Contractor shall do no work without such additional instructions. In giving such additional instructions, the Engineer shall have authority to make minor changes in the work, not inconsistent with the Contract. If either the Contractor or the Engineer so requests they shall jointly prepare a schedule, subject to change from time to time in accordance with the progress of the work, fixing the dates at which the various detail drawings will be required, and the Engineer shall furnish them in accordance with this schedule; and on like request, a schedule shall be prepared, fixing the dates for the submission of shop drawings, for the beginning of manufacture and installation of materials and for the completion of the various parts of the work.

### 4. COPIES FURNISHED

In addition to the signed triplicates of the contract documents the Engineer shall furnish to the Contractor, without charge to him, as many copies of all drawings and specifications as are reasonably necessary for the proper execution of the work.

### 5. SHOP DRAWINGS

The Contractor shall furnish to the Engineer, at proper times, all shop and setting drawings or diagrams which the Engineer may deem necessary in order to make clear the work intended or to show its relation to adjacent work of other trades. The Contractor shall make any changes in such drawings or diagrams which the Engineer may require consistent with the contract and shall submit sufficient copies of the revised prints to the Engineer for approval, all but one of which shall be returned to the Contractor if approved by the Engineer. When submitting such shop and setting drawings the Contractor shall notify the Engineer in writing of changes made therein from the Engineer's drawings or specifications. The Engineer's approval of such drawings or of the revised drawings shall not relieve the Contractor from responsibility for errors made by the Contractor therein or for changes made from the Engineer's drawings or specifications not covered by the Contractor's written notification to the Engineer. All models and templates submitted shall conform to the spirit and intent of the contract documents.

### 6. DRAWINGS AND SPECIFICATIONS OF THE WORK

The Contractor shall keep one copy of all drawings and specifications on the construction site, in good order, available to the Engineer and his representatives.

### 7. OWNERSHIP OF DRAWINGS AND MODELS

All drawings, specifications, and copies thereof and all models furnished by the Engineer are his property. They are not to be used on other work, and, with the exception of the signed contract set of the drawings and specifications, are to be returned to him on request on the completion of the work. Any models furnished by the Contractor or the Owner are the property of the Owner.



8. SAMPLES

The Contractor shall furnish for the Engineer's approval such samples as he may reasonably require. The work shall be in accordance with approved samples.

9. MATERIAL TESTS AND MIX DESIGNS

The Contractor shall furnish for the Engineer's approval such material tests and mix designs as he may reasonably require. The cost of providing the foregoing beyond the extent called for in the specifications shall be charged to the Owner. The work shall be in accordance with approved material tests and mix designs.

10. ENGINEER AND CONTRACTOR

The Engineer shall have general supervision and direction of the work, but the Contractor shall have complete control, subject to Section 13, of his organization. The Engineer is, in the first instance, the interpreter of the contract and the judge of its performance; he shall use his powers under the contract to enforce its faithful performance by both the parties hereto. In case of the termination of the employment of the Engineer, the Owner shall appoint a capable and reputable Engineer whose status under the Contract shall be that of the former Engineer.

11. THE ENGINEER'S DECISIONS

The Engineer shall decide on questions arising under the contract documents, whether as to the performance of the work or the interpretation of the specifications and drawings; but should the Contractor hold such decisions to be at variance with the contract documents, or to involve changes in work already built, fixed, ordered or in hand in excess of the contract, or to be given in error, he shall notify the Engineer before proceeding to carry them out. In the event of the Engineer and the Contractor failing to agree as to such change or error and the Engineer deciding to carry out such disputed work, the Contractor shall act according to such decision, any question of excess of cost due to the aforesaid cause being decided by arbitration in the manner hereinafter provided in Section 40.

12. SUB-SURFACE CONDITIONS

In the event that during the execution of the work sub-surface conditions at the location of the work are found to differ materially from those indicated in the contract documents or otherwise represented in writing by the Owner or Engineer to the Contractor then the Contractor shall promptly notify the Engineer in writing of such conditions. The Engineer shall promptly investigate such conditions and if he finds that they differ materially and will result in an increase or decrease in the cost of or time required for performance of this contract an equitable adjustment shall be made between the parties and the contract modified in writing accordingly. If the parties fail to agree, the dispute shall be determined by arbitration as provided for in Section 41 hereof.



13. SUPERINTENDENCE

The Contractor shall keep on the work, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Engineer. The superintendent shall not be changed except with the consent of the Engineer unless the superintendent proves to be unsatisfactory to the Contractor or ceases to be in his employ. The superintendent shall represent the Contractor in his absence and directions on minor matters given to him shall be given in writing to the Contractor. The Contractor shall give efficient supervision to the work, using his best skill and attention.

14. MATERIALS, APPLIANCES, EMPLOYEES

Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labour, water, tools, equipment, light, and power necessary for the execution of the work. Unless otherwise specified, all materials shall be new. Both workmanship and materials shall be of the quality specified. The Contractor shall not employ on the work any unfit person or anyone not skilled in the work assigned to him.

15. INSPECTION OF WORK

The Owner or the Engineer on his behalf and their representative shall at all times have access to the work wherever it is in preparation or progress and the Contractor shall provide proper facilities for such access and for inspection. If the specifications, the Engineer's instructions, the laws, or the ordinances of any public authority require any work to be specially tested or approved, the Contractor shall give the Engineer timely notice of its readiness for inspection, and if the inspection is by an authority other than the Engineer, of the date and time fixed for such inspection. Inspections by the Engineer shall be promptly made. If any such work should be covered up without approval or consent of the Engineer, it must, if required by the Engineer, be uncovered for examination and made good at the Contractor's expense. Re-examination of quoted work may be ordered by the Engineer. If such work be found in accordance with the contract, the Owner shall pay the cost of re-examination and replacement. If such work be found not in accordance with the contract, through the fault of the Contractor, the Contractor shall pay such cost.

16. REJECTED WORK AND MATERIALS

All materials which do not conform to the requirements of Contract Documents or are not equal to samples approved by the Engineer, shall be rejected. Any defective work whether the result of poor workmanship, use of defective materials, damage through carelessness or by any act or omission of the Contractor shall be removed within ten (10) days after written notice is given by the Engineer, and the work shall be re-executed by the Contractor at his expense.

If the Contractor does not remove such condemned materials or work within the time fixed by written notice, the Owner may remove them and may store such materials at the expense of the Contractor. If the Contractor does not pay the expense of such removal within five (5) days thereafter, the Owner may, upon ten (10) days' written notice, sell such materials at auction or at private sale and shall account to the Contractor for the net proceeds thereof, after deducting all the costs and expenses that should have been borne by the Contractor.



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17. DEDUCTIONS OF UNCORRECTED WORK

If in the opinion of the Engineer it is not expedient to correct defective work or work not done in accordance with the contract documents, the Owner may deduct from the contract price the difference in value between the work as done and that called for by the contract, the amount of which shall be determined in the first instance by the Engineer.

18. CORRECTION AFTER FINAL PAYMENT

Neither the final payment certificate nor payment thereunder, nor any provision in the contract documents, shall relieve the Contractor from responsibility for faulty materials or workmanship, which appear within a period of one year from the date of certification of substantial completion of the work, and he shall remedy any defects due thereto, at no cost to the Owner and pay for any damage to other work resulting therefrom which appear within such period of one year. The Owner shall give notice of observed defects promptly. Questions arising under this Section shall be decided as provided in Sections 11 and 40.

19. EMERGENCIES

The Engineer has authority to stop the progress of the work whenever in his opinion such stoppage may be necessary to ensure its proper execution. In an emergency affecting or threatening the safety of life, or of the structure, or of adjoining property, he has authority to make such changes and to order, assess and award the cost of such work extra to the contract or otherwise as may in his opinion be necessary.

20. PROTECTION OF WORK AND PROPERTY

The Contractor shall maintain continuously adequate protection of all his work from damage and shall take all reasonable precautions to protect the Owner's property from all injury arising in connection with this contract. He shall make good any damage or injury to his work and to the property of the Owner resulting from the lack of reasonable protective precautions. He shall not be responsible, however, for any damage or injury to his work and to the property of the Owner which may be directly due to errors in the contract documents or caused by the Owner, his agents, or employees, provided the Contractor has taken reasonable protective precautions. He shall adequately protect adjacent property as required by law and the contract documents.

21. CONTRACTOR'S LIABILITY INSURANCE

The Contractor shall maintain such insurance or pay such assessments as will protect him and the Owner from claims under Workers' Compensation Acts and from any other claims for damages for personal injury, including death, and from claims for property damage which may arise from his operations under this contract. Certificates of such Insurance shall be filed with the Owner or the Engineer on his behalf and shall be subject to his approval as to adequacy of protection. Such Insurance shall be maintained until the Engineer certifies that the work is complete.



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22. GUARANTY BONDS

The Owner shall have the right to require the Contractor to furnish a bond covering the faithful performance of the contract including the corrections after final payment provided for in Section 18 hereof, and the payment of all obligations arising under the contract, in such forms as the Engineer may prescribe and with such sureties as he may approve. If such bond is required by written instructions given previous to the receipt of bids, the premium shall be paid by the Contractor; if subsequent thereto, it shall be paid by the Owner.

23. CHANGES IN THE WORK

The Owner, or the Engineer, without invalidating the contract, may make changes by altering, adding to, or deducting from the work, the contract sum being adjusted accordingly. All such work shall be executed under the conditions of the original contract except that any claim for extension or reduction of time caused thereby shall be adjusted at the time of order of such change.

24. APPLICATIONS FOR PAYMENTS

The Contractor shall submit to the Engineer an application for each payment, itemized in such form and supported by such evidence as the Engineer may direct showing this right to the payment claimed.

25. CERTIFICATES AND PAYMENTS

If and so often as the Contractor has made application for monthly payment by submitting to the Engineer the invoice, the Engineer shall, within twenty (20) working days of receipt of the application, approve the account for payment or advise the Contractor promptly in writing why the account is amended or disapproved. Such approval may provide for holdbacks sufficient to protect the Owner against all liens and may be withheld if the Engineer has received information that payments due to sub-contractors have not been made.

No payment made to the Contractor and no partial or entire use or occupancy of the work by the Owner shall be construed as an acceptance of any work or material not in accordance with this contract. The issuance of the final certificate shall constitute a waiver of all claims by the Owner otherwise than under Sections 18 and 27 of these conditions and the acceptance of such final certificate by the Contractor shall constitute a waiver by him of all claims except those previously made and still unsettled, if any. Should the Owner fail to pay the sum named in any certificate of the Engineer or in any award by arbitration, upon demand when due, the Contractor shall receive, in addition to the sum named in the certificate, interest thereon at the rate of prime plus 5% per year.

26. LIENS

Neither the final payment nor any part thereof shall become due until the Contractor, if required, for good and sufficient reason, shall obtain and deliver to the Owner a complete release of all liens arising out of this contract (other than his own) but the contractor may, if any sub-contractor refuses to furnish a release of such a lien, furnish a bond satisfactory to the Owner to indemnify him against any claim under such lien.

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27. PERMITS, NOTICES, LAWS AND RULES

The Contractor shall apply and pay for all necessary permits or licences required for the execution of the work (but this shall not include the obtaining of permanent easements or rights of servitude). The Contractor shall give all necessary notices and pay all fees required by law and comply with all laws, ordinances, rules, and regulations relating to the work and to the preservation of the public health and safety and if the specifications and drawings are at variance therewith any resulting additional expense incurred by the Contractor shall constitute an addition to the contract price.

28. PATENT FEES

The Contractor shall pay all royalties and licence fees and shall save the Owner harmless from loss on account of suits or claims which may arise by reason of the work for infringements of patents in force at the time of signing of the contract documents.

29. USE OF PREMISES

The Contractor shall confine his apparatus, the storage of materials and the operations of his workmen to limits indicated by law, ordinances, permits or directions of the Engineer and shall not unreasonably encumber the premises with his materials. The Contractor shall not load or permit to be loaded any part of the structure with a weight that in the opinion of the Engineer will endanger its safety. The Contractor shall enforce the Engineer's instructions regarding signs, advertisements, fires, and smoking.

30. CLEANING UP

The Contractor shall at all times keep the subject matter of the work free from accumulations of waste material or rubbish resulting from his operations, and at the completion of the work the Contractor shall remove all his rubbish and all his tools, equipment and surplus materials and shall leave the work "broom clean" or its equivalent, unless more exactly specified. In case of dispute the Owner may remove the rubbish and charge the cost as the Engineer shall determine to be just.

31. DELAYS

If the Contractor, through no fault or neglect on his part, is delayed in the completion of the work by any act or neglect of the Owner, Engineer or other Contractor, or any employee of any one of them, or if the Contractor is delayed in the completion of the work by changes ordered in the work, or by labour disputes, strikes, lock-outs (including lock-outs decreed or recommended by a recognized contractors' association for its members of which the Contractor is a member), fire, unusual delay by common carriers or unavoidable casualties or without limitation to any of the foregoing, by any cause of any kind whatsoever beyond the Contractor's control, then the time for completion shall be extended. All such extensions of time for performance shall be for a period of time equal to the time lost due to such delays and for such an additional period of time, if any, as may be approved by the Engineer provided that in order to obtain an extension of time for completion the Contractor shall notify the Engineer within seven (7) days of any occurrence which in the Contractor's opinion entitles him to an extension of time for completion except in the case of a continuing occurrence where one notice will be sufficient. In addition, and without limit to the foregoing, the time of completion shall be extended because of any cause whatsoever within the Contractor's control which the Engineer shall decide as justifying a delay for such reasonable time as the Engineer may decide.



**32. OWNER'S RIGHT TO DO WORK**

If the Contractor should neglect to prosecute the work properly or fail to perform any provision of this contract, the Owner after three (3) days' written notice to the Contractor, may without prejudice to any other remedy he may have, make good deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor; provided however, that the Engineer shall approve both such action and the amount charged to the Contractor.

**33. OWNER'S RIGHT TO TERMINATE CONTRACT**

If the Contractor should be adjudged as bankrupt, or is he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency or if he should, except in cases recited in Section 32, refuse or fail to supply enough properly skilled workmen or proper materials after having received seven (7) days' notice in writing from the Engineer to supply additional workmen or materials, or if he should fail to make prompt payment to sub-contractors or for material or labour, or persistently disregard laws, ordinances or the instruction of the Engineer, or otherwise be guilty of a substantial violation of the provisions of the contract, then the Owner, upon the certificate of the Engineer that sufficient case exists to justify such action, may, without prejudice to any other right or remedy, by giving the Contractor written notice, terminate the employment of the

Contractor and take possession of the premises and of all materials, tools, and appliances thereon and finish the work by whatever method he may deem expedient, but without undue delay or expense. In such case the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the contract price shall exceed the expense of finishing the work, including compensation to the Engineer for his additional services, such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the Owner. The expense incurred by the Owner as herein provided, shall be certified by the Engineer.

**34. CONTRACTOR'S RIGHT TO SUSPEND WORK OR TERMINATE CONTRACT**

The Contractor may suspend work or terminate the contract upon twenty-one (21) day's written notice to the Owner and the Engineer for any of the following reasons:

- (a) If an order of any court, or other public authority caused the work to be stopped or suspended for a period of forty-five (45) days through no act or fault of the Contractor or his employees.
- (b) If the Owner should fail to pay the Contractor the amount of an award within thirty (30) days after its award by arbitrators.

Upon suspension of the work or termination of the contract by the Contractor for any of the above reasons, the Contractor shall recover payment from the Owner for the work performed, plus loss on plant and materials, plus established profit and damages, as approved by the Engineer.



35. DAMAGES AND MUTUAL RESPONSIBILITY

If either party to this contract should suffer damage in any manner because of any wrongful act or neglect of other party or of anyone employed by him then he shall be reimbursed by the other party for such damage. Claims under this paragraph shall be made in writing to the party liable within a reasonable time after the first observance of such damage and not later than the time of final payment, except as expressly stipulated otherwise in the case of faulty work or materials, and shall be adjusted by agreement or arbitration, and the party reimbursing the other party as aforesaid shall thereupon be subrogated to the rights of the other party in respect of such wrongful act or neglect if it be that of a third party. Should the Contractor cause damage to any other Contractor on the work, the Contractor agrees upon due notice to settle with such other Contractor by agreement or arbitration, if he will so settle. If such other Contractor sues the Owner on account of any damage alleged to have been so sustained the Owner shall notify the Contractor who shall defend such proceedings at the Owner's expense and if any final order or judgement against the Owner arises therefrom the Contractor shall pay or satisfy it and pay all costs incurred by the Owner. Provided that if the Contractor becomes liable to pay or satisfy any final order or judgement against the Owner then the Contractor shall have the right upon undertaking to indemnify the Owner against any and all liability for costs, to appeal in the name of the Owner such final order or judgement to any and all courts of competent jurisdiction.

36. OTHER CONTRACTS

The Owner reserves the right to let other contracts in connection with the undertaking of which the work is a part and the Contractor shall connect properly and co-ordinate his work with that of other Contractors. If any part of the Contractor's work depends for its proper execution or result upon the work of any other Contractor, the Contractor shall in writing report promptly to the Engineer any defects in the work of such other Contractor as may interfere with the proper execution of the Contractor's work.

Should the Contractor fail so to inspect and report he shall have no claim against the Owner by reason of the defective or unfinished work of any other Contractor except as to latent defects not reasonably noticeable at the time of the commencement of the Contractor's work. In letting separate contracts the Owner shall take all precautions reasonably possible to avoid the possible occurrence of a labour dispute or disputes on the work.

37. ASSIGNMENT

Neither party to the Contract shall assign the Contract without the written consent of the other.

38. SUB-CONTRACTS

The Contractor shall, at the time of signing the contract, notify the Engineer in writing of the name of sub-contractors proposed for the principal parts of the work and for such others as the Engineer may direct and shall not employ any to whom the Engineer may reasonably object. If the change of any name on such list is required by the Engineer, and the work has to be awarded to a higher bidder, the contract price shall be adjusted accordingly by the difference between the two bids. The Engineer, shall, on request, furnish to any sub-contractor, wherever practicable, evidence of the amounts certified to on his account. The Contractor shall be held as fully responsible to the Owner for the acts and omissions of his sub-contractors and of persons directly or indirectly employed by them, as for the acts



38. SUB-CONTRACTS (cont'd)

and omissions of persons directly employed by him. In his view of this responsibility for the acts and omissions of sub-contractors, the Contractor shall not be obliged to employ as a sub-contractor any person or firm to whom he reasonably objects. Nothing contained in the contract documents shall create any contractual relation between any sub-contractor and the Owner.

39. RELATIONS OF CONTRACTOR AND SUB-CONTRACTOR

The Contractor agrees to bind every sub-contractor by the terms of the General Conditions, Drawings and Specifications, as far as applicable to his work.

40. CLAIMS, NEGOTIATIONS, MEDIATION AND ARBITRATION

With regard to all matters concerning claims, negotiations, mediation, and arbitration, the Ontario Provincial Standards (O.P.S.) Sections GC3.11 to GC3.15 shall apply.



**GEOTECHNICAL INVESTIGATION REPORT**



# Geotechnical Investigation Report

Glencoe Industrial Park, Glencoe, ON

**Spriet Associates Architects and Consulting Engineers**  
Final Report

February 11, 2026

OC04.02506021.000-GS-R-0001-00



**eNGLOBE**

# Spriet Associates Architects and Consulting Engineers

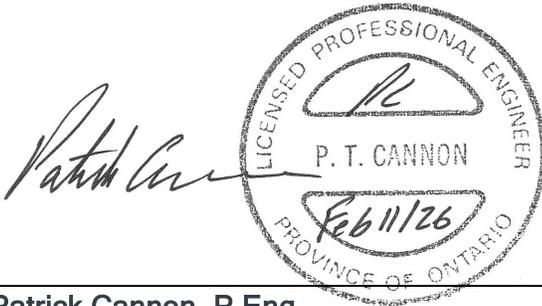
Prepared by:



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**Madhur Hallan, M.Eng.**  
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Approved by:



The seal is circular with the text "LICENSED PROFESSIONAL ENGINEER" around the top and "PROVINCE OF ONTARIO" around the bottom. Inside the seal, there is a handwritten signature "P. T. Cannon", the name "P. T. CANNON" printed in the center, and the date "Feb 11/26" handwritten at the bottom.

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**Patrick Cannon, P.Eng.**  
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### Revisions and publications log

REVISION No.	DATE	DESCRIPTION
00	February 11, 2026	Final version published

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## APPENDICES

Appendix A	Drawings
Appendix B	Borehole Logs
Appendix C	Geotechnical Lab Results
Appendix D	Traffic Data

# 1 General Information

Englobe Corp. (Englobe) was retained by the Spriet Associates Architects and Consulting Engineers to carry out a geotechnical investigation for the planned Glencoe industrial park to be located in Glencoe, Municipality of Southwest Middlesex, Ontario; shown on the Location Plan, Drawing 1 in Appendix A.

The proposed development consists of extending Tower Avenue by approximately 340 metres east to accommodate a new industrial park. Planned works include the installation of underground services—watermain, sanitary sewers, and storm sewers—together with the construction of a stormwater management facility and the roadway itself, complete with curbs and gutters. Based on the conceptual servicing plan, it is also noted that portions of the storm and sanitary services are to be installed within a rear yard easement. The proposed service installation depths are anticipated to be on the order of 2.6 to 3.5 m to invert for sanitary sewers with deepest service at 5.0 mbgs, 3.0 m to invert for storm sewers, and 2.0 m to invert for the watermain.

The purpose of this investigation was to explore the subsurface soil and groundwater conditions at the site. Based on the findings, we have prepared this engineering report with geotechnical recommendations for excavations and dewatering, pipe bedding, trench backfilling, and road construction including pavement design and curbs and sidewalks. In addition, chemical analyses were carried out on representative soil samples from each borehole, and the results are provided in the Englobe environment report, 02506021.0200.EN.0001.0A\_DDSCR.

## 2 Investigation Procedure

### 2.1 Field Program

#### 2.1.1 Drilling Program

The fieldwork for this investigation was performed on July 23 and 24, 2025 and involved the drilling of ten boreholes (Boreholes BH-01-25 to BH-10-25). The locations of the boreholes are shown on Drawing No. 2 in Appendix A, and the boreholes are listed on the Borehole Logs in Appendix B.

The field investigation was carried out in general conformance with the professional standards set out in the Canadian Foundation Engineering Manual (CFEM 2023, 5th Edition), applicable Ontario Regulations, and the ASTM International. The following is a summary of field investigation tasks:

- Local utility companies were contacted prior to the start of drilling activities in order to demarcate underground utilities on the site.
- The boreholes were advanced using a Diedrich D50 track mount drill rig equipped with continuous flight hollow stem augers supplied and operated by London Soil Test under the supervision of an Englobe drilling supervisor. The boreholes were logged by our geotechnical supervisor.
- Soil samples were recovered from the boreholes at regular depth intervals using a 50 mm outside diameter split spoon sampler in accordance with ASTM D1586 Standard Penetration Test (SPT) and the results are provided on the borehole logs (Appendix B).

- Combustible Soil Vapour (CSV) “headspace” readings were carried out on soil samples obtained from the boreholes using a RKI Eagle Portable-Gas Detector, Type 101, that was calibrated to hexane. The CSV readings are provided on the borehole logs (Appendix B).
- The borehole locations and ground surface elevations were surveyed by Englobe using a SX Blue Platinum Model MFREQ RTK Global Navigation Satellite System (GNSS) rover. The borehole locations were referenced to Universal Trans Mercator North American Datum of 1983 (UTM NAD83) coordinates; the zone reference (17N) has been excluded for presentation purposes. The ground surface elevations are geodetic, based on GNSS and local base station telemetry with a vertical root mean squared error of less than 20 mm.
- Groundwater measurements were taken in the open boreholes and are provided on the borehole logs (Appendix B).
- A monitoring well was installed in Borehole BH-7-25 to allow measurement of stabilized groundwater levels. The monitoring well was constructed using 50 mm diameter Trilock pipe with 1.5 m long 10 slots well screens, delivered to the site pre-cleaned in individually sealed plastic bags. The monitoring well was installed in accordance with O. Reg 903, as amended.
- The boreholes without monitoring wells were backfilled with bentonite in accordance with Ontario Regulation 903 as amended, under the Ontario Water Resources Act.

## 2.2 Laboratory Testing

All soil samples recovered during this investigation were returned to the Englobe laboratory for visual examination and moisture content testing on the recovered soil samples. The moisture content values are shown on the appended borehole logs and selected soil samples were submitted for particle size analyses, and Atterberg limits. Detailed descriptions and the results of the laboratory tests are provided in Appendix C and Section 3 of this report.

It is important to note that as per the standard policy of Englobe, the soil samples will be stored for a period of three months from the date of sampling. These soil samples will be discarded after three months unless prior arrangements have been made for longer storage.

# 3 Subsurface Conditions

The subsurface soil and groundwater conditions observed in the boreholes and the results of the field and laboratory testing are shown on the Log of Borehole sheets in Appendix B. A list of abbreviations and symbols is provided to assist in the interpretation of the borehole logs. It should be noted that the boundaries between the strata have been inferred from drilling observations and non-continuous samples. These boundaries generally represent a transition from one soil type to another and should not be inferred to represent exact planes of geological change. The subsurface conditions will vary between and beyond the locations investigated.

## 3.1 Soil Conditions

For the purposes of geotechnical design, the following discussion has been simplified to focus on the major soil strata. In general, the boreholes advanced at the site revealed topsoil at the ground surface, underlain by native soils consisting of Silt, Clayey Silt, Silt and Clay, Silty Clay Clayey Silt glacial till and Silt and Clay glacial till.

### 3.1.1 Topsoil

All boreholes were advanced on undeveloped land and observed topsoil at the ground surface. The thickness of the topsoil ranged from 50 mm to 150 mm. The topsoil generally consisted of silty and silty sandy soils. Topsoil found was brown in colour and observed to be moist at the time of drilling.

### 3.1.2 Silt and Clayey Silt

Silt and Clayey Silt deposits were observed beneath the topsoil in all boreholes. The thickness of these deposits varied across the site. Standard Penetration Test (SPT) N-values obtained within this stratum ranged from 7 to 20 blows per 305 mm of penetration, corresponding to relative conditions from loose/firm, and compact/very stiff. The natural moisture contents of the recovered samples ranged between 13 and 23 percent.

### 3.1.3 Silt and Clay, and Silty Clay

Silt and Clay, and Silty Clay deposits were observed beneath the Silt stratum in boreholes BH-01-25, BH-05-25, and BH-06-25. These deposits range in thickness from approximately 0.9 m to 1.7 m. Standard Penetration Test (SPT) N-values within these deposits varied from 9 to 21 blows per 300 mm of penetration, which is indicative of a stiff to very stiff consistency. The natural moisture contents of the recovered samples ranged between 17 and 21 percent.

### 3.1.4 Clayey Silt, Silt and Clay, and Silty Clay (Glacial Till)

Glacial till deposits, consisting of Clayey Silt, Silt and Clay, and Silty Clay soils, were encountered in all boreholes. All ten boreholes were terminated in the Silt and Clay glacial till stratum. Standard Penetration Test (SPT) N-values obtained in the till ranged from 11 to 26 blows per 300 mm of penetration, indicating a stiff to very stiff consistency. The natural moisture contents of the recovered samples were measured in the range of approximately 15 to 24 percent.

## 3.2 Groundwater

Groundwater observations and measurements carried out in the open boreholes and monitoring well installed in Borehole BH-7-25 are presented on the appended borehole logs and summarized in Table 1 below.

Table 1: Water Level Measurements

Borehole No.	Ground Surface Elevation (m)	Un-stabilized Groundwater Elevation / Depth (m)	Stabilized Groundwater Sept 15, 2025 Elevation/Depth (m)	Stabilized Groundwater Dec 18, 2025 Elevation/Depth (m)
BH-7-25/MW	218.0	-	5.3/212.6	2.05/215.95

It is important to note that the groundwater conditions described in this report refer only to those observed at the place and time of observation noted in the report. These elevations and conditions may vary locally due to seasonal fluctuations, groundwater regimes encountered at the site or as a consequence of construction activities on the site or adjacent sites.

# 4 Design Recommendations

## 4.1 Tower Avenue extension - Pavement Design

For pavement design purposes, Tower Avenue is considered a rural minor Local Road. The minimum required pavement component thicknesses as provided in the Design and Construction Standards for the Municipality of Southwest Middlesex 2021 is provided in Table 2 below.

**Table 2: Township of Southwest Middlesex Minimum Pavement Component Thicknesses**

Pavement Component	Structural Layer Coefficient	Drainage Coefficient	Tower Avenue (Urban Local) Thickness (mm)
Hot-Mix Asphalt	0.42	1.0	90
Granular A (Base Course)	0.14	1.0	150
Granular B (Subbase Course)	0.09	1.0	300
Structural Number (SN)			86 mm

The Structural Number (SN) was calculated in accordance with Appendix D of the *Adoption and Verification of the AASHTO Pavement Design Guide for Ontario Conditions* (MTO MI-183). The structural layer and drainage coefficients applied in the analysis were selected from the recommendations provided in Table D-9 of MTO MI-183.

To evaluate whether the Township of Southwest Middlesex's standard pavement structures would be adequate for the extension of Tower Avenue, Englobe estimated the design traffic loading in terms of Equivalent Single Axle Loads (ESALs). As measured traffic data for this section of roadway was not available from the Township, an Average Annual Daily Traffic (AADT) of 1,000 vehicles was assumed for design purposes. The assumed AADT of 1,000 reflects anticipated future traffic volumes associated with planned roadway expansion and industrial development, including increased truck traffic over the pavement design life, and is subject to revision should updated traffic data become available. Given Tower Avenue's rural setting, an annual growth rate of two percent (2%) was adopted. On this basis, ESALs were estimated in accordance with the procedures outlined in MTO MI-183. A summary of the traffic assumptions and resulting ESAL calculations is presented in Appendix D: Traffic Data.

Traffic volumes were calculated beginning in 2026 using the assumed AADT of 1,000 vehicles, two percent (2%) annual growth, and a truck percentage of twenty percent (20%) over a 20-year pavement design life. In the absence of a detailed traffic spectrum, truck factors were estimated from typical values presented in Tables D-3 and D-4 of MTO MI-183. A truck factor of 0.78 was considered appropriate for this roadway.

Based on these assumptions, the total cumulative traffic loading over the 20-year design life is estimated at approximately **705,600** ESALs. Supporting details are provided in Appendix D.

Pavement design recommendations were developed in accordance with the *1993 AASHTO Guide for the Design of Pavement Structures*, supplemented by MTO MI-183 (*Adaptation and Verification of the AASHTO Pavement Design for Ontario Conditions*, Revised March 19, 2008) and Englobe’s extensive experience with pavements of this type. For the analysis, the average resilient modulus of the subgrade was assumed to be 20 MPa, consistent with the values recommended in Table D-8 of MTO MI-183 for low-plasticity clays and compressible silts (CL, MH).

Table 3 summarizes the design parameters adopted for the structural evaluation of this roadway section.

**Table 3: AASHTO Structural Analysis Parameters**

Parameter	Design Values Tower Avenue
ESALs	705,600
Initial Serviceability	4.2
Terminal Serviceability	2.0
Reliability Level	85 %
Overall Standard Deviation	0.47
Estimated Resilient Modulus of Subgrade	20 MPa
<b>Calculated Design Structural Number</b>	<b>107 mm</b>

Based on the existing traffic levels and composition, and the assumptions and calculations outlined, the Township of Southwest Middlesex standard pavement component thicknesses (provided in Table 2) will not be sufficient for the subject roadway. A recommended design to meet the serviceability requirements for the Township of Southwest Middlesex is outlined in Table 4.

**Table 4: Township of Southwest Middlesex Recommended Pavement Component Thickness**

Pavement Component	Structural Layer Coefficient	Drainage Coefficient	Tower Avenue (Rural Minor Local) Thickness (mm)
Hot-Mix Asphalt	0.42	1.0	130
Granular A Base Course	0.14	1.0	150
Granular B Type I Subbase Course	0.09	1.0	400
<b>Structural Number (SN)</b>			<b>110</b>

## 4.2 Infiltration Assessment

The hydraulic conductivity of the grain-size distribution sample was evaluated using the fifteen (15) available empirical methods implemented in the spreadsheet *HydroGeoSieveXL ver. 2.2* (J.F. Devlin, University of Kansas, 2015). For the designated stormwater management facility area (BH-07-25), the calculated hydraulic conductivity is  $2.2 \times 10^{-8}$  cm/s, which corresponds to an estimated factored infiltration rate of less than 10 mm/hr.

The calculated hydraulic conductivity values and corresponding factored infiltration rates are summarized in **Table 5**.

**Table 5: Hydraulic Conductivity and Factored Infiltration Rates**

Borehole and Sample Number	Sample Depth (m)	Soil Classification	Hydraulic Conductivity (cm/sec)	Recommended Factored Infiltration Rate (mm/hr)
BH-07-25, Sa 8	6.1 - 6.56	CL	$2.2 \times 10^{-8}$	<10

It should be noted that hydraulic conductivity and infiltration rate are distinct concepts and as such, unit conversion does not apply.

Geological conditions are inherently variable. Information about the subsurface stratigraphy is only available at discrete borehole pit locations at the time of report preparation. To develop recommendations from the available information, it is necessary to make some assumptions concerning conditions at the site. Adequate inspection should be provided during construction to check that these assumptions are reasonable.

It is the responsibility of the designer to carry out field inspections at the time of installation to confirm that the soil and groundwater conditions are consistent with the design assumptions.

# 5 Construction Recommendations

## 5.1 Servicing

### 5.1.1 Excavations and Dewatering

The proposed service installation depths are anticipated to be on the order of 2.6 to 3.5 m to invert for sanitary sewers with the deepest service at 5.0 mbgs, 3.0 m to invert for storm sewers, and 2.0 m to invert for the watermain.

Based on the subsurface conditions, the native soils encountered at depths between 2 to 5 m below ground surface generally consist of competent materials suitable for supporting the proposed pipe installations and associated bedding. Where localized pockets of loose or unsuitable soils are encountered beneath proposed pipe inverts, sub-excavation should be carried out to competent strata and the excavated zones replaced with approved, well-compacted granular materials, such as Granular A or Granular B Type I.

Based on the soil conditions observed in the boreholes, open-cut excavation is considered to be the most practical and cost-effective method of construction. It is further noted that no free groundwater was observed in the boreholes advanced within the proposed roadway and service easement areas. However, the silty and clayey soils encountered may produce groundwater over time, and levels could fluctuate during construction.

Temporary excavations to conventional depths for installation of underground pipes at this site must comply with the Ontario Occupational Health and Safety Act and Regulations for Construction Projects.

The boreholes show that the excavations for the construction are expected to extend through surface topsoil, over native silt, clayey silt, silty clay, silt and clay, clayey silt (glacial till), silt and clay (glacial till), and silty clay (glacial till). As per the O.Reg 213/91, S.226, the soil at this site may be classified as shown in the Table 6 below.

**Table 6: Soil Classification for Excavations**

Soil Type	Above Groundwater Level	Below Groundwater Level
Silt, Clayey Silt	Type 3	Type 4
Silt and Clay, Silty Clay	Type 3	Type 4
Clayey Silt, Silt and Clay, Silty Clay (Glacial Till)	Type 2	Type 3

Where workmen must enter a trench or excavation the soil must be suitably sloped and/or braced in accordance with the regulation requirements. The regulation stipulates safe excavation slopes by soil type as Table 7.

**Table 7: Safe Excavation Slope Based on Soil Type (Ontario Regulation 213/91 Occupational Health and Safety Act (OHSA))**

Soil Type	Base of Slope	Steepest Slope Inclination
1	Within 1.2 metres of bottom of trench	1 horizontal to 1 vertical
2	Within 1.2 metres of bottom of trench	1 horizontal to 1 vertical
3	From bottom of trench	1 horizontal to 1 vertical
4	From bottom of trench	3 horizontal to 1 vertical

Where space limitations (from utility poles, existing underground services, or buildings) do not permit overburden cut slopes at inclinations specified above, a steeper cut slope can be employed if a trench liner box is used to protect workers. Trench box liners could also be used to minimize the size of the excavation for installation of the underground services therefore minimizing the excess soil which is removed from the site. Some ground movement adjacent to the trench is to be expected if this option is used.

It should be noted that trenchless method for the utility replacement can be an option and Englobe would be please to provide additional information if required.

Every prefabricated hydraulic or engineered support system shall be designed by a professional engineer and shall be constructed, installed, used in accordance with its design drawings and specifications (O.Reg. 213/91, s. 236).

It is anticipated that existing utility conduits, municipal services and/or gas lines will be exposed in the trenches for the new services. To ensure stability, the pipes should be properly supported in the vicinity of the excavation, and in accordance with the specific requirements of the utility provider. Englobe can provide supplementary recommendations for pipe support at specific locations if required. Precautions concerning services should be as per O.Reg. 213/91, s. 228.

### 5.1.2 Temporary Groundwater Control

During the field investigation, stabilized groundwater was measured at depths of 2.05 to 5.3 mbgs (Elevation 212.6 to 215.95 m) in the monitoring well installed in borehole BH-7-25. No free groundwater was observed in other boreholes; however, the silty and clayey soils encountered may produce groundwater over time, and levels could fluctuate during construction.

Proposed service installation depths are approximately 2.6 - 3.5 mbgs for sanitary sewers (deepest invert 5.0 mbgs), ~3.0 mbgs for storm sewers, and ~2.0 mbgs for the watermain. Excavations to these depths are expected to be manageable using conventional sump pumping techniques, with care taken to divert surface water from the excavation. Sump pits should be lined with geotextile filter fabric and filled completely with clean stone, with the pump inlet set within the stone. Unfiltered pumping can lead to migration of soil fines, loosening the soil and potentially causing ground surface settlement.

Moderate inflow is expected where excavations extend up to 0.5 m below the stabilized groundwater level. It is believed that this groundwater can be controlled using a gravity dewatering system with perimeter interceptor ditches and high-capacity pumps.

Excavations below 0.5 m below the stabilized groundwater may require a positive dewatering system installed by a specialist dewatering contractor to lower the groundwater level prior to excavating to maintain a safe and adequately dry excavation. Starting July 1, 2025, construction site dewatering activities that take more than 50,000 litres of groundwater, storm water or a combination of both per day will be subject to registration on the Environmental Activity and Sector Registry (EASR).

Residential foundation drainage systems that are taking less than 379,000 litres of water per day will be exempt from requiring a Permit to Take Water (PTTW). More details are provided on O.Reg. 63/16 and O.Reg. 387/04.

The contractor should decide on the method and technique of dewatering to maintain a stable base and side slopes based on the factual information provided in this report. It is also recommended that prior to construction, trial test pits be dug in order to evaluate the expected groundwater inflow and to determine best means to achieve adequate dewatering.

### 5.1.3 Pipe Bedding

Loose silt deposits may not provide adequate long-term support for the proposed pipe installations due to the potential for post-construction settlement. All trench bases should therefore be inspected by a qualified geotechnical engineer during excavation. Where loose soils are identified beneath the pipe inverts, sub-excavation to competent material will be required. Similarly, any organic soils (e.g., topsoil) encountered at any invert elevation must be fully removed.

Sub-excavated zones should be backfilled with OPSS.MUNI 1010 Granular A, placed in maximum 200 mm lifts and compacted to at least 100% of the Standard Proctor Maximum Dry Density (SPMDD). In general, stiff to compact native mineral soils or properly compacted granular fills are considered suitable to provide long-term pipe support.

Conventional bedding and cover in accordance with Township of Southwest Middlesex standards are appropriate. A minimum 150 mm thick bedding layer of OPSS.MUNI 1010 Granular A should be provided below the pipe, together with at least 300 mm of Granular A cover above the pipe crown. Bedding and cover materials should be placed in lifts not exceeding 150 mm in thickness and compacted to a minimum of 95% SPMDD.

## 5.1.4 Trench Backfill

The trench above the specified pipe bedding should be backfilled with inorganic soils that are not excessively wet. The backfill should be placed in maximum 200 mm thick lifts and each lift compacted to at least 100% SPMDD. Trench backfill within 1 m of the pavement structure should be compacted to 100% SPMDD. Based on the results of insitu moisture content tests carried out on the native overburden deposits, the materials excavated from above the groundwater table will typically be suitable for reuse as trench backfill; however, this will depend on the moisture contents at the time of construction. Material for reuse should be within 2% of the optimum SPMDD moisture content. Any overly wet material may require air drying or may need to be excluded from the backfill material. Organic material (topsoil) and fill containing debris (asphalt, brick, etc.) is not considered suitable for reuse as trench backfill and if encountered, shall be separated.

If there is a shortage of on-site excavated material, then it is recommended that material meeting the specifications of OPSS.MUNI 1010 Select Subgrade Material (SSM) be imported for trench backfill.

To minimize potential problems, backfilling operations should follow closely after excavation so that only a minimal length of trench is exposed. Care should be taken to protect side slopes of excavations by diverting surface run-off away from the excavations.

If construction extends into the winter, then the backfilling operations should be planned so that exposure of the backfill material to freezing conditions is kept to a minimum and to ensure that frozen material is not used as backfill.

Frequent inspection and compaction testing by experienced geotechnical personnel should be carried out to examine and approve backfill material, and to verify that the specified degree of compaction has been achieved.

## 5.2 Backfilling and Reuse of Excavated Material

Backfilling of trench excavations can be accomplished by reusing the excavated soils or imported granular soil, provided the moisture content of the material is maintained within  $\pm 2$  percent of optimum and the fill is free of topsoil, organics, and any deleterious material. The lift thickness of fill placed in excavated trenches should not exceed 200 mm and be compacted to not less than 98 percent of its standard Proctor maximum dry density (SPMDD).

The soils encountered at the site may be geotechnically suitable for reuse as backfill, provided the soil is free of organic material (topsoil) and its moisture content is within  $\pm 2$  percent of the optimum moisture content. The native soils above the groundwater level are likely to be near their optimum water content for compaction, whereas those below the groundwater level will likely be wet and well above their optimum water content for compaction.

Silt, clayey silt, and glacial till soil deposits at this Site are sensitive to small changes in moisture content and thus may be difficult to compact, unless they are allowed to dry to around their optimum moisture content (which may require significant time).

Control of moisture content during placement and compaction will also be essential for maintaining adequate compaction. If any materials are found to be wet, they may be left aside to dry or mixed with drier material that is to be used as backfill. All backfill materials should be placed in thin layers (200 mm thick or less) and compacted by a heavy, smooth-type roller to 98 percent of SPMDD.

All backfill operations and materials should be inspected and tested by qualified geotechnical personnel to confirm that proper material is utilized, and that adequate compaction is attained.

## 5.3 Surface Works

### 5.3.1 Curbs and Sidewalks

The concrete for sidewalks and curbs should be proportioned, mixed, placed, and cured in accordance with the requirements of Township of Southwest Middlesex Standard Specifications for Curb and Sidewalk, OPSS 353 for curbs and OPSS 351 for concrete sidewalks as well as CSA A23.1 and A23.2.

If new sidewalks are to be provided, the subgrade should comprise undisturbed native mineral soil or well-compacted fill. A minimum 150 mm thick layer of OPSS.MUNI 1010 Granular A type aggregate compacted to 100% SPMDD should be placed beneath the sidewalk slabs.

During cold weather, freshly placed concrete must be covered with insulating blankets to protect against freezing. It is recommended that a minimum of three cylinders from each day's pour should be taken for compressive strength testing. Air entrainment, temperature, and slump tests should be made from the same batch of concrete from which test cylinders are made.

### 5.3.2 Pavement Construction Recommendations

Following installation of the new services, the roadway will be constructed. Any existing organic soil and loose soils should be removed from below the pavement areas and if required, grades should be raised with approved on-site inorganic soils or imported granular materials. Subgrade fill and SSM for the roadways should be placed in maximum 200 mm thick lifts and compacted to at least 98% SPMDD, if greater than 1 m below the top of subgrade, and 100% SPMDD within the top 1 m of the subgrade.

The recommended pavement design, as outlined in Section 4.1 is provided in Table 8:

**Table 8: Recommended Pavement Component Thicknesses**

Pavement Component	Tower Avenue, Township of Southwest Middlesex Structure	Tower Avenue, Recommended Structure
HL3 Surface Course (mm)	40	50
HL8 Binder Course (mm)	50	80
Granular A Base Course (mm)	150	150
Granular B Type I Subbase Course (mm)	300	400
Total Depth (mm)	540	680

Prior to undertaking any pavement construction work, the roadway drainage and sub-drainage should be carefully assessed, noting that provision of proper drainage is fundamental to the performance of the roadway to mitigate frost-related movements and minimize seasonal loss of subgrade support (subgrade softening in spring). All subdrains should be located below the lowest elevation of granular material in the road base. Pavements should be provided with a continuous centre-to-edge cross fall of 3 percent at top of subgrade and 2 percent for granular layers.

Following construction of the services and preparation of the subgrade, the pavement reconstruction should be carried out in general accordance with Township of Southwest Middlesex guidelines, as follows:

**Englobe recommended structure:**

- The prepared subgrade should be proof-rolled in the presence of a qualified representative of a geotechnical engineering firm to check for weak spots and any soft or wet spots or other obviously objectionable materials (such as organic material, construction debris, etc.) should be sub-excavated and properly replaced with suitable, approved material;
- Install pavement subdrains in accordance with Township of Southwest Middlesex standards, OPSS 216.03;
- Construct the pavement subbase with 400 mm of OPSS.MUNI 1010 Granular B Type I and compact in lifts not exceeding 200 mm in loose thickness to 100% SPMDD;
- Construct the pavement base with 150 mm of OPSS.MUNI 1010 Granular A and compact to 100% SPMDD; and,
- Place two lifts of hot-mix asphalt: one 80-mm lift of OPSS 1150 HL 8 binder, and one 50-mm lift of OPSS 1150 HL 3 surface course, and compact in conformance with OPSS 310 requirements.

It is recommended that PG 58-28 be used in both the OPSS 1150 HL 8 binder course and HL 3 surface course hot-mix asphalt layers for this project. Performance graded asphalt cement (PGAC) PG 58-28 should conform to OPSS 1101 requirements.

A tack coat is recommended between all hot-mix asphalt layers.

Appropriate quality control/quality assurance laboratory and field testing of the pavement structure components (granular base and subbase and hot-mix asphalt) should be conducted. Compaction testing of the hot-mix asphalt should be carried out at the time of placement.

Englobe recommends that the surface course hot mix asphalt should be placed as soon as possible following placement of the binder course to ensure that the full pavement strength is available before regular traffic is allowed on the newly constructed roadway.

A joint transition treatment will be necessary where old and new pavement layers abut. Provided the existing pavement is 100 mm thick or greater, the recommended transition treatment consists of milling the existing surface layer approximately 300 mm wide and 50 mm deep to provide better pavement tie-in to adjacent new asphalt pavement structure.

It is recommended that all construction joints at the ends of the pavement be cleaned with stiff bristle brooms and compressed air to remove all dust, dirt and other foreign matter. A tack coat should be applied to all construction joints prior to the placement of hot-mix asphalt to ensure an adequate bond between the old and new pavements.

Systematic routine preventative maintenance is strongly recommended for all newly reconstructed or rehabilitated pavements. Crack routing and sealing will generally be required within 2 to 3 years of rehabilitation/construction. As the pavements ages, it will also be necessary to patch areas of medium to high severity distresses (i.e. potholes, ravelling). In some cases, routine maintenance may be considered to extend the life of an existing section by several years. For example, spray patching may be carried out to retard water infiltration at edge crack locations.

All pavement construction, rehabilitation and maintenance work should only be completed during periods of favourable weather. The Englobe pavement design recommendations are contingent upon provision of a consistently competent, stable subgrade that is properly drained and free of soft spots and objectionable materials (such as organic material) and is capable of supporting the design traffic loads.

## 5.4 Construction Inspection and Testing

### 5.4.1 Materials Testing and Inspections

It is recommended that geotechnical inspections, compaction testing, asphalt testing and concrete testing be carried out per Minimum testing requirements provided in the Design and Construction Standards 2021 by Township of Southwest Middlesex.

Appropriate laboratory and field testing of the pavement structure components (granulars and hot-mix asphalt) should be conducted, as well as concrete testing for the curbs and sidewalks. Compaction testing of the hot-mix asphalt should be carried out at the time of placement. Mix designs for the concrete materials and hot-mix asphalt should be reviewed for suitability and specification compliance at least two weeks prior to production and placement.

Concrete to be tested in accordance with the requirements of CSA A23.1 and A23.2. Field sampling and testing of concrete shall be according to OPSS 1350 MUNI.

The need for continuous repair work and paving supervision by a pavement inspector and quality assurance testing during pavement rehabilitation/construction projects cannot be over emphasized. It is also recommended that an annual maintenance program including localized repairs and crack sealing be implemented to ensure that the pavements are maintained at a suitable level.

### 5.4.2 Construction Vibrations

Given the proximity of residences to the project, it is recommended that the contractor conduct a pre-construction condition survey of the properties and buildings along the subject corridor and notify the residents of the likelihood of construction vibrations prior to the start of construction and dewatering activities. The contractor should adjust the amplitude and frequency of the compaction equipment, as well as keep layer thicknesses to a minimum such that the appropriate compaction can be achieved without excess vibration.

# 6 Statement of Limitations

The analyses and recommendations provided in this report are based on field measurements and observations made by Englobe technical staff.

The geotechnical recommendations provided in this report are applicable only to the project described in the text and then only if constructed substantially in accordance with the details stated in this report. Since all details of the design may not be known at the time of report preparation, we recommend that we be retained during the final design stage to verify that the geotechnical recommendations have been correctly interpreted in the design. Also, if any further clarification and/or elaboration are needed concerning the geotechnical aspects of the project, Englobe should be contacted. We recommend that we be retained during construction to confirm that the subsurface conditions do not deviate materially from those encountered in the test holes and to ensure that our recommendations are properly understood.

The geotechnical recommendations provided in this report are intended for the use of the owner and its retained designer. They are not intended as specifications or instructions to contractors. Any use which a contractor makes of this report, or decisions made based on it, are the responsibility of the contractor. The contractor must also accept the responsibility for means and methods of construction, seek additional information if required, and draw their own conclusions as to how the subsurface conditions may affect their work. Englobe accepts no responsibility and denies any liability whatsoever for any damages arising from improper or unauthorized use of the report or parts thereof.

It is important to note that the geotechnical investigation involves a limited sampling of the site gathered at specific test hole locations and the conclusions in this report are based on this information gathered. The subsurface geotechnical, hydrogeological, environmental and geologic conditions between and beyond the test holes will differ from those encountered at the test holes. Also, such conditions are not uniform and can vary over time. Should subsurface conditions be encountered which differ materially from those indicated at the test holes, we request that we be notified in order to assess the additional information and determine whether or not changes should be made as a result of the conditions.

It is noted that the borehole locations and chemical analysis performed were selected based on a limited review of the site history and observation of the site and subsurface conditions.

The chemical testing program was designed to identify the presence of the contaminants considered most likely to be encountered and did not include all possible contaminants and conditions. The analytical test results are assumed correct and performed according to all current regulations. No audit of laboratory methods or procedures was performed; however, the laboratory conducts its own Quality Assurance/Quality Control for certification activities.

# Appendix A

# Drawings

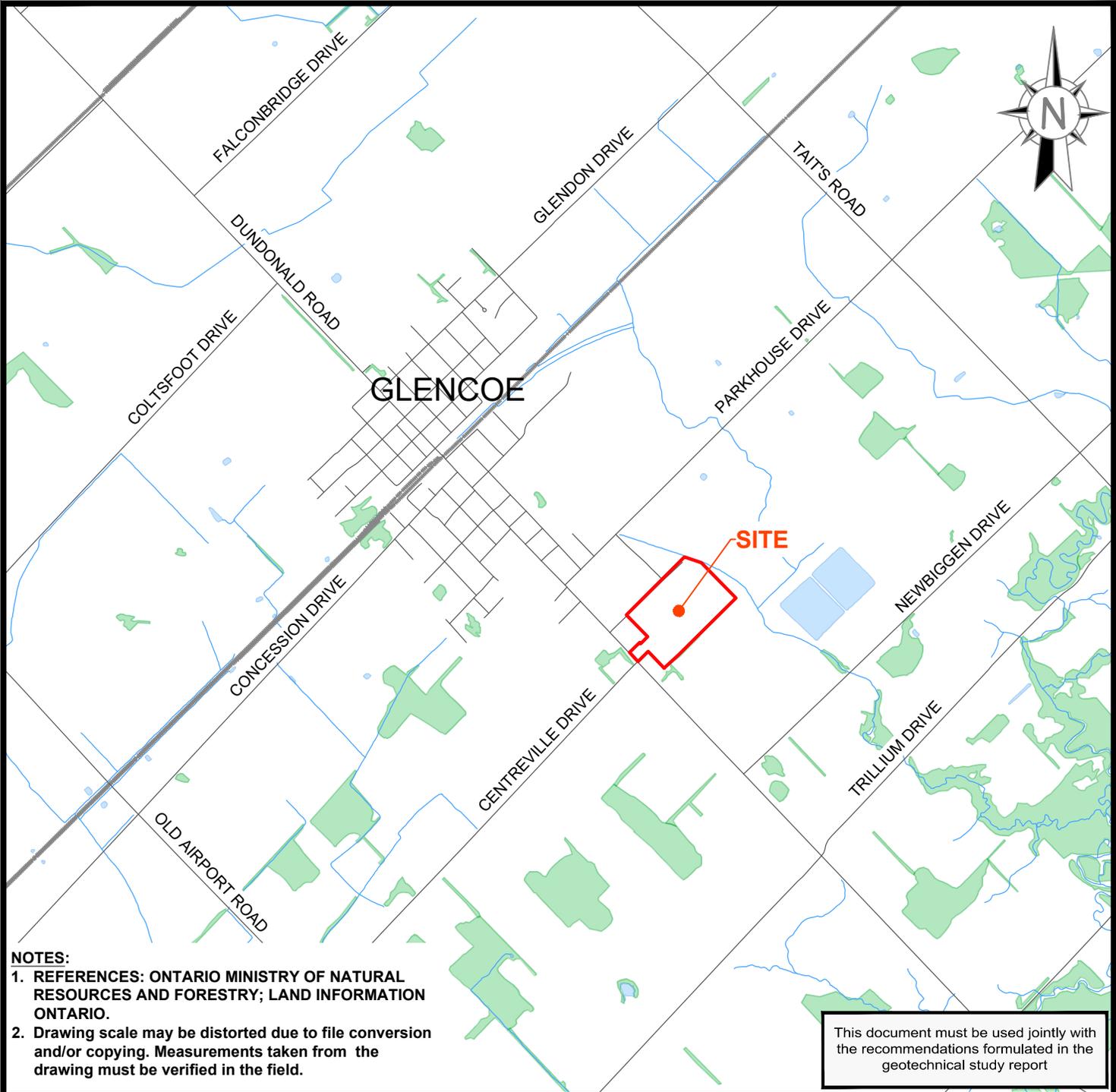
Drawing 1: Location Plan

Drawing 2: Site Plan



**eNGLOBE**

I:\EGNYTDRIVE\ENGL0BE\SHARED\CA\KITCHENER\DATA\PROJECTS\160\2025 (SWO)\GEOTECHNICAL\02506021.000 - GLENCOE INDUSTRIAL PARK, ON\Z4\_CAD\CAD\02506021.000-R01\001.DWG



- NOTES:**
- REFERENCES: ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY; LAND INFORMATION ONTARIO.**
  - Drawing scale may be distorted due to file conversion and/or copying. Measurements taken from the drawing must be verified in the field.**

This document must be used jointly with the recommendations formulated in the geotechnical study report

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Client	<b>Spriet Associates Architects and Consulting Engineers</b>
Project	<b>Glencoe Industrial Park, Glencoe, ON</b>
Title	<b>99 Industrial Road, Glencoe, ON</b>
	<b>Site Plan</b>

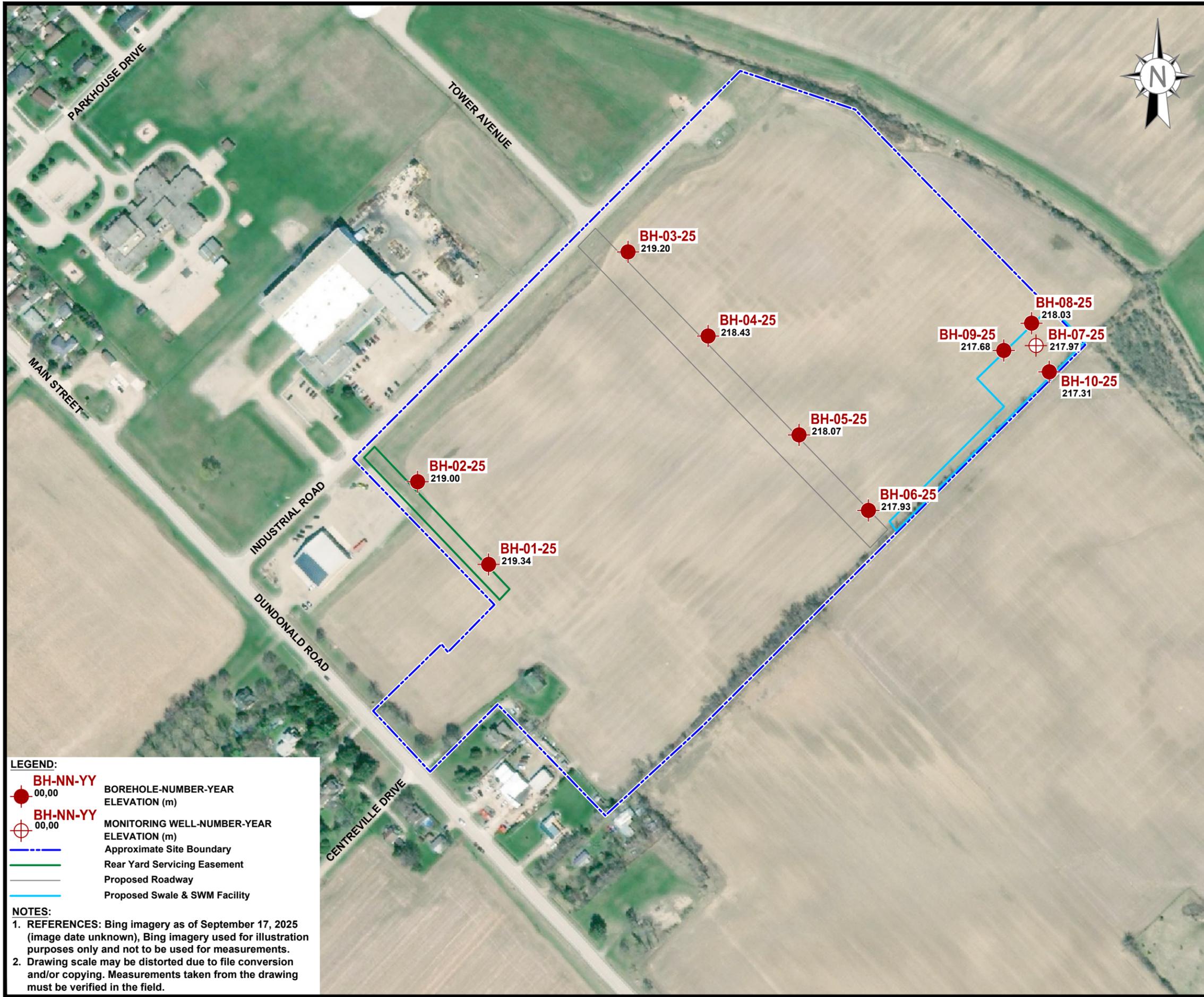


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Discipline: <b>Geosciences</b>		Prepared by: <b>LK</b>	Checked by: <b>MH</b>
Scale: <b>1:30 000</b>		Drawn by: <b>LK</b>	Approved by: <b>ZB</b>
Date: <b>17/09/2025</b>		Figure N°: <b>01 of 02</b>	
Page setup: <b>0001</b>		Register N°:	
<small>Paper Format: ANSI full bleed A (8.50 x 11.00 Inches)</small>			

Resp.	Project	Phase	Disc.	Type	Drawing N°	Rev.
<b>00</b>	<b>02506021.000</b>	<b>0000</b>	<b>GE</b>	<b>D</b>	<b>0001</b>	<b>00</b>

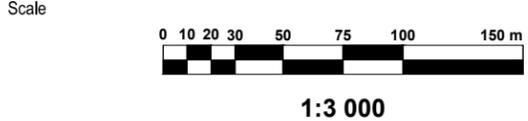
I:\EGNYTDRIVE\ENGL\ENGL\SHARED\CAD\KITCHENER\DATA\PROJECTS\160\2025 (S\W)\GEO\TECHNICAL\02506021.000 - GLENCOE INDUSTRIAL PARK\_ONZ4\_CAD\CAD\02506021.000-R01001.DWG



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XX	REVISION	JJ/MM/AA	XX	XX	XX
No.	Version	Date	By	Check	Appr.

Seal



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Client  
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 F 519 685-0943

Project **Glencoe Industrial Park, Glencoe, ON**

99 Industrial Road, Glencoe, ON

Title **Borehole Location Plan**

**LEGEND:**

-  **BH-NN-YY**  
00,00 BOREHOLE-NUMBER-YEAR  
ELEVATION (m)
-  **BH-NN-YY**  
00,00 MONITORING WELL-NUMBER-YEAR  
ELEVATION (m)
-  Approximate Site Boundary
-  Rear Yard Servicing Easement
-  Proposed Roadway
-  Proposed Swale & SWM Facility

**NOTES:**

- REFERENCES:** Bing imagery as of September 17, 2025 (image date unknown), Bing imagery used for illustration purposes only and not to be used for measurements.
- Drawing scale may be distorted due to file conversion and/or copying. Measurements taken from the drawing must be verified in the field.

Discipline:	Geosciences	Prepared by:	LK	Checked by:	MH
Scale:	1:3 000	Drawn by:	LK	Approved by:	ZB
Date:	17/09/2025	Figure N°:	02 of 02		
Page setup:	Paper format:	Register N°:			
0002	ANSI full bleed B (17.00 x 11.00 inches)				

Resp.	Project	Phase	Disc.	Type	Drawing N°	Rev.
00	02506021.000	0000	GE	D	0002	00

# Appendix B

# Borehole Logs

List of Abbreviations

Boreholes BH-01-25 to BH-10-25



**eNGLOBE**



## List of Abbreviations

The abbreviations commonly employed on the borehole logs, on the figures, and in the text of the report, are as follows:

Sample Types		Soil Test and Properties	
AS	Auger Sample	SPT	Standard Penetration Test
CS	Core Sample	UC	Unconfined Compression
RC	Rock Core	FV	Field Vane Test
SS	Split Spoon	$\phi$	Angle of internal friction
TW	Thinwall, Open	$\gamma$	Unit weight
WS	Wash Sample	$W_p$	Plastic Limit
BS	Bulk Sample	w	Water content
GS	Grab Sample	$W_L$	Liquid Limit
WC	Water Content Sample	$I_L$	Liquidity Index
TP	Thinwall, Piston	$I_p$	Plastic Index
		PP	Pocket Penetrometer

Penetration Resistances	
Dynamic Penetration Resistance	The number of blows by a 63.5 kg (140 lb.) hammer dropped 760 mm (30 in.) required to drive a 50 mm (2 in.) diameter 60° cone a distance 300 mm (12 in.)  The cone is attached to 'A' size drill rods and casing is not used.
Standard Penetration Resistance, N (ASTM D1586)	The number of blows by a 63.5 kg (140 lb.) hammer dropped 760 mm (30 in.) required to drive a standard split spoon sampler 300 mm (12 in.)
WH	Sampler advanced by weight of hammer
PH	Sampler advanced by hydraulic pressure
PM	Sampler advanced by manual pressure

Soil Description		
<b>Cohesionless Soils</b>	<b>SPT N-Value</b>	<b>Relative Density ( <math>D_r</math> )</b>
<b>Compactness Condition</b>	(blows per 0.3 m)	(%)
Very Loose	0 to 4	0 to 20
Loose	4 to 10	20 to 40
Compact	10 to 30	40 to 60
Dense	30 to 50	60 to 80
Very Dense	Over 50	80 to 100
<b>Cohesive Soils</b>	<b>Undrained Shear Strength ( <math>C_u</math> )</b>	
<b>Consistency</b>	<b>kPa</b>	<b>psf</b>
Very Soft	Less than 12	Less than 250
Soft	12 to 25	250 to 500
Firm	25 to 50	500 to 1000
Stiff	50 to 100	1000 to 2000
Very Stiff	100 to 200	2000 to 4000
Hard	over 200	over 4000
DTPL	Drier than plastic limit	Low Plasticity, $W_L < 30$
APL	About plastic limit	Medium Plasticity, $30 < W_L < 50$
WTPL	Wetter than plastic limit	High Plasticity, $W_L > 50$

Project No. : 02506021.000

Client : Spriet Associates Architects and Consulting Engineers

Originated by : BT

Date started : 2025 July 23

Project : Glencoe Industrial Park, Glencoe, ON

Compiled by : LK

Sheet No. : 1 of 1

Location : 99 Industrial Road, Glencoe, ON

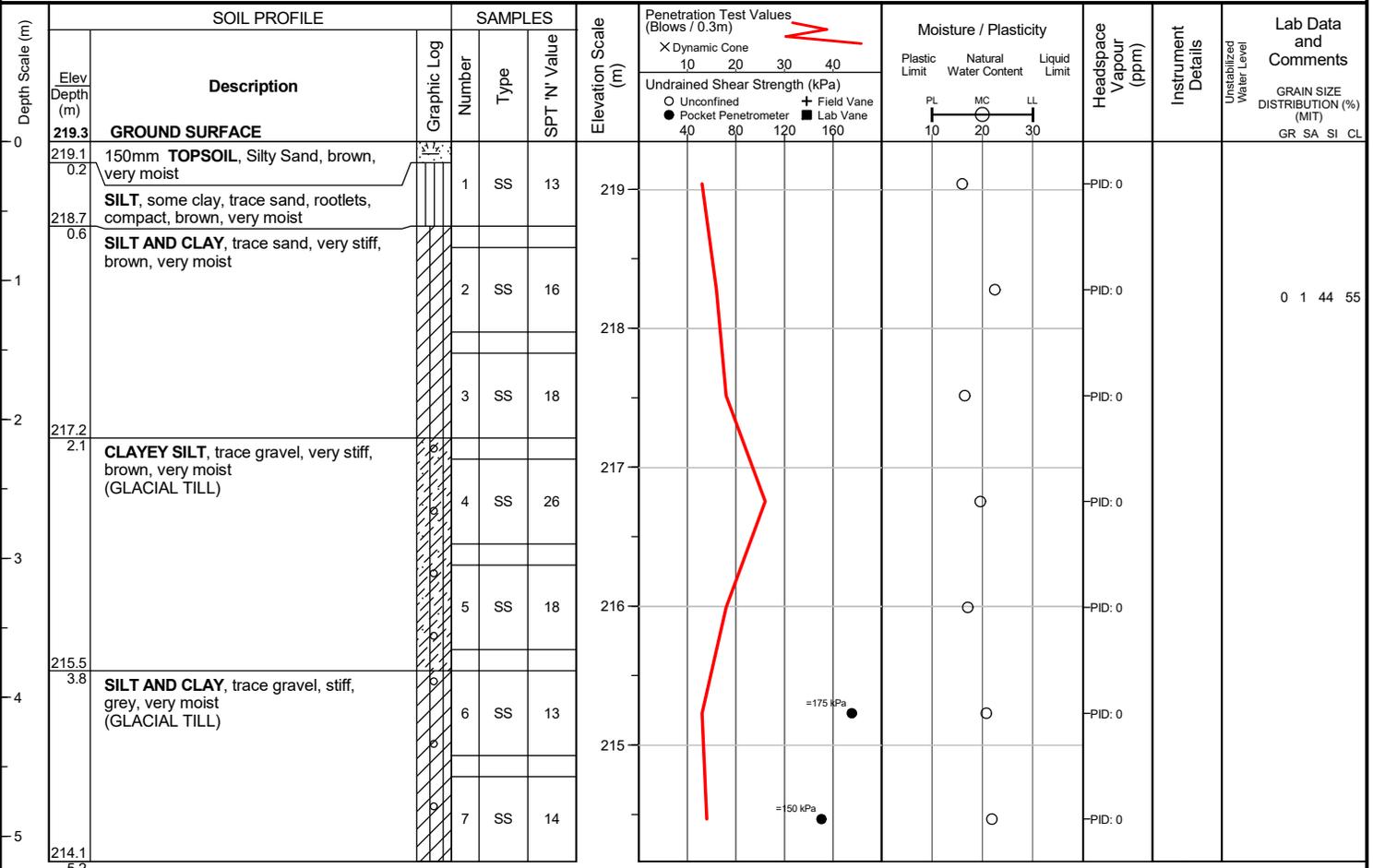
Checked by : MH

Position : E: 4732058, N: 442974 (UTM 17T)

Elevation Datum : Geodetic

Rig type : D50, track-mounted

Drilling Method : Hollow stem augers



**END OF BOREHOLE**

Borehole was dry and open upon completion of drilling.

