Public Services and Procurement Canada

Requisition No.: EZ897-180773/B

Buy and Sell ID No.: _____

Specifications for

Site Remediation

Fireside Maintenance Camp, KM 839, Alaska Highway, BC

Project No. R.018388.006/007 Date

APPROVED BY:

Regional Manager ES — Date: 15 Sept 2017

Construction Safety Coordinator — Date: 6/7.09.18

TENDER:

Project Manager — Date: 2017-09-15

Real Property Services Branch, Professional and Technical Services, Pacific Region
#219 – 800 Burrard Street, Vancouver, B.C. V6Z 0B9

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SPECIFICATIONS INDEX

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PROFESSIONAL ENGINEER
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Sept 15/17

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. Pre-mobilization Submittals will be paid in accordance with lump sum price established for all Preconstruction Meetings, final design, planning, health and safety, and other Submittals in accordance with the Contract or required and accepted by the Departmental Representative as in accordance with the Contract prior to mobilization to Site.

1.1.2. Mobilization will be paid in accordance with lump sum price established for mobilizing all necessary equipment, materials, supplies, facilities, and personnel associated with the Works to the Site. Includes initial insurance, bonding, and permits.

1.1.3. Site Preparation will be paid in accordance with lump sum price established to prepare the Site for planned construction works. Includes clearing and grubbing, temporary removal of existing infrastructure, utility location, rerouting, and protection, and construction of temporary onsite access roads. Also includes removal of any incidental or generated material. Also includes Preconstruction Precondition Survey and Preconstruction As-Built Documents.

1.1.4. Site Facilities Provision will be paid in accordance with lump sum price established to design, temporarily provide for duration of Work, and erect all infrastructure in accordance with the Contract. Includes temporary structures and facilities including those for accommodation, screening plant, temporary hoarding, security fencing, federal signage, sanitary facilities, stormwater management infrastructure, and utility installation. Site facilities to include separate trailer for living accommodations of up to 3 Departmental representatives.

1.1.5. Site Facilities Operation will be paid in accordance with unit rate price established for time to operate and maintain all infrastructure between mobilization and demobilization. Measurement as recorded time by Departmental Representative. Includes temporary structures and facilities including temporary hoarding, screening plant, security fencing, federal signage, sanitary facilities, stormwater management infrastructure, and utility installation Also includes ongoing services including project management, security, surveying, noise monitoring, vibration monitoring, utilities, project meetings, inspections, progress Submittals, traffic control, health and safety, Environmental Protection and cleaning. Also, includes living out allowances, travel and room and board. Rate must not vary even if hours of work and/or days of work vary. Time will only be paid for duration in accordance with the Contract and changes in schedule as accepted by the Departmental Representative and included in Extension of Time on Contracts.

1.1.6. Standby Time will be paid in accordance with unit rate price established, for time when construction Work is unable to proceed, and that is directly attributable to any neglect or delay that occurs after the date of the Contract on the part of the Departmental Representative in providing any information or in doing any act that the Contract expressly requires the Departmental Representative. Measurement as recorded time by Departmental Representative. Includes machinery and labour standby costs. Does not include items covered by Site Facilities Operation. Standby Time may be pro-rated based on hours of work. Make all efforts to minimize impacts due to delays caused by the Departmental Representative, including re-sequencing Work. Provide documentation of a sufficient description of the facts and circumstances of the occurrence to enable the Departmental Representative to determine whether or not the Standby Time is justified. Reviews, sampling, or other work conducted by the Departmental Representative with time allowances in accordance with the Contract will result in no increase to the Contract Amount nor Extension of Time for completion of the Work. Also, inclement weather will result in no increase to the Contract Amount nor Extension of Time for completion of the Work.

1.1.7. Temporary Sloping and Shoring will be paid in accordance with lump sum price established to design and provide temporary sloping and/or shoring required to excavate contaminated material to extents shown on Drawings. Includes backfilling and compaction within excavation of any acceptable temporary slope material.

1.1.8. Excavation will be paid in accordance with unit rate price to excavate contaminated material to extents shown on Drawings. Measurement as recorded in-situ volume of contaminated material excavation limits as surveyed by Departmental Representative. Includes handling, transport, and stockpiling onsite. If required, in-situ volume to tonne conversion factor will be 1.95 tonnes/m^3.

1.1.9. Excavated Material Screening Operation will be paid in accordance with unit rate price established for in-situ volume of material removed from excavation and screened prior to placement into Owner Soil Treatment Facility. Measurement as recorded in-situ volume of excavated contaminated material by Departmental Representative. Includes stockpiling within work area as instructed by Departmental Representative. Provision of screening plant to be included in Site Facilities Provision. If required, volume to tonne conversion factor will be 1.95 tonnes/m^3.

1.1.10. Waste Oversize Debris Removal will be paid in accordance with unit rate price established for time to remove oversize material from excavation. Measurement as recorded time by Departmental Representative. Does not include Transport or Disposal.

1.1.11. Backfill-Owner Supplied will be paid in accordance with unit rate price established per volume for backfill material supplied by PSPC from the JJJ Pit. Measurement as recorded in-situ volume of excavation backfilled as surveyed by

Departmental Representative. Includes transport, placing, grading and compacting as specified on Drawings. If required, volume to tonne conversion factor will be 1.95 tonnes/m^3.

1.1.12. Contaminated Material Transport-Offsite will be paid in accordance with unit rate price established for weight of material transported. Measurement as recorded on Treatment Facility or Disposal Facility weigh scale certified by Measurement Canada and results provided to Departmental Representative. Includes loading, hauling, interim storage, and handling for all material transported from Site. If material is taken to a Treatment Facility-Offsite before a Disposal Facility, payment includes transport and handling to both Treatment Facility and Disposal Facility.

1.1.13. Contaminated Material Transport-Owner Soil Treatment Facility located at JJJ Pit will be paid in accordance with unit rate price established for in-situ volume of material transported. Measurement as recorded by survey of Owner Soil Treatment Facility by Departmental Representative. Includes handling, stockpiling, loading, unloading, hauling, and interim storage for all material transported to Owner Soil Treatment Facility. If required, volume to tonne conversion factor will be 1.95 tonnes/m^3.

1.1.14. Non-Contaminated Material and Waste Transport will be paid in accordance with unit rate price established for weight of material removed offsite. Includes uncontaminated facility debris, including but not limited to concrete and metal debris. Measurement as recorded on Landfill weigh scale certified by Measurement Canada and results provided to Departmental Representative. Includes loading, hauling, interim storage, and handling for all material transported from Site.

1.1.15. Contaminated Material Disposal will be paid in accordance with unit rate price established for weight of material treated and/or disposed offsite. Measurement as recorded on Disposal Facility weigh scale certified by Measurement Canada and results provided to Departmental Representative on Certificates of Disposal. Contaminated Material Disposal includes Contaminated Material Treatment-Offsite, as required by Disposal Facility.

1.1.16. Non-Contaminated Material and Waste Disposal will be paid in accordance with unit rate price established for weight of material disposed offsite. Does not include materials recycled at no cost. Measurement as recorded on Landfill facility weigh scale certified by Measurement Canada and results provided to Departmental Representative on Certificates of Disposal.

1.1.17. Site Restoration will be paid in accordance with the lump sum price established to restore the Site to make suitable for post-Work use as shown on Drawings. Includes re-establishment of pre-existing infrastructure and deconstructing and removal from Site all temporary facilities and removal of any incidental or generated material.

1.1.18. Owner Soil Treatment Facilities Preparation and Aeration will be paid in accordance with lump sum price established to prepare, mechanically aerate as specified in Appendix F. Includes clearing and grubbing, mixing, and minor repairs to liner. Also includes final grading of soil and supply, placement and securing of final cover.

1.1.19. Owner Soil Treatment Facility Leachate Collection, Transportation and Disposal will be paid in accordance with unit rate price established for volume of leachate collected, transported, and disposed at an approved facility. Measurement as recorded on the receiving facility Certificate of Disposal provided to the Departmental Representative.

1.1.20. Owner Soil Treatment Facility Construction will be paid in accordance with lump sum price established to prepare and construct the Soil Treatment Facility for planned construction works. Includes clearing and grubbing, levelling of base protection layer, and construction as detailed in Appendix E.

1.1.21. Demobilization will be paid in accordance with lump sum price established for demobilizing all equipment and personnel associated with the Works from the Site. Includes decontaminating all equipment prior to removal from Site.

1.1.22. Closeout submittals will be paid in accordance with lump sum price established for Final Site Inspection (for Certificate of Completion purposes), Closeout Meetings, provision of final as-built documents and completion documents as instructed by the Departmental Representative.

1.2. Definitions

1.2.1. Certificate of Completion: see General Conditions.

1.2.2. Change Order: PSPC form issued by the Departmental Representative to the Contractor as per the relevant Contemplated Change Notice.

1.2.3. Confirmation Samples: soil samples collected from the base and walls of the excavation by the Departmental Representative to confirm that the remedial objectives for the Work have been met.

1.2.4. Contaminated Material: soil and other material where substances occur at concentrations that: (i) are above background levels and pose, or are likely to pose, an immediate or long-term hazard to human health or the environment, or (ii) exceed the levels specified in policies and regulations. Includes Hazardous Waste and Waste Quality; does not include Non-Contaminated Material or Waste. Relevant regulations, unless otherwise in accordance with the Contract or as instructed by the Departmental Representative, include:

1.2.4.1. For all sites: Canadian Council of Ministers of the Environment (CCME) *Canadian Environmental Quality Guidelines* and CCME *Canada-Wide Standards*.

1.2.4.2. For sites in BC: BC *Hazardous Waste Regulations*, BC *Approved Water Quality Guidelines*, BC *Contaminated Sites Regulation*.

1.2.5. Contaminated Water: liquid material where substances occur at concentrations that: (i) are above background levels and pose, or are likely to pose, an immediate or long-term hazard to human health or the environment, or (ii) meet or exceed the levels specified in policies and regulations. Includes Hazardous Waste and Waste Quality Water; does not include Non-Contaminated Water or Sewage Wastewater. Relevant regulations, unless otherwise in accordance with the Contract or as instructed by the Departmental Representative, include:

1.2.5.1. For all sites: Canadian Council of Ministers of the Environment (CCME) *Canadian Environmental Quality Guideline*s and CCME *Canada-Wide Standards*.

1.2.5.2. For sites in BC: BC *Hazardous Waste Regulations*, BC *Approved Water Quality Guidelines*.

1.2.6. Contaminated Water Treatment Plant: a temporary onsite or existing offsite facility located in Canada that is designed, constructed and operated for the handling or processing of Contaminated Water in such a manner as to change the physical, chemical or biological character or composition of the water to lower than the site-specific remedial objective, Discharge Approval, and in compliance with all regulations.

1.2.7. Contemplated Change Notice: PSPC form issued by the Departmental Representative to the Contractor requesting Contractor to provide a quote, which may result in a Change Order.

1.2.8. Contract: see General Conditions.

1.2.9. Contract Amount: see General Conditions.

1.2.10. Contractor: see General Conditions.

1.2.11. Departmental Representative: see General Conditions.

1.2.12. Discharge Approval: permit, certificate, approval, or any other form of authorization issued by appropriate federal agency, province, territory, or municipality having jurisdiction and authorizing offsite discharge.

1.2.13. Disposal Facility: a facility specifically used to introduce waste into the environment for the purpose of final burial.

1.2.14. Environmental Pollution and Damage: presence of chemical, physical, biological elements or agents which adversely affect human health and welfare; unfavourably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade environment aesthetically, culturally and/or historically.

1.2.15. Environmental Protection: prevention, control, mitigation, and restoration of pollution and habitat or environmental disruption during construction. Control of Environmental Pollution and Damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; vibrations; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2.16. Environmental Protection Plan: plan developed by the Contractor to ensure Environmental Protection and prevent Environmental Pollution and Damage identifying all environmental risks and mitigation measures, including: personnel requirements, emergency contacts, Environmental Protection methods, procedures, and equipment, and emergency response including a Spill Control Plan.
1.2.17. Extension of Time: see General Conditions.
1.2.18. Extension of Time on Contracts: PSPC form requesting an Extension of Time.
1.2.19. Final Completion: see General Conditions.
1.2.20. Hazardous Waste: Contaminated Material which meets the regulatory definition of Hazardous Waste.
1.2.21. Land Surveyor: a person working for the Contractor who is a qualified, registered land surveyor licensed to practice in relevant jurisdiction.
1.2.22. Landfill: an existing offsite facility located in Canada that is designed, constructed and operated to prevent any pollution from being caused by the facility outside the area of the facility from waste placed in or on land within the facility.
1.2.23. Materials Source Separation Program: consists of a series of ongoing activities to separate reusable and recyclable waste into categories from other types of waste at point of generation.
1.2.24. Non-Contaminated Material: soil and other material which meets the BC *Contaminated Sites Regulation* Schedule 7 Column IV.
1.2.25. Non-Contaminated Water: liquids which are suitable for direct discharge to the environment after removal of sediment, and which is not Contaminated Water or Sewage Wastewater. Includes surface runoff, stormwater, and groundwater which has not come into contact with Contaminated Material.
1.2.26. On Site Instruction: instructions or other communications issued by the Departmental Representative to the Contractor.
1.2.27. On Site Notice: notice or other communication issued by the Contractor to the Departmental Representative.
1.2.28. Overburden: Non-Contaminated Material excavated incidentally that is not Topsoil.
1.2.29. Progress Payment: see General Conditions.
1.2.30. PSPC: Public Services and Procurement Canada. Representative of Canada with control of the Site.
1.2.31. Qualified Professional: a person working for the Contractor who is registered in relevant jurisdiction with his or her appropriate professional association, acts under that professional association's code of ethics, and is subject to disciplinary action by that professional association, and through suitable education, experience, accreditation and knowledge can be reasonably relied on to provide advice within his or her area of expertise. Includes Geotechnical Engineers and Environmental Consultants.
1.2.32. Quote: Contractor’s cost estimate issued to the Departmental Representative as per the relevant Contemplated Change Notice via an On Site Notice.

1.2.33. Remediation by Excavation: complete excavation of Contaminated Material and incidental Non-Contaminated Material to the Site boundaries for the purpose of remediating the Site to meet numerical standards. Includes full treatment and disposal. Does not include risk assessment or risk management of material onsite. Does not include encapsulation or solidification in place.
1.2.34. Sewage Wastewater: liquid waste which is not suitable for direct discharge to the environment, and which must be either treated offsite or discharged to a sanitary sewer. Includes water from hand basin, shower, personal hygiene facilities, or other liquid waste from sanitary facilities.
1.2.35. Site: area shown on Drawings.
1.2.36. Subcontractor: see General Conditions.
1.2.37. Submit/Submittals: documents from the Contractor to the Departmental Representative as: required by Contract; stipulated in permit, certificate, approval, or any other form of authorization; by convention or industry practice. Submittals are final only after review and accepted in writing by Departmental Representative.
1.2.38. Substantial Performance: see General Conditions.
1.2.39. Superintendent: see General Conditions
1.2.40. Supplier: see General Conditions.
1.2.41. Topsoil: non-contaminated soil excavated incidentally that is a surface organic layer to facilitate vegetation growth.
1.2.42. Treatment Facility: a facility specifically used to treat Contaminated Material. May be Onsite (PSPC provided) or Offsite (Contractor provided). Onsite facility is located on property under PSPC control, but may be located at a different location than where excavation work occurs.
1.2.43. Waste: Non-Contaminated Material that is not soil. Includes cleared and grubbed vegetation, litter, rubbish, debris, cobbles, boulders, excess construction material, lumber, steel, plastic, concrete, and asphalt.
1.2.44. Waste Oversize Debris: Waste that is required to be excavated and is: larger than 1 cubic metre or larger than 2 metres in one dimension, cannot be removed with a typical excavator with bucket, and requires the use of special equipment (e.g., saws, hydraulic cutters, excavator hammers, vibratory pile extractors). Includes bedrock, boulders, pilings, building structures, and concrete foundations.
1.2.45. Waste Quality: soil or other material that is not suitable for industrial, commercial, urban park, residential, agricultural, wildlands or any other land use specified in the BC *Contaminated Sites Regulation*.
1.2.46. Waste Reduction Plan: a written report which addresses opportunities for reduction, reuse or recycling of materials.
1.2.47. Work: see General Conditions.
1.2.48. Working Day: see General Conditions.

1.3. Action and Informational Submittals

1.3.1. After hours work: at least 5 Working Days prior to commencing after hours work Submit a schedule showing requested dates, times, and reasons for after

hours work. Approval will only be granted for reasons valid in the opinion of the Departmental Representative and if request can be reasonably accommodated by other contracts.

1.4. Work Covered by Contract

1.4.1. Work under the Contract covers remediation of contaminated material by excavation and placement in offsite PSPC owned Soil Treatment Facility (at JJJ pit) and/or offsite disposal. In addition works cover construction of an additional on-site Soil Treatment Facility at JJJ Pit and aeration and mixing of 3 existing treatment cells at the JJJ Pit.

1.4.2. Work to be performed under the Contract includes, but is not limited to, the following items covered further in the Contract:

1.4.2.1. Prime Contractor for health and safety and environmental protection at Site.

1.4.2.2. All required design activities to complete Work.

1.4.2.3. Pre-mobilization Submittals.

1.4.2.4. Progress Submittals, including cash flow and forecasting.

1.4.2.5. Prepare Site for Work, including clearing site as required and provision of onsite temporary office facilities for Departmental Representative and consultants.

1.4.2.6. Plan excavation, including geotechnical design as required.

1.4.2.7. Design and install temporary shoring support as required to allow excavation to extents as shown on Drawings.

1.4.2.8. Remove and replace existing infrastructure.

1.4.2.9. Excavate Non-Contaminated Material as instructed by the Departmental Representative.

1.4.2.10. Excavate Contaminated Material as instructed by the Departmental Representative.

1.4.2.11. Excavation of Contaminated Material to extents as shown on Drawings with zero percent residual contamination or as instructed by the Departmental Representative at Final Completion.

1.4.2.12. Backfill excavations with clean imported or client supplied fill material.

1.4.2.13. Load and transport Contaminated Material and Non-Contaminated Material to a Treatment Facility as applicable and a Disposal Facility for final disposal, as required.

1.4.2.14. Construction of a soil treatment cell at JJJ Pit

1.4.2.15. Bioremediation of 21,240 m^3 of soil currently within the existing Soil Treatment Facility at JJJ pit by mechanical aeration and mixing during a discrete event.

1.4.2.16. Restore Site to pre-existing conditions.

1.4.2.17. As-built and closure Submittals.

1.4.2.18. All ancillary activities required to complete Work.

1.4.3. Green Requirements:

1.4.3.1. Use only environmentally responsible green materials/products with no Volatile Organic Compounds (VOC) emissions or minimum VOC emissions

of indoor off-gassing contaminants for improved indoor air quality – subject of acceptance of Submittal of Materials Safety Data Sheet (MSDS) Product Data.

1.4.3.2. Use materials/products containing highest percentage of recycled and recovered materials practicable – consistent with maintaining cost effective satisfactory levels of competition.