Project No. : 02506021.000

Client : Spriet Associates Architects and Consulting Engineers

Originated by : BT

Date started : 2025 July 23

Project : Glencoe Industrial Park, Glencoe, ON

Compiled by : LK

Sheet No. : 1 of 1

Location : 99 Industrial Road, Glencoe, ON

Checked by : MH

Position : E: 4732123, N: 442918 (UTM 17T)

Elevation Datum : Geodetic

Rig type : D50, track-mounted

Drilling Method : Hollow stem augers

Depth Scale (m)	SOIL PROFILE			SAMPLES			Elevation Scale (m)	Penetration Test Values (Blows / 0.3m)	Moisture / Plasticity	Headspace Vapour (ppm)	Instrument Details	Lab Data and Comments
	Elev Depth (m)	Description	Graphic Log	Number	Type	SPT 'N' Value						
0	219.0	<b>GROUND SURFACE</b>					219					
0.2	218.8	130mm <b>TOPSOIL</b> , Silty, brown, very moist		1	SS	8	218.8					
0.8	218.2	<b>SILT</b> , some clay, trace sand, rootlets, loose, brown, very moist					218.2					
1.5	217.5	<b>CLAYEY SILT</b> , with clay seams, very stiff, brown, very moist		2	SS	16	218					
3.0	216.0	<b>CLAYEY SILT</b> , trace gravel, very stiff, brown, very moist (GLACIAL TILL)		3	SS	17	217					
3.0	216.0	<b>SILT AND CLAY</b> , trace gravel, stiff, grey, very moist (GLACIAL TILL)		4	SS	20	216					
3.0	216.0	<b>SILT AND CLAY</b> , trace gravel, stiff, grey, very moist (GLACIAL TILL)		5	SS	14	216					
4.0	215.0			6	SS	13	215					
5.0	214.0			7	SS	13	214					
5.2	213.8	<b>END OF BOREHOLE</b>					214					

**END OF BOREHOLE**

Borehole was dry and open upon completion of drilling.

Project No. : 02506021.000

Client : Spriet Associates Architects and Consulting Engineers

Originated by : BT

Date started : 2025 July 23

Project : Glencoe Industrial Park, Glencoe, ON

Compiled by : LK

Sheet No. : 1 of 1

Location : 99 Industrial Road, Glencoe, ON

Checked by : MH

Position : E: 4732303, N: 443083 (UTM 17T)

Elevation Datum : Geodetic

Rig type : D50, track-mounted

Drilling Method : Hollow stem augers

Depth Scale (m)	SOIL PROFILE			SAMPLES			Elevation Scale (m)	Penetration Test Values (Blows / 0.3m)	Moisture / Plasticity	Headspace Vapour (ppm)	Instrument Details	Lab Data and Comments
	Elev Depth (m)	Description	Graphic Log	Number	Type	SPT 'N' Value						
0	219.2	<b>GROUND SURFACE</b>										
0.2	219.0	130mm <b>TOPSOIL</b> , Silty, brown, very moist		1	SS	16	219					
		<b>SILT</b> , some clay, some sand, rootlets, compact, brown, very moist										
1				2	SS	17	218					
1.5	217.7	<b>CLAYEY SILT</b> , very stiff, brown, very moist		3	SS	20	217					
2.3	216.9	<b>CLAYEY SILT</b> , trace gravel, very stiff, brown, very moist (GLACIAL TILL)		4	SS	25	216					
				5	SS	18	215					
3.8	215.4	<b>SILT AND CLAY</b> , trace gravel, trace sand, stiff, grey, very moist (GLACIAL TILL)		6	SS	12	215	125				
				7	SS	11	214					
5.2	214.0	<b>END OF BOREHOLE</b>										

Borehole was dry and open upon completion of drilling.

Project No. : 02506021.000

Client : Spriet Associates Architects and Consulting Engineers

Originated by : BT

Date started : 2025 July 23

Project : Glencoe Industrial Park, Glencoe, ON

Compiled by : LK

Sheet No. : 1 of 1

Location : 99 Industrial Road, Glencoe, ON

Checked by : MH

Position : E: 4732237, N: 443146 (UTM 17T)

Elevation Datum : Geodetic

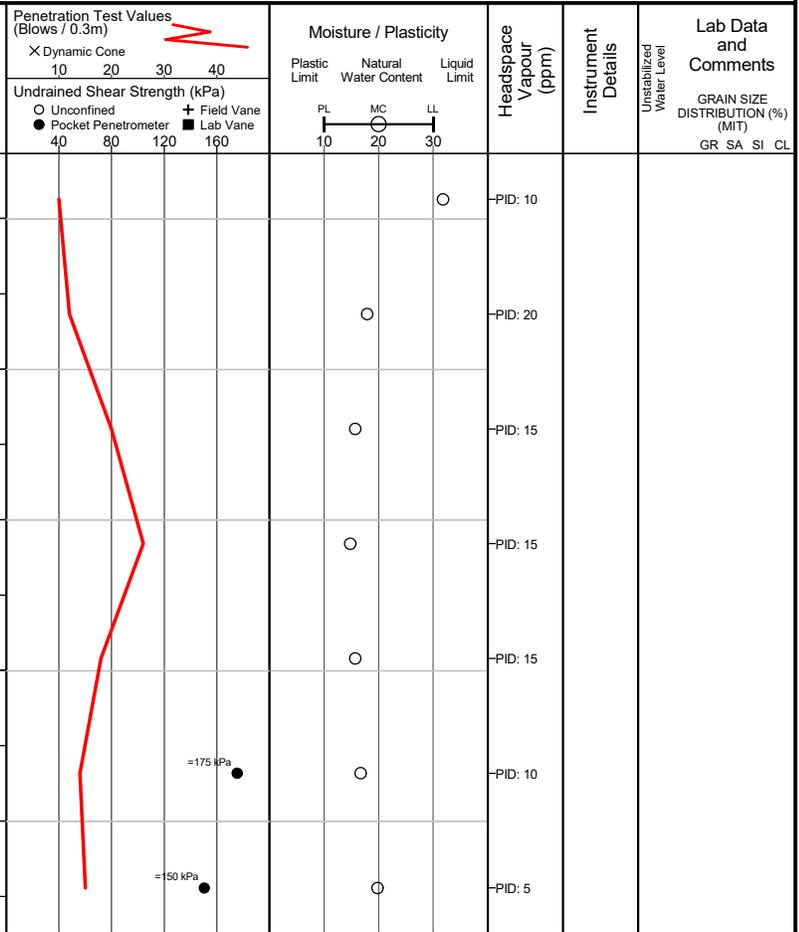
Rig type : D50, track-mounted

Drilling Method : Hollow stem augers

Depth Scale (m)	SOIL PROFILE			SAMPLES			Elevation Scale (m)	Penetration Test Values (Blows / 0.3m)	Moisture / Plasticity	Headspace Vapour (ppm)	Instrument Details	Lab Data and Comments	
	Elev Depth (m)	Description	Graphic Log	Number	Type	SPT 'N' Value							10
0	218.4	<b>GROUND SURFACE</b>											
0.2	218.2	130mm <b>TOPSOIL</b> , Silty, brown, very moist		1	SS	10	218						
0.6	217.8	<b>SILT</b> , some sand, some clay, rootlets, loose / compact, brown, very moist		2	SS	12	217						
1.5	216.9	<b>CLAYEY SILT</b> , with clay seams, very stiff, brown, very moist		3	SS	20	217						
2.0	216.6	<b>CLAYEY SILT</b> , trace gravel, very stiff, brown to grey, very moist (GLACIAL TILL)		4	SS	26	216						
3.0	215.6			5	SS	18	215						
3.8	214.6	<b>SILTY CLAY</b> , trace gravel, stiff, grey, very moist (GLACIAL TILL)		6	SS	14	214						
5.2	213.2			7	SS	15	214						

**END OF BOREHOLE**

Borehole was dry and open upon completion of drilling.



Project No. : 02506021.000

Client : Spriet Associates Architects and Consulting Engineers

Originated by : BT

Date started : 2025 July 23

Project : Glencoe Industrial Park, Glencoe, ON

Compiled by : LK

Sheet No. : 1 of 1

Location : 99 Industrial Road, Glencoe, ON

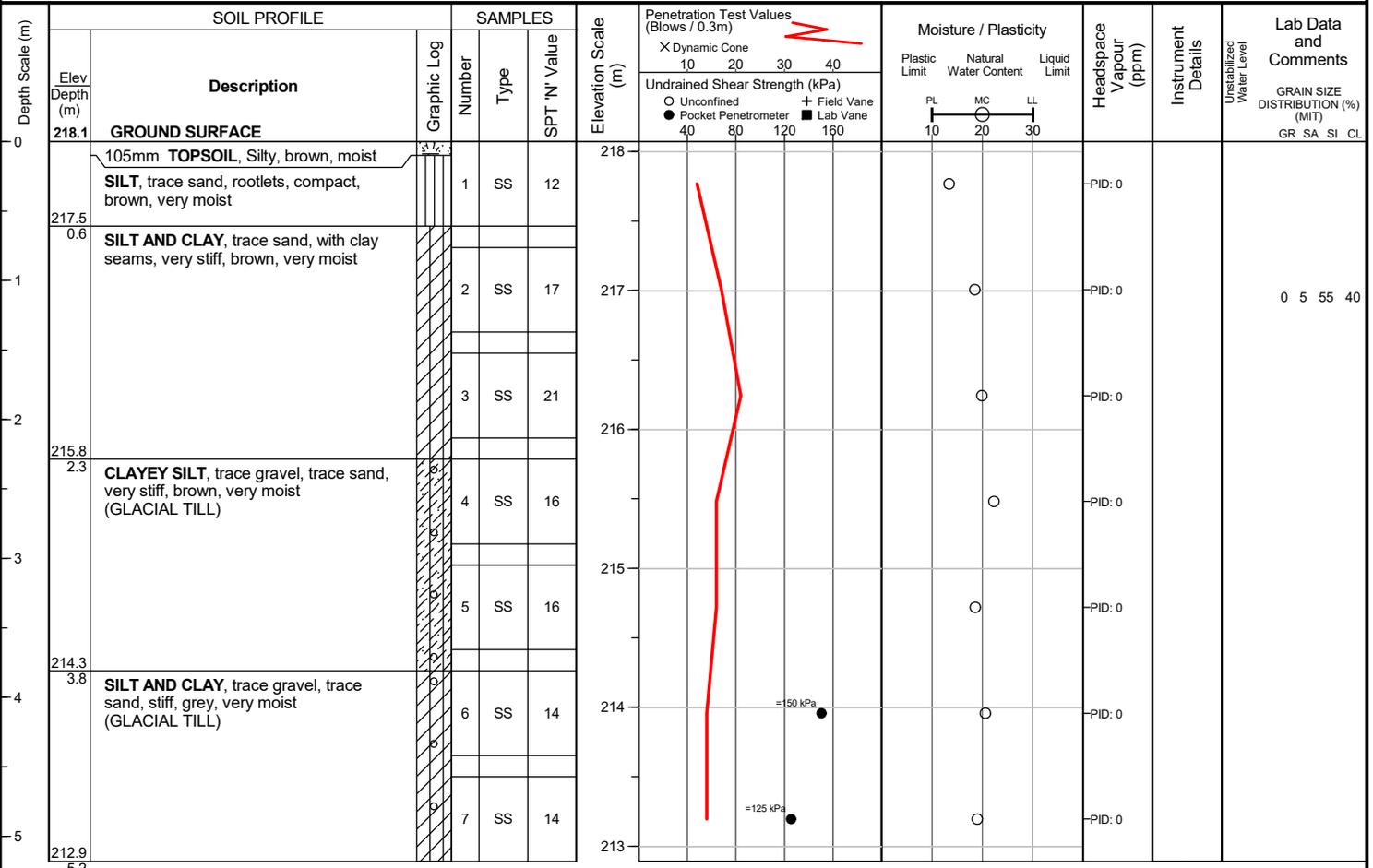
Checked by : MH

Position : E: 4732159, N: 443217 (UTM 17T)

Elevation Datum : Geodetic

Rig type : D50, track-mounted

Drilling Method : Hollow stem augers



**END OF BOREHOLE**

Borehole was dry and open upon completion of drilling.

Project No. : 02506021.000

Client : Spriet Associates Architects and Consulting Engineers

Originated by : BT

Date started : 2025 July 23

Project : Glencoe Industrial Park, Glencoe, ON

Compiled by : LK

Sheet No. : 1 of 1

Location : 99 Industrial Road, Glencoe, ON

Checked by : MH

Position : E: 4732100, N: 443272 (UTM 17T)

Elevation Datum : Geodetic

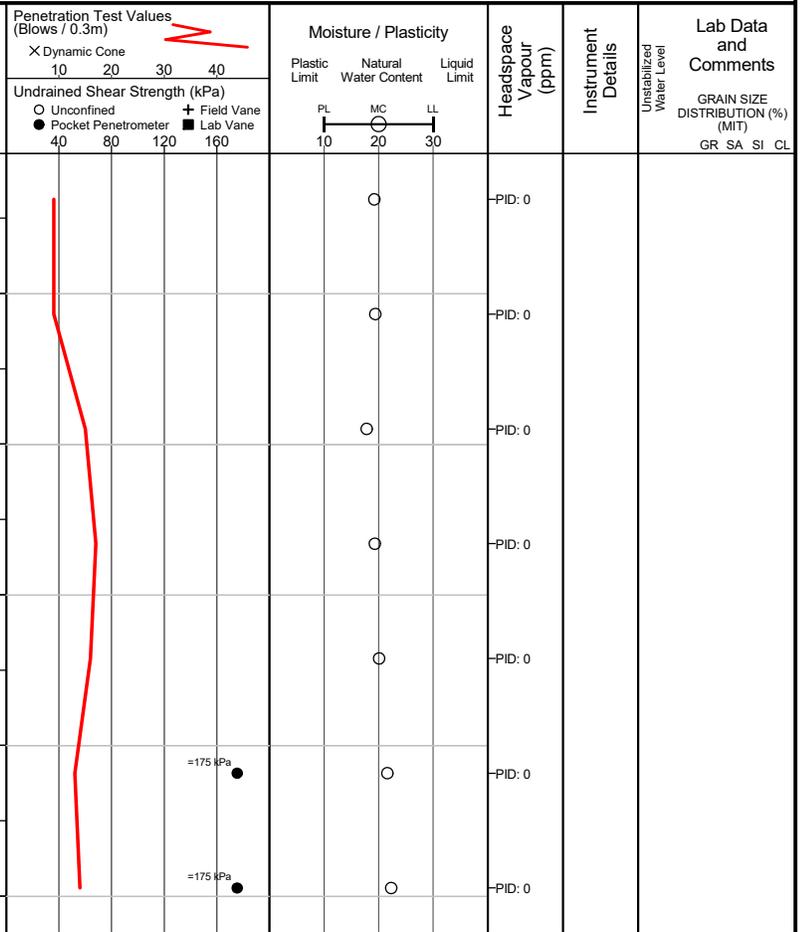
Rig type : D50, track-mounted

Drilling Method : Hollow stem augers

Depth Scale (m)	SOIL PROFILE			SAMPLES			Elevation Scale (m)	Penetration Test Values (Blows / 0.3m)	Moisture / Plasticity			Headspace Vapour (ppm)	Instrument Details	Lab Data and Comments
	Elev Depth (m)	Description	Graphic Log	Number	Type	SPT 'N' Value			Plastic Limit	Natural Water Content	Liquid Limit			
0	217.9	<b>GROUND SURFACE</b>												
		Brown												
		<b>SILT</b> , some clay, trace sand, rootlets, loose, brown, very moist		1	SS	9								
	217.3													
	0.6	<b>SILTY CLAY</b> , stiff, brown, very moist												
				2	SS	9								
	216.4													
	1.5	<b>CLAYEY SILT</b> , with clay seams, stiff / very stiff, brown, very moist												
				3	SS	15								
	215.6													
	2.3	<b>CLAYEY SILT</b> , trace gravel, very stiff, brown to grey, very moist (GLACIAL TILL)												
				4	SS	17								
	214.1													
	3.8	<b>SILT AND CLAY</b> , trace gravel, stiff, grey, very moist (GLACIAL TILL)												
				6	SS	13								
	212.7													
	5.2													

**END OF BOREHOLE**

Borehole was dry and open upon completion of drilling.



Project No. : 02506021.000

Client : Spriet Associates Architects and Consulting Engineers

Originated by : BT

Date started : 2025 July 24

Project : Glencoe Industrial Park, Glencoe, ON

Compiled by : LK

Sheet No. : 1 of 1

Location : 99 Industrial Road, Glencoe, ON

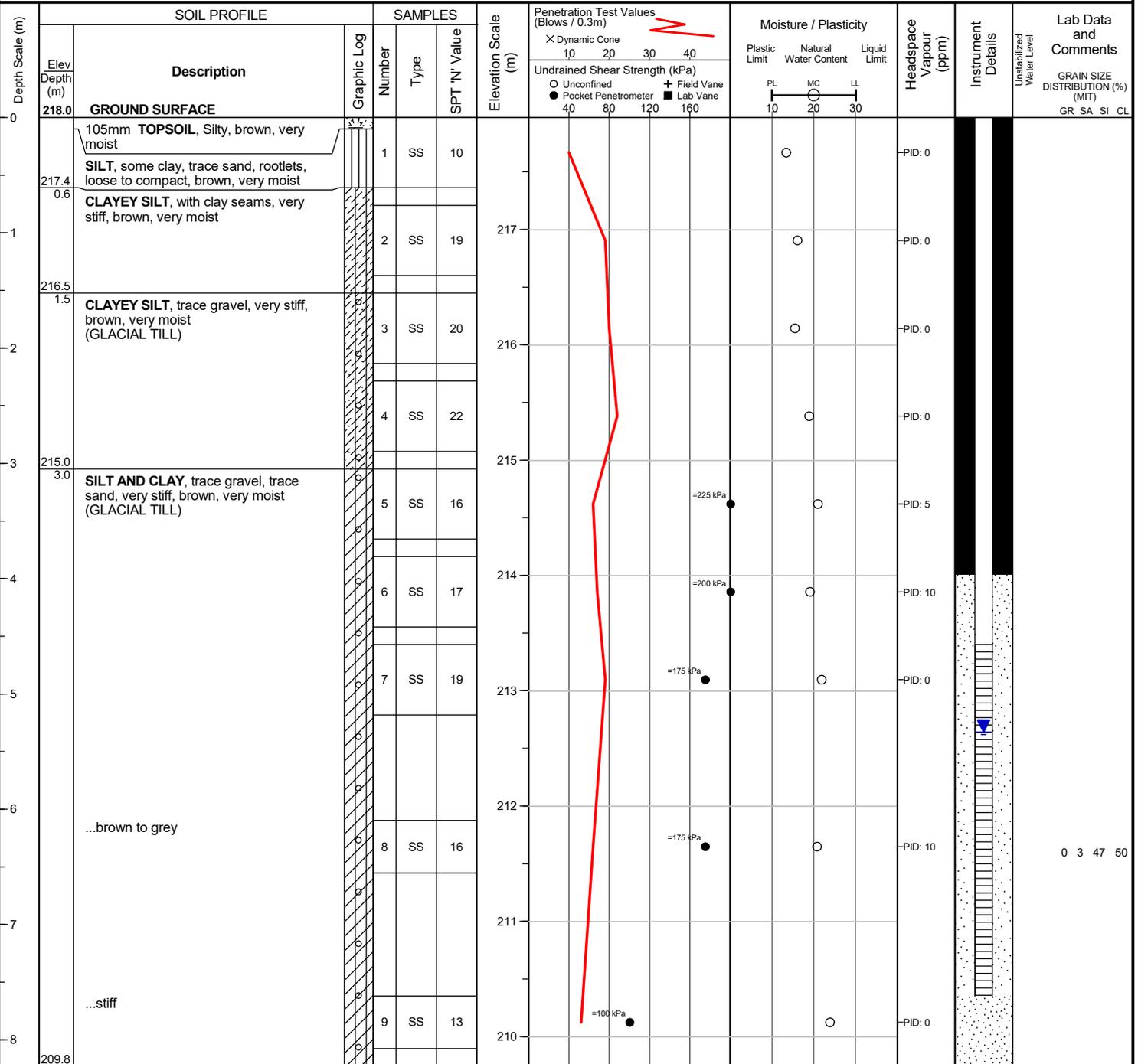
Checked by : MH

Position : E: 4732229, N: 443403 (UTM 17T)

Elevation Datum : Geodetic

Rig type : D50, track-mounted

Drilling Method : Hollow stem augers



**END OF BOREHOLE**

Borehole was dry and open upon completion of drilling.

WATER LEVEL READINGS  
 Date: Sep 18, 2025    Water Depth (m): 5.3    Elevation (m): 212.6

Project No. : 02506021.000

Client : Spriet Associates Architects and Consulting Engineers

Originated by : BT

Date started : 2025 July 24

Project : Glencoe Industrial Park, Glencoe, ON

Compiled by : LK

Sheet No. : 1 of 1

Location : 99 Industrial Road, Glencoe, ON

Checked by : MH

Position : E: 4732247, N: 443400 (UTM 17T)

Elevation Datum : Geodetic

Rig type : D50, track-mounted

Drilling Method : Hollow stem augers

Depth Scale (m)	SOIL PROFILE			SAMPLES			Elevation Scale (m)	Penetration Test Values (Blows / 0.3m)	Moisture / Plasticity			Headspace Vapour (ppm)	Instrument Details	Lab Data and Comments	
	Elev Depth (m)	Description	Graphic Log	Number	Type	SPT 'N' Value			10	20	30				40
0	218.0	<b>GROUND SURFACE</b>					218								
		105mm <b>TOPSOIL</b> , Silty, brown, moist <b>SILT</b> , trace to some clay, rootlets, compact, brown, very moist		1	SS	12	218								
	217.4 0.6	<b>CLAYEY SILT</b> , very stiff, brown, very moist		2	SS	19	217								
	216.5 1.5	<b>CLAYEY SILT</b> , trace gravel, very stiff, brown, very moist (GLACIAL TILL)		3	SS	23	216								
				4	SS	23	215								
				5	SS	20	214								
	214.2 3.8	<b>SILT AND CLAY</b> , trace gravel, very stiff, brown, very moist (GLACIAL TILL)		6	SS	19	214								
				7	SS	18	213								
	212.8 5.2	<b>END OF BOREHOLE</b>					213								

Borehole was dry and open upon completion of drilling.

Project No. : 02506021.000

Client : Spriet Associates Architects and Consulting Engineers

Originated by : BT

Date started : 2025 July 24

Project : Glencoe Industrial Park, Glencoe, ON

Compiled by : LK

Sheet No. : 1 of 1

Location : 99 Industrial Road, Glencoe, ON

Checked by : MH

Position : E: 4732226, N: 443378 (UTM 17T)

Elevation Datum : Geodetic

Rig type : D50, track-mounted

Drilling Method : Hollow stem augers

Depth Scale (m)	SOIL PROFILE			SAMPLES			Elevation Scale (m)	Penetration Test Values (Blows / 0.3m)	Moisture / Plasticity	Headspace Vapour (ppm)	Instrument Details	Lab Data and Comments	
	Elev Depth (m)	Description	Graphic Log	Number	Type	SPT 'N' Value							10
0	217.7	<b>GROUND SURFACE</b>											
		75mm <b>TOPSOIL</b> , Silty, brown, very moist		1	SS	11							
	217.1	<b>SILT</b> , trace to some clay, rootlets, compact, brown, very moist											
	0.6	<b>CLAYEY SILT</b> , with clay seams, very stiff, brown, very moist		2	SS	17							
	216.2	<b>CLAYEY SILT</b> , trace gravel, with clay seams, very stiff, brown, very moist (GLACIAL TILL)		3	SS	19							
	1.5			4	SS	20							
				5	SS	22							
	213.9	<b>SILT AND CLAY</b> , trace gravel, very stiff, grey, very moist (GLACIAL TILL)		6	SS	16							
	3.8			7	SS	18							
	5.2												

**END OF BOREHOLE**

Borehole was dry and open upon completion of drilling.

Project No. : 02506021.000

Client : Spriet Associates Architects and Consulting Engineers

Originated by : BT

Date started : 2025 July 24

Project : Glencoe Industrial Park, Glencoe, ON

Compiled by : LK

Sheet No. : 1 of 1

Location : 99 Industrial Road, Glencoe, ON

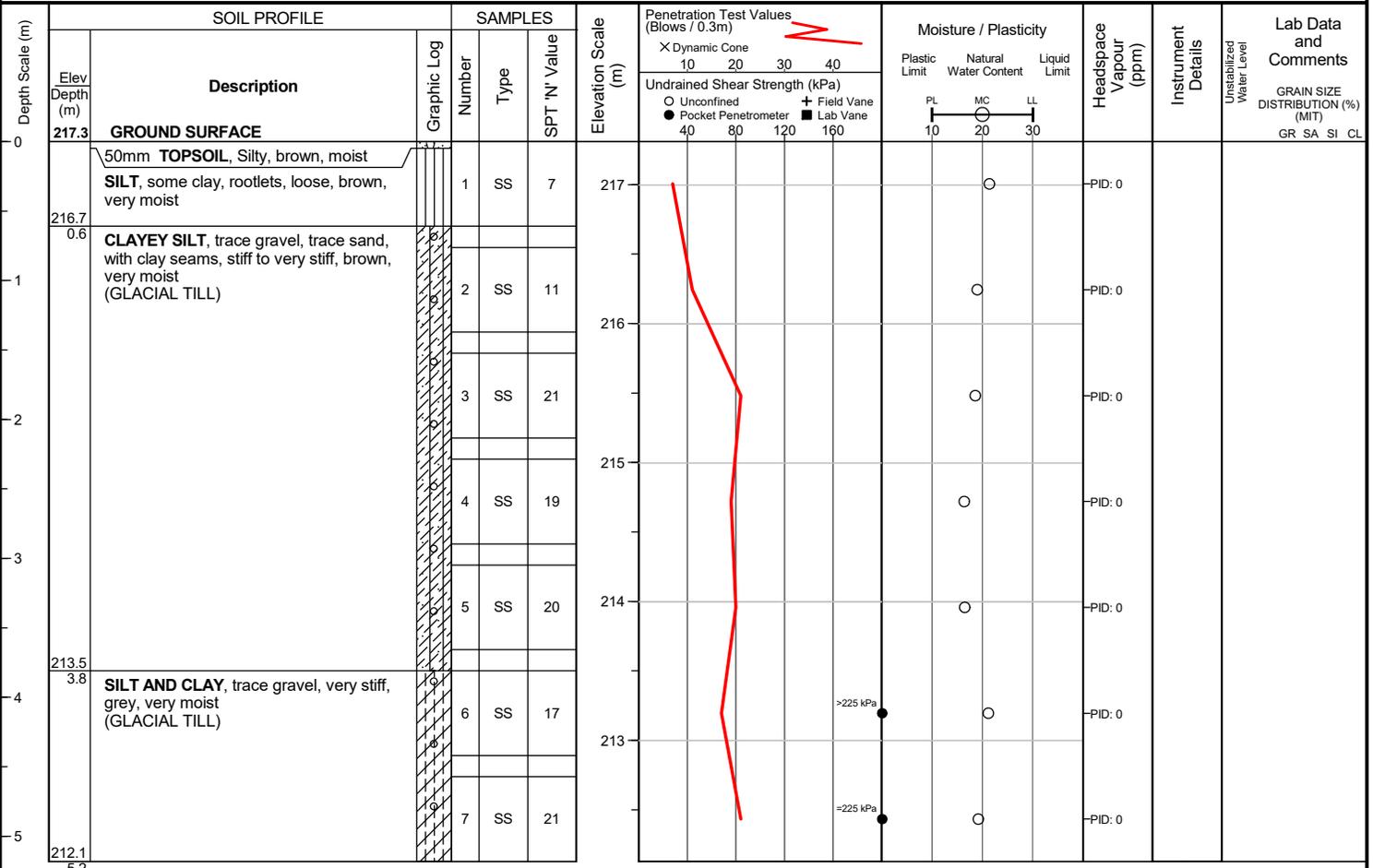
Checked by : MH

Position : E: 4732209, N: 443414 (UTM 17T)

Elevation Datum : Geodetic

Rig type : D50, track-mounted

Drilling Method : Hollow stem augers



**END OF BOREHOLE**

Borehole was dry and open upon completion of drilling.

# Appendix C

## Geotechnical Lab Results

Figures 1 to 3, 5 and 6: Particle Size Analysis

Figure 4: Atterberg limits



Project Number:	<u>02506021</u>	Project Name:	<u>Glencoe Industrial Park</u>	Client:	<u>Spriet Associates London Limited</u>
ROS:	<u>2604</u>	Sample ID:	<u>Borehole 01, Sample 2</u>	Sample Depth:	<u>0.76 - 1.22m</u>
Sampled By:	<u>Englobe</u>	Date Received:	<u>July 30, 2025</u>	Date Completed:	<u>August 9, 2025</u>
File Number:	<u>04-02506021.000.MT-SH-001-00</u>			Englobe Laboratory	<u>London</u>

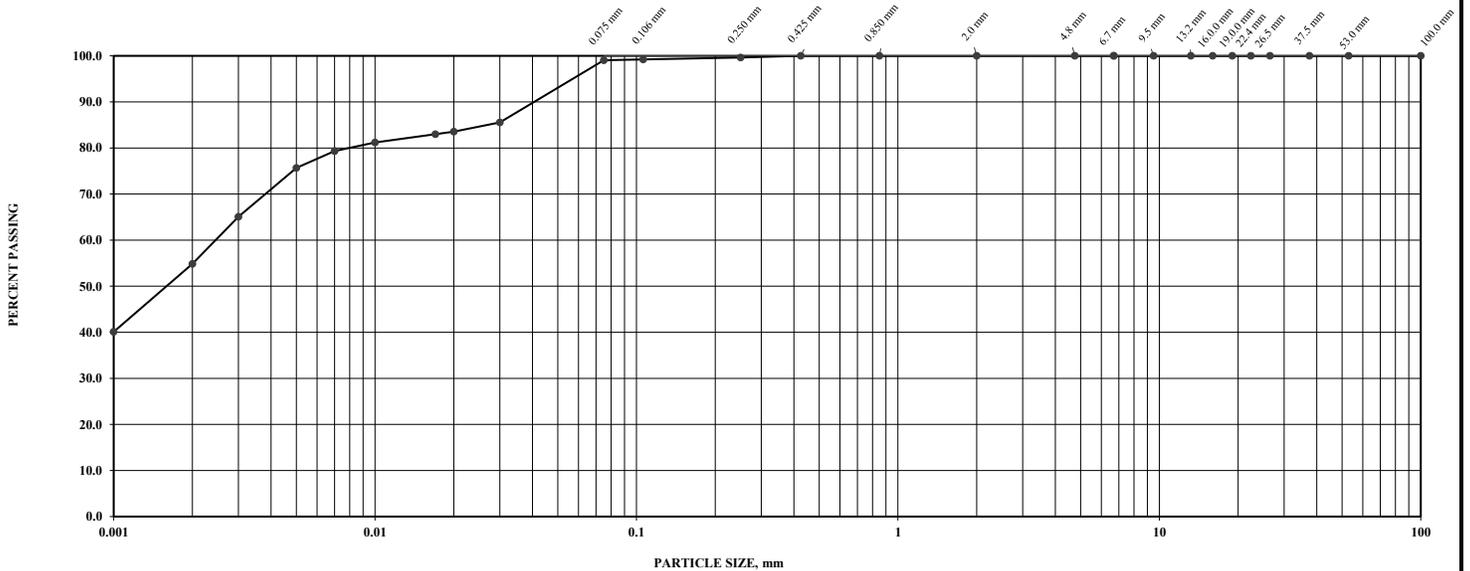
**PARTICLE SIZE DISTRIBUTION, MTO LS-702**

U.S. BUREAU OF SOILS CLASSIFICATION (AS USED IN MINISTRY OF TRANSPORTATION OF ONTARIO PAVEMENT DESIGNS)

CLAY	SILT	VERY FINE SAND	FINE SAND	MEDIUM SAND	COARSE SAND	FINE GRAVEL	GRAVEL
------	------	----------------	-----------	-------------	-------------	-------------	--------

UNIFIED SOILS CLASSIFICATION ASTM D 2487

FINES (SILT & CLAY)	FINE SAND	MEDIUM SAND	COARSE SAND	FINE GRAVEL	COARSE GRAVEL
---------------------	-----------	-------------	-------------	-------------	---------------



**Coefficients**

D60	<b>0.003</b>	D30		D10		Cc		Cu	
-----	--------------	-----	--	-----	--	----	--	----	--

Sieve Analysis		Hydrometer Analysis	
Sieve Size, mm	% Passing	Diameter, mm	% Passing
53	100.0	0.030	85.6
37.5	100.0	0.020	83.5
26.5	100.0	0.017	83.0
22.4	100.0	0.010	81.2
19	100.0	0.007	79.3
16	100.0	0.005	75.7
13.2	100.0	0.002	54.8
9.5	100.0	0.001	40.1
6.7	100.0	Atterberg Limits	
4.75	100.0		
2.00	100.0		
0.850	100.0	Liquid Limit	
0.425	100.0	Plastic Limit	
0.250	99.6	Plastic Index	
0.106	99.2		
0.075	99.0		

GRAIN SIZE PROPORTIONS, %	
% Gravel (> 4.75 mm):	
% Sand (75 µm to 4.75 mm):	<b>1.0</b>
% Silt (2 µm to 75 µm):	<b>44.2</b>
% Clay (<2 µm):	<b>54.8</b>
Group Symbol / Soil Description	<b>SILT and CLAY, trace Sand</b>
Remarks	

Figure: 1

Tested By:	<u>Nurudeen Mekanjuola</u> Laboratory Technician	Reviewed By:		Date:	<u>August 14, 2025</u>
------------	---	--------------	--	-------	------------------------

Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on written request.

Project Number: <u>02506021</u>	Project Name: <u>Glencoe Industrial Park</u>	Client: <u>Spriet Associates London Limited</u>
ROS: <u>2605</u>	Sample ID: <u>Borehole 02, Sample 7</u>	Sample Depth: <u>4.58 - 5.03m</u>
Sampled By: <u>Englobe</u>	Date Received: <u>July 30, 2025</u>	Date Completed: <u>August 9, 2025</u>
File Number: <u>04-02506021.000.MT-SH-002-00</u>	Englobe Laboratory	London

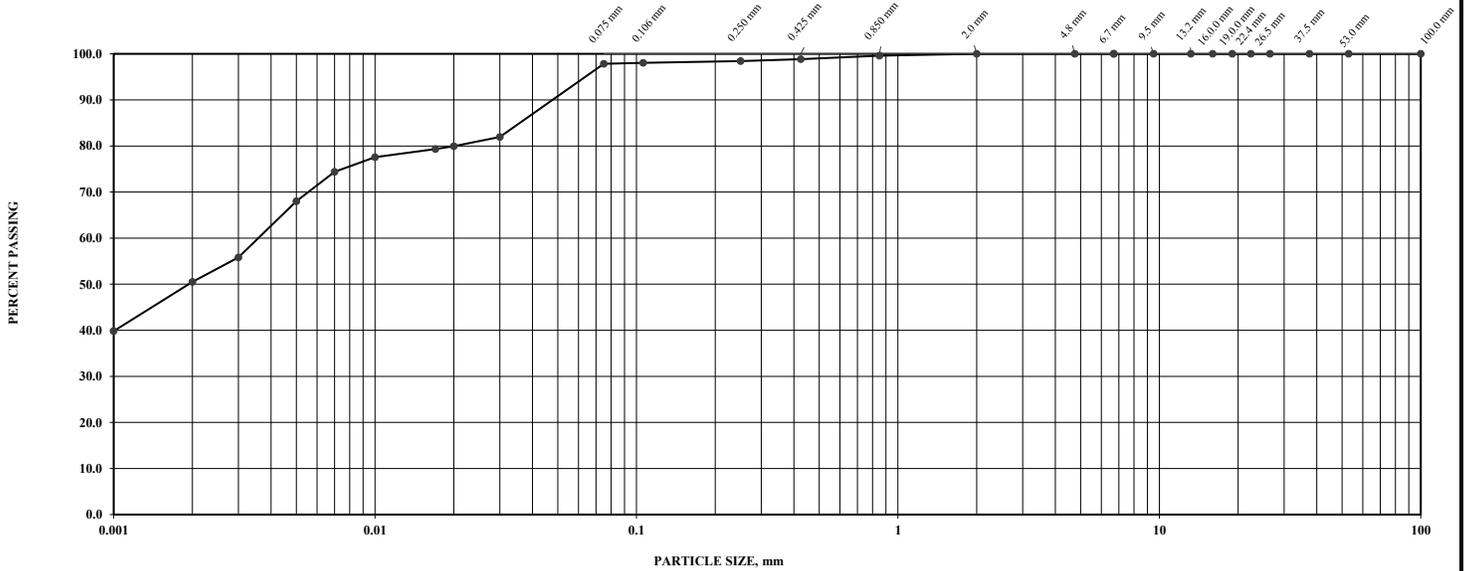
**PARTICLE SIZE DISTRIBUTION, MTO LS-702**

U.S. BUREAU OF SOILS CLASSIFICATION (AS USED IN MINISTRY OF TRANSPORTATION OF ONTARIO PAVEMENT DESIGNS)

CLAY	SILT	VERY FINE SAND	FINE SAND	MEDIUM SAND	COARSE SAND	FINE GRAVEL	GRAVEL
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UNIFIED SOILS CLASSIFICATION ASTM D 2487

FINES (SILT & CLAY)	FINE SAND	MEDIUM SAND	COARSE SAND	FINE GRAVEL	COARSE GRAVEL
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**Coefficients**

D60	0.004	D30		D10		Cc		Cu	
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Sieve Analysis		Hydrometer Analysis	
Sieve Size, mm	% Passing	Diameter, mm	% Passing
53	100.0	0.030	81.9
37.5	100.0	0.020	79.9
26.5	100.0	0.017	79.3
22.4	100.0	0.010	77.6
19	100.0	0.007	74.4
16	100.0	0.005	68.0
13.2	100.0	0.002	50.5
9.5	100.0	0.001	39.8
6.7	100.0	Atterberg Limits	
4.75	100.0		
2.00	100.0	Liquid Limit	
0.850	99.6		
0.425	98.8	Plastic Limit	
0.250	98.4		
0.106	98.0	Plastic Index	
0.075	97.8		

GRAIN SIZE PROPORTIONS, %	
% Gravel (> 4.75 mm):	2.2
% Sand (75 µm to 4.75 mm):	47.3
% Silt (2 µm to 75 µm):	50.5
% Clay (<2 µm):	50.5
Group Symbol / Soil Description	<b>SILT and CLAY, trace Sand</b>
Remarks	

Figure: 2

Tested By: <u>Nurudeen Makanjuola</u> Laboratory Technician	Reviewed By: <u>David McBay</u> CET - Laboratory Supervisor	Date: <u>August 14, 2025</u>
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Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on written request.

Project Number:	<u>02506021</u>	Project Name:	<u>Glencoe Industrial Park</u>	Client:	<u>Spriet Associates London Limited</u>
ROS:	<u>2606 / 2607</u>	Sample ID:	<u>Borehole 03, Sample 7</u>	Sample Depth:	<u>4.58 - 5.03m</u>
Sampled By:	<u>Englobe</u>	Date Received:	<u>July 30, 2025</u>	Date Completed:	<u>August 9, 2025</u>
File Number:	<u>04-02506021.000.MT-SH-003-00</u>	Englobe Laboratory	<u>London</u>		

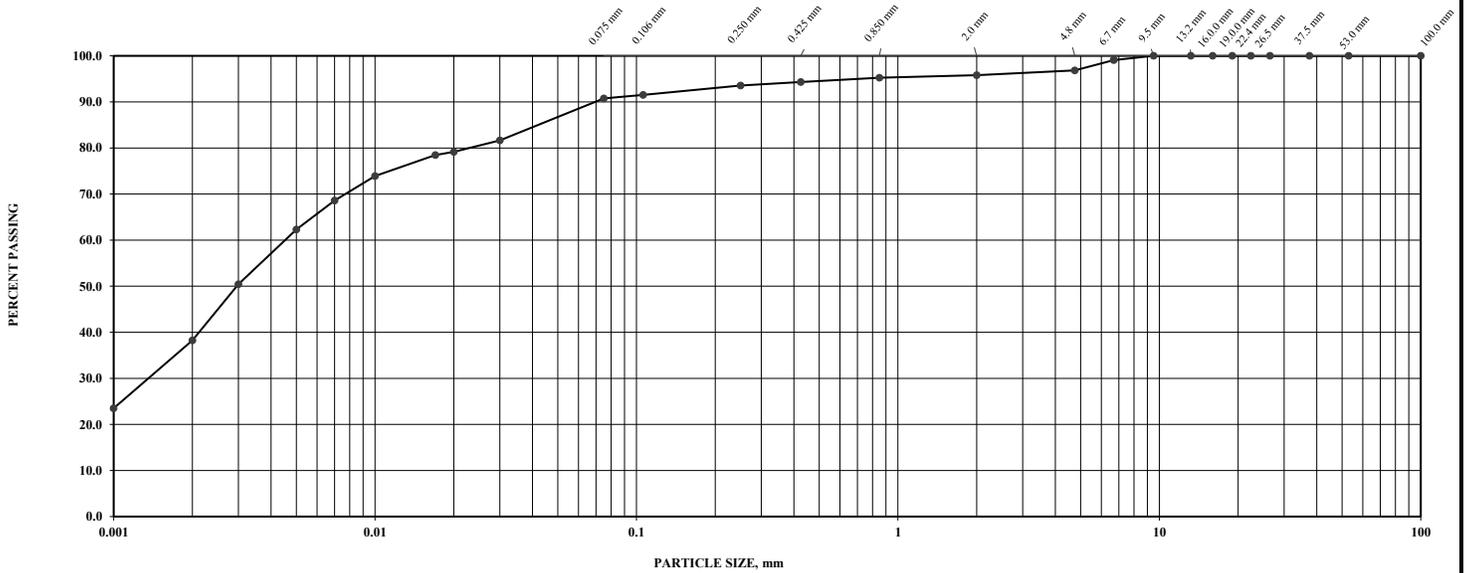
**PARTICLE SIZE DISTRIBUTION, MTO LS-702**

U.S. BUREAU OF SOILS CLASSIFICATION (AS USED IN MINISTRY OF TRANSPORTATION OF ONTARIO PAVEMENT DESIGNS)

CLAY	SILT	VERY FINE SAND	FINE SAND	MEDIUM SAND	COARSE SAND	FINE GRAVEL	GRAVEL
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UNIFIED SOILS CLASSIFICATION ASTM D 2487

FINES (SILT & CLAY)	FINE SAND	MEDIUM SAND	COARSE SAND	FINE GRAVEL	COARSE GRAVEL
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**Coefficients**

D60	<b>0.005</b>	D30	<b>0.001</b>	D10		Cc		Cu	
-----	--------------	-----	--------------	-----	--	----	--	----	--

Sieve Analysis		Hydrometer Analysis	
Sieve Size, mm	% Passing	Diameter, mm	% Passing
53	100.0	0.030	81.7
37.5	100.0	0.020	79.2
26.5	100.0	0.017	78.5
22.4	100.0	0.010	73.9
19	100.0	0.007	68.6
16	100.0	0.005	62.3
13.2	100.0	0.002	38.2
9.5	100.0	0.001	23.5
6.7	99.1	Atterberg Limits	
4.75	96.8		
2.00	95.8	Liquid Limit	36
0.850	95.2	Plastic Limit	21
0.425	94.3		
0.250	93.6	Plastic Index	15
0.106	91.5		
0.075	90.8		

GRAIN SIZE PROPORTIONS, %	
% Gravel (> 4.75 mm):	<b>3.2</b>
% Sand (75 µm to 4.75 mm):	<b>6.0</b>
% Silt (2 µm to 75 µm):	<b>52.6</b>
% Clay (<2 µm):	<b>38.2</b>
Group Symbol / Soil Description	<b>CL</b>
<b>SILT and CLAY, traces of Sand and Gravel</b>	
Remarks	

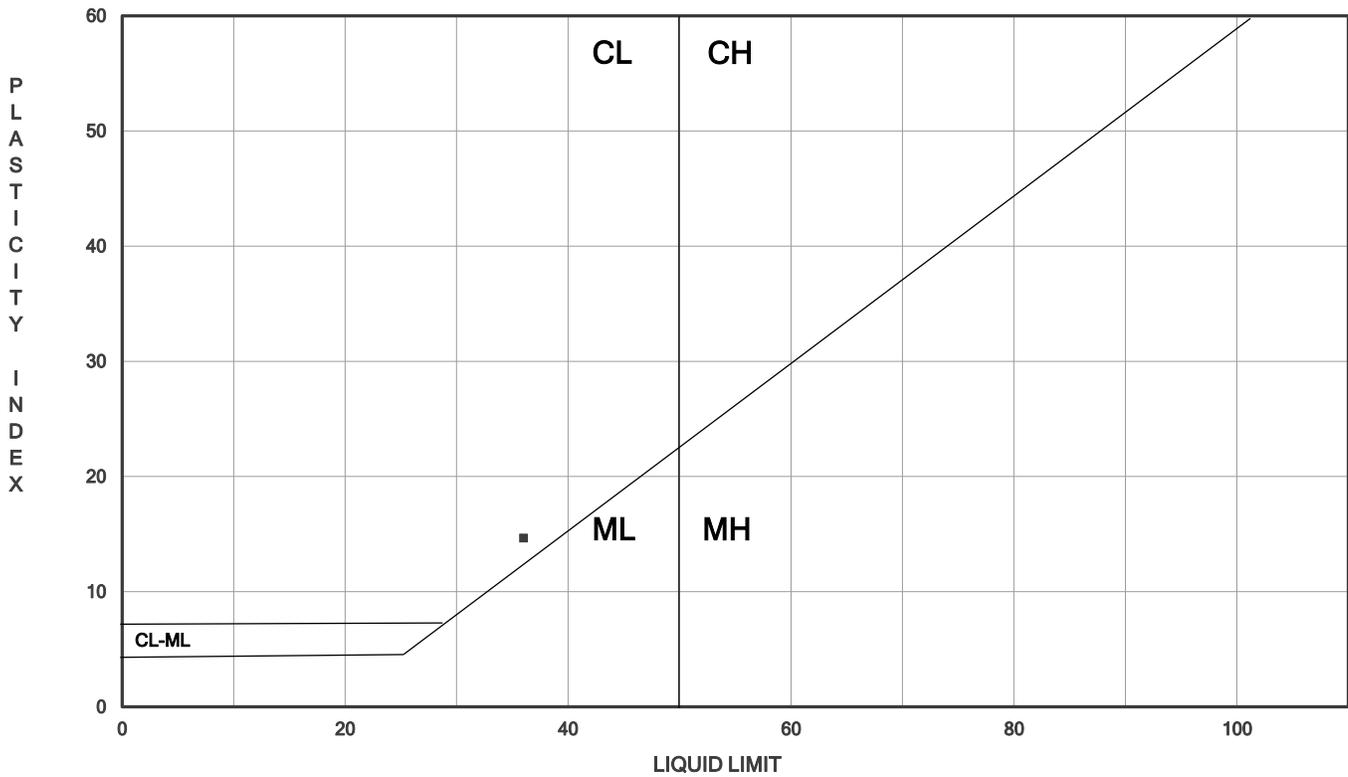
Figure: 3

Tested By:	<u>Nurudeen Mekanjuola</u> Laboratory Technician	Reviewed By:	 David McBay, CET - Laboratory Supervisor	Date:	<u>August 14, 2025</u>
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Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on written request.

**METHOD OF TEST FOR LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX OF SOILS**  
MTO LS-703/704

Project Number: <b>02506021</b>	Project Name: <b>Glencoe Industrial Park</b>	Client: <b>Spriet Associates London Limited</b>
ROS: <b>2606 / 2607</b>	Sample ID: <b>Borehole 03, Sample 7</b>	Sample Depth: <b>4.58 - 5.03m</b>
Sampled By: <b>Englobe</b>	Date Received: <b>July 30, 2025</b>	Date Completed: <b>August 9, 2025</b>
File Number: <b>04.02506021.000.MT-AT-001-00</b>	Englobe Laboratory: <b>London</b>	



Atterberg Limits / In-Situ Moisture Content		Grainsize Proportions, %	
Liquid Limit, LL	<b>36</b>	% Gravel (> 4.75 mm):	<b>3.2</b>
Plastic Limit, PL	<b>21</b>	% Sand (75 µm to 4.75 mm):	<b>6</b>
Plasticity Index, PI	<b>15</b>	% Silt (2 µm to 75 µm):	<b>52.6</b>
In Situ Moisture Content (ASTM D2216) %		% Clay (<2 µm):	<b>38.2</b>

Soil Description	<b>SILT and CLAY, traces of Sand and Gravel</b>
Group Symbol	<b>CL</b>
Remarks	

**Figure: 4**

Tested By: <u>Nurudeen Makanjuola</u> Laboratory Technician	Reviewed By: <u></u> David McBay, C.E.T. - Laboratory Supervisor	Date: <u>August 14, 2025</u>
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Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on written request.  
London Office: 60 Meg Drive, Unit#12, London, ON, N6E 3T6 - Ph: (519) 685-6400

Project Number:	02506021	Project Name:	Glencoe Industrial Park	Client:	Spriet Associates London Limited
ROS:	2608	Sample ID:	Borehole 05, Sample 2	Sample Depth:	0.76 - 1.22m
Sampled By:	Englobe	Date Received:	July 30, 2025	Date Completed:	August 9, 2025
File Number:	04-02506021.000.MT-SH-004-00			Englobe Laboratory	London

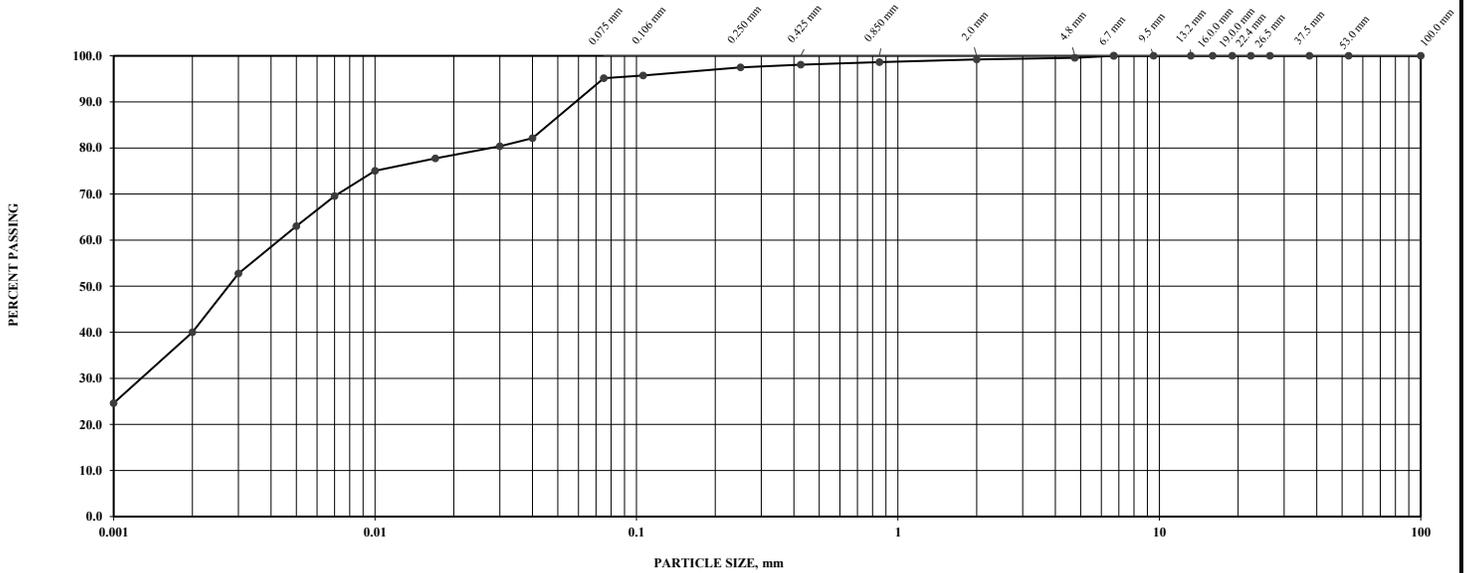
**PARTICLE SIZE DISTRIBUTION, MTO LS-702**

U.S. BUREAU OF SOILS CLASSIFICATION (AS USED IN MINISTRY OF TRANSPORTATION OF ONTARIO PAVEMENT DESIGNS)

CLAY	SILT	VERY FINE SAND	FINE SAND	MEDIUM SAND	COARSE SAND	FINE GRAVEL	GRAVEL
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UNIFIED SOILS CLASSIFICATION ASTM D 2487

FINES (SILT & CLAY)	FINE SAND	MEDIUM SAND	COARSE SAND	FINE GRAVEL	COARSE GRAVEL
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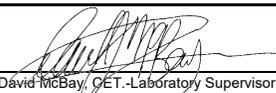
**Coefficients**

D60	0.004	D30	0.001	D10	Cc	Cu
-----	-------	-----	-------	-----	----	----

Sieve Analysis		Hydrometer Analysis	
Sieve Size, mm	% Passing	Diameter, mm	% Passing
53	100.0	0.040	82.1
37.5	100.0	0.030	80.4
26.5	100.0	0.017	77.7
22.4	100.0	0.010	75.1
19	100.0	0.007	69.5
16	100.0	0.005	63.0
13.2	100.0	0.002	40.0
9.5	100.0	0.001	24.6
6.7	100.0	Atterberg Limits	
4.75	99.6		
2.00	99.2	Liquid Limit	
0.850	98.6		
0.425	98.1	Plastic Limit	
0.250	97.5		
0.106	95.7	Plastic Index	
0.075	95.1		

GRAIN SIZE PROPORTIONS, %	
% Gravel (> 4.75 mm):	0.4
% Sand (75 µm to 4.75 mm):	4.5
% Silt (2 µm to 75 µm):	55.1
% Clay (< 2 µm):	40.0
Group Symbol / Soil Description	<b>SILT and CLAY, trace Sand</b>
Remarks	

Figure: 5

Tested By:	Nurudeen Mekanjuola Laboratory Technician	Reviewed By:	 David McBay, CET - Laboratory Supervisor	Date:	August 14, 2025
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Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on written request.

Project Number:	02506021	Project Name:	Glencoe Industrial Park	Client:	Spriet Associates London Limited
ROS:	2609	Sample ID:	Borehole 07, Sample 8	Sample Depth:	6.10 - 6.56m
Sampled By:	Englobe	Date Received:	July 30, 2025	Date Completed:	August 9, 2025
File Number:	04-02506021.000.MT-SH-005-00			Englobe Laboratory	London

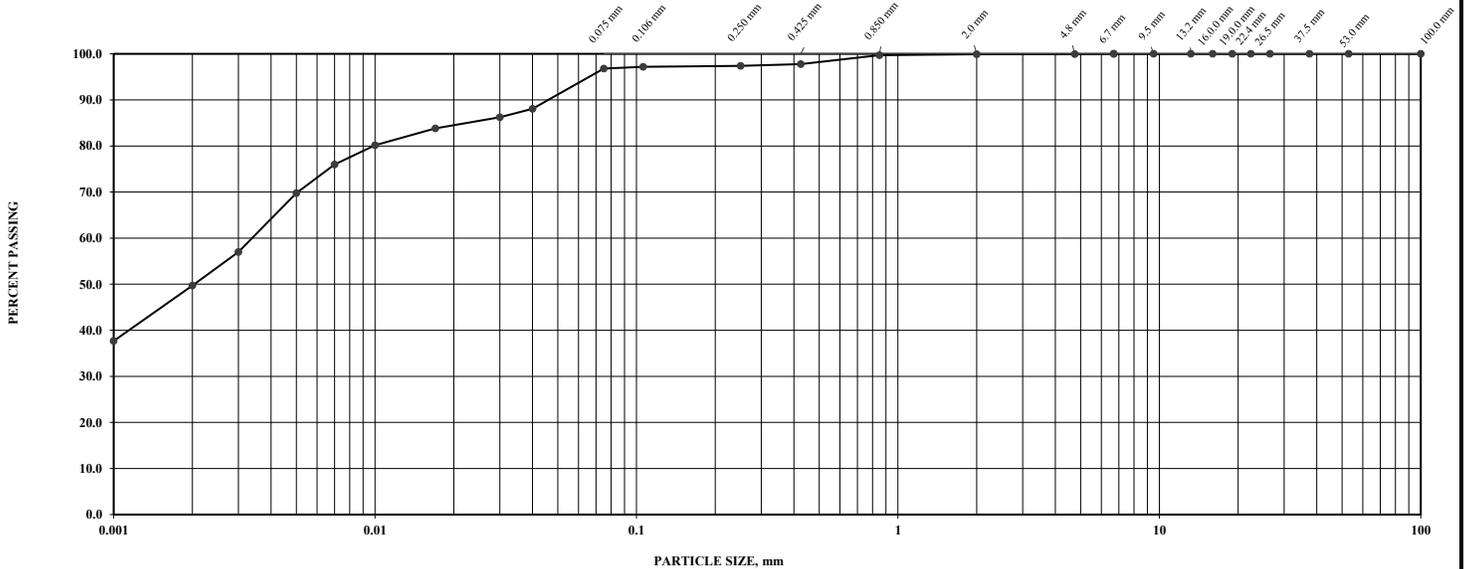
**PARTICLE SIZE DISTRIBUTION, MTO LS-702**

U.S. BUREAU OF SOILS CLASSIFICATION (AS USED IN MINISTRY OF TRANSPORTATION OF ONTARIO PAVEMENT DESIGNS)

CLAY	SILT	VERY FINE SAND	FINE SAND	MEDIUM SAND	COARSE SAND	FINE GRAVEL	GRAVEL
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UNIFIED SOILS CLASSIFICATION ASTM D 2487

FINES (SILT & CLAY)	FINE SAND	MEDIUM SAND	COARSE SAND	FINE GRAVEL	COARSE GRAVEL
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**Coefficients**

D60	0.003	D30		D10		Cc		Cu	
-----	-------	-----	--	-----	--	----	--	----	--

Sieve Analysis		Hydrometer Analysis	
Sieve Size, mm	% Passing	Diameter, mm	% Passing
53	100.0	0.040	88.1
37.5	100.0	0.030	86.2
26.5	100.0	0.017	83.8
22.4	100.0	0.010	80.1
19	100.0	0.007	76.0
16	100.0	0.005	69.8
13.2	100.0	0.002	49.7
9.5	100.0	0.001	37.7
6.7	100.0	Atterberg Limits	
4.75	99.9		
2.00	99.9	Liquid Limit	
0.850	99.7	Plastic Limit	
0.425	97.8		
0.250	97.4	Plastic Index	
0.106	97.2		
0.075	96.8		

GRAIN SIZE PROPORTIONS, %	
% Gravel ( > 4.75 mm):	0.1
% Sand ( 75 µm to 4.75 mm):	3.1
% Silt ( 2 µm to 75 µm):	47.1
% Clay ( < 2 µm):	49.7
Group Symbol / Soil Description	<b>SILT and CLAY, trace Sand</b>
Remarks	

Figure: 6

Tested By:	Nurudeen Mekanjuola Laboratory Technician	Reviewed By:	 David McBay, GET - Laboratory Supervisor	Date:	August 14, 2025
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Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on written request.

# Appendix D

## Traffic Data



**eNGLOBE**

**TABLE D-2 TRAFFIC DATA AND ESTIMATED ESALs**

Tower Avenue Extension

**Glencoe, ON**

YEAR	AVERAGE ANNUAL DAILY TRAFFIC	No. OF LANES	ESTIMATED CUMULATIVE ANNUAL ESALs
2026	1,000	2	
2027	1,020	2	29,000
2028	1,040	2	58,600
2029	1,061	2	88,800
2030	1,082	2	119,600
2031	1,104	2	151,000
2032	1,126	2	183,100
2033	1,149	2	215,800
2034	1,172	2	249,200
2035	1,195	2	283,200
2036	1,219	2	317,900
2037	1,243	2	353,300
2038	1,268	2	389,400
2039	1,294	2	426,200
2040	1,319	2	463,800
2041	1,346	2	502,100
2042	1,373	2	541,200
2043	1,400	2	581,100
2044	1,428	2	621,800
2045	1,457	2	663,300
2046	1,486	2	705,600

Directional Factor (DF) =	0.5
Lane Distribution Factor (LDF) =	1.0
Combined Truck Factor (CTF) =	0.78
Percent Trucks =	20.0%
Traffic Growth Rate =	2.0%
Days Per Year For Truck Traffic =	365
Number of Lanes in one Direction =	1



[englobecorp.com](http://englobecorp.com)

**DUE – DILIGENCE SOIL CHARACTERIZATION REPORT**





December 17, 2025

**Spriet Associates Architects and Consulting Engineers**  
155 York Street,  
London ON, N6A 1A8

Attention: Katherine Dagenais, P.Eng. ([katherine@spriet.on.ca](mailto:katherine@spriet.on.ca))

Subject: **Due-Diligence Soil Characterization Report**  
**Proposed Glencoe Industrial Park**  
Glencoe, Municipality of Southwest Middlesex, Ontario  
Englobe reference: 02506021.0200.EN.0001.00

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## 1 Introduction

Englobe Corp. (“Englobe”) was retained by Spriet Associates Architects and Consulting Engineers (hereinafter referred to as the “Client”) to complete due-diligence soil characterization and analysis (“Soil Sampling”) in support of the engineering design services for the proposed Glencoe Industrial Park in Glencoe, Ontario (hereinafter referred to as the “Project Area”).

Englobe understands that the total anticipated volume of excess soil for this project area is broken down as follows;

- roadworks and servicing: 8,000 m<sup>3</sup>; and
- storm water management (SWM) facility: 24,700 m<sup>3</sup>

Based on the location of the Project Area, the Project meets the criteria for non-application of Section 8 of Ontario Regulation 406/19 and aligns with the “low-risk” site exemption clause. The purpose of the Soil Sampling activities was to characterize the environmental quality of soil contained at the Project Area prior to off-site beneficial reuse and/or disposal.

A due-diligence excess soil characterization program for the proposed Glencoe Industrial Park was requested by the Client in general accordance with Ontario Regulation 406/19: On-Site and Excess Soil Management, made under Environmental Protection Act, R.S.O. 1990, c. E. 19, last amended December 17, 2024 (“O.Reg. 406/19”).

### 1.1 Non-Application of Section 8 of the Regulation

It is Englobe’s understanding that the Project Leader has determined that the project is likely to fall under the location-based exemption of Section 8 of O.Reg. 406/19 (the Project Area is used entirely for agricultural purposes).

As a result, the following tasks were not considered to be required for this project at the time of writing:

- Assessment of Past Uses and Sampling and Analysis Plan;
- Soil sampling at the frequency defined in O.Reg. 406/19;
- Soil Characterization Report;
- Filing on the Resource Productivity and Recovery Authority (RPRA) Excess Soil Registry; and,
- Implementation of a soil tracking system.

## 2 Methodology

Englobe developed a due-diligence excess soil characterization program, designed to characterize the soil quality at the Project Area, and satisfy the requirements of potential excess soil reuse sites. This section outlines the field program conducted on July 23 and 24, 2025.

### 2.1 Soil Sampling

#### 2.1.1 Boreholes

A total of ten (10) boreholes were advanced within the Project Area (BH1 through BH10) on July 23 and 24, 2025. Boreholes were advanced to maximum depths of approximately 5.2 to 8.2 metres below grade (mbg) or soil surface. The approximate borehole locations are shown on the attached **Drawing 2**, contained in **Appendix A**.

The boreholes were advanced in accordance with O.Reg. 903 using a Diedrich D50T track mounted drill with an auger sampling device supplied and operated by a MECP-licenced drilling contractor, London Soil Test (LST).

A total of forty-six (46) soil samples [including four (4) field duplicate sample for QA/QC purposes] were selected for laboratory analysis of petroleum hydrocarbons (PHCs) fractions F1 to F4, benzene, toluene, ethylbenzene and xylenes (BTEX), metals, pH, electrical conductivity (EC), and sodium adsorption ratio (SAR). Additionally, ten (10) samples were submitted for analysis of the ministry's Synthetic Precipitation Leaching Procedure (mSPLP).

### 2.2 Soil Screening and Sampling

Soil vapour headspace readings were completed on all soil samples using a Mini-Rae photoionization detector (PID) calibrated with isobutylene reference gases. The soil samples were allowed to equilibrate to the ambient air temperature prior to measurement.

Samples selected for laboratory chemical analysis were collected into pre-cleaned, laboratory supplied containers provided with necessary preservatives and placed in an ice chilled cooler to minimize the potential for chemical degradation and volatilization. Sample containers were labelled with a unique sample number, project reference, date, and time of sampling.

Soil samples were selected for laboratory chemical analysis on the basis of olfactory evidence of odours, physical evidence of staining or deleterious matter, headspace readings, and/or evaluation of analytical test groups. The soil samples selected for laboratory chemical testing were submitted to a Canadian Association for Laboratory Accreditation Inc. (CALA)-accredited laboratory, ALS Global (ALS) of Waterloo, Ontario.

## 2.3 Quality Assurance/Quality Control (QA/QC)

Quality assurance/quality control (QA/QC) measures were incorporated into the field sampling and laboratory analytical programs to evaluate the field and analytical data for acceptable accuracy, precision, representativeness, and comparability. Specific QA/QC measures were followed in relation to equipment decontamination, equipment calibration, sample collection and handling, field documentation, and contractor provision.

Specific procedures pertaining to the characterization and description of soil samples and were followed by trained field personnel.

Decontamination procedures were followed during the soil sampling activities, including:

- All sampling equipment having potential to come into contact with contaminated soil was decontaminated prior to and following each sample. Decontamination consisted of washing equipment with a non-phosphate detergent and distilled water mixture.
- New disposable chemical resistant nitrile gloves were worn for the handling and collection of soil samples to minimize the potential for cross-contamination.

Specific procedures were followed for the documentation, handling, and transport of the soil samples, including:

- Soil samples upon collection were placed directly in ice-chilled coolers;
- Soil samples were assigned unique identification numbers and submitted by the sampler to the contractual laboratory following chain of custody protocols within required holding times; and,
- Quality control soil samples were collected to provide a quantitative evaluation of the accuracy of the field sampling and laboratory analytical procedures. Duplicate soil samples at a general frequency of one (1) for every ten (10) samples for each parameter analyzed were submitted to the contractual laboratory to evaluate the precision and reproducibility of the field sampling and laboratory analytical procedures. Field quality control results were compared to applicable alert criteria.

The laboratory, ALS, performed chemical analyses following referenced methods incorporating QA/QC protocols as provided by the Ministry of Environment Conservation and Parks (MECP) and Canada Wide Standards for Petroleum Hydrocarbons. Chemical analyses for specific analytical test groups were performed in general accordance with the MECP document titled *“Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality,”* dated February 19, 2021, as amended.

Analytical test group specific quality control samples were prepared and analyzed by the laboratory, including:

- Laboratory duplicate samples to evaluate method reproducibility and sample homogeneity;
- Method blanks to evaluate potential bias;
- Spike blanks to evaluate method accuracy;
- Surrogate compounds to evaluate extraction efficiency;
- Matrix spikes to evaluate extraction efficiency and matrix interferences; and,
- QC standards to evaluate method accuracy.

Quality control results reported by the contractual laboratory were compared to applicable alert and control criteria and were presented in the quality control reports accompanying the certificates of analysis (COAs). The laboratory QA/QC results are discussed in **Section 3.3**.

## 3 Results

### 3.1 Applicable Standards

#### 3.1.1 On-Site Soil Reuse Quality Assessment Criteria

The soil analytical results were compared to the criteria presented in the MECP document titled *“Soil, Ground Water and Sediment Standards for use under Part XV.1 of the Environmental Protection Act,”* dated July 1, 2011 (hereinafter referred to as the MECP Site Condition Standards).

The soil analytical results were assessed using the MECP Site Condition Standards (SCS), Table 1: Background Site Condition Standards for Agricultural or other (AgO) property use condition (MECP Table 1 AgO SCS) and MECP Table 2: Full Depth Background SCS in a Potable Ground Water Condition for industrial/commercial/community (ICC) property use condition (MECP Table 2 ICC SCS)

The rationale for the selection of the MECP Table 1 AgO SCS is as follows;

- The current land use of the Project Area is an agricultural field;
- There are records of municipal water wells located within the area
- Soil pH analysis completed on all soil samples collected as part of this investigation were within the range specified by O. Reg. 153/04 (5 to 9 for surface soil). Therefore, the Project Area is not considered to be an environmentally sensitive site due to soil pH;
- Based on field observations and laboratory grain size analysis, the predominant soils at the Site are comprised of coarse-grained soils (% of particles are < 75 µm);
- There is a Lower Thames Valley Conservation Authority (LTVCA) regulated area which overlaps the site on the north-western boundary. This area provides a 40 m buffer around an unnamed creek which flows northwest to northeast. The Table 1 AgO SCS applies to areas within 30 m of this LTVCA regulated area; and,
- The Glencoe Outlet Municipal Drain is located within 30 m of the northeast boundary of the Project Area, however, due to the LTVCA regulated area, the most stringent site condition standard criteria is applied to this area within the Project Area.

In addition to the above noted information, the rationale for the selection of the MECP Table 2 ICC SCS is as follows;

- The proposed work is to be completed within roadways and Stormwater Management Pond within the Project Area.

### 3.1.2 Off-Site Soil Reuse Quality Assessment Criteria

The soil analytical results were compared to the Excess Soil Quality Standards (ESQS) presented in the Soil Rules. Based on the unknown anticipated quantity of excess soil to be excavated/managed (i.e. volume greater than 350 cubic metres), and discussions with the client, the soil analytical results were assessed using:

- Table 1 Full Depth Background Site Condition Standards (SCS) in an agricultural or other (AgO) property use condition (MECP Table 1 AgO SCS), and;
- Table 2.1 Full Depth Background ESQS in a Potable Ground Water Condition for ICC property use condition (MECP Table 2.1 ICC ESQS).

### 3.1.3 mSPLP Assessment Criteria

mSPLP results were compared to the volume independent MECP Leachate Screening Levels (LSL) for Excess Soil Reuse in an agricultural or other (AgO) property use (MECP Table 1 AgO LSL).

## 3.2 Soil Quality

The analytical results for PHCs (fractions F1 to F4) and BTEX, and metals and inorganics (including pH, EC and SAR) from the Englobe 2025 Field Program are summarized in **Tables 1 and Table 2**, which are contained in **Appendix B**. In addition, the laboratory certificates of analysis provided by ALS for soil samples collected during the Englobe 2025 Field Program are contained in **Appendix C**, for reference.

### 3.2.1 Assessment to MECP Table 1 AgO SCS

Based on a review of the laboratory analytical results, all sampling locations had concentrations of the specified parameters reported above the MECP Table 1 AgO SCS.

- Samples generally across the entire project area exceeded the MECP Table 1 AgO SCS for sodium absorption ratio (SAR) and/or electrical conductivity (EC);
- BH10 S5 exceeded the MECP Table 1 AgO SCS for molybdenum at a depth between 3.0 m and 3.7 m below ground surface (bgs);
- BH1 S6 and DUP-S-3 (field duplicate) exceeded the MECP Table 1 AgO SCS for PHC F2 at a depth between 3.8 m and 4.4 m bgs;
- BH2 S4 and BH2 S7 exceeded the MECP Table 1 AgO SCS for PHC F2 at depth between 2.3 and 2.9 m bgs, and 4.6 and 5.2 m bgs, respectively;
- BH3 S6 exceeded the MECP Table 1 AgO SCS for PHC F2 at a depth between 3.8 m and 4.4 m bgs;

- DUP-S-1 (field duplicate of BH4 S7) exceeded the MECP Table 1 AgO SCS for PHC F2 at depth between 4.6 and 5.2 mbg. The average of sample DUP-S-1 and the parent sample exceeded MECP Table 1 AgO SCS criteria, and as such this location is considered to be an exceedance of the criteria; and,
- BH5 S6 exceeded the MECP Table 1 AgO SCS for PHC F2 at a depth between 3.8 m and 4.4 m bgs.

All other laboratory analytical results met the MECP Table 1 AgO SCS.

### **3.2.2 Assessment to MECP Table 2.1 ICC ESQS**

Based on a review of the laboratory analytical results, all sampling locations had concentrations of the specified parameters reported above the MECP Table 2.1 ICC ESQS.

- Samples at BH7 S6, BH7 S7, BH7 S8, BH9 S3 & DUP-S-2, and BH9 S4 exceeded the MECP Table 2.1 ICC ESQS for EC.

All other laboratory analytical results met the MECP Table 2.1 ICC ESQS.

### **3.2.3 Assessment to MECP Table 2 ICC SCS**

Based on a review of the laboratory analytical results, all sampling locations had concentrations of the specified parameters reported above the MECP Table 2 ICC SCS.

- Samples at BH7 S6, BH7 S7, BH7 S8, BH9 S3 & DUP-S-2 and BH9 S4 exceeded the MECP Table 2 ICC SCS for EC.

All other laboratory analytical results met the MECP Table 2 ICC SCS.

### **3.2.4 Assessment to MECP Leachate Screening Levels Criteria**

Englobe's Qualified Person (QP) selected soil samples for mSPLP analysis after determining the sampling locations where 90% (or higher) of the highest contaminant concentrations were found. Based on a review of the laboratory analytical results, all analyzed samples met the MECP Table 1 AgO and 2.1 ICC LSLs. The mSPLP results are provided in Table 5.

### **3.2.5 Quality Assurance/Quality Control Results**

Soil sampling undertaken during the Englobe 2025 Field Program followed written procedures to ensure sample integrity and the collection of reliable data. Soil samples were collected into pre-cleaned test group specific containers prepared with any necessary preservatives by the contractual laboratory, ALS. Sample integrity was maintained by placing containerized samples immediately upon collection into ice chilled insulated coolers to minimize chemical activity and delivered to the laboratory within test group specific holding times. Decontamination protocols were followed and new disposable sampling equipment (i.e. gloves) was used to minimize the potential for sample cross contamination and bias.

Certificates of analysis prepared by the contractual laboratory were received for all soil samples analyzed. Review of the certificates of analysis indicated that they were prepared in a manner consistent with the requirements of O.Reg. 153/04 and O.Reg. 406/19. Copies of the laboratory certificates of analysis are presented in **Appendix C**, for reference.

QA/QC samples were collected and analyzed as part of the Englobe 2025 Field Program to ensure the reliability of the analytical data. The QA/QC samples included the collection of soil duplicates to evaluate the precision/reproducibility of the field and analytical procedures. A summary of the field duplicates is provided in **Table 3-1**, below.

**Table 3-1 Summary of QA/QC Program**

Sample Location	Sample ID	Duplicate Sample ID	Media	Analysis Performed
BH4	BH4 S7	DUP-S-1	Soil	PHCs F1 to F4, BTEX, Metals, pH, EC, SAR
BH9	BH9 S3	DUP-S-2	Soil	PHCs F1 to F4, BTEX, Metals, pH, EC, SAR
BH1	BH1 S6	DUP-S-3	Soil	PHCs F1 to F4, BTEX, Metals, pH, EC, SAR
BH10	BH10 S6	DUP-S-4	Soil	PHCs F1 to F4, BTEX, Metals, pH, EC, SAR

Notes:  
 PHCs F1 to F4 - Petroleum Hydrocarbons Fractions F1 to F4  
 BTEX - Benzene, Toluene, Ethylbenzene and Xylenes  
 EC - Electrical Conductivity  
 SAR - Sodium Adsorption Ratio

A quantitative evaluation of the soil duplicate sample results was completed by calculating the relative percent difference (RPD) and comparing the results to applicable alert criteria. The calculation of RPDs is only valid if an analyte is detected in both samples at a concentration at least five times the method detection limit (MDL). Alert criteria are matrix and test group specific. For parameters analyzed in the soil duplicate samples, considering matrix heterogeneity, an alert criterion of 60% was applied.

The results of the calculation of RPDs are summarized as follows:

- For PHCs and BTEX none of the assessed parameters were detected at concentrations exceeding laboratory MDLs and, as such, RPDs could not be calculated;
- For metals and inorganics, the RPDs were all below the 60% alert criteria.

Based on review of the field and laboratory QA/QC sample results, no data qualifications were required, and the quality of the analytical data was deemed acceptable to meet the objectives of the Englobe 2025 Field Program and did not affect decision making related to the findings of this report.

## 4 Conclusions

Based on the analytical results obtained during the Soil Sampling, as documented in this report, three (3) soil zones were identified within the Project Area. A summary of the soil management requirements for the soil zones are as follows:

**Soil Zone 1:** A review of the laboratory analytical results indicates that the soil quality identified within Soil Zone 1 identified as Soil Zone 1, if deemed geotechnically suitable, are appropriate for reuse in areas which are unlikely to be suitable habitat for environmentally sensitive species (i.e. meet the Table 1 AgO SCS) with the exception of salt-related impacts. If these soils are deemed as excess soil and required exportation from the Project Area then these soils are considered to be suitable for reuse at an off-site location accepting soil meeting the MECP Table 1 AgO SCS under the following conditions, as outlined in Section D (1) (3) of the Soil Rules:

- Salt impacted soil is finally placed at the Project Area at one (1) of the following locations:
  - Where it is reasonable to expect that the soil will be affected by the same chemicals as a result of continued application of a substance for the safety of vehicular or pedestrian traffic under conditions of snow or ice;
  - At an industrial or commercial property use and to which non-potable standards would be applicable; or
  - At least 1.5 m below the surface of the soil.
- Salt impacted soil is not finally placed at the Project Area at any of the following locations:
  - Within 30 metres of a waterbody; or
  - Within 100 metres of a potable well / an area intended for future potable well; or
  - Where crops / pasture activities are occurring / planned (unless the soil is placed 1.5 m or greater below the soil surface). with salt-related impacts.

**Soil Zone 2:** A review of the laboratory analytical results indicates that the soil quality identified within Soil Zone 2, if deemed geotechnically suitable, are appropriate for reuse within the Project Area in areas which are unlikely to be suitable habitat for environmentally sensitive species and at least 30 m away from the Lower Thames Valley Conservation Authority (LTVCA) regulated area (i.e meets MECP Table 2 ICC SCS). If these soils are deemed as excess soils and required exportation from the Project Area then these soils are considered to be suitable for reuse at an off-site location accepting soil meeting the MECP Table 2.1 ICC ESQS under the following conditions, as outlined in Section D (1) (3) of the Soil Rules:

- Salt impacted soil is finally placed at the Project Area at one (1) of the following locations:
  - Where it is reasonable to expect that the soil will be affected by the same chemicals as a result of continued application of a substance for the safety of vehicular or pedestrian traffic under conditions of snow or ice;
  - At an industrial or commercial property use and to which non-potable standards would be applicable; or
  - At least 1.5 m below the surface of the soil.
- Salt impacted soil is not finally placed at the Project Area at any of the following locations:
  - Within 30 metres of a waterbody; or
  - Within 100 metres of a potable well / an area intended for future potable well; or
  - Where crops / pasture activities are occurring / planned (unless the soil is placed 1.5 m or greater below the soil surface). with salt-related impacts.

Soil within the Project Area has been characterized at select locations and depths. Further sampling should be conducted if soils at depths not sampled be deemed excess soils.

Under O.Reg. 406/19, written acceptance of the excess soil is required to be provided by the owner or operator of the reuse/disposal site to the Project Leader or their representative (such as the Contractor) prior to receipt of the excess soil from the Project Area. Furthermore, an acceptable “beneficial reuse” [i.e. backfilling excavation, grading]] must be identified for the undertaking at the reuse site to permit the deposit of excess at the reuse site.

It is noted that the information provided above is based on the soil samples collected and analyzed from the sample locations only. The environmental quality of the soils at the Project Area may vary between the sampling locations and sampling dates. It is further noted that this Due-Diligence Soil Characterization Report may not satisfy specific receiving sites’ internal requirements.

## 5 Closure

This Due-Diligence Soil Sampling Report was completed by Arden McPhail and reviewed by Emily Brook, P.Eng. This report is subject to the Statement of Limitations provided in **Appendix D**.

Best regards,

Englobe Corp.:



Arden McPhail, G.I.T.  
*Environment Professional*



Emily Brook, P.Eng., QPESA  
*Project Manager*

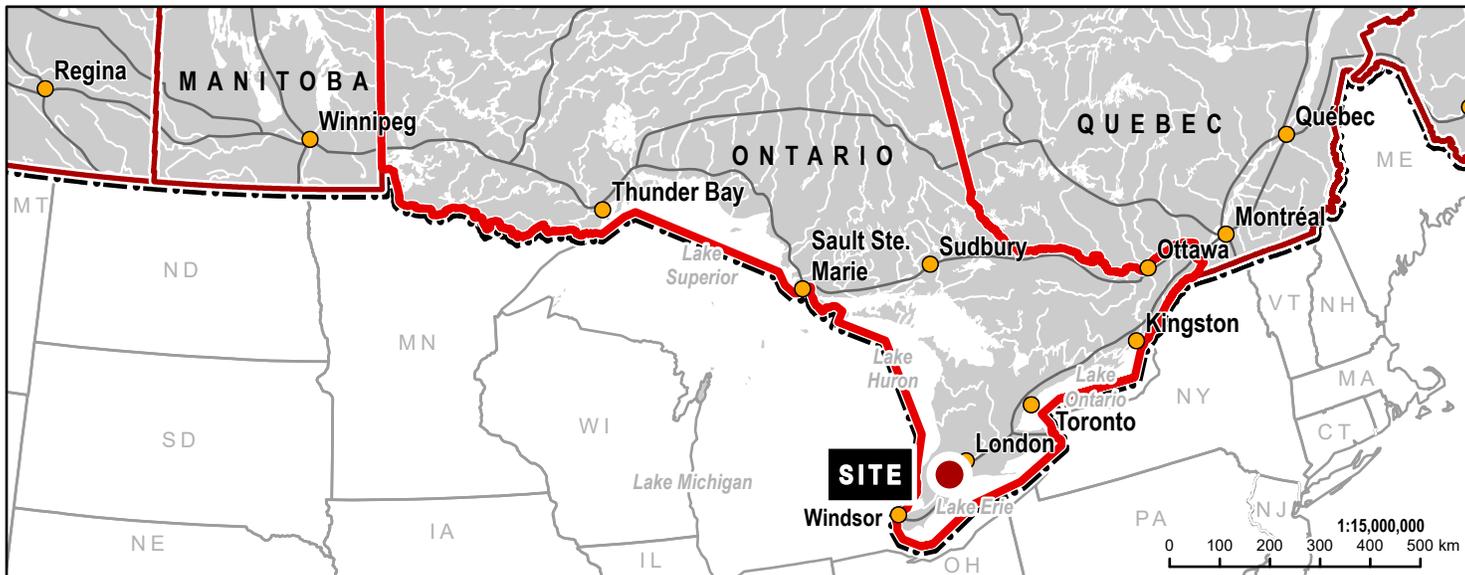
### APPENDICES

Appendix A	Drawings
Appendix B	Analytical Tables
Appendix C	Laboratory Certificates of Analysis
Appendix D	Englobe Statement of Limitations

# Appendix A

## Drawings



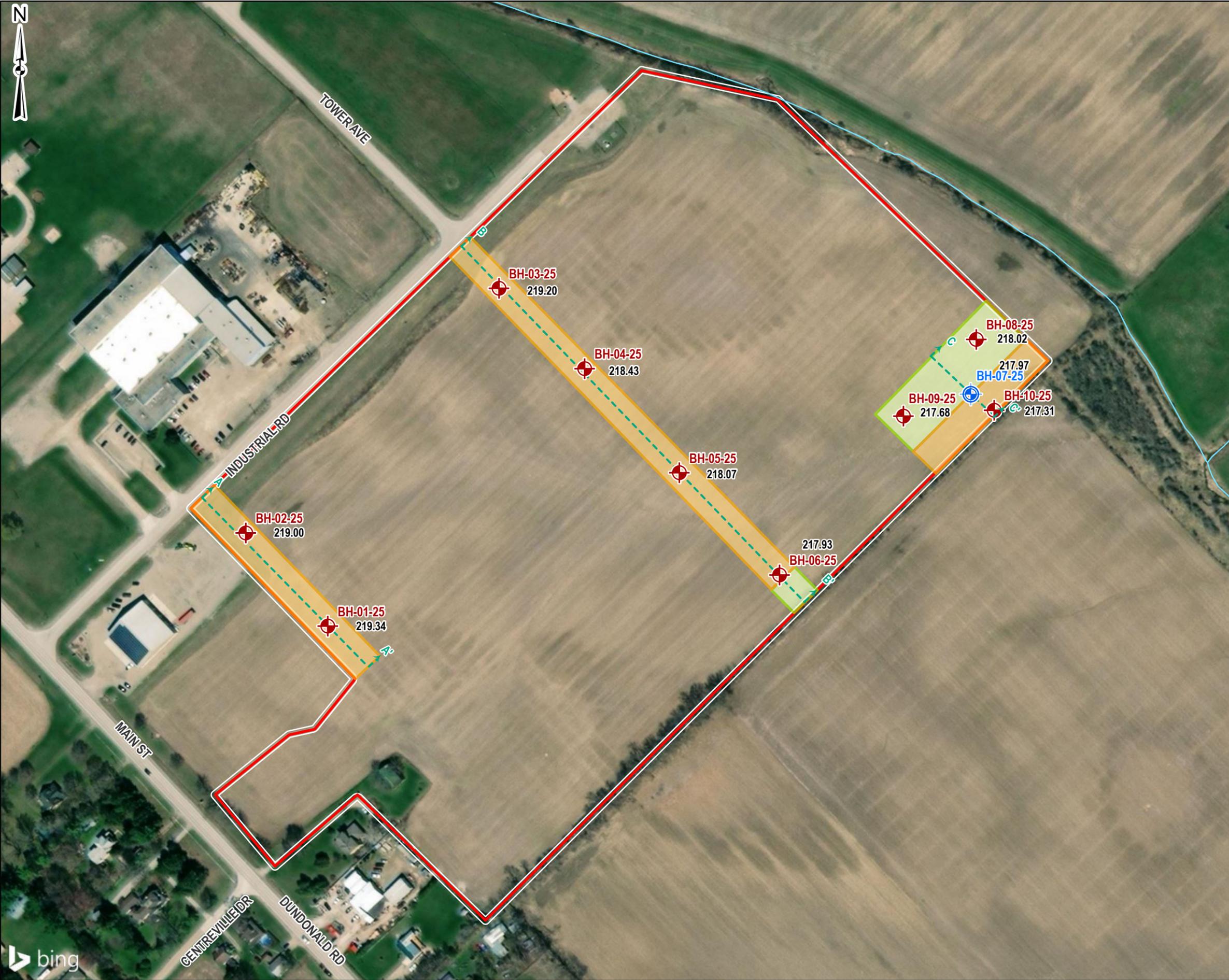


**Note**  
This drawing shall be read in conjunction with the associated technical report.

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A	11/7/2025	Draft		E.B.		
Revision	Date	Issue		Approval		

Client <b>Spriet Associates London Limited</b>		Site <b>Glencoe Industrial Park, Glencoe, ON</b>			
	Report Title <b>Due Diligence Soil Characterization Report</b>	Designed By A.M.	Date Nov 2025		
	Drawing Title <b>Site Location Map</b>	Drawn By H.K.	Project No. 02506021.000		
		Approved By E.B.	Figure No.		
		Scale 1:25,000	<b>1</b>		

Folder: D:\Englobe\Projects\02506021\_SiteLocation.aprx Friday, Friday, November 7, 2025 @ Time: 9:41 AM  
 Drawing: 02506021\_SiteLocation



**Notes**

1. This drawing shall be read in conjunction with the associated technical report.
2. Coordinate System: NAD 1983 CSRS UTM Zone 17 T  
Projection: Transverse Mercator  
Datum: North American 1983 CSRS
3. Source: Bing Maps Aerial (used for Illustrative Purposes only)

**Legend**

- Approximate Borehole Location (Englobe, 2025)
- Approximate Monitoring Well Location (Englobe, 2025)

XXX.XX Approximate Elevation (Englobe, 2025)

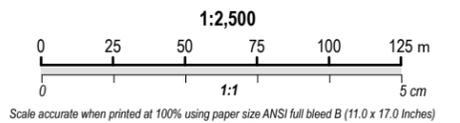
Watercourse

Cross-Section Lines

Approximate Project Extent

**Soil Zones**

- Soil Zone 1: Soil meets MECP Table 1 AgO SCS excluding salt impacts
- Soil Zone 2: Soil meets MECP Table 2.1 ICC ESQS at specific depths excluding salt impacts



Revision	Date	Issue	Approval
A	11/10/2025	Draft	E.B.

Client: **Spriet Associates London Limited**

Site: **Glencoe Industrial Park, Glencoe, ON**

Report Title: **Due Diligence Soil Characterization Report**

Drawing Title: **Soil Zones**

Designed By	<b>A.M.</b>	Scale	<b>1:2,500</b>
Drawn By	<b>H.K.</b>	Date	<b>Nov 2025</b>
Approved By	<b>E.B.</b>	Project No.	<b>02506021.000</b>

Figure No. **2**

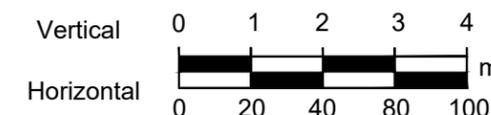
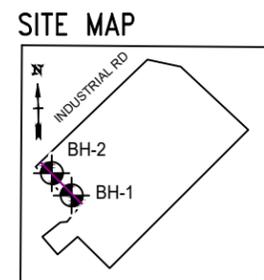
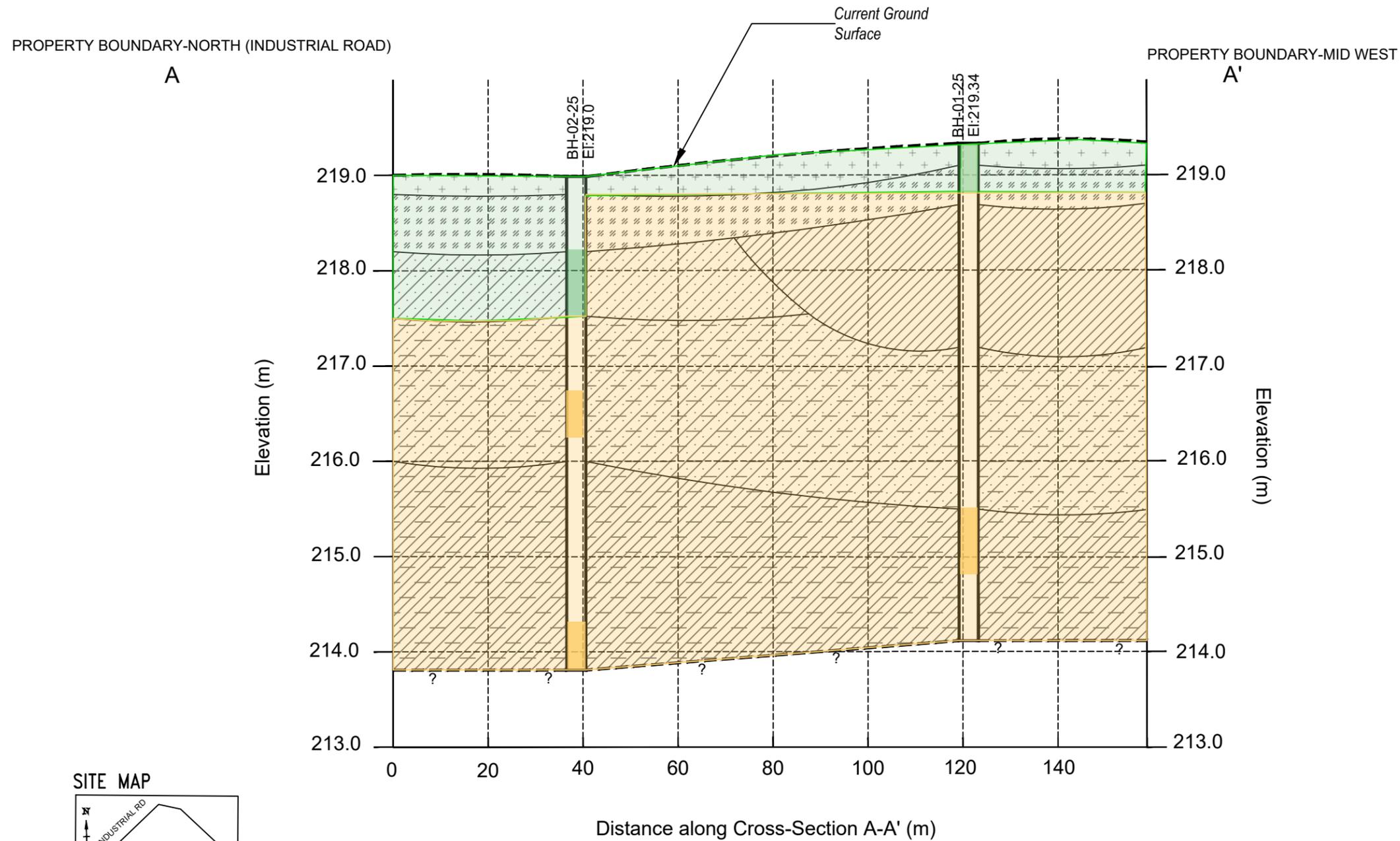


**Note**

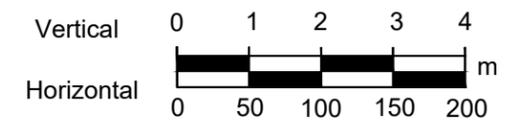
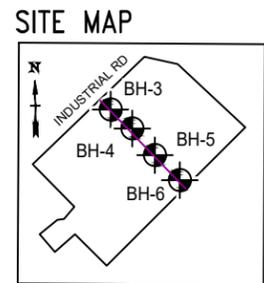
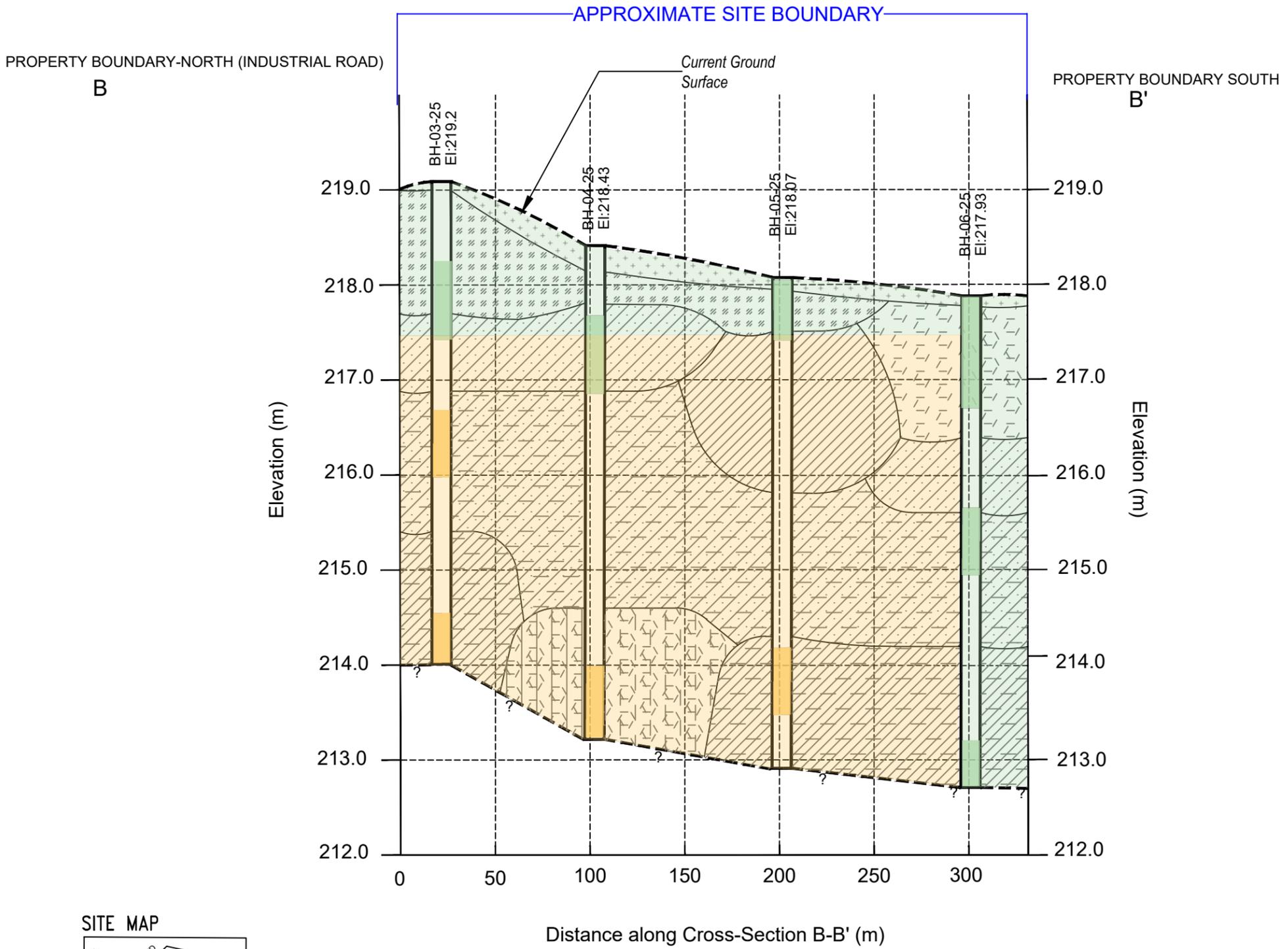
1. This drawing shall be read in conjunction with the associated technical report.
2. Drawing scale may be distorted. Measurements/locations taken from the drawing must be verified in the field.

**Legend**

- Topsoil
- Silt
- Silt and Clay
- Clayey Silt
- Clayey Silt Till
- Silt and Clay Till
- Soil Zone 1: Soil Meets MECP Table 1 AgO SCS excluding salt impacts
- Soil Zone 2: Soil Meets MECP Table 2.1 ICC ESQS at specific depths excluding salt impacts
- End of Investigation



A	11/10/2025	Draft	E.B
Revision	Date	Issue	Approval
Client <b>Spriet Associates London Limited</b>			
Site <b>Glencoe Industrial Park, Glencoe, ON</b>			
Report Title <b>Due Diligence Soil Characterization Report</b>			
Drawing Title <b>Subsurface Profile Cross-Section A-A'</b>			
Designed By <b>A.M</b>	Scale <b>As Shown</b>		
Drawn By <b>H.K</b>	Date <b>Nov 2025</b>		
Approved By <b>E.B</b>	Project No. <b>02506021.000</b>		
Figure No.	<b>3A</b>		



**Note**

1. This drawing shall be read in conjunction with the associated technical report.
2. Drawing scale may be distorted. Measurements/locations taken from the drawing must be verified in the field.

- Legend**
- Topsoil
  - Silt
  - Silt and Clay
  - Clayey Silt
  - Clayey Silt Till
  - Silt and Clay Till
  - Silty Clay
  - Silty Clay Till
  - Soil Zone 1: Soil Meets MECP Table 1 AgO SCS excluding salt impacts
  - Soil Zone 2: Soil Meets MECP Table 2.1 ICC ESQS at specific depths excluding salt impacts
  - End of Investigation

A	11/10/2025	Draft	E.B
Revision	Date	Issue	Approval
Client <b>Spriet Associates London Limited</b>			
Site <b>Glencoe Industrial Park, Glencoe, ON</b>			
Report Title <b>Due Diligence Soil Characterization Report</b>			
Drawing Title <b>Subsurface Profile Cross-Section B-B'</b>			
Designed By	Scale		
<b>A.M</b>	<b>As Shown</b>		
Drawn By	Date		
<b>H.K</b>	<b>Nov 2025</b>		
Approved By	Project No.		
<b>E.B</b>	<b>02506021.000</b>		
Figure No.	<b>3B</b>		

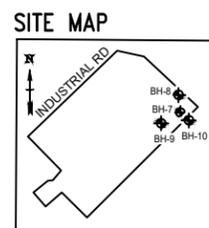
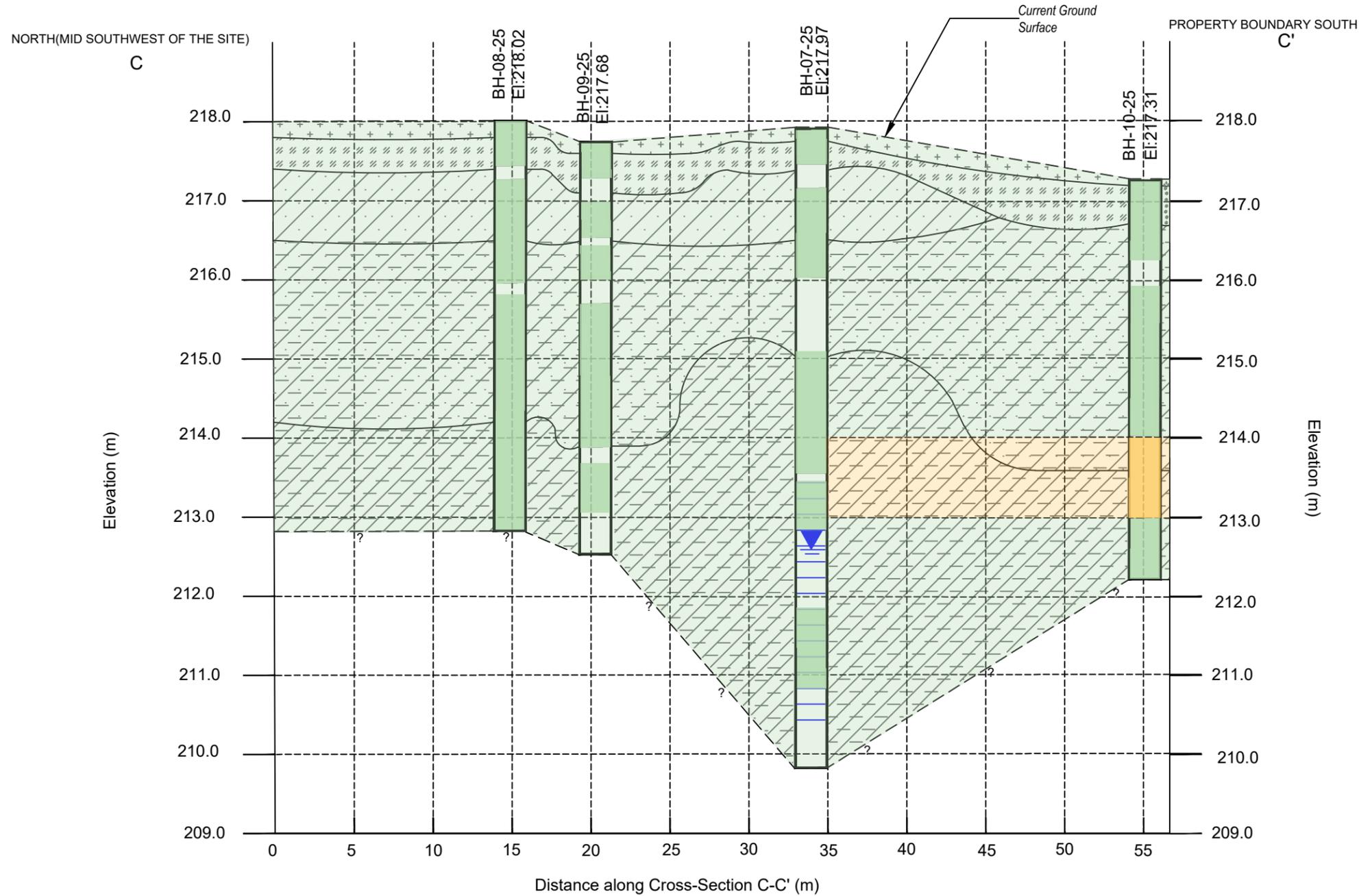
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**Note**

1. This drawing shall be read in conjunction with the associated technical report.
2. Drawing scale may be distorted. Measurements/locations taken from the drawing must be verified in the field.

**Legend**

- Topsoil
- Silt
- Silt and Clay
- Clayey Silt
- Clayey Silt Till
- Silt and Clay Till
- Groundwater Level as of 18 Sep 2025
- Monitoring well Screen
- Soil Zone 1: Soil Meets MECP Table 1 AgO SCS excluding salt impacts
- Soil Zone 2: Soil Meets MECP Table 2.1 ICC ESQS at specific depths excluding salt impacts
- End of Investigation



A	11/10/2025	Draft	E.B
Revision	Date	Issue	Approval
Client <b>Spriet Associates London Limited</b>			
Site <b>Glencoe Industrial Park, Glencoe, ON</b>			
Report Title <b>Due Diligence Soil Characterization Report</b>			
Drawing Title <b>Subsurface Profile Cross-Section C-C'</b>			
Designed By <b>A.M</b>	Scale <b>As Shown</b>		
Drawn By <b>H.K</b>	Date <b>Nov 2025</b>		
Approved By <b>E.B</b>	Project No. <b>02506021.000</b>		
Figure No.	<b>3C</b>		

# Appendix B

## Analytical Tables



TABLE 1

PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL

Glencoe Industrial Park  
Glencoe, Ontario

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Residential / Parkland / Institutional Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location			RPD (%)	Sample Location	
					Sample ID	BH1 S1	BH1 S6		DUP-S-3	BH2 S2
					Date and Time	23-Jul-2025 9:10	23-Jul-2025 9:50		23-Jul-2025 0:00	23-Jul-2025 10:10
					Laboratory ID	WT2521286-001	WT2521286-002		WT2521286-045	WT2521286-003
					Sample Depth (mbgs)	0.0-0.6	3.8-4.4		Field Duplicate	0.8-1.4
					Laboratory Units					
Benzene	0.02	0.02	0.21	0.0050	µg/g	<0.0050	<0.0050	<0.0050	NC	<0.0050
Ethylbenzene	0.05	0.05	1.1	0.015	µg/g	<0.015	<0.015	<0.015	NC	<0.015
Toluene	0.2	0.2	2.3	0.050	µg/g	<0.050	<0.050	<0.050	NC	<0.050
Xylenes (Total)	0.05	0.091	3.1	0.050	µg/g	<0.050	<0.050	<0.050	NC	<0.050
F1 (C6-C10)	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	NC	<5.0
F1-BTEX	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	NC	<5.0
F2 (C10-C16)	10	26	98	10	µg/g	<10	<b>13</b>	<b>22</b>	NC	<10
F3 (C16-C34)	240	240	300	50	µg/g	<50	78	61	NC	<50
F4 (C34-C50)	120	3300	2800	50	µg/g	<50	<50	<50	NC	<50
Chrom. to baseline at nC50	-	-	-	-	-	YES	YES	YES	NC	YES
F4G-SG (GHH-Silica)	120	3300	2800	-	-	-	-	-	NC	-

Notes:

- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
- Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
- Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
- Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- All Standards and results shown in µg/g.
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- Tests carried out by: ALS Global

**TABLE 1**  
**PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL**

**Glencoe Industrial Park**  
**Glencoe, Ontario**

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Residential / Parkland / Institutional Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location					
					Sample ID	BH2 S4	BH2 S7	BH3 S2	BH3 S6	BH4 S2
					Date and Time	23-Jul-2025 10:22	23-Jul-2025 10:25	23-Jul-2025 11:05	23-Jul-2025 11:35	23-Jul-2025 12:10
					Laboratory ID	WT2521286-004	WT2521286-005	WT2521286-006	WT2521286-007	WT2521286-008
					Sample Depth (mbgs)	2.3-2.9	4.6-5.2	0.8-1.4	3.8-4.4	0.8-1.4
					Laboratory Units					
Benzene	0.02	0.02	0.21	0.0050	µg/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ethylbenzene	0.05	0.05	1.1	0.015	µg/g	<0.015	<0.015	<0.015	<0.015	<0.015
Toluene	0.2	0.2	2.3	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050
Xylenes (Total)	0.05	0.091	3.1	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050
F1 (C6-C10)	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0
F1-BTEX	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0
F2 (C10-C16)	10	26	98	10	µg/g	<b>15</b>	<b>13</b>	<10	<b>20</b>	<10
F3 (C16-C34)	240	240	300	50	µg/g	65	56	<50	60	<50
F4 (C34-C50)	120	3300	2800	50	µg/g	<50	<50	<50	<50	<50
Chrom. to baseline at nC50	-	-	-	-	-	YES	YES	YES	YES	YES
F4G-SG (GHH-Silica)	120	3300	2800	-	-	-	-	-	-	-

**Notes:**

- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
- Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
- Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
- Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- All Standards and results shown in µg/g.
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- Tests carried out by: ALS Global

TABLE 1

PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL

Glencoe Industrial Park  
Glencoe, Ontario

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Residential / Parkland / Institutional Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location		RPD (%)	BH5 S1	BH5 S6	
					Sample ID	BH4 S7				DUP-S-1
					Date and Time	23-Jul-2025 12:50				23-Jul-2025 0:00
					Laboratory ID	WT2521286-009				WT2521286-043
					Sample Depth (mbgs)	4.6-5.2				Field Duplicate
					Laboratory Units					
Benzene	0.02	0.02	0.21	0.0050	µg/g	<0.0050	<0.0050	NC	<0.0050	<0.0050
Ethylbenzene	0.05	0.05	1.1	0.015	µg/g	<0.015	<0.015	NC	<0.015	<0.015
Toluene	0.2	0.2	2.3	0.050	µg/g	<0.050	<0.050	NC	<0.050	<0.050
Xylenes (Total)	0.05	0.091	3.1	0.050	µg/g	<0.050	<0.050	NC	<0.050	<0.050
F1 (C6-C10)	17	25	55	5.0	µg/g	<5.0	<5.0	NC	<5.0	<5.0
F1-BTEX	17	25	55	5.0	µg/g	<5.0	<5.0	NC	<5.0	<5.0
F2 (C10-C16)	10	26	98	10	µg/g	10	<b>20</b>	NC	<10	<b>11</b>
F3 (C16-C34)	240	240	300	50	µg/g	51	77	NC	<50	<50
F4 (C34-C50)	120	3300	2800	50	µg/g	<50	<50	NC	<50	<50
Chrom. to baseline at nC50	-	-	-	-	-	YES	YES	NC	YES	YES
F4G-SG (GHH-Silica)	120	3300	2800	-	-	-	-	NC	-	-

Notes:

- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
- Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
- Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
- Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- All Standards and results shown in µg/g.
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- Tests carried out by: ALS Global

**TABLE 1**  
**PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL**

**Glencoe Industrial Park**  
**Glencoe, Ontario**

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Residential / Parkland / Institutional Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location					
					Sample ID	BH6 S1+2	BH6 S4	BH6 S7	BH7 S1	BH7 S3
					Date and Time	23-Jul-2025 14:05	23-Jul-2025 14:25	23-Jul-2025 14:40	24-Jul-2025 8:10	24-Jul-2025 8:20
					Laboratory ID	WT2521286-012	WT2521286-013	WT2521286-014	WT2521286-015	WT2521286-016
					Sample Depth (mbgs)	0.0-1.4	2.3-2.9	4.6-5.2	0.0-0.6	1.5-2.1
					Laboratory Units					
Benzene	0.02	0.02	0.21	0.0050	µg/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ethylbenzene	0.05	0.05	1.1	0.015	µg/g	<0.015	<0.015	<0.015	<0.015	<0.015
Toluene	0.2	0.2	2.3	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050
Xylenes (Total)	0.05	0.091	3.1	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050
F1 (C6-C10)	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0
F1-BTEX	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0
F2 (C10-C16)	10	26	98	10	µg/g	<10	<10	<10	<10	<10
F3 (C16-C34)	240	240	300	50	µg/g	<50	<50	56	<50	<50
F4 (C34-C50)	120	3300	2800	50	µg/g	<50	<50	<50	<50	<50
Chrom. to baseline at nC50	-	-	-	-	-	YES	YES	YES	YES	YES
F4G-SG (GHH-Silica)	120	3300	2800	-	-	-	-	-	-	-

**Notes:**

- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
- Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
- Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
- Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- All Standards and results shown in µg/g.
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- Tests carried out by: ALS Global

**TABLE 1**  
**PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL**

**Glencoe Industrial Park**  
**Glencoe, Ontario**

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Residential / Parkland / Institutional Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location					
					Sample ID	BH7 S5	BH7 S6	BH7 S7	BH7 S8	BH7 S9
					Date and Time	24-Jul-2025 8:40	24-Jul-2025 8:50	24-Jul-2025 9:00	24-Jul-2025 9:15	24-Jul-2025 9:25
					Laboratory ID	WT2521286-017	WT2521286-018	WT2521286-019	WT2521286-020	WT2521286-021
					Sample Depth (mbgs)	3.0-3.7	3.8-4.4	4.6-5.2	6.1-6.7	6.9-7.5
					Laboratory Units					
Benzene	0.02	0.02	0.21	0.0050	µg/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ethylbenzene	0.05	0.05	1.1	0.015	µg/g	<0.015	<0.015	<0.015	<0.015	<0.015
Toluene	0.2	0.2	2.3	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050
Xylenes (Total)	0.05	0.091	3.1	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050
F1 (C6-C10)	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0
F1-BTEX	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0
F2 (C10-C16)	10	26	98	10	µg/g	<10	<10	<10	<10	<10
F3 (C16-C34)	240	240	300	50	µg/g	<50	<50	<50	<50	<50
F4 (C34-C50)	120	3300	2800	50	µg/g	<50	<50	<50	<50	<50
Chrom. to baseline at nC50	-	-	-	-	-	YES	YES	YES	YES	YES
F4G-SG (GHH-Silica)	120	3300	2800	-	-	-	-	-	-	-

**Notes:**

- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
- Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
- Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
- Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- All Standards and results shown in µg/g.
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- Tests carried out by: ALS Global

**TABLE 1**  
**PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL**

**Glencoe Industrial Park**  
**Glencoe, Ontario**

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Residential / Parkland / Institutional Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location					
					Sample ID	BH8 S1	BH8 S2	BH8 S3	BH8 S4	BH8 S5
					Date and Time	24-Jul-2025 9:55	24-Jul-2025 10:00	24-Jul-2025 10:10	24-Jul-2025 10:15	24-Jul-2025 10:25
					Laboratory ID	WT2521286-022	WT2521286-023	WT2521286-024	WT2521286-025	WT2521286-026
					Sample Depth (mbgs)	0.0-0.6	0.8-1.4	1.5-2.1	2.3-2.9	3.0-3.7
					Laboratory Units					
Benzene	0.02	0.02	0.21	0.0050	µg/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ethylbenzene	0.05	0.05	1.1	0.015	µg/g	<0.015	<0.015	<0.015	<0.015	<0.015
Toluene	0.2	0.2	2.3	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050
Xylenes (Total)	0.05	0.091	3.1	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050
F1 (C6-C10)	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0
F1-BTEX	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0
F2 (C10-C16)	10	26	98	10	µg/g	<10	<10	<10	<10	<10
F3 (C16-C34)	240	240	300	50	µg/g	<50	<50	<50	<50	<50
F4 (C34-C50)	120	3300	2800	50	µg/g	<50	<50	<50	<50	<50
Chrom. to baseline at nC50	-	-	-	-	-	YES	YES	YES	YES	YES
F4G-SG (GHH-Silica)	120	3300	2800	-	-	-	-	-	-	-

**Notes:**

- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
- Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
- Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
- Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- All Standards and results shown in µg/g.
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- Tests carried out by: ALS Global

**TABLE 1**  
**PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL**

**Glencoe Industrial Park**  
**Glencoe, Ontario**

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Residential / Parkland / Institutional Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location					
					Sample ID	BH8 S6	BH8 S7	BH9 S1	BH9 S2	BH9 S3
					Date and Time	24-Jul-2025 10:35	24-Jul-2025 10:45	24-Jul-2025 10:55	24-Jul-2025 11:00	24-Jul-2025 11:10
					Laboratory ID	WT2521286-027	WT2521286-028	WT2521286-029	WT2521286-030	WT2521286-031
					Sample Depth (mbgs)	3.8-4.4	4.6-5.2	0.0-0.6	0.8-1.4	1.5-2.1
					Laboratory Units					
Benzene	0.02	0.02	0.21	0.0050	µg/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ethylbenzene	0.05	0.05	1.1	0.015	µg/g	<0.015	<0.015	<0.015	<0.015	<0.015
Toluene	0.2	0.2	2.3	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050
Xylenes (Total)	0.05	0.091	3.1	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050
F1 (C6-C10)	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0
F1-BTEX	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0
F2 (C10-C16)	10	26	98	10	µg/g	<10	<10	<10	<10	<10
F3 (C16-C34)	240	240	300	50	µg/g	<50	<50	<50	<50	<50
F4 (C34-C50)	120	3300	2800	50	µg/g	<50	<50	<50	<50	<50
Chrom. to baseline at nC50	-	-	-	-	-	YES	YES	YES	YES	YES
F4G-SG (GHH-Silica)	120	3300	2800	-	-	-	-	-	-	-

**Notes:**

- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
- Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
- Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
- Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- All Standards and results shown in µg/g.
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- Tests carried out by: ALS Global

TABLE 1

PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL

Glencoe Industrial Park  
Glencoe, Ontario

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Residential / Parkland / Institutional Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location			RPD (%)	BH9 S4	BH9 S5	BH9 S6
					Sample ID	DUP-S-2					
					Date and Time	24-Jul-2025 0:00					
					Laboratory ID	WT2521286-044					
					Sample Depth (mbgs)	Field Duplicate					
					Laboratory Units						
Benzene	0.02	0.02	0.21	0.0050	µg/g	<0.0050	NC	<0.0050	<0.0050	<0.0050	
Ethylbenzene	0.05	0.05	1.1	0.015	µg/g	<0.015	NC	<0.015	<0.015	<0.015	
Toluene	0.2	0.2	2.3	0.050	µg/g	<0.050	NC	<0.050	<0.050	<0.050	
Xylenes (Total)	0.05	0.091	3.1	0.050	µg/g	<0.050	NC	<0.050	<0.050	<0.050	
F1 (C6-C10)	17	25	55	5.0	µg/g	<5.0	NC	<5.0	<5.0	<5.0	
F1-BTEX	17	25	55	5.0	µg/g	<5.0	NC	<5.0	<5.0	<5.0	
F2 (C10-C16)	10	26	98	10	µg/g	<10	NC	<10	<10	<10	
F3 (C16-C34)	240	240	300	50	µg/g	<50	NC	<50	<50	<50	
F4 (C34-C50)	120	3300	2800	50	µg/g	<50	NC	<50	<50	<50	
Chrom. to baseline at nC50	-	-	-	-	-	YES	NC	YES	YES	YES	
F4G-SG (GHH-Silica)	120	3300	2800	-	-	-	NC	-	-	-	

Notes:

- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
- Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
- Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
- Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- All Standards and results shown in µg/g.
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- Tests carried out by: ALS Global

**TABLE 1**  
**PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL**

**Glencoe Industrial Park**  
**Glencoe, Ontario**

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Residential / Parkland / Institutional Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location					
					Sample ID	BH9 S7	BH10 S1	BH10 S2	BH10 S3	BH10 S4
					Date and Time	24-Jul-2025 11:45	24-Jul-2025 11:50	24-Jul-2025 11:55	24-Jul-2025 12:05	24-Jul-2025 12:15
					Laboratory ID	WT2521286-035	WT2521286-036	WT2521286-037	WT2521286-038	WT2521286-039
					Sample Depth (mbgs)	4.6-5.2	0.0-0.6	0.8-1.4	1.5-2.1	2.3-2.9
					Laboratory Units					
Benzene	0.02	0.02	0.21	0.0050	µg/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ethylbenzene	0.05	0.05	1.1	0.015	µg/g	<0.015	<0.015	<0.015	<0.015	<0.015
Toluene	0.2	0.2	2.3	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050
Xylenes (Total)	0.05	0.091	3.1	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050
F1 (C6-C10)	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0
F1-BTEX	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0
F2 (C10-C16)	10	26	98	10	µg/g	<10	<10	<10	<10	<10
F3 (C16-C34)	240	240	300	50	µg/g	<50	<50	<50	<50	<50
F4 (C34-C50)	120	3300	2800	50	µg/g	<50	<50	<50	<50	<50
Chrom. to baseline at nC50	-	-	-	-	-	YES	YES	YES	YES	YES
F4G-SG (GHH-Silica)	120	3300	2800	-	-	-	-	-	-	-

**Notes:**

- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
- Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
- Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
- Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- All Standards and results shown in µg/g.
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- Tests carried out by: ALS Global

**TABLE 1**

**PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL**

**Glencoe Industrial Park  
Glencoe, Ontario**

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Residential / Parkland / Institutional Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location			RPD (%)	Sample Location		
					Sample ID	BH10 S5	BH10 S6		DUP-S-4	BH10 S7	
					Date and Time	24-Jul-2025 12:25	24-Jul-2025 12:35		24-Jul-2025 0:00	24-Jul-2025 12:45	
					Laboratory ID	WT2521286-040	WT2521286-041		WT2521286-046	WT2521286-042	
					Sample Depth (mbgs)	3.0-3.7	3.8-4.4		Field Duplicate	4.6-5.2	
					Laboratory Units						
Benzene	0.02	0.02	0.21	0.0050	µg/g	<0.0050	<0.0050	<0.0050	NC	<0.0050	
Ethylbenzene	0.05	0.05	1.1	0.015	µg/g	<0.015	<0.015	<0.015	NC	<0.015	
Toluene	0.2	0.2	2.3	0.050	µg/g	<0.050	<0.050	<0.050	NC	<0.050	
Xylenes (Total)	0.05	0.091	3.1	0.050	µg/g	<0.050	<0.050	<0.050	NC	<0.050	
F1 (C6-C10)	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	NC	<5.0	
F1-BTEX	17	25	55	5.0	µg/g	<5.0	<5.0	<5.0	NC	<5.0	
F2 (C10-C16)	10	26	98	10	µg/g	10	<10	<10	NC	<10	
F3 (C16-C34)	240	240	300	50	µg/g	<50	<50	<50	NC	<50	
F4 (C34-C50)	120	3300	2800	50	µg/g	<50	<50	<50	NC	<50	
Chrom. to baseline at nC50	-	-	-	-	-	YES	YES	YES	NC	YES	
F4G-SG (GHH-Silica)	120	3300	2800	-	-	-	-	-	NC	-	

**Notes:**

- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
- Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
- Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
- Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- All Standards and results shown in µg/g.
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- Tests carried out by: ALS Global

**TABLE 2**  
**O.REG. 153/04 METALS AND INORGANICS ANALYSIS - SOIL**

Glencoe Industrial Park  
Glencoe, Ontario

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location			RPD (%)	BH1 S1	BH1 S6	DUP-S-3	BH2 S2	BH2 S4	BH2 S7	BH3 S2
					Sample ID	BH1 S1	BH1 S6		DUP-S-3	BH2 S2	BH2 S4	BH2 S7	BH3 S2		
					Date and Time	23-Jul-2025 9:10	23-Jul-2025 9:50		23-Jul-2025 0:00	23-Jul-2025 10:10	23-Jul-2025 10:22	23-Jul-2025 10:25	23-Jul-2025 11:05		
					Laboratory ID	WT2521286-001	WT2521286-002		WT2521286-045	WT2521286-003	WT2521286-004	WT2521286-005	WT2521286-006		
					Sample Depth (mbgs)	0.0-0.6	3.8-4.4		X.X-X.X	0.8-1.4	2.3-2.9	4.6-5.2	0.8-1.4		
Laboratory Units															
<b>Calculated Parameters</b>															
SAR	1	12	12	0.10	-	0.12	<b>1.10</b>	<b>1.12</b>	1.80	0.22	0.55	<b>1.32</b>	0.53		
<b>Inorganics</b>															
Conductivity	0.47	1.4	1.4	0.00500	mS/cm	0.212	0.417	0.374	10.87	0.147	0.220	0.341	0.320		
pH*	5 to 9 and 5 to 11	5 to 9 and 5 to 11	5 to 9 and 5 to 11	0.10	pH units	7.34	7.69	7.75	0.06	7.68	7.65	7.89	7.63		
Cyanide, Weak Acid Dissociabl	0.051	0.051	0.051	0.050	µg/g	<0.050	<0.050	<0.050	NC	<0.050	<0.050	<0.050	<0.050		
Chromium, Hexavalent	0.66	8	8	0.10	µg/g	<0.10	<0.10	<0.10	NC	0.12	0.14	<0.10	0.13		
<b>Metals</b>															
Boron (B), Hot Water Ext.	-	2	2	0.10	µg/g	0.31	0.62	0.54	13.79	<0.10	0.35	0.82	0.11		
Antimony (Sb)	1	40	40	0.10	µg/g	<0.10	0.19	0.18	NC	0.15	0.18	0.18	0.18		
Arsenic (As)	11	18	18	0.10	µg/g	2.25	5.50	4.22	26.34	4.24	4.04	4.76	4.54		
Barium (Ba)	210	670	670	0.50	µg/g	43.8	143	152	6.10	83.3	147	126	158		
Beryllium (Be)	2.5	8	8	0.10	µg/g	0.39	0.94	0.83	12.43	0.60	0.85	0.87	1.02		
Boron (B)	36	120	120	5.0	µg/g	<5.0	24.2	21.3	NC	14.2	22.4	23.8	20.2		
Cadmium (Cd)	1	1.9	1.9	0.020	µg/g	0.143	0.104	0.091	NC	0.090	0.097	0.098	0.100		
Chromium (Cr)	67	160	160	0.50	µg/g	12.6	31.5	29.8	5.55	21.0	29.1	30.6	31.6		
Cobalt (Co)	19	80	80	0.10	µg/g	4.48	13.6	12.7	6.84	11.0	12.2	13.1	14.4		
Copper (Cu)	62	230	230	0.50	µg/g	8.27	22.9	22.3	2.65	18.5	22.1	23.2	22.6		
Lead (Pb)	45	120	120	0.50	µg/g	8.46	11.1	10.9	1.82	8.61	10.4	10.5	11.2		
Mercury (Hg)	0.16	0.27	3.9	0.0050	µg/g	0.0218	0.0140	0.0127	NC	0.0105	0.0141	0.0136	0.0129		
Molybdenum (Mo)	2	40	40	0.10	µg/g	0.56	1.17	1.06	9.87	0.58	1.14	1.03	0.72		
Nickel (Ni)	37	270	270	0.50	µg/g	9.48	30.8	29.5	4.31	22.7	27.4	30.6	31.3		
Selenium (Se)	1.2	5.5	5.5	0.20	µg/g	<0.20	<0.20	<0.20	NC	<0.20	0.24	<0.20	<0.20		
Silver (Ag)	0.5	40	40	0.10	µg/g	<0.10	<0.10	<0.10	NC	<0.10	<0.10	<0.10	<0.10		
Thallium (Tl)	1	3.3	3.3	0.050	µg/g	0.082	0.204	0.184	NC	0.136	0.156	0.166	0.197		
Uranium (U)	1.9	33	33	0.050	µg/g	0.617	0.999	0.985	1.41	0.572	0.925	0.937	0.816		
Vanadium (V)	86	86	86	0.20	µg/g	18.4	41.6	38.9	6.71	30.7	39.5	40.1	43.7		
Zinc (Zn)	290	340	340	2.0	µg/g	34.4	63.8	61.4	3.83	45.3	59.6	63.8	64.4		

**Notes:**

- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
- Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
- Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- \*The RPD for pH is an absolute difference and shown in pH units.
- All Standards and results shown in µg/g [exceptions, SAR (unitless), pH (pH units) and Conductivity (mS/cm)].
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- pH criteria refers to surface and subsurface soils, respectively.
- Tests carried out by: ALS Global

**TABLE 2**  
**O.REG. 153/04 METALS AND INORGANICS ANALYSIS - SOIL**

**Glencoe Industrial Park**  
**Glencoe, Ontario**

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	BH3 S6	BH4 S2	BH4 S7	DUP-S-1	RPD (%)	BH5 S1	BH5 S6	BH6 S1+2	BH6 S4
					23-Jul-2025 11:35	23-Jul-2025 12:10	23-Jul-2025 12:50	23-Jul-2025 0:00		23-Jul-2025 13:05	23-Jul-2025 13:40	23-Jul-2025 14:05	23-Jul-2025 14:25
					WT2521286-007	WT2521286-008	WT2521286-009	WT2521286-043		WT2521286-010	WT2521286-011	WT2521286-012	WT2521286-013
					3.8-4.4	0.8-1.4	4.6-5.2	X.X-X.X		0.0-0.6	3.8-4.4	0.0-0.6	2.3-2.9
<b>Calculated Parameters</b>													
SAR	1	12	12	0.10	0.80	0.52	<b>1.57</b>	<b>1.48</b>	5.90	0.42	<b>1.45</b>	0.26	0.54
<b>Inorganics</b>													
Conductivity	0.47	1.4	1.4	0.00500	0.377	0.324	<b>0.747</b>	<b>0.769</b>	2.90	0.276	<b>0.868</b>	0.260	0.174
pH*	5 to 9 and 5 to 11	5 to 9 and 5 to 11	5 to 9 and 5 to 11	0.10	7.71	7.62	7.75	7.77	0.02	7.51	7.80	7.30	7.73
Cyanide, Weak Acid Dissociabl	0.051	0.051	0.051	0.050	<0.050	<0.050	<0.050	<0.050	NC	<0.050	<0.050	<0.050	<0.050
Chromium, Hexavalent	0.66	8	8	0.10	<0.10	0.17	<0.10	<0.10	NC	0.15	<0.10	<0.10	0.12
<b>Metals</b>													
Boron (B), Hot Water Ext.	-	2	2	0.10	0.59	<0.10	0.85	0.74	13.84	0.24	0.59	0.16	0.24
Antimony (Sb)	1	40	40	0.10	0.18	0.18	0.18	0.18	NC	0.17	0.15	0.17	0.16
Arsenic (As)	11	18	18	0.10	4.28	5.40	4.41	4.26	3.46	4.12	3.55	5.06	4.52
Barium (Ba)	210	670	670	0.50	108	133	130	137	5.24	123	124	131	105
Beryllium (Be)	2.5	8	8	0.10	0.72	0.88	0.86	0.80	7.23	0.84	0.76	1.01	0.77
Boron (B)	36	120	120	5.0	20.8	18.7	24.3	22.1	NC	12.9	21.8	17.5	20.9
Cadmium (Cd)	1	1.9	1.9	0.020	0.125	0.123	0.089	0.100	NC	0.168	0.094	0.159	0.098
Chromium (Cr)	67	160	160	0.50	26.3	29.4	30.2	28.7	5.09	27.9	27.9	33.4	28.4
Cobalt (Co)	19	80	80	0.10	12.0	13.9	12.9	12.6	2.35	11.5	11.2	13.0	11.7
Copper (Cu)	62	230	230	0.50	21.8	22.9	22.3	21.8	2.27	18.5	21.1	23.1	21.5
Lead (Pb)	45	120	120	0.50	9.96	10.6	10.4	10.1	2.93	12.2	9.67	14.0	10.1
Mercury (Hg)	0.16	0.27	3.9	0.0050	0.0138	0.0145	0.0132	0.0133	NC	0.0246	0.0132	0.0317	0.0129
Molybdenum (Mo)	2	40	40	0.10	1.64	0.68	0.98	0.96	2.06	0.61	0.86	0.84	0.96
Nickel (Ni)	37	270	270	0.50	27.8	29.7	29.5	29.0	1.71	24.4	26.5	29.0	27.3
Selenium (Se)	1.2	5.5	5.5	0.20	<0.20	<0.20	<0.20	<0.20	NC	<0.20	<0.20	0.27	<0.20
Silver (Ag)	0.5	40	40	0.10	<0.10	<0.10	<0.10	<0.10	NC	<0.10	<0.10	<0.10	<0.10
Thallium (Tl)	1	3.3	3.3	0.050	0.166	0.175	0.180	0.167	NC	0.160	0.154	0.222	0.187
Uranium (U)	1.9	33	33	0.050	1.07	0.792	1.07	1.05	1.89	0.727	1.07	0.802	0.873
Vanadium (V)	86	86	86	0.20	33.2	42.2	39.7	37.4	5.97	38.7	36.5	44.8	38.0
Zinc (Zn)	290	340	340	2.0	64.2	57.0	61.5	59.1	3.98	58.4	55.2	77.5	57.9

**Notes:**

- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
- Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
- Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- \*The RPD for pH is an absolute difference and shown in pH units.
- All Standards and results shown in µg/g [exceptions, SAR (unitless), pH (pH units) and Conductivity (mS/cm)].
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- pH criteria refers to surface and subsurface soils, respectively.
- Tests carried out by: ALS Global