1.4.3.3. Adhere to waste reduction requirement for reuse or recycling of waste materials, thus diverting materials from Landfill.

1.4.4. Work not included in the Contract comprises such work and services specifically listed as:

1.4.4.1. Not Used.

1.5. Location

1.5.1. The Site location is shown on Drawings.

1.5.2. There is no civic street address or PIN for the Site.

1.6. Project/Site Conditions

1.6.1. Work at Site will involve contact with contaminated materials, requiring appropriate health and safety and environmental protection procedures.

1.6.2. Complete list of anticipated contaminants and concentration levels on the Site available separately in assessment reports.

1.6.3. Existing condition on the Site is shown on Drawings.

1.7. Other Contracts

1.7.1. Other contracts are currently in progress at Site.

1.7.2. Other contracts are:

1.7.2.1. Environmental and other consultants.

1.7.2.2. Site users as identified in Contract.

1.7.3. Further contracts may be awarded while the Contract is in progress.

1.7.4. Cooperate with other contractors in carrying out their respective works and carry out instructions from Departmental Representative.

1.7.5. Coordinate Work with that of other contractors. If any part of Work under the Contract depends for its proper execution or result upon Work of another contractor, report promptly to Departmental Representative, in writing, any defects which can interfere with proper execution of this Work.

1.8. Products Supplied by the Departmental Representative

1.8.1. Not Used.

1.9. Contractor's Use of Site

1.9.1. Use of Site:

1.9.1.1. For the sole benefit of Canada.

1.9.1.2. Exclusive and only for completion of the execution of Work.

1.9.1.3. Assume responsibility for assigned premises for performance of this Work.

1.9.1.4. Be responsible for coordination of all Work activities onsite, including the Work of other contractors engaged by the Departmental Representative.
1.9.2. There are no pre-existing arrangements for encroachment on the neighbouring properties. Shoring designs accommodating no offsite encroachment, or arrangements for offsite encroachment, are the responsibility of the Contractor.
1.9.3. Perform Work in accordance with Contract. Ensure Work is carried out in accordance with schedule accepted by Departmental Representative.
1.9.4. Do not unreasonably encumber Site with material or equipment.

1.10. Existing Permits
1.10.1. Existing permits are:
1.10.1.1. None

1.11. Schedule Requirements
1.11.1. Work to be initiated: within 5 Working Days of Contract Award.
1.11.2. Pre-Mobilization Submittals: within 5 Working Days of Contract Award.
1.11.3. Final Completion no later than 120 Working Days following mobilization.
1.11.4. Site Works at Maintenance Yard to be completed no later than December 15, 2017.
1.11.5. Treatment Works at Soil Treatment Facility: Final Completion no later than 120 Working Days following mobilization.
1.11.6. Completion of Submittals: no later than 30 Working Days following de-mobilization. Includes all final Submittals including as-built documents, the Certificate of Completion, and the Statutory Declaration at Final Completion.

1.12. Hours of Work
1.12.1. Restrictive as follows:
1.12.1.1. Working Day work hours are 07:00 to 19:00.
1.12.2. Obtain consent from Departmental Representative for all after hours Work, including weekends and holidays.
1.12.2.1. Proceed only as instructed by the Departmental Representative.

1.13. Security Clearances
1.13.1. Not Used.

2. PART 2 - PRODUCTS

2.1. Not Used
2.1.1. Not Used.

3. PART 3 - EXECUTION

3.1. Not Used

3.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Utility Locations: at least 5 Working Days prior to commencing any subsurface disturbance, Submit drawings identifying all utilities on the Site. Update drawings as instructed by the Departmental Representative.

1.3.2. Breakdown of Lump Sum Prices: at least 5 Working Days prior to submitting the first Progress Payment, Submit a breakdown of the Contract lump sum prices including labour, material and time, in detail as instructed by the Departmental Representative and aggregating Contract Amount.

1.3.3. Daily Work Records: at the end of each shift Submit daily Work records, during onsite Work. Include:

1.3.3.1. Quantities for each Description of Work identified in the Unit Price Table and Change Orders.

1.3.3.2. Description of Work performed.

1.3.3.3. Current Site conditions.

1.3.3.4. General information including: date, time shift started and ended, Subcontractor(s) onsite, Health and Safety items, and Environmental Protection items.

1.3.3.5. Signature of Superintendent and Departmental Representative.

1.3.4. Cash Flow: with each Progress Payment, Submit a cash flow forecast. Include:

1.3.4.1. Calculation of planned cost versus actual cost and schedule forecasting and cash flow projections on a monthly basis, indicating anticipated value of future Progress Payments, for each Description of Work identified in the Unit Price Table.

1.3.4.2. Progress Payments will not be processed until cash flow has been accepted by the Departmental Representative.

1.3.5. Coordination Meeting Minutes and Drawings: at least 5 Working Days prior to relevant Work commencing, Submit final meeting minutes and drawings from coordination with Subcontractors.

1.3.6. Quality Management Plan: within 5 Working Days after Contract award. Submit a quality management plan. Include:

1.3.6.1. Details on planned review, inspection and testing to provide Quality Assurance and Quality Control for the Work.

1.3.6.2. Subcontractors responsible for review, inspection and testing.

1.3.6.3. Schedule of submittals of review, inspection and testing results.

1.3.7. Review, Inspection, and Testing Results: within 5 Working Days of receipt, Submit all results of reviews, inspection, and testing performed as part of the Work, including laboratory reports.

1.4. Division of Specifications

1.4.1. This specification is subdivided into Divisions and Sections in accordance with the six digit National Master Specifications System.

1.4.2. A Division or Section may consist of the Work of more than one Subcontractor. Responsibility for determining which Subcontractor provides the labour, material, equipment and services required to complete the Work rests solely with the Contractor.

1.5. Documents Required

1.5.1. Maintain 1 copy each of the following posted at the job Site:

1.5.1.1. General Conditions.
1.5.1.2. Drawings.
1.5.1.3. Specifications.
1.5.1.4. Addenda or other modifications to Contract.
1.5.1.5. Change orders.
1.5.1.6. Copy of current Work schedule.
1.5.1.7. Reviewed and final shop drawings Submittals.
1.5.1.8. One set of record drawings and Specifications for “as-built” purposes.
1.5.1.9. Field and laboratory test reports.
1.5.1.10. Reviewed and accepted Submittals.
1.5.1.11. Manufacturers’ installation and application instructions (as appropriate).
1.5.1.12. *National Building Code of Canada* (as appropriate).
1.5.1.13. Current construction standards of workmanship listed in technical Sections (as appropriate).
1.5.1.14. Health and Safety documents, including all daily toolbox meetings, Notice of Project, and utility clearances.
1.5.1.15. Environmental Protection Plan.
1.5.1.16. Quality Management Plan.
1.5.1.17. Final Meeting Minutes, Agendas and associated attachments.
1.5.1.18. Permits and other approvals.

1.6. Setting out of Work

1.6.1. Assume full responsibility for and execute complete layout of Work to locations, lines and elevations in accordance with the Contract.

1.6.2. Provide devices needed to layout and construct Work.

1.6.3. Supply such services and devices in accordance with the Contract to facilitate Departmental Representative’s inspection of Work.

1.7. Acceptance of Substrates

1.7.1. Each trade must examine surfaces prepared by others and job conditions which can affect his work, and must report defects to the Departmental Representative. Commencement of Work will imply acceptance of prepared Work or substrate surfaces.

1.8. Works Coordination

1.8.1. Coordinate Work of Subcontractors.

1.8.1.1. Designate one person to be responsible for review of Contract and shop drawings and managing coordination of Work.

1.8.2. Convene meetings between Subcontractors whose Work interfaces and ensure awareness of areas and extent of interface required.

1.8.2.1. Provide each Subcontractor with complete Drawings and Specifications for Contract, to assist them in planning and carrying out their respective work.

1.8.2.2. Develop coordination drawings when required, illustrating potential interference between Work of various trades and distribute to affected parties.

1.8.2.3. Facilitate meeting and review coordination drawings. Ensure Subcontractors agree and sign off on coordination drawings.

1.8.2.4. Publish minutes of each meeting.

1.8.2.5. Submit a copy of coordination drawings and meeting minutes as instructed by the Departmental Representative.

1.8.3. Submit shop drawings and order of prefabricated equipment or rebuilt components only after coordination meeting for such items has taken place.

1.8.4. Work coordination:

1.8.4.1. Ensure cooperation between trades in order to facilitate general progress of Work and avoid situations of spatial interference.

1.8.4.2. Ensure that each trade provides all other trades reasonable opportunity for Final Completion of Work and in such a way as to prevent unnecessary delays, cutting, patching and removal or replacement of completed Work.

1.8.4.3. Ensure disputes between Subcontractors are resolved.

1.8.5. Failure to coordinate Work is responsibility of Contractor.

1.9. Approvals of Shop Drawings, Product Data and Samples

1.9.1. The term "shop drawings" means drawings, figures, diagrams, illustrations, schedules, performance charts, brochures and other data which are Submittals by Contractor to illustrate details of a portion of Work.

1.9.2. Submit as instructed by the Departmental Representative the requested shop drawings, product data, MSDS sheets and samples in accordance with the Contract.

1.9.3. Allow sufficient time for the following:

1.9.3.1. Review of product data.

1.9.3.2. Acceptance of shop drawings.

1.9.3.3. Review of re-submission.

1.9.3.4. Ordering of accepted material and/or products.

1.10. Relics and Antiquities

1.10.1. See General Conditions.

1.11. Additional Drawings

1.11.1. The Departmental Representative may furnish additional Drawings for clarification. These additional Drawings have the same meaning and intent as if they were included with Drawings referred to in the Contract.

1.11.2. Upon request, Departmental Representative may furnish up to a maximum of 2 sets of Drawings for use by the Contractor at no additional cost. Should more than 2 sets of documents be required the Departmental Representative will provide them at additional cost.

1.12. Record Keeping

1.12.1. On Site Notifications: All correspondence from Contractor to the Departmental Representative, including Submittals, Quotes, and Extension Of Time On Contracts, must be as a sequentially numbered On Site Notifications. Include cross references to applicable On Site Instructions. The status of the Contractor, including the function of Prime Contractor, must not change by reason of any On Site Notifications.

1.12.2. On Site Instructions: All correspondence from the Departmental Representative to the Contractor, including Contemplated Change Notices, Change Orders, and Extension of Time on Contracts, will be as sequentially numbered On Site Instructions. Include cross references to applicable On Site Notifications. The status of the Contractor, including the function of Prime Contractor, must not change by reason of any On Site Instructions.

1.12.3. Maintain adequate records to support information provided to Departmental Representative.

1.12.4. Maintain asbestos waste shipment records or other Hazardous Waste Manifests for minimum of 3 years from date of shipment or longer period required by applicable law or regulation.

1.12.5. Maintain bills of ladings for minimum of 300 days from date of shipment or longer period required by applicable law or regulation.

1.13. Change Documents

1.13.1. Change Documents do not relieve Contractor of any obligation.

1.13.2. Change Documents do not change the Contractor's responsibility for sequencing, methods and means.

1.13.3. Change Documents do not change by any reason the status of the Contractor, including the function of Prime Contractor or as supervisor.

1.13.4. Change Documents include:

1.13.4.1. Change Order: There may be an increase to the Contract Amount by reason of any Change Order. No Extension of Time for completion of the Work by reason of any Change Order.

1.13.4.2. Contemplated Change Notice: No increase to the Contract Amount by reason of any Contemplated Change Notice. No Extension of Time for completion of the Work by reason of any Contemplated Change Notice.

1.13.4.3. Extension of Time on Contracts: No increase to the Contract Amount by reason of any Extension of Time on Contracts. There may be an Extension of Time for completion of the Work by reason of an Extension of Time on Contracts.

1.13.4.4. Quote: No increase to the Contract Amount by reason of any Quote. No Extension of Time for completion of the Work by reason of any Quote. The status of the Contractor, including the function of Prime Contractor, must not change by reason of any Quote.

1.14. System of Measurement

1.14.1. The metric system of measurement (SI) will be employed on the Contract.

2. PART 2 - PRODUCTS

2.1. Not Used

2.1.1. Not Used.

3. PART 3 - EXECUTION

3.1. Not Used

3.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Preconstruction Meeting Minutes: within 2 Working Days of the Preconstruction Meeting, Submit meeting minutes.

1.3.2. Progress Meeting Minutes: within 2 Working Days of a Progress Meeting, Submit meeting minutes.

1.3.3. Information for Progress Meetings: at least 2 Working Days prior to scheduled Progress Meetings, Submit all information in accordance with the Contract for Progress Meetings. Include:

1.3.3.1. Agenda for the proposed Progress Meeting.

1.3.3.2. Updated Project Schedule.

1.3.3.3. Copies of transport manifests and disposal receipts for all materials removed from Site.

1.3.3.4. Other information as instructed by the Departmental Representative or relevant to agenda for upcoming progress meeting.

1.3.4. Final Site Inspection: within 2 Working Days of the Final Site Inspection, Submit meeting minutes.

1.3.5. Closeout Meetings: within 2 Working Days of the Closeout Meeting, Submit meeting minutes.

1.4. Administrative

1.4.1. Schedule and administer project meetings throughout the progress of the Work weekly and at the call of the Departmental Representative.

1.4.2. Prepare agenda for meetings.

1.4.3. Submit written notice with agenda of each meeting 2 Working Days in advance of meeting date as instructed by the Departmental Representative.

1.4.4. Provide physical space and make arrangements for meetings, or arrange for teleconference meetings, as instructed by Departmental Representative.

1.4.5. Preside at meetings.

1.4.6. Record the meeting minutes. Include significant proceedings and decisions. Identify actions by parties.

1.4.7. Maintain records of meeting minutes for a minimum of 2 years after Work is completed.

1.4.8. Representative of Contractor, Subcontractor(s) and Supplier(s) attending meetings must be qualified and authorized to act on behalf of party each represents.

1.5. Preconstruction Meeting

1.5.1. Within 5 Working Days after award of Contract, request a meeting of parties in Contract to discuss and resolve administrative procedures and responsibilities.

1.5.2. Departmental Representative, Contractor, Superintendent, major Subcontractor(s), field inspectors and supervisors must be in attendance.

1.5.3. Establish time and location of meeting subject to approval by Departmental Representative and notify parties concerned at least 3 Working Days before meeting.

1.5.4. Agenda to include:

1.5.4.1. Appointment of official representative of participants in the Work, including Contractor's Superintendent and Departmental Representative.

1.5.4.2. Schedule of Work.

1.5.4.3. Schedule of Submittals.

1.5.4.4. Requirements for temporary facilities.

1.5.4.5. Site security.

1.5.4.6. Change orders, procedures, approvals required, administrative requirements.

1.5.4.7. Monthly Progress Payments, administrative procedures, hold backs.

1.5.4.8. Appointment of inspection and testing agencies or firms.

1.5.4.9. List of Subcontractor(s).

1.6. Progress Meetings

1.6.1. During course of Work schedule progress meetings weekly subject to approval by Departmental Representative.

1.6.2. Contractor, Superintendent, major Subcontractor(s) involved in Work, and Departmental Representative are to be in attendance.

1.6.3. Agenda to include:

1.6.3.1. Review and acceptance of minutes of previous meeting.

1.6.3.2. Review health and safety, including incidents, near misses, and corrective measures.

1.6.3.3. Review Environmental Protection, including incidents, near misses, and corrective measures.

1.6.3.4. Review contractual compliance.

1.6.3.5. Review regulatory compliance.

1.6.3.6. Review communications, problems or concerns with community.

1.6.3.7. Review of Work progress since previous meeting.

1.6.3.8. Field observations, problems, conflicts.

1.6.3.9. Updated progress schedule detailing activities planned over next 2 week period. Include review of progress with respect to previously established dates for starting and stopping various stages of Work.

1.6.3.10. Problems which impede construction schedule.

1.6.3.11. Corrective measures and procedures to regain projected schedule.

1.6.3.12. Revision to construction schedule.

1.6.3.13. Progress schedule, during succeeding Work period.

1.6.3.14. Review submittal schedules: expedite as required.

1.6.3.15. Maintenance of quality standards.
1.6.3.16. Quantities of material transported, treated, and disposed.
1.6.3.17. Review proposed changes for affect on construction schedule and on Final Completion date.
1.6.3.18. Other business.

1.7. Toolbox Meetings

1.7.1. During the course of the Work, schedule daily toolbox meetings at the start of each Work shift. Multiple meetings are required if the Contractor works multiple shifts within a 24-hour period.
1.7.2. All on Site workers to attend, including Contractor, Superintendent, major Subcontractor(s), and environmental consultants. Departmental Representative may attend.
1.7.3. Agenda to include:
1.7.3.1. Planned Work activities and environmental considerations for that shift.
1.7.3.2. Coordination activities required between Contractor, Subcontractor(s), Departmental Representative, and other contractor(s) including environmental consultant.
1.7.3.3. Health and Safety items.
1.7.3.4. Environmental Protection items.

1.8. Final Site Inspection

1.8.1. Within 5 Working Days of completion of Site Works but prior to Demobilization, request a meeting on Site to review the Site.
1.8.2. Departmental Representative, Contractor, Superintendent, major Subcontractor(s), field inspectors and supervisors must be in attendance.
1.8.3. Establish time and location of meeting subject to approval by Departmental Representative and notify parties concerned at least 3 Working Days before meeting.
1.8.4. Agenda to include:
1.8.4.1. Inspect removal of all temporary equipment, materials, supplies, and facilities.
1.8.4.2. Inspect final surface grades.
1.8.4.3. Inspect final vegetation.
1.8.4.4. Inspect permanent facilities for performance and damage.
1.8.4.5. Document all damage, deficiencies, missing items, and non-conformance.
1.8.5. If required, and in the opinion of the Departmental Representative, perform another Final Site Inspection after resolving all documented damage, deficiencies, missing items, and non-conformance.

1.9. Closeout Meeting

1.9.1. Within 10 Working Days of completion of the Work, request a meeting to review the project.

1.9.2. Departmental Representative, Contractor, Superintendent, major Subcontractor(s), field inspectors and supervisors must be in attendance.

1.9.3. Establish time and location of meeting subject to approval by Departmental Representative and notify parties concerned at least 3 Working Days before meeting.

1.9.4. Agenda to include:

1.9.4.1. Review Certificate of Completion.

1.9.4.2. Review final payment.

1.9.4.3. Identify lessons learned.

1.9.4.4. Perform Contractor Performance Evaluation Report Form.

2. PART 2 - PRODUCTS

2.1. Not Used

2.1.1. Not Used.

3. PART 3 - EXECUTION

3.1. Not Used

3.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Schedule: within 5 Working Days after Contract award, Submit a Master Plan.

1.3.2. Schedule of Interruption of Services: at least 5 Working Days prior to any shutdown or closure of active utilities or facilities Submit a schedule identifying type of service and dates of shutdown or closure.

1.3.3. Project Schedule and Updates: with Progress Payment, Submit a Project Schedule updated as appropriate. Progress Payment submission is incomplete without an updated Project Schedule acceptable to Departmental Representative.

1.4. Requirements

1.4.1. Ensure Master Plan and detail Project Schedules are practical and remain within specified Contract duration.

1.4.2. Plan to complete Work in accordance with prescribed milestones and time frame.

1.4.3. Limit activity durations to maximum of approximately 10 Working Days, to allow for progress reporting.

1.4.4. Ensure that it is understood that Award of Contract or time of beginning, rate of progress, Interim Certificate and Final Certificate as defined times of completion are of essence of this contract.

1.4.5. Include Work sequencing description and schedule:

1.4.5.1. Work Sequencing description must describe sequence, methods and means to perform each major task.

1.4.5.2. Work Sequencing schedule must show on a Gantt chart, start, end and dependencies of each major task and also indicates Work to be performed in sequence and in parallel.

1.4.5.3. Major tasks includes all items identified on Unit Price Table.

1.5. Master Plan

1.5.1. Structure schedule to allow orderly planning, organizing and execution of Work as Bar Chart (GANTT).

1.5.2. Departmental Representative will review and return revised schedules within 5 Working Days.

1.5.3. Revise impractical schedule and resubmit within 5 Working Days.

1.5.4. Accepted revised schedule will become Master Plan and be used as baseline for updates.

1.6. Project Schedule

1.6.1. Develop detailed Project Schedule derived from Master Plan.

1.6.2. Ensure detailed Project Schedule includes as minimum milestone and activity types as follows:

1.6.2.1. Dates of commencement and completion of Work for each Description of Work identified on the Unit Price Table.

1.6.2.2. Dates of Submittals including shop drawings, product data, MSDS sheets and samples.

1.6.2.3. Dates of inspection and testing.

1.6.2.4. Final Completion date within the time period in accordance with the Contract, including Amendments.

1.7. Project Schedule Reporting

1.7.1. Update Project Schedule on monthly basis reflecting activity changes and completions, as well as activities in progress.

1.7.2. Include as part of Project Schedule, narrative report identifying Work status to date, comparing current progress to baseline, presenting current forecasts, defining problem areas, anticipated delays and impact with possible mitigation.

1.8. Project Meetings

1.8.1. Discuss Project Schedule at regular site meetings, identify activities that are behind schedule and provide measures to regain slippage. Activities considered behind schedule are those with projected start or completion dates later than current approved dates shown on baseline schedule.

1.8.2. Weather related delays with their remedial measures will be discussed and negotiated

2. PART 2 - PRODUCTS

2.1. Not Used

2.1.1. Not Used.

3. PART 3 - EXECUTION

3.1. Not Used

3.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Shop Drawings: at least 5 Working Days prior to commencing applicable Work, Submit Shop Drawings signed by a Qualified Professional.

1.4. General

1.4.1. This section specifies general requirements and procedures for the Contractor's Submittals of design drawings, shop drawings, product data, samples and other submittals in accordance with the Contract to Departmental Representative. Additional specific requirements for Submittals are identified in individual technical sections.

1.4.2. Present shop drawings, product data and samples in SI Metric units.

1.4.3. Where items or information is not produced in SI Metric units, converted values are acceptable.

1.4.4. Contractor's responsibility for errors and omissions in Submittals is not relieved by the Departmental Representative's review of Submittals.

1.4.5. Notify Departmental Representative in writing at time of Submittals, identifying deviations from requirements of Contract and stating reasons for deviations.

1.4.6. Contractor's responsibility for deviations in Submittals from requirements of Contract is not relieved by the Departmental Representative's review of Submittals unless Departmental Representative gives written acceptance of specific deviations.

1.4.7. Make any changes in Submittals which Departmental Representative requires to be in accordance with the Contract and resubmit as instructed by the Departmental Representative.

1.4.8. Notify Departmental Representative in writing, when resubmitting, of any revisions other than those instructed by the Departmental Representative.

1.4.9. Do not proceed with Work until relevant Submittals are finalized and have been accepted.

1.4.10. Submit to Departmental Representative submittals listed for review. Submit promptly and in orderly sequence to not cause delay in Work. Failure to Submit in ample time is responsibility of Contractor.

1.4.11. Review Submittals prior to submission to Departmental Representative. This review represents that necessary requirements have been determined and verified, or will be, and that each Submittal has been checked and coordinated with requirements of Work and Contract. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and considered rejected.
1.4.12. Verify field measurements and affected adjacent Work are coordinated.
1.4.13. Adjustments made on Submittals by the Departmental Representative will not result in an increase the Contract Amount nor an Extension of Time for completion of the Work. If adjustments result in an increase to the Contract Amount or an Extension of Time for completion of the Work, notify Departmental Representative and receive approval prior to proceeding with Work.
1.4.14. Keep one final copy of each Submittal onsite.

1.5. Submission Requirements

1.5.1. Coordinate each Submittal with the requirements of the Work and the Contract. Individual Submittals will not be reviewed until:
1.5.1.1. Submittals are complete.
1.5.1.2. All related information is available.
1.5.2. Allow 10 Working Days for Departmental Representative's review of each Submittal, unless otherwise specified.
1.5.3. All Submittals are to be sent to Departmental Representative in duplicate as a hardcopy and in electronic format compatible with Departmental Representative's software.
1.5.4. Accompany Submittals with On Site Notification:
1.5.4.1. Date.
1.5.4.2. Project title and number.
1.5.4.3. Contractor's name and address.
1.5.4.4. Identification and quantity of each shop drawing, product data and sample.
1.5.4.5. Other pertinent data.
1.5.5. Submittals must include:
1.5.5.1. Date and revision dates.
1.5.5.2. Project title and number.
1.5.5.3. Name and address of:
1.5.5.3.1. Subcontractor.
1.5.5.3.2. Supplier.
1.5.5.3.3. Manufacturer.
1.5.5.4. Signature of Superintendent, certifying approval of Submittals, verification of field measurements and in accordance with the Contract.
1.5.5.5. Qualified Professional to sign and seal Submittals in accordance with the Contract. Submittals to include at a minimum 1 hard copy of original ink sealed document.
1.5.5.6. Details of appropriate portions of Work as applicable.

1.6. Shop Drawings

1.6.1. Shop drawings are drawings, figures, diagrams, illustrations, schedules, performance charts, brochures and other data intended to illustrate details of a portion of the Work which are provided by the Qualified Professional of record.

1.6.2. Maximum sheet size: ANSI E (864 x 1118 mm).

1.6.3. Submit, as instructed by the Departmental Representative, 2 copies of shop drawings for each requirement requested in the specification sections and/or as instructed by the Departmental Representative.

1.6.4. Cross-reference shop drawing information to applicable portions of the Contract.

1.6.5. Qualified Professional to sign and seal each individual shop drawing.

1.6.6. Qualified Professional to sign and seal final design drawings and submit as instructed by the Departmental Representative upon Final Completion of the construction project. Final design drawings are prepared by a Qualified Professional to reflect design changes made during the construction of the Remediation by Excavation project. Final design drawings are intended to incorporate addenda, change orders and other significant design changes, but not necessarily Site instructions.

1.6.7. Shop drawings must include:

1.6.7.1. The original date of issue.

1.6.7.2. The dates of all applicable revisions.

1.6.7.3. The project title.

1.6.7.4. The project address.

1.6.7.5. The project number.

1.6.7.6. Wherever applicable, the name(s) of the: Contractor, Subcontractor(s), Supplier(s), manufacturers, and separate detailers.

1.6.7.7. The sequence number for each shop drawing.

1.6.7.8. Identifications of all products and materials.

1.6.7.9. Relation to adjacent structures or materials.

1.6.7.10. Clearly identified field dimensions.

1.6.7.11. Applicable standards.

1.7. Shop Drawings Review

1.7.1. Departmental Representative’s review of shop drawings is to determine if shop drawings are consistent with the general intent of the Contract and are in accordance with the Contract.

1.7.2. This review will not mean that Departmental Representative approves the detail design inherent in the shop drawings, responsibility for which will remain with Contractor submitting same.

1.7.3. This review will not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of responsibility for meeting all requirements of the Contract.

1.7.4. Without restricting the generality of the foregoing, be responsible for:

1.7.4.1. Dimensions to be confirmed and correlated at the Site.

1.7.4.2. Information that pertains solely to fabrication processes or to techniques of construction and installation.
1.7.4.3. Coordination of the Work of all sub-trades.

2. PART 2 - PRODUCTS

2.1. Not Used
2.1.1. Not Used.

3. PART 3 - EXECUTION

3.1. Not Used
3.1.1. Not Used.

END OF SECTION

4. PART 1 - GENERAL

4.1. Measurement Procedures

4.1.1. See 01 11 00.

4.2. Definitions

4.2.1. See 01 11 00.

4.3. Action and Informational Submittals

4.3.1. List of Signs and Devices: within 10 Working Days after Contract award and prior to mobilization to Site. Submit a list of signs and other devices required for the project.

4.4. Protection of Public Traffic

4.4.1. Comply with requirements of acts, regulations and bylaws in force for regulation of traffic or use of roadways upon or over which it is necessary to carry out Work or haul materials or equipment.

4.4.2. Comply with current version of BC Ministry of Transportation and Infrastructure *Traffic Control Manual for Work on Roadways*.

4.4.3. Provide and maintain road access and egress to property fronting Site and in other areas in accordance with the Contract, except where other means of road access exist that are accepted.

4.5. Informational and Warning Devices

4.5.1. Provide and maintain signs, flashing warning lights, and other devices required to indicate construction activities or other temporary and unusual conditions resulting from Work which requires road user response.

4.5.2. Supply and erect signs, delineators, barricades and miscellaneous warning devices to comply with current version of BC Ministry of Transportation and Infrastructure *Traffic Control Manual for Work on Roadways*.

4.5.3. Place signs and other devices in locations recommended in current version of BC Ministry of Transportation and Infrastructure *Traffic Control Manual for Work on Roadways*.

4.5.4. Meet with Departmental Representative prior to commencement of Work to prepare list of signs and other devices required for project. If situation onsite changes, revise list for approval.

4.5.5. Continually maintain traffic control devices in use:

4.5.5.1. Check signs daily for legibility, damage, suitability and location. Clean, repair or replace to ensure clarity and reflectance.

4.5.5.2. Remove or cover signs which do not apply to conditions existing from day to day.

4.6. Control of Public Traffic

4.6.1. Provide competent flag personnel, trained in accordance with, and properly equipped to, current version of BC Ministry of Transportation and Infrastructure *Traffic Control Manual for Work on Roadways* for situations as follows:

4.6.1.1. When public traffic is required to pass working vehicles or equipment that block all or part of travelled roadway.

4.6.1.2. In situations where complete protection for workers, working equipment and public traffic is not provided by other traffic control devices.

4.7. Operational Requirements

4.7.1. Maintain existing conditions for traffic throughout period of Contract except that, when required for construction in accordance with the Contract and when measures have been taken in accordance with the Contract and accepted by Departmental Representative to protect and control public traffic, existing conditions for traffic to be restricted as follows:

4.7.1.1. Maintain existing conditions for traffic crossing right-of-way.

5. PART 2 - PRODUCTS

5.1. Not Used

5.1.1. Not Used.

6. PART 3 - EXECUTION

6.1. Not Used

6.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Contaminated Material and Non-Contaminated Material Management Plan: within 5 Working Days after Contract award and prior to mobilization to Site, Submit plan detailing management of Contaminated Material and Non-Contaminated Material. Include:

1.3.1.1. Sequence, methods and means to ensure different categories of waste are segregated.

1.3.1.2. Sequence, methods and means to handle, transport, and store Contaminated Material and Non-Contaminated Material onsite.

1.3.1.3. Sequence, methods and means to transport Contaminated Material and Non-Contaminated Material offsite. Include name, vehicle type, and licenses of transporters. Include name, location, provincial or territorial authorizations, and evidence of compliance with municipal zoning and bylaws of all transfer stations and interim storage facilities.

1.3.1.4. Sequence, methods and means to treat Contaminated Material offsite. Include proposed treatment method, schedule for treatment, and name, location, provincial or territorial authorizations, and evidence of compliance with municipal zoning and bylaws of Treatment Facilities.

1.3.1.5. Sequence, methods and means to dispose Contaminated Material and Non-Contaminated Material offsite. Include name, location, provincial or territorial authorizations, and evidence of compliance with municipal zoning and bylaws of Disposal Facilities.

1.3.2. Contaminated Water Treatment Plant Provision Plan: within 15 Working Days after Contract award and prior to mobilization to Site, Submit design, operation procedures, manufacturers' instructions, and monitoring and sampling plan of onsite Contaminated Water Treatment Plant.

1.3.3. Contaminated Water Treatment Plant Initial Testing: within 5 Working Days of conducting initial operations testing, and prior to operating or discharge, Submit results of initial operations test.

1.3.4. Contaminated Water Treatment Plant Operational Testing: within 5 Working Days of sampling Submit sampling results of operational (recurrent) testing.

1.3.5. Certificate of Seaworthiness: Prior to barge shipments, Submit a Certificate of Seaworthiness by an independent licensed Marine Surveyor for all marine vessels transporting Contaminated Material.

1.3.6. Transport Manifests: within 5 Working Days of offsite transport, Submit documentation verifying that material has been transported appropriately. Include:
1.3.6.1. Method of transport.
1.3.6.2. Name of transport company.
1.3.6.3. Weigh scale receipt including location, date, and weight of loading.
1.3.6.4. Weigh scale receipt including location, date, and weight of unloading.
1.3.7. Certificate of Treatment: within 30 Working Days of treatment at offsite Treatment Facility, Submit documentation verifying that materials have been treated by Contractor. Include:
1.3.7.1. Issued by the Treatment Facility.
1.3.7.2. On company letterhead.
1.3.7.3. Name and location of facility where the material is being treated.
1.3.7.4. Date and weight for each shipment received and total weight received at the offsite facility.
1.3.7.5. Date and weight for each treatment event and total weight treated at the offsite facility.
1.3.7.6. Treatment methodology.
1.3.7.7. Laboratory certificates demonstrating treatment objectives were met.
1.3.7.8. Disposition of treated material.
1.3.7.9. Signed by identified authorized treatment company representative.
1.3.8. Certificate of Disposal: within 30 Working Days of disposal at Disposal Facility, Submit documentation verifying that materials have been disposed by Contractor. Include:
1.3.8.1. Issued by the Disposal Facility.
1.3.8.2. On company letterhead.
1.3.8.3. Name and location of facility where the material is being disposed.
1.3.8.4. Date and weight for each shipment received and total weight received at the Disposal Facility.
1.3.8.5. Identification of final ownership of material.
1.3.8.6. Signed by identified authorized disposal company representative.

1.4. Sequencing and Scheduling

1.4.1. Commence Work involving contact with Contaminated or potentially Contaminated Material or Wastewater after all applicable Environmental Protection procedures (including those identified in Contaminated Material and Non-Contaminated Material Management Plan and Environmental Protection Plan) and facilities (including those identified in Site Layout) are operational and accepted by Departmental Representative.
1.4.2. Plan work sequencing and traffic patterns to prevent contamination of clean areas due to traffic or debris.

1.5. Equipment Decontamination Facility

1.5.1. Prior to commencing Work involving equipment contact with potentially Contaminated Material, construct equipment decontamination facilities to accommodate the largest potentially contaminated equipment onsite.

1.5.2. Collect and contain equipment decontamination wastewater and sediment. Transfer collected wastewater and sediment to treatment facilities accepted by Departmental Representative.

1.6. Personnel Decontamination Facility

1.6.1. Provide an area or areas close to the workers' changing facilities to enable workers and other personnel leaving areas such as exclusion area to remove deleterious and contaminated materials from boots, clothing and skin surfaces.

1.6.2. Be responsible for ensuring that all materials, chemicals, protective clothing, wash water and deleterious materials are collected, treated and disposed of in accordance with applicable environmental standards and regulations.

1.6.3. Personnel Decontamination Facility to be available for use by persons other than the Contractor's workers and Subcontractors, including federal employees, other contractor(s), and environmental agencies. Provide use of facilities to other persons.

1.7. Drum Staging Pad

1.7.1. Provide, maintain, and operate drum staging pad as required.

1.7.2. Construct drum staging pad with sump capable of collecting leachate and rain runoff. Place impermeable liner that contours over top of berm, and collects leachate and runoff from staging pad which is conducted solely to sump on staging pad. Leachate is Contaminated Water.

1.8. Contaminated Water Treatment Plant

1.8.1. Design Requirements:

1.8.1.1. Design and Operating Criteria: design Contaminated Water Treatment Plant capable of treating Contaminated Water generated from dewatering excavations and Work areas to meet Discharge Approval requirements, capable of removing oil, suspended solids, particulates, and asbestos fibers, and filter water through 5-micron particulate filter prior to discharge.

1.8.1.2. Ensure that discharges from Site are in compliance with applicable permit requirements and limitations.

1.8.1.3. Design piping to transfer liquid/solid mixtures generated by dewatering operations which require treatment to Contaminated Water Treatment Plant.

1.8.1.4. Design Contaminated Water Treatment Plant capable of receiving liquid/solid mixtures and not causing delay to dewatering operations.

1.8.1.5. Piping: suitable material type, of sufficient diameter and structural thickness for purpose intended; satisfactorily tested for leaks with potable water in presence of Departmental Representative before handling Contaminated Water.

1.8.2. Installation:

1.8.2.1. Prepare Site for Contaminated Water Treatment Plant.

1.8.2.2. Install component systems in accordance with installation procedures and as required.

1.8.2.3. Following installation of system, implement initial operation test in accordance with procedures developed by Contractor and submit results as instructed by the Departmental Representative.

1.8.2.4. Install piping in accordance with manufacturer's instructions and test for leakage using potable water prior to commencing dewatering and treatment operations.

1.8.3. Initial Testing: determine performance of Contaminated Water Treatment Plant provided by Contractor as follows prior to commencing excavation:

1.8.3.1. Test run with potable water to ensure it is operating currently and no leaks are occurring.

1.8.3.2. Performance verification (contaminant removal) of Contaminated Water treated, stored, tested, assessed, and accepted by Departmental Representative prior to discharge.

1.8.3.3. Provide access for independent collection of treated stored water samples by the Departmental Representative.

1.8.4. Operational Testing:

1.8.4.1. Operate Contaminated Water Treatment Plant using experienced, qualified personnel and in accordance with manufacturer's instructions and procedures as Submittals by Contractor.

1.8.4.2. Collect, analyze, and assess samples as recommended by a Qualified Professional.

1.8.4.3. Provide access for independent collection of samples by the Departmental Representative.

1.8.4.4. On basis of analytical results by Contractor or Departmental Representative obtained from samples collected at the discharge point, make system modifications required for effluent to satisfy effluent criteria, or continue with normal dewatering operations as instructed by the Departmental Representative.

1.8.5. Decommissioning/Dismantling:

1.8.5.1. Decontaminate and remove salvageable components of Contaminated Water Treatment Plant including treatment system, pumps, piping, and electrical equipment. Decontaminate salvageable equipment as required prior to demobilization from Site.

1.8.5.2. Dispose of non-salvageable equipment and materials at Disposal Facility accepted by the Departmental Representative.