**TABLE 2**  
**O.REG. 153/04 METALS AND INORGANICS ANALYSIS - SOIL**

Glencoe Industrial Park  
 Glencoe, Ontario

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	BH6 S7	BH7 S1	BH7 S3	BH7 S5	BH7 S6	BH7 S7	BH7 S8	BH7 S9	BH8 S1
					23-Jul-2025 14:40	24-Jul-2025 8:10	24-Jul-2025 8:20	24-Jul-2025 8:40	24-Jul-2025 8:50	24-Jul-2025 9:00	24-Jul-2025 9:15	24-Jul-2025 9:25	24-Jul-2025 9:55
					WT2521286-014	WT2521286-015	WT2521286-016	WT2521286-017	WT2521286-018	WT2521286-019	WT2521286-020	WT2521286-021	WT2521286-022
					4.6-5.2	0.0-0.6	1.5-2.1	3.0-3.7	3.8-4.4	4.6-5.2	6.1-6.7	6.9-7.5	0.0-0.6
<b>Calculated Parameters</b>													
SAR	1	12	12	0.10	<b>1.26</b>	0.17	<b>1.39</b>	<b>1.73</b>	<b>1.67</b>	<b>1.36</b>	<b>1.53</b>	<b>1.54</b>	0.37
<b>Inorganics</b>													
Conductivity	0.47	1.4	1.4	0.00500	0.407	0.358	<b>0.764</b>	<b>1.37</b>	<b>1.49</b>	<b>2.14</b>	<b>1.42</b>	<b>1.16</b>	0.274
pH*	5 to 9 and 5 to 11	5 to 9 and 5 to 11	5 to 9 and 5 to 11	0.10	7.76	7.50	7.77	7.78	7.76	7.71	7.73	7.70	7.63
Cyanide, Weak Acid Dissociabl	0.051	0.051	0.051	0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chromium, Hexavalent	0.66	8	8	0.10	<0.10	0.26	0.18	0.14	0.17	0.20	0.15	0.12	<0.10
<b>Metals</b>													
Boron (B), Hot Water Ext.	-	2	2	0.10	0.59	0.15	0.14	0.46	0.65	0.74	0.84	0.83	0.11
Antimony (Sb)	1	40	40	0.10	0.17	0.18	0.19	0.20	0.19	0.22	0.18	0.15	0.17
Arsenic (As)	11	18	18	0.10	4.08	4.75	5.56	7.44	6.74	9.57	4.03	7.74	4.41
Barium (Ba)	210	670	670	0.50	127	129	139	122	102	115	133	134	134
Beryllium (Be)	2.5	8	8	0.10	0.82	0.98	0.71	0.91	0.92	0.84	0.87	0.77	0.96
Boron (B)	36	120	120	5.0	23.2	12.2	19.0	23.5	25.1	24.2	25.1	21.7	12.2
Cadmium (Cd)	1	1.9	1.9	0.020	0.090	0.170	0.102	0.102	0.102	0.109	0.131	0.075	0.199
Chromium (Cr)	67	160	160	0.50	29.0	32.1	27.0	31.4	31.0	30.1	30.8	28.5	30.8
Cobalt (Co)	19	80	80	0.10	12.3	13.4	12.6	14.6	13.8	13.1	13.1	12.4	13.0
Copper (Cu)	62	230	230	0.50	21.8	20.2	21.9	24.3	23.4	23.5	23.0	22.3	20.1
Lead (Pb)	45	120	120	0.50	10.3	15.2	10.5	11.3	10.4	10.7	10.4	9.72	13.7
Mercury (Hg)	0.16	0.27	3.9	0.0050	0.0132	0.0360	0.0142	0.0132	0.0141	0.0137	0.0136	0.0141	0.0624
Molybdenum (Mo)	2	40	40	0.10	0.91	0.68	1.87	1.94	1.34	1.49	1.11	1.05	0.64
Nickel (Ni)	37	270	270	0.50	28.4	26.4	29.0	32.6	30.3	31.0	31.6	28.0	26.5
Selenium (Se)	1.2	5.5	5.5	0.20	<0.20	0.26	<0.20	<0.20	<0.20	<0.20	0.23	<0.20	0.23
Silver (Ag)	0.5	40	40	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.12
Thallium (Tl)	1	3.3	3.3	0.050	0.168	0.208	0.208	0.249	0.222	0.223	0.185	0.147	0.193
Uranium (U)	1.9	33	33	0.050	1.17	0.671	1.17	1.11	1.18	1.36	0.924	0.750	0.678
Vanadium (V)	86	86	86	0.20	38.4	45.5	35.2	42.4	41.5	40.6	40.8	37.5	43.9
Zinc (Zn)	290	340	340	2.0	59.6	68.7	55.8	66.3	65.0	64.8	61.6	59.2	67.9

- Notes:**
- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
  - Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
  - Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.
  - Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
  - Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
  - Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended.
  - Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
  - Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
  - \*The RPD for pH is an absolute difference and shown in pH units.
  - All Standards and results shown in µg/g [exceptions, SAR (unitless), pH (pH units) and Conductivity (mS/cm)].
  - "-" Standard not available or parameter not analyzed.
  - "NC" RPD not calculable / not valid.
  - mbgs - metres below ground surface.
  - pH criteria refers to surface and subsurface soils, respectively.
  - Tests carried out by: ALS Global

**TABLE 2**  
**O.REG. 153/04 METALS AND INORGANICS ANALYSIS - SOIL**

Glencoe Industrial Park  
 Glencoe, Ontario

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	BH8 S2	BH8 S3	BH8 S4	BH8 S5	BH8 S6	BH8 S7	BH9 S1	BH9 S2	BH9 S3
					24-Jul-2025 10:00	24-Jul-2025 10:10	24-Jul-2025 10:15	24-Jul-2025 10:25	24-Jul-2025 10:35	24-Jul-2025 10:45	24-Jul-2025 10:55	24-Jul-2025 11:00	24-Jul-2025 11:10
					WT2521286-023	WT2521286-024	WT2521286-025	WT2521286-026	WT2521286-027	WT2521286-028	WT2521286-029	WT2521286-030	WT2521286-031
					0.8-1.4	1.5-2.1	2.3-2.9	3.0-3.7	3.8-4.4	4.6-5.2	0.0-0.6	0.8-1.4	1.5-2.1
<b>Calculated Parameters</b>													
SAR	1	12	12	0.10	<b>1.22</b>	<b>1.34</b>	<b>1.52</b>	<b>1.50</b>	<b>1.47</b>	<b>1.29</b>	0.56	<b>1.33</b>	0.73
<b>Inorganics</b>													
Conductivity	0.47	1.4	1.4	0.00500	0.439	<b>0.475</b>	<b>0.667</b>	<b>0.735</b>	<b>0.882</b>	<b>1.05</b>	0.353	<b>0.931</b>	<b>3.23</b>
pH*	5 to 9 and 5 to 11	5 to 9 and 5 to 11	5 to 9 and 5 to 11	0.10	7.79	7.87	7.79	7.89	7.80	7.80	7.28	7.76	7.75
Cyanide, Weak Acid Dissociabl	0.051	0.051	0.051	0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chromium, Hexavalent	0.66	8	8	0.10	0.12	0.12	0.14	0.13	0.13	0.18	0.28	0.11	0.13
<b>Metals</b>													
Boron (B), Hot Water Ext.	-	2	2	0.10	<0.10	0.16	0.34	0.41	0.51	0.68	0.13	0.13	0.30
Antimony (Sb)	1	40	40	0.10	0.15	0.14	0.18	0.16	0.18	0.17	0.20	0.17	0.16
Arsenic (As)	11	18	18	0.10	4.06	4.56	5.25	4.43	3.93	3.65	5.66	4.62	4.26
Barium (Ba)	210	670	670	0.50	146	113	118	142	168	130	157	195	132
Beryllium (Be)	2.5	8	8	0.10	0.79	0.67	0.88	0.80	0.83	0.84	1.14	0.82	0.78
Boron (B)	36	120	120	5.0	18.2	16.2	24.1	21.6	21.6	22.8	14.7	20.2	20.8
Cadmium (Cd)	1	1.9	1.9	0.020	0.098	0.104	0.097	0.094	0.104	0.098	0.197	0.113	0.101
Chromium (Cr)	67	160	160	0.50	27.0	24.0	31.3	28.3	30.2	30.3	38.5	30.9	28.8
Cobalt (Co)	19	80	80	0.10	11.7	10.9	13.1	12.8	13.4	12.4	16.2	14.6	12.0
Copper (Cu)	62	230	230	0.50	20.9	23.4	22.0	21.4	22.6	22.2	24.1	22.0	20.6
Lead (Pb)	45	120	120	0.50	9.52	9.20	10.2	9.75	10.4	9.98	16.7	10.6	9.92
Mercury (Hg)	0.16	0.27	3.9	0.0050	0.0126	0.0140	0.0138	0.0134	0.0129	0.0137	0.0333	0.0131	0.0129
Molybdenum (Mo)	2	40	40	0.10	0.60	0.87	0.99	0.98	1.02	0.88	0.94	0.81	0.88
Nickel (Ni)	37	270	270	0.50	25.7	23.3	30.0	27.4	29.8	29.0	34.2	29.4	27.3
Selenium (Se)	1.2	5.5	5.5	0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.50	0.24	<0.20	<0.20
Silver (Ag)	0.5	40	40	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium (Tl)	1	3.3	3.3	0.050	0.176	0.157	0.205	0.186	0.182	0.178	0.236	0.202	0.183
Uranium (U)	1.9	33	33	0.050	1.09	0.935	1.07	0.952	0.958	0.912	0.821	0.951	1.09
Vanadium (V)	86	86	86	0.20	37.6	33.6	41.5	37.8	39.8	40.4	50.9	40.8	38.4
Zinc (Zn)	290	340	340	2.0	53.8	55.9	61.2	58.0	62.9	61.0	78.8	59.9	57.0

- Notes:**
- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
  - Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
  - Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.
  - Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
  - Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
  - Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended.
  - Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
  - Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
  - \*The RPD for pH is an absolute difference and shown in pH units.
  - All Standards and results shown in µg/g [exceptions, SAR (unitless), pH (pH units) and Conductivity (mS/cm)].
  - "-" Standard not available or parameter not analyzed.
  - "NC" RPD not calculable / not valid.
  - mbgs - metres below ground surface.
  - pH criteria refers to surface and subsurface soils, respectively.
  - Tests carried out by: ALS Global

**TABLE 2**  
**O.REG. 153/04 METALS AND INORGANICS ANALYSIS - SOIL**

**Glencoe Industrial Park**  
**Glencoe, Ontario**

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	DUP-S-2		BH9 S4	BH9 S5	BH9 S6	BH9 S7	BH10 S1	BH10 S2	BH10 S3
					24-Jul-2025 0:00		24-Jul-2025 11:15	24-Jul-2025 11:25	24-Jul-2025 11:35	24-Jul-2025 11:45	24-Jul-2025 11:50	24-Jul-2025 11:55	24-Jul-2025 12:05
					WT2521286-044		WT2521286-032	WT2521286-033	WT2521286-034	WT2521286-035	WT2521286-036	WT2521286-037	WT2521286-038
					X.X-X.X		2.3-2.9	3.0-3.7	3.8-4.4	4.6-5.2	0.0-0.6	0.8-1.4	1.5-2.1
<b>Calculated Parameters</b>													
SAR	1	12	12	0.10	0.81	10.39	<b>1.85</b>	<b>1.99</b>	<b>1.92</b>	<b>2.10</b>	0.13	0.34	0.48
<b>Inorganics</b>													
Conductivity	0.47	1.4	1.4	0.00500	<b>3.05</b>	5.73	<b>1.74</b>	<b>1.40</b>	<b>1.23</b>	<b>0.902</b>	<b>0.628</b>	0.217	0.209
pH*	5 to 9 and 5 to 11	5 to 9 and 5 to 11	5 to 9 and 5 to 11	0.10	7.85	0.10	7.82	7.80	7.84	7.75	7.04	7.32	7.66
Cyanide, Weak Acid Dissociabl	0.051	0.051	0.051	0.050	<0.050	NC	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chromium, Hexavalent	0.66	8	8	0.10	0.14	NC	0.13	0.16	<0.10	<0.10	0.35	0.23	0.13
<b>Metals</b>													
Boron (B), Hot Water Ext.	-	2	2	0.10	0.35	NC	0.57	0.60	0.79	0.86	0.17	<0.10	0.11
Antimony (Sb)	1	40	40	0.10	0.16	NC	0.17	0.17	0.17	0.17	0.13	0.18	0.19
Arsenic (As)	11	18	18	0.10	4.42	3.69	4.54	4.22	3.60	4.00	4.28	5.34	5.39
Barium (Ba)	210	670	670	0.50	140	5.88	140	136	129	115	142	130	139
Beryllium (Be)	2.5	8	8	0.10	0.87	10.91	0.77	0.80	0.78	0.89	1.16	0.93	0.94
Boron (B)	36	120	120	5.0	25.4	NC	23.3	20.7	21.8	26.3	12.6	22.9	25.5
Cadmium (Cd)	1	1.9	1.9	0.020	0.091	NC	0.100	0.089	0.099	0.099	0.183	0.134	0.104
Chromium (Cr)	67	160	160	0.50	29.4	2.06	29.8	27.9	27.8	30.8	35.9	31.3	31.8
Cobalt (Co)	19	80	80	0.10	12.5	4.08	14.3	11.8	11.6	12.8	17.1	13.7	13.3
Copper (Cu)	62	230	230	0.50	21.0	1.92	22.0	22.2	21.0	22.3	17.1	22.3	23.4
Lead (Pb)	45	120	120	0.50	9.95	0.30	10.1	9.95	9.89	10.4	14.8	10.2	10.8
Mercury (Hg)	0.16	0.27	3.9	0.0050	0.0127	NC	0.0133	0.0131	0.0126	0.0122	0.0370	0.0124	0.0124
Molybdenum (Mo)	2	40	40	0.10	0.97	9.73	1.04	1.04	1.20	0.97	0.84	0.91	1.23
Nickel (Ni)	37	270	270	0.50	27.5	0.73	29.9	27.6	27.9	29.8	29.8	28.8	31.0
Selenium (Se)	1.2	5.5	5.5	0.20	<0.20	NC	<0.20	<0.20	<0.20	<0.20	0.38	0.21	<0.20
Silver (Ag)	0.5	40	40	0.10	<0.10	NC	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium (Tl)	1	3.3	3.3	0.050	0.189	NC	0.179	0.185	0.159	0.170	0.210	0.200	0.229
Uranium (U)	1.9	33	33	0.050	1.08	0.92	0.972	0.802	0.946	1.02	0.877	0.963	0.978
Vanadium (V)	86	86	86	0.20	39.6	3.08	39.4	37.0	36.6	40.3	50.3	42.9	43.8
Zinc (Zn)	290	340	340	2.0	56.1	1.59	60.9	58.9	61.8	61.3	81.4	59.4	62.2

**Notes:**

- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
- Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
- Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- \*The RPD for pH is an absolute difference and shown in pH units.
- All Standards and results shown in µg/g [exceptions, SAR (unitless), pH (pH units) and Conductivity (mS/cm)].
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- pH criteria refers to surface and subsurface soils, respectively.
- Tests carried out by: ALS Global

**TABLE 2**  
**O.REG. 153/04 METALS AND INORGANICS ANALYSIS - SOIL**

**Glencoe Industrial Park**  
**Glencoe, Ontario**

Parameters	MECP Table 1 SCS Agricultural or Other Property Use	MECP Table 2.1 ESQS Industrial / Commercial / Community Property Use	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	BH10 S4	BH10 S5	BH10 S6	DUP-S-4	RPD (%)	BH10 S7
					24-Jul-2025 12:15	24-Jul-2025 12:25	24-Jul-2025 12:35	24-Jul-2025 0:00		24-Jul-2025 12:45
					WT2521286-039	WT2521286-040	WT2521286-041	WT2521286-046		WT2521286-042
					2.3-2.9	3.0-3.7	3.8-4.4	X.X-X.X		4.6-5.2
<b>Calculated Parameters</b>										
SAR	1	12	12	0.10	0.69	0.92	<b>1.18</b>	0.94	22.64	<b>1.14</b>
<b>Inorganics</b>										
Conductivity	0.47	1.4	1.4	0.00500	0.239	0.281	0.458	<b>0.604</b>	27.50	<b>0.651</b>
pH*	5 to 9 and 5 to 11	5 to 9 and 5 to 11	5 to 9 and 5 to 11	0.10	7.70	7.72	7.72	7.81	0.09	7.72
Cyanide, Weak Acid Dissociabl	0.051	0.051	0.051	0.050	<0.050	<0.050	<0.050	<0.050	NC	<0.050
Chromium, Hexavalent	0.66	8	8	0.10	0.12	0.15	0.13	0.13	NC	0.11
<b>Metals</b>										
Boron (B), Hot Water Ext.	-	2	2	0.10	0.17	0.31	0.46	0.44	NC	0.58
Antimony (Sb)	1	40	40	0.10	0.17	0.22	0.16	0.17	NC	0.15
Arsenic (As)	11	18	18	0.10	4.51	5.49	4.09	3.78	7.88	5.68
Barium (Ba)	210	670	670	0.50	198	147	124	131	5.49	102
Beryllium (Be)	2.5	8	8	0.10	0.94	0.75	0.80	0.83	3.68	0.71
Boron (B)	36	120	120	5.0	26.9	24.5	20.8	24.6	NC	21.3
Cadmium (Cd)	1	1.9	1.9	0.020	0.107	0.097	0.104	0.105	0.96	0.087
Chromium (Cr)	67	160	160	0.50	33.1	28.5	28.3	29.9	5.50	25.7
Cobalt (Co)	19	80	80	0.10	12.7	13.1	13.0	12.8	1.55	12.0
Copper (Cu)	62	230	230	0.50	23.0	21.4	21.5	21.8	1.39	19.3
Lead (Pb)	45	120	120	0.50	10.2	10.1	9.63	10.0	3.77	8.83
Mercury (Hg)	0.16	0.27	3.9	0.0050	0.0132	0.0143	0.0121	0.0126	NC	0.0104
Molybdenum (Mo)	2	40	40	0.10	1.18	<b>2.31</b>	1.16	1.19	2.55	1.15
Nickel (Ni)	37	270	270	0.50	31.2	31.6	28.6	29.1	1.73	26.0
Selenium (Se)	1.2	5.5	5.5	0.20	<0.20	<0.20	<0.20	<0.20	NC	<0.20
Silver (Ag)	0.5	40	40	0.10	<0.10	<0.10	<0.10	<0.10	NC	<0.10
Thallium (Tl)	1	3.3	3.3	0.050	0.206	0.223	0.184	0.199	NC	0.172
Uranium (U)	1.9	33	33	0.050	1.06	1.15	0.892	0.945	5.77	0.750
Vanadium (V)	86	86	86	0.20	44.0	34.4	37.1	39.5	6.27	34.2
Zinc (Zn)	290	340	340	2.0	62.8	57.4	59.3	61.0	2.83	53.4

**Notes:**

- Standards from Table 1 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Background Site Condition Standards for Agricultural or Other Property Use.
- Standards from Table 2.1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 for Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Property Use.
- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- Test results shown in bold type and highlighted exceeded the MECP Table 1 Agricultural SCS, as amended.
- Test results shown in bold type and highlighted exceeded the MECP Table 2.1 ICC ESQS.
- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- \*The RPD for pH is an absolute difference and shown in pH units.
- All Standards and results shown in µg/g [exceptions, SAR (unitless), pH (pH units) and Conductivity (mS/cm)].
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- pH criteria refers to surface and subsurface soils, respectively.
- Tests carried out by: ALS Global

TABLE 3

PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL

Glencoe Industrial Park  
Glencoe, Ontario

Parameters	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location			RPD (%)	Sample Location			
			Sample ID	BH1 S1	BH1 S6		DUP-S-3	BH2 S2	BH2 S4	BH2 S7
			Date and Time	23-Jul-2025 9:10	23-Jul-2025 9:50		23-Jul-2025 0:00	23-Jul-2025 10:10	23-Jul-2025 10:22	23-Jul-2025 10:25
			Laboratory ID	WT2521286-001	WT2521286-002		WT2521286-045	WT2521286-003	WT2521286-004	WT2521286-005
			Sample Depth (mbgs)	0.0-0.6	3.8-4.4		Field Duplicate	0.8-1.4	2.3-2.9	4.6-5.2
			Laboratory Units							
Benzene	0.32	0.0050	µg/g	<0.0050	<0.0050	<0.0050	NC	<0.0050	<0.0050	<0.0050
Ethylbenzene	1.1	0.015	µg/g	<0.015	<0.015	<0.015	NC	<0.015	<0.015	<0.015
Toluene	6.4	0.050	µg/g	<0.050	<0.050	<0.050	NC	<0.050	<0.050	<0.050
Xylenes (Total)	26	0.050	µg/g	<0.050	<0.050	<0.050	NC	<0.050	<0.050	<0.050
F1 (C6-C10)	55	5.0	µg/g	<5.0	<5.0	<5.0	NC	<5.0	<5.0	<5.0
F1-BTEX	55	5.0	µg/g	<5.0	<5.0	<5.0	NC	<5.0	<5.0	<5.0
F2 (C10-C16)	230	10	µg/g	<10	13	22	NC	<10	15	13
F3 (C16-C34)	1700	50	µg/g	<50	78	61	NC	<50	65	56
F4 (C34-C50)	3300	50	µg/g	<50	<50	<50	NC	<50	<50	<50
Chrom. to baseline at nC50	-	-	-	YES	YES	YES	NC	YES	YES	YES
F4G-SG (GHH-Silica)	3300	-	-	-	-	-	NC	-	-	-

Notes:

- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.

- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended. Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.

- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.

- All Standards and results shown in µg/g.

- "-" Standard not available or parameter not analyzed.

- "NC" RPD not calculable / not valid.

- mbgs - metres below ground surface.

- Tests carried out by: ALS Global

TABLE 3

PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL

Glencoe Industrial Park  
Glencoe, Ontario

Parameters	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location					RPD (%)	BH5 S1	
			Sample ID	BH3 S2	BH3 S6	BH4 S2	BH4 S7			DUP-S-1
			Date and Time	23-Jul-2025 11:05	23-Jul-2025 11:35	23-Jul-2025 12:10	23-Jul-2025 12:50			23-Jul-2025 0:00
			Laboratory ID	WT2521286-006	WT2521286-007	WT2521286-008	WT2521286-009			WT2521286-043
			Sample Depth (mbgs)	0.8-1.4	3.8-4.4	0.8-1.4	4.6-5.2			Field Duplicate
			Laboratory Units							
Benzene	0.32	0.0050	µg/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NC	<0.0050
Ethylbenzene	1.1	0.015	µg/g	<0.015	<0.015	<0.015	<0.015	<0.015	NC	<0.015
Toluene	6.4	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050	NC	<0.050
Xylenes (Total)	26	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050	NC	<0.050
F1 (C6-C10)	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0	NC	<5.0
F1-BTEX	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0	NC	<5.0
F2 (C10-C16)	230	10	µg/g	<10	20	<10	10	20	NC	<10
F3 (C16-C34)	1700	50	µg/g	<50	60	<50	51	77	NC	<50
F4 (C34-C50)	3300	50	µg/g	<50	<50	<50	<50	<50	NC	<50
Chrom. to baseline at nC50	-	-	-	YES	YES	YES	YES	YES	NC	YES
F4G-SG (GHH-Silica)	3300	-	-	-	-	-	-	-	NC	-

Notes:

- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.

- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended. Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.

- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.

- All Standards and results shown in µg/g.

- "-" Standard not available or parameter not analyzed.

- "NC" RPD not calculable / not valid.

- mbgs - metres below ground surface.

- Tests carried out by: ALS Global

TABLE 3

PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL

Glencoe Industrial Park  
Glencoe, Ontario

Parameters	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location						
			Sample ID	BH5 S6	BH6 S1+2	BH6 S4	BH6 S7	BH7 S1	BH7 S3
			Date and Time	23-Jul-2025 13:40	23-Jul-2025 14:05	23-Jul-2025 14:25	23-Jul-2025 14:40	24-Jul-2025 8:10	24-Jul-2025 8:20
			Laboratory ID	WT2521286-011	WT2521286-012	WT2521286-013	WT2521286-014	WT2521286-015	WT2521286-016
			Sample Depth (mbgs)	0.0-0.6	0.0-1.4	2.3-2.9	4.6-5.2	0.0-0.6	1.5-2.1
			Laboratory Units						
Benzene	0.32	0.0050	µg/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ethylbenzene	1.1	0.015	µg/g	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Toluene	6.4	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Xylenes (Total)	26	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
F1 (C6-C10)	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
F1-BTEX	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
F2 (C10-C16)	230	10	µg/g	11	<10	<10	<10	<10	<10
F3 (C16-C34)	1700	50	µg/g	<50	<50	<50	56	<50	<50
F4 (C34-C50)	3300	50	µg/g	<50	<50	<50	<50	<50	<50
Chrom. to baseline at nC50	-	-	-	YES	YES	YES	YES	YES	YES
F4G-SG (GHH-Silica)	3300	-	-	-	-	-	-	-	-

Notes:

- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.



Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended. Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.

- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- All Standards and results shown in µg/g.
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- Tests carried out by: ALS Global

TABLE 3

PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL

Glencoe Industrial Park  
Glencoe, Ontario

Parameters	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location							
			Sample ID	BH7 S5	BH7 S6	BH7 S7	BH7 S8	BH7 S9	BH8 S1	
			Date and Time	24-Jul-2025 8:40	24-Jul-2025 8:50	24-Jul-2025 9:00	24-Jul-2025 9:15	24-Jul-2025 9:25	24-Jul-2025 9:55	
			Laboratory ID	WT2521286-017	WT2521286-018	WT2521286-019	WT2521286-020	WT2521286-021	WT2521286-022	
			Sample Depth (mbgs)	3.0-3.7	3.8-4.4	4.6-5.2	6.1-6.7	6.9-7.5	0.0-0.6	
			Laboratory Units							
Benzene	0.32	0.0050	µg/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ethylbenzene	1.1	0.015	µg/g	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Toluene	6.4	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Xylenes (Total)	26	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
F1 (C6-C10)	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
F1-BTEX	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
F2 (C10-C16)	230	10	µg/g	<10	<10	<10	<10	<10	<10	<10
F3 (C16-C34)	1700	50	µg/g	<50	<50	<50	<50	<50	<50	<50
F4 (C34-C50)	3300	50	µg/g	<50	<50	<50	<50	<50	<50	<50
Chrom. to baseline at nC50	-	-	-	YES	YES	YES	YES	YES	YES	YES
F4G-SG (GHH-Silica)	3300	-	-	-	-	-	-	-	-	-

Notes:

- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.



Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended. Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.

- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- All Standards and results shown in µg/g.
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- Tests carried out by: ALS Global

**TABLE 3**  
**PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL**

Glencoe Industrial Park  
 Glencoe, Ontario

Parameters	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location							
			Sample ID	BH8 S2	BH8 S3	BH8 S4	BH8 S5	BH8 S6	BH8 S7	
			Date and Time	24-Jul-2025 10:00	24-Jul-2025 10:10	24-Jul-2025 10:15	24-Jul-2025 10:25	24-Jul-2025 10:35	24-Jul-2025 10:45	
			Laboratory ID	WT2521286-023	WT2521286-024	WT2521286-025	WT2521286-026	WT2521286-027	WT2521286-028	
			Sample Depth (mbgs)	0.8-1.4	1.5-2.1	2.3-2.9	3.0-3.7	3.8-4.4	4.6-5.2	
			Laboratory Units							
Benzene	0.32	0.0050	µg/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ethylbenzene	1.1	0.015	µg/g	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Toluene	6.4	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Xylenes (Total)	26	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
F1 (C6-C10)	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
F1-BTEX	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
F2 (C10-C16)	230	10	µg/g	<10	<10	<10	<10	<10	<10	<10
F3 (C16-C34)	1700	50	µg/g	<50	<50	<50	<50	<50	<50	<50
F4 (C34-C50)	3300	50	µg/g	<50	<50	<50	<50	<50	<50	<50
Chrom. to baseline at nC50	-	-	-	YES	YES	YES	YES	YES	YES	YES
F4G-SG (GHH-Silica)	3300	-	-	-	-	-	-	-	-	-

**Notes:**

- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.

- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended. Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.

- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.

- All Standards and results shown in µg/g.  
 - "-" Standard not available or parameter not analyzed.

- "NC" RPD not calculable / not valid.  
 - mbgs - metres below ground surface.

- Tests carried out by: ALS Global

TABLE 3

PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL

Glencoe Industrial Park  
Glencoe, Ontario

Parameters	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location				RPD (%)	BH9 S4	BH9 S5		
			Sample ID	BH9 S1	BH9 S2	BH9 S3				DUP-S-2	
			Date and Time	24-Jul-2025 10:55	24-Jul-2025 11:00	24-Jul-2025 11:10				24-Jul-2025 0:00	
			Laboratory ID	WT2521286-029	WT2521286-030	WT2521286-031				WT2521286-044	
			Sample Depth (mbgs)	0.0-0.6	0.8-1.4	1.5-2.1				Field Duplicate	
			Laboratory Units								
Benzene	0.32	0.0050	µg/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NC	<0.0050	<0.0050
Ethylbenzene	1.1	0.015	µg/g	<0.015	<0.015	<0.015	<0.015	<0.015	NC	<0.015	<0.015
Toluene	6.4	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050	NC	<0.050	<0.050
Xylenes (Total)	26	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050	NC	<0.050	<0.050
F1 (C6-C10)	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0	NC	<5.0	<5.0
F1-BTEX	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0	NC	<5.0	<5.0
F2 (C10-C16)	230	10	µg/g	<10	<10	<10	<10	<10	NC	<10	<10
F3 (C16-C34)	1700	50	µg/g	<50	<50	<50	<50	<50	NC	<50	<50
F4 (C34-C50)	3300	50	µg/g	<50	<50	<50	<50	<50	NC	<50	<50
Chrom. to baseline at nC50	-	-	-	YES	YES	YES	YES	YES	NC	YES	YES
F4G-SG (GHH-Silica)	3300	-	-	-	-	-	-	-	NC	-	-

Notes:

- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.

- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended. Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.

- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.

- All Standards and results shown in µg/g.

- "-" Standard not available or parameter not analyzed.

- "NC" RPD not calculable / not valid.

- mbgs - metres below ground surface.

- Tests carried out by: ALS Global

TABLE 3

PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL

Glencoe Industrial Park  
Glencoe, Ontario

Parameters	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location						
			Sample ID	BH9 S6	BH9 S7	BH10 S1	BH10 S2	BH10 S3	BH10 S4
			Date and Time	24-Jul-2025 11:35	24-Jul-2025 11:45	24-Jul-2025 11:50	24-Jul-2025 11:55	24-Jul-2025 12:05	24-Jul-2025 12:15
			Laboratory ID	WT2521286-034	WT2521286-035	WT2521286-036	WT2521286-037	WT2521286-038	WT2521286-039
			Sample Depth (mbgs)	3.8-4.4	4.6-5.2	0.0-0.6	0.8-1.4	1.5-2.1	2.3-2.9
			Laboratory Units						
Benzene	0.32	0.0050	µg/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ethylbenzene	1.1	0.015	µg/g	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Toluene	6.4	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Xylenes (Total)	26	0.050	µg/g	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
F1 (C6-C10)	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
F1-BTEX	55	5.0	µg/g	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
F2 (C10-C16)	230	10	µg/g	<10	<10	<10	<10	<10	<10
F3 (C16-C34)	1700	50	µg/g	<50	<50	<50	<50	<50	<50
F4 (C34-C50)	3300	50	µg/g	<50	<50	<50	<50	<50	<50
Chrom. to baseline at nC50	-	-	-	YES	YES	YES	YES	YES	YES
F4G-SG (GHH-Silica)	3300	-	-	-	-	-	-	-	-

Notes:

- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.



Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended. Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.

- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- All Standards and results shown in µg/g.
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- Tests carried out by: ALS Global

**TABLE 3**  
**PETROLEUM HYDROCARBON (PHC) FRACTIONS F1 to F4 AND BTEX ANALYSIS - SOIL**

**Glencoe Industrial Park**  
**Glencoe, Ontario**

Parameters	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location			RPD (%)	BH10 S7	
			Sample ID	BH10 S5	BH10 S6			DUP-S-4
			Date and Time	24-Jul-2025 12:25	24-Jul-2025 12:35			24-Jul-2025 0:00
			Laboratory ID	WT2521286-040	WT2521286-041			WT2521286-046
			Sample Depth (mbgs)	3.0-3.7	3.8-4.4			Field Duplicate
			Laboratory Units					
Benzene	0.32	0.0050	µg/g	<0.0050	<0.0050	<0.0050	NC	<0.0050
Ethylbenzene	1.1	0.015	µg/g	<0.015	<0.015	<0.015	NC	<0.015
Toluene	6.4	0.050	µg/g	<0.050	<0.050	<0.050	NC	<0.050
Xylenes (Total)	26	0.050	µg/g	<0.050	<0.050	<0.050	NC	<0.050
F1 (C6-C10)	55	5.0	µg/g	<5.0	<5.0	<5.0	NC	<5.0
F1-BTEX	55	5.0	µg/g	<5.0	<5.0	<5.0	NC	<5.0
F2 (C10-C16)	230	10	µg/g	10	<10	<10	NC	<10
F3 (C16-C34)	1700	50	µg/g	<50	<50	<50	NC	<50
F4 (C34-C50)	3300	50	µg/g	<50	<50	<50	NC	<50
Chrom. to baseline at nC50	-	-	-	YES	YES	YES	NC	YES
F4G-SG (GHH-Silica)	3300	-	-	-	-	-	NC	-

**Notes:**

- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended.
- Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- All Standards and results shown in µg/g.
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- Tests carried out by: ALS Global

TABLE 4

O.REG. 153/04 METALS AND INORGANICS ANALYSIS - SOIL

Glencoe Industrial Park  
Glencoe, Ontario

Parameters	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	Sample Location								
			Sample ID	BH1 S1	BH1 S6	DUP-S-3	RPD (%)	BH2 S2	BH2 S4	BH2 S7	BH3 S2
			Date and Time	23-Jul-2025 9:10	23-Jul-2025 9:50	23-Jul-2025 0:00		23-Jul-2025 10:10	23-Jul-2025 10:22	23-Jul-2025 10:25	23-Jul-2025 11:05
			Laboratory ID	WT2521286-001	WT2521286-002	WT2521286-045		WT2521286-003	WT2521286-004	WT2521286-005	WT2521286-006
			Sample Depth (mbgs)	0.0-0.6	3.8-4.4	Field Duplicate		0.8-1.4	2.3-2.9	4.6-5.2	0.8-1.4
Laboratory Units											
<b>Calculated Parameters</b>											
SAR	12	0.10	-	0.12	1.10	1.12	1.80	0.22	0.55	1.32	0.53
<b>Inorganics</b>											
Conductivity	1.4	0.00500	mS/cm	0.212	0.417	0.374	10.87	0.147	0.220	0.341	0.320
pH*	5 to 9 and 5 to 11	0.10	pH units	7.34	7.69	7.75	0.06	7.68	7.65	7.89	7.63
Cyanide, Weak Acid Dissociabl	0.051	0.050	µg/g	<0.050	<0.050	<0.050	NC	<0.050	<0.050	<0.050	<0.050
Chromium, Hexavalent	8	0.10	µg/g	<0.10	<0.10	<0.10	NC	0.12	0.14	<0.10	0.13
<b>Metals</b>											
Boron (B), Hot Water Ext.	2	0.10	µg/g	0.31	0.62	0.54	13.79	<0.10	0.35	0.82	0.11
Antimony (Sb)	40	0.10	µg/g	<0.10	0.19	0.18	NC	0.15	0.18	0.18	0.18
Arsenic (As)	18	0.10	µg/g	2.25	5.50	4.22	26.34	4.24	4.04	4.76	4.54
Barium (Ba)	670	0.50	µg/g	43.8	143	152	6.10	83.3	147	126	158
Beryllium (Be)	8	0.10	µg/g	0.39	0.94	0.83	12.43	0.60	0.85	0.87	1.02
Boron (B)	120	5.0	µg/g	<5.0	24.2	21.3	NC	14.2	22.4	23.8	20.2
Cadmium (Cd)	1.9	0.020	µg/g	0.143	0.104	0.091	NC	0.090	0.097	0.098	0.100
Chromium (Cr)	160	0.50	µg/g	12.6	31.5	29.8	5.55	21.0	29.1	30.6	31.6
Cobalt (Co)	80	0.10	µg/g	4.48	13.6	12.7	6.84	11.0	12.2	13.1	14.4
Copper (Cu)	230	0.50	µg/g	8.27	22.9	22.3	2.65	18.5	22.1	23.2	22.6
Lead (Pb)	120	0.50	µg/g	8.46	11.1	10.9	1.82	8.61	10.4	10.5	11.2
Mercury (Hg)	3.9	0.0050	µg/g	0.0218	0.0140	0.0127	NC	0.0105	0.0141	0.0136	0.0129
Molybdenum (Mo)	40	0.10	µg/g	0.56	1.17	1.06	9.87	0.58	1.14	1.03	0.72
Nickel (Ni)	270	0.50	µg/g	9.48	30.8	29.5	4.31	22.7	27.4	30.6	31.3
Selenium (Se)	5.5	0.20	µg/g	<0.20	<0.20	<0.20	NC	<0.20	0.24	<0.20	<0.20
Silver (Ag)	40	0.10	µg/g	<0.10	<0.10	<0.10	NC	<0.10	<0.10	<0.10	<0.10
Thallium (Tl)	3.3	0.050	µg/g	0.082	0.204	0.184	NC	0.136	0.156	0.166	0.197
Uranium (U)	33	0.050	µg/g	0.617	0.999	0.985	1.41	0.572	0.925	0.937	0.816
Vanadium (V)	86	0.20	µg/g	18.4	41.6	38.9	6.71	30.7	39.5	40.1	43.7
Zinc (Zn)	340	2.0	µg/g	34.4	63.8	61.4	3.83	45.3	59.6	63.8	64.4

Notes:

- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.

- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse Soils), as amended. Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.
- Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplicate samples of the Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- \*The RPD for pH is an absolute difference and shown in pH units.
- All Standards and results shown in µg/g [exceptions, SAR (unitless), pH (pH units) and Conductivity (mS/cm)].
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- pH criteria refers to surface and subsurface soils, respectively.
- Tests carried out by: ALS Global

**TABLE 4**  
**O.REG. 153/04 METALS AND INORGANICS ANALYSIS - SOIL**

Glencoe Industrial Park  
 Glencoe, Ontario

Parameters	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	BH3 S6	BH4 S2	BH4 S7	DUP-S-1	RPD (%)	BH5 S1	BH5 S6	BH6 S1+2	BH6 S4
			23-Jul-2025 11:35	23-Jul-2025 12:10	23-Jul-2025 12:50	23-Jul-2025 0:00		23-Jul-2025 13:05	23-Jul-2025 13:40	23-Jul-2025 14:05	23-Jul-2025 14:25
			WT2521286-007	WT2521286-008	WT2521286-009	WT2521286-043		WT2521286-010	WT2521286-011	WT2521286-012	WT2521286-013
			3.8-4.4	0.8-1.4	4.6-5.2	Field Duplicate		0.0-0.6	3.8-4.4	0.0-1.4	2.3-2.9
<b>Calculated Parameters</b>											
SAR	12	0.10	0.80	0.52	1.57	1.48	5.90	0.42	1.45	0.26	0.54
<b>Inorganics</b>											
Conductivity	1.4	0.00500	0.377	0.324	0.747	0.769	2.90	0.276	0.868	0.260	0.174
pH*	5 to 9 and 5 to 11	0.10	7.71	7.62	7.75	7.77	0.02	7.51	7.80	7.30	7.73
Cyanide, Weak Acid Dissociabl	0.051	0.050	<0.050	<0.050	<0.050	<0.050	NC	<0.050	<0.050	<0.050	<0.050
Chromium, Hexavalent	8	0.10	<0.10	0.17	<0.10	<0.10	NC	0.15	<0.10	<0.10	0.12
<b>Metals</b>											
Boron (B), Hot Water Ext.	2	0.10	0.59	<0.10	0.85	0.74	13.84	0.24	0.59	0.16	0.24
Antimony (Sb)	40	0.10	0.18	0.18	0.18	0.18	NC	0.17	0.15	0.17	0.16
Arsenic (As)	18	0.10	4.28	5.40	4.41	4.26	3.46	4.12	3.55	5.06	4.52
Barium (Ba)	670	0.50	108	133	130	137	5.24	123	124	131	105
Beryllium (Be)	8	0.10	0.72	0.88	0.86	0.80	7.23	0.84	0.76	1.01	0.77
Boron (B)	120	5.0	20.8	18.7	24.3	22.1	NC	12.9	21.8	17.5	20.9
Cadmium (Cd)	1.9	0.020	0.125	0.123	0.089	0.100	NC	0.168	0.094	0.159	0.098
Chromium (Cr)	160	0.50	26.3	29.4	30.2	28.7	5.09	27.9	27.9	33.4	28.4
Cobalt (Co)	80	0.10	12.0	13.9	12.9	12.6	2.35	11.5	11.2	13.0	11.7
Copper (Cu)	230	0.50	21.8	22.9	22.3	21.8	2.27	18.5	21.1	23.1	21.5
Lead (Pb)	120	0.50	9.96	10.6	10.4	10.1	2.93	12.2	9.67	14.0	10.1
Mercury (Hg)	3.9	0.0050	0.0138	0.0145	0.0132	0.0133	NC	0.0246	0.0132	0.0317	0.0129
Molybdenum (Mo)	40	0.10	1.64	0.68	0.98	0.96	2.06	0.61	0.86	0.84	0.96
Nickel (Ni)	270	0.50	27.8	29.7	29.5	29.0	1.71	24.4	26.5	29.0	27.3
Selenium (Se)	5.5	0.20	<0.20	<0.20	<0.20	<0.20	NC	<0.20	<0.20	0.27	<0.20
Silver (Ag)	40	0.10	<0.10	<0.10	<0.10	<0.10	NC	<0.10	<0.10	<0.10	<0.10
Thallium (Tl)	3.3	0.050	0.166	0.175	0.180	0.167	NC	0.160	0.154	0.222	0.187
Uranium (U)	33	0.050	1.07	0.792	1.07	1.05	1.89	0.727	1.07	0.802	0.873
Vanadium (V)	86	0.20	33.2	42.2	39.7	37.4	5.97	38.7	36.5	44.8	38.0
Zinc (Zn)	340	2.0	64.2	57.0	61.5	59.1	3.98	58.4	55.2	77.5	57.9

**Notes:**

- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/
- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse S Laboratory detection limits for the test results shown in bold type and highlighted exceeded the a Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil dupli Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessme Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- \*The RPD for pH is an absolute difference and shown in pH units.
- All Standards and results shown in µg/g [exceptions, SAR (unitless), pH (pH units) and Conducti
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- pH criteria refers to surface and subsurface soils, respectively.
- Tests carried out by: ALS Global

TABLE 4

O.REG. 153/04 METALS AND INORGANICS ANALYSIS - SOIL

Glencoe Industrial Park  
Glencoe, Ontario

Parameters	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	BH6 S7	BH7 S1	BH7 S3	BH7 S5	BH7 S6	BH7 S7	BH7 S8	BH7 S9
			23-Jul-2025 14:40	24-Jul-2025 8:10	24-Jul-2025 8:20	24-Jul-2025 8:40	24-Jul-2025 8:50	24-Jul-2025 9:00	24-Jul-2025 9:15	24-Jul-2025 9:25
			WT2521286-014	WT2521286-015	WT2521286-016	WT2521286-017	WT2521286-018	WT2521286-019	WT2521286-020	WT2521286-021
			4.6-5.2	0.0-0.6	1.5-2.1	3.0-3.7	3.8-4.4	4.6-5.2	6.1-6.7	6.9-7.5
<b>Calculated Parameters</b>										
SAR	12	0.10	1.26	0.17	1.39	1.73	1.67	1.36	1.53	1.54
<b>Inorganics</b>										
Conductivity	1.4	0.00500	0.407	0.358	0.764	1.37	<b>1.49</b>	<b>2.14</b>	<b>1.42</b>	1.16
pH*	5 to 9 and 5 to 11	0.10	7.76	7.50	7.77	7.78	7.76	7.71	7.73	7.70
Cyanide, Weak Acid Dissociabl	0.051	0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chromium, Hexavalent	8	0.10	<0.10	0.26	0.18	0.14	0.17	0.20	0.15	0.12
<b>Metals</b>										
Boron (B), Hot Water Ext.	2	0.10	0.59	0.15	0.14	0.46	0.65	0.74	0.84	0.83
Antimony (Sb)	40	0.10	0.17	0.18	0.19	0.20	0.19	0.22	0.18	0.15
Arsenic (As)	18	0.10	4.08	4.75	5.56	7.44	6.74	9.57	4.03	7.74
Barium (Ba)	670	0.50	127	129	139	122	102	115	133	134
Beryllium (Be)	8	0.10	0.82	0.98	0.71	0.91	0.92	0.84	0.87	0.77
Boron (B)	120	5.0	23.2	12.2	19.0	23.5	25.1	24.2	25.1	21.7
Cadmium (Cd)	1.9	0.020	0.090	0.170	0.102	0.102	0.102	0.109	0.131	0.075
Chromium (Cr)	160	0.50	29.0	32.1	27.0	31.4	31.0	30.1	30.8	28.5
Cobalt (Co)	80	0.10	12.3	13.4	12.6	14.6	13.8	13.1	13.1	12.4
Copper (Cu)	230	0.50	21.8	20.2	21.9	24.3	23.4	23.5	23.0	22.3
Lead (Pb)	120	0.50	10.3	15.2	10.5	11.3	10.4	10.7	10.4	9.72
Mercury (Hg)	3.9	0.0050	0.0132	0.0360	0.0142	0.0132	0.0141	0.0137	0.0136	0.0141
Molybdenum (Mo)	40	0.10	0.91	0.68	1.87	1.94	1.34	1.49	1.11	1.05
Nickel (Ni)	270	0.50	28.4	26.4	29.0	32.6	30.3	31.0	31.6	28.0
Selenium (Se)	5.5	0.20	<0.20	0.26	<0.20	<0.20	<0.20	<0.20	0.23	<0.20
Silver (Ag)	40	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium (Tl)	3.3	0.050	0.168	0.208	0.208	0.249	0.222	0.223	0.185	0.147
Uranium (U)	33	0.050	1.17	0.671	1.17	1.11	1.18	1.36	0.924	0.750
Vanadium (V)	86	0.20	38.4	45.5	35.2	42.4	41.5	40.6	40.8	37.5
Zinc (Zn)	340	2.0	59.6	68.7	55.8	66.3	65.0	64.8	61.6	59.2

Notes:

- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/
- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse S Laboratory detection limits for the test results shown in bold type and highlighted exceeded the a Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil dupli Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessme Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- \*The RPD for pH is an absolute difference and shown in pH units.
- All Standards and results shown in µg/g [exceptions, SAR (unitless), pH (pH units) and Conducti "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- pH criteria refers to surface and subsurface soils, respectively.
- Tests carried out by: ALS Global

TABLE 4

O.REG. 153/04 METALS AND INORGANICS ANALYSIS - SOIL

Glencoe Industrial Park  
Glencoe, Ontario

Parameters	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	BH8 S1	BH8 S2	BH8 S3	BH8 S4	BH8 S5	BH8 S6	BH8 S7	BH9 S1
			24-Jul-2025 9:55	24-Jul-2025 10:00	24-Jul-2025 10:10	24-Jul-2025 10:15	24-Jul-2025 10:25	24-Jul-2025 10:35	24-Jul-2025 10:45	24-Jul-2025 10:55
			WT2521286-022	WT2521286-023	WT2521286-024	WT2521286-025	WT2521286-026	WT2521286-027	WT2521286-028	WT2521286-029
			0.0-0.6	0.8-1.4	1.5-2.1	2.3-2.9	3.0-3.7	3.8-4.4	4.6-5.2	0.0-0.6
<b>Calculated Parameters</b>										
SAR	12	0.10	0.37	1.22	1.34	1.52	1.50	1.47	1.29	0.56
<b>Inorganics</b>										
Conductivity	1.4	0.00500	0.274	0.439	0.475	0.667	0.735	0.882	1.05	0.353
pH*	5 to 9 and 5 to 11	0.10	7.63	7.79	7.87	7.79	7.89	7.80	7.80	7.28
Cyanide, Weak Acid Dissociabl	0.051	0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chromium, Hexavalent	8	0.10	<0.10	0.12	0.12	0.14	0.13	0.13	0.18	0.28
<b>Metals</b>										
Boron (B), Hot Water Ext.	2	0.10	0.11	<0.10	0.16	0.34	0.41	0.51	0.68	0.13
Antimony (Sb)	40	0.10	0.17	0.15	0.14	0.18	0.16	0.18	0.17	0.20
Arsenic (As)	18	0.10	4.41	4.06	4.56	5.25	4.43	3.93	3.65	5.66
Barium (Ba)	670	0.50	134	146	113	118	142	168	130	157
Beryllium (Be)	8	0.10	0.96	0.79	0.67	0.88	0.80	0.83	0.84	1.14
Boron (B)	120	5.0	12.2	18.2	16.2	24.1	21.6	21.6	22.8	14.7
Cadmium (Cd)	1.9	0.020	0.199	0.098	0.104	0.097	0.094	0.104	0.098	0.197
Chromium (Cr)	160	0.50	30.8	27.0	24.0	31.3	28.3	30.2	30.3	38.5
Cobalt (Co)	80	0.10	13.0	11.7	10.9	13.1	12.8	13.4	12.4	16.2
Copper (Cu)	230	0.50	20.1	20.9	23.4	22.0	21.4	22.6	22.2	24.1
Lead (Pb)	120	0.50	13.7	9.52	9.20	10.2	9.75	10.4	9.98	16.7
Mercury (Hg)	3.9	0.0050	0.0624	0.0126	0.0140	0.0138	0.0134	0.0129	0.0137	0.0333
Molybdenum (Mo)	40	0.10	0.64	0.60	0.87	0.99	0.98	1.02	0.88	0.94
Nickel (Ni)	270	0.50	26.5	25.7	23.3	30.0	27.4	29.8	29.0	34.2
Selenium (Se)	5.5	0.20	0.23	<0.20	<0.20	<0.20	<0.20	<0.20	0.50	0.24
Silver (Ag)	40	0.10	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium (Tl)	3.3	0.050	0.193	0.176	0.157	0.205	0.186	0.182	0.178	0.236
Uranium (U)	33	0.050	0.678	1.09	0.935	1.07	0.952	0.958	0.912	0.821
Vanadium (V)	86	0.20	43.9	37.6	33.6	41.5	37.8	39.8	40.4	50.9
Zinc (Zn)	340	2.0	67.9	53.8	55.9	61.2	58.0	62.9	61.0	78.8

Notes:

- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/
- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse S Laboratory detection limits for the test results shown in bold type and highlighted exceeded the a Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil dupli Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessme Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- \*The RPD for pH is an absolute difference and shown in pH units.
- All Standards and results shown in µg/g [exceptions, SAR (unitless), pH (pH units) and Conducti
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- pH criteria refers to surface and subsurface soils, respectively.
- Tests carried out by: ALS Global

**TABLE 4**  
**O.REG. 153/04 METALS AND INORGANICS ANALYSIS - SOIL**

Glencoe Industrial Park  
 Glencoe, Ontario

Parameters	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	BH9 S2	BH9 S3	DUP-S-2	RPD (%)	BH9 S4	BH9 S5	BH9 S6	BH9 S7	BH10 S1
			24-Jul-2025 11:00	24-Jul-2025 11:10	24-Jul-2025 0:00		24-Jul-2025 11:15	24-Jul-2025 11:25	24-Jul-2025 11:35	24-Jul-2025 11:45	24-Jul-2025 11:50
			WT2521286-030	WT2521286-031	WT2521286-044		WT2521286-032	WT2521286-033	WT2521286-034	WT2521286-035	WT2521286-036
			0.8-1.4	1.5-2.1	Field Duplicate		2.3-2.9	3.0-3.7	3.8-4.4	4.6-5.2	0.0-0.6
<b>Calculated Parameters</b>											
SAR	12	0.10	1.33	0.73	0.81	10.39	1.85	1.99	1.92	2.10	0.13
<b>Inorganics</b>											
Conductivity	1.4	0.00500	0.931	<b>3.23</b>	<b>3.05</b>	5.73	<b>1.74</b>	1.40	1.23	0.902	0.628
pH*	5 to 9 and 5 to 11	0.10	7.76	7.75	7.85	0.10	7.82	7.80	7.84	7.75	7.04
Cyanide, Weak Acid Dissociabl	0.051	0.050	<0.050	<0.050	<0.050	NC	<0.050	<0.050	<0.050	<0.050	<0.050
Chromium, Hexavalent	8	0.10	0.11	0.13	0.14	NC	0.13	0.16	<0.10	<0.10	0.35
<b>Metals</b>											
Boron (B), Hot Water Ext.	2	0.10	0.13	0.30	0.35	NC	0.57	0.60	0.79	0.86	0.17
Antimony (Sb)	40	0.10	0.17	0.16	0.16	NC	0.17	0.17	0.17	0.17	0.13
Arsenic (As)	18	0.10	4.62	4.26	4.42	3.69	4.54	4.22	3.60	4.00	4.28
Barium (Ba)	670	0.50	195	132	140	5.88	140	136	129	115	142
Beryllium (Be)	8	0.10	0.82	0.78	0.87	10.91	0.77	0.80	0.78	0.89	1.16
Boron (B)	120	5.0	20.2	20.8	25.4	NC	23.3	20.7	21.8	26.3	12.6
Cadmium (Cd)	1.9	0.020	0.113	0.101	0.091	NC	0.100	0.089	0.099	0.099	0.183
Chromium (Cr)	160	0.50	30.9	28.8	29.4	2.06	29.8	27.9	27.8	30.8	35.9
Cobalt (Co)	80	0.10	14.6	12.0	12.5	4.08	14.3	11.8	11.6	12.8	17.1
Copper (Cu)	230	0.50	22.0	20.6	21.0	1.92	22.0	22.2	21.0	22.3	17.1
Lead (Pb)	120	0.50	10.6	9.92	9.95	0.30	10.1	9.95	9.89	10.4	14.8
Mercury (Hg)	3.9	0.0050	0.0131	0.0129	0.0127	NC	0.0133	0.0131	0.0126	0.0122	0.0370
Molybdenum (Mo)	40	0.10	0.81	0.88	0.97	9.73	1.04	1.04	1.20	0.97	0.84
Nickel (Ni)	270	0.50	29.4	27.3	27.5	0.73	29.9	27.6	27.9	29.8	29.8
Selenium (Se)	5.5	0.20	<0.20	<0.20	<0.20	NC	<0.20	<0.20	<0.20	<0.20	0.38
Silver (Ag)	40	0.10	<0.10	<0.10	<0.10	NC	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium (Tl)	3.3	0.050	0.202	0.183	0.189	NC	0.179	0.185	0.159	0.170	0.210
Uranium (U)	33	0.050	0.951	1.09	1.08	0.92	0.972	0.802	0.946	1.02	0.877
Vanadium (V)	86	0.20	40.8	38.4	39.6	3.08	39.4	37.0	36.6	40.3	50.3
Zinc (Zn)	340	2.0	59.9	57.0	56.1	1.59	60.9	58.9	61.8	61.3	81.4

**Notes:**

- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/
- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse S Laboratory detection limits for the test results shown in bold type and highlighted exceeded the alert Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil duplication Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessment Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- \*The RPD for pH is an absolute difference and shown in pH units.
- All Standards and results shown in µg/g [exceptions, SAR (unitless), pH (pH units) and Conductivity].
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- pH criteria refers to surface and subsurface soils, respectively.
- Tests carried out by: ALS Global

TABLE 4

O.REG. 153/04 METALS AND INORGANICS ANALYSIS - SOIL

Glencoe Industrial Park  
Glencoe, Ontario

Parameters	MECP Table 2 SCS Industrial / Commercial / Community Property Use - Coarse Soils	Laboratory Detection Limit	BH10 S2	BH10 S3	BH10 S4	BH10 S5	BH10 S6	DUP-S-4	RPD (%)	BH10 S7
			24-Jul-2025 11:55	24-Jul-2025 12:05	24-Jul-2025 12:15	24-Jul-2025 12:25	24-Jul-2025 12:35	24-Jul-2025 0:00		24-Jul-2025 12:45
			WT2521286-037	WT2521286-038	WT2521286-039	WT2521286-040	WT2521286-041	WT2521286-046		WT2521286-042
			0.8-1.4	1.5-2.1	2.3-2.9	3.0-3.7	3.8-4.4	Field Duplicate		4.6-5.2
<b>Calculated Parameters</b>										
SAR	12	0.10	0.34	0.48	0.69	0.92	1.18	0.94	22.64	1.14
<b>Inorganics</b>										
Conductivity	1.4	0.00500	0.217	0.209	0.239	0.281	0.458	0.604	27.50	0.651
pH*	5 to 9 and 5 to 11	0.10	7.32	7.66	7.70	7.72	7.72	7.81	0.09	7.72
Cyanide, Weak Acid Dissociabl	0.051	0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	NC	<0.050
Chromium, Hexavalent	8	0.10	0.23	0.13	0.12	0.15	0.13	0.13	NC	0.11
<b>Metals</b>										
Boron (B), Hot Water Ext.	2	0.10	<0.10	0.11	0.17	0.31	0.46	0.44	NC	0.58
Antimony (Sb)	40	0.10	0.18	0.19	0.17	0.22	0.16	0.17	NC	0.15
Arsenic (As)	18	0.10	5.34	5.39	4.51	5.49	4.09	3.78	7.88	5.68
Barium (Ba)	670	0.50	130	139	198	147	124	131	5.49	102
Beryllium (Be)	8	0.10	0.93	0.94	0.94	0.75	0.80	0.83	3.68	0.71
Boron (B)	120	5.0	22.9	25.5	26.9	24.5	20.8	24.6	NC	21.3
Cadmium (Cd)	1.9	0.020	0.134	0.104	0.107	0.097	0.104	0.105	0.96	0.087
Chromium (Cr)	160	0.50	31.3	31.8	33.1	28.5	28.3	29.9	5.50	25.7
Cobalt (Co)	80	0.10	13.7	13.3	12.7	13.1	13.0	12.8	1.55	12.0
Copper (Cu)	230	0.50	22.3	23.4	23.0	21.4	21.5	21.8	1.39	19.3
Lead (Pb)	120	0.50	10.2	10.8	10.2	10.1	9.63	10.0	3.77	8.83
Mercury (Hg)	3.9	0.0050	0.0124	0.0124	0.0132	0.0143	0.0121	0.0126	NC	0.0104
Molybdenum (Mo)	40	0.10	0.91	1.23	1.18	2.31	1.16	1.19	2.55	1.15
Nickel (Ni)	270	0.50	28.8	31.0	31.2	31.6	28.6	29.1	1.73	26.0
Selenium (Se)	5.5	0.20	0.21	<0.20	<0.20	<0.20	<0.20	<0.20	NC	<0.20
Silver (Ag)	40	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	NC	<0.10
Thallium (Tl)	3.3	0.050	0.200	0.229	0.206	0.223	0.184	0.199	NC	0.172
Uranium (U)	33	0.050	0.963	0.978	1.06	1.15	0.892	0.945	5.77	0.750
Vanadium (V)	86	0.20	42.9	43.8	44.0	34.4	37.1	39.5	6.27	34.2
Zinc (Zn)	340	2.0	59.4	62.2	62.8	57.4	59.3	61.0	2.83	53.4

Notes:

- Standards from Table 2 of the MECP Soil, Ground Water and Sediment Standards for Use Under Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended document for Full Depth Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/
- Test results shown in bold type and highlighted exceeded the MECP Table 2 ICC SCS (Coarse S Laboratory detection limits for the test results shown in bold type and highlighted exceeded the a Relative Percent Difference (RPD) shown in bold red type exceed the alert criterion for soil dupli Laboratory Services Branch MECP 2021 "Protocol for Analytical Methods Used in the Assessme Part XV.1 of the Environmental Protection Act and Excess Soil Quality" Version 3.1.
- \*The RPD for pH is an absolute difference and shown in pH units.
- All Standards and results shown in µg/g [exceptions, SAR (unitless), pH (pH units) and Conducti
- "-" Standard not available or parameter not analyzed.
- "NC" RPD not calculable / not valid.
- mbgs - metres below ground surface.
- pH criteria refers to surface and subsurface soils, respectively.
- Tests carried out by: ALS Global

**Table 5**  
**O. REG. 406 MODIFIED SYNTHETIC PRECIPITATION LEACHING PROCEDURE ANALYSIS (mSPLP)**  
**Glencoe Industrial Park**  
**Glencoe, Ontario**

Parameters	MECP Table 1 LSL Residential / Parkland / Institutional / Industrial / Commercial / Community Property Use	MECP Table 2.1 LSL Industrial / Commercial / Community Property Use	Laboratory Detection Limit	Sample Location	BH1	BH2	BH3	BH5	BH7
				Sample ID	BH1 S6	BH2 S4	BH3 S6	BH5 S6	BH7 S6
				Date and Time	23-Jul-2025 9:50	23-Jul-2025 10:22	23-Jul-2025 11:35	23-Jul-2025 13:40	24-Jul-2025 8:50
				Laboratory ID	WT2521286-002	WT2521286-004	WT2521286-007	WT2521286-011	WT2521286-018
				Sample Depth (mbgs)	3.8-4.4	2.3-2.9	3.8-4.4	3.8-4.4	3.8-4.4
				Laboratory Units					
<b>Metals and Inorganics</b>									
Antimony (Sb)	-	6	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Arsenic (As)	-	-	1.0	µg/L	<1.0	<1.0	1.0	<1.0	<1.0
Barium (Ba)	-	1000	2	µg/L	17	15	39	38	4
Beryllium (Be)	-	4	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Boron (B)	-	5000	10	µg/L	16	12	18	19	14
Cadmium (Cd)	-	0.5	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium (Cr)	-	50	5.0	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0
Cobalt (Co)	-	3.8	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Copper (Cu)	-	14	5.0	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0
Lead (Pb)	-	-	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum (Mo)	23	23	0.50	µg/L	6.73	3.32	3.31	1.54	14.3
Nickel (Ni)	-	78	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Selenium (Se)	-	10	1.0	µg/L	1.3	1.2	1.9	1.4	<1.0
Silver (Ag)	0.3	0.3	0.25	µg/L	<0.25	<0.25	<0.25	<0.25	<0.25
Thallium (Tl)	2	2	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Uranium (U)	-	20	2.0	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0
Vanadium (V)	-	-	0.50	µg/L	1.71	5.44	4.04	3.08	0.71
Zinc (Zn)	-	180	5.0	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0

**Notes:**

Standards from Table 1 of the MECP Rules for Soil Management and Excess Soil Quality Standards adopted by reference in O. Reg. 406/19 made under the Environmental Protection Act, R.S.O. 1990, cc. E.19 - Leachate Screening Levels for Excess Soil Reuse for Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use.

Test results shown in bold type exceeded the MECP Table 1 RPIICC LSLs, as amended.

Laboratory detection limits for the test results shown in bold type and highlighted exceeded the applicable standards.

All Standards and results shown in µg/L.

"-" Standard not available or parameter not analyzed.

mbgs - metres below ground surface.

Tests carried out by: ALS Global

BH7	BH8	BH9	BH10	BH10
BH7 S7	BH8 S6	BH9 S3	BH10 S5	BH10 S6
24-Jul-2025 9:00	24-Jul-2025 10:35	24-Jul-2025 11:10	24-Jul-2025 12:25	24-Jul-2025 12:35
WT2521286-019	WT2521286-027	WT2521286-031	WT2521286-040	WT2521286-041
4.6-5.2	3.8-4.4	1.5-2.1	3.0-3.7	3.8-4.4
<0.50	<0.50	<0.50	<0.50	<0.50
<1.0	<1.0	<1.0	<1.0	<1.0
24	20	16	14	16
<0.50	<0.50	<0.50	<0.50	<0.50
20	16	<10	11	13
<0.10	<0.10	<0.10	<0.10	<0.10
<5.0	<5.0	<5.0	<5.0	<5.0
<1.0	<1.0	<1.0	<1.0	<1.0
<5.0	<5.0	<5.0	<5.0	<5.0
<1.0	<1.0	<1.0	<1.0	<1.0
13.3	9.23	5.37	11.2	10.9
<1.0	<1.0	<1.0	<1.0	<1.0
<1.0	<1.0	<1.0	<1.0	<1.0
<0.25	<0.25	<0.25	<0.25	<0.25
<0.50	<0.50	<0.50	<0.50	<0.50
<2.0	<2.0	<2.0	<2.0	<2.0
<0.50	<0.50	<0.50	<0.50	<0.50
<5.0	<5.0	<5.0	<5.0	<5.0

# Appendix C

## Certificates of Analysis



**eNGLOBE**

**CERTIFICATE OF ANALYSIS**

<b>Work Order</b>	: <b>WT2521286</b>	<b>Laboratory</b>	: ALS Environmental - Waterloo
<b>Client</b>	: <b>Englobe Corp.</b>	<b>Account Manager</b>	: Gayle Braun
<b>Contact</b>	: Emily Brook	<b>Address</b>	: 60 Northland Road, Unit 1
<b>Address</b>	: 417 Exeter Road London Ontario Canada N6E 2Z3		: Waterloo ON Canada N2V 2B8
<b>Telephone</b>	: ----	<b>E-mail</b>	: Gayle.Braun@ALSGlobal.com
<b>Project</b>	: 02506021	<b>Telephone</b>	: +1 519 886 6910
<b>PO</b>	: ----	<b>Date Samples Received</b>	: 01-Aug-2025 16:40
<b>C-O-C number</b>	: 20-1075399	<b>Date Analysis Commenced</b>	: 06-Aug-2025
<b>Sampler</b>	: CLIENT	<b>Issue Date</b>	: 12-Aug-2025 16:05
<b>Site</b>	: ----		
<b>Quote number</b>	: Excess Soils Q87721 Kitchener/London		
<b>No. of samples received</b>	: 46		
<b>No. of samples analysed</b>	: 46		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

**Signatories**

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Andrea Armstrong		VOC, Waterloo, Ontario
Danielle Gravel		Organics, Waterloo, Ontario
Greg Pokocky		Metals, Waterloo, Ontario
Greg Pokocky		Inorganics, Waterloo, Ontario
Jeremy Gingras		Organics, Waterloo, Ontario
Josphin Masihi		Centralized Prep, Waterloo, Ontario
Niral Patel		Centralized Prep, Waterloo, Ontario



## General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.  
LOR: Limit of Reporting (detection limit).

<i>Unit</i>	<i>Description</i>
-	no units
%	percent
mg/kg	milligrams per kilogram
mg/L	milligrams per litre
mS/cm	millisiemens per centimetre
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

## Qualifiers

<i>Qualifier</i>	<i>Description</i>
DLIS	Detection Limit Adjusted due to insufficient sample.
FR5	As per applicable reference method(s), soil:water ratio for Fixed Ratio Leach was modified to 1:5 due to high soil organic content



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH1 S1	BH1 S6	BH2 S2	BH2 S4	BH2 S7
					Client sampling date / time	23-Jul-2025 09:10	23-Jul-2025 09:50	23-Jul-2025 10:10	23-Jul-2025 10:22	23-Jul-2025 10:25
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-001	WT2521286-002	WT2521286-003	WT2521286-004	WT2521286-005	
					Result	Result	Result	Result	Result	
<b>Physical Tests</b>										
Conductivity (1:2 leachate)	----	E100-L/WT	0.00500	mS/cm	0.212	0.417	0.147	0.220	0.341	
Moisture	----	E144/WT	0.25	%	12.2	19.6	15.1	15.7	19.3	
pH (1:2 soil:CaCl2-aq)	----	E108A/WT	0.10	pH units	7.34	7.69	7.68	7.65	7.89	
<b>Cyanides</b>										
Cyanide, weak acid dissociable	----	E336A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
<b>Fixed-Ratio Extractables</b>										
Calcium, soluble ion content	7440-70-2	E484/WT	0.50	mg/L	13.1	15.6	4.09	6.40	9.77	
Magnesium, soluble ion content	7439-95-4	E484/WT	0.50	mg/L	1.25	11.5	1.17	2.84	6.52	
Sodium, soluble ion content	17341-25-2	E484/WT	0.50	mg/L	1.68	23.6	1.99	6.69	21.8	
Sodium adsorption ratio [SAR]	----	E484/WT	0.10	-	0.12	1.10	0.22	0.55	1.32	
<b>Metals</b>										
Antimony	7440-36-0	E440C/WT	0.10	mg/kg	<0.10	0.19	0.15	0.18	0.18	
Arsenic	7440-38-2	E440C/WT	0.10	mg/kg	2.25	5.50	4.24	4.04	4.76	
Barium	7440-39-3	E440C/WT	0.50	mg/kg	43.8	143	83.3	147	126	
Beryllium	7440-41-7	E440C/WT	0.10	mg/kg	0.39	0.94	0.60	0.85	0.87	
Boron	7440-42-8	E440C/WT	5.0	mg/kg	<5.0	24.2	14.2	22.4	23.8	
Boron, hot water soluble	7440-42-8	E487/WT	0.10	mg/kg	0.31	0.62	<0.10	0.35	0.82	
Cadmium	7440-43-9	E440C/WT	0.020	mg/kg	0.143	0.104	0.090	0.097	0.098	
Chromium	7440-47-3	E440C/WT	0.50	mg/kg	12.6	31.5	21.0	29.1	30.6	
Cobalt	7440-48-4	E440C/WT	0.10	mg/kg	4.48	13.6	11.0	12.2	13.1	
Copper	7440-50-8	E440C/WT	0.50	mg/kg	8.27	22.9	18.5	22.1	23.2	



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH1 S1	BH1 S6	BH2 S2	BH2 S4	BH2 S7
					Client sampling date / time	23-Jul-2025 09:10	23-Jul-2025 09:50	23-Jul-2025 10:10	23-Jul-2025 10:22	23-Jul-2025 10:25
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-001	WT2521286-002	WT2521286-003	WT2521286-004	WT2521286-005	
					Result	Result	Result	Result	Result	
<b>Metals</b>										
Lead	7439-92-1	E440C/WT	0.50	mg/kg	8.46	11.1	8.61	10.4	10.5	
Mercury	7439-97-6	E510C/WT	0.0050	mg/kg	0.0218	0.0140	0.0105	0.0141	0.0136	
Molybdenum	7439-98-7	E440C/WT	0.10	mg/kg	0.56	1.17	0.58	1.14	1.03	
Nickel	7440-02-0	E440C/WT	0.50	mg/kg	9.48	30.8	22.7	27.4	30.6	
Selenium	7782-49-2	E440C/WT	0.20	mg/kg	<0.20	<0.20	<0.20	0.24	<0.20	
Silver	7440-22-4	E440C/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	
Thallium	7440-28-0	E440C/WT	0.050	mg/kg	0.082	0.204	0.136	0.156	0.166	
Uranium	7440-61-1	E440C/WT	0.050	mg/kg	0.617	0.999	0.572	0.925	0.937	
Vanadium	7440-62-2	E440C/WT	0.20	mg/kg	18.4	41.6	30.7	39.5	40.1	
Zinc	7440-66-6	E440C/WT	2.0	mg/kg	34.4	63.8	45.3	59.6	63.8	
<b>Speciated Metals</b>										
Chromium, hexavalent [Cr VI]	18540-29-9	E532/WT	0.10	mg/kg	<0.10	<0.10	0.12	0.14	<0.10	
<b>Volatile Organic Compounds</b>										
Benzene	71-43-2	E611A/WT	0.0050	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Ethylbenzene	100-41-4	E611A/WT	0.015	mg/kg	<0.015	<0.015	<0.015	<0.015	<0.015	
Toluene	108-88-3	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
Xylene, m+p-	179601-23-1	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylene, o-	95-47-6	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylenes, total	1330-20-7	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
BTEX, total	----	E611A/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	



### Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH1 S1 ----	BH1 S6 ----	BH2 S2 ----	BH2 S4 ----	BH2 S7 ----
					Client sampling date / time	23-Jul-2025 09:10	23-Jul-2025 09:50	23-Jul-2025 10:10	23-Jul-2025 10:22	23-Jul-2025 10:25
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-001	WT2521286-002	WT2521286-003	WT2521286-004	WT2521286-005	
					Result	Result	Result	Result	Result	
<b>Hydrocarbons</b>										
F1 (C6-C10)	----	E581.F1/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
F2 (C10-C16)	----	E601.SG-LWT	10	mg/kg	<10	13	<10	15	13	
F3 (C16-C34)	----	E601.SG-LWT	50	mg/kg	<50	78	<50	65	56	
F4 (C34-C50)	----	E601.SG-LWT	50	mg/kg	<50	<50	<50	<50	<50	
F1-BTEX	----	EC580/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Hydrocarbons, total (C6-C50)	n/a	EC581/WT	80	mg/kg	<80	91	<80	80	<80	
Chromatogram to baseline at nC50	n/a	E601.SG-LWT	-	-	YES	YES	YES	YES	YES	
<b>Hydrocarbons Surrogates</b>										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601.SG-LWT	1.0	%	82.4	83.3	78.7	84.3	82.6	
Dichlorotoluene, 3,4-	95-75-0	E581.F1/WT	1.0	%	78.8	93.0	87.7	79.4	82.0	
<b>Volatile Organic Compounds Surrogates</b>										
Bromofluorobenzene, 4-	460-00-4	E611A/WT	0.10	%	95.2	105	95.0	94.3	92.2	
Difluorobenzene, 1,4-	540-36-3	E611A/WT	0.10	%	86.8	94.2	85.4	86.6	81.6	

Please refer to the General Comments section for an explanation of any qualifiers detected.

### Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH3 S2 ----	BH3 S6 ----	BH4 S2 ----	BH4 S7 ----	BH5 S1 ----
					Client sampling date / time	23-Jul-2025 11:05	23-Jul-2025 11:35	23-Jul-2025 12:10	23-Jul-2025 12:50	23-Jul-2025 13:05
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-006	WT2521286-007	WT2521286-008	WT2521286-009	WT2521286-010	
					Result	Result	Result	Result	Result	
<b>Physical Tests</b>										
Conductivity (1:2 leachate)	----	E100-L/WT	0.00500	mS/cm	0.320	0.377	0.324	0.747	0.276	
Moisture	----	E144/WT	0.25	%	19.1	15.7	17.0	18.4	13.7	



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH3 S2	BH3 S6	BH4 S2	BH4 S7	BH5 S1
					Client sampling date / time	23-Jul-2025 11:05	23-Jul-2025 11:35	23-Jul-2025 12:10	23-Jul-2025 12:50	23-Jul-2025 13:05
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-006	WT2521286-007	WT2521286-008	WT2521286-009	WT2521286-010	
					Result	Result	Result	Result	Result	
<b>Physical Tests</b>										
pH (1:2 soil:CaCl2-aq)	----	E108A/WT	0.10	pH units	7.63	7.71	7.62	7.75	7.51	
<b>Cyanides</b>										
Cyanide, weak acid dissociable	----	E336A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
<b>Fixed-Ratio Extractables</b>										
Calcium, soluble ion content	7440-70-2	E484/WT	0.50	mg/L	15.5	15.2	18.4	38.9	15.9	
Magnesium, soluble ion content	7439-95-4	E484/WT	0.50	mg/L	5.09	10.2	5.01	28.7	2.53	
Sodium, soluble ion content	17341-25-2	E484/WT	0.50	mg/L	9.38	16.5	9.74	53.1	6.90	
Sodium adsorption ratio [SAR]	----	E484/WT	0.10	-	0.53	0.80	0.52	1.57	0.42	
<b>Metals</b>										
Antimony	7440-36-0	E440C/WT	0.10	mg/kg	0.18	0.18	0.18	0.18	0.17	
Arsenic	7440-38-2	E440C/WT	0.10	mg/kg	4.54	4.28	5.40	4.41	4.12	
Barium	7440-39-3	E440C/WT	0.50	mg/kg	158	108	133	130	123	
Beryllium	7440-41-7	E440C/WT	0.10	mg/kg	1.02	0.72	0.88	0.86	0.84	
Boron	7440-42-8	E440C/WT	5.0	mg/kg	20.2	20.8	18.7	24.3	12.9	
Boron, hot water soluble	7440-42-8	E487/WT	0.10	mg/kg	0.11	0.59	<0.10	0.85	0.24	
Cadmium	7440-43-9	E440C/WT	0.020	mg/kg	0.100	0.125	0.123	0.089	0.168	
Chromium	7440-47-3	E440C/WT	0.50	mg/kg	31.6	26.3	29.4	30.2	27.9	
Cobalt	7440-48-4	E440C/WT	0.10	mg/kg	14.4	12.0	13.9	12.9	11.5	
Copper	7440-50-8	E440C/WT	0.50	mg/kg	22.6	21.8	22.9	22.3	18.5	
Lead	7439-92-1	E440C/WT	0.50	mg/kg	11.2	9.96	10.6	10.4	12.2	
Mercury	7439-97-6	E510C/WT	0.0050	mg/kg	0.0129	0.0138	0.0145	0.0132	0.0246	



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH3 S2	BH3 S6	BH4 S2	BH4 S7	BH5 S1
					Client sampling date / time	23-Jul-2025 11:05	23-Jul-2025 11:35	23-Jul-2025 12:10	23-Jul-2025 12:50	23-Jul-2025 13:05
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-006	WT2521286-007	WT2521286-008	WT2521286-009	WT2521286-010	
					Result	Result	Result	Result	Result	
<b>Metals</b>										
Molybdenum	7439-98-7	E440C/WT	0.10	mg/kg	0.72	1.64	0.68	0.98	0.61	
Nickel	7440-02-0	E440C/WT	0.50	mg/kg	31.3	27.8	29.7	29.5	24.4	
Selenium	7782-49-2	E440C/WT	0.20	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	
Silver	7440-22-4	E440C/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	
Thallium	7440-28-0	E440C/WT	0.050	mg/kg	0.197	0.166	0.175	0.180	0.160	
Uranium	7440-61-1	E440C/WT	0.050	mg/kg	0.816	1.07	0.792	1.07	0.727	
Vanadium	7440-62-2	E440C/WT	0.20	mg/kg	43.7	33.2	42.2	39.7	38.7	
Zinc	7440-66-6	E440C/WT	2.0	mg/kg	64.4	64.2	57.0	61.5	58.4	
<b>Speciated Metals</b>										
Chromium, hexavalent [Cr VI]	18540-29-9	E532/WT	0.10	mg/kg	0.13	<0.10	0.17	<0.10	0.15	
<b>Volatile Organic Compounds</b>										
Benzene	71-43-2	E611A/WT	0.0050	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Ethylbenzene	100-41-4	E611A/WT	0.015	mg/kg	<0.015	<0.015	<0.015	<0.015	<0.015	
Toluene	108-88-3	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
Xylene, m+p-	179601-23-1	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylene, o-	95-47-6	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylenes, total	1330-20-7	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
BTEX, total	----	E611A/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	
<b>Hydrocarbons</b>										
F1 (C6-C10)	----	E581.F1/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
F2 (C10-C16)	----	E601.SG-L/WT	10	mg/kg	<10	20	<10	10	<10	



### Analytical Results

Sub-Matrix: Soil/Solid (Matrix: Soil/Solid)					Client sample ID	BH3 S2 ----	BH3 S6 ----	BH4 S2 ----	BH4 S7 ----	BH5 S1 ----
					Client sampling date / time	23-Jul-2025 11:05	23-Jul-2025 11:35	23-Jul-2025 12:10	23-Jul-2025 12:50	23-Jul-2025 13:05
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-006	WT2521286-007	WT2521286-008	WT2521286-009	WT2521286-010	
					Result	Result	Result	Result	Result	
<b>Hydrocarbons</b>										
F3 (C16-C34)	----	E601.SG-LWT	50	mg/kg	<50	60	<50	51	<50	
F4 (C34-C50)	----	E601.SG-LWT	50	mg/kg	<50	<50	<50	<50	<50	
F1-BTEX	----	EC580/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Hydrocarbons, total (C6-C50)	n/a	EC581/WT	80	mg/kg	<80	80	<80	<80	<80	
Chromatogram to baseline at nC50	n/a	E601.SG-LWT	-	-	YES	YES	YES	YES	YES	
<b>Hydrocarbons Surrogates</b>										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601.SG-LWT	1.0	%	84.5	81.4	85.2	81.7	82.8	
Dichlorotoluene, 3,4-	95-75-0	E581.F1/WT	1.0	%	92.6	104	80.7	74.6	92.8	
<b>Volatile Organic Compounds Surrogates</b>										
Bromofluorobenzene, 4-	460-00-4	E611A/WT	0.10	%	90.3	103	97.5	90.0	96.9	
Difluorobenzene, 1,4-	540-36-3	E611A/WT	0.10	%	80.8	93.7	87.1	82.9	88.1	

Please refer to the General Comments section for an explanation of any qualifiers detected.

### Analytical Results

Sub-Matrix: Soil/Solid (Matrix: Soil/Solid)					Client sample ID	BH5 S6 ----	BH6 S1+2 ----	BH6 S4 ----	BH6 S7 ----	BH7 S1 ----
					Client sampling date / time	23-Jul-2025 13:40	23-Jul-2025 14:05	23-Jul-2025 14:25	23-Jul-2025 14:40	24-Jul-2025 08:10
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-011	WT2521286-012	WT2521286-013	WT2521286-014	WT2521286-015	
					Result	Result	Result	Result	Result	
<b>Physical Tests</b>										
Conductivity (1:2 leachate)	----	E100-L/WT	0.00500	mS/cm	0.868	0.260	0.174	0.407	0.358 <sup>FR5</sup>	
Moisture	----	E144/WT	0.25	%	17.8	17.0	17.4	20.2	16.3	
pH (1:2 soil:CaCl2-aq)	----	E108A/WT	0.10	pH units	7.80	7.30	7.73	7.76	7.50	



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH5 S6	BH6 S1+2	BH6 S4	BH6 S7	BH7 S1
					Client sampling date / time	23-Jul-2025 13:40	23-Jul-2025 14:05	23-Jul-2025 14:25	23-Jul-2025 14:40	24-Jul-2025 08:10
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-011	WT2521286-012	WT2521286-013	WT2521286-014	WT2521286-015	
					Result	Result	Result	Result	Result	
<b>Cyanides</b>										
Cyanide, weak acid dissociable	----	E336A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
<b>Fixed-Ratio Extractables</b>										
Calcium, soluble ion content	7440-70-2	E484/WT	0.50	mg/L	43.8	14.0	3.41	12.7	7.81	DLIS, FRS
Magnesium, soluble ion content	7439-95-4	E484/WT	0.50	mg/L	42.4	2.78	1.85	10.8	0.94	DLIS, FRS
Sodium, soluble ion content	17341-25-2	E484/WT	0.50	mg/L	56.0	4.14	4.99	25.2	1.86	DLIS, FRS
Sodium adsorption ratio [SAR]	----	E484/WT	0.10	-	1.45	0.26	0.54	1.26	0.17	DLIS, FRS
<b>Metals</b>										
Antimony	7440-36-0	E440C/WT	0.10	mg/kg	0.15	0.17	0.16	0.17	0.18	
Arsenic	7440-38-2	E440C/WT	0.10	mg/kg	3.55	5.06	4.52	4.08	4.75	
Barium	7440-39-3	E440C/WT	0.50	mg/kg	124	131	105	127	129	
Beryllium	7440-41-7	E440C/WT	0.10	mg/kg	0.76	1.01	0.77	0.82	0.98	
Boron	7440-42-8	E440C/WT	5.0	mg/kg	21.8	17.5	20.9	23.2	12.2	
Boron, hot water soluble	7440-42-8	E487/WT	0.10	mg/kg	0.59	0.16	0.24	0.59	0.15	
Cadmium	7440-43-9	E440C/WT	0.020	mg/kg	0.094	0.159	0.098	0.090	0.170	
Chromium	7440-47-3	E440C/WT	0.50	mg/kg	27.9	33.4	28.4	29.0	32.1	
Cobalt	7440-48-4	E440C/WT	0.10	mg/kg	11.2	13.0	11.7	12.3	13.4	
Copper	7440-50-8	E440C/WT	0.50	mg/kg	21.1	23.1	21.5	21.8	20.2	
Lead	7439-92-1	E440C/WT	0.50	mg/kg	9.67	14.0	10.1	10.3	15.2	
Mercury	7439-97-6	E510C/WT	0.0050	mg/kg	0.0132	0.0317	0.0129	0.0132	0.0360	
Molybdenum	7439-98-7	E440C/WT	0.10	mg/kg	0.86	0.84	0.96	0.91	0.68	
Nickel	7440-02-0	E440C/WT	0.50	mg/kg	26.5	29.0	27.3	28.4	26.4	



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH5 S6	BH6 S1+2	BH6 S4	BH6 S7	BH7 S1
					Client sampling date / time	23-Jul-2025 13:40	23-Jul-2025 14:05	23-Jul-2025 14:25	23-Jul-2025 14:40	24-Jul-2025 08:10
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-011	WT2521286-012	WT2521286-013	WT2521286-014	WT2521286-015	
					Result	Result	Result	Result	Result	
<b>Metals</b>										
Selenium	7782-49-2	E440C/WT	0.20	mg/kg	<0.20	0.27	<0.20	<0.20	0.26	
Silver	7440-22-4	E440C/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	
Thallium	7440-28-0	E440C/WT	0.050	mg/kg	0.154	0.222	0.187	0.168	0.208	
Uranium	7440-61-1	E440C/WT	0.050	mg/kg	1.07	0.802	0.873	1.17	0.671	
Vanadium	7440-62-2	E440C/WT	0.20	mg/kg	36.5	44.8	38.0	38.4	45.5	
Zinc	7440-66-6	E440C/WT	2.0	mg/kg	55.2	77.5	57.9	59.6	68.7	
<b>Speciated Metals</b>										
Chromium, hexavalent [Cr VI]	18540-29-9	E532/WT	0.10	mg/kg	<0.10	<0.10	0.12	<0.10	0.26	
<b>Volatile Organic Compounds</b>										
Benzene	71-43-2	E611A/WT	0.0050	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Ethylbenzene	100-41-4	E611A/WT	0.015	mg/kg	<0.015	<0.015	<0.015	<0.015	<0.015	
Toluene	108-88-3	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
Xylene, m+p-	179601-23-1	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylene, o-	95-47-6	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylenes, total	1330-20-7	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
BTEX, total	---	E611A/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	
<b>Hydrocarbons</b>										
F1 (C6-C10)	---	E581.F1/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
F2 (C10-C16)	---	E601.SG-L/WT	10	mg/kg	11	<10	<10	<10	<10	
F3 (C16-C34)	---	E601.SG-L/WT	50	mg/kg	<50	<50	<50	56	<50	
F4 (C34-C50)	---	E601.SG-L/WT	50	mg/kg	<50	<50	<50	<50	<50	



### Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH5 S6 ----	BH6 S1+2 ----	BH6 S4 ----	BH6 S7 ----	BH7 S1 ----
					Client sampling date / time	23-Jul-2025 13:40	23-Jul-2025 14:05	23-Jul-2025 14:25	23-Jul-2025 14:40	24-Jul-2025 08:10
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2521286-011	WT2521286-012	WT2521286-013	WT2521286-014	WT2521286-015
						Result	Result	Result	Result	Result
<b>Hydrocarbons</b>										
F1-BTEX	----	EC580/WT	5.0	mg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Hydrocarbons, total (C6-C50)	n/a	EC581/WT	80	mg/kg		<80	<80	<80	<80	<80
Chromatogram to baseline at nC50	n/a	E601.SG-L/WT	-	-		YES	YES	YES	YES	YES
<b>Hydrocarbons Surrogates</b>										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601.SG-L/WT	1.0	%		82.2	81.7	81.4	86.6	82.8
Dichlorotoluene, 3,4-	95-75-0	E581.F1/WT	1.0	%		76.3	80.6	78.4	78.8	93.4
<b>Volatile Organic Compounds Surrogates</b>										
Bromofluorobenzene, 4-	460-00-4	E611A/WT	0.10	%		95.5	88.8	90.1	88.8	92.2
Difluorobenzene, 1,4-	540-36-3	E611A/WT	0.10	%		87.6	82.9	82.6	81.5	83.7

Please refer to the General Comments section for an explanation of any qualifiers detected.

### Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH7 S3 ----	BH7 S5 ----	BH7 S6 ----	BH7 S7 ----	BH7 S8 ----
					Client sampling date / time	24-Jul-2025 08:20	24-Jul-2025 08:40	24-Jul-2025 08:50	24-Jul-2025 09:00	24-Jul-2025 09:15
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2521286-016	WT2521286-017	WT2521286-018	WT2521286-019	WT2521286-020
						Result	Result	Result	Result	Result
<b>Physical Tests</b>										
Conductivity (1:2 leachate)	----	E100-L/WT	0.00500	mS/cm		0.764	1.37	1.49	2.14	1.42
Moisture	----	E144/WT	0.25	%		14.7	19.5	17.6	17.8	19.4
pH (1:2 soil:CaCl2-aq)	----	E108A/WT	0.10	pH units		7.77	7.78	7.76	7.71	7.73
<b>Cyanides</b>										
Cyanide, weak acid dissociable	----	E336A/WT	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH7 S3	BH7 S5	BH7 S6	BH7 S7	BH7 S8
					Client sampling date / time	----	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	24-Jul-2025 08:20	24-Jul-2025 08:40	24-Jul-2025 08:50	24-Jul-2025 09:00	24-Jul-2025 09:15	
					WT2521286-016	WT2521286-017	WT2521286-018	WT2521286-019	WT2521286-020	
					Result	Result	Result	Result	Result	
<b>Fixed-Ratio Extractables</b>										
Calcium, soluble ion content	7440-70-2	E484/WT	0.50	mg/L	35.6	68.9	83.4	191	87.3	
Magnesium, soluble ion content	7439-95-4	E484/WT	0.50	mg/L	37.8	90.7	100	156	89.1	
Sodium, soluble ion content	17341-25-2	E484/WT	0.50	mg/L	49.9	93.1	95.8	105	85.0	
Sodium adsorption ratio [SAR]	----	E484/WT	0.10	-	1.39	1.73	1.67	1.36	1.53	
<b>Metals</b>										
Antimony	7440-36-0	E440C/WT	0.10	mg/kg	0.19	0.20	0.19	0.22	0.18	
Arsenic	7440-38-2	E440C/WT	0.10	mg/kg	5.56	7.44	6.74	9.57	4.03	
Barium	7440-39-3	E440C/WT	0.50	mg/kg	139	122	102	115	133	
Beryllium	7440-41-7	E440C/WT	0.10	mg/kg	0.71	0.91	0.92	0.84	0.87	
Boron	7440-42-8	E440C/WT	5.0	mg/kg	19.0	23.5	25.1	24.2	25.1	
Boron, hot water soluble	7440-42-8	E487/WT	0.10	mg/kg	0.14	0.46	0.65	0.74	0.84	
Cadmium	7440-43-9	E440C/WT	0.020	mg/kg	0.102	0.102	0.102	0.109	0.131	
Chromium	7440-47-3	E440C/WT	0.50	mg/kg	27.0	31.4	31.0	30.1	30.8	
Cobalt	7440-48-4	E440C/WT	0.10	mg/kg	12.6	14.6	13.8	13.1	13.1	
Copper	7440-50-8	E440C/WT	0.50	mg/kg	21.9	24.3	23.4	23.5	23.0	
Lead	7439-92-1	E440C/WT	0.50	mg/kg	10.5	11.3	10.4	10.7	10.4	
Mercury	7439-97-6	E510C/WT	0.0050	mg/kg	0.0142	0.0132	0.0141	0.0137	0.0136	
Molybdenum	7439-98-7	E440C/WT	0.10	mg/kg	1.87	1.94	1.34	1.49	1.11	
Nickel	7440-02-0	E440C/WT	0.50	mg/kg	29.0	32.6	30.3	31.0	31.6	
Selenium	7782-49-2	E440C/WT	0.20	mg/kg	<0.20	<0.20	<0.20	<0.20	0.23	
Silver	7440-22-4	E440C/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH7 S3	BH7 S5	BH7 S6	BH7 S7	BH7 S8
					Client sampling date / time	24-Jul-2025 08:20	24-Jul-2025 08:40	24-Jul-2025 08:50	24-Jul-2025 09:00	24-Jul-2025 09:15
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-016	WT2521286-017	WT2521286-018	WT2521286-019	WT2521286-020	
					Result	Result	Result	Result	Result	
<b>Metals</b>										
Thallium	7440-28-0	E440C/WT	0.050	mg/kg	0.208	0.249	0.222	0.223	0.185	
Uranium	7440-61-1	E440C/WT	0.050	mg/kg	1.17	1.11	1.18	1.36	0.924	
Vanadium	7440-62-2	E440C/WT	0.20	mg/kg	35.2	42.4	41.5	40.6	40.8	
Zinc	7440-66-6	E440C/WT	2.0	mg/kg	55.8	66.3	65.0	64.8	61.6	
<b>Speciated Metals</b>										
Chromium, hexavalent [Cr VI]	18540-29-9	E532/WT	0.10	mg/kg	0.18	0.14	0.17	0.20	0.15	
<b>Volatile Organic Compounds</b>										
Benzene	71-43-2	E611A/WT	0.0050	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Ethylbenzene	100-41-4	E611A/WT	0.015	mg/kg	<0.015	<0.015	<0.015	<0.015	<0.015	
Toluene	108-88-3	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
Xylene, m+p-	179601-23-1	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylene, o-	95-47-6	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylenes, total	1330-20-7	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
BTEX, total	----	E611A/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	
<b>Hydrocarbons</b>										
F1 (C6-C10)	----	E581.F1/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
F2 (C10-C16)	----	E601.SG-L/WT	10	mg/kg	<10	<10	<10	<10	<10	
F3 (C16-C34)	----	E601.SG-L/WT	50	mg/kg	<50	<50	<50	<50	<50	
F4 (C34-C50)	----	E601.SG-L/WT	50	mg/kg	<50	<50	<50	<50	<50	
F1-BTEX	----	EC580/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Hydrocarbons, total (C6-C50)	n/a	EC581/WT	80	mg/kg	<80	<80	<80	<80	<80	



### Analytical Results

Sub-Matrix: Soil/Solid (Matrix: Soil/Solid)					Client sample ID	BH7 S3 ----	BH7 S5 ----	BH7 S6 ----	BH7 S7 ----	BH7 S8 ----
					Client sampling date / time	24-Jul-2025 08:20	24-Jul-2025 08:40	24-Jul-2025 08:50	24-Jul-2025 09:00	24-Jul-2025 09:15
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-016	WT2521286-017	WT2521286-018	WT2521286-019	WT2521286-020	
					Result	Result	Result	Result	Result	
<b>Hydrocarbons</b>										
<b>Chromatogram to baseline at nC50</b>	n/a	E601.SG-L/WT	-	-	YES	YES	YES	YES	YES	
<b>Hydrocarbons Surrogates</b>										
<b>Bromobenzotrifluoride, 2- (F2-F4 surrogate)</b>	392-83-6	E601.SG-L/WT	1.0	%	85.8	81.8	82.8	78.9	78.8	
<b>Dichlorotoluene, 3,4-</b>	95-75-0	E581.F1/WT	1.0	%	83.5	126	128	136	139	
<b>Volatile Organic Compounds Surrogates</b>										
<b>Bromofluorobenzene, 4-</b>	460-00-4	E611A/WT	0.10	%	100	86.3	82.9	91.5	94.9	
<b>Difluorobenzene, 1,4-</b>	540-36-3	E611A/WT	0.10	%	91.9	95.2	89.5	99.0	101	

Please refer to the General Comments section for an explanation of any qualifiers detected.

### Analytical Results

Sub-Matrix: Soil/Solid (Matrix: Soil/Solid)					Client sample ID	BH7 S9 ----	BH8 S1 ----	BH8 S2 ----	BH8 S3 ----	BH8 S4 ----
					Client sampling date / time	24-Jul-2025 09:25	24-Jul-2025 09:55	24-Jul-2025 10:00	24-Jul-2025 10:10	24-Jul-2025 10:15
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-021	WT2521286-022	WT2521286-023	WT2521286-024	WT2521286-025	
					Result	Result	Result	Result	Result	
<b>Physical Tests</b>										
<b>Conductivity (1:2 leachate)</b>	----	E100-L/WT	0.00500	mS/cm	1.16	0.274	0.439	0.475	0.667	
<b>Moisture</b>	----	E144/WT	0.25	%	21.8	16.3	17.3	16.4	18.8	
<b>pH (1:2 soil:CaCl2-aq)</b>	----	E108A/WT	0.10	pH units	7.70	7.63	7.79	7.87	7.79	
<b>Cyanides</b>										
<b>Cyanide, weak acid dissociable</b>	----	E336A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
<b>Fixed-Ratio Extractables</b>										
<b>Calcium, soluble ion content</b>	7440-70-2	E484/WT	0.50	mg/L	77.0	16.7	15.2	12.4	18.2	
<b>Magnesium, soluble ion content</b>	7439-95-4	E484/WT	0.50	mg/L	59.2	2.19	13.5	17.4	33.3	



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH7 S9	BH8 S1	BH8 S2	BH8 S3	BH8 S4
					Client sampling date / time	----	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	24-Jul-2025 09:25	24-Jul-2025 09:55	24-Jul-2025 10:00	24-Jul-2025 10:10	24-Jul-2025 10:15	
					WT2521286-021	WT2521286-022	WT2521286-023	WT2521286-024	WT2521286-025	
					Result	Result	Result	Result	Result	
<b>Fixed-Ratio Extractables</b>										
Sodium, soluble ion content	17341-25-2	E484/WT	0.50	mg/L	74.1	6.05	27.1	31.3	47.3	
Sodium adsorption ratio [SAR]	----	E484/WT	0.10	-	1.54	0.37	1.22	1.34	1.52	
<b>Metals</b>										
Antimony	7440-36-0	E440C/WT	0.10	mg/kg	0.15	0.17	0.15	0.14	0.18	
Arsenic	7440-38-2	E440C/WT	0.10	mg/kg	7.74	4.41	4.06	4.56	5.25	
Barium	7440-39-3	E440C/WT	0.50	mg/kg	134	134	146	113	118	
Beryllium	7440-41-7	E440C/WT	0.10	mg/kg	0.77	0.96	0.79	0.67	0.88	
Boron	7440-42-8	E440C/WT	5.0	mg/kg	21.7	12.2	18.2	16.2	24.1	
Boron, hot water soluble	7440-42-8	E487/WT	0.10	mg/kg	0.83	0.11	<0.10	0.16	0.34	
Cadmium	7440-43-9	E440C/WT	0.020	mg/kg	0.075	0.199	0.098	0.104	0.097	
Chromium	7440-47-3	E440C/WT	0.50	mg/kg	28.5	30.8	27.0	24.0	31.3	
Cobalt	7440-48-4	E440C/WT	0.10	mg/kg	12.4	13.0	11.7	10.9	13.1	
Copper	7440-50-8	E440C/WT	0.50	mg/kg	22.3	20.1	20.9	23.4	22.0	
Lead	7439-92-1	E440C/WT	0.50	mg/kg	9.72	13.7	9.52	9.20	10.2	
Mercury	7439-97-6	E510C/WT	0.0050	mg/kg	0.0141	0.0624	0.0126	0.0140	0.0138	
Molybdenum	7439-98-7	E440C/WT	0.10	mg/kg	1.05	0.64	0.60	0.87	0.99	
Nickel	7440-02-0	E440C/WT	0.50	mg/kg	28.0	26.5	25.7	23.3	30.0	
Selenium	7782-49-2	E440C/WT	0.20	mg/kg	<0.20	0.23	<0.20	<0.20	<0.20	
Silver	7440-22-4	E440C/WT	0.10	mg/kg	<0.10	0.12	<0.10	<0.10	<0.10	
Thallium	7440-28-0	E440C/WT	0.050	mg/kg	0.147	0.193	0.176	0.157	0.205	
Uranium	7440-61-1	E440C/WT	0.050	mg/kg	0.750	0.678	1.09	0.935	1.07	



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH7 S9	BH8 S1	BH8 S2	BH8 S3	BH8 S4
					Client sampling date / time	----	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-021	WT2521286-022	WT2521286-023	WT2521286-024	WT2521286-025	
					Result	Result	Result	Result	Result	
<b>Metals</b>										
Vanadium	7440-62-2	E440C/WT	0.20	mg/kg	37.5	43.9	37.6	33.6	41.5	
Zinc	7440-66-6	E440C/WT	2.0	mg/kg	59.2	67.9	53.8	55.9	61.2	
<b>Speciated Metals</b>										
Chromium, hexavalent [Cr VI]	18540-29-9	E532/WT	0.10	mg/kg	0.12	<0.10	0.12	0.12	0.14	
<b>Volatile Organic Compounds</b>										
Benzene	71-43-2	E611A/WT	0.0050	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Ethylbenzene	100-41-4	E611A/WT	0.015	mg/kg	<0.015	<0.015	<0.015	<0.015	<0.015	
Toluene	108-88-3	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
Xylene, m+p-	179601-23-1	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylene, o-	95-47-6	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylenes, total	1330-20-7	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
BTEX, total	----	E611A/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	
<b>Hydrocarbons</b>										
F1 (C6-C10)	----	E581.F1/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
F2 (C10-C16)	----	E601.SG-L/WT	10	mg/kg	<10	<10	<10	<10	<10	
F3 (C16-C34)	----	E601.SG-L/WT	50	mg/kg	<50	<50	<50	<50	<50	
F4 (C34-C50)	----	E601.SG-L/WT	50	mg/kg	<50	<50	<50	<50	<50	
F1-BTEX	----	EC580/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Hydrocarbons, total (C6-C50)	n/a	EC581/WT	80	mg/kg	<80	<80	<80	<80	<80	
Chromatogram to baseline at nC50	n/a	E601.SG-L/WT	-	-	YES	YES	YES	YES	YES	



### Analytical Results

Sub-Matrix: Soil/Solid (Matrix: Soil/Solid)					Client sample ID	BH7 S9 ----	BH8 S1 ----	BH8 S2 ----	BH8 S3 ----	BH8 S4 ----
					Client sampling date / time	24-Jul-2025 09:25	24-Jul-2025 09:55	24-Jul-2025 10:00	24-Jul-2025 10:10	24-Jul-2025 10:15
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2521286-021	WT2521286-022	WT2521286-023	WT2521286-024	WT2521286-025
						Result	Result	Result	Result	Result
<b>Hydrocarbons Surrogates</b>										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601.SG-L/WT	1.0	%		79.4	80.1	79.1	77.5	78.7
Dichlorotoluene, 3,4-	95-75-0	E581.F1/WT	1.0	%		124	129	126	131	129
<b>Volatile Organic Compounds Surrogates</b>										
Bromofluorobenzene, 4-	460-00-4	E611A/WT	0.10	%		84.7	89.8	85.0	86.9	84.5
Difluorobenzene, 1,4-	540-36-3	E611A/WT	0.10	%		90.9	98.0	92.2	93.8	91.0

Please refer to the General Comments section for an explanation of any qualifiers detected.

### Analytical Results

Sub-Matrix: Soil/Solid (Matrix: Soil/Solid)					Client sample ID	BH8 S5 ----	BH8 S6 ----	BH8 S7 ----	BH9 S1 ----	BH9 S2 ----
					Client sampling date / time	24-Jul-2025 10:25	24-Jul-2025 10:35	24-Jul-2025 10:45	24-Jul-2025 10:55	24-Jul-2025 11:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2521286-026	WT2521286-027	WT2521286-028	WT2521286-029	WT2521286-030
						Result	Result	Result	Result	Result
<b>Physical Tests</b>										
Conductivity (1:2 leachate)	---	E100-L/WT	0.00500	mS/cm		0.735	0.882	1.05	0.353	0.931
Moisture	---	E144/WT	0.25	%		17.2	18.5	17.4	17.4	17.5
pH (1:2 soil:CaCl2-aq)	---	E108A/WT	0.10	pH units		7.89	7.80	7.80	7.28	7.76
<b>Cyanides</b>										
Cyanide, weak acid dissociable	---	E336A/WT	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
<b>Fixed-Ratio Extractables</b>										
Calcium, soluble ion content	7440-70-2	E484/WT	0.50	mg/L		23.0	33.4	54.0	21.9	57.4
Magnesium, soluble ion content	7439-95-4	E484/WT	0.50	mg/L		38.3	50.2	64.8	5.15	48.0
Sodium, soluble ion content	17341-25-2	E484/WT	0.50	mg/L		50.5	57.6	59.3	11.2	56.5
Sodium adsorption ratio [SAR]	---	E484/WT	0.10	-		1.50	1.47	1.29	0.56	1.33



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH8 S5	BH8 S6	BH8 S7	BH9 S1	BH9 S2
					Client sampling date / time	----	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	24-Jul-2025 10:25	24-Jul-2025 10:35	24-Jul-2025 10:45	24-Jul-2025 10:55	24-Jul-2025 11:00	
					WT2521286-026	WT2521286-027	WT2521286-028	WT2521286-029	WT2521286-030	
					Result	Result	Result	Result	Result	
<b>Metals</b>										
Antimony	7440-36-0	E440C/WT	0.10	mg/kg	0.16	0.18	0.17	0.20	0.17	
Arsenic	7440-38-2	E440C/WT	0.10	mg/kg	4.43	3.93	3.65	5.66	4.62	
Barium	7440-39-3	E440C/WT	0.50	mg/kg	142	168	130	157	195	
Beryllium	7440-41-7	E440C/WT	0.10	mg/kg	0.80	0.83	0.84	1.14	0.82	
Boron	7440-42-8	E440C/WT	5.0	mg/kg	21.6	21.6	22.8	14.7	20.2	
Boron, hot water soluble	7440-42-8	E487/WT	0.10	mg/kg	0.41	0.51	0.68	0.13	0.13	
Cadmium	7440-43-9	E440C/WT	0.020	mg/kg	0.094	0.104	0.098	0.197	0.113	
Chromium	7440-47-3	E440C/WT	0.50	mg/kg	28.3	30.2	30.3	38.5	30.9	
Cobalt	7440-48-4	E440C/WT	0.10	mg/kg	12.8	13.4	12.4	16.2	14.6	
Copper	7440-50-8	E440C/WT	0.50	mg/kg	21.4	22.6	22.2	24.1	22.0	
Lead	7439-92-1	E440C/WT	0.50	mg/kg	9.75	10.4	9.98	16.7	10.6	
Mercury	7439-97-6	E510C/WT	0.0050	mg/kg	0.0134	0.0129	0.0137	0.0333	0.0131	
Molybdenum	7439-98-7	E440C/WT	0.10	mg/kg	0.98	1.02	0.88	0.94	0.81	
Nickel	7440-02-0	E440C/WT	0.50	mg/kg	27.4	29.8	29.0	34.2	29.4	
Selenium	7782-49-2	E440C/WT	0.20	mg/kg	<0.20	<0.20	0.50	0.24	<0.20	
Silver	7440-22-4	E440C/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	
Thallium	7440-28-0	E440C/WT	0.050	mg/kg	0.186	0.182	0.178	0.236	0.202	
Uranium	7440-61-1	E440C/WT	0.050	mg/kg	0.952	0.958	0.912	0.821	0.951	
Vanadium	7440-62-2	E440C/WT	0.20	mg/kg	37.8	39.8	40.4	50.9	40.8	
Zinc	7440-66-6	E440C/WT	2.0	mg/kg	58.0	62.9	61.0	78.8	59.9	



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH8 S5	BH8 S6	BH8 S7	BH9 S1	BH9 S2
					Client sampling date / time	----	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	24-Jul-2025 10:25	24-Jul-2025 10:35	24-Jul-2025 10:45	24-Jul-2025 10:55	24-Jul-2025 11:00	
					WT2521286-026	WT2521286-027	WT2521286-028	WT2521286-029	WT2521286-030	
					Result	Result	Result	Result	Result	
<b>Speciated Metals</b>										
Chromium, hexavalent [Cr VI]	18540-29-9	E532/WT	0.10	mg/kg	0.13	0.13	0.18	0.28	0.11	
<b>Volatile Organic Compounds</b>										
Benzene	71-43-2	E611A/WT	0.0050	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Ethylbenzene	100-41-4	E611A/WT	0.015	mg/kg	<0.015	<0.015	<0.015	<0.015	<0.015	
Toluene	108-88-3	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
Xylene, m+p-	179601-23-1	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylene, o-	95-47-6	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylenes, total	1330-20-7	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
BTEX, total	----	E611A/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	
<b>Hydrocarbons</b>										
F1 (C6-C10)	----	E581.F1/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
F2 (C10-C16)	----	E601.SG-L/WT	10	mg/kg	<10	<10	<10	<10	<10	
F3 (C16-C34)	----	E601.SG-L/WT	50	mg/kg	<50	<50	<50	<50	<50	
F4 (C34-C50)	----	E601.SG-L/WT	50	mg/kg	<50	<50	<50	<50	<50	
F1-BTEX	----	EC580/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Hydrocarbons, total (C6-C50)	n/a	EC581/WT	80	mg/kg	<80	<80	<80	<80	<80	
Chromatogram to baseline at nC50	n/a	E601.SG-L/WT	-	-	YES	YES	YES	YES	YES	
<b>Hydrocarbons Surrogates</b>										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601.SG-L/WT	1.0	%	76.0	78.3	78.3	79.3	79.9	
Dichlorotoluene, 3,4-	95-75-0	E581.F1/WT	1.0	%	128	130	140	128	125	



### Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH8 S5 ----	BH8 S6 ----	BH8 S7 ----	BH9 S1 ----	BH9 S2 ----
					Client sampling date / time	24-Jul-2025 10:25	24-Jul-2025 10:35	24-Jul-2025 10:45	24-Jul-2025 10:55	24-Jul-2025 11:00
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-026	WT2521286-027	WT2521286-028	WT2521286-029	WT2521286-030	
					Result	Result	Result	Result	Result	
<b>Volatile Organic Compounds Surrogates</b>										
Bromofluorobenzene, 4-	460-00-4	E611A/WT	0.10	%	87.0	86.6	93.7	86.6	85.2	
Difluorobenzene, 1,4-	540-36-3	E611A/WT	0.10	%	94.5	92.9	100	94.6	92.9	

Please refer to the General Comments section for an explanation of any qualifiers detected.

### Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH9 S3 ----	BH9 S4 ----	BH9 S5 ----	BH9 S6 ----	BH9 S7 ----
					Client sampling date / time	24-Jul-2025 11:10	24-Jul-2025 11:15	24-Jul-2025 11:25	24-Jul-2025 11:35	24-Jul-2025 11:45
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-031	WT2521286-032	WT2521286-033	WT2521286-034	WT2521286-035	
					Result	Result	Result	Result	Result	
<b>Physical Tests</b>										
Conductivity (1:2 leachate)	----	E100-L/WT	0.00500	mS/cm	3.23	1.74	1.40	1.23	0.902	
Moisture	----	E144/WT	0.25	%	17.1	17.2	17.3	18.4	18.6	
pH (1:2 soil:CaCl2-aq)	----	E108A/WT	0.10	pH units	7.75	7.82	7.80	7.84	7.75	
<b>Cyanides</b>										
Cyanide, weak acid dissociable	----	E336A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
<b>Fixed-Ratio Extractables</b>										
Calcium, soluble ion content	7440-70-2	E484/WT	0.50	mg/L	531	98.7	71.4	62.8	42.4	
Magnesium, soluble ion content	7439-95-4	E484/WT	0.50	mg/L	208	128	84.6	68.1	37.2	
Sodium, soluble ion content	17341-25-2	E484/WT	0.50	mg/L	78.8	118	105	92.1	77.8	
Sodium adsorption ratio [SAR]	----	E484/WT	0.10	-	0.73	1.85	1.99	1.92	2.10	
<b>Metals</b>										
Antimony	7440-36-0	E440C/WT	0.10	mg/kg	0.16	0.17	0.17	0.17	0.17	
Arsenic	7440-38-2	E440C/WT	0.10	mg/kg	4.26	4.54	4.22	3.60	4.00	



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH9 S3	BH9 S4	BH9 S5	BH9 S6	BH9 S7
					Client sampling date / time	24-Jul-2025 11:10	24-Jul-2025 11:15	24-Jul-2025 11:25	24-Jul-2025 11:35	24-Jul-2025 11:45
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-031	WT2521286-032	WT2521286-033	WT2521286-034	WT2521286-035	
					Result	Result	Result	Result	Result	
<b>Metals</b>										
Barium	7440-39-3	E440C/WT	0.50	mg/kg	132	140	136	129	115	
Beryllium	7440-41-7	E440C/WT	0.10	mg/kg	0.78	0.77	0.80	0.78	0.89	
Boron	7440-42-8	E440C/WT	5.0	mg/kg	20.8	23.3	20.7	21.8	26.3	
Boron, hot water soluble	7440-42-8	E487/WT	0.10	mg/kg	0.30	0.57	0.60	0.79	0.86	
Cadmium	7440-43-9	E440C/WT	0.020	mg/kg	0.101	0.100	0.089	0.099	0.099	
Chromium	7440-47-3	E440C/WT	0.50	mg/kg	28.8	29.8	27.9	27.8	30.8	
Cobalt	7440-48-4	E440C/WT	0.10	mg/kg	12.0	14.3	11.8	11.6	12.8	
Copper	7440-50-8	E440C/WT	0.50	mg/kg	20.6	22.0	22.2	21.0	22.3	
Lead	7439-92-1	E440C/WT	0.50	mg/kg	9.92	10.1	9.95	9.89	10.4	
Mercury	7439-97-6	E510C/WT	0.0050	mg/kg	0.0129	0.0133	0.0131	0.0126	0.0122	
Molybdenum	7439-98-7	E440C/WT	0.10	mg/kg	0.88	1.04	1.04	1.20	0.97	
Nickel	7440-02-0	E440C/WT	0.50	mg/kg	27.3	29.9	27.6	27.9	29.8	
Selenium	7782-49-2	E440C/WT	0.20	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	
Silver	7440-22-4	E440C/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	
Thallium	7440-28-0	E440C/WT	0.050	mg/kg	0.183	0.179	0.185	0.159	0.170	
Uranium	7440-61-1	E440C/WT	0.050	mg/kg	1.09	0.972	0.802	0.946	1.02	
Vanadium	7440-62-2	E440C/WT	0.20	mg/kg	38.4	39.4	37.0	36.6	40.3	
Zinc	7440-66-6	E440C/WT	2.0	mg/kg	57.0	60.9	58.9	61.8	61.3	
<b>Speciated Metals</b>										
Chromium, hexavalent [Cr VI]	18540-29-9	E532/WT	0.10	mg/kg	0.13	0.13	0.16	<0.10	<0.10	



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH9 S3	BH9 S4	BH9 S5	BH9 S6	BH9 S7
					Client sampling date / time	24-Jul-2025 11:10	24-Jul-2025 11:15	24-Jul-2025 11:25	24-Jul-2025 11:35	24-Jul-2025 11:45
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-031	WT2521286-032	WT2521286-033	WT2521286-034	WT2521286-035	
					Result	Result	Result	Result	Result	
<b>Volatile Organic Compounds</b>										
Benzene	71-43-2	E611A/WT	0.0050	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Ethylbenzene	100-41-4	E611A/WT	0.015	mg/kg	<0.015	<0.015	<0.015	<0.015	<0.015	
Toluene	108-88-3	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
Xylene, m+p-	179601-23-1	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylene, o-	95-47-6	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylenes, total	1330-20-7	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
BTEX, total	----	E611A/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	
<b>Hydrocarbons</b>										
F1 (C6-C10)	----	E581.F1/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
F2 (C10-C16)	----	E601.SG-L/WT	10	mg/kg	<10	<10	<10	<10	<10	
F3 (C16-C34)	----	E601.SG-L/WT	50	mg/kg	<50	<50	<50	<50	<50	
F4 (C34-C50)	----	E601.SG-L/WT	50	mg/kg	<50	<50	<50	<50	<50	
F1-BTEX	----	EC580/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Hydrocarbons, total (C6-C50)	n/a	EC581/WT	80	mg/kg	<80	<80	<80	<80	<80	
Chromatogram to baseline at nC50	n/a	E601.SG-L/WT	-	-	YES	YES	YES	YES	YES	
<b>Hydrocarbons Surrogates</b>										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601.SG-L/WT	1.0	%	79.3	80.6	81.9	78.4	81.6	
Dichlorotoluene, 3,4-	95-75-0	E581.F1/WT	1.0	%	128	130	129	114	106	
<b>Volatile Organic Compounds Surrogates</b>										
Bromofluorobenzene, 4-	460-00-4	E611A/WT	0.10	%	84.3	87.9	83.2	98.1	90.5	
Difluorobenzene, 1,4-	540-36-3	E611A/WT	0.10	%	91.1	95.6	89.7	106	100	



Please refer to the General Comments section for an explanation of any qualifiers detected.

### Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH10 S1	BH10 S2	BH10 S3	BH10 S4	BH10 S5
					Client sampling date / time	----	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-036	WT2521286-037	WT2521286-038	WT2521286-039	WT2521286-040	
					Result	Result	Result	Result	Result	
<b>Physical Tests</b>										
Conductivity (1:2 leachate)	----	E100-L/WT	0.00500	mS/cm	0.628	0.217	0.209	0.239	0.281	
Moisture	----	E144/WT	0.25	%	18.5	17.7	17.1	17.5	17.3	
pH (1:2 soil:CaCl2-aq)	----	E108A/WT	0.10	pH units	7.04	7.32	7.66	7.70	7.72	
<b>Cyanides</b>										
Cyanide, weak acid dissociable	----	E336A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
<b>Fixed-Ratio Extractables</b>										
Calcium, soluble ion content	7440-70-2	E484/WT	0.50	mg/L	80.8	9.07	6.57	6.24	6.84	
Magnesium, soluble ion content	7439-95-4	E484/WT	0.50	mg/L	9.16	2.23	2.70	3.85	5.81	
Sodium, soluble ion content	17341-25-2	E484/WT	0.50	mg/L	4.75	4.45	5.78	8.84	13.6	
Sodium adsorption ratio [SAR]	----	E484/WT	0.10	-	0.13	0.34	0.48	0.69	0.92	
<b>Metals</b>										
Antimony	7440-36-0	E440C/WT	0.10	mg/kg	0.13	0.18	0.19	0.17	0.22	
Arsenic	7440-38-2	E440C/WT	0.10	mg/kg	4.28	5.34	5.39	4.51	5.49	
Barium	7440-39-3	E440C/WT	0.50	mg/kg	142	130	139	198	147	
Beryllium	7440-41-7	E440C/WT	0.10	mg/kg	1.16	0.93	0.94	0.94	0.75	
Boron	7440-42-8	E440C/WT	5.0	mg/kg	12.6	22.9	25.5	26.9	24.5	
Boron, hot water soluble	7440-42-8	E487/WT	0.10	mg/kg	0.17	<0.10	0.11	0.17	0.31	
Cadmium	7440-43-9	E440C/WT	0.020	mg/kg	0.183	0.134	0.104	0.107	0.097	
Chromium	7440-47-3	E440C/WT	0.50	mg/kg	35.9	31.3	31.8	33.1	28.5	
Cobalt	7440-48-4	E440C/WT	0.10	mg/kg	17.1	13.7	13.3	12.7	13.1	



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH10 S1	BH10 S2	BH10 S3	BH10 S4	BH10 S5
					Client sampling date / time	24-Jul-2025 11:50	24-Jul-2025 11:55	24-Jul-2025 12:05	24-Jul-2025 12:15	24-Jul-2025 12:25
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-036	WT2521286-037	WT2521286-038	WT2521286-039	WT2521286-040	
					Result	Result	Result	Result	Result	
<b>Metals</b>										
Copper	7440-50-8	E440C/WT	0.50	mg/kg	17.1	22.3	23.4	23.0	21.4	
Lead	7439-92-1	E440C/WT	0.50	mg/kg	14.8	10.2	10.8	10.2	10.1	
Mercury	7439-97-6	E510C/WT	0.0050	mg/kg	0.0370	0.0124	0.0124	0.0132	0.0143	
Molybdenum	7439-98-7	E440C/WT	0.10	mg/kg	0.84	0.91	1.23	1.18	2.31	
Nickel	7440-02-0	E440C/WT	0.50	mg/kg	29.8	28.8	31.0	31.2	31.6	
Selenium	7782-49-2	E440C/WT	0.20	mg/kg	0.38	0.21	<0.20	<0.20	<0.20	
Silver	7440-22-4	E440C/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	
Thallium	7440-28-0	E440C/WT	0.050	mg/kg	0.210	0.200	0.229	0.206	0.223	
Uranium	7440-61-1	E440C/WT	0.050	mg/kg	0.877	0.963	0.978	1.06	1.15	
Vanadium	7440-62-2	E440C/WT	0.20	mg/kg	50.3	42.9	43.8	44.0	34.4	
Zinc	7440-66-6	E440C/WT	2.0	mg/kg	81.4	59.4	62.2	62.8	57.4	
<b>Speciated Metals</b>										
Chromium, hexavalent [Cr VI]	18540-29-9	E532/WT	0.10	mg/kg	0.35	0.23	0.13	0.12	0.15	
<b>Volatile Organic Compounds</b>										
Benzene	71-43-2	E611A/WT	0.0050	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Ethylbenzene	100-41-4	E611A/WT	0.015	mg/kg	<0.015	<0.015	<0.015	<0.015	<0.015	
Toluene	108-88-3	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
Xylene, m+p-	179601-23-1	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylene, o-	95-47-6	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylenes, total	1330-20-7	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
BTEX, total	----	E611A/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	



### Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH10 S1	BH10 S2	BH10 S3	BH10 S4	BH10 S5
					Client sampling date / time	24-Jul-2025 11:50	24-Jul-2025 11:55	24-Jul-2025 12:05	24-Jul-2025 12:15	24-Jul-2025 12:25
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-036	WT2521286-037	WT2521286-038	WT2521286-039	WT2521286-040	
					Result	Result	Result	Result	Result	
<b>Hydrocarbons</b>										
F1 (C6-C10)	---	E581.F1/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
F2 (C10-C16)	---	E601.SG-LWT	10	mg/kg	<10	<10	<10	<10	10	
F3 (C16-C34)	---	E601.SG-LWT	50	mg/kg	<50	<50	<50	<50	<50	
F4 (C34-C50)	---	E601.SG-LWT	50	mg/kg	<50	<50	<50	<50	<50	
F1-BTEX	---	EC580/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Hydrocarbons, total (C6-C50)	n/a	EC581/WT	80	mg/kg	<80	<80	<80	<80	<80	
Chromatogram to baseline at nC50	n/a	E601.SG-LWT	-	-	YES	YES	YES	YES	YES	
<b>Hydrocarbons Surrogates</b>										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601.SG-LWT	1.0	%	81.6	80.4	76.8	78.8	84.1	
Dichlorotoluene, 3,4-	95-75-0	E581.F1/WT	1.0	%	102	105	109	102	104	
<b>Volatile Organic Compounds Surrogates</b>										
Bromofluorobenzene, 4-	460-00-4	E611A/WT	0.10	%	83.8	84.2	88.1	86.8	92.6	
Difluorobenzene, 1,4-	540-36-3	E611A/WT	0.10	%	92.7	92.9	98.7	96.1	102	

Please refer to the General Comments section for an explanation of any qualifiers detected.

### Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH10 S6	BH10 S7	DUP-S-1	DUP-S-2	DUP-S-3
					Client sampling date / time	24-Jul-2025 12:35	24-Jul-2025 12:45	23-Jul-2025 00:00	24-Jul-2025 00:00	23-Jul-2025 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-041	WT2521286-042	WT2521286-043	WT2521286-044	WT2521286-045	
					Result	Result	Result	Result	Result	
<b>Physical Tests</b>										
Conductivity (1:2 leachate)	---	E100-L/WT	0.00500	mS/cm	0.458	0.651	0.769	3.05	0.374	
Moisture	---	E144/WT	0.25	%	18.9	19.2	18.7	17.4	20.5	



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH10 S6	BH10 S7	DUP-S-1	DUP-S-2	DUP-S-3
					Client sampling date / time	24-Jul-2025 12:35	24-Jul-2025 12:45	23-Jul-2025 00:00	24-Jul-2025 00:00	23-Jul-2025 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-041	WT2521286-042	WT2521286-043	WT2521286-044	WT2521286-045	
					Result	Result	Result	Result	Result	
<b>Physical Tests</b>										
pH (1:2 soil:CaCl2-aq)	----	E108A/WT	0.10	pH units	7.72	7.72	7.77	7.85	7.75	
<b>Cyanides</b>										
Cyanide, weak acid dissociable	----	E336A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
<b>Fixed-Ratio Extractables</b>										
Calcium, soluble ion content	7440-70-2	E484/WT	0.50	mg/L	16.3	32.9	41.3	476	12.4	
Magnesium, soluble ion content	7439-95-4	E484/WT	0.50	mg/L	16.0	31.9	29.7	198	8.90	
Sodium, soluble ion content	17341-25-2	E484/WT	0.50	mg/L	27.9	38.3	51.2	83.7	21.1	
Sodium adsorption ratio [SAR]	----	E484/WT	0.10	-	1.18	1.14	1.48	0.81	1.12	
<b>Metals</b>										
Antimony	7440-36-0	E440C/WT	0.10	mg/kg	0.16	0.15	0.18	0.16	0.18	
Arsenic	7440-38-2	E440C/WT	0.10	mg/kg	4.09	5.68	4.26	4.42	4.22	
Barium	7440-39-3	E440C/WT	0.50	mg/kg	124	102	137	140	152	
Beryllium	7440-41-7	E440C/WT	0.10	mg/kg	0.80	0.71	0.80	0.87	0.83	
Boron	7440-42-8	E440C/WT	5.0	mg/kg	20.8	21.3	22.1	25.4	21.3	
Boron, hot water soluble	7440-42-8	E487/WT	0.10	mg/kg	0.46	0.58	0.74	0.35	0.54	
Cadmium	7440-43-9	E440C/WT	0.020	mg/kg	0.104	0.087	0.100	0.091	0.091	
Chromium	7440-47-3	E440C/WT	0.50	mg/kg	28.3	25.7	28.7	29.4	29.8	
Cobalt	7440-48-4	E440C/WT	0.10	mg/kg	13.0	12.0	12.6	12.5	12.7	
Copper	7440-50-8	E440C/WT	0.50	mg/kg	21.5	19.3	21.8	21.0	22.3	
Lead	7439-92-1	E440C/WT	0.50	mg/kg	9.63	8.83	10.1	9.95	10.9	
Mercury	7439-97-6	E510C/WT	0.0050	mg/kg	0.0121	0.0104	0.0133	0.0127	0.0127	



## Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH10 S6	BH10 S7	DUP-S-1	DUP-S-2	DUP-S-3
					Client sampling date / time	----	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	24-Jul-2025 12:35	24-Jul-2025 12:45	23-Jul-2025 00:00	24-Jul-2025 00:00	23-Jul-2025 00:00	
					WT2521286-041	WT2521286-042	WT2521286-043	WT2521286-044	WT2521286-045	
					Result	Result	Result	Result	Result	
<b>Metals</b>										
Molybdenum	7439-98-7	E440C/WT	0.10	mg/kg	1.16	1.15	0.96	0.97	1.06	
Nickel	7440-02-0	E440C/WT	0.50	mg/kg	28.6	26.0	29.0	27.5	29.5	
Selenium	7782-49-2	E440C/WT	0.20	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	
Silver	7440-22-4	E440C/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	
Thallium	7440-28-0	E440C/WT	0.050	mg/kg	0.184	0.172	0.167	0.189	0.184	
Uranium	7440-61-1	E440C/WT	0.050	mg/kg	0.892	0.750	1.05	1.08	0.985	
Vanadium	7440-62-2	E440C/WT	0.20	mg/kg	37.1	34.2	37.4	39.6	38.9	
Zinc	7440-66-6	E440C/WT	2.0	mg/kg	59.3	53.4	59.1	56.1	61.4	
<b>Speciated Metals</b>										
Chromium, hexavalent [Cr VI]	18540-29-9	E532/WT	0.10	mg/kg	0.13	0.11	<0.10	0.14	<0.10	
<b>Volatile Organic Compounds</b>										
Benzene	71-43-2	E611A/WT	0.0050	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Ethylbenzene	100-41-4	E611A/WT	0.015	mg/kg	<0.015	<0.015	<0.015	<0.015	<0.015	
Toluene	108-88-3	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
Xylene, m+p-	179601-23-1	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylene, o-	95-47-6	E611A/WT	0.030	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	
Xylenes, total	1330-20-7	E611A/WT	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
BTEX, total	----	E611A/WT	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	
<b>Hydrocarbons</b>										
F1 (C6-C10)	----	E581.F1/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
F2 (C10-C16)	----	E601.SG-L/WT	10	mg/kg	<10	<10	20	<10	22	



### Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	BH10 S6	BH10 S7	DUP-S-1	DUP-S-2	DUP-S-3
					Client sampling date / time	----	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-041	WT2521286-042	WT2521286-043	WT2521286-044	WT2521286-045	
					Result	Result	Result	Result	Result	
<b>Hydrocarbons</b>										
F3 (C16-C34)	----	E601.SG-LWT	50	mg/kg	<50	<50	77	<50	61	
F4 (C34-C50)	----	E601.SG-LWT	50	mg/kg	<50	<50	<50	<50	<50	
F1-BTEX	----	EC580/WT	5.0	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	
Hydrocarbons, total (C6-C50)	n/a	EC581/WT	80	mg/kg	<80	<80	97	<80	83	
Chromatogram to baseline at nC50	n/a	E601.SG-LWT	-	-	YES	YES	YES	YES	YES	
<b>Hydrocarbons Surrogates</b>										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601.SG-LWT	1.0	%	79.9	84.2	88.3	81.6	92.7	
Dichlorotoluene, 3,4-	95-75-0	E581.F1/WT	1.0	%	104	98.9	97.9	85.7	80.6	
<b>Volatile Organic Compounds Surrogates</b>										
Bromofluorobenzene, 4-	460-00-4	E611A/WT	0.10	%	85.1	82.0	104	93.2	93.3	
Difluorobenzene, 1,4-	540-36-3	E611A/WT	0.10	%	93.9	91.4	94.0	85.7	85.6	

Please refer to the General Comments section for an explanation of any qualifiers detected.

### Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	DUP-S-4	----	----	----	----
					Client sampling date / time	24-Jul-2025 00:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-046	----	----	----	----	
					Result	----	----	----	----	
<b>Physical Tests</b>										
Conductivity (1:2 leachate)	----	E100-L/WT	0.00500	mS/cm	0.604	----	----	----	----	
Moisture	----	E144/WT	0.25	%	19.3	----	----	----	----	
pH (1:2 soil:CaCl2-aq)	----	E108A/WT	0.10	pH units	7.81	----	----	----	----	



### Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	DUP-S-4	---	---	---	---
					Client sampling date / time	24-Jul-2025 00:00	---	---	---	---
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-046	---	---	---	---	---
						Result	---	---	---	---
<b>Cyanides</b>										
Cyanide, weak acid dissociable	---	E336A/WT	0.050	mg/kg	<0.050	---	---	---	---	---
<b>Fixed-Ratio Extractables</b>										
Calcium, soluble ion content	7440-70-2	E484/WT	0.50	mg/L	30.9	---	---	---	---	---
Magnesium, soluble ion content	7439-95-4	E484/WT	0.50	mg/L	27.2	---	---	---	---	---
Sodium, soluble ion content	17341-25-2	E484/WT	0.50	mg/L	29.8	---	---	---	---	---
Sodium adsorption ratio [SAR]	---	E484/WT	0.10	-	0.94	---	---	---	---	---
<b>Metals</b>										
Antimony	7440-36-0	E440C/WT	0.10	mg/kg	0.17	---	---	---	---	---
Arsenic	7440-38-2	E440C/WT	0.10	mg/kg	3.78	---	---	---	---	---
Barium	7440-39-3	E440C/WT	0.50	mg/kg	131	---	---	---	---	---
Beryllium	7440-41-7	E440C/WT	0.10	mg/kg	0.83	---	---	---	---	---
Boron	7440-42-8	E440C/WT	5.0	mg/kg	24.6	---	---	---	---	---
Boron, hot water soluble	7440-42-8	E487/WT	0.10	mg/kg	0.44	---	---	---	---	---
Cadmium	7440-43-9	E440C/WT	0.020	mg/kg	0.105	---	---	---	---	---
Chromium	7440-47-3	E440C/WT	0.50	mg/kg	29.9	---	---	---	---	---
Cobalt	7440-48-4	E440C/WT	0.10	mg/kg	12.8	---	---	---	---	---
Copper	7440-50-8	E440C/WT	0.50	mg/kg	21.8	---	---	---	---	---
Lead	7439-92-1	E440C/WT	0.50	mg/kg	10.0	---	---	---	---	---
Mercury	7439-97-6	E510C/WT	0.0050	mg/kg	0.0126	---	---	---	---	---
Molybdenum	7439-98-7	E440C/WT	0.10	mg/kg	1.19	---	---	---	---	---
Nickel	7440-02-0	E440C/WT	0.50	mg/kg	29.1	---	---	---	---	---



**Analytical Results**

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	DUP-S-4	----	----	----	----
					Client sampling date / time	24-Jul-2025 00:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-046	----	----	----	----	----
					Result	----	----	----	----	----
<b>Metals</b>										
Selenium	7782-49-2	E440C/WT	0.20	mg/kg	<0.20	----	----	----	----	----
Silver	7440-22-4	E440C/WT	0.10	mg/kg	<0.10	----	----	----	----	----
Thallium	7440-28-0	E440C/WT	0.050	mg/kg	0.199	----	----	----	----	----
Uranium	7440-61-1	E440C/WT	0.050	mg/kg	0.945	----	----	----	----	----
Vanadium	7440-62-2	E440C/WT	0.20	mg/kg	39.5	----	----	----	----	----
Zinc	7440-66-6	E440C/WT	2.0	mg/kg	61.0	----	----	----	----	----
<b>Speciated Metals</b>										
Chromium, hexavalent [Cr VI]	18540-29-9	E532/WT	0.10	mg/kg	0.13	----	----	----	----	----
<b>Volatile Organic Compounds</b>										
Benzene	71-43-2	E611A/WT	0.0050	mg/kg	<0.0050	----	----	----	----	----
Ethylbenzene	100-41-4	E611A/WT	0.015	mg/kg	<0.015	----	----	----	----	----
Toluene	108-88-3	E611A/WT	0.050	mg/kg	<0.050	----	----	----	----	----
Xylene, m+p-	179601-23-1	E611A/WT	0.030	mg/kg	<0.030	----	----	----	----	----
Xylene, o-	95-47-6	E611A/WT	0.030	mg/kg	<0.030	----	----	----	----	----
Xylenes, total	1330-20-7	E611A/WT	0.050	mg/kg	<0.050	----	----	----	----	----
BTEX, total	----	E611A/WT	0.10	mg/kg	<0.10	----	----	----	----	----
<b>Hydrocarbons</b>										
F1 (C6-C10)	----	E581.F1/WT	5.0	mg/kg	<5.0	----	----	----	----	----
F2 (C10-C16)	----	E601.SG-L/WT	10	mg/kg	<10	----	----	----	----	----
F3 (C16-C34)	----	E601.SG-L/WT	50	mg/kg	<50	----	----	----	----	----
F4 (C34-C50)	----	E601.SG-L/WT	50	mg/kg	<50	----	----	----	----	----



### Analytical Results

Sub-Matrix: Soil/Solid  
 (Matrix: Soil/Solid)

					Client sample ID	DUP-S-4	----	----	----	----
					Client sampling date / time	24-Jul-2025 00:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521286-046	----	----	----	----	----
						Result	----	----	----	----
<b>Hydrocarbons</b>										
F1-BTEX	----	EC580/WT	5.0	mg/kg	<5.0	----	----	----	----	----
Hydrocarbons, total (C6-C50)	n/a	EC581/WT	80	mg/kg	<80	----	----	----	----	----
Chromatogram to baseline at nC50	n/a	E601.SG-LWT	-	-	YES	----	----	----	----	----
<b>Hydrocarbons Surrogates</b>										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601.SG-LWT	1.0	%	83.4	----	----	----	----	----
Dichlorotoluene, 3,4-	95-75-0	E581.F1/WT	1.0	%	72.2	----	----	----	----	----
<b>Volatile Organic Compounds Surrogates</b>										
Bromofluorobenzene, 4-	460-00-4	E611A/WT	0.10	%	93.0	----	----	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611A/WT	0.10	%	86.4	----	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.




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## QUALITY CONTROL INTERPRETIVE REPORT

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<p><b>Work Order</b> : <b>WT2521286</b></p> <p><b>Client</b> : <b>Englobe Corp.</b></p> <p><b>Contact</b> : Emily Brook</p> <p><b>Address</b> : 417 Exeter Road London ON Canada N6E 2Z3</p> <p><b>Telephone</b> : ----</p> <p><b>Project</b> : 02506021</p> <p><b>PO</b> : ----</p> <p><b>C-O-C number</b> : 20-1075399</p> <p><b>Sampler</b> : CLIENT</p> <p><b>Site</b> : ----</p> <p><b>Quote number</b> : Excess Soils Q87721 Kitchener/London</p> <p><b>No. of samples received</b> : 46</p> <p><b>No. of samples analysed</b> : 46</p>	<p><b>Page</b> : 1 of 70</p> <p><b>Laboratory</b> : ALS Environmental - Waterloo</p> <p><b>Account Manager</b> : Gayle Braun</p> <p><b>Address</b> : 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8</p> <p><b>Telephone</b> : +1 519 886 6910</p> <p><b>Date Samples Received</b> : 01-Aug-2025 16:40</p> <p><b>Issue Date</b> : 12-Aug-2025 16:04</p>
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This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

**Key**

- Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
- CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
- DQO: Data Quality Objective.
- LOR: Limit of Reporting (detection limit).
- RPD: Relative Percent Difference.