1.9. Soil Stockpiling

1.9.1. Provide, maintain, and operate temporary storage/stockpiling facilities as per Contractor's Site Layout.

1.9.2. Segregate Contaminated Material from Non-Contaminated Material into separate stockpiles to prevent cross-contamination and as instructed by the Departmental Representative.

1.9.3. Prevent precipitation from infiltrating or from directly running off stockpiled materials. Cover stockpiled materials with an impermeable cover during periods of Work stoppage including at end of each Working Day and as instructed by the Departmental Representative.

1.9.4. Securely fasten covers over stockpiled material until material is loaded for offsite transport.

1.9.5. Store excavated Non-Contaminated Material only on non-contaminated surface areas. Ensure no contact between excavated Non-Contaminated Material and drainage of Contaminated Water or Contaminated Material.

1.9.6. Store excavated Contaminated Material in temporary stockpiles.

1.9.6.1. Install impermeable liner (eg asphalt or minimum 20 mil (0.5mm) polyethylene) below proposed stockpile locations to prevent contact between stockpile material and ground.

1.9.6.2. Cover stockpiled material when not being worked or sampled to prevent release of airborne dust, vapours, or odours, and to prevent saturation and leachate generation from material.

1.9.6.3. Prevent Non-Contaminated Water, such as surface water, from coming into contact with Contaminated Material stockpiles.

1.9.7. Segregate Contaminated Material into different treatment/disposal streams, including at a minimum:

1.9.7.1. Hazardous Waste

1.9.7.2. Waste Quality

1.9.8. Segregate different suspect material in discrete stockpiles to facilitate ex-situ characterization as instructed by the Departmental Representative.

1.9.9. Assist Departmental Representative in collection of stockpile samples for exsitu characterization. Ex-situ characterization may take up to 5 Working Days, not counting the day the sample is collected. No Standby Time charges or increases to Contract Amount or Extension of Time for completion of the Work can be incurred for Confirmation Sample results provided within 5 Working Days, not counting the day the sample is collected.

1.9.10. Do not remove Contaminated Material from stockpiles until exsitu characterization completed and as instructed by Departmental Representative.

1.10. Equipment Decontamination

1.10.1. At minimum, perform following steps during equipment decontamination: mechanically remove packed dirt, grit, and debris by scraping and brushing without using steam or high-pressure water to reduce amount of water needed and to reduce amount of contaminated rinsate generated.

1.10.2. If required, as instructed by the Departmental Representative, use high-pressure, low-volume, hot water or steam supplemented by detergents or solvents as appropriate. Pay particular attention to tire treads, equipment tracks, springs, joints, sprockets, and undercarriages. Scrub surfaces with long handle scrub brushes and cleaning agent. Rinse off and collect cleaning agent. Air dry equipment in clean area before removing from Site or travelling on clean areas. Perform assessment as instructed by the Departmental Representative to determine effectiveness of decontamination.

1.10.2.1. Take appropriate measures necessary to minimize drift of mist and spray during decontamination including provision of wind screens.

1.10.2.2. Collect decontamination wastewater and sediment which accumulate in decontamination location. Treat collected wastewater as Contaminated Water. Manage decontamination sediment as Hazardous Waste.

1.10.3. In the opinion of the Departmental Representative, each piece of equipment must be inspected by the Departmental Representative after decontamination and prior to travel on clean areas or demobilization from Site. Perform additional decontamination as required in the opinion of the Departmental Representative.

1.10.4. Furnish and equip personnel engaged in equipment decontamination with protective equipment including suitable disposable clothing, respiratory protection, and face shields.

1.11. Progress Decontamination

1.11.1. Decontaminate equipment after working in potentially contaminated Work areas and prior to subsequent Work or travel on clean areas.

1.12. Final Decontamination

1.12.1. Perform final decontamination of construction facilities, equipment, and materials which may have come in contact with potentially Contaminated Material prior to demobilization from Site.

1.13. Drums

1.13.1. Storage of liquid waste: 200 L steel drums meeting Transportation and Dangerous Goods Act, closable lids, complete with labels for marking contents and date filled.

1.13.2. Storage of solid waste: 200 L steel drums meeting Transportation and Dangerous Goods Act, closable lids, complete with labels for marking contents and date filled.

1.14. Contaminated Water

1.14.1. Assume ownership of, and be responsible for Contaminated Water once it is loaded on a vehicle, barge, or other vessel for transport offsite or once it enters the Contaminated Water Treatment Plant.

1.14.2. Collect Contaminated Water that has, or potentially has, come into contact with Contaminated Material including excavation and stockpile areas, or is otherwise potentially contaminated from Work activities.

1.14.3. Transport and treat collected Contaminated Water at Contaminated Water Treatment Plant.

1.14.4. Discharge to environment: obtain Discharge Approval from authority having jurisdiction. Comply with Waterway Impact Requirements.

1.15. Onsite Contaminated Water Treatment Plant

1.15.1. Onsite Contaminated Water Treatment: at Contractor's discretion, treat at Treatment Facility onsite provided by Contractor and accepted by the Departmental Representative.

1.15.2. Design Requirements:

1.15.2.1. Design and Operating Criteria: design Contaminated Water Treatment Plant capable of treating Contaminated Water generated from dewatering excavations and Work areas to meet Discharge Approval requirements, capable of removing oil, suspended solids, particulates, and asbestos fibers, and filter water through 5-micron particulate filter prior to discharge.

1.15.2.2. Ensure that discharges from Site are in compliance with applicable permit requirements and limitations.

1.15.2.3. Design piping to transfer liquid/solid mixtures generated by dewatering operations which require treatment to Contaminated Water Treatment Plant.

1.15.2.4. Design Contaminated Water Treatment Plant capable of receiving liquid/solid mixtures and not causing delay to dewatering operations.

1.15.2.5. Piping: suitable material type, of sufficient diameter and structural thickness for purpose intended; satisfactorily tested for leaks with potable water in presence of Departmental Representative before handling Contaminated Water.

1.15.3. Installation:

1.15.3.1. Prepare Site for Contaminated Water Treatment Plant.

1.15.3.2. Install component systems in accordance with installation procedures and as required.

1.15.3.3. Following installation of system, implement initial operation test in accordance with procedures developed by Contractor and submit results as directed by the Departmental Representative.

1.15.3.4. Install piping in accordance with manufacturer's instructions and test for leakage using potable water prior to commencing dewatering and treatment operations.

1.15.4. Initial Testing: determine performance of Contaminated Water Treatment Plant provided by Contractor as follows prior to commencing excavation:

1.15.4.1. Test run with potable water to ensure it is operating currently and no leaks are occurring.
1.15.4.2. Performance verification (contaminant removal) of Contaminated Water treated, stored, tested, assessed, and accepted by Departmental Representative prior to discharge.
1.15.4.3. Provide access for independent collection of treated stored water samples by the Departmental Representative.
1.15.5. Operational Testing:
1.15.5.1. Operate Contaminated Water Treatment Plant using experienced, qualified personnel and in accordance with manufacturer's instructions and procedures as Submittals by Contractor.
1.15.5.2. Collect, analyze, and assess samples as required by a Qualified Professional.
1.15.5.3. Provide access for independent collection of samples by the Departmental Representative.
1.15.5.4. On basis of analytical results by Contractor or Departmental Representative obtained from samples collected at the discharge point, make system modifications required for effluent to satisfy effluent criteria, or continue with normal dewatering operations as directed by the Departmental Representative.
1.15.6. Decommissioning/Dismantling:
1.15.6.1. Decontaminate and remove salvageable components of Contaminated Water Treatment Plant including treatment system, pumps, piping, and electrical equipment.
1.15.6.2. Dispose of non-salvageable equipment and materials at Disposal Facility accepted by the Departmental Representative. Decontaminate salvageable equipment as required prior to demobilization from Site.
1.15.7. Discharge to environment: obtain Discharge Approval from authority having jurisdiction.

1.16. Contaminated Material Management

1.16.1. Remove all Contaminated Material within Work areas in accordance with the Contract and as instructed by the Departmental Representative.
1.16.2. Minimize generation of Contaminated Material to greatest extent practicable. Take necessary precautions to avoid mixing during excavation, handling, loading, stockpiling, and transport of Non-Contaminated Material with Contaminated Material, and Waste Quality with Hazardous Waste.
1.16.3. Segregate, excavate, handle, stockpile, load, transport, treat, and dispose Contaminated Material separately into the following classifications in accordance with the Contract or as instructed by the Departmental Representative based on in-situ results, field observations, field measurements, and/or ex-situ characterization:
1.16.3.1. Hazardous Waste
1.16.3.2. Waste Quality

1.16.4. Handle, stockpile, load, and transport Contaminated Material from the Site separately from material from other sites.
1.16.5. Treat and dispose Contaminated Material from the Site separately from material from other sites to the extent practicable as acceptable to the Departmental Representative.
1.16.6. Material characterization additional to information provided in Contract required by transport, Treatment Facility or Disposal Facility responsibility of Contractor.

1.17. Contaminated Material Transport-Offsite

1.17.1. Assume ownership of, and be responsible for, Contaminated Material once it is loaded on a vehicle, barge, or other vessel for transport.
1.17.2. Transport material as soon as practical. Do not unreasonably stockpile material onsite.
1.17.3. Cover material while being transported to prevent release of airborne dust, vapours, or odours, and to prevent saturation and leachate generation from material.
1.17.4. Excess water in soil or sediment must not be allowed to flow out of vehicle or vessel during transport.
1.17.5. Stabilize soil and sediment as necessary.
1.17.6. All vehicles, vessels and operators must be appropriately licensed and equipped to transport Hazardous Waste soil and sediment.
1.17.7. Manifest and correlate weights of all material transported from Site documenting weight at removal from Site, movement, transfer stations, interim storage and treatment, and weight of material at final Disposal Facility. Submit all manifests, as instructed by the Departmental Representative.
1.17.8. Material transported with discrepancies in manifests must be resolved as required by regulations and as acceptable to the Departmental Representative. Discrepancies include:
1.17.8.1. No manifest or an incomplete manifest.
1.17.8.2. The material transported does not match the description in the manifest.
1.17.8.3. The amount transported differs by more than 5% in the manifest.
1.17.8.4. The material transported is in a hazardous condition.

1.18. Contaminated Material Disposition

1.18.1. Treat and dispose of Contaminated Material as follows, otherwise in accordance with the Contract, or as instructed by the Departmental Representative:
1.18.1.1. Hazardous Waste: May be treated at a Treatment Facility prior to disposal at a Disposal Facility.
1.18.1.2. Waste Quality: May be treated at a Treatment Facility prior to disposal at a Disposal Facility.

1.19. Contaminated Material Transport-Owner Soil Treatment Facility

1.19.1. Assume ownership of, and be responsible for, Contaminated Material once it is loaded on a vehicle, barge, or other vessel for transport.

1.19.2. Transport material as soon as practical. Do not unreasonably stockpile material onsite.

1.19.3. Cover material while being transported to prevent release of airborne dust, vapours, or odours, and to prevent saturation and leachate generation from material.

1.19.4. Excess water in soil or sediment must not be allowed to flow out of vehicle or vessel during transport.

1.19.5. Stabilize soil and sediment as necessary.

1.19.6. All vehicles, vessels and operators must be appropriately licensed and equipped to transport Hazardous Waste soil and sediment.

1.19.7. Transport material to location shown on Drawings.

1.19.8. Manifest estimated volumes of all material transported from Site to Owner Soil Treatment Facility. Submit all manifests as directed by the Departmental Representative.

1.20. Contaminated Material Treatment- Owner Soil Treatment Facility

1.20.1. Contaminated Material Treatment-Onsite: place Contaminated Material at Treatment Facility provided by Owner.

1.20.1.1. Screen contaminated material as specified and place in Owner Soil Treatment Facility in locations and thicknesses according to Drawings.

1.20.1.2. Be responsible for any damage to Owner Soil Treatment Facility caused by placement.

1.20.2. Treat soil according to Drawings.

1.21. Contaminated Material Treatment - Offsite

1.21.1. Contaminated Material Treatment-Offsite: treat at Treatment Facility provided by Contractor and accepted by the Departmental Representative.

1.21.2. Treatment Facility must:

1.21.2.1. Be an existing offsite facility located in Canada or the United States.

1.21.2.2. Be designed, constructed and operated for the handling or processing of waste in such a manner as to change the physical, chemical or biological character or composition of waste amenable to treatment to lower than the BC *Contaminated Sites Regulation* Schedule 7 Column II.

1.21.2.3. Hold a valid and subsisting permit, certificate, approval, or any other form of authorization issued by a province or territory for the treatment of soil or other material that is Hazardous Waste or Waste Quality, as applicable.

1.21.2.4. Comply with applicable municipal zoning, bylaws, and other applicable requirements.

1.21.3. Facility Regulator:

1.21.3.1. For facilities within provincial or territorial jurisdiction, the relevant provincial or territorial ministry.

1.21.3.2. For facilities on First Nations reserve land in Canada not subject to the First Nation Land Management regime: Indigenous and Northern Affairs Canada.

1.21.3.3. For facilities on First Nations reserve land in Canada subject to the First Nation Land Management regime, the relevant First Nation Council. In addition, a Qualified Professional must certify that the facility is appropriate for the relevant Contaminated Material.

1.21.3.4. For facilities in the United States of America, either or both of the Environmental Protection Agency and the relevant State, as appropriate.

1.21.4. Treat material as soon as practical and within 100 Working Days of leaving Site or as required by Contract unless otherwise accepted by Departmental Representative.

1.21.5. Material treated offsite must subsequently be disposed of at a Disposal Facility after treatment.

1.21.6. Treatment includes bioremediation, thermal desorption, and incineration. Treatment does not include blending, mixing, or dilution.

1.21.7. If proposed Treatment Facility is not acceptable to Departmental Representative, identify an alternate Treatment Facility that is acceptable.

1.21.8. Submit Certificates of Treatment for all material treated offsite.

1.22. Contaminated Material Disposal

1.22.1. Contaminated Material Disposal: dispose Contaminated Material at Disposal Facility provided by Contractor and accepted by the Departmental Representative.

1.22.2. Disposal Facility must:

1.22.2.1. Be an existing offsite facility located in Canada or the United States.

1.22.2.2. Be designed, constructed and operated to prevent any pollution from being caused by the facility outside the area of the facility from waste placed in or on land within the facility.

1.22.2.3. Hold a valid and subsisting permit, certificate, approval, or any other form of authorization issued by a province or territory for the disposal of soil or other material that is Waste Quality.

1.22.2.4. Comply with applicable municipal zoning, bylaws, and other applicable requirements.

1.22.3. Facility Regulator:

1.22.3.1. For facilities within provincial or territorial jurisdiction, the relevant provincial or territorial ministry.

1.22.3.2. For facilities on First Nations reserve land in Canada not subject to the First Nation Land Management regime: Indigenous and Northern Affairs Canada.

1.22.3.3. For facilities on First Nations reserve land in Canada subject to the First Nation Land Management regime, the relevant First Nation Council. In addition, a Qualified Professional must certify that the facility is appropriate for the relevant Contaminated Material.

1.22.3.4. For facilities in the United States of America, either or both of the Environmental Protection Agency and the relevant State, as appropriate.

1.22.4. Dispose material as soon as practical and within 100 Working Days of leaving Site or as required by Contract unless otherwise accepted by Departmental Representative.

1.22.5. Material sent to a Disposal Facility must be permanently stored at that facility.
1.22.6. If proposed Disposal Facility is not acceptable to Departmental Representative, provide an alternate Disposal Facility that is acceptable.
1.22.7. Submit Certificates of Disposal for all material disposed offsite.

2. PART 2 - PRODUCTS

2.1. Not Used
2.1.1. Not Used.

3. PART 3 - EXECUTION

3.1. Not Used
3.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Submit to Departmental Representative Submittals listed for review.
1.3.2. Work affected by Submittal must not proceed until review is complete.
1.3.3. Submit the following:
1.3.3.1. Health and Safety Plan.
1.3.3.2. Copies of reports or directions issued by federal and provincial health and safety inspectors.
1.3.3.3. Copies of incident and accident reports.
1.3.3.4. Complete set of Material Safety Data Sheets (MSDS), and all other documentation required by Workplace Hazardous Materials Information System (WHMIS) requirements.
1.3.3.5. Emergency Procedures.
1.3.3.6. Notice of Project.
1.3.4. The Departmental Representative will review the Contractor's site-specific project Health and Safety Plan and emergency procedures, and provide comments to the Contractor within 5 Working Days after receipt of the plan.
1.3.5. If changes are required, revise the plan as appropriate and resubmit to Departmental Representative within 5 Working Days.
1.3.6. Submittal of the Health and Safety Plan, and any revised version, to the Departmental Representative is for information and reference purposes only. It will not:
1.3.6.1. Be construed to imply approval by the Departmental Representative.
1.3.6.2. Be interpreted as a warranty of being complete, accurate and legislatively compliant.
1.3.6.3. Relieve the Contractor of his legal obligations for the provision of health and safety on the project.

1.4. References

1.4.1. Government of Canada:
1.4.1.1. Canada Labour Code - Part II.
1.4.1.2. Canada Occupational Health and Safety Regulations.
1.4.2. National Building Code of Canada (NBC):
1.4.2.1. Part 8, Safety Measures at Construction and Demolition Sites.
1.4.3. Canadian Standards Association (CSA) as amended:
1.4.3.1. CSA Z797-2009 Code of Practice for Access Scaffold.
1.4.3.2. CSA S269.1-1975 (R2003) Falsework for Construction Purposes.

1.4.3.3. CSA S350-M1980 (R2003) Code of Practice for Safety in Demolition of Structures.
1.4.4. National Fire Code of Canada 2010 (as amended):
1.4.4.1. Part 5 – Hazardous Processes and Operations and Division B as applicable and required.
1.4.4.2. FCC No. 302, Standard for Welding and Cutting.
1.4.5. American National Standards Institute (ANSI):
1.4.5.1. ANSI A10.3, Operations – Safety Requirements for Powder-Actuated Fastening Systems.
1.4.6. Province of British Columbia:
1.4.6.1. Workers Compensation Act Part 3-Occupational Health and Safety.
1.4.6.2. Occupational Health and Safety Regulation.

1.5. Regulatory Requirements

1.5.1. Comply with codes, acts, bylaws, standards and regulations applicable to the performance of the Work in accordance with the Contract to ensure safe operations at Site.
1.5.2. In event of conflict between any provision of the above authorities, the most stringent provision will apply. Should a dispute arise in determining the most stringent requirement, the Departmental Representative will instruct on the course of action to be followed.

1.6. Worker's Compensation Board Coverage

1.6.1. Comply fully with the Workers' Compensation Act, regulations and orders made pursuant thereto, and any amendments up to the Final Completion of the Work.
1.6.2. Maintain Workers' Compensation Board coverage during the term of the Contract, until and including the date that the Certificate of Final Completion is issued.

1.7. Compliance with Regulations

1.7.1. PSPC may terminate the Contract without liability to PSPC where the Contractor, in the opinion of PSPC, refuses to comply with a requirement of the Workers' Compensation Act or the Occupational Health and Safety Regulations.
1.7.2. It is the Contractor's responsibility to ensure that all workers are qualified, competent and certified to perform the Work as required by the Workers' Compensation Act or the Occupational Health and Safety Regulations.

1.8. Responsibility

1.8.1. Assume responsibility as the Prime Contractor for Work under this Contract.
1.8.1.1. Be responsible for health and safety of persons onsite, safety of property onsite and for protection of persons adjacent to Site and environment to extent that they may be affected by conduct of Work.

1.8.1.2. Comply with and enforce compliance by employees with safety requirements of Contract, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.

1.9. Health and Safety Coordinator

1.9.1. The Health and Safety Coordinator must:

1.9.1.1. Be responsible for completing all health and safety training, and ensuring that personnel that do not successfully complete the required training are not permitted to enter the Site to perform Work.

1.9.1.2. Be responsible for implementing, daily enforcing, and monitoring the site-specific Health and Safety Plan.

1.9.1.3. Be on Site during execution of Work.

1.10. General Conditions

1.10.1. Provide safety barricades and lights around Site as required to provide a safe working environment for workers and protection for pedestrian and vehicular traffic.

1.10.2. Ensure that non-authorized persons are not allowed to circulate in designated construction areas of the Site:

1.10.2.1. Provide appropriate means by use of barricades, fences, warning signs, traffic control personnel, and temporary lighting as required.

1.11. Project/Site Conditions

1.11.1. Work at Site will involve contact with contaminants identified in Specifications and environmental reports.

1.12. Work Permits

1.12.1. Obtain specialty permits related to project before start of Work.

1.13. Filing of Notice

1.13.1. The Prime Contractor is to complete and submit a Notice of Project as required by Provincial or Territorial authorities.

1.13.2. Provide copies of all notices to the Departmental Representative.

1.14. Health and Safety Plan

1.14.1. Conduct a site-specific hazard assessment based on review of Contract, required Work, and project Site. Identify any known and potential health risks and safety hazards.

1.14.2. Prepare and comply with a site-specific project Health and Safety Plan based on hazard assessment, including, but not limited to, the following:

1.14.2.1. Primary requirements:

1.14.2.1.1. Contractor's safety policy.

1.14.2.1.2. Identification of applicable compliance obligations.

1.14.2.1.3. Definition of responsibilities for project safety/organization chart for project.
1.14.2.1.4. General safety rules for project.
1.14.2.1.5. Job-specific safe work, procedures.
1.14.2.1.6. Inspection policy and procedures.
1.14.2.1.7. Incident reporting and investigation policy and procedures.
1.14.2.1.8. Occupational Health and Safety Committee/Representative procedures.
1.14.2.1.9. Occupational Health and Safety meetings.
1.14.2.1.10. Occupational Health and Safety communications and record keeping procedures.
1.14.2.2. Summary of health risks and safety hazards resulting from analysis of hazard assessment, with respect to site tasks and operations which must be performed as part of the Work.
1.14.2.3. List hazardous materials to be brought onsite as required by Work.
1.14.2.4. Indicate engineering and administrative control measures to be implemented at the Site for managing identified risks and hazards.
1.14.2.5. Identify personal protective equipment (PPE) to be used by workers.
1.14.2.6. Identify personnel and alternates responsible for site safety and health.
1.14.2.7. Identify personnel training requirements and training plan, including site orientation for new workers.
1.14.3. Develop the plan in collaboration with all Subcontractors. Ensure that work/activities of Subcontractors are included in the hazard assessment and are reflected in the plan.
1.14.4. Revise and update Health and Safety Plan as required, and re-submit to the Departmental Representative.
1.14.5. Departmental Representative's review: the review of Health and Safety Plan by Public Service and Procurement Canada (PSPC) will not relieve the Contractor of responsibility for errors or omissions in final Health and Safety Plan or of responsibility for meeting all requirements of construction and Contract.

1.15. Emergency Procedures

1.15.1. List standard operating procedures and measures to be taken in emergency situations. Include an evacuation plan and emergency contacts (ie names/telephone numbers) of:
1.15.1.1. Designated personnel from own company.
1.15.1.2. Regulatory agencies applicable to Work and as per legislated regulations.
1.15.1.3. Local emergency resources.
1.15.1.4. Departmental Representative and site staff.
1.15.2. Include the following provisions in the emergency procedures:
1.15.2.1. Notify workers and the first-aid attendant, of the nature and location of the emergency.
1.15.2.2. Evacuate all workers safely.
1.15.2.3. Check and confirm the safe evacuation of all workers.
1.15.2.4. Notify the fire department or other emergency responders.

1.15.2.5. Notify adjacent workplaces or residences which may be affected if the risk extends beyond the workplace.
1.15.2.6. Notify Departmental Representative and Site staff.
1.15.3. Provide written rescue/evacuation procedures as required for, but not limited to:
1.15.3.1. Work at high angles.
1.15.3.2. Work in confined spaces or where there is a risk of entrapment.
1.15.3.3. Work with hazardous substances.
1.15.3.4. Underground work.
1.15.3.5. Work on, over, under and adjacent to water.
1.15.3.6. Workplaces where there are persons who require physical assistance to be moved.
1.15.4. Design and mark emergency exit routes to provide quick and unimpeded exit.
1.15.5. Revise and update emergency procedures as required, and re-submit to the Departmental Representative.

1.16. Hazardous Products

1.16.1. Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage and disposal of hazardous materials, and regarding labelling and provision of Material Safety Data Sheets (MSDS) acceptable to the Departmental Representative and in accordance with the Canada Labour Code.
1.16.2. Where use of hazardous and toxic products cannot be avoided:
1.16.2.1. Notify Departmental Representative beforehand of the product(s) intended for use. Submit applicable MSDS and WHMIS documents as required.
1.16.2.2. In conjunction with Departmental Representative, schedule to carry out Work during "off hours" when tenants have left the building.
1.16.2.3. Provide adequate means of ventilation as required.

1.17. Unforeseen Hazards

1.17.1. Should any unforeseen or peculiar safety-related factor, hazard or condition become evident during performance of the Work, immediately stop Work and notify the Departmental Representative verbally and in writing.

1.18. Posted Documents

1.18.1. Post legible versions of the following documents onsite:
1.18.1.1. Health and Safety Plan.
1.18.1.2. Sequence of Work.
1.18.1.3. Emergency procedures.
1.18.1.4. Site drawing showing project layout, locations of the first-aid station, evacuation route and marshalling station, and the emergency transportation provisions.
1.18.1.5. Notice of Project.
1.18.1.6. Floor plans or Site plans.

1.18.1.7. Notice as to where a copy of the Workers' Compensation Act and Regulations are available on the Site for review by employees and workers.
1.18.1.8. Workplace Hazardous Materials Information System (WHMIS) documents.
1.18.1.9. Material Safety Data Sheets (MSDS).
1.18.1.10. List of names of Joint Health and Safety Committee members, or Health and Safety Representative, as applicable.
1.18.2. Post all Material Safety Data Sheets (MSDS) onsite, in a common area, visible to all workers and in locations accessible to tenants when Work of this Contract includes construction activities adjacent to occupied areas.
1.18.3. Postings should be protected from the weather, and visible from the street or the exterior of the principal construction site shelter provided for workers and equipment, or as accepted by the Departmental Representative.

1.19. Meetings

1.19.1. Attend health and safety preconstruction meeting and all subsequent meetings called by the Departmental Representative.
1.19.2. Ensure all site personnel attend a health and safety toolbox meeting at the beginning of each shift, which must include:
1.19.2.1. Sign-in of all attendees.
1.19.2.2. Planned Work activities and environmental considerations for that shift.
1.19.2.3. Hazards associated with these Work activities, including environmental hazards (eg potential for hypothermia, heat exhaustion, heat stroke).
1.19.2.4. Appropriate job-specific safe work procedures.
1.19.2.5. Required personal protective equipment (PPE).
1.19.2.6. Appropriate emergency procedures.
1.19.2.7. Review recent accidents on Site, including near misses.
1.19.3. Retain records of all health and safety meetings onsite during Work, and retain as corporate records for a minimum of 7 years after Work is completed.

1.20. Correction of Non-Compliance

1.20.1. Immediately address health and safety non-compliance issues identified by the Departmental Representative.
1.20.2. Provide Departmental Representative with written report of action taken to correct non-compliance with health and safety issues identified.
1.20.3. The Departmental Representative may issue a "stop work order" if non-compliance of health and safety regulations is not corrected immediately or within posted time.
1.20.4. Correct non-compliance.

1.21. Hazardous Occurrence Investigation and Reporting

1.21.1. Hazard includes:

1.21.1.1. Any source of potential damage, harm or adverse effects on life, health, property or environment at work. It refers to any biological, chemical, ergonomic, physical, psychosocial and safety factor that is reasonably likely to cause harm or damage to humans, other organisms, or the environment in the absence of its control. Sometimes a hazard is referred to as being the actual harm or the health effect it caused rather than the hazard. For example the disease tuberculosis might be called a hazard by some but in general the tuberculosis-causing bacteria would be considered the “hazard” or “hazardous biological agent”. Exposure to tuberculosis would be the hazardous incident. For types of Hazards refer to Annex 3 of the Standard on Hazard Prevention Program.

1.21.2. Hazardous Occurrence includes:

1.21.2.1. An event occurring at a PSPC managed building or worksite, or through the course of an employee's work that results in, or has the potential to result in, a fatality, injury, illness, exposure to a hazardous substance or property damage or an escapement of a hazardous material. For the purpose of investigating, recording and reporting hazardous occurrences, the following are included under this term: disabling injuries, minor injuries and near-misses.

1.21.3. Hazardous Occurrence Investigation and Reporting Procedures:

1.21.3.1. Includes information regarding the person involved and the basic circumstances surrounding the hazardous occurrence.

1.21.3.2. Provides a detailed and thorough description of the hazardous occurrence and the sequence of events.

1.21.3.3. Indicates corrective measures that have been taken since the occurrence.

1.21.3.4. Requires the appointment of a qualified investigator.

1.21.3.5. Provides recommendations for additional corrective measures, if required.

1.21.4. Fatal or Serious Accidents Procedures:

1.21.4.1. Call (250) 774-2777 to advise the police organization having jurisdiction to secure the scene and investigate the matter.

1.21.4.2. Advise the Departmental Representative of the fatality or serious accident within 1 hour.

1.21.4.3. No investigation will be conducted at the scene until the police service having jurisdiction has released the scene.

1.21.4.4. No person shall, unless authorized to do so, remove or in any way interfere with or disturb any wreckage, article or thing related to the incident except to the extent necessary to: save a life, prevent injury or relieve human suffering in the vicinity; maintain an essential public service; or prevent unnecessary damage to or loss of property.

1.22. Utility Clearance

1.22.1. The Contractor is solely responsible for utility clearance.

1.22.2. The Contractor will not rely upon Drawings or other information provided with utility locations.

1.23. Personal Protective Equipment Program

1.23.1. Submit Personal Protective Equipment (PPE) program to the Departmental Representative addressing:

1.23.1.1. Donning and doffing procedures.

1.23.1.2. PPE selection based upon Site hazards.

1.23.1.3. PPE use and limitations of equipment.

1.23.1.4. Work mission duration, PPE maintenance and storage.

1.23.1.5. PPE decontamination and disposal.

1.23.1.6. PPE inspection procedures prior to, during, and after use.

1.23.1.7. Evaluation of effectiveness of PPE program, and limitations during temperature extremes, and other appropriate medical considerations.

1.23.1.8. Medical surveillance requirements for personnel assigned to work at Site.

1.23.1.9. Frequency and types of air monitoring, personnel monitoring, and environmental sampling techniques and instrumentation to be used, including methods of maintenance and calibration of monitoring and sampling equipment.

1.23.1.10. Site control measures employed at Site including site map, site work zones, use of 'buddy system', site communications including site security, alerting means for emergencies, standard operating procedures or safe work practices, and identification of nearest medical assistance.

1.23.1.11. Decontamination procedures for both personnel and equipment.

1.23.1.12. Emergency response requirements addressing: pre-emergency planning, personnel roles, lines of authority and communication, emergency recognition and prevention, safe distances and places of refuge, site security and control, evacuation routes and procedures, decontamination procedures not covered under decontamination section, emergency medical treatment and first aid, emergency alerting and response procedures, critique of response and follow-up, PPE and emergency equipment, site topography, layout, prevailing weather conditions, and procedures for reporting incidents to local, provincial, or federal agencies.

1.23.1.13. Written respiratory protection program for project activities.

1.23.1.14. Procedures dealing with heat and/or cold stress.

1.23.1.15. Spill containment program if waste material is generated, excavated, stored, or managed onsite.

1.24. Offsite Contingency and Emergency Response Plan

1.24.1. Prior to commencing Work involving handling of hazardous materials, develop offsite Contingency and Emergency Response Plan.

1.24.2. Plan must provide immediate response to serious site occurrence such as explosion, fire, or migration of significant quantities of toxic or hazardous material from Site.

1.25. Personnel Health, Safety, and Hygiene

1.25.1. Training: ensure personnel entering Site are trained in accordance with specified personnel training requirements. Training session must be completed by Health and Safety Officer.

1.25.2. Levels of Protection: establish levels of protection for each Work area based on planned activity and location of activity.

1.25.3. Personal Protective Equipment:

1.25.3.1. Furnish site personnel with appropriate PPE as specified above. Ensure that safety equipment and protective clothing is kept clean and maintained.

1.25.4. Develop protective equipment usage procedures and ensure that procedures are strictly followed by site personnel; include following procedures as minimum:

1.25.4.1. Ensure prescription eyeglasses worn are safety glasses and do not permit contact lenses onsite within work zones.

1.25.4.2. Ensure footwear is steel-toed safety shoes or boots and is covered by rubber overshoes when entering or working in potentially contaminated work areas.

1.25.4.3. Dispose of or decontaminate PPE worn onsite at end of each workday.

1.25.4.4. Decontaminate reusable PPE before reissuing.

1.25.4.5. Ensure site personnel have passed respirator fit test prior to entering potentially contaminated work areas.

1.25.4.6. Ensure facial hair does not interfere with proper respirator fit.

1.25.5. Respiratory Protection:

1.25.5.1. Provide site personnel with extensive training in usage and limitations of, and qualitative fit testing for, air purifying and supplied-air respirators in accordance with specified regulations.

1.25.5.2. Develop, implement, and maintain respirator program.

1.25.5.3. Monitor, evaluate, and provide respiratory protection for site personnel.

1.25.5.4. Ensure levels of protection as listed have been chosen consistent with site-specific potential airborne hazards associated with major contaminants identified onsite.

1.25.5.5. In absence of additional air monitoring information or substance identification, retain an industrial hygiene specialist to determine minimum levels of respiratory protection required.

1.25.5.6. Immediately notify Departmental Representative when level of respiratory protection required increases.

1.25.5.7. Ensure appropriate respiratory protection during Work activities. As minimum requirement, ensure that persons entering potentially contaminated work areas are supplied with and use appropriate respiratory protection.

1.25.6. Heat Stress/Cold Stress: implement heat stress or cold stress monitoring program as applicable and include in site-specific Health and Safety Plan.
1.25.7. Personnel Hygiene and Personnel Decontamination Procedures. Provide minimum as follows:
1.25.7.1. Suitable containers for storage and disposal of used disposable PPE.
1.25.7.2. Potable water and suitable sanitation facility.
1.25.8. Emergency and First-Aid Equipment:
1.25.8.1. Locate and maintain emergency and first-aid equipment in appropriate location onsite including first-aid kit to accommodate number of site personnel; portable emergency eye wash; two 9 kg ABC type dry chemical fire extinguishers.
1.25.9. Site Communications:
1.25.9.1. Identify, supply, and implement appropriate communication devices for Site and post emergency contact numbers near devices.
1.25.9.2. Ensure personnel use of "buddy" system and develop hand signal system appropriate for site activities.
1.25.9.3. Provide employee alarm system to notify employees of site emergency situations or to stop Work activities if necessary.
1.25.9.4. Furnish selected personnel with 2-way radios.
1.25.9.5. Safety Meetings: conduct mandatory daily safety meetings for personnel, and additionally as required by special or Work-related conditions; include refresher training for existing equipment and protocols, review ongoing safety issues and protocols, and examine new site conditions as encountered. Hold additional safety meetings on as-needed basis.

2. PART 2 - PRODUCTS

2.1. Not Used
2.1.1. Not Used.

3. PART 3 - EXECUTION

3.1. Not Used
3.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Environmental Protection Plan: within 5 Working Days after Contract award and prior to mobilization to Site, Submit a plan detailing protection of the environment. Include:

1.3.1.1. Comprehensive overview of known or potential environmental issues to be addressed during Work.

1.3.1.2. Identify requirements that plan complies with. Includes: permits, certificates, approvals, or any other form of authorizations; other federal, provincial, or municipal requirements; and in accordance with the Contract.

1.3.1.3. Names and qualifications of persons responsible for ensuring adherence to Environmental Protection Plan.

1.3.1.4. Names and qualifications of persons responsible for manifesting material to be removed from Site.

1.3.1.5. Names and qualifications of persons responsible for training Site personnel.

1.3.1.6. Description of Environmental Protection personnel training program.

1.3.1.7. Work Area Plan showing proposed activity in each portion of areas, such as exclusion zone(s), decontamination zone(s) and clean zone(s), and identifying areas of limited use or non-use. Ensure plan includes measures for marking limits of use areas and methods for protection of features to be preserved within authorized Work areas.

1.3.1.8. Drawings showing locations of proposed temporary excavations or embankments for haul roads, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials onsite.

1.3.1.9. Historical, Archaeological, Cultural Resources, Biological Resources and Wetlands Plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources and wetlands. Include procedures if previously unknown historical, archaeological, cultural, and biological resources are discovered during Work.

1.3.1.10. Noise Control Plan identifying methods and procedures for preventing, monitoring, and controlling noise for compliance with: applicable permits, certificates, approvals, or any other form of authorizations; other federal, provincial, or municipal requirements; and in accordance with the Contract. Include thresholds and procedures if: noise does not comply with appropriate levels, or if there are public complaints.

1.3.1.11. Vibration Control Plan identifying methods and procedures for preventing, monitoring, and controlling vibration for compliance with: applicable permits, certificates, approvals, or any other form of authorizations; other federal, provincial, or municipal requirements; and in accordance with the Contract. Include thresholds and procedures if: vibration does not comply with appropriate levels, there are public complaints, or if onsite or offsite damage occurs

1.3.1.12. Traffic Control Plans including measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather. Ensure plans include measures to prevent mud transported onto public roads by vehicles or runoff, and mitigation measures if mud is transported onto public roads by vehicles or runoff. Vehicles and vehicle traffic must comply with all federal, provincial, and municipal laws and regulations.

1.3.1.13. Contamination Prevention Plan identifying hazardous, deleterious or regulated substances to be used onsite; intended actions to prevent introduction of such materials into air, water, or ground; and detailing provisions for compliance with federal, provincial, and municipal laws and regulations for storage and handling of these materials.

1.3.1.14. Spill Control Plan including procedures, instructions, and reports to be used in event of spill of hazardous, deleterious or regulated substances. Identify locations and contents of spill kits.