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### ***Workorder Comments***

Holding times are displayed as "----" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

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### ***Summary of Outliers***

#### ***Outliers : Quality Control Samples***

- No Method Blank value outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- Duplicate outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

#### ***Outliers: Reference Material (RM) Samples***

- No Reference Material (RM) Sample outliers occur.

### ***Outliers : Analysis Holding Time Compliance (Breaches)***

- Analysis Holding Time Outliers exist - please see following pages for full details.

### ***Outliers : Frequency of Quality Control Samples***

- No Quality Control Sample Frequency Outliers occur.



**Outliers : Quality Control Samples**

*Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes*

Matrix: **Soil/Solid**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
<b>Duplicate (DUP) RPDs</b>								
Hydrocarbons	Anonymous	Anonymous	F2 (C10-C16)	----	E601.SG-L	141 % DUP-H	40%	Duplicate RPD does not meet the DQO for this test.
Hydrocarbons	Anonymous	Anonymous	F3 (C16-C34)	----	E601.SG-L	128 % DUP-H	40%	Duplicate RPD does not meet the DQO for this test.
Hydrocarbons	Anonymous	Anonymous	F4 (C34-C50)	----	E601.SG-L	114 % DUP-H	40%	Duplicate RPD does not meet the DQO for this test.

**Result Qualifiers**

Qualifier	Description
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.



## Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S1	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	14 days	1 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S2	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	14 days	1 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S3	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	14 days	1 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S4	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	14 days	1 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S5	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	14 days	1 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S6	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	14 days	1 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S7	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	14 days	1 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S5	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	14 days	1 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S6	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	14 days	1 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S7	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	14 days	1 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH1 S1	E336A	23-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH1 S6	E336A	23-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S2	E336A	23-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S4	E336A	23-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S7	E336A	23-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH3 S2	E336A	23-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH3 S6	E336A	23-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH4 S2	E336A	23-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH4 S7	E336A	23-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH5 S1	E336A	23-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH5 S6	E336A	23-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S1+2	E336A	23-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S4	E336A	23-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S7	E336A	23-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S1	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S3	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S5	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S6	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S7	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S8	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S9	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S1	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S2	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S3	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S4	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S5	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S6	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S7	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S1	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S2	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S3	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S4	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-2	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	11-Aug-2025	14 days	4 days	✔



Matrix: Soil/Solid

Evaluation: \* = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-4	E336A	24-Jul-2025	07-Aug-2025	14 days	14 days	✓	11-Aug-2025	14 days	4 days	✓
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-1	E336A	23-Jul-2025	07-Aug-2025	14 days	15 days	* EHT	11-Aug-2025	14 days	4 days	✓
<b>Cyanides : WAD Cyanide (0.01M NaOH Extraction)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-3	E336A	23-Jul-2025	07-Aug-2025	14 days	15 days	* EHT	11-Aug-2025	14 days	4 days	✓
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH10 S1	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✓	06-Aug-2025	40 days	0 days	✓
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH10 S2	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✓	06-Aug-2025	40 days	0 days	✓
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH10 S3	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✓	06-Aug-2025	40 days	0 days	✓
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH10 S4	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✓	06-Aug-2025	40 days	0 days	✓
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH10 S5	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✓	06-Aug-2025	40 days	0 days	✓
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH10 S6	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✓	06-Aug-2025	40 days	0 days	✓



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH10 S7	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH7 S1	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH7 S3	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH7 S5	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH7 S6	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH7 S7	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH7 S8	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH7 S9	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH8 S1	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH8 S2	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH8 S3	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH8 S4	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH8 S5	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH8 S6	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH8 S7	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH9 S1	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH9 S2	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH9 S3	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔	



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH9 S4	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH9 S5	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH9 S6	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH9 S7	E581.F1	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH1 S1	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH1 S6	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH2 S2	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH2 S4	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass soil methanol vial [ON MECP] BH2 S7	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔	



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH3 S2	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH3 S6	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH4 S2	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH4 S7	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH5 S1	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH5 S6	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH6 S1+2	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH6 S4	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] BH6 S7	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] DUP-S-1	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] DUP-S-2	E581.F1	24-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] DUP-S-3	E581.F1	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>										
Glass soil methanol vial [ON MECP] DUP-S-4	E581.F1	24-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S3	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	13 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S4	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	13 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S5	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	13 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S6	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	13 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S7	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	13 days	✔	08-Aug-2025	40 days	2 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-1	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	07-Aug-2025	40 days	1 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-3	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	07-Aug-2025	40 days	1 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH1 S1	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH1 S6	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S1	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S2	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH2 S2	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH2 S4	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH2 S7	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH3 S2	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH3 S6	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH4 S2	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH4 S7	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH5 S1	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH5 S6	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH6 S1+2	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH6 S4	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH6 S7	E601.SG-L	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔	



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S1	E601.SG-L	24-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S3	E601.SG-L	24-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S5	E601.SG-L	24-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S6	E601.SG-L	24-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S7	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S8	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S9	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S1	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S2	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S3	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S4	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S5	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S6	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S7	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S1	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S2	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S3	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S4	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S5	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S6	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S7	E601.SG-L	24-Jul-2025	07-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-2	E601.SG-L	24-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-4	E601.SG-L	24-Jul-2025	06-Aug-2025	14 days	14 days	✔	08-Aug-2025	40 days	2 days	✔
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S1	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S2	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S3	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S4	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S5	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S6	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S7	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S1	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S3	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S5	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S6	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S7	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S8	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	



Matrix: Soil/Solid

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Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S9	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH8 S1	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH8 S2	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH8 S3	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH8 S4	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH8 S5	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH8 S6	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH8 S7	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH9 S1	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH9 S2	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH9 S3	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH9 S4	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH9 S5	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH9 S6	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH9 S7	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-2	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-4	E487	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH1 S1	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	



Matrix: Soil/Solid

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Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH1 S6	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH2 S2	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH2 S4	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH2 S7	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH3 S2	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH3 S6	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH4 S2	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH4 S7	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH5 S1	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	



Matrix: Soil/Solid

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Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH5 S6	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH6 S1+2	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH6 S4	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH6 S7	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-1	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Boron-Hot Water Extractable by ICPOES</b>											
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-3	E487	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S1	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔	
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S2	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔	
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S3	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔	



Matrix: Soil/Solid

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Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S4	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S5	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S6	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S7	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S1	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S3	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S5	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S6	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S7	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S8	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S9	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S1	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S2	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S3	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S4	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S5	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S6	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S7	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S1	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S2	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S3	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S4	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S5	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S6	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S7	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-2	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-4	E510C	24-Jul-2025	11-Aug-2025	28 days	18 days	✔	11-Aug-2025	28 days	0 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH1 S1	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH1 S6	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S2	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S4	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S7	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH3 S2	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH3 S6	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH4 S2	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH4 S7	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH5 S1	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH5 S6	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S1+2	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S4	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S7	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-1	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-3	E510C	23-Jul-2025	11-Aug-2025	28 days	19 days	✔	11-Aug-2025	28 days	0 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S1	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S2	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S3	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S4	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S5	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S6	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S7	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S1	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S3	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S5	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S6	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔	



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S7	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S8	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S9	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S1	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S2	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S3	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S4	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S5	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S6	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔



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			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S7	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S1	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S2	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S3	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S4	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S5	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S6	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S7	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-2	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔



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			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-4	E440C	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	18 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH1 S1	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH1 S6	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S2	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S4	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S7	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH3 S2	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH3 S6	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH4 S2	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH4 S7	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH5 S1	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH5 S6	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH6 S1+2	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH6 S4	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH6 S7	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-1	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS (&lt;355 µm)</b>											
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-3	E440C	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	19 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S1	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S2	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S3	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S4	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S5	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S6	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S7	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S1	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S3	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S5	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	



Matrix: Soil/Solid

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Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S6	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S7	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S8	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S9	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH8 S1	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH8 S2	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH8 S3	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH8 S4	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH8 S5	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	



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			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH8 S6	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH8 S7	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH9 S1	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH9 S2	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH9 S3	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
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Glass soil jar/Teflon lined cap [ON MECP] BH9 S4	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
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Glass soil jar/Teflon lined cap [ON MECP] BH9 S5	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH9 S6	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH9 S7	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	



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			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-2	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-4	E484	24-Jul-2025	11-Aug-2025	180 days	18 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH1 S1	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH1 S6	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH2 S2	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH2 S4	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH2 S7	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH3 S2	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH3 S6	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	



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			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH4 S2	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH4 S7	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH5 S1	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH5 S6	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH6 S1+2	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH6 S4	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH6 S7	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-1	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	
<b>Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)</b>											
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-3	E484	23-Jul-2025	11-Aug-2025	180 days	19 days	✔	11-Aug-2025	180 days	0 days	✔	



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				Rec	Actual			Rec	Actual	
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S1	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S2	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S3	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S4	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S5	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S6	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S7	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S1	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S3	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔



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<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S7	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S8	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S9	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S1	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S2	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S3	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S4	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔



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				Rec	Actual			Rec	Actual	
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S5	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S6	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S7	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S1	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S2	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S3	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S4	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S5	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S6	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S7	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-2	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-4	E100-L	24-Jul-2025	11-Aug-2025	30 days	18 days	✔	11-Aug-2025	30 days	18 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH1 S1	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH1 S6	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S2	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S4	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S7	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH3 S2	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH3 S6	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH4 S2	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH4 S7	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH5 S1	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH5 S6	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S1+2	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S4	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S7	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-1	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-3	E100-L	23-Jul-2025	11-Aug-2025	30 days	19 days	✔	11-Aug-2025	30 days	19 days	✔
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH1 S1	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH1 S6	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S1	E144	24-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S2	E144	24-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S3	E144	24-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S4	E144	24-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S5	E144	24-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S6	E144	24-Jul-2025	----	----	----		07-Aug-2025	----	----	



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S7	E144	24-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S2	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S4	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S7	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH3 S2	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH3 S6	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH4 S2	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH4 S7	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH5 S1	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH5 S6	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S1+2	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S4	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S7	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S1	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S3	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S5	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S6	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S7	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	



Matrix: Soil/Solid

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Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S8	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S9	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S1	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S2	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S3	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S4	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S5	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S6	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S7	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S1	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S2	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S3	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S4	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S5	E144	24-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S6	E144	24-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S7	E144	24-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-1	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----	
<b>Physical Tests : Moisture Content by Gravimetry</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-2	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----	



Matrix: Soil/Solid

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Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Physical Tests : Moisture Content by Gravimetry</b>											
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-3	E144	23-Jul-2025	----	----	----		07-Aug-2025	----	----		
<b>Physical Tests : Moisture Content by Gravimetry</b>											
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-4	E144	24-Jul-2025	----	----	----		08-Aug-2025	----	----		
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S1	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S3	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S5	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S6	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S7	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S8	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH7 S9	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔	



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S1	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S2	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S3	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S4	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S5	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S6	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S7	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S1	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S2	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH9 S3	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH9 S4	E108A	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	30 days	14 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH1 S1	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH1 S6	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S1	E108A	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S2	E108A	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S3	E108A	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S4	E108A	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>											
Glass soil jar/Teflon lined cap [ON MECP] BH10 S5	E108A	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔	



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S6	E108A	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S7	E108A	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S2	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S4	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S7	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH3 S2	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH3 S6	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH4 S2	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH4 S7	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH5 S1	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH5 S6	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S1+2	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S4	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S7	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S5	E108A	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S6	E108A	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S7	E108A	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-1	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-2	E108A	24-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-3	E108A	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-4	E108A	24-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	30 days	15 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S1	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S3	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S5	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S6	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S7	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S8	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH7 S9	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S1	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S2	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S3	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S4	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S5	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S6	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH8 S7	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S1	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S2	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S3	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S4	E532	24-Jul-2025	07-Aug-2025	30 days	14 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S1	E532	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	0 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S2	E532	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	0 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S3	E532	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	0 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S4	E532	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	0 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S5	E532	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	0 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S6	E532	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	0 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH10 S7	E532	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	0 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S5	E532	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	0 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S6	E532	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	0 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH9 S7	E532	24-Jul-2025	08-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	0 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH1 S1	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH1 S6	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S2	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S4	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH2 S7	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH3 S2	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH3 S6	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH4 S2	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH4 S7	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH5 S1	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH5 S6	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S1+2	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S4	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] BH6 S7	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-1	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-3	E532	23-Jul-2025	07-Aug-2025	30 days	15 days	✔	08-Aug-2025	7 days	1 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-2	E532	24-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Speciated Metals : Hexavalent Chromium (Cr VI) by IC</b>										
Glass soil jar/Teflon lined cap [ON MECP] DUP-S-4	E532	24-Jul-2025	07-Aug-2025	30 days	15 days	✔	11-Aug-2025	7 days	4 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH10 S1	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH10 S2	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH10 S3	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH10 S4	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH10 S5	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH10 S6	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH10 S7	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH7 S1	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH7 S3	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH7 S5	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH7 S6	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH7 S7	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH7 S8	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH7 S9	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH8 S1	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH8 S2	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH8 S3	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH8 S4	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH8 S5	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH8 S6	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH8 S7	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH9 S1	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH9 S2	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH9 S3	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH9 S4	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH9 S5	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH9 S6	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH9 S7	E611A	24-Jul-2025	06-Aug-2025	14 days	13 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH1 S1	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH1 S6	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH2 S2	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH2 S4	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH2 S7	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH3 S2	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH3 S6	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH4 S2	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH4 S7	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH5 S1	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH5 S6	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH6 S1+2	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH6 S4	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✔	06-Aug-2025	40 days	0 days	✔



Matrix: **Soil/Solid**

Evaluation: \* = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] BH6 S7	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✓	06-Aug-2025	40 days	0 days	✓
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] DUP-S-1	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✓	06-Aug-2025	40 days	0 days	✓
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] DUP-S-2	E611A	24-Jul-2025	06-Aug-2025	14 days	14 days	✓	06-Aug-2025	40 days	0 days	✓
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] DUP-S-3	E611A	23-Jul-2025	06-Aug-2025	14 days	14 days	✓	06-Aug-2025	40 days	0 days	✓
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>										
Glass soil methanol vial [ON MECP] DUP-S-4	E611A	24-Jul-2025	06-Aug-2025	14 days	14 days	✓	06-Aug-2025	40 days	0 days	✓

[Legend & Qualifier Definitions](#)

Rec. HT: ALS recommended hold time (see units).



## Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: ✖ = QC frequency outside specification; ✔ = QC frequency within specification.

Quality Control Sample Type	Method	QC Lot #	Count		Frequency (%)		
			QC	Regular	Actual	Expected	Evaluation
<b>Analytical Methods</b>							
<b>Laboratory Duplicates (DUP)</b>							
Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)	E100-L	2146870	3	50	6.0	5.0	✔
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A	2146868	3	58	5.1	5.0	✔
Moisture Content by Gravimetry	E144	2146875	4	80	5.0	5.0	✔
WAD Cyanide (0.01M NaOH Extraction)	E336A	2146866	3	53	5.6	5.0	✔
Metals in Soil/Solid by CRC ICPMS (<355 µm)	E440C	2146874	3	50	6.0	5.0	✔
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484	2146869	3	50	6.0	5.0	✔
Boron-Hot Water Extractable by ICPOES	E487	2146871	3	50	6.0	5.0	✔
Mercury in Soil/Solid by CVAAS (<355 µm)	E510C	2146873	3	50	6.0	5.0	✔
Hexavalent Chromium (Cr VI) by IC	E532	2146867	3	58	5.1	5.0	✔
CCME PHC - F1 by Headspace GC-FID	E581.F1	2145972	3	60	5.0	5.0	✔
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	2146644	4	52	7.6	5.0	✔
BTEX by Headspace GC-MS	E611A	2145971	3	60	5.0	5.0	✔
<b>Laboratory Control Samples (LCS)</b>							
Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)	E100-L	2146870	6	50	12.0	10.0	✔
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A	2146868	3	58	5.1	5.0	✔
Moisture Content by Gravimetry	E144	2146875	4	80	5.0	5.0	✔
WAD Cyanide (0.01M NaOH Extraction)	E336A	2146866	3	53	5.6	5.0	✔
Metals in Soil/Solid by CRC ICPMS (<355 µm)	E440C	2146874	6	50	12.0	10.0	✔
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484	2146869	6	50	12.0	10.0	✔
Boron-Hot Water Extractable by ICPOES	E487	2146871	6	50	12.0	10.0	✔
Mercury in Soil/Solid by CVAAS (<355 µm)	E510C	2146873	6	50	12.0	10.0	✔
Hexavalent Chromium (Cr VI) by IC	E532	2146867	6	58	10.3	10.0	✔
CCME PHC - F1 by Headspace GC-FID	E581.F1	2145972	3	60	5.0	5.0	✔
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	2146644	4	52	7.6	5.0	✔
BTEX by Headspace GC-MS	E611A	2145971	3	60	5.0	5.0	✔
<b>Method Blanks (MB)</b>							
Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)	E100-L	2146870	3	50	6.0	5.0	✔
Moisture Content by Gravimetry	E144	2146875	4	80	5.0	5.0	✔
WAD Cyanide (0.01M NaOH Extraction)	E336A	2146866	3	53	5.6	5.0	✔
Metals in Soil/Solid by CRC ICPMS (<355 µm)	E440C	2146874	3	50	6.0	5.0	✔
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484	2146869	3	50	6.0	5.0	✔
Boron-Hot Water Extractable by ICPOES	E487	2146871	3	50	6.0	5.0	✔
Mercury in Soil/Solid by CVAAS (<355 µm)	E510C	2146873	3	50	6.0	5.0	✔
Hexavalent Chromium (Cr VI) by IC	E532	2146867	3	58	5.1	5.0	✔
CCME PHC - F1 by Headspace GC-FID	E581.F1	2145972	3	60	5.0	5.0	✔



Matrix: **Soil/Solid**

Evaluation: \* = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type	Method	QC Lot #	Count		Frequency (%)		
			QC	Regular	Actual	Expected	Evaluation
<i>Analytical Methods</i>							
<b>Method Blanks (MB) - Continued</b>							
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	2146644	4	52	7.6	5.0	✓
BTEX by Headspace GC-MS	E611A	2145971	3	60	5.0	5.0	✓
<b>Matrix Spikes (MS)</b>							
WAD Cyanide (0.01M NaOH Extraction)	E336A	2146866	3	53	5.6	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	2145972	3	60	5.0	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	2146644	4	52	7.6	5.0	✓
BTEX by Headspace GC-MS	E611A	2145971	3	60	5.0	5.0	✓



## Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)	E100-L ALS Environmental - Waterloo	Soil/Solid	CSSS Ch. 15 (mod)/APHA 2510 (mod)	Conductivity, also known as Electrical Conductivity (EC) or Specific Conductance, is measured by immersion of a conductivity cell with platinum electrodes into a soil sample that has been added in a defined ratio of soil to deionized water, then shaken well and allowed to settle. Conductance is measured in the fluid that is observed in the upper layer.
pH by Meter (1:2 Soil:0.01M CaCl <sub>2</sub> Extraction) - As Received	E108A ALS Environmental - Waterloo	Soil/Solid	MECP E3530	pH is determined by potentiometric measurement with a pH electrode, and is conducted at ambient laboratory temperature (normally 20 ± 5°C) and is carried out in accordance with procedures described in the Analytical Protocol (prescriptive method). A minimum 10g portion of the sample, as received, is extracted with 20mL of 0.01M calcium chloride solution by shaking for at least 30 minutes. The aqueous layer is separated from the soil by centrifuging, settling, or decanting and then analyzed using a pH meter and electrode. This method is equivalent to ASTM D4972 and is acceptable for topsoil analysis.
Moisture Content by Gravimetry	E144 ALS Environmental - Waterloo	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
WAD Cyanide (0.01M NaOH Extraction)	E336A ALS Environmental - Waterloo	Soil/Solid	APHA 4500-CN I (mod)	Weak Acid Dissociable (WAD) cyanide is determined after extraction by Continuous Flow Analyzer (CFA) with in-line distillation followed by colourmetric analysis.
Metals in Soil/Solid by CRC ICPMS (<355 µm)	E440C ALS Environmental - Waterloo	Soil/Solid	EPA 6020B (mod)	This method is intended to liberate metals that may be environmentally available. Samples are dried, then sieved through a 355 µm sieve, and digested with HNO <sub>3</sub> and HCl.  Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Silicate minerals are not solubilized. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. This method does not adequately recover elemental sulfur, and is unsuitable for assessment of elemental sulfur standards or guidelines.  Analysis is by Collision/Reaction Cell ICPMS.
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484 ALS Environmental - Waterloo	Soil/Solid	SW846 6010C	A dried, disaggregated solid sample is extracted with deionized water, the aqueous extract is separated from the solid, acidified and then analyzed using a ICP/OES. The concentrations of Na, Ca and Mg are reported as per CALA requirements for calculated parameters. These individual parameters are not for comparison to any guideline.



Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Boron-Hot Water Extractable by ICPOES	E487 ALS Environmental - Waterloo	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES.  Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).
Mercury in Soil/Solid by CVAAS (<355 µm)	E510C ALS Environmental - Waterloo	Soil/Solid	EPA 200.2/1631 Appendix (mod)	Samples are sieved through a 355 µm sieve, and digested with HNO <sub>3</sub> and HCl, followed by CVAAS analysis.
Hexavalent Chromium (Cr VI) by IC	E532 ALS Environmental - Waterloo	Soil/Solid	APHA 3500-CR C	Instrumental analysis is performed by ion chromatography with UV detection.
CCME PHC - F1 by Headspace GC-FID	E581.F1 ALS Environmental - Waterloo	Soil/Solid	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.  Analytical methods for CCME Petroleum Hydrocarbons (PHCs) are validated to comply fully with the Reference Method for the Canada-Wide Standard for PHC. Test results are expressed on a dry weight basis. Unless qualified, all required quality control criteria of the CCME PHC method have been met, including response factor and linearity requirements.
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L ALS Environmental - Waterloo	Soil/Solid	CCME PHC in Soil - Tier 1	Sample extracts are subjected to in-situ silica gel treatment prior to analysis by GC-FID for CCME hydrocarbon fractions (F2-F4).  Analytical methods for CCME Petroleum Hydrocarbons (PHCs) are validated to comply fully with the Reference Method for the Canada-Wide Standard for PHC. Test results are expressed on a dry weight basis. Unless qualified, all required quality control criteria of the CCME PHC method have been met, including response factor and linearity requirements.
BTEX by Headspace GC-MS	E611A ALS Environmental - Waterloo	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
F1-BTEX	EC580 ALS Environmental - Waterloo	Soil/Solid	CCME PHC in Soil - Tier 1	F1-BTEX is calculated as follows: F1-BTEX = F1 (C6-C10) minus benzene, toluene, ethylbenzene and xylenes (BTEX).
Sum F1 to F4 (C6-C50)	EC581 ALS Environmental - Waterloo	Soil/Solid	CCME PHC in Soil - Tier 1	Hydrocarbons, total (C6-C50) is the sum of CCME Fractions F1(C6-C10), F2(C10-C16), F3(C16-C34), and F4(C34-C50). F4G-sg is not used within this calculation due to overlap with other fractions.

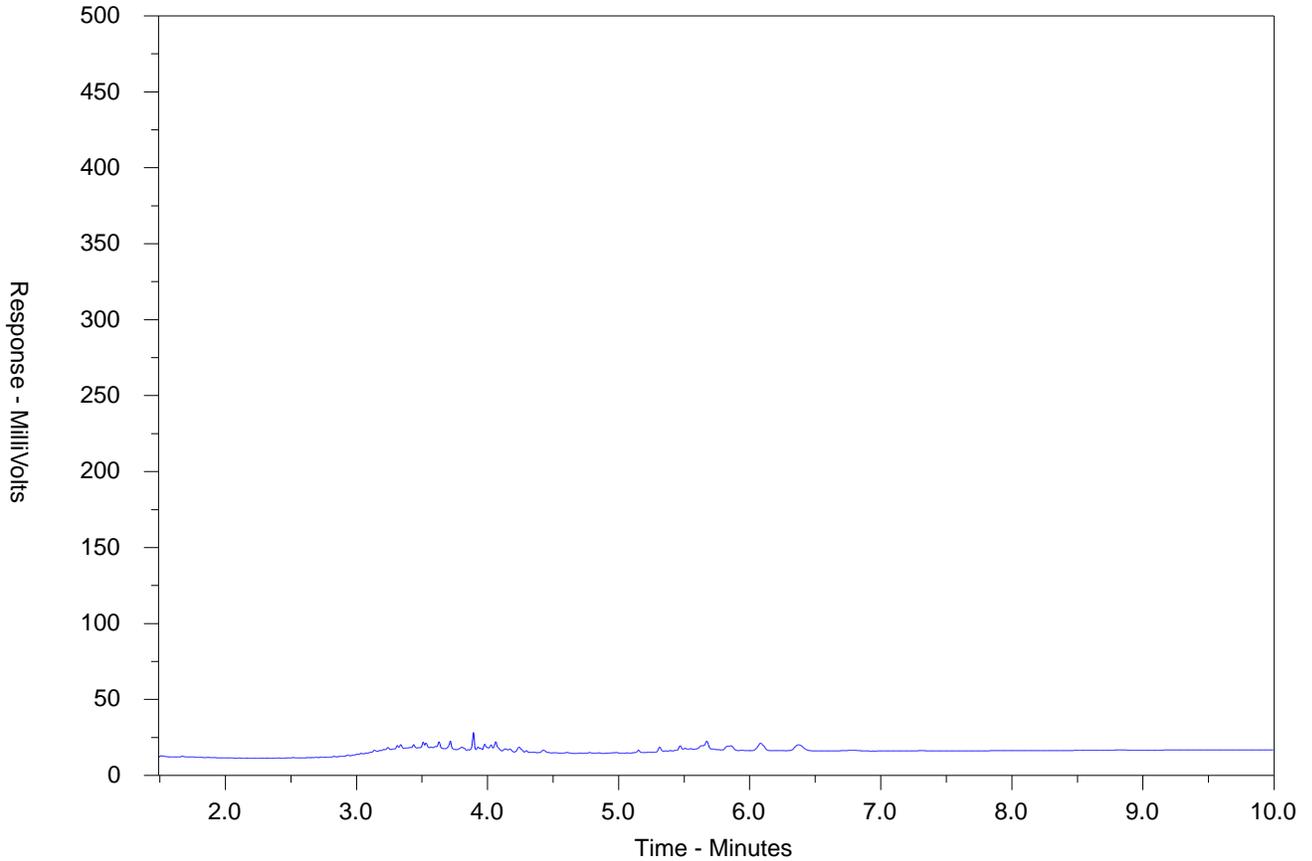


Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Leach 1:2 Soil:Water for pH/EC	EP108 ALS Environmental - Waterloo	Soil/Solid	BC WLAP METHOD: PH, ELECTROMETRIC, SOIL	The procedure involves mixing the dried (at <60°C) and sieved (No. 10 / 2mm) sample with deionized/distilled water at a 1:2 ratio of sediment to water.
Leach 1:2 Soil : 0.01CaCl <sub>2</sub> - As Received for pH	EP108A ALS Environmental - Waterloo	Soil/Solid	MOEE E3137A	A minimum 10g portion of the sample, as received, is extracted with 20mL of 0.01M calcium chloride solution by shaking for at least 30 minutes. The aqueous layer is separated from the soil by centrifuging, settling or decanting and then analyzed using a pH meter and electrode.
Cyanide Extraction for CFA (0.01M NaOH)	EP333A ALS Environmental - Waterloo	Soil/Solid	ON MECP E3015 (mod)	Extraction for various cyanide analysis is by rotary extraction of the soil with 0.01M Sodium Hydroxide.
Digestion for Metals and Mercury (355 µm Sieve)	EP440C ALS Environmental - Waterloo	Soil/Solid	EPA 200.2 (mod)	Samples are sieved through a 355 µm sieve, and digested with HNO <sub>3</sub> and HCl. This method is intended to liberate metals that may be environmentally available.
Boron-Hot Water Extractable	EP487 ALS Environmental - Waterloo	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with weak calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES.  Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011)
Preparation of Hexavalent Chromium (Cr VI) for IC	EP532 ALS Environmental - Waterloo	Soil/Solid	EPA 3060A	Field moist samples are digested with a sodium hydroxide/sodium carbonate solution as described in EPA 3060A.
VOCs Methanol Extraction for Headspace Analysis	EP581 ALS Environmental - Waterloo	Soil/Solid	EPA 5035A (mod)	VOCs in samples are extracted with methanol. Extracts are then prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PHCs and PAHs Hexane-Acetone Tumbler Extraction	EP601 ALS Environmental - Waterloo	Soil/Solid	CCME PHC in Soil - Tier 1 (mod)	Samples are subsampled and Petroleum Hydrocarbons (PHC) and PAHs are extracted with 1:1 hexane:acetone using a rotary extractor.

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-001-E601.SG-L  
 Client Sample ID: BH1 S1



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
← Gasoline →			← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

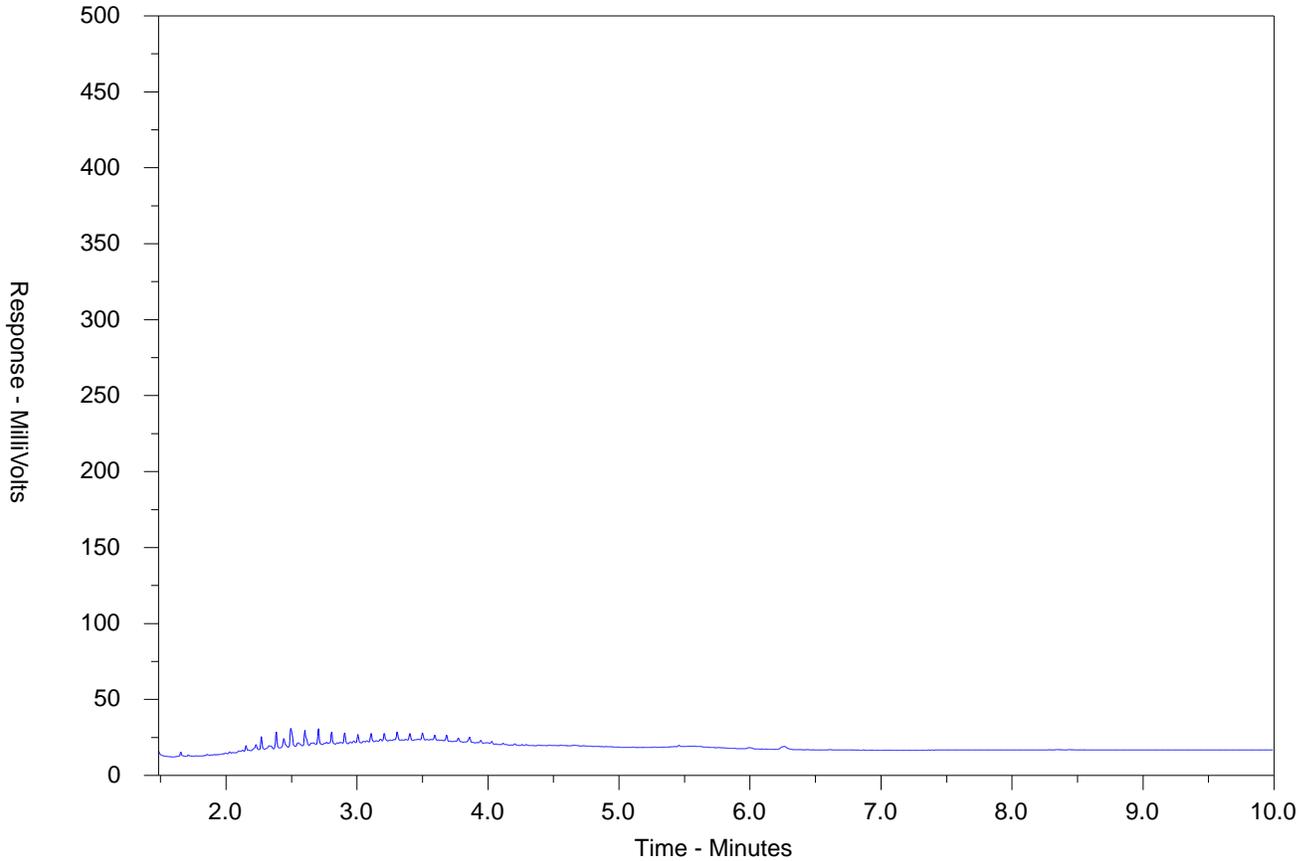
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-002-E601.SG-L  
 Client Sample ID: BH1 S6



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

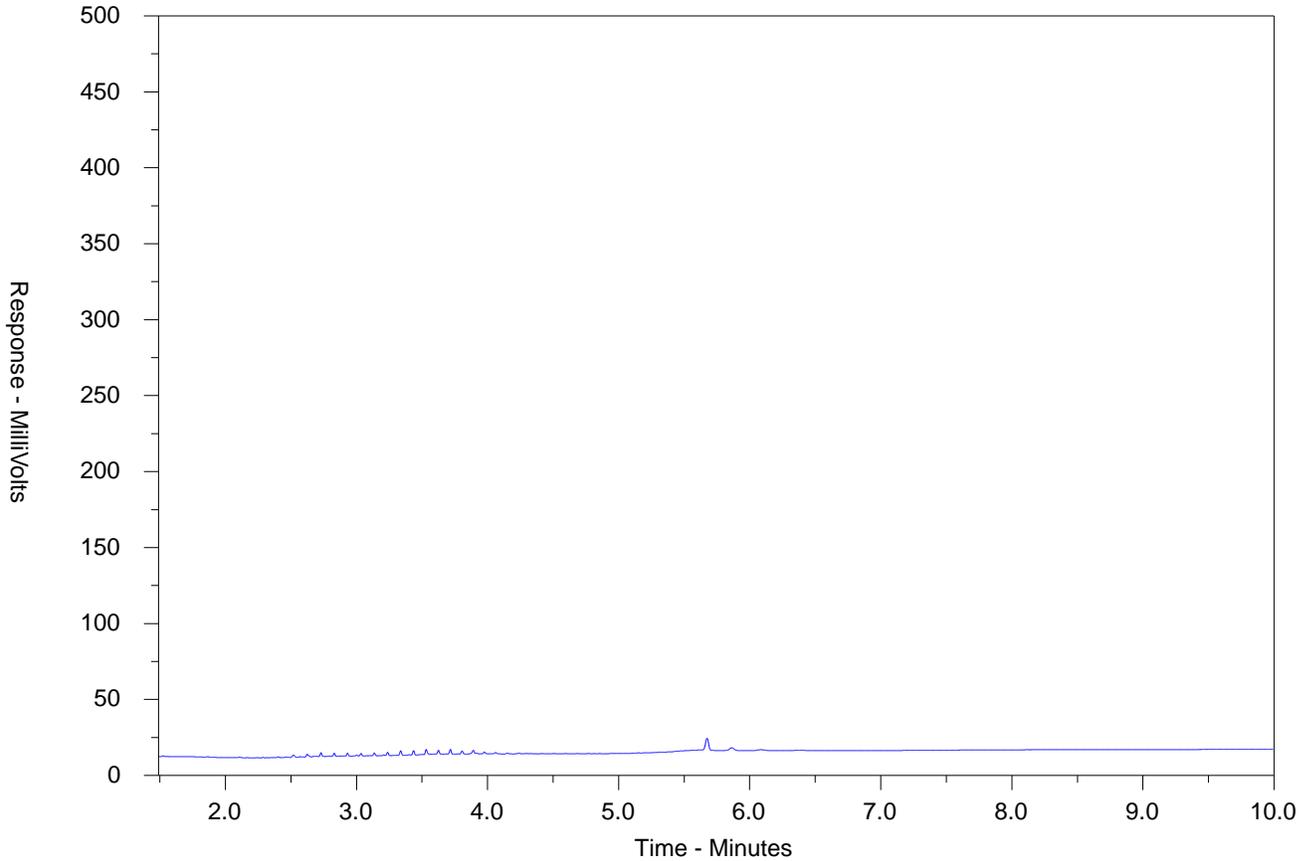
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-003-E601.SG-L  
 Client Sample ID: BH2 S2



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

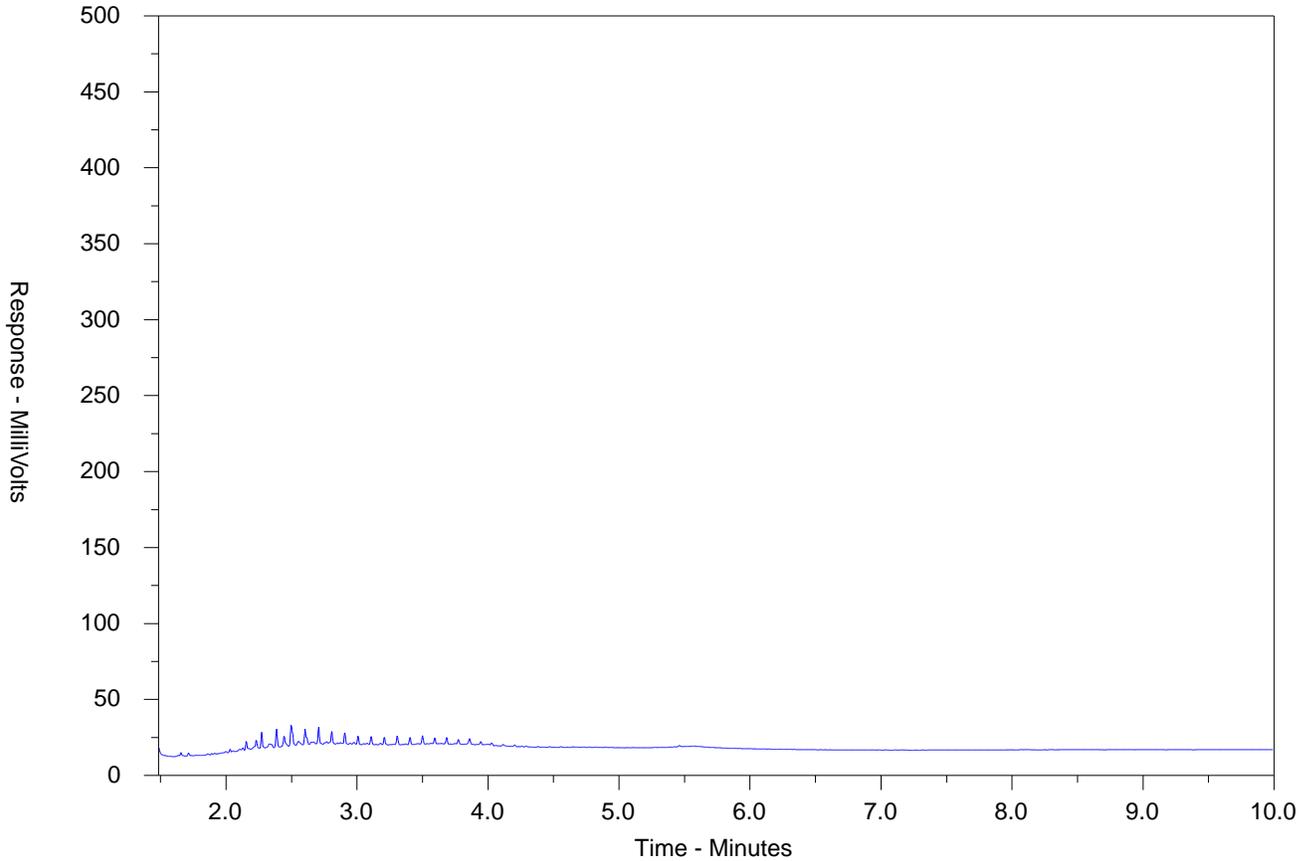
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-004-E601.SG-L  
 Client Sample ID: BH2 S4



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

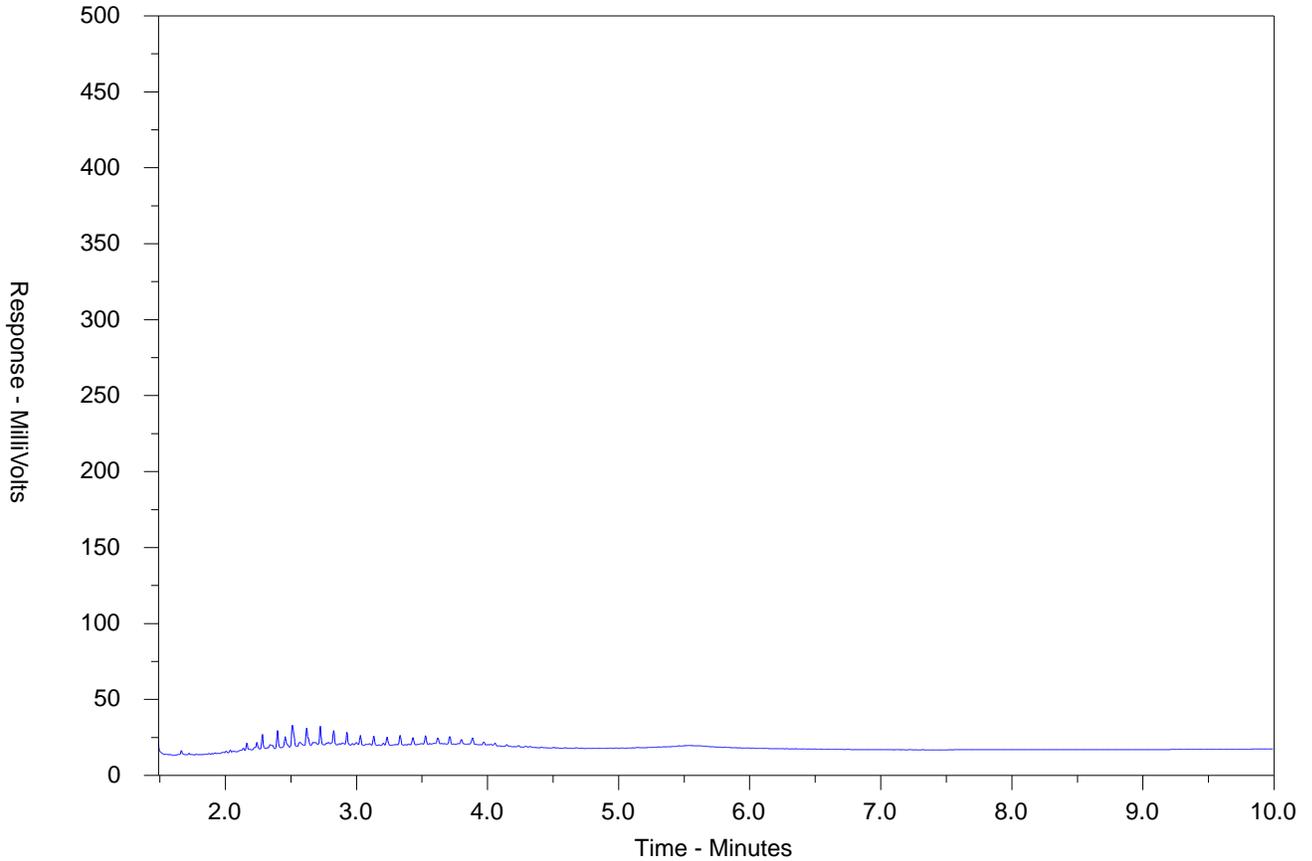
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-005-E601.SG-L  
 Client Sample ID: BH2 S7



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

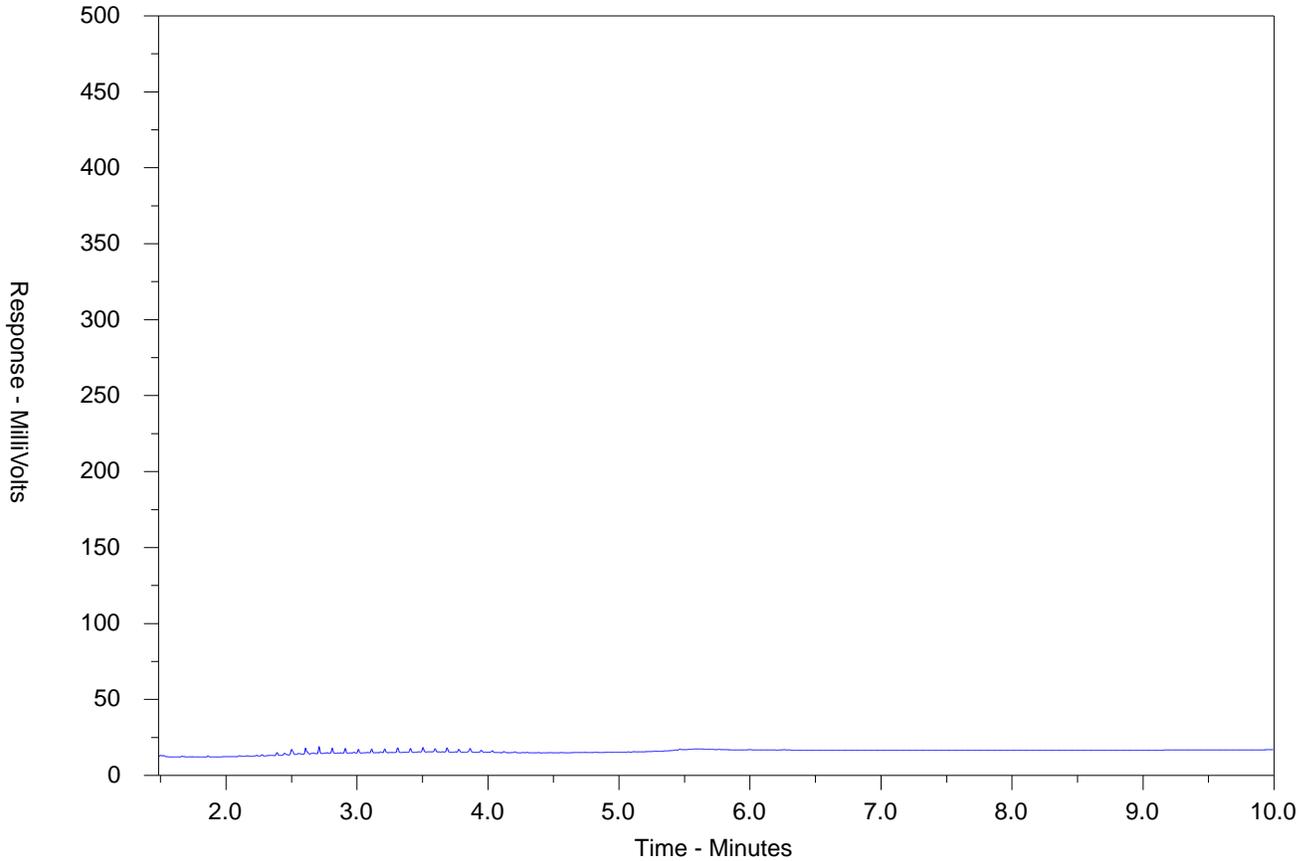
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-006-E601.SG-L  
 Client Sample ID: BH3 S2



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
← Gasoline →			← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

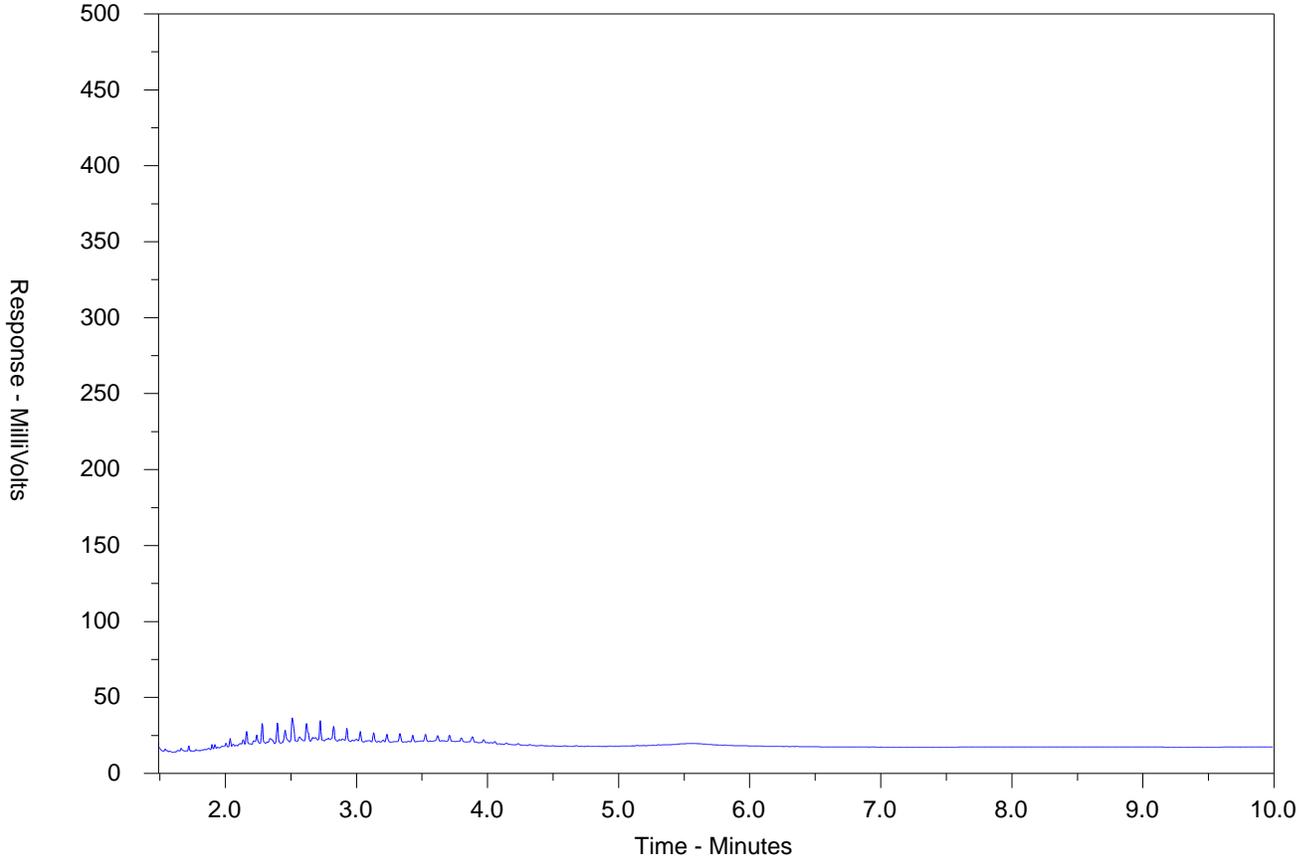
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-007-E601.SG-L  
 Client Sample ID: BH3 S6



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
← Gasoline →			← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

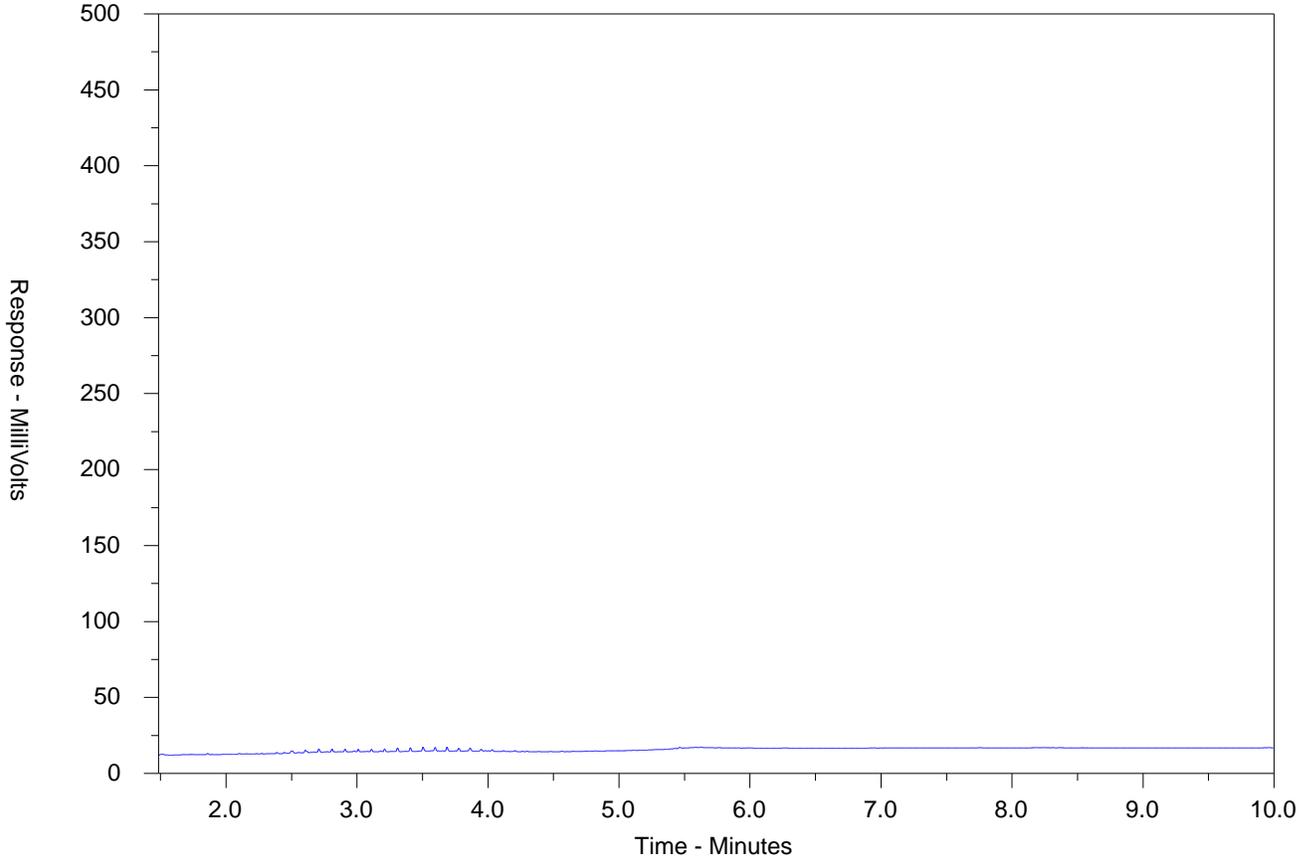
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-008-E601.SG-L  
 Client Sample ID: BH4 S2



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

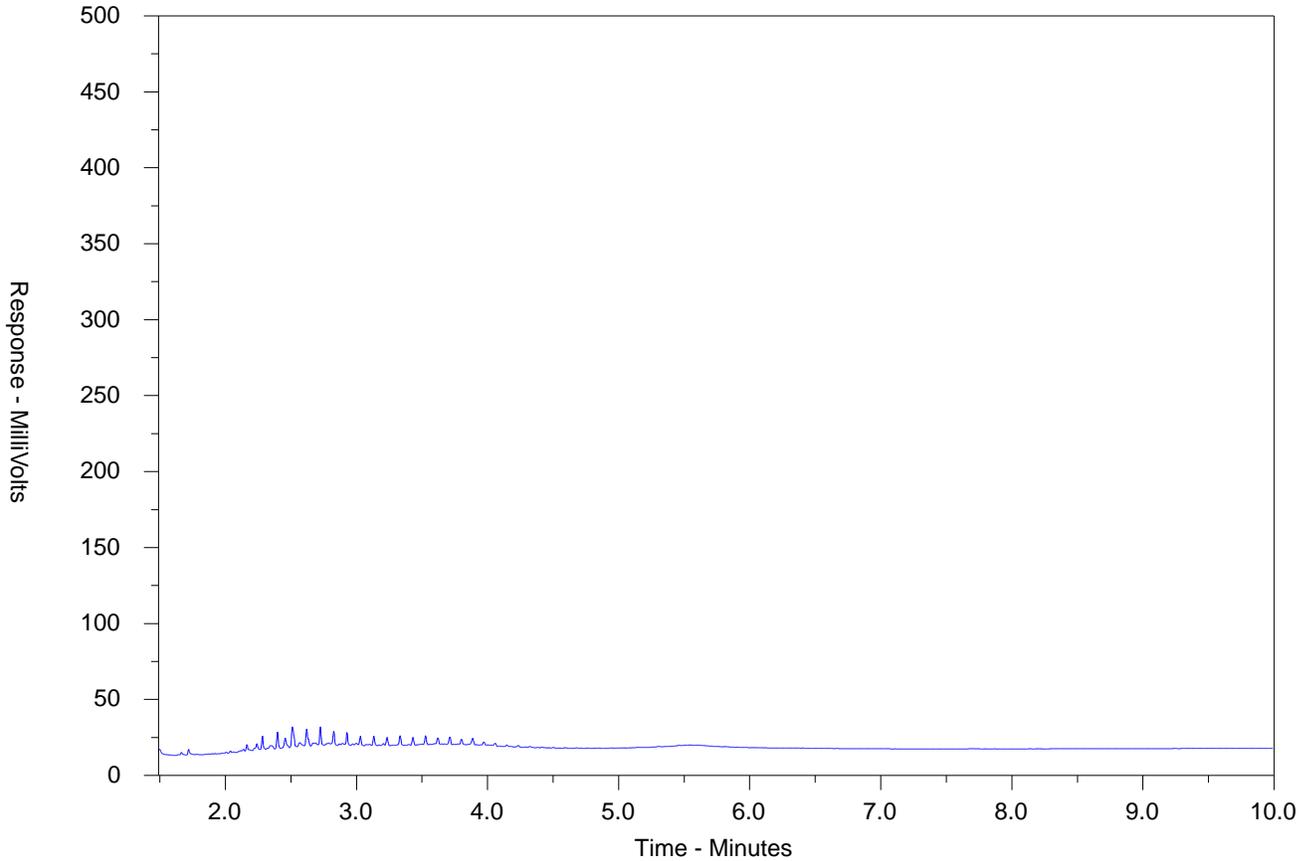
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-009-E601.SG-L  
 Client Sample ID: BH4 S7



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

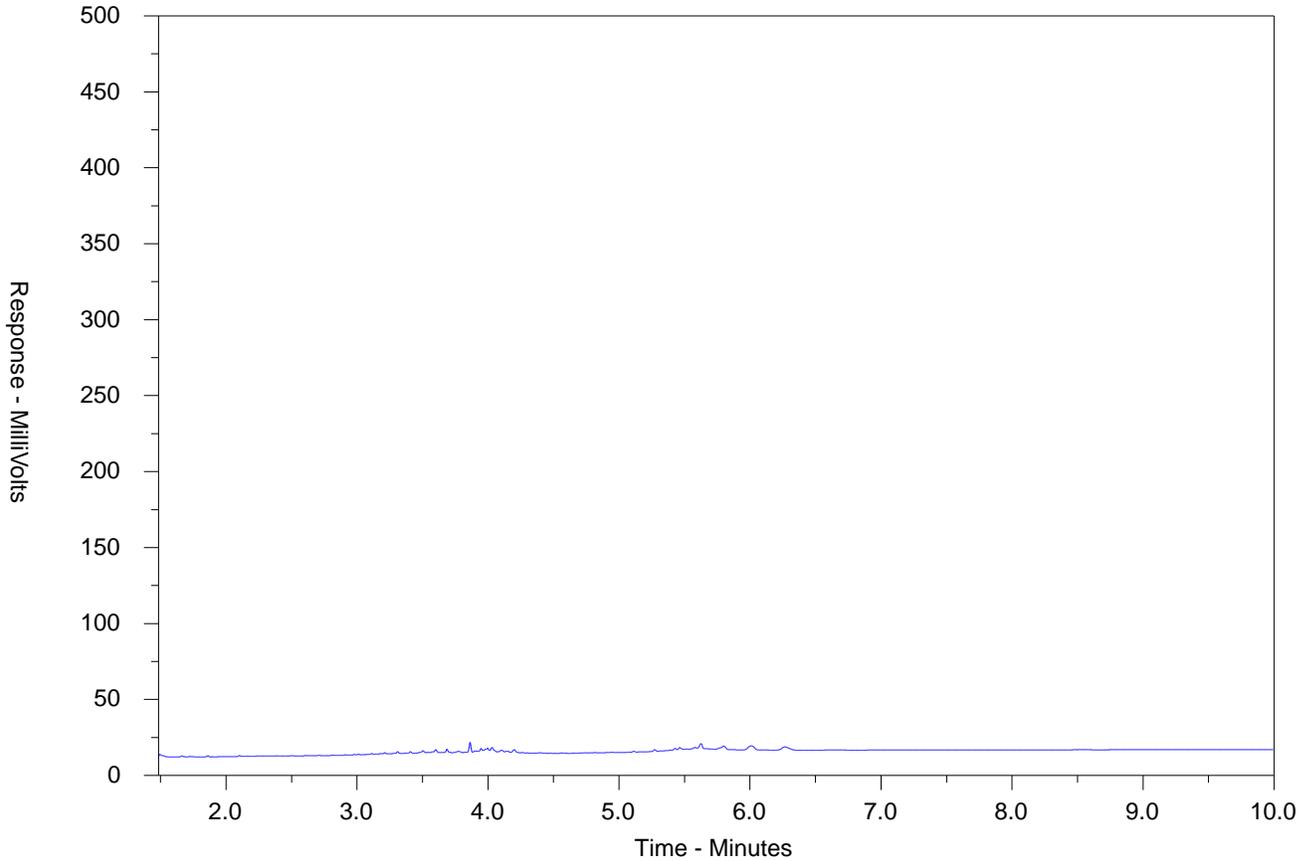
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-010-E601.SG-L  
 Client Sample ID: BH5 S1



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

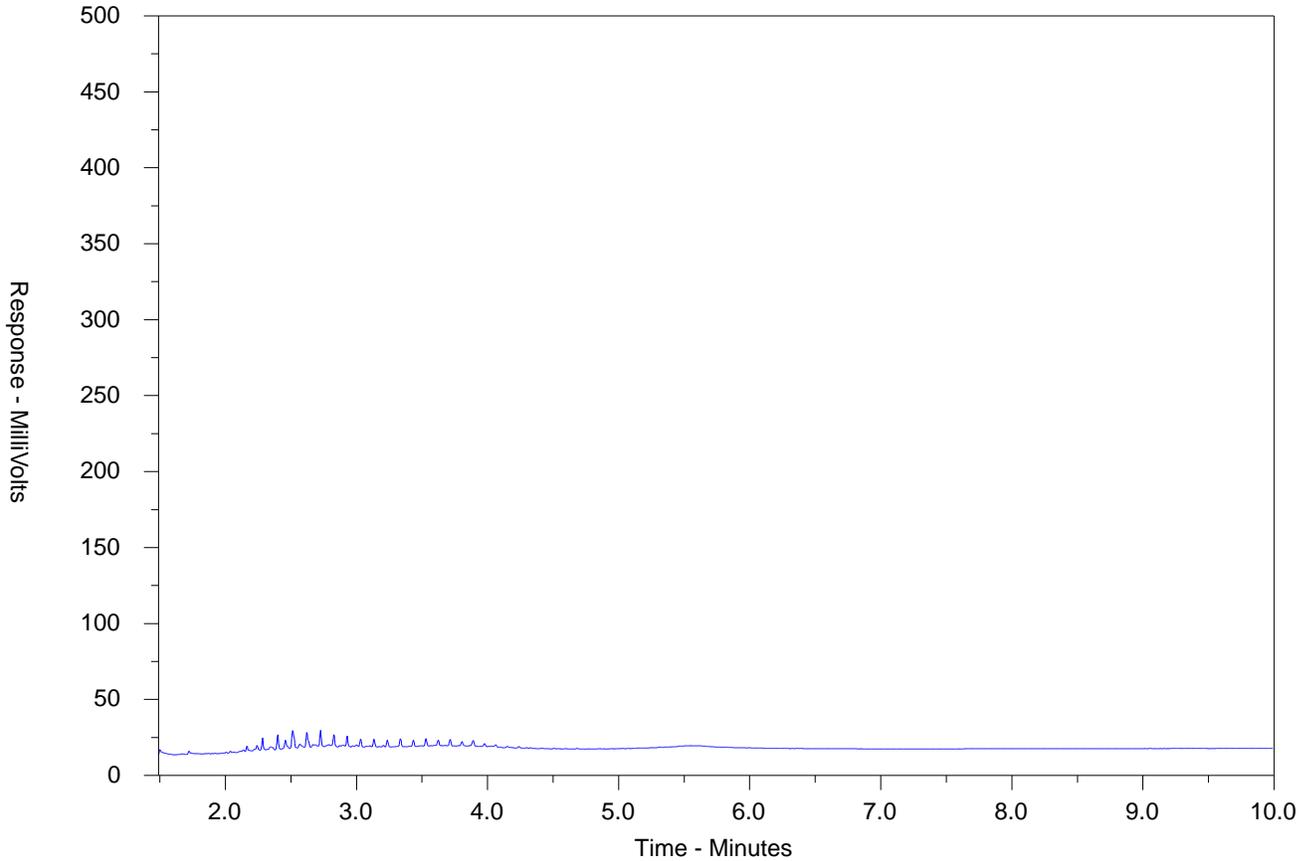
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-011-E601.SG-L  
 Client Sample ID: BH5 S6



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

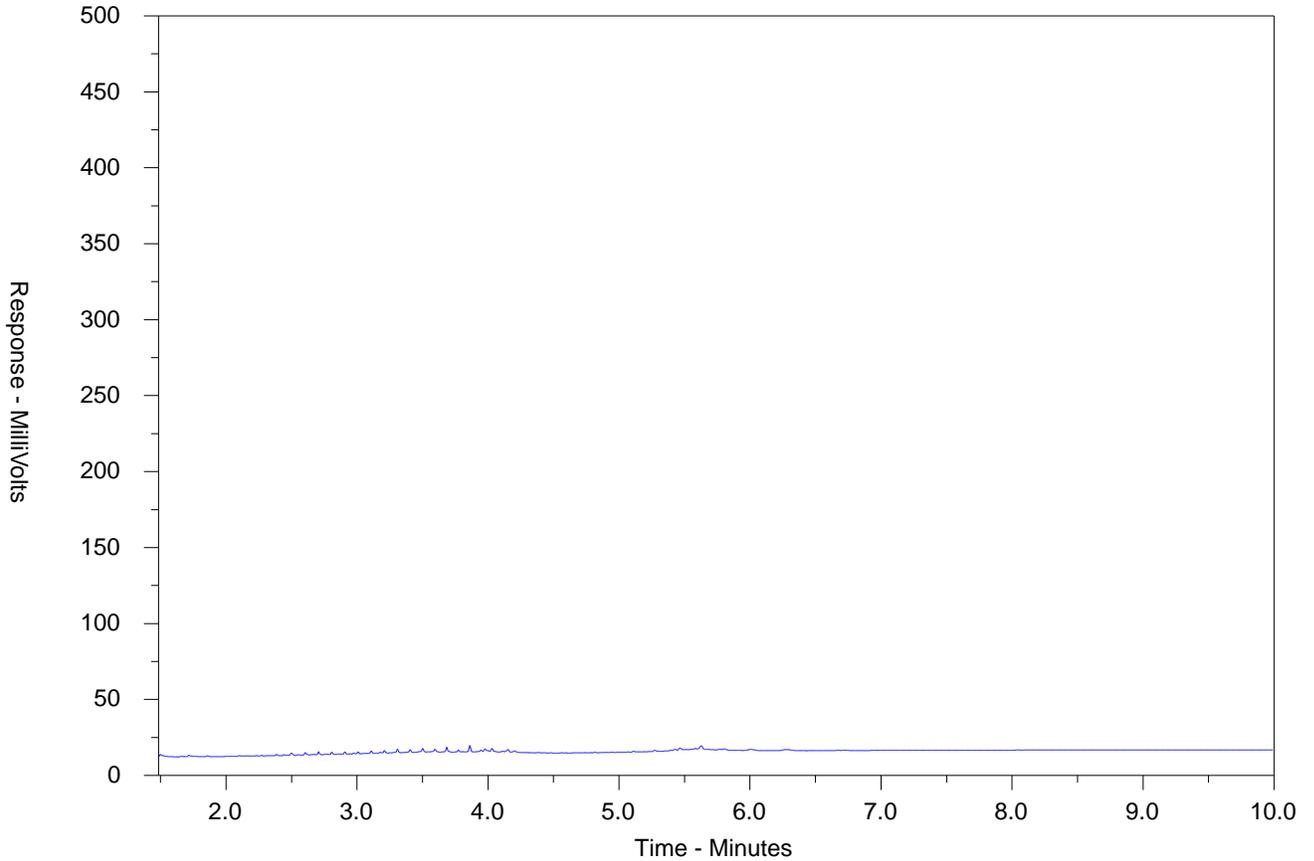
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-012-E601.SG-L  
 Client Sample ID: BH6 S1+2