1.3.1.15. Communications Plan identifying emergency contact list and conditions for implementing emergency contact. Emergency contact to include: Contractor emergency response team including Superintendent; Departmental Representative and alternate, and other contractor(s) and individuals as instructed by the Departmental Representative; and federal, provincial, and municipal emergency contacts.

1.3.1.16. Air Pollution Control Plan detailing provisions to assure that contaminants, dust, debris, materials, and trash, are contained onsite. Include procedures, in accordance with the Contract, if air pollution does not comply with appropriate levels, there are public complaints, or if onsite or offsite damage occurs.

1.3.1.17. Non-Contaminated Material Disposal Plan identifying methods and locations for solid waste disposal including clearing waste. Include name, location, provincial or territorial authorizations, and evidence of compliance with municipal zoning and bylaws of Landfill.

1.3.1.18. Wastewater Management Plan identifying methods and procedures for management and discharge of Contaminated and Non-Contaminated Water including surface waters and wastewater which are directly derived from construction activities, such as concrete curing water, clean-up water, dewatering of groundwater, disinfection water, hydrostatic test water, and water used in flushing of lines. Include method of treatment and disposal.

1.3.1.19. Wastewater Disposal Plan identifying methods and locations for solid waste disposal including clearing waste. Include name, location, provincial or territorial authorizations, and evidence of compliance with Municipal zoning and bylaws of Disposal Facility and/or copy of municipal permit to discharge to sewer system

1.3.1.20. Erosion and Sediment Control Plan identifying type and location of erosion and sediment controls to be provided including monitoring and reporting requirements to assure that control measures are in compliance with erosion and sediment control plan, federal, provincial, and municipal laws and regulations.

1.3.2. Pollution Control Procedures Modification: immediately when pollution control procedures are inadequate, as instructed by the Departmental Representative, Submit modified procedures to resolve problem.

1.3.3. Pollution Control Remediation: immediately when soil, sediment or water contaminated by Contractor's activities are inadequate as instructed by the Departmental Representative, Submit remediation procedures.

1.3.4. Dust and Particulate Control Procedures Modification: immediately when dust and particulate control measures are inadequate as instructed by the Departmental Representative, Submit modified procedures to resolve problem.

1.4. Fires

1.4.1. Fires and burning of rubbish onsite not permitted.

1.5. Cleaning

1.5.1. Maintain cleanliness of Work and surrounding Site to comply with federal, provincial, and municipal fire and safety laws, ordinances, codes, and regulations applicable to the performance of the Work.

1.5.2. Coordinate cleaning operations with disposal operations to prevent accumulation of dust, dirt, debris, rubbish, and waste materials.

1.5.3. Ensure cleanup of the Work areas each day after Final Completion of Work.

1.6. Site Clearing and Plant Protection

1.6.1. Minimize stripping of Topsoil and vegetation.

1.6.2. Restrict tree and plant removal to areas in accordance with the Contract or as instructed by the Departmental Representative. Protect all other trees and plants onsite and offsite.

1.6.3. Salvage all trees and plants to be removed in accordance with the Contract or as instructed by the Departmental Representative.

1.6.4. Wrap in burlap, trees and shrubs adjacent to construction Work, storage areas and trucking lanes, and encase with protective wood framework from grade level to height of 2 m minimum.

1.6.5. Protect roots of designated trees to dripline during excavation and site grading to prevent disturbance or damage. Avoid unnecessary traffic, dumping and storage of materials over root zones.

1.7. Vibration

1.7.1. Maintain acceptable vibration levels as to not damage structures adjacent to the Site as a result of the Work.

1.8. Maintenance of Public Roads

1.8.1. Prevent tracking or spilling of debris or material onto public roads.
1.8.2. Immediately sweep or scrape up debris or material on public roads.
1.8.3. Clean public roads within a 200 m radius of the Site entrance at least once per shift.

1.9. Pollution Control

1.9.1. Pollution includes spills or other releases from Contractor's activities that could potentially contaminate soil, sediment, water, and atmosphere from discharge of hazardous, deleterious or regulated substances, including from equipment and material handling.
1.9.2. Provide sequence, methods and means, and facilities to prevent spills or releases.
1.9.2.1. Maintain temporary erosion and pollution control features.
1.9.2.2. Do not store fuel onsite other than tanks forming part of the equipment.
1.9.2.3. Control emissions from equipment and plant to meet applicable authorities' emission requirements.
1.9.2.4. Contractor to regularly inspect all machinery on the Site to ensure it is in good repair and free of leaks.
1.9.3. Inadequate procedures:
1.9.3.1. Stop relevant Work if procedures are inadequate to prevent spills or other releases, or when monitoring indicates that release equals or exceeds regulated or levels in accordance with the Contract.
1.9.3.2. Submit procedures proposed to resolve problem.
1.9.3.3. Make necessary changes to operations prior to resuming excavation, handling, processing, or other Work that can cause spills or other releases.
1.9.3.4. Departmental Representative can stop relevant Work at any time when Contractor's Work procedures are inadequate to prevent spills or other releases, or when monitoring indicates that release equals or exceeds regulated or levels in accordance with the Contract. Do not proceed with stopped Work until corrections accepted by Departmental Representative.
1.9.4. Be prepared to intercept, cleanup, and dispose of spills or other releases that can occur whether on land or water.
1.9.5. Spill kits and containment are to be maintained onsite and ready for deployment in the event of spills or other releases.
1.9.5.1. Spill kits are to include sufficient quantities of absorbent material, containers, booms, shovels and other tools, and personal protective equipment.
1.9.5.2. Spill response materials must be compatible with type of equipment being used or type of material being handled.
1.9.5.3. Spill kits are to be in close proximity to machinery.

1.9.5.4. During the Work there are to be trained and qualified personnel available that are ready to deploy spill kits when necessary.
1.9.6. Take immediate action using available resources to contain and mitigate effects on environment and persons from spill or release.
1.9.7. Promptly report spills and releases potentially causing damage to environment to:
1.9.7.1. Authority having jurisdiction or interest in spill or other release including conservation authority, water supply authorities, drainage authority, road authority, and fire department.
1.9.7.2. Contractor emergency response team including Superintendent
1.9.7.3. Departmental Representative and other contractor(s) and individuals as instructed by the Departmental Representative.
1.9.8. Departmental Representative can collect samples for chemical analyses prior to, during, and upon Final Completion of Work to monitor potential pollution caused by Contractor's activities. Assist Departmental Representative in collection of samples.
1.9.9. Remediation of soil, sediment or water contaminated by Contractor's activities.
1.9.9.1. Remediate all soil, sediment or water contaminated by Contractor's activities associated with the Work onsite and offsite.
1.9.9.2. Remediation includes excavation, pumping, testing, transport, treatment and disposal as appropriate for the type of contamination incurred, and at a minimum in accordance with the Contract.
1.9.9.3. Submit procedures for remediating soil, sediment or water contaminated by Contractor's activities.
1.9.9.4. Remediate as instructed by the Departmental Representative.
1.9.9.5. Contractor is responsible for any additional investigation, testing, and assessments required as acceptable to the Departmental Representative.

1.10. Dust and Particulate Control

1.10.1. Execute Work by methods to minimize raising dust from construction operations.
1.10.2. Prevent fugitive dust from the Site from interfering with onsite and offsite uses.
1.10.3. Prevent dust from spreading to neighbouring properties.
1.10.4. Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads, excavations, and stockpiles.
1.10.5. Implement and maintain dust and particulate control measures immediately as instructed by the Departmental Representative during Work and in accordance with regulations and in accordance with the Contract.
1.10.6. Provide positive means to prevent airborne dust from dispersing into atmosphere. Use fresh (non-saline) water for dust and particulate control.
1.10.7. As minimum, use appropriate covers on vehicles, including trucks, barges, and trains, hauling fine or dusty material. Use watertight vehicles to haul wet materials.

1.10.8. Inadequate procedures:

1.10.8.1. Stop relevant Work if dust and particulate control is not sufficient for controlling dusts and particulates into atmosphere, or when monitoring indicates that dust or particulate levels equal or exceed regulated or levels in accordance with the Contract.

1.10.8.2. Submit procedures proposed to resolve problem.

1.10.8.3. Make necessary changes to operations prior to resuming excavation, handling, processing, or other Work that can cause release of dusts or particulates.

1.10.8.4. Departmental Representative can stop relevant Work at any time when Contractor's Work procedures are inadequate to prevent release of dusts or particulates, or when monitoring indicates that dust or particulate levels equal or exceed regulated or levels in accordance with the Contract. Do not proceed with stopped Work until corrections accepted by Departmental Representative.

1.11. Non-Contaminated Material Removal

1.11.1. Remove all Non-Contaminated Material within Work areas in accordance with the Contract and as instructed by the Departmental Representative.

1.11.2. Assume ownership of, and be responsible for, Non-Contaminated Material once it is loaded on a vehicle, barge, or other vessel for transport offsite.

1.11.3. Remove surplus materials and temporary facilities from Site.

1.11.4. Dispose waste offsite.

1.11.5. Do not burn or bury any waste onsite.

1.11.6. Do not discharge wastes into streams or waterways.

1.11.7. Do not dispose of volatile or hazardous materials such as mineral spirits, oil, or paint thinner in storm or sanitary drains.

1.11.8. Dispose of following materials at appropriate Landfill provided by Contractor and accepted by Departmental Representative:

1.11.8.1. Non-Contaminated Material.

1.11.8.2. Disposable PPE.

1.12. Sewage Wastewater

1.12.1. Store Sewage Wastewater from toilet facilities with wastewater from handbasins, and/or showers, for ultimate disposal.

1.12.2. Provide, operate, and maintain Sewage Wastewater storage tanks to store Sewage Wastewater.

1.12.3. Transport and dispose of Sewage Wastewater at a Disposal Facility, or discharge to municipal sanitary sewer system in compliance with Municipal requirements, as accepted by Departmental Representative.

1.12.4. Discharges: comply with applicable discharge limitations and requirements; do not discharge Sewage Wastewater to Site sewer systems that do not conform to or are in violation of such limitations or requirements; and obtain approval prior to discharge of Sewage Wastewater.

1.13. Wastewater Control

1.13.1. Dewater various parts of Work including, without limitation, excavations, structures, foundations, and Work areas.

1.13.2. Employ construction methods, plant procedures, and precautions that ensure Work, including excavations, are stable, free from disturbance, and dry.

1.13.3. Direct surface waters that have not contacted potentially Contaminated Materials to surface drainage systems.

1.13.4. Control surface drainage including ensuring that gutters are kept open, wastewater is not allowed across or over pavements or sidewalks except through accepted pipes or properly constructed troughs, and runoff from unstabilized areas is intercepted and diverted to suitable outlet.

1.14. Non-Contaminated Water Disposal

1.14.1. Dispose of Non-Contaminated Water in manner not injurious to public health or safety, to property, or to any part of Work completed or under construction.

1.14.2. Control disposal or runoff of Non-Contaminated Water containing suspended materials or other harmful substances in accordance with local authority requirements.

1.14.3. Ensure pumped Non-Contaminated Water into waterways, sewer or drainage systems is free of suspended materials. Provide flocculation tanks, settling basins, or other treatment facilities to remove suspended solids or other materials before discharging to storm sewers, watercourses or drainage areas

1.14.4. Obtain permits to discharge Non-Contaminated Water to environment or Municipal sewers.

1.14.5. Do not discharge water which may have come in contact with potentially Contaminated Material or otherwise be Contaminated directly offsite to the environment or to municipal sewers.

1.15. Erosion and Sediment Control

1.15.1. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas, from stockpiles, staging areas, and other Work areas. Prevent erosion and sedimentation.

1.15.2. Minimize amount of bare soil or sediment exposed at one time. Stabilize disturbed soil or sediment as quickly as practical. Strip vegetation, regrade, or otherwise develop to minimize erosion. Remove accumulated sediment resulting from construction activity from adjoining surfaces, drainage systems, and water courses, and repair damage caused by soil erosion and sedimentation as instructed by the Departmental Representative.

1.15.3. Provide and maintain temporary erosion and sediment control measures.

1.15.3.1. Temporary erosion and sediment control measures are required to prevent erosion and migration of silt, mud, sediment, and other debris offsite or to other areas of Site where damage might result, or that might otherwise be required by laws and regulations.

1.15.3.2. Temporary erosion and sediment control measures include: silt fences, hay or straw bales, ditches, geotextiles, drains, berms, terracing, riprap, temporary drainage piping, vegetative cover, dikes, mulching, sediment traps, detention and retention basins, grading, planting, retaining walls, culverts, pipes, guardrails, temporary roads, and other measures appropriate to specific condition.

1.15.3.3. Temporary improvements must remain in place and in operation as necessary or until otherwise instructed by the Departmental Representative

1.15.3.4. Place silt fences and/or hay or straw bales in ditches to prevent sediment from escaping from ditch terminations.

1.15.3.5. Do not construct bale barriers and silt fence in flowing streams or in swales.

1.15.3.6. Check erosion and sediment control measures weekly after each rainfall; during prolonged rainfall check daily.

1.15.3.7. Bales and/or silt fence can be removed at beginning of Working Day, replace at end of Working Day.

1.15.3.8. Repair damaged bales, end runs, and undercutting beneath bales.

1.15.3.9. Unless instructed by the Departmental Representative, remove temporary erosion and sediment control devices upon Final Completion of Work. Temporary erosion and sediment control devices once removed become property of Contractor.

1.15.4. Whenever sedimentation is caused by stripping vegetation, regrading, or other development, remove it from adjoining surfaces, drainage systems, and watercourses, and repair damage as quickly as possible.

1.15.5. Construct fill areas to prevent erosion.

1.15.6. Do not disturb existing embankments or embankment protection in accordance with the Contract.

1.15.7. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.

1.15.8. If soil, sediment and debris from Site accumulate in low areas, storm sewers, roadways, gutters, ditches, or other areas where it is undesirable, remove accumulation and restore area to original condition, as instructed by the Departmental Representative.

1.16. Work In or Adjacent to Waterways

1.16.1. Approvals and Practices:

1.16.1.1. Obtain Discharge Approval prior to commencing work which may impact waterways.

1.16.1.2. Comply with Fisheries Act Authorization and other relevant authorizations and in accordance with the Contract.

1.16.1.3. Follow practices described in Fisheries and Oceans Canada (September 1993) *Land Development Guidelines for the Protection of Aquatic Habitat*.

1.16.1.4. Follow practices described in BC Ministry of Environment (March 2004) *Standards and Best Practices for Instream Works*.

1.16.2. Timing

1.16.2.1. Time work in water to respect timing windows to protect fish, including their eggs, juveniles, spawning adults and/or the organisms upon which they feed.

1.16.2.2. Minimize duration of in-water work.

1.16.2.3. Conduct instream work during periods of low flow, or at low tide, to further reduce the risk to fish and their habitat or to allow work in water to be isolated from flows.

1.16.2.4. Schedule work to avoid wet, windy and rainy periods that may increase erosion and sedimentation.

1.16.3. Site Selection

1.16.3.1. Design and plan activities and works in waterbody such that loss or disturbance to aquatic habitat is minimized and sensitive spawning habitats are avoided.

1.16.3.2. Design and construct approaches to the waterbody such that they are perpendicular to the watercourse to minimize loss or disturbance to riparian vegetation.

1.16.3.3. Avoid building structures on meander bends, braided streams, alluvial fans, active floodplains or any other area that is inherently unstable and may result in erosion and scouring of the stream bed or the built structures.

1.16.3.4. Undertake all instream activities in isolation of open or flowing water to maintain the natural flow of water downstream and avoid introducing sediment into the watercourse.

1.16.4. Contaminant and Spill Management

1.16.4.1. Plan activities near water such that materials such as paint, primers, blasting abrasives, rust solvents, degreasers, grout, poured concrete or other chemicals do not enter the watercourse.

1.16.4.2. Develop a response plan that is to be implemented immediately in the event of a sediment release or spill of a deleterious substance and keep an emergency spill kit on site.

1.16.4.3. Ensure that building material used in a watercourse has been handled and treated in a manner to prevent the release or leaching of substances into the water that may be deleterious to fish.

1.16.5. Erosion and Sediment Control

1.16.5.1. Develop and implement an Erosion and Sediment Control Plan for the site that minimizes risk of sedimentation of the waterbody during all phases of the project. Maintain erosion and sediment control measures until all disturbed ground has been permanently stabilized, suspended sediment has resettled to the bed of the waterbody or settling basin and runoff water is clear.

1.16.6. Erosion and Sediment Control Plan includes:

1.16.6.1. Installation of effective erosion and sediment control measures before starting work to prevent sediment from entering the water body.

1.16.6.2. Measures for managing water flowing onto the site, as well as water being pumped/diverted from the site such that sediment is filtered out prior to the water entering a waterbody. This includes pumping/diversion of water to a vegetated area, construction of a settling basin or other filtration system.

1.16.6.3. Site isolation measures (e.g., silt boom or silt curtain) for containing suspended sediment where in-water work is required (e.g., dredging, underwater cable installation).

1.16.6.4. Measures for containing and stabilizing waste material (e.g., dredging spoils, construction waste and materials, commercial logging waste, uprooted or cut aquatic plants, accumulated debris) above the high water mark of nearby waterbodies to prevent re-entry.

1.16.6.5. Regular inspection and maintenance of erosion and sediment control measures and structures during the course of construction.

1.16.6.6. Repairs to erosion and sediment control measures and structures if damage occurs.

1.16.6.7. Removal of non-biodegradable erosion and sediment control materials once site is stabilized.

1.16.7. Shoreline/Bank Re-vegetation and Stabilization

1.16.7.1. Clearing of riparian vegetation should be kept to a minimum: use existing trails, roads or cut lines wherever possible to avoid disturbance to the riparian vegetation and prevent soil compaction.

1.16.7.2. When practicable, prune or top the vegetation instead of grubbing/uprooting.

1.16.7.3. Minimize the removal of natural woody debris, rocks, sand or other materials from the banks, the shoreline or the bed of the waterbody below the ordinary high water mark. If material is removed from the waterbody, set it aside and return it to the original location once construction activities are completed.

1.16.7.4. Immediately stabilize shoreline or banks disturbed by any activity associated with the project to prevent erosion and/or sedimentation, preferably through re-vegetation with native species suitable for the site.

1.16.7.5. Restore bed and banks of the waterbody to their original contour and gradient; if the original gradient cannot be restored due to instability, a stable gradient that does not obstruct fish passage should be restored.

1.16.7.6. If replacement rock reinforcement/armouring is required to stabilize eroding or exposed areas, then ensure that appropriately-sized, clean rock is used; and that rock is installed at a similar slope to maintain a uniform bank/shoreline and natural stream/shoreline alignment.

1.16.7.7. Remove all construction materials from site upon project completion.

1.16.8. Fish Protection

1.16.8.1. Ensure that all in-water activities, or associated in-water structures, do not interfere with fish passage, constrict the channel width, or reduce flows.

1.16.8.2. Retain a qualified environmental professional to ensure applicable permits for relocating fish are obtained and to capture any fish trapped within an isolated/enclosed area at the work site and safely relocate them to an appropriate location in the same waters. Fish may need to be relocated again, should flooding occur on the site.

1.16.8.3. Screen any water intakes or outlet pipes to prevent entrainment or impingement of fish. Entrainment occurs when a fish is drawn into a water intake and cannot escape. Impingement occurs when an entrapped fish is held in contact with the intake screen and is unable to free itself.

1.16.8.4. Avoid using explosives in or near water. Use of explosives in or near water produces shock waves that can damage a fish swim bladder and rupture internal organs. Blasting vibrations may also kill or damage fish eggs or larvae.

1.16.9. Operation of Machinery

1.16.9.1. Ensure that machinery arrives on site in a clean condition and is maintained free of fluid leaks, invasive species and noxious weeds.

1.16.9.2. Whenever possible, operate machinery on land above the high water mark, on ice, or from a floating barge in a manner that minimizes disturbance to the banks and bed of the waterbody.

1.16.9.3. Limit machinery fording of the watercourse to a one-time event (i.e., over and back), and only if no alternative crossing method is available. If repeated crossings of the watercourse are required, construct a temporary crossing structure.

1.16.9.4. Use temporary crossing structures or other practices to cross streams or waterbodies with steep and highly erodible (e.g., dominated by organic materials and silts) banks and beds. For fording equipment without a temporary crossing structure, use stream bank and bed protection methods (e.g., swamp mats, pads) if minor rutting is likely to occur during fording.

1.16.9.5. Wash, refuel and service machinery and store fuel and other materials for the machinery in such a way as to prevent any deleterious substances from entering the water

1.17. Noncompliance

1.17.1. Departmental Representative will inform Contractor in writing of observed noncompliance with federal, provincial or municipal environmental laws, regulations, permits, or other environmental procedure violations.

1.17.2. After receipt of notice, inform the Departmental Representative of the proposed corrective action. Corrective action will be subject to acceptance of Departmental Representative.

1.17.2.1. Do not take action until after receipt of written acceptance.

1.17.3. Departmental Representative will issue stop order of Work until satisfactory corrective action has been taken.

2. PART 2 - PRODUCTS

2.1. Not Used

2.1.1. Not Used.

3. PART 3 - EXECUTION

3.1. Not Used

3.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Not Used.

1.4. Laws, Regulations, Permits

1.4.1. Generally, provincial and municipal laws, regulations, bylaws and other requirements do not apply on federal lands, activities or undertakings. Soil and other materials that are removed from federal lands may become subject to provincial or municipal laws and regulations.

1.4.2. Provincial or municipal standards may be used in relation to federal lands only as guidelines for the purpose of establishing remediation goals and objectives. The term "standards" is used in this part in order to maintain consistency in terminology throughout this document, and does not imply that standards contained in provincial or municipal laws and regulations apply on Federal lands, activities or undertakings.

1.4.3. Comply with certificates, licenses and other permits enforced at the location concerned required by regulatory federal, provincial or municipal authorities to complete the Work that have already been obtained.

1.4.4. Obtain and pay for certificates, licenses and other permits enforced at the location concerned required by regulatory federal, provincial or municipal authorities to complete the Work that have not already been obtained or that are required to be amended.

1.4.5. Provide applicable authorities with plans and information required for issue of acceptance certificates.

1.4.6. Furnish inspection certificates in evidence that the Work installed conforms with the requirements of the authority having jurisdiction.

1.5. Codes, Bylaws, Standards

1.5.1. Meet or exceed requirements of Contract, standards, and codes applicable to the performance of the Work and referenced documents.

1.5.2. In any case of conflict or discrepancy, the most stringent requirements will apply.

1.5.3. Perform Work in accordance with the *National Building Code* of Canada (NBC), and other requirements or codes in accordance with the Contract, construction standards and/or any other code or bylaw applicable to the performance of the Work.

1.5.4. Certificates, licenses and other permits enforced at the location concerned required by regulatory federal, provincial or municipal authorities to complete the Work: see 01 11 00.
1.5.5. Comply with all attachments, references, and reports relevant to Work, including environmental protection.

1.6. Smoking Environment
1.6.1. Smoking on the Site is not permitted.

2. PART 2 - PRODUCTS

2.1. Not Used
2.1.1. Not Used.

3. PART 3 - EXECUTION

3.1. Not Used
3.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Not Used.

1.4. Quality of Work

1.4.1. Ensure that quality workmanship is performed through use of skilled tradesmen, under supervision of qualified journeyman, or Qualified Professional.

1.4.2. Meet or exceed standards set out in the National Building Code of Canada as applicable for workmanship, erection methods and procedures.

1.4.3. In cases of dispute, perform Work to standard or quality in accordance with any decisions by the Departmental Representative.

1.4.4. Follow Departmental Representative's instructions to meet the Quality of Work in accordance with the Contract at no increase to the Contract Amount and no increase to Extension of Time for completion of the Work. Quality of Work includes addressing comments on Submittals, modifying environmental procedures, and preventing or remediating contaminated material spills.

1.5. Quality Management

1.5.1. Be responsible for all Quality Assurance and Quality Control during the performance of the Work.

1.5.2. Quality Assurance and Quality Control includes monitoring, inspecting, testing, documenting and reporting the means, methods, materials, workmanship, processes, and products of all aspects of the Work, including design, construction, and management as necessary to ensure conformance with the Contract.

1.5.3. Assist Departmental Representative in quality audit inspections and submit all indicated information within 5 Working Days of collection or as instructed.

1.6. Inspection

1.6.1. Allow Departmental Representative access to Work. If part of Work is in preparation at locations other than Site, allow access to such Work whenever it is in progress. Work at locations other than Site includes offsite Transportation (eg transfer stations), Treatment, and Disposal Facilities.

1.6.2. Give timely notice requesting inspection if Work is designated for special tests, inspections or approvals by Departmental Representative instructions, or law of Site.

1.6.3. If Contractor covers or permits to be covered Work that has been designated for special tests, inspections or approvals before such is made, uncover such Work, have inspections or tests satisfactorily completed and make good such Work.
1.6.4. Departmental Representative will order part of Work to be examined if Work is suspected to be not in accordance with Contract Documents. If, upon examination such work is found not in accordance with Contract Documents, correct such Work and pay cost of examination and correction.

1.7. Independent Inspection Agencies
1.7.1. Independent Inspection/Testing Agencies will be engaged by Departmental Representative for purpose of inspecting and/or testing portions of Work. Cost of such services will be borne by Departmental Representative.
1.7.2. Provide equipment required for executing inspection and testing by appointed agencies.
1.7.3. Employment of inspection/testing agencies does not relax responsibility to perform Work in accordance with Contract Documents.
1.7.4. If defects are revealed during inspection and/or testing, appointed agency will request additional inspection and/or testing to ascertain full degree of defect. Correct defect and irregularities as advised by Departmental Representative at no cost to Departmental Representative. Pay costs for retesting and reinspection.

1.8. Access to Work
1.8.1. Allow inspection/testing agencies access to Work, off site manufacturing and fabrication plants.
1.8.2. Co-operate to provide reasonable facilities for such access.

1.9. Procedures
1.9.1. Notify appropriate agency and Departmental Representative in advance of requirement for tests, in order that attendance arrangements can be made.
1.9.2. Submit samples and/or materials required for testing, as specifically requested in specifications. Submit with reasonable promptness and in orderly sequence to not cause delays in Work.
1.9.3. Provide labour and facilities to obtain and handle samples and materials on site. Provide sufficient space to store and cure test samples.

1.10. Rejected Work
1.10.1. Remove defective Work, whether result of poor workmanship, use of defective products or damage and whether incorporated in Work or not, which has been rejected by Departmental Representative as failing to conform to Contract Documents. Replace or re-execute in accordance with Contract Documents.
1.10.2. Make good other Contractor's work damaged by such removals or replacements promptly.
1.10.3. If in opinion of Departmental Representative it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents,

PSPC will deduct from Contract Price difference in value between Work performed and that called for by Contract Documents, amount of which will be determined by Departmental Representative.

1.11. Reports

1.11.1. Submit 2 copies of inspection and test reports to [Departmental Representative.

1.11.2. Provide copies to subcontractor of work being inspected or tested.

1.12. Tests and Mix Designs

1.12.1. Furnish test results and mix designs as requested.

1.12.2. Test results must be signed by Qualified Professional.

1.12.3. The Departmental Representative may require, and pay for, additional inspection and testing services not included above.

2. PART 2 - PRODUCTS

2.1. Not Used

2.1.1. Not Used.

3. PART 3 - EXECUTION

3.1. Not Used

3.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Site Layout: within 10 Working Days after Contract award and prior to mobilization to Site, Submit Site Layout drawings showing existing conditions and facilities, construction facilities and temporary controls provided by Contractor. Include:

1.3.1.1. Equipment and personnel decontamination areas.

1.3.1.2. Means of ingress, egress and temporary traffic control.

1.3.1.3. Equipment and material staging areas.

1.3.1.4. Stockpile areas and construction details, including base preparation and water control features.

1.3.1.5. Exclusion areas, contaminant handling areas, and other areas identified in Contractor's site-specific Health and Safety Plan and Environmental Protection Plan.

1.3.1.6. Grading, including contours, required to construct temporary facilities.

1.3.1.7. Location of all temporary facilities including: Contaminated Water Treatment Plant, truck wash and decontamination units, office trailers, modular camp structures, parking, storage, environmental monitoring stations, above ground and underground utilities, and temporary facilities and roads.

1.3.2. Signs: at least 5 Working Days prior to posting, Submit any signs viewable by public.

1.4. Utilities

1.4.1. Power is not available at existing Site and must be supplied at the Contractor’s expense.

1.4.2. Water supply is not available at existing Site and must be supplied at the Contractor’s expense.

1.5. Fire Protection

1.5.1. Provide and maintain temporary fire protection equipment during performance of Work required by governing codes, regulations and bylaws.

1.6. Access and Delivery

1.6.1. Only the designated entrance in accordance with the Contract can be used for access to Site.

1.6.1.1. Maintain for duration of Contract.

1.6.1.2. Make good damage resulting from Contractor's use.

1.6.2. Use of the Site will be granted to the Contractor through the Departmental Representative.

1.7. Installation and Removal

1.7.1. Prepare site plan indicating proposed location and dimensions of area to be fenced and used by Contractor, number of trailers to be used, avenues of ingress/egress to fenced area and details of fence installation.

1.7.2. Identify areas which have to be gravelled to prevent tracking of mud.

1.7.3. Indicate use of supplemental or other staging area.

1.7.4. Provide construction facilities in order to execute work expeditiously.

1.7.5. Provide temporary utilities in order to execute Work expeditiously.

1.7.6. Remove from Site all such Work after use.

1.8. Site Storage/Loading

1.8.1. Confine work and operations of employees in accordance with the Contract. Do not unreasonably encumber premises with products.

1.8.2. Storage space must be limited to the Site.

1.8.3. Do not load or permit to load any part of Work with weight or force that will endanger Work.

1.9. Construction Parking

1.9.1. Parking of private vehicles will not be permitted on Site.

1.9.2. Provide and maintain adequate access to project site.

1.10. Security

1.10.1. Provide and pay for responsible security personnel to guard site and contents of site after working hours and during holidays.

1.10.2. Control access to Site and maintain a log of all personnel onsite. No non-Work visitors allowed without prior written consent of Departmental Representative

1.11. Departmental Representative and Consultant Offices

1.11.1. Provide office facilities for the exclusive use of the Departmental Representative and their consultants with the following:

1.11.1.1. Two work stations within the Factory fabricated modular double wide units in accordance with the Contract.

1.11.1.2. Work stations must include; 1 desk (minimum size 120 cm x 50 cm, minimum height 70 cm), 1 swivel desk chair (minimum load requirement 100 kg), 1 bookshelf (minimum 3 shelves with a minimum shelf height of 32 cm), 1 locking filing cabinet (minimum dimensions 50 cm x 39 cm x 60 cm), 1 garbage can, and 1 recycling bin.
1.11.1.3. Building envelope: watertight construction.
1.11.1.4. Completed building: exterior to interior minimum sound attenuation of STC 30.
1.11.1.5. Building interior environment: heated and cooled to maintain temperature of 20 degrees C minimum to 25 degrees C maximum with relative humidity of 35% to 60%.
1.11.1.6. Provide ventilation and outdoor air as per ASHRAE 62.1 – 2010 Standard.
1.11.1.7. Building lighting: maintain measured lighting level of 200 lx at 1500 mm above finished floor, after building finishes and painting complete.
1.11.1.8. Thermal performance of window units: Maximum heat transfer rate (U-value) not to exceed 2.0 W/m2K.
1.11.1.9. Regularly collect refuse and recyclables and keep the office clean and properly maintained with heat and light.
1.11.1.10. Provide private washroom facilities in offices in accordance with the Contract, complete with flush or chemical type toilet, lavatory and mirror and maintain supply of paper towels and toilet tissue.
1.11.1.11. Furnish offices in accordance with the Contract.
1.11.1.12. Work stations must include; 1 desk (minimum size 120 cm x 50 cm, minimum height 70 cm), 1 swivel desk chair (minimum load requirement 100 kg), 1 bookshelf (minimum 3 shelves with a minimum shelf height of 32 cm), 1 locking filing cabinet (minimum dimensions 50 cm x 39 cm x 60 cm), 1 garbage can, and 1 recycling bin.
1.11.1.13. The work stations and contents must be for the sole use of the Departmental Representative and their consultant(s) for the duration of the Work and may, if necessary, be used concurrently with other inspection agencies.
1.11.2. Installation:
1.11.2.1. Install stable timber foundation as shown on Contractor’s Site Layout.
1.11.2.2. Install level and plumb.
1.11.2.3. Install skirting and stairs.
1.11.2.4. Adjust doors and windows for smooth operation.
1.11.2.5. Install personnel decontamination facility immediately adjacent to stairs.
1.11.3. Provide a minimum of 2 parking spaces for Departmental Representatives and their consultants adjacent to offices.

1.12. Equipment, Tools and Materials Storage

1.12.1. Provide and maintain, in clean and orderly condition, lockable weatherproof sheds for storage of tools, equipment and materials.

1.12.2. Locate materials not required to be stored in weatherproof sheds on site in manner to cause least interference with work activities.

1.13. Sanitary Facilities

1.13.1. Provide sanitary facilities for work force in accordance with governing regulations and ordinances.

1.13.2. Post notices and take precautions as required by local health authorities. Keep area and premises in sanitary condition.

1.14. Construction Signage

1.14.1. Provide and erect project signs within 10 Working Days of mobilization in a location designated by Departmental Representative.

1.14.2. Provide project identification site sign comprising foundation, framing, and one 1200 x 2400 mm signboard as detailed and as described below.

1.14.2.1. Foundations: 15 MPa concrete to CSA-A23.1 minimum 200 mm x 900 mm deep.

1.14.2.2. Framework and battens: SPF, pressure treated minimum 89 x 89 mm.

1.14.2.3. Signboard: 19 mm Medium Density Overlaid Douglas Fir Plywood to CSA O121.

1.14.2.4. Paint: alkyd enamel to CAN/CGSB-1.59 over exterior alkyd primer to CAN/CGSB 1.189.

1.14.2.5. Fasteners: hot-dip galvanized steel nails and carriage bolts.

1.14.2.6. Vinyl sign face: printed project identification, self adhesive, vinyl film overlay, supplied by Departmental Representative.

1.14.3. Locate project identification sign as directed by Departmental Representative and construct as follows:

1.14.3.1. Build concrete foundation, erect framework, and attach signboard to framing.

1.14.3.2. Paint surfaces of signboard and framing with one coat primer and two coats enamel. Colour white on signboard face, black on other surfaces.

1.14.3.3. Apply vinyl sign face overlay to painted signboard face in accordance with installation instruction supplied.

1.14.4. Direct requests for approval to erect Contractor signboard to Departmental Representative. For consideration general appearance of Contractor signboard must conform to project identification site sign. Wording in both official languages.

1.14.5. Signs and notices for safety and instruction in both official languages Graphic symbols to CAN/CSA-Z321.

1.14.6. Maintain approved signs and notices in good condition for duration of project, and dispose of off site on completion of project or earlier if directed by Departmental Representative.

1.15. Protection and Maintenance of Traffic

1.15.1. Provide access and temporary relocated roads as necessary to maintain traffic.

1.15.2. Maintain and protect traffic on affected roads during construction period except as otherwise specifically directed by Departmental Representative.

1.15.3. Provide measures for protection and diversion of traffic, including provision of watch-persons and flag-persons, erection of barricades, placing of lights around and in front of equipment and work, and erection and maintenance of adequate warning, danger, and direction signs.

1.15.4. Protect travelling public from damage to person and property.

1.15.5. Contractor's traffic on roads selected for hauling material to and from site to interfere as little as possible with public traffic.

1.15.6. Verify adequacy of existing roads and allowable load limit on these roads. Contractor: responsible for repair of damage to roads caused by construction operations.

1.15.7. Construct access and haul roads necessary.

1.15.8. Haul roads: constructed with suitable grades and widths; sharp curves, blind corners, and dangerous cross traffic shall be avoided.

1.15.9. Provide necessary lighting, signs, barricades, and distinctive markings for safe movement of traffic.

1.15.10. Dust control: adequate to ensure safe operation at all times.

1.15.11. Location, grade, width, and alignment of construction and hauling roads: subject to approval by Departmental Representative.

1.15.12. Lighting: to assure full and clear visibility for full width of haul road and work areas during night work operations.

1.15.13. Provide snow removal during period of Work.

1.15.14. Remove, upon completion of work, haul roads designated by Departmental Representative.

1.16. Truck Wash and Decontamination Units

1.16.1. Supply, install and operate the truck wash, including the installation of a water supply.

1.16.1.1. No vehicles which have come in contact with Contaminated Material must leave the Site without passing through the truck wash.

1.16.1.2. The truck wash must provide, at a minimum, the ability to wash truck tires and load boxes to a minimum height of 1.7 m.

1.16.1.3. Truck wash must have a solid separation tank and all solids collected must be classified as Contaminated Material and disposed of at a Disposal Facility.

1.16.1.4. Recycle or treated as Contaminated Water used in the truck wash.

1.16.2. Supply personnel decontamination units (minimum of 2) for use by hazardous material, testing and inspection personnel working in areas of hazardous materials and for general clean-up of personal protective equipment to remove Contaminated Material.

1.16.2.1. At least one personnel decontamination unit must have overhead shower capability.

1.16.2.2. The personnel decontamination units to be available to Departmental Representative and their consultants.
1.16.2.3. The personnel decontamination units are subject to acceptance of Departmental Representative.
1.16.3. The truck wash and personnel decontamination units must be maintained in good working order during onsite Work.
1.16.4. The truck wash and personnel decontamination units must be removed from the Site during Site Decommissioning.

1.17. Clean-Up
1.17.1. Remove construction debris, waste materials, packaging material from work site daily.
1.17.2. Clean dirt or mud tracked onto paved or surfaced roadways.
1.17.3. Store materials resulting from demolition activities that are salvageable.
1.17.4. Stack stored new or salvaged material not in construction facilities.