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

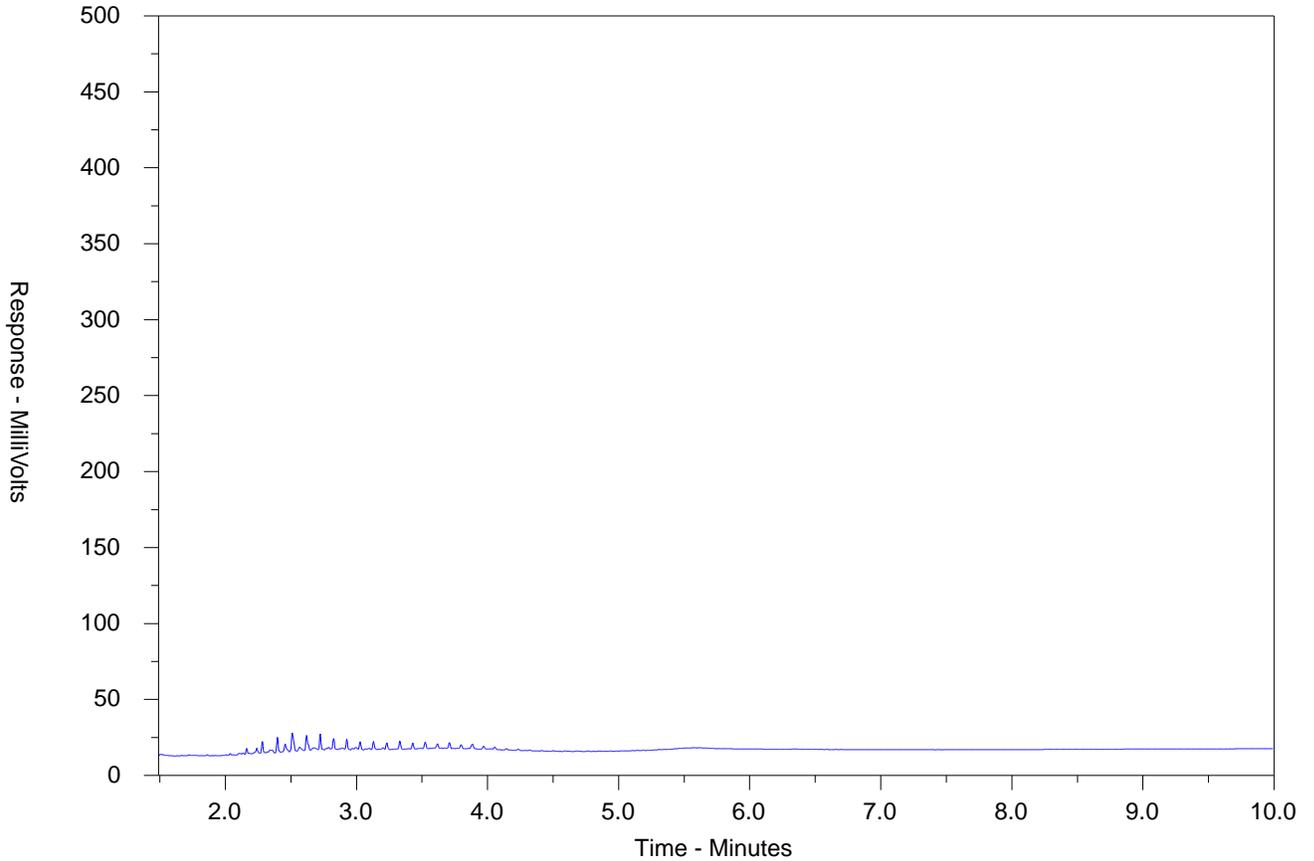
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-013-E601.SG-L  
 Client Sample ID: BH6 S4



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
← Gasoline →			← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

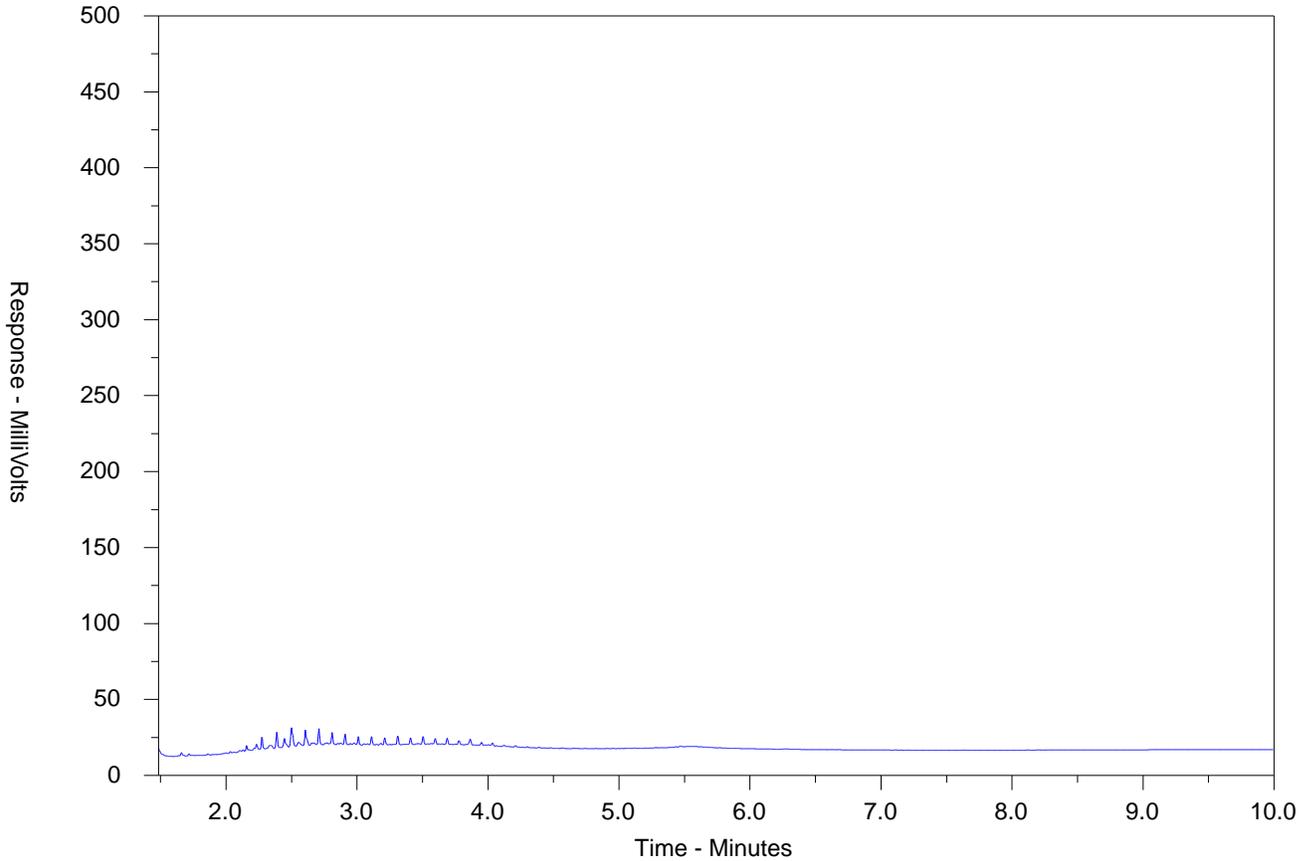
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-014-E601.SG-L  
 Client Sample ID: BH6 S7



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

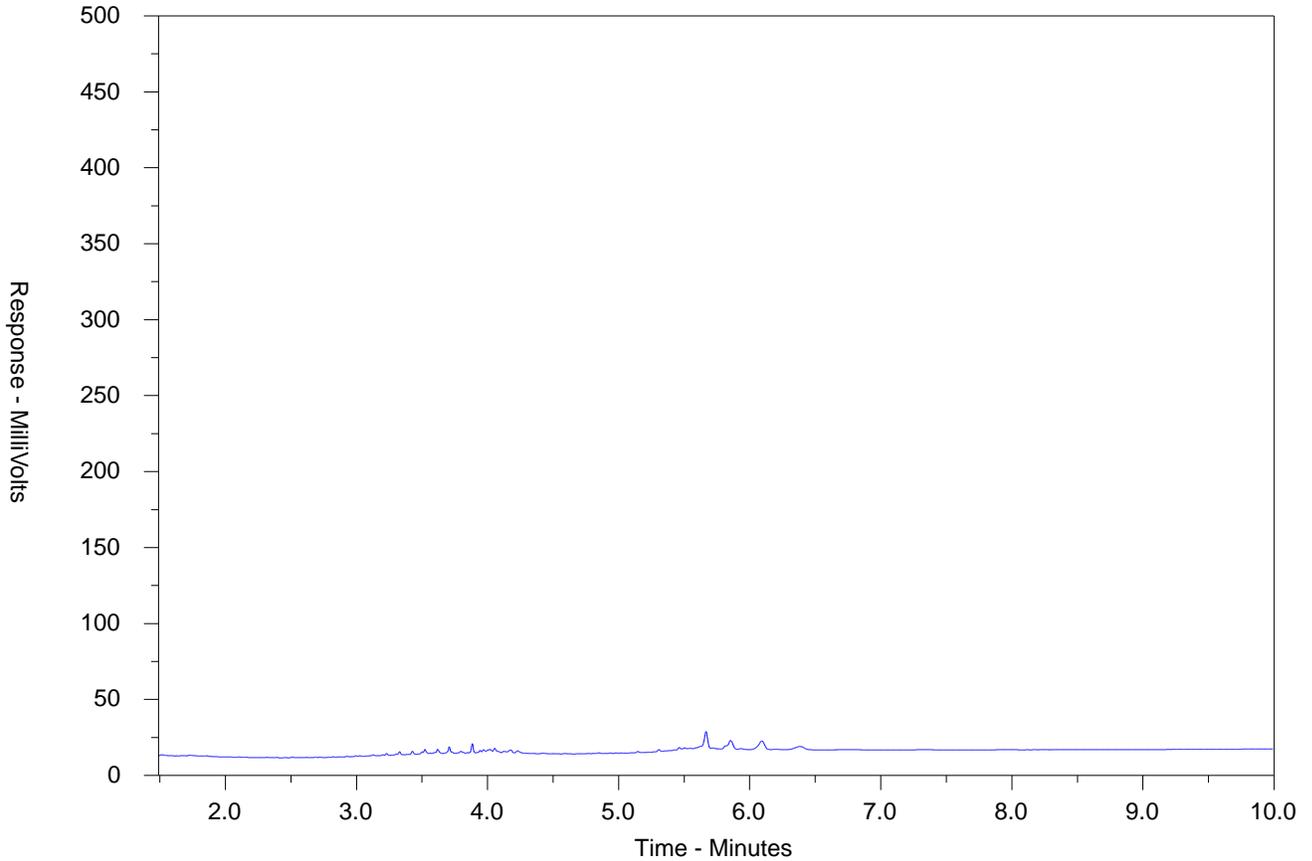
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-015-E601.SG-L  
 Client Sample ID: BH7 S1



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

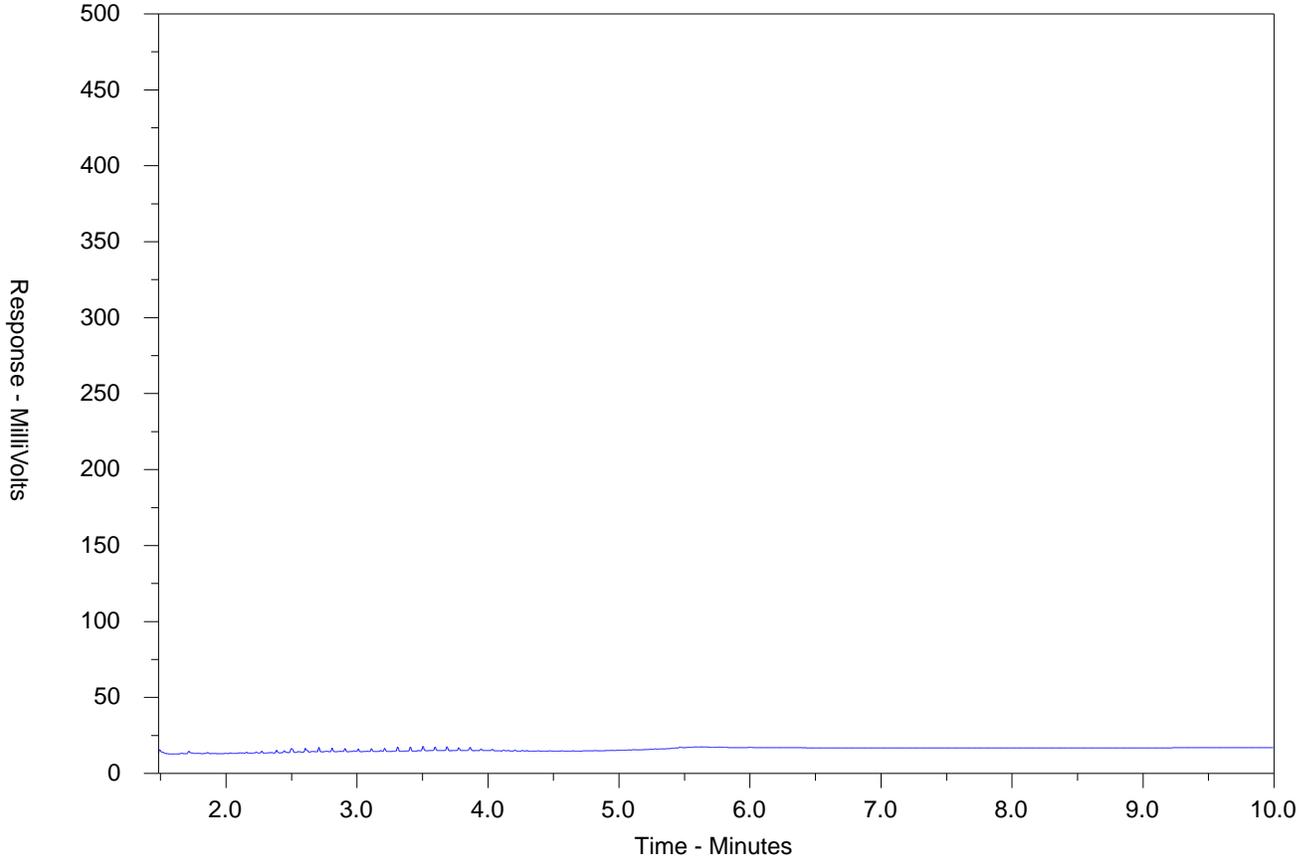
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-016-E601.SG-L  
 Client Sample ID: BH7 S3



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

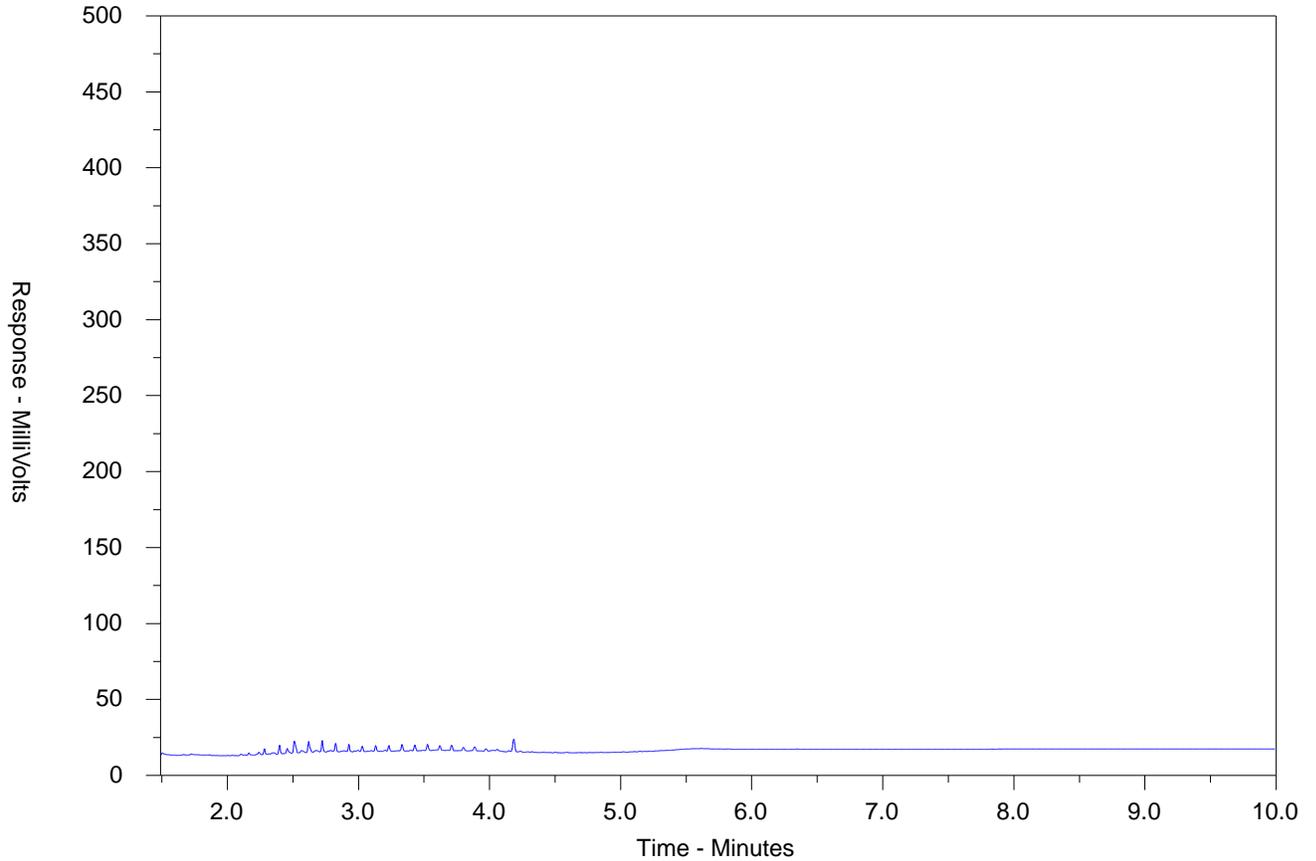
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-017-E601.SG-L  
 Client Sample ID: BH7 S5



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
← Gasoline →			← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

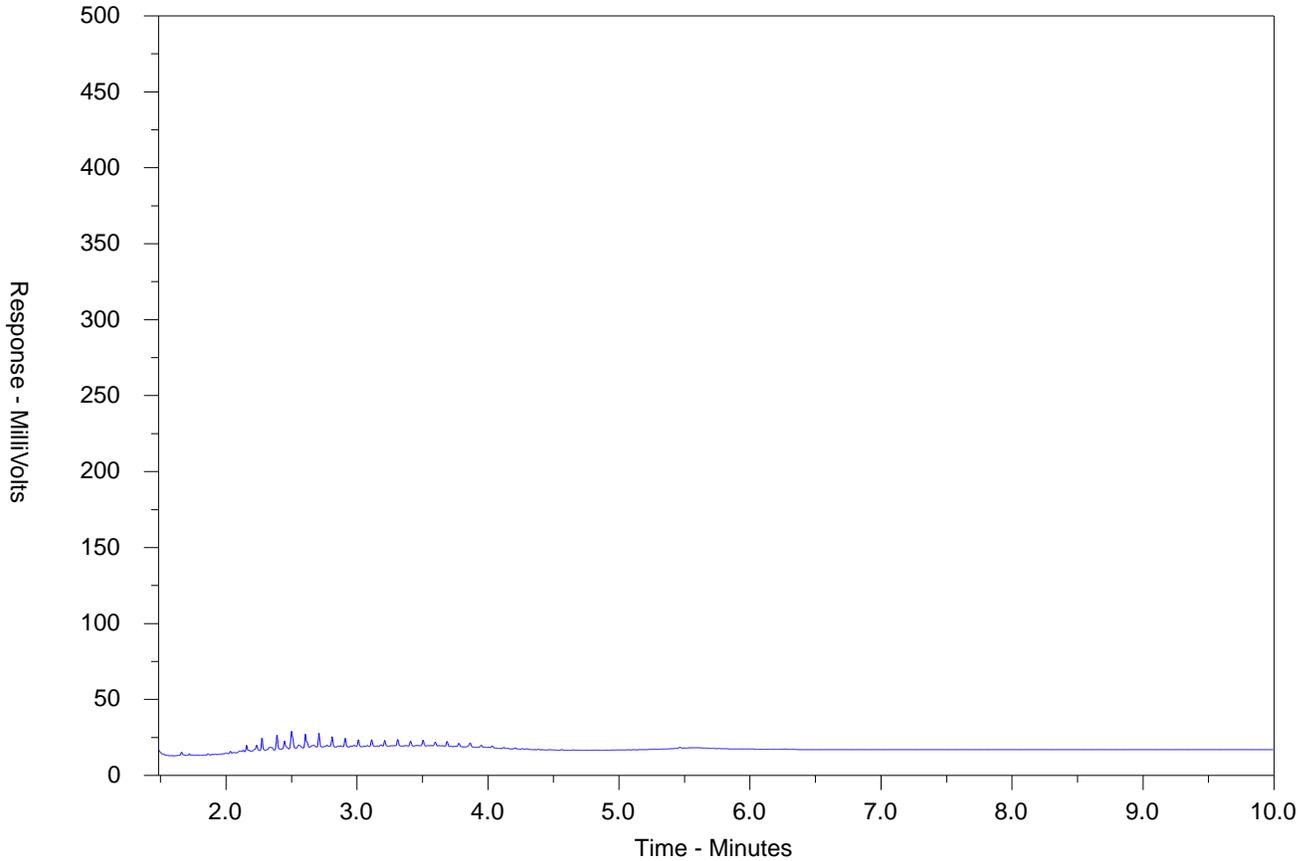
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-018-E601.SG-L  
 Client Sample ID: BH7 S6



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
← Gasoline →			← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

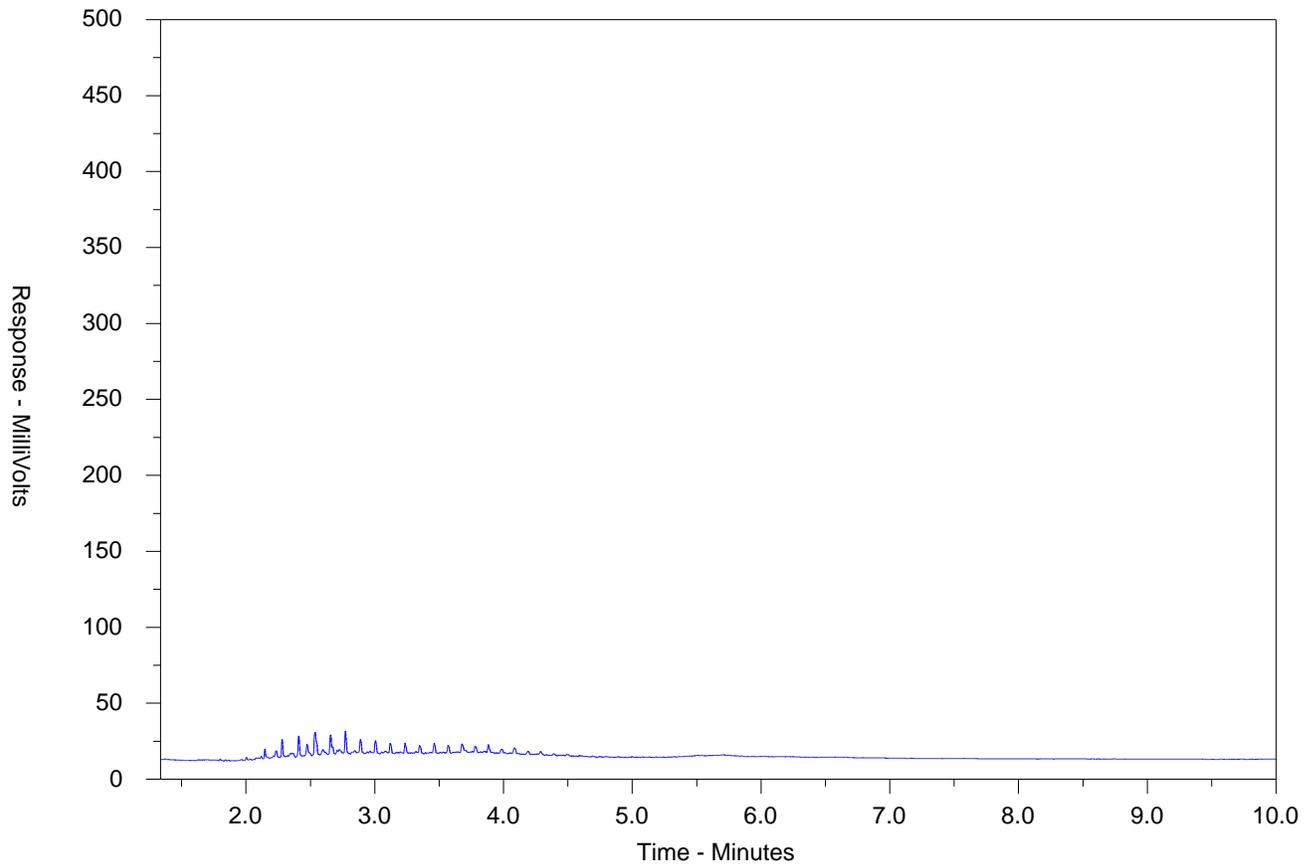
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-019-E601.SG-L  
 Client Sample ID: BH7 S7



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

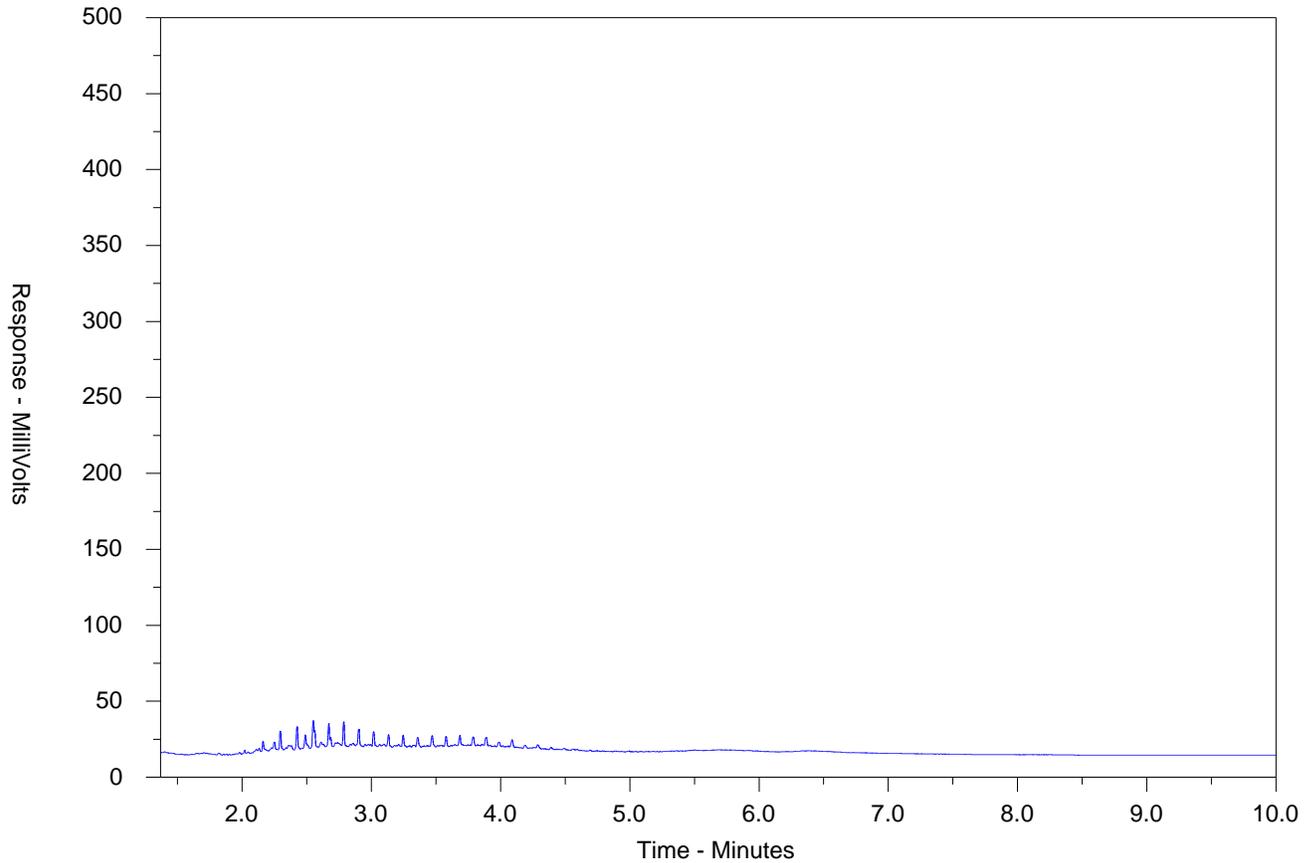
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-020-E601.SG-L  
 Client Sample ID: BH7 S8



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

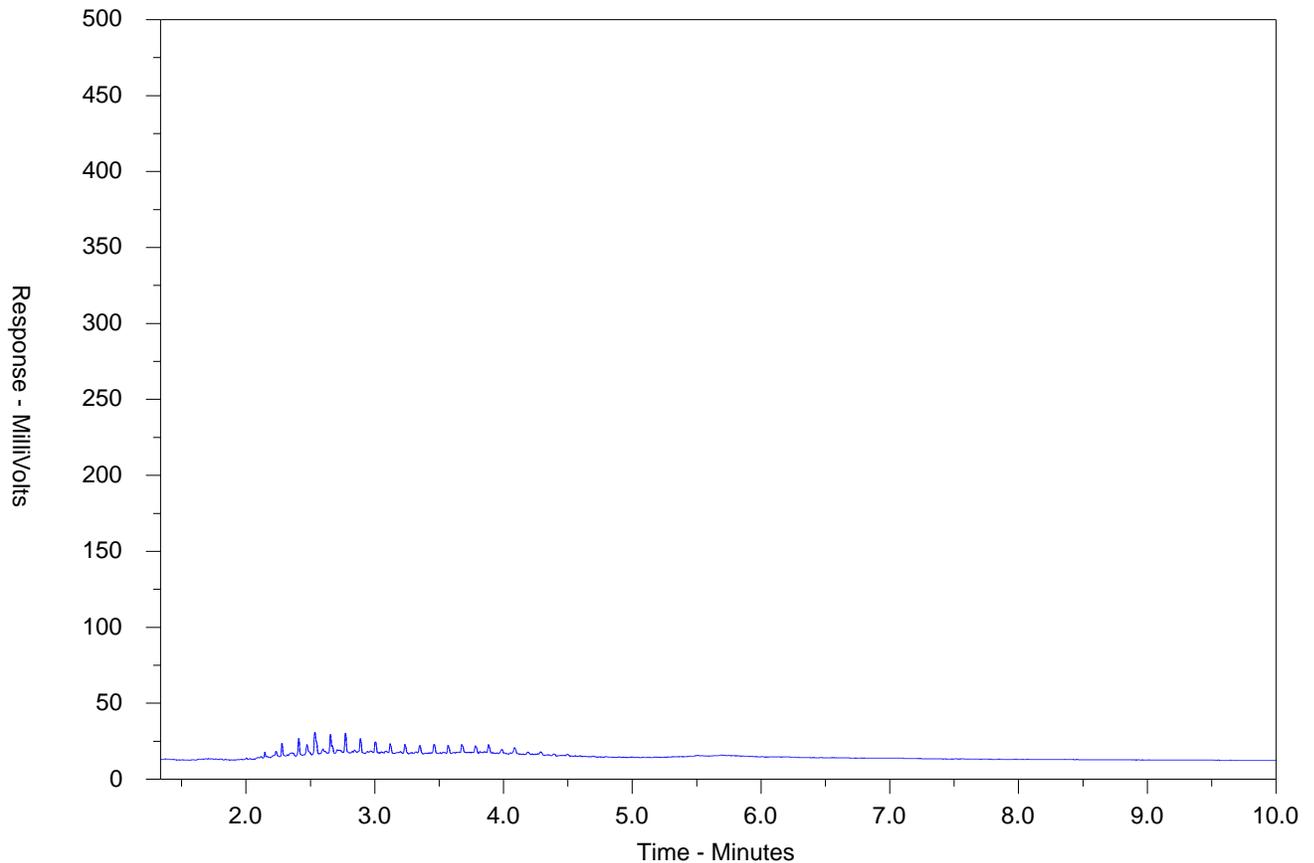
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-021-E601.SG-L  
 Client Sample ID: BH7 S9



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

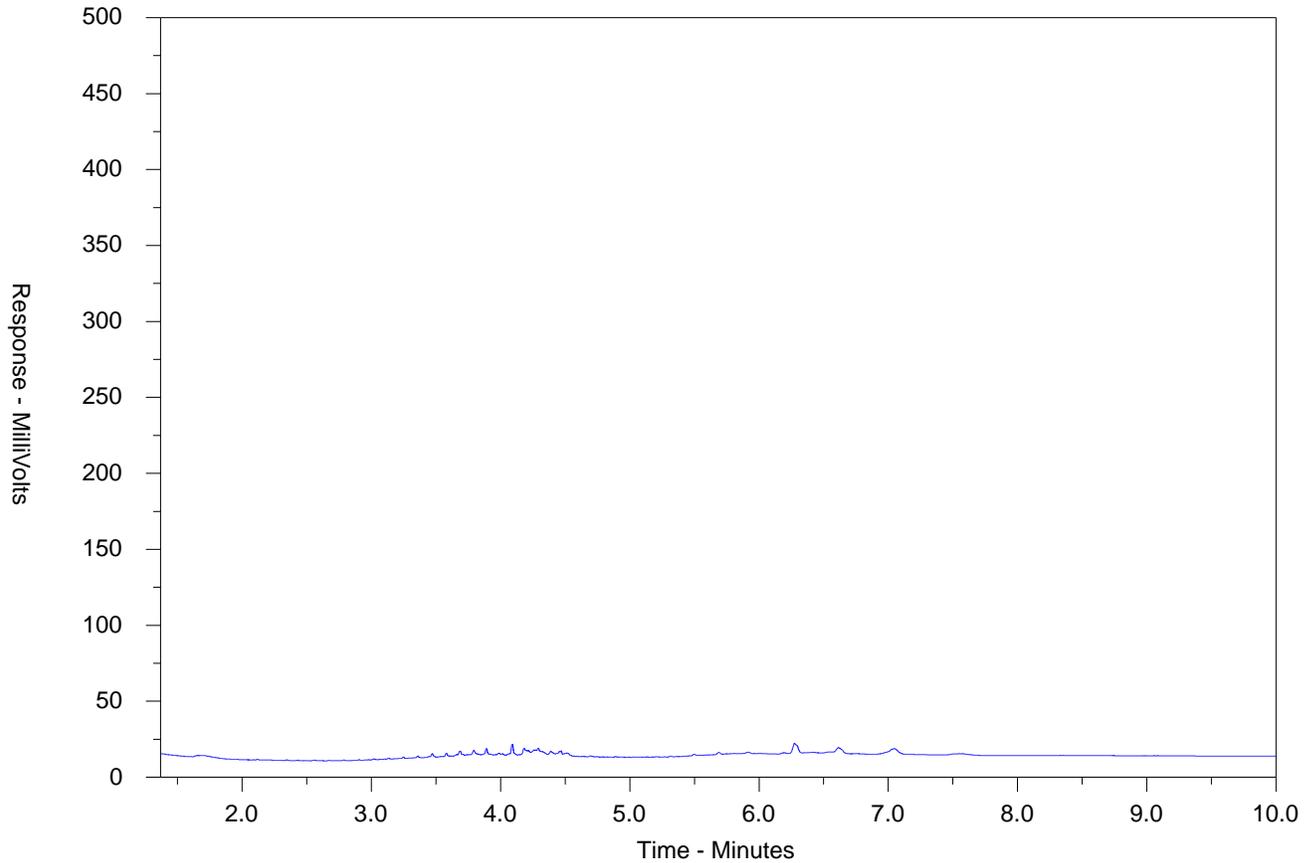
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-022-E601.SG-L  
 Client Sample ID: BH8 S1



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

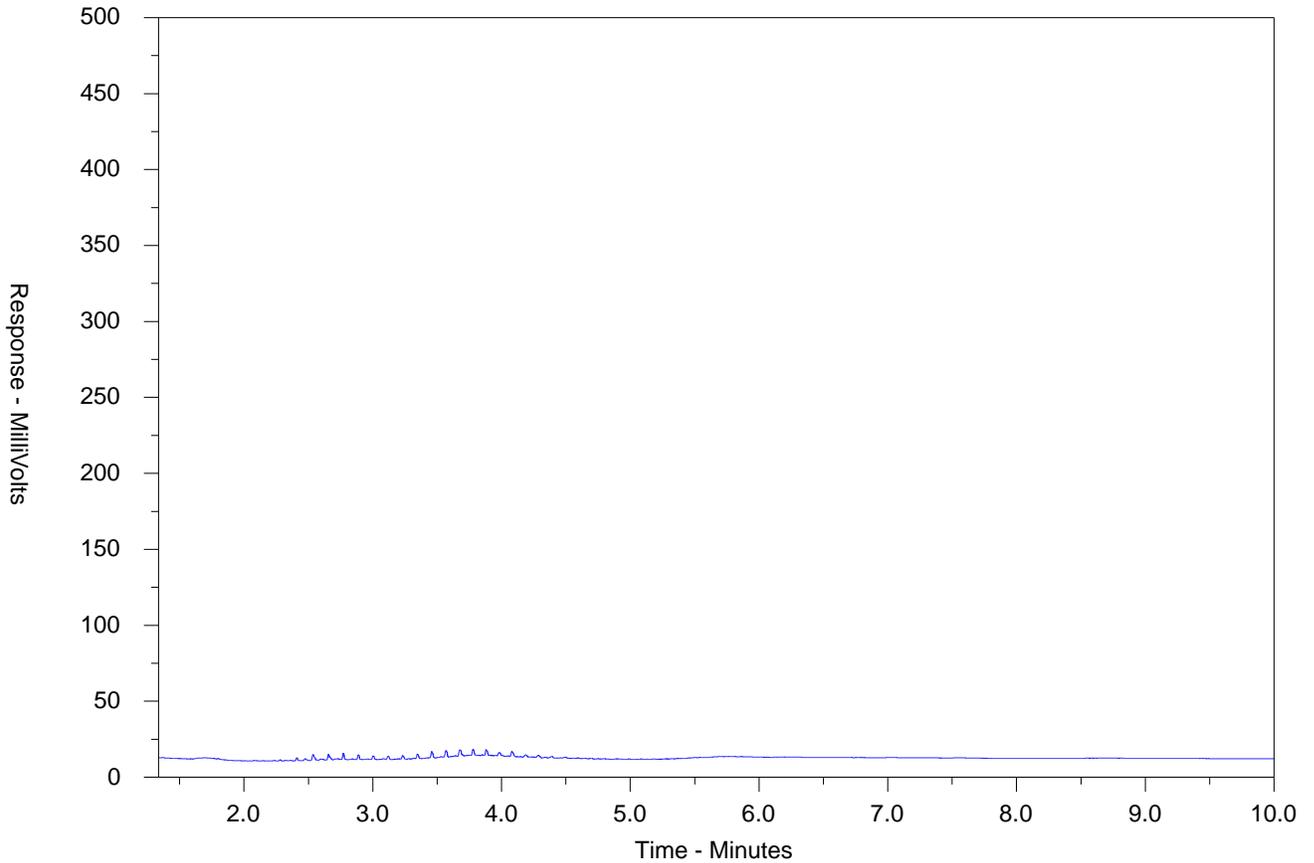
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-023-E601.SG-L  
 Client Sample ID: BH8 S2



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

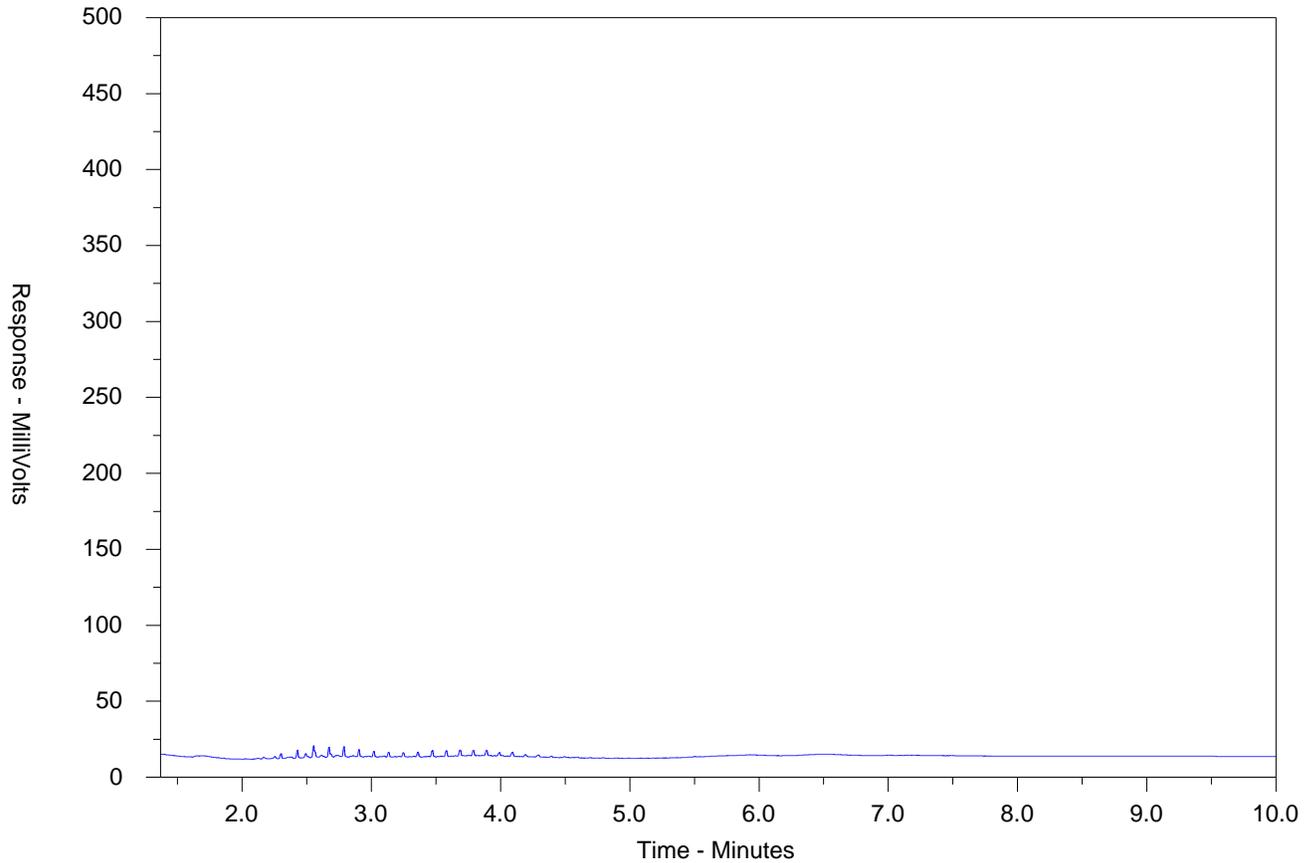
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-024-E601.SG-L  
 Client Sample ID: BH8 S3



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

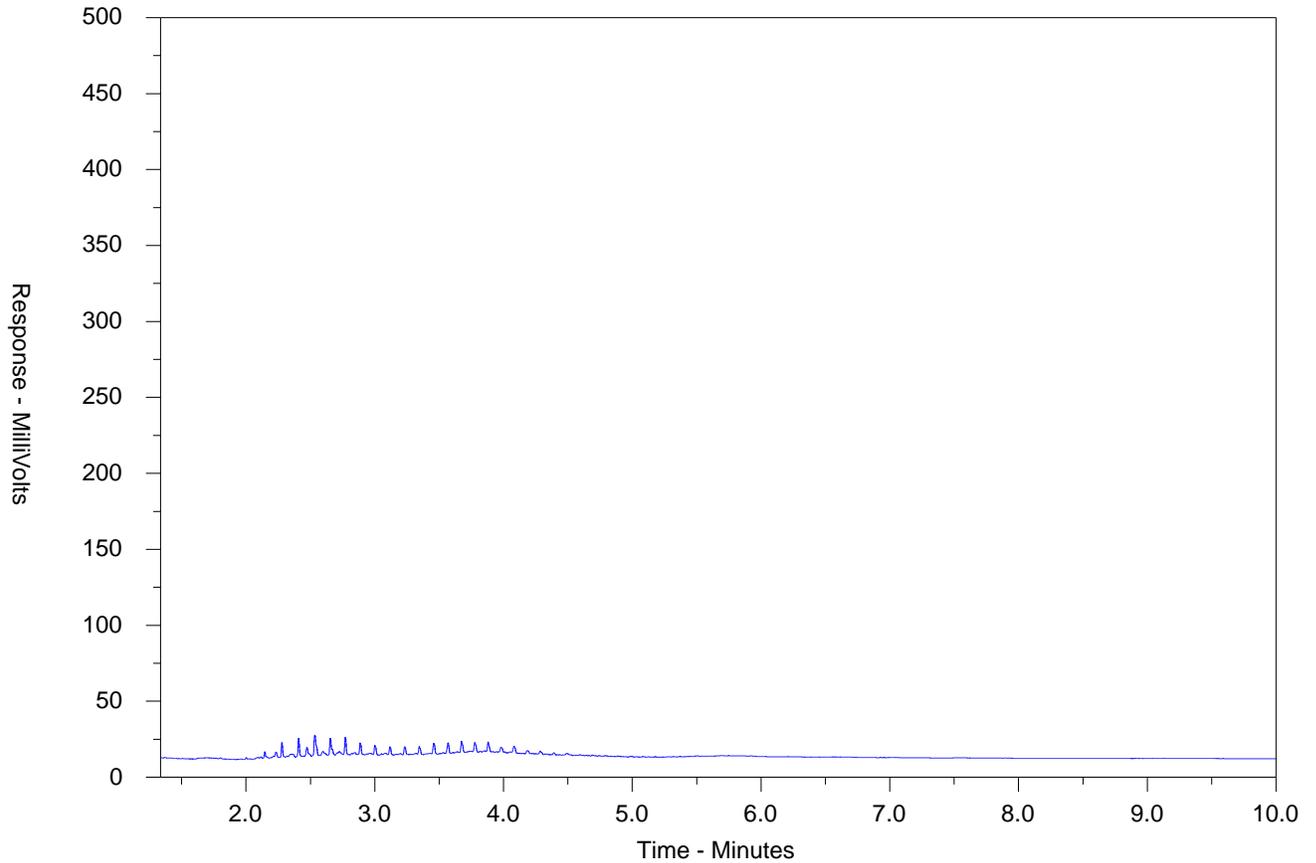
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-025-E601.SG-L  
 Client Sample ID: BH8 S4



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

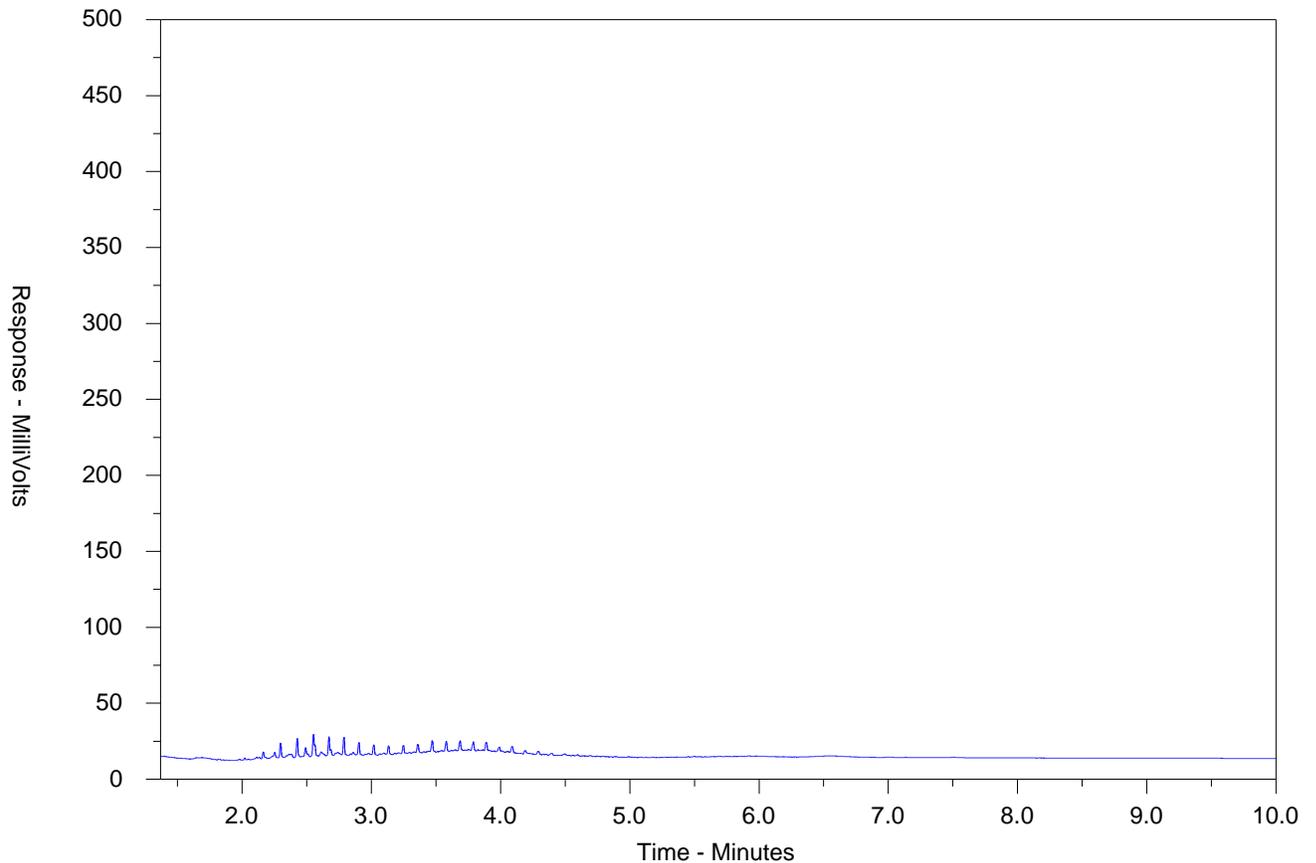
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-026-E601.SG-L  
 Client Sample ID: BH8 S5



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

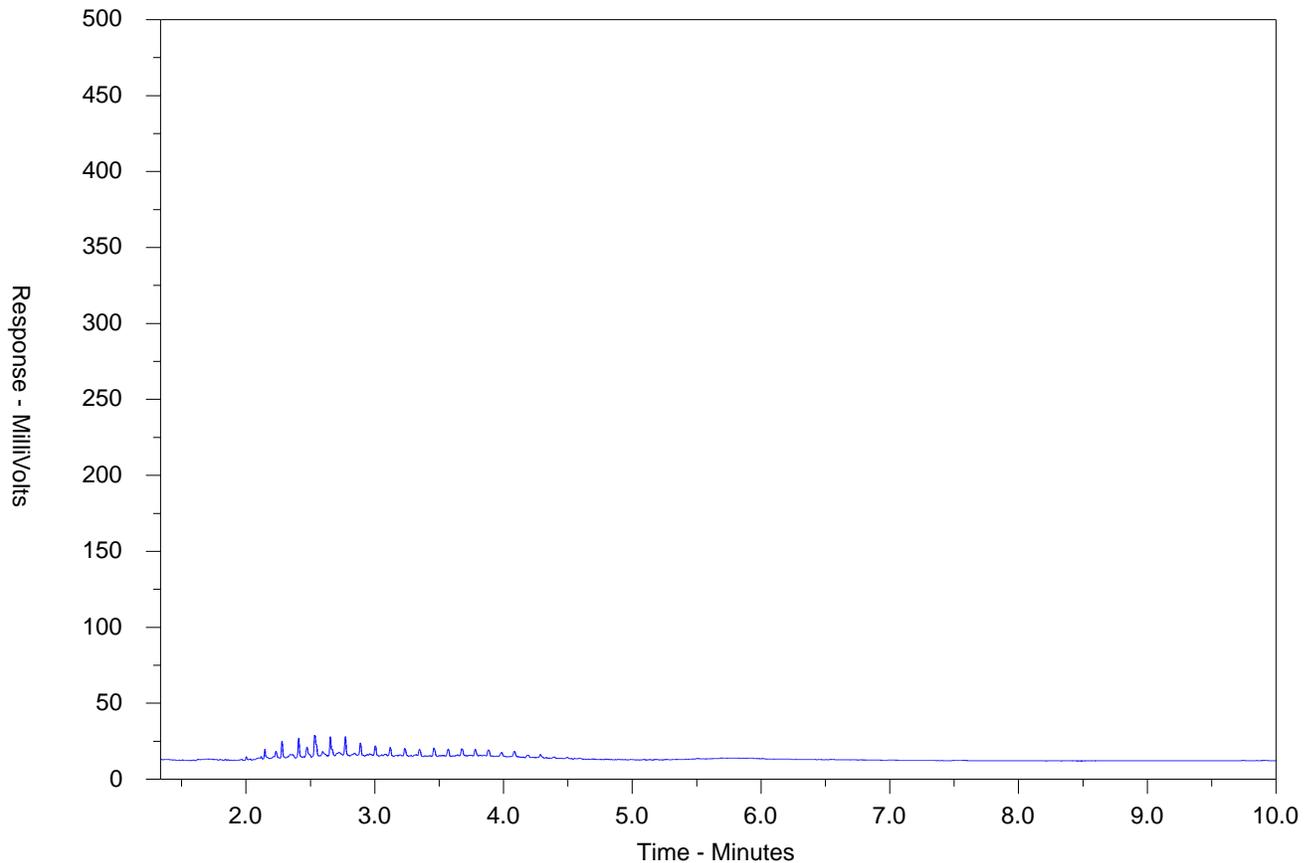
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-027-E601.SG-L  
 Client Sample ID: BH8 S6



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

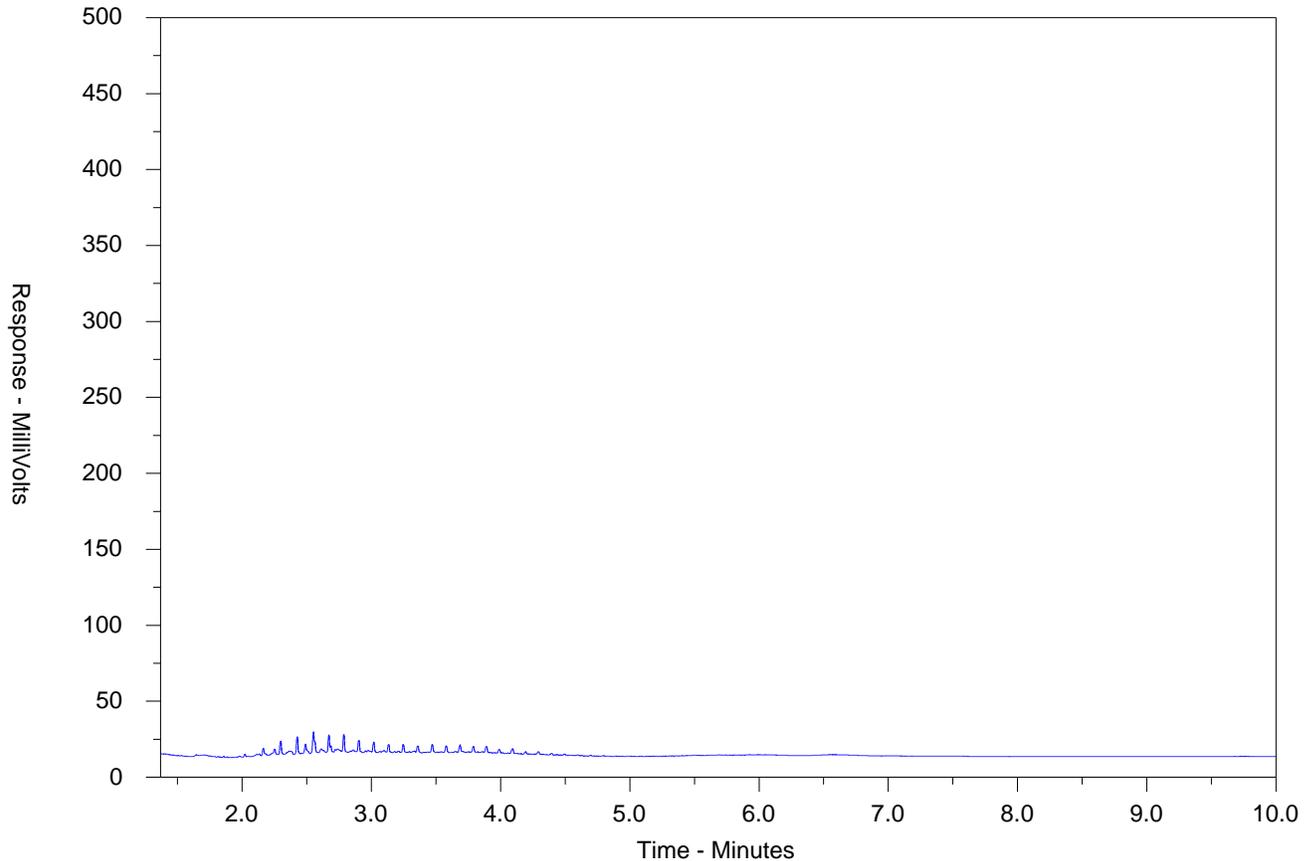
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-028-E601.SG-L  
 Client Sample ID: BH8 S7



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

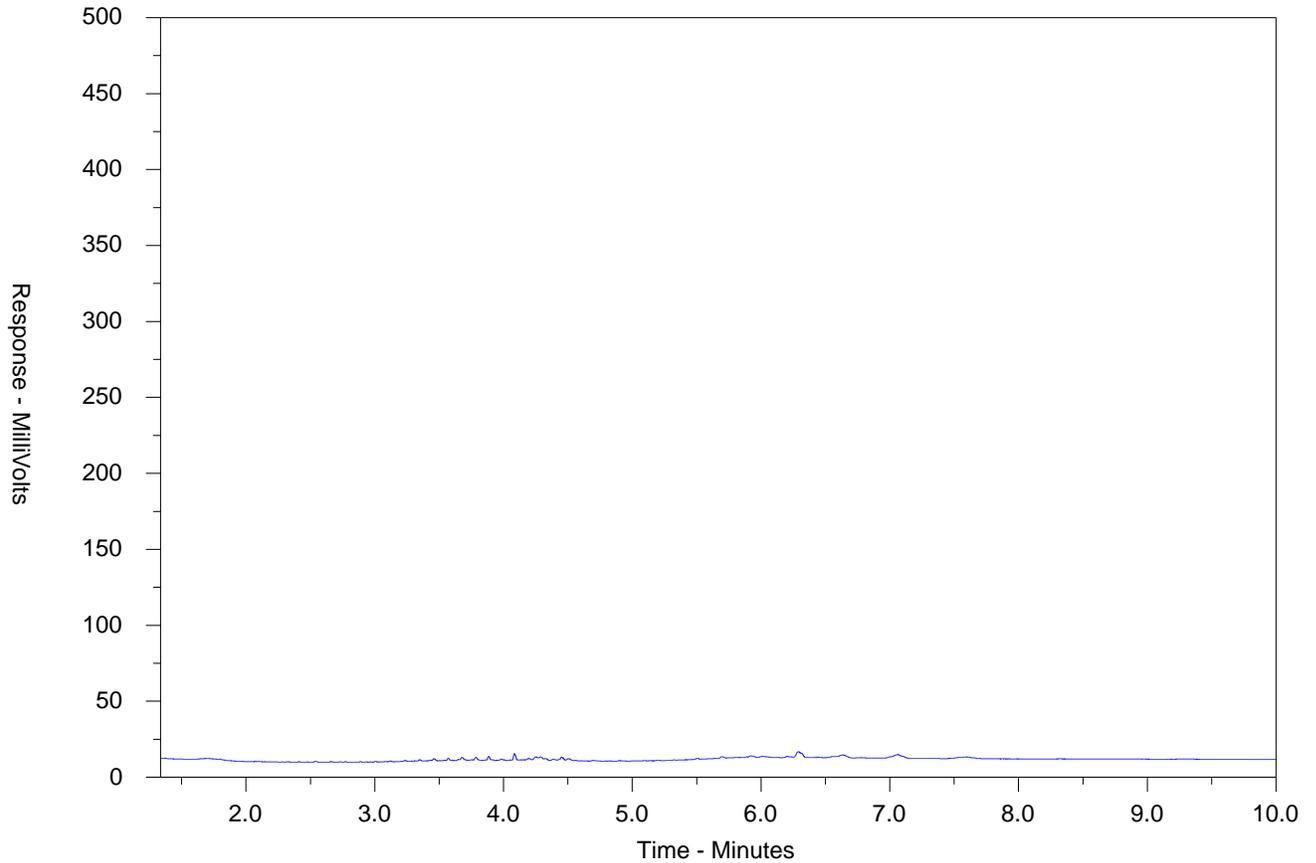
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-029-E601.SG-L  
 Client Sample ID: BH9 S1



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

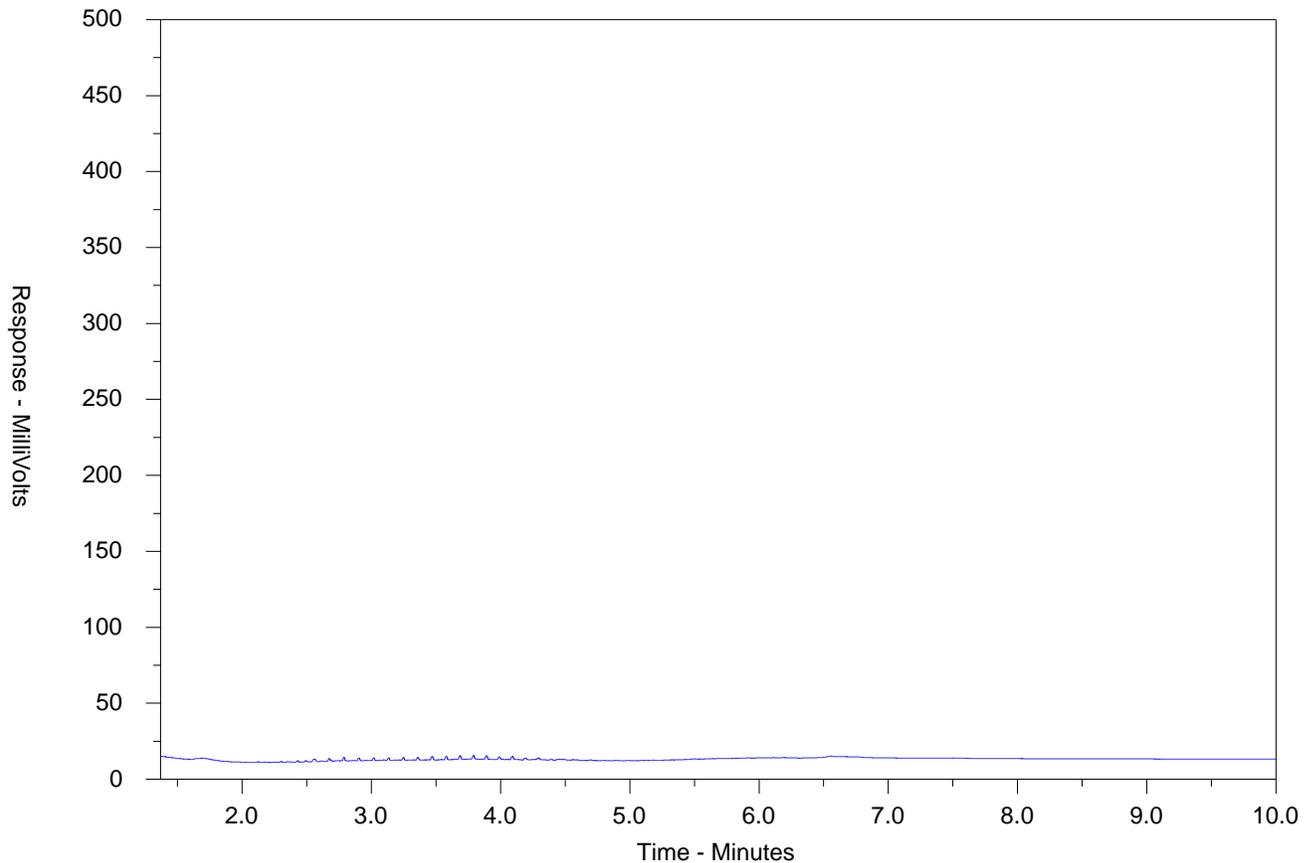
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-030-E601.SG-L  
 Client Sample ID: BH9 S2



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

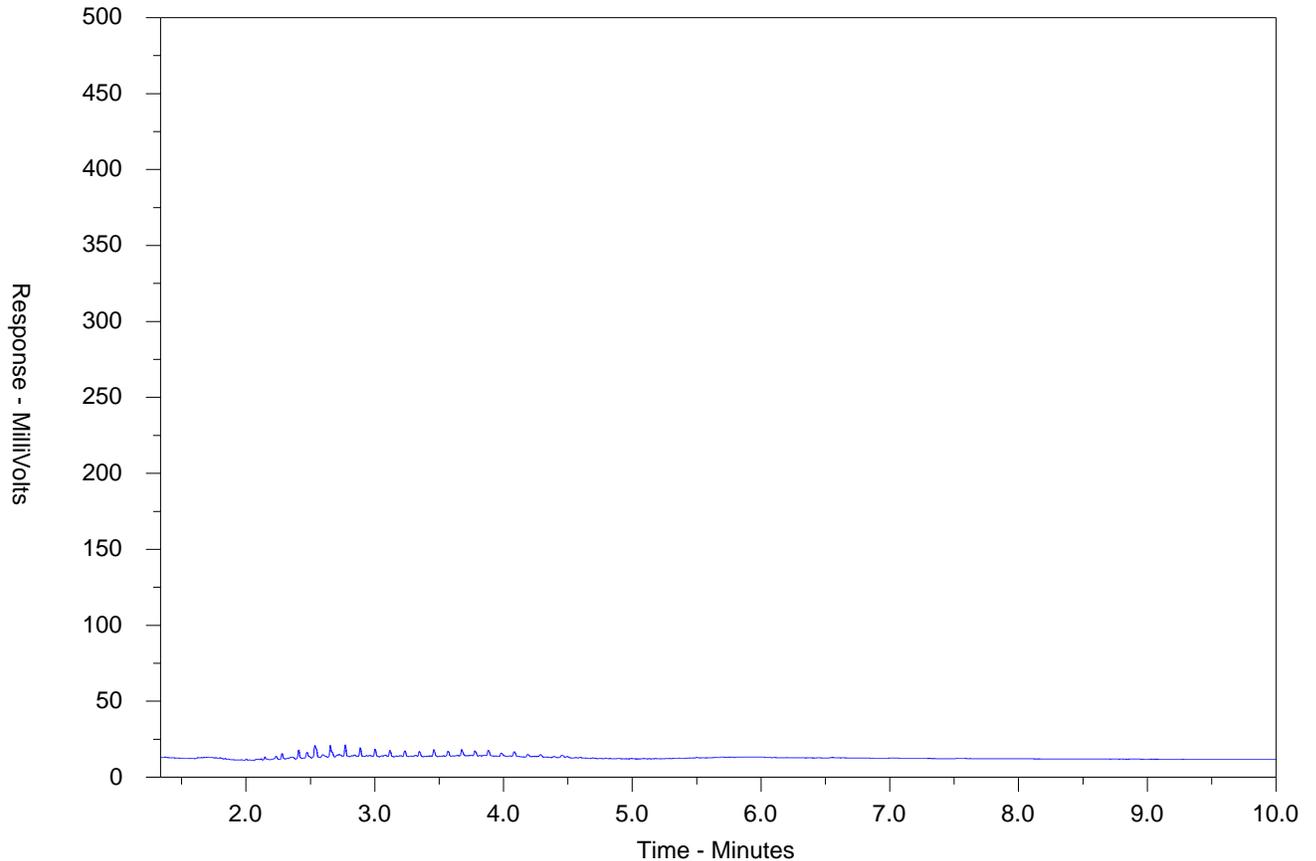
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-031-E601.SG-L  
 Client Sample ID: BH9 S3



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

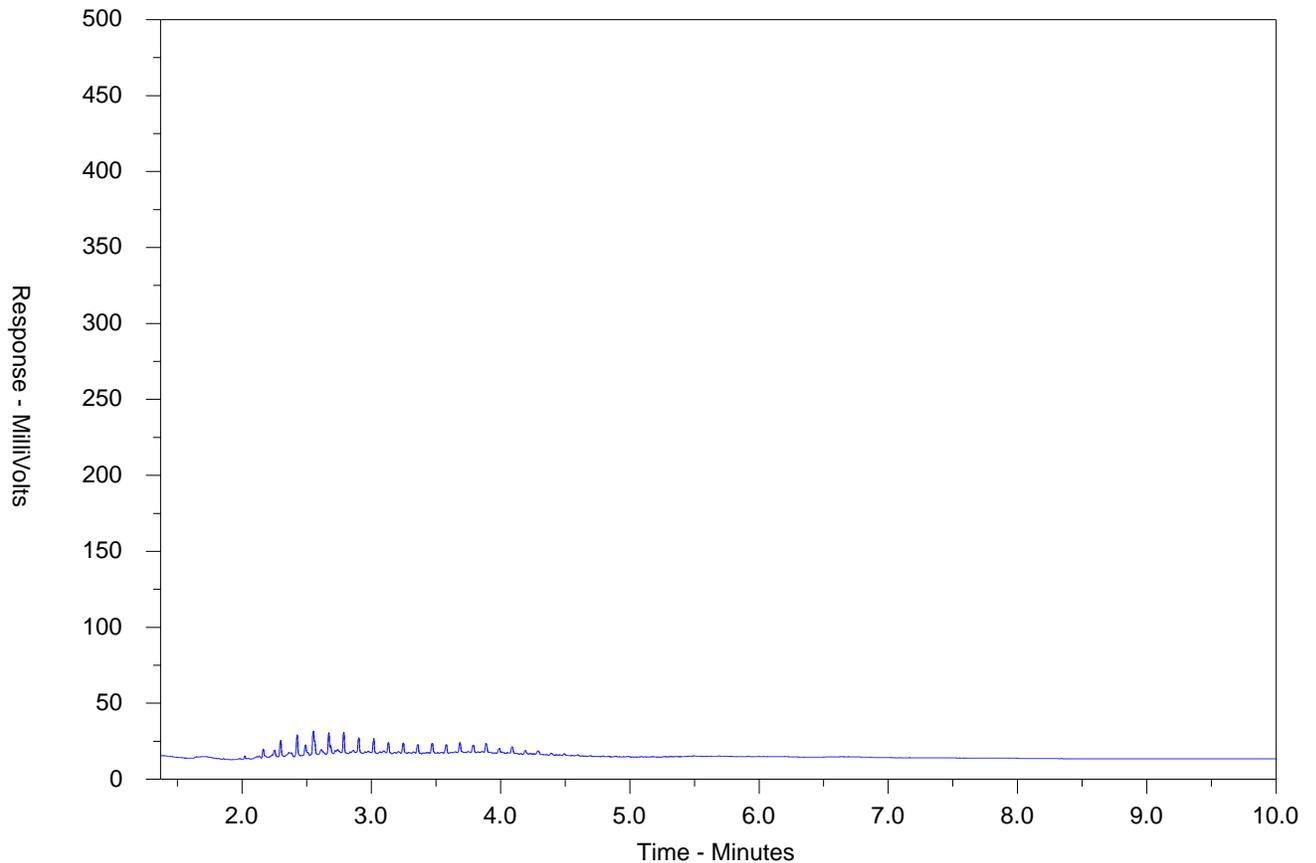
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-032-E601.SG-L  
 Client Sample ID: BH9 S4



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

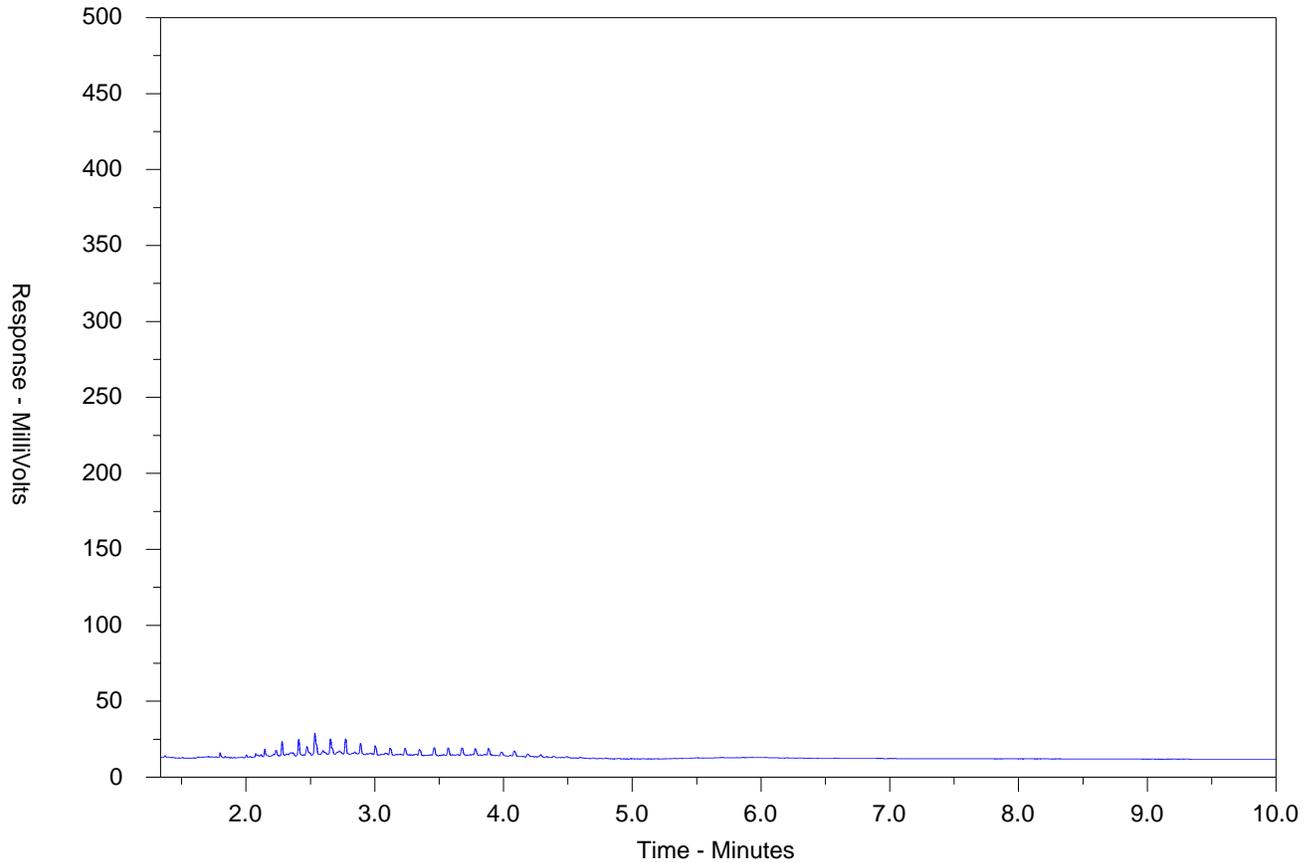
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-033-E601.SG-L  
 Client Sample ID: BH9 S5



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

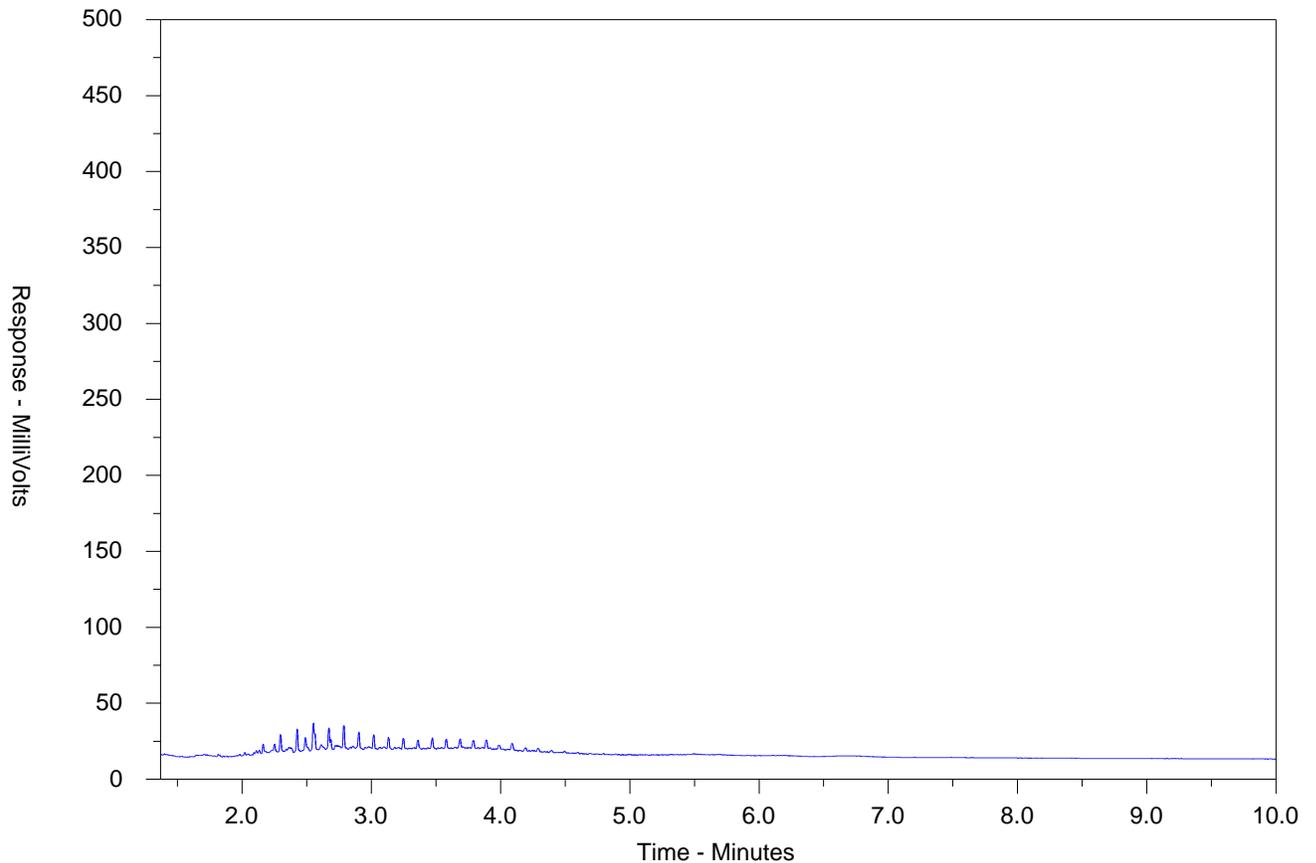
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-034-E601.SG-L  
 Client Sample ID: BH9 S6



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

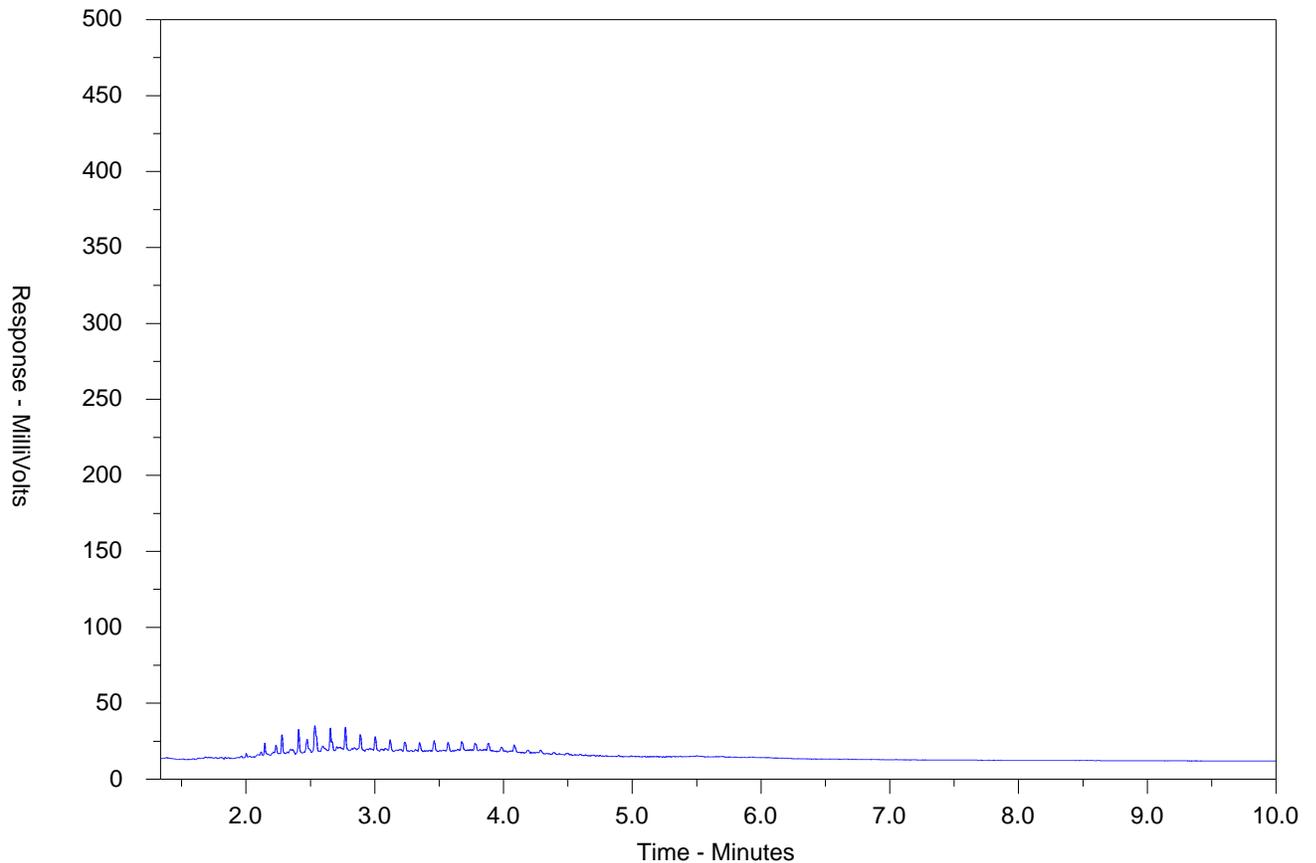
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-035-E601.SG-L  
 Client Sample ID: BH9 S7



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

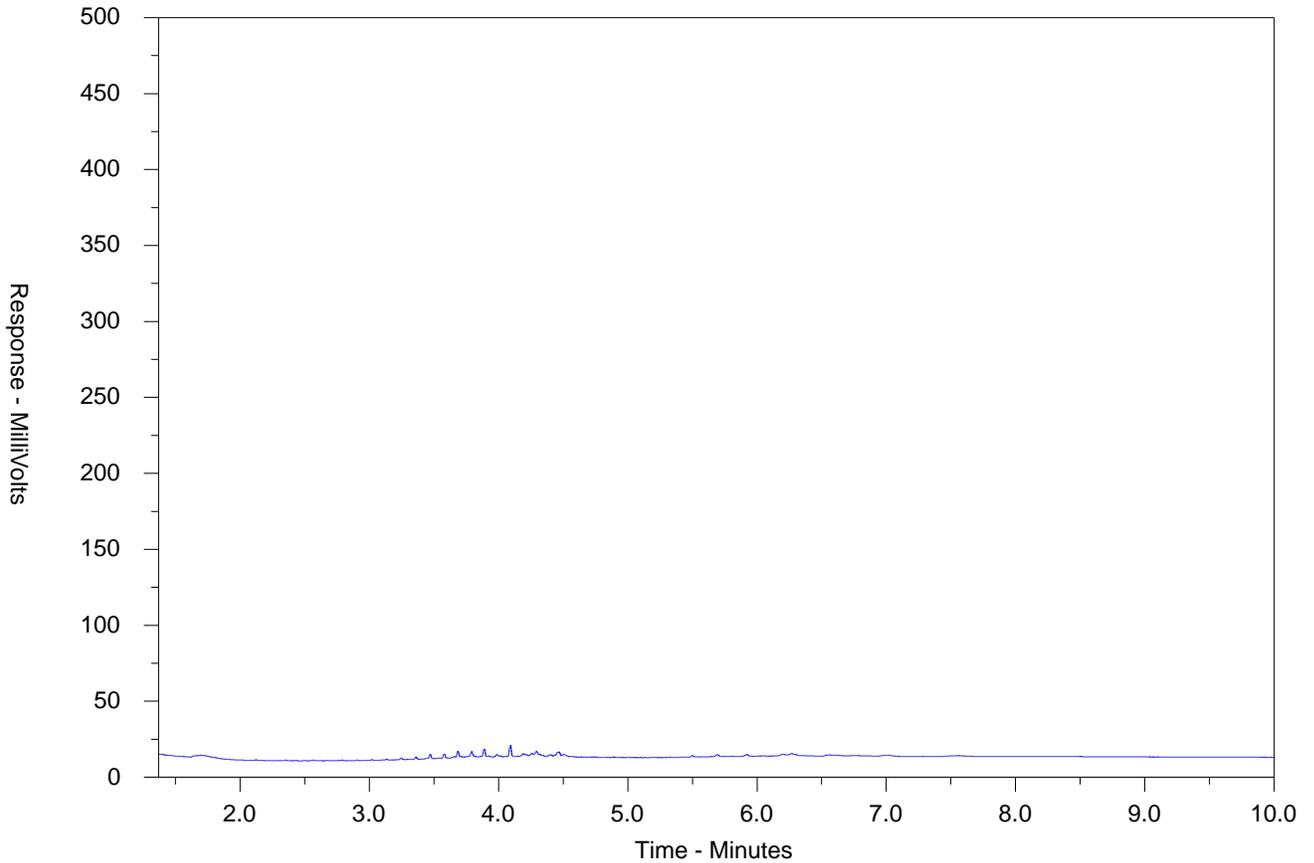
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-036-E601.SG-L  
 Client Sample ID: BH10 S1



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

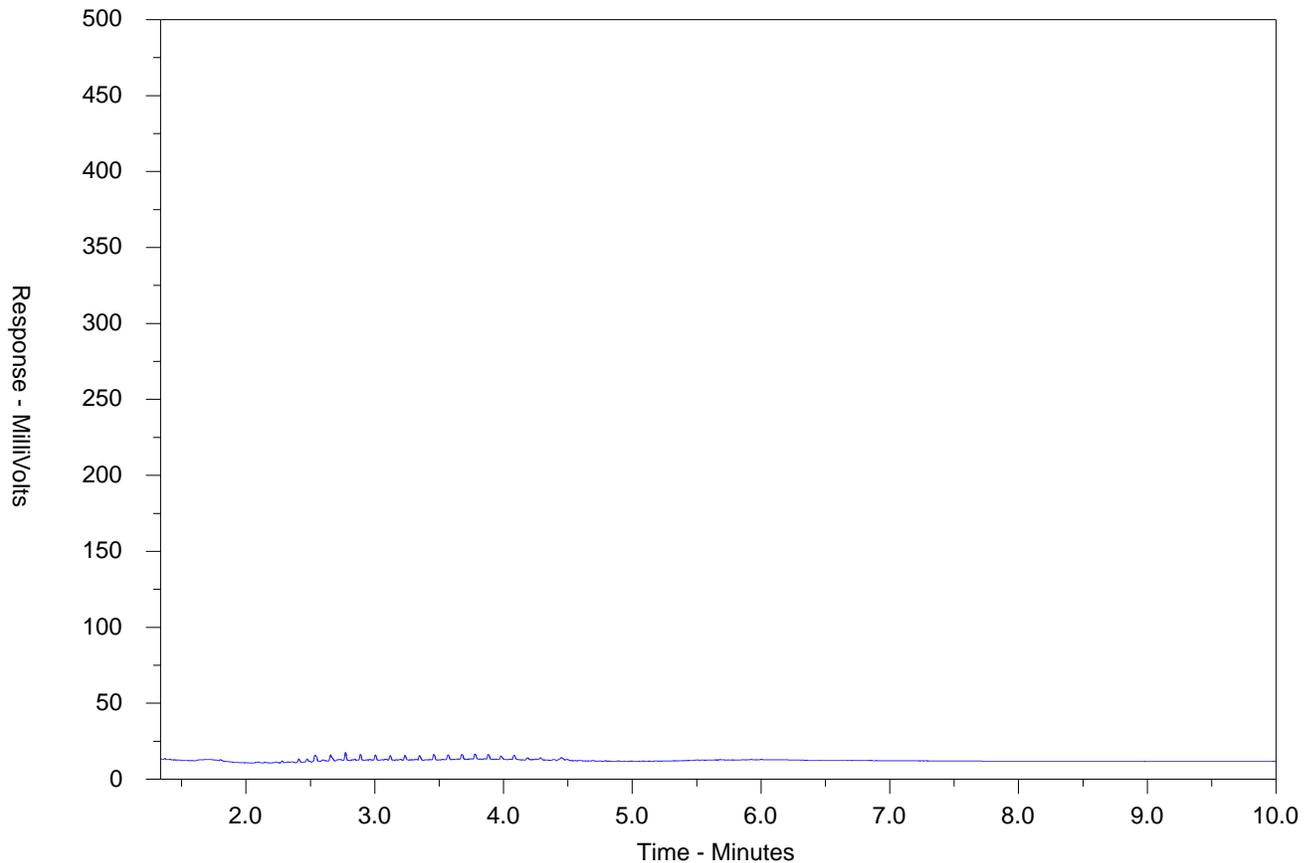
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-037-E601.SG-L  
 Client Sample ID: BH10 S2



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

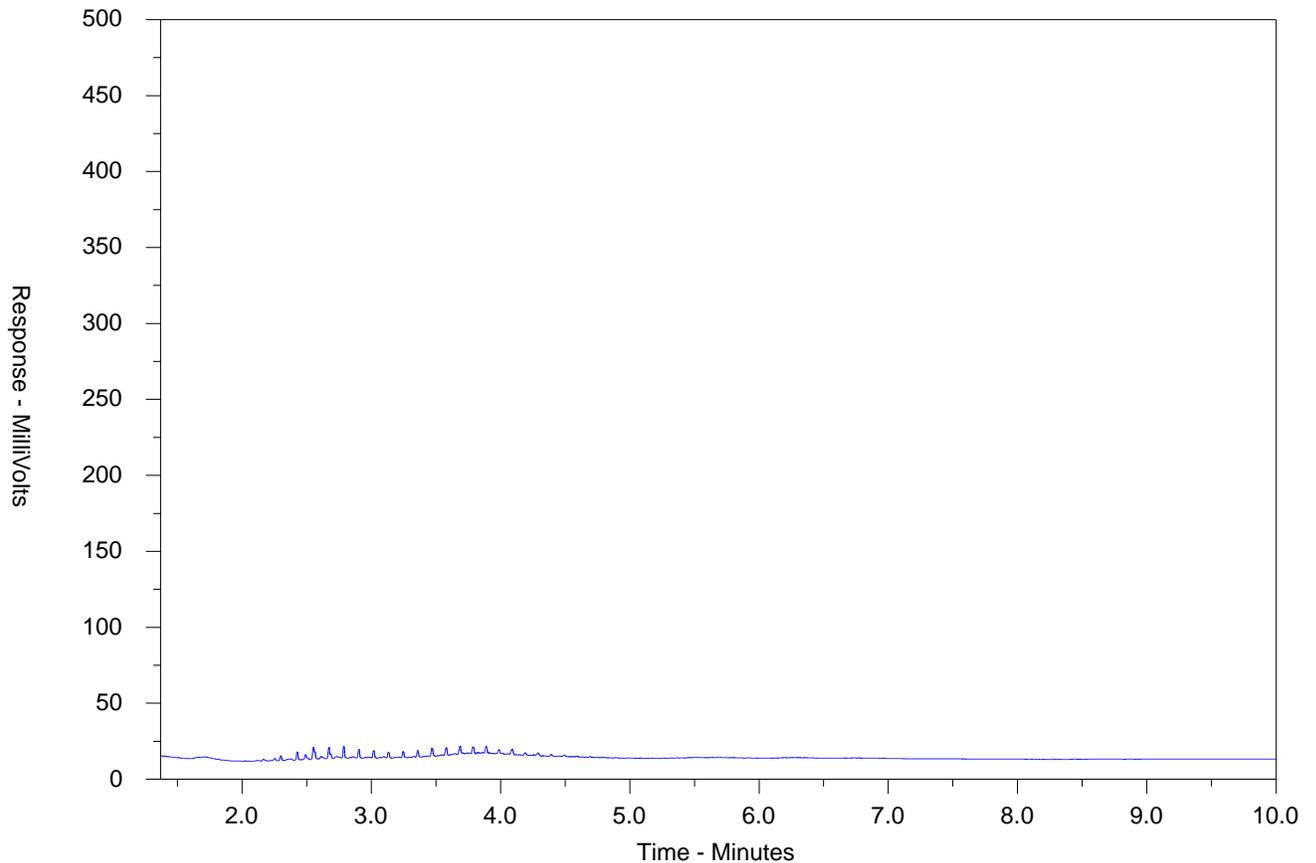
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-038-E601.SG-L  
 Client Sample ID: BH10 S3



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

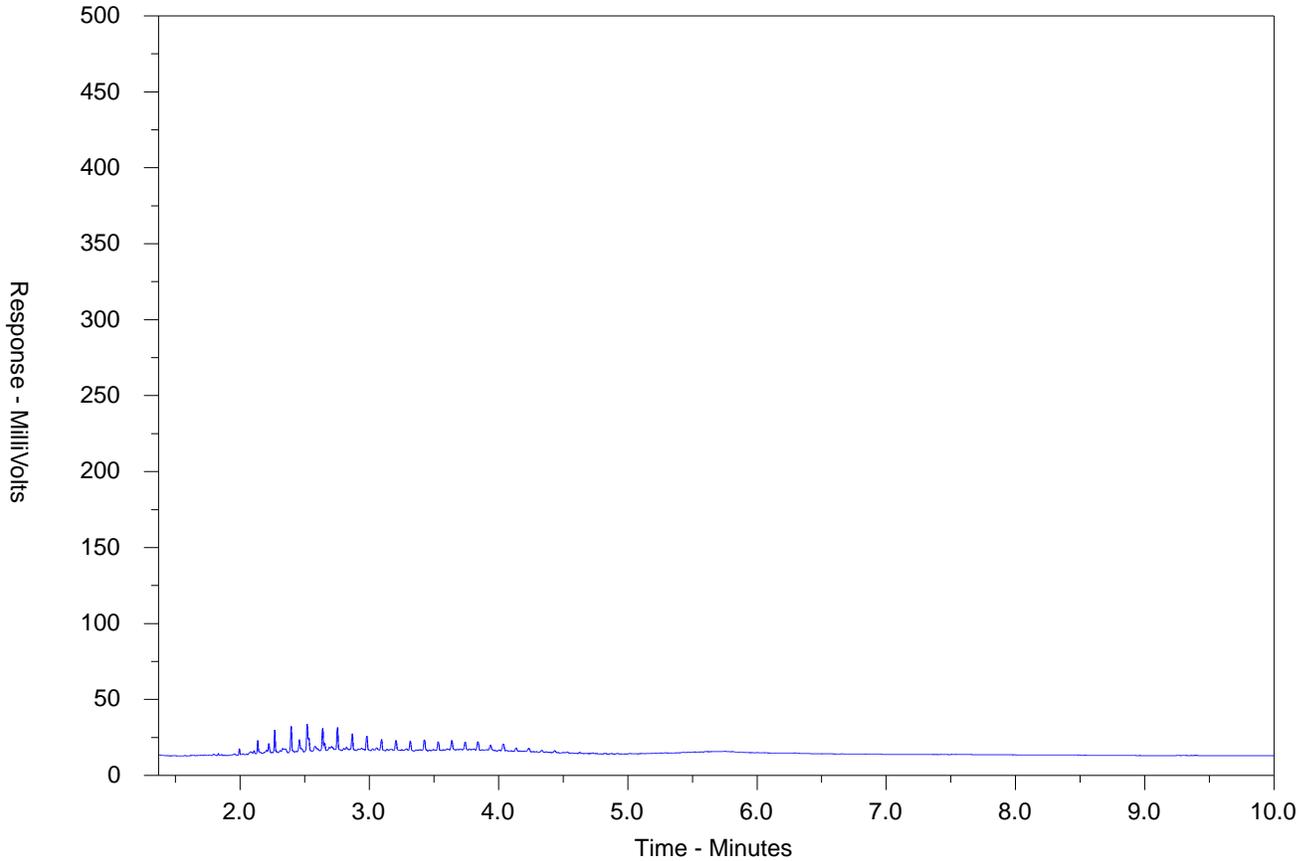
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-039-E601.SG-L  
 Client Sample ID: BH10 S4



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

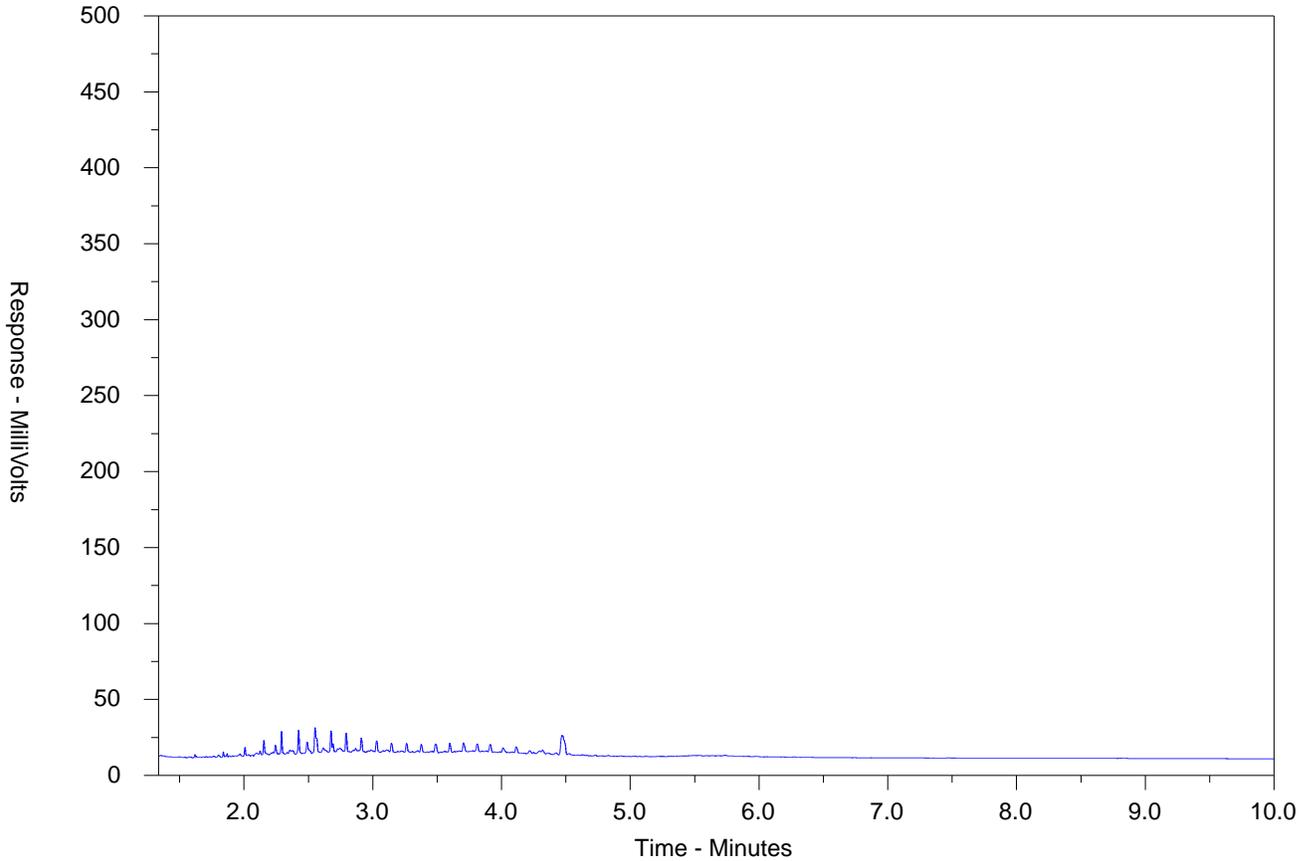
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-040-E601.SG-L  
 Client Sample ID: BH10 S5



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

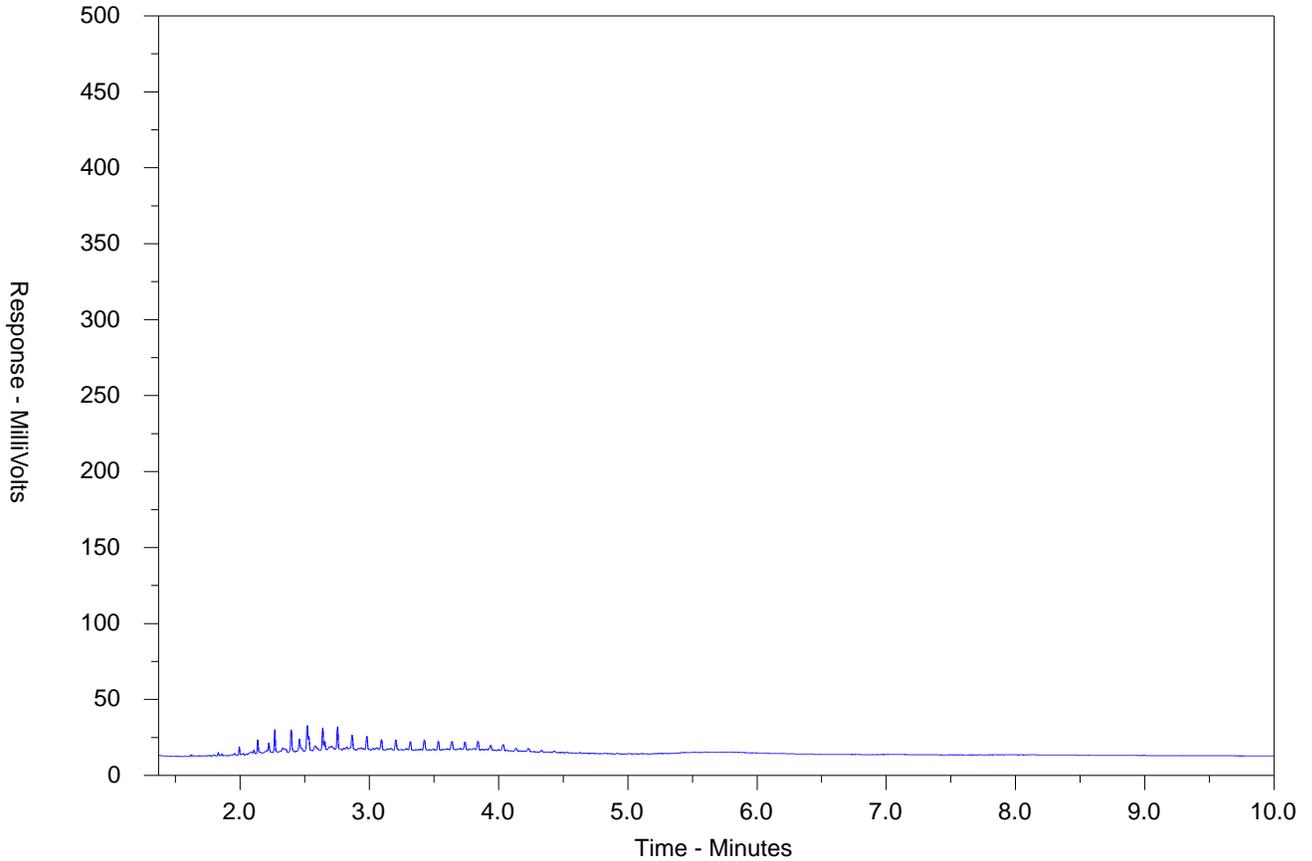
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-041-E601.SG-L  
 Client Sample ID: BH10 S6



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

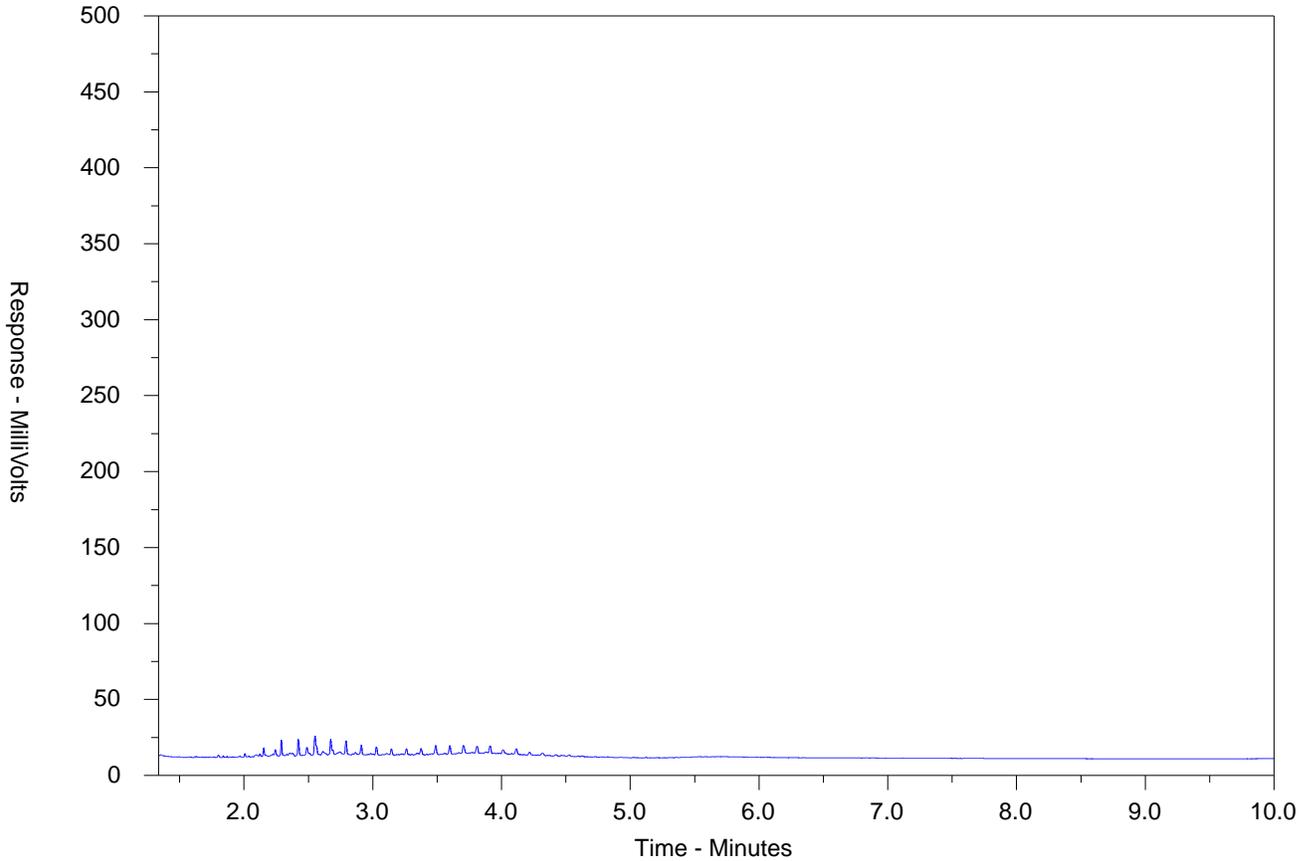
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-042-E601.SG-L  
 Client Sample ID: BH10 S7



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

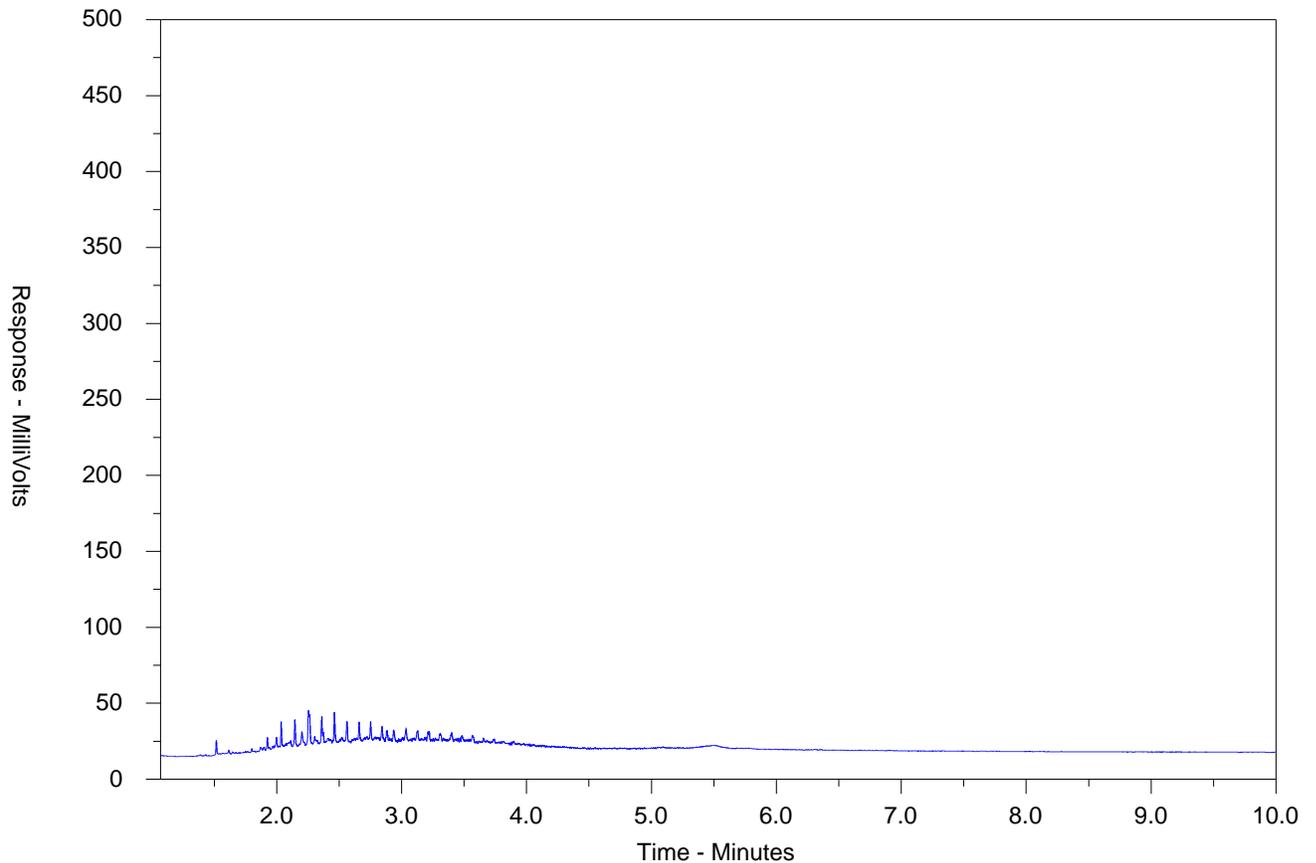
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-043-E601.SG-L  
 Client Sample ID: DUP-S-1



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

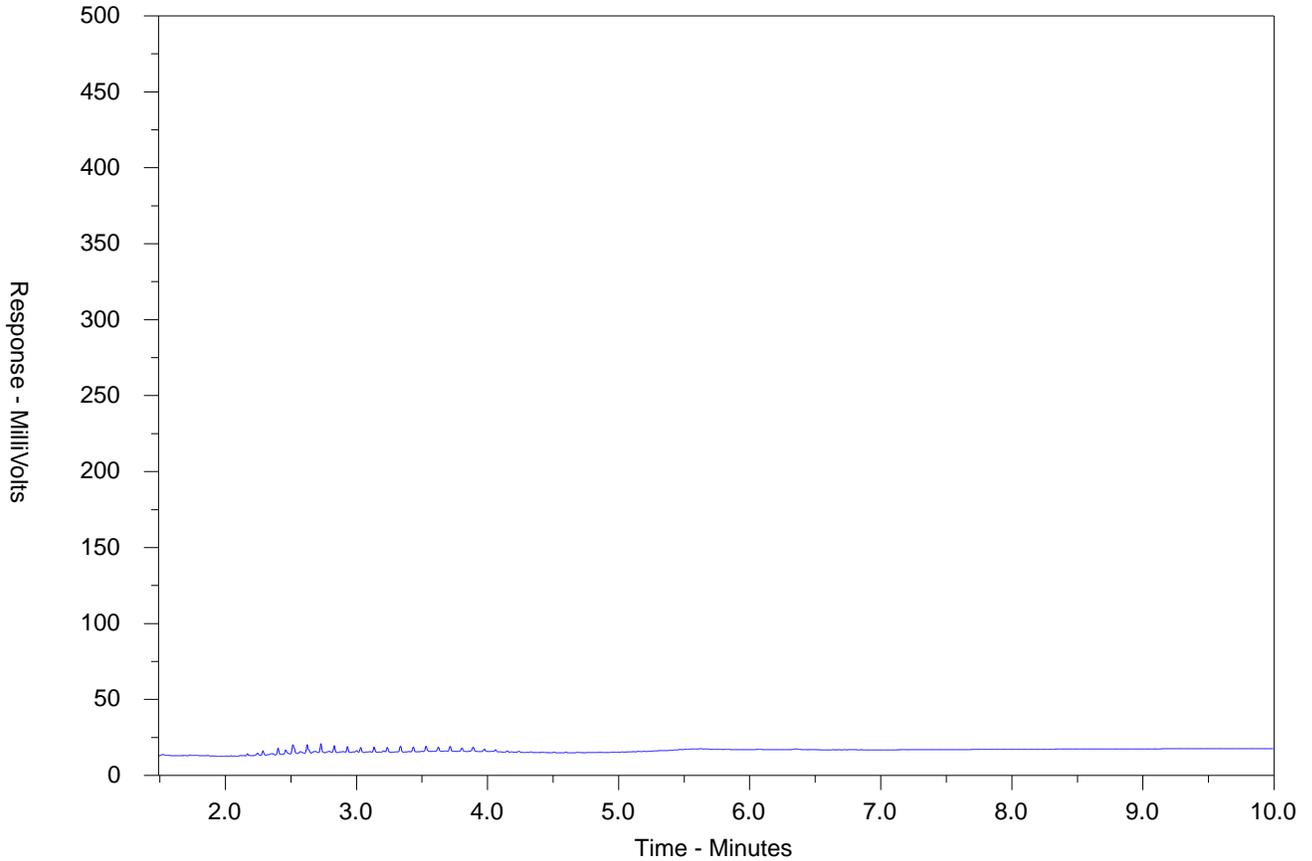
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-044-E601.SG-L  
 Client Sample ID: DUP-S-2



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

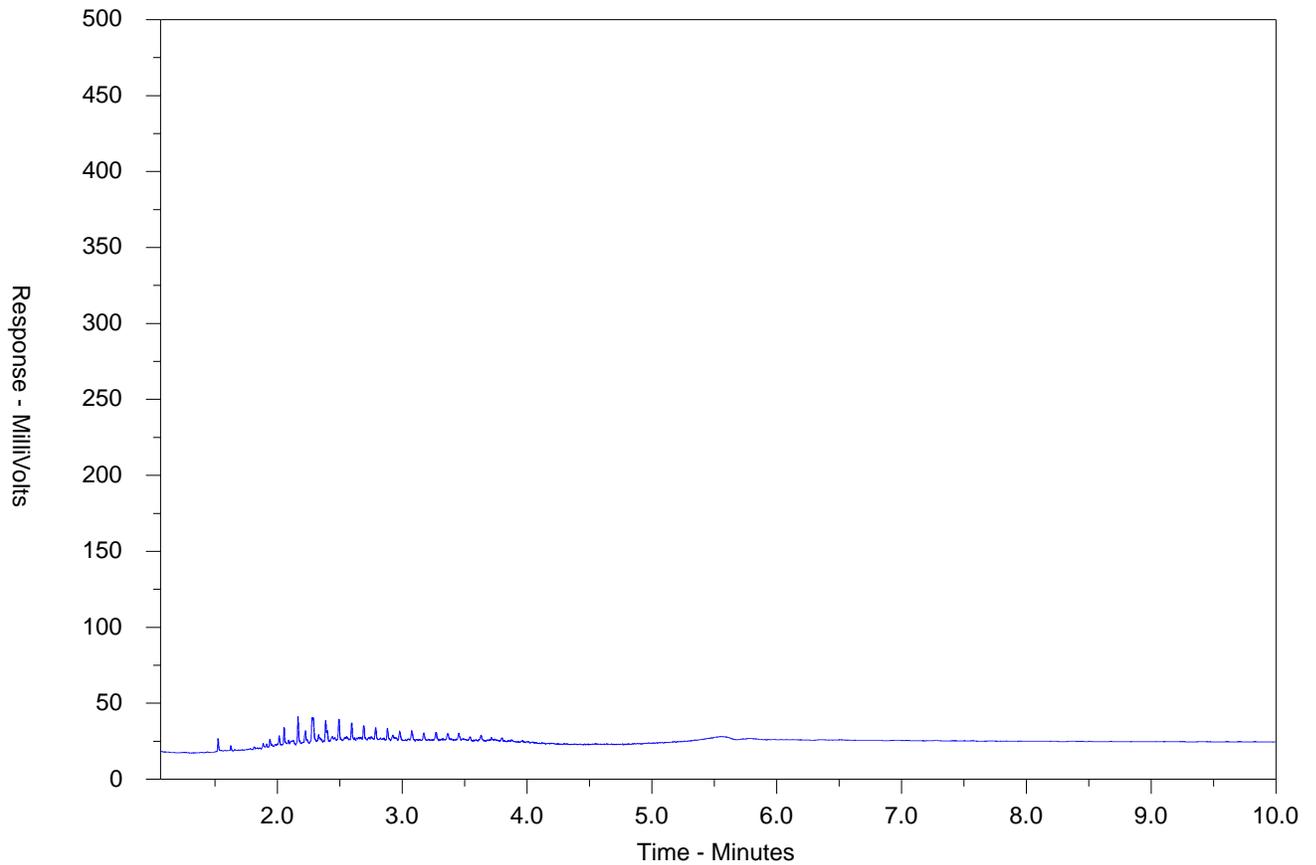
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-045-E601.SG-L  
 Client Sample ID: DUP-S-3



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50		
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

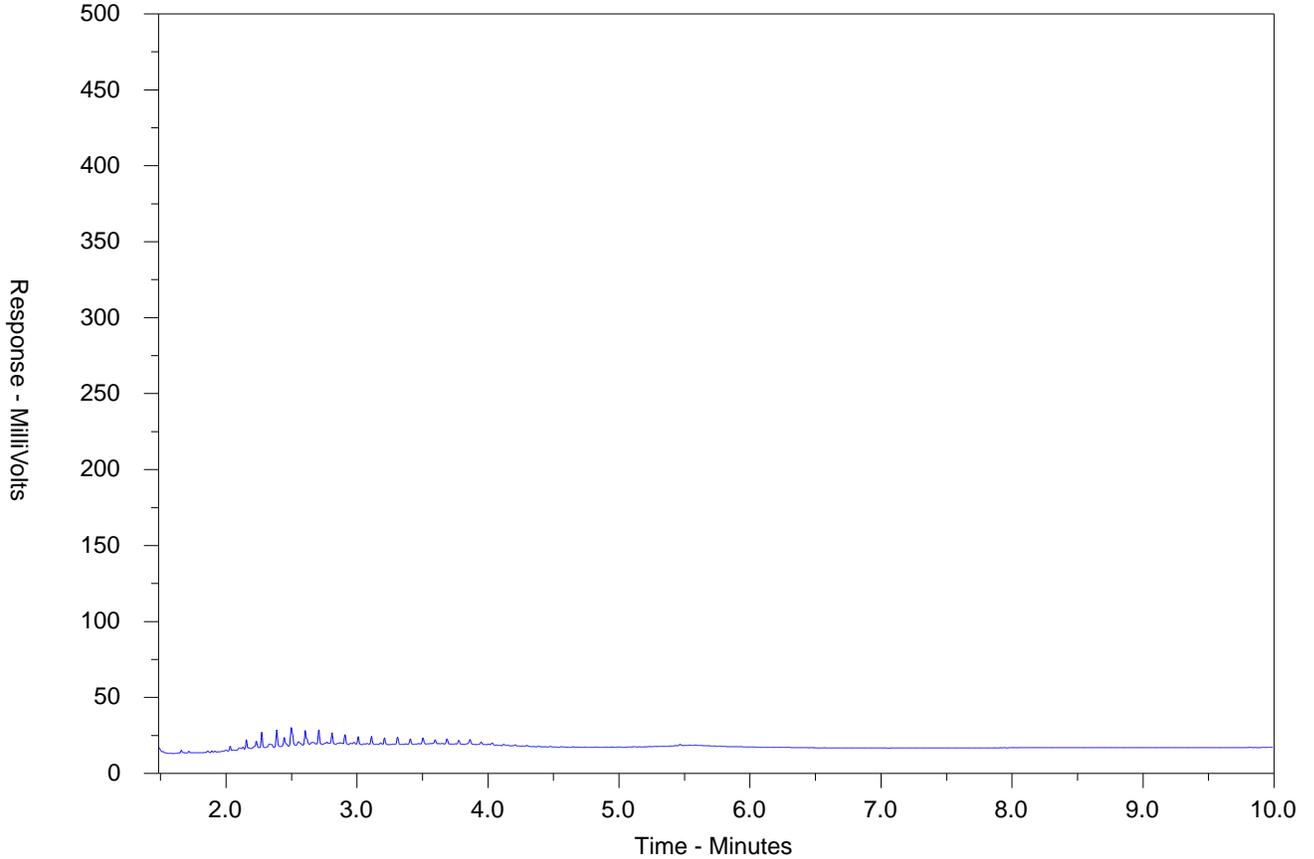
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: WT2521286-046-E601.SG-L  
 Client Sample ID: DUP-S-4



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
← Gasoline →			← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

**Note:** This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at [www.alsglobal.com](http://www.alsglobal.com).

SOL-361/362/363

VS-089/091

Chain of Custody (COC) / Analytical Request Form

COC Number: 20-1075399

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Canada Toll Free: 1 800 668 9878



www.alsglobal.com

Environmental Division  
Waterloo  
Work Order Reference  
WT2521286



Telephone: +1 519 886 6910

**Report To**  
 Company: Kinglobe  
 Contact: Emily Brook  
 Phone: [blank]  
 Street: 47 Etter Rd  
 City/Province: London  
 Postal Code: [blank]  
 Invoice To: Same as Report To  YES  NO  
 Copy of Invoice with Report  YES  NO  
 Company: [blank]  
 Contact: [blank]

**Project Information**  
 ALS Account # / Quote #: Excess Soil  
 Job #: 0250601  
 PO / AFE: [blank]  
 LSD: [blank]

**ALS Lab Work Order # (ALS use only):** [blank]

**Sample Identification and/or Coordinates**  
 (This description will appear on the report)

**Reports / Recipients**  
 Select Report Format: PDF  EXCEL  EDD (DIGITAL)  
 Merge QC/QCI Reports with COA  YES  NO  N/A  
 Compare Results to Criteria on Report - provide details below, if box checked  
 Select Distribution: EMAIL  MAIL  FAX  
 Email 1 or Fax: Emily.brook@kinglobe.com  
 Email 2: Mike.Arthur@kinglobe.com  
 Email 3: Zaher.Sahar@kinglobe.com

**Invoice Recipients**  
 Select Invoice Distribution: EMAIL  MAIL  FAX  
 Email 1 or Fax: Johanne  
 Email 2: [blank]

**Oil and Gas Required Fields (client use)**  
 AFE/Cost Center: [blank]  
 Major/Minor Code: [blank]  
 Requisitioner: [blank]  
 Location: [blank]

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mm-yy)	Time (hh:mm)	Sampler:
BH1 S1		2025/07/23	09:10	Soil
BH1 S6			09:50	
BH2 S2			10:10	
BH2 S4			10:22	
BH2 S7			10:45	
BH3 S2			11:05	
BH3 S6			11:35	
BH4 S2			12:10	
BH4 S7			12:50	
BH5 S1			13:05	
BH5 S6			13:40	
BH6 S1+2			14:05	

**Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)**  
 153/64 - Table 1  
 406/14 - All tables

**Drinking Water (DW) Samples (client use)**  
 YES  NO  
 Are samples taken from a Regulated DW System?  
 YES  NO  
 Are samples for human consumption/ use?  
 YES  NO

**SHIPPING RELEASE (client use)**  
 Released by: [Signature] Date: 2025/08/01  
 Time: [blank]

**INITIAL SHIPMENT RECEPTION (ALS use only)**  
 Received by: P. Talbot Date: 1 Aug-25  
 Time: 16:40

**WHITE - LABORATORY COPY**  
 Received by: [Signature] Date: 08/05  
 Time: 18:00

**Turnaround Time (TAT) Requested**  
 Routine [R] if received by 3pm M-F - no surcharges apply  
 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum  
 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum  
 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum  
 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum  
 Same day [E2] if received by 10am M-F - 200% rush surcharge. Additio may apply to rush requests on weekends, statutory holidays and non-rout

**Date and Time Required for all E&P TATs:**  
 For all tests with rush TATs requested, please cor

**Analysis Reqt**  
 Indicate Filtered (F), Preserved (P) or Filtered and I

**NUMBER OF CONTAINERS**

ALS Sample #	Sample Type	Time	Sampler
BH1 S1	Soil	09:10	
BH1 S6		09:50	
BH2 S2		10:10	
BH2 S4		10:22	
BH2 S7		10:45	
BH3 S2		11:05	
BH3 S6		11:35	
BH4 S2		12:10	
BH4 S7		12:50	
BH5 S1		13:05	
BH5 S6		13:40	
BH6 S1+2		14:05	

**SAMPLE RECEIPT DETAILS (ALS use only)**  
 Cooling Method: NONE  ICE  ICE PACKS  FROZEN  COOLING INITIATED  
 Submission Comments identified on Sample Receipt Notification: YES  NO   
 Cooler Custody Seals Intact: YES  NO  N/A   
 Sample Custody Seals Intact: YES  NO  N/A   
 FINAL COOLER TEMPERATURES °C: 6.2, 7.5, 8.5, 6.7, 4.9, 6.6, 4.1

**SAMPLES ON HOLD**

ALS Sample #	Sample Identification and/or Coordinates	Date	Time	Sampler
BH1 S1		2025/07/23	09:10	Soil
BH1 S6			09:50	
BH2 S2			10:10	
BH2 S4			10:22	
BH2 S7			10:45	
BH3 S2			11:05	
BH3 S6			11:35	
BH4 S2			12:10	
BH4 S7			12:50	
BH5 S1			13:05	
BH5 S6			13:40	
BH6 S1+2			14:05	

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1075400

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<b>Report To</b> Contact and company name below will appear on the final report Company: <u>Enbridge</u> Contact: <u>Emily Brook</u> Phone: _____ Company address below will appear on the final report Street: _____ City/Province: _____ Postal Code: _____		<b>Reports / Recipients</b> Select Report Format: <input checked="" type="checkbox"/> PDF <input type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL) Merge QC/QCI Reports with COA <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A Compare Results to Criteria on Report - provide details below if box checked Select Distribution: <input type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX Email 1 or Fax: <u>Same as pg 1</u> Email 2: _____ Email 3: _____		<b>Turnaround Time (TAT) Requested</b> <input checked="" type="checkbox"/> Routine [R] if received by 3pm M-F - no surcharges apply <input type="checkbox"/> 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum <input type="checkbox"/> 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum <input type="checkbox"/> 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum <input type="checkbox"/> 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum <input type="checkbox"/> Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests Date and Time Required for all E&P TATs: _____ For all tests with rush TATs requested, please contact your AM to confirm availability.		AFFIX ALS BARCODE LABEL HERE (ALS use only)	
<b>Invoice To</b> Same as Report To <input type="checkbox"/> YES <input type="checkbox"/> NO Copy of Invoice with Report <input type="checkbox"/> YES <input type="checkbox"/> NO		<b>Invoice Recipients</b> Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX Email 1 or Fax: <u>Same as pg 1</u> Email 2: _____		<b>Analysis Request</b> Indicate Filtered (F), Preserved (P) or Filtered and Preserved (FP) below SUSPECTED HAZARD (see notes)			
<b>Project Information</b> ALS Account # / Quote #: <u>Excess Sewer</u> Job #: <u>02506021</u> PO / AFE: _____ LSD: _____		<b>Oil and Gas Required Fields (client use)</b> AFE/Cost Center: _____ Major/Minor Code: _____ Requisitioner: _____ Location: _____		<b>NUMBER OF CONTAINERS</b> 3			
<b>ALS Lab Work Order # (ALS use only):</b>		<b>ALS Contact:</b>		<b>SAMPLER:</b>			
<b>Sample Identification and/or Coordinates</b> (This description will appear on the report)		<b>Date</b> (dd-mm-yy)		<b>Time</b> (hh:mm)			
BH6 S4 BH6 S7 BH7 S1 BH7 S3 BH7 S5 BH7 S6 BH7 S7 BH7 S8 BH7 S9 BH8 S1 BH8 S2 BH8 S3		2025/07/23 " 2025/07/24		1425 1440 0810 0820 0840 0850 0900 0915 0925 0955 1000 1010			
<b>Drinking Water (DW) Samples<sup>1</sup> (client use)</b> Are samples taken from a Regulated DW System? <input type="checkbox"/> YES <input type="checkbox"/> NO Are samples for human consumption/ use? <input type="checkbox"/> YES <input type="checkbox"/> NO		<b>Notes / Specify Limits for result evaluation by selecting from drop-down below</b> (Excel COC only) Same as page 1		<b>SAMPLE RECEIPT DETAILS (ALS use only)</b> Cooling Method: <input type="checkbox"/> NONE <input type="checkbox"/> ICE <input checked="" type="checkbox"/> ICE PACKS <input type="checkbox"/> FROZEN <input type="checkbox"/> COOLING INITIATED Submission: Comments identified on Sample Receipt Notification: <input type="checkbox"/> YES <input type="checkbox"/> NO Cooler Custody Seals Intact: <input type="checkbox"/> YES <input type="checkbox"/> N/A Sample Custody Seals Intact: <input type="checkbox"/> YES <input type="checkbox"/> N/A INITIAL COOLER TEMPERATURE: _____ FINAL COOLER TEMPERATURES °C: _____ 6.2 7.8 8.5 6.7 4.9			
<b>SHIPPING RELEASE (client use)</b> Released by: <u>Sen-Jack</u> Date: 2025/08/01		<b>INITIAL SHIPMENT RECEPTION (ALS use only)</b> Received by: <u>AS</u> Date: 08/05		<b>FINAL SHIPMENT RECEPTION (ALS use only)</b> Received by: <u>AS</u> Date: 08/05 Time: 18:00			

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION  
 Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.  
 1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.



Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1075402

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<b>Report To</b> Contact and company name below will appear on the final report Company: Same as P41 Contact: Same as P41 Phone: Same as P41 Street: Same as P41 City/Province: Same as P41 Postal Code: Same as P41		<b>Reports / Recipients</b> Select Report Format: <input checked="" type="checkbox"/> PDF <input type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL) Merge QC/QCI Reports with COA <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX Email 1 or Fax: Same as P41 Email 2: Same as P41 Email 3: Same as P41		<b>Turnaround Time (TAT) Requested</b> <input checked="" type="checkbox"/> Routine [R] if received by 3pm M-F - no surcharges apply <input type="checkbox"/> 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum <input type="checkbox"/> 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum <input type="checkbox"/> 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum <input type="checkbox"/> 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum <input type="checkbox"/> Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests		<b>Analysis Request</b> Indicate Filtered (F), Preserved (P) or Filtered and Preserved (FP) below PHC FI-FA Metals + Inorganics BTX PHC FI-FA	
<b>Project Information</b> ALS Account # / Quote #: Same as P41 Job #: Same as P41 PO / AFE: Same as P41 LSD: Same as P41		<b>Invoice Recipients</b> Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX Email 1 or Fax: Same as P41 Email 2: Same as P41		<b>Oil and Gas Required Fields (client use)</b> AFE/Cost Center: Major/Minor Code: Requisitioner: Location:			
<b>ALS Lab Work Order # (ALS use only):</b>		<b>ALS Contact:</b>		<b>Sampler:</b>			
<b>ALS Sample # (ALS use only)</b>	<b>Sample Identification and/or Coordinates</b> (This description will appear on the report)	<b>Date</b> (dd-mm-yy)	<b>Time</b> (hh:mm)	<b>Sample Type</b>	<b>NUMBER OF CONTAINERS</b>		
	BH10 S2	2025/07/24	1155	Soil	3		
	BH10 S3		1205				
	BH10 S4		1215				
	BH10 S5		1225				
	BH10 S6		1235				
	BH10 S7		1245				
	DWP-S-1	2025/07/23	-				
	DWP-S-2	2025/07/24	-				
	DWP-S-3	2025/07/23	-				
	DWP-S-4	2025/07/24	-				
<b>Drinking Water (DW) Samples<sup>1</sup> (client use)</b> Are samples taken from a Regulated DW System? <input type="checkbox"/> YES <input type="checkbox"/> NO Are samples for human consumption/ use? <input type="checkbox"/> YES <input type="checkbox"/> NO		<b>Notes / Specify Limits for result evaluation by selecting from drop-down below</b> (Excel COC only)					
<b>SHIPPING RELEASE (client use)</b> Released by: Sean Jordan Date: 2025/08/01		<b>INITIAL SHIPMENT RECEPTION (ALS use only)</b> Received by: P. J. Kelly Date: 1 August 25		<b>FINAL SHIPMENT RECEPTION (ALS use only)</b> Received by: GP Date: 08/05 Time: 18:00			
<b>SHIPMENT RELEASE (client use)</b> Released by: Sean Jordan Date: 2025/08/01		<b>INITIAL SHIPMENT RECEPTION (ALS use only)</b> Received by: P. J. Kelly Date: 1 August 25		<b>FINAL SHIPMENT RECEPTION (ALS use only)</b> Received by: GP Date: 08/05 Time: 18:00			

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

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# Appendix D

## Statement of Limitations



## STATEMENT OF LIMITATIONS

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This Statement of Limitations forms an integral part of the Report.

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Any results from laboratory or other subcontractors reported herein have been carried out by others, and the Company cannot warrant their accuracy.