2. PART 2 - PRODUCTS

2.1. Not Used
2.1.1. Not Used.

3. PART 3 - EXECUTION

3.1. Not Used
3.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Product Data: at least 5 Working Days prior to use, Submit data on products to be used in Work. Include:

1.3.1.1. Manufacturers' catalogue sheets, MSDS sheets, brochures, literature, performance charts and diagrams, used to illustrate standard manufactured products or any other information in accordance with the Contract.

1.3.1.2. Delete information not applicable to project.

1.3.1.3. Supplement standard information to provide details applicable to project.

1.3.1.4. Cross-reference product data information to applicable portions of Contract.

1.3.2. Substitution: at least 5 Working Days prior to use and after Contract award, Submit proposals for substituting products, if required. Include statements of respective costs of items originally in accordance with the Contract and the proposed substitution.

1.3.3. Quality of Work: at least 5 Working Days prior to Work, Submit alternate means to meet or correct quality of work, if required.

1.4. Products, Material and Equipment

1.4.1. Use new products, material and equipment in accordance with the Contract. The term "products" is referred to throughout the specifications.

1.4.2. Use products of one manufacturer for material and equipment of the same type or classification in accordance with the Contract.

1.4.3. Unless otherwise specified, comply with manufacturer's latest printed instructions for materials and installation method in accordance with the Contract s.

1.4.4. Notify Departmental Representative in writing of any conflict between Contract and manufacturer's instructions. Departmental Representative will instruct which document is to be followed.

1.4.5. Deliver, store and maintain packaged material and equipment with manufacturer's seals and labels intact.

1.4.6. Prevent damage, adulteration and soiling of products during delivery, handling and storage. Immediately remove rejected products from Site.

1.4.7. Store products in accordance with Suppliers' instructions.

1.5. Quality of Products

1.5.1. Products, materials and equipment (referred to as products) incorporated into Work must be new, not damaged or defective, and of the best quality (compatible with the specifications) for the purpose intended. As instructed by the Departmental Representative, furnish evidence as to type, source, and quality of the products provided.

1.5.2. Defective products will be rejected regardless of previous inspections.

1.5.2.1. Inspection does not relieve responsibility, but is precaution against oversight or error.

1.5.2.2. Remove and replace defective products.

1.5.3. Retain purchase orders, invoices and other documents to prove that all products utilized in the Work meet the requirements of the Contract. Produce documents as instructed by the Departmental Representative.

1.5.4. Should any dispute arise as to quality or fitness of products, the decision rests strictly with the Departmental Representative in accordance with the Contract.

1.5.5. Permanent labels, trademarks and nameplates on products are not acceptable in prominent locations, except where required for operating instructions, or when located in mechanical or electrical rooms.

1.6. Availability of Products

1.6.1. Immediately upon signing the Contract, review product delivery requirements and anticipate foreseeable supply delays for any items.

1.6.2. If delays in supply of products are foreseeable, Notify Departmental Representative of such in order that substitutions or other remedial action may be authorized in ample time to prevent delay in performance of the Work.

1.6.3. In event of failure to Notify Departmental Representative at the start of Work and should it subsequently appear that the Work may be delayed for such reason, the Departmental Representative reserves the right to substitute more readily available products of similar character.

1.7. Manufacturer's Instructions

1.7.1. Install or erect products in accordance with the manufacturer's instructions in accordance with the Contract.

1.7.1.1. Do not rely on labels or enclosures provided with products.

1.7.1.2. Obtain written instructions directly from the manufacturer.

1.7.2. Notify Departmental Representative in writing of any conflict between Contract and manufacturer's instructions. Departmental Representative will instruct which document is to be followed.

1.7.3. Improper installation or erection of products, due to failure in complying with these requirements, authorizes the Departmental Representative to instruct the removal and re-installation.

1.8. Contractor's Options for Selection of Products for Tendering

1.8.1. Products specified by "Prescriptive" specifications: select any product meeting or exceeding requirements in accordance with the Contract.

1.8.2. Products specified by performance and referenced standard: select any product meeting or exceeding the referenced standard.

1.8.3. Products specified to meet particular design requirements or to match existing materials: use only material in accordance with the Contract.

1.8.4. When products are specified by a referenced standard or by performance specifications, as instructed by the Departmental Representative obtain from manufacturer and independent laboratory report showing that the product meets or exceeds the requirements in accordance with the Contract.

1.9. Storage, Handling and Protection

1.9.1. Handle and store products in manner to prevent damage, adulteration, deterioration and soiling and in accordance with manufacturer's instructions.

1.9.2. Store packaged or bundled products in original and undamaged condition with manufacturer's seals and labels intact. Do not remove from packaging or bundling until required in Work.

1.9.3. Store products subject to damage from weather in weatherproof enclosures.

1.9.4. Remove and replace damaged products as instructed by the Departmental Representative.

1.10. Transportation

1.10.1. Pay costs of transportation of products required in performance of Work.

1.10.2. Transport products in manner to prevent damage, adulteration, deterioration and soiling and in accordance with manufacturer's instructions when applicable.

1.10.3. Transport products subject to damage from weather in weatherproof enclosures.

1.10.4. Transport in an efficient manner that does not cause delays to the Work schedule.

1.11. Quality of Work

1.11.1. Ensure quality of Work is of highest standard, executed by workers experienced and skilled in respective duties for which they are employed. Immediately Notify Departmental Representative if required Work is such as to make it impractical to produce results in accordance with the Contract. Provide alternate means to meet or correct quality of work, as accepted by the Departmental Representative.

1.11.2. Do not employ anyone unskilled in their required duties.

1.11.3. Perform Work to standard of fitness of Quality of Work in accordance with any decision by the Departmental Representative.

1.12. Coordination

1.12.1. Ensure cooperation of workers in laying out Work. Maintain efficient and continuous supervision.

1.13. Remedial Work

1.13.1. Perform remedial Work required to repair or replace parts or portions of Work as instructed by the Departmental Representative as defective or unacceptable. Coordinate adjacent affected Work as required.

1.13.2. Perform remedial Work by specialists familiar with materials affected. Perform in a manner to neither damage nor put at risk any portion of Work.

1.14. Storage Tanks

1.14.1. Abide by the *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations* for stored petroleum products and allied petroleum products tank system located on federal or Aboriginal land, or within federal jurisdiction as described in the regulations.

1.14.2. Temporary storage tanks subject to the regulations must be registered with Environment Canada.

1.14.3. Mobile tanks subject to the regulations must be certified to be mobile.

1.14.4. Storage tanks to meet the following minimum requirements:

1.14.4.1. Corrosion protection.

1.14.4.2. Secondary containment.

1.14.4.3. Containment sumps, if applicable.

1.14.4.4. Overfill protection.

1.14.5. All components of tank system must bear certification marks indicating that they conform to the standards set out in the regulations.

1.14.6. Product transfer area must be designed to contain spills.

1.14.7. Prepare an emergency plan.

1.14.8. Prior to first filling, storage tanks must:

1.14.8.1. Be registered.

1.14.8.2. Be certified and marked.

1.14.8.3. Transfer area be constructed.

1.14.8.4. Emergency plan in place.

2. PART 2 - PRODUCTS

2.1. Asbestos Containing Materials Prohibition

2.1.1. Any material containing any degree of asbestos is banned from use in any and all sites, designs and projects.

3. PART 3 - EXECUTION

3.1. Not Used

3.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Preconstruction Condition Survey: within 5 Working Days prior to mobilization to Site, Submit Preconstruction Condition Survey of existing structures, utilities and surface features.

1.3.2. Preconstruction As-Built Documents: at least 5 Working Days prior to mobilization to Site, Submit preconstruction as-built documents prepared by a Land Surveyor.

1.4. Qualifications of Surveyor

1.4.1. A Land Surveyor, acceptable to Departmental Representative.

1.5. Survey Reference Points

1.5.1. Locate, confirm and protect control points prior to starting site work. Preserve permanent reference points during construction.

1.5.2. Make no changes or relocations without prior written notice to Departmental Representative.

1.5.3. Report to Departmental Representative when reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.

1.5.4. Require surveyor to replace control points in accordance with original survey control.

1.6. Survey Requirements

1.6.1. Establish permanent bench marks on site, referenced to established bench marks by survey control points. Record locations, with horizontal and vertical data in Project Record Documents.

1.6.2. Establish lines and levels, locate and lay out, by instrumentation.

1.6.3. Stake for grading, fill.

1.7. Existing Services

1.7.1. Size, depth and location of existing utilities and structures as specified are for guidance only. Completeness and accuracy are not guaranteed.

1.7.2. Before commencing work, establish location and extent of service lines in area of Work and notify Departmental Representative. All utilities entering Site must be confirmed prior to subsurface disturbance (i.e., do not rely on as-built documents). As appropriate, confirm locations of buried utilities by independent utility locator and using hand test excavations or hydrovac methods.

1.7.3. Remove abandoned service lines within 2m of structures. Cap or otherwise seal lines at cut-off points as directed by Departmental Representative.
1.7.4. Maintain and protect from damage all utilities and structures encountered, unless Work involves temporarily breaking, rerouting, or connecting into existing utilities.
1.7.5. Where Work involves temporarily breaking, rerouting, or connecting into existing utilities, obtain permission from utility companies of intended interruption of services, and carry out Work at times determined by the authorities having jurisdiction.
1.7.6. Submit schedule to and obtain approval for any shutdown or closure of active service. Adhere to schedule accepted by Departmental Representative and provide notice to affected parties.
1.7.7. Provide temporary services as required to maintain critical building and tenant systems.
1.7.8. Where unknown utilities are encountered, immediately verbally notify Departmental Representative and confirm findings in writing.

1.8. Examination

1.8.1. Examine Site and Contract and be familiar and conversant with existing conditions likely to affect Work, including Contaminated Material.

1.9. Records

1.9.1. Land Surveyor to prepare preconstruction as-built drawings of all utilities.
1.9.2. Land Surveyor to prepare postconstruction as-built drawings of all utilities, including existing, reinstated, rerouted, and abandoned.
1.9.3. Maintain a complete, accurate log of control and survey work as it progresses.
1.9.4. Preconstruction Condition Survey:
1.9.4.1. Conduct Preconstruction Condition Survey of existing structures and other features which can be affected by Work, both onsite and offsite. Includes: buildings, trees and other plants, lawns, fencing, service poles, wires, rail tracks, pavement, roads, survey bench marks, monuments and other features.
1.9.4.2. Survey to include detailed photographic documentation of any preconstruction damage, and measurements where appropriate, including crack width and length, angles out of true. Record written notices to owners of features that have existing damage.
1.9.4.3. Record written notices of offsite owners which refused entry to conduct Preconstruction Condition Survey.

2. PART 2 - PRODUCTS

2.1. Not Used
2.1.1. Not Used.

3. PART 3 - EXECUTION

3.1. Not Used
3.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Waste Reduction Plan: within 5 Working Days after Contract award and prior to mobilization to Site, Submit a plan detailing material separation. Include:

1.3.1.1. List of materials to be reused or recycled.

1.3.1.2. Sequence, methods and means to dispose Waste offsite. Include name, location, provincial or territorial authorizations, and evidence of compliance with municipal zoning and bylaws of Disposal Facilities.

1.3.2. Landfill Receipts: within 5 Working Days of transport offsite, Submit receiving facility receipts indicating quantity and type of material delivered to Landfill.

1.3.3. Recycling Receipts: within 5 Working Days of transport offsite, Submit receiving facility receipts indicating quantity and type of materials sent for recycling.

1.4. Waste Disposition

1.4.1. Waste and Non-Contaminated Material Disposal:

1.4.1.1. Dispose all soil and sediment in Landfill Facility.

1.4.1.2. Divert materials other than soil or sediment which can be practically reused or recycled from Landfill as approved by Departmental Representative.

1.4.1.3. All Waste not reused or recycled must be disposed in Landfill Facility.

1.5. Waste Transport

1.5.1. Assume ownership of, and be responsible for, Waste once it is loaded on a vehicle, barge, or other vessel for transport.

1.5.2. Transport material as soon as practical. Do not unreasonably stockpile material onsite.

1.5.3. Cover material while being transported to prevent release of airborne dust, vapours, or odours, and to prevent saturation and leachate generation from material.

1.5.4. Excess water in material must not be allowed to flow out of vehicle or vessel during transport.

1.5.5. Stabilize material as necessary.

1.5.6. All vehicles, vessels and operators must be appropriately licensed and equipped to transport Waste.

1.5.7. Barges must be inspected by an independent Marine Surveyor and Submit a copy of the Certificate of Seaworthiness to Departmental Representative.

1.5.8. Manifest and correlate quantities of all material transported from Site documenting quantity removed from Site, movement, transfer stations, interim storage and treatment, and weight of material at final Disposal Facility. Submit all manifests, as directed by the Departmental Representative.

1.5.9. Material transported with discrepancies in manifests must be resolved as required by regulations and as acceptable to the Departmental Representative. Discrepancies include:

1.5.9.1. No manifest or an incomplete manifest.

1.5.9.2. The material transported does not match the description in the manifest.

1.5.9.3. The amount transported differs by more than 5% in the manifest.

1.5.9.4. The material transported is in a hazardous condition.

1.5.10. Transfer/Interim Storage Facility must:

1.5.10.1. Be an existing offsite facility located in Canada or the United States.

1.5.10.2. Be designed, constructed and operated for the transfer or interim storage of Contaminated Material.

1.5.10.3. Hold a valid and subsisting permit, certificate, approval, or other required form of authorization issued by a Facility Regulator for the transfer or interim storage of relevant Contaminated Material.

1.5.10.4. Comply with applicable municipal zoning, bylaws, and other applicable requirements.

1.5.11. Facility Regulator:

1.5.11.1. For facilities within provincial or territorial jurisdiction: the relevant provincial or territorial ministry.

1.5.11.2. For facilities on First Nations reserve land in Canada not subject to the First Nation Land Management regime: Indigenous and Northern Affairs Canada.

1.5.11.3. For facilities on First Nations reserve land in Canada subject to the First Nation Land Management regime: the relevant First Nation Council. In addition, a Qualified Professional must certify that the facility is appropriate for the relevant Contaminated Material.

1.5.11.4. For facilities in the United States of America: either or both of the Environmental Protection Agency and the relevant State, as appropriate.

1.6. Waste Disposal

1.6.1. Assume ownership of, and be responsible for, Waste disposed.

1.6.2. Waste Disposal: dispose Waste at Landfill Facility provided by Contractor and accepted by the Departmental Representative.

1.6.3. Disposal Facility must:

1.6.3.1. Be an existing offsite facility located in Canada or the United States.

1.6.3.2. Be designed, constructed and operated to prevent any pollution from being caused by the facility outside the area of the facility from waste placed in or on land within the facility. Must conform with the BC Ministry of Environment *Landfill Criteria for Municipal Solid Waste* or equivalent requirements of authorities having jurisdiction.

1.6.3.3. Hold a valid and subsisting permit, certificate, approval, or other required form of authorization issued by a Facility Regulator for the disposal of relevant Contaminated Material.
1.6.3.4. Comply with applicable municipal zoning, bylaws, and other applicable requirements.
1.6.4. Facility Regulator:
1.6.4.1. For facilities within provincial or territorial jurisdiction: the relevant provincial or territorial ministry.
1.6.4.2. For facilities on First Nations reserve land in Canada not subject to the First Nation Land Management regime: Indigenous and Northern Affairs Canada.
1.6.4.3. For facilities on First Nations reserve land in Canada subject to the First Nation Land Management regime: the relevant First Nation Council. In addition, a Qualified Professional must certify that the facility is appropriate for the relevant Contaminated Material.
1.6.4.4. For facilities in the United States of America: either or both of the Environmental Protection Agency and the relevant State, as appropriate.
1.6.5. Dispose material as soon as practical and within 60 Working Days of leaving Site or as required by Contract unless otherwise accepted by Departmental Representative.
1.6.6. Material sent to a Landfill Facility must be permanently stored at that facility.
1.6.7. If proposed Landfill Facility is not acceptable to Departmental Representative, provide an alternate Landfill Facility that is acceptable.
1.6.8.
Submit Landfill Receipts for all Waste material disposed offsite.

1.7. Materials Source Separation

1.7.1. Provide separate containers for reusable and/or recyclable materials of the following:
1.7.1.1. Metals.
1.7.1.2. Wood.
1.7.1.3. Plastics.
1.7.1.4. Paper.
1.7.1.5. Glass.
1.7.1.6. Concrete.
1.7.1.7. Other materials in accordance with the Contract.
1.7.2. Implement Materials Source Separation Program for waste generated on project in compliance with methods accepted by the Departmental Representative.
1.7.3. Locate containers in locations, to facilitate deposit of materials without hindering daily operations.
1.7.4. Locate separated materials in areas which minimize material damage.

1.8. Diversion of Materials

1.8.1. Create a list of materials to be separated from the general waste stream and stockpiled in separate containers, as accepted by the Departmental Representative and consistent with applicable fire regulations.

1.8.1.1. Mark containers.

1.8.1.2. Provide instruction on disposal practices.

1.9. Storage, Handling and Application

1.9.1. Do Work in compliance with Waste Reduction Plan.

1.9.2. Handle waste materials not reused, salvaged, or recycled in accordance with appropriate regulations and codes, and dispose at Landfill weekly.

1.9.3. Materials in separated condition: collect, handle, store onsite, and transport offsite to an authorized recycling facility accepted by the Departmental Representative, and remove from Site weekly.

1.9.4. Materials must be immediately separated into specified categories for reuse or recycling.

1.9.5. Unless otherwise in accordance with the Contract, materials for removal become the Contractor's property.

1.9.6. Onsite sale of salvaged/recyclable material is not permitted.

1.9.7. Submit as instructed by the Departmental Representative receiving facility weigh scale receipts indicating quantity of material delivered to Landfill.

1.9.8. Submit as instructed by the Departmental Representative receiving facility weigh scale receipts indicating quantity and type of materials sent for recycling.

2. PART 2 - PRODUCTS

2.1. Not Used

2.1.1. Not Used.

3. PART 3 - EXECUTION

3.1. Not Used

3.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Product Instructions: at least 10 Working Days before Substantial Performance of the Work is completed, Submit instructions and data by personnel experienced in maintenance and operation of products and equipment constructed and remaining onsite, if required.

1.3.2. Closeout Documents: within 20 Working Days of Final Completion of Site Restoration, Submit completion documents and as-built documents.

1.4. As-Built Documents

1.4.1. The Departmental Representative will provide 2 sets of Drawings, 2 sets of Specifications, and 2 copies of the original AutoCAD files for “as-built” purposes.

1.4.2. As Work progresses, maintain accurate records to show all deviations from the Contract. Note changes as they occur on as-built Specifications, Drawings and shop drawings.

1.4.3. Drawings and shop drawings: legibly mark each item to record actual construction, including:

1.4.3.1. Measured locations of internal utilities and appurtenances, referenced to visible and accessible features of construction.

1.4.3.2. Field changes of dimension and detail.

1.4.3.3. Changes made by change orders.

1.4.3.4. Details not on original Drawings.

1.4.3.5. References to related shop drawings and modifications.

1.4.4. Contract Specifications: legibly mark each item to record actual workmanship of construction, including:

1.4.4.1. Manufacturer, trade name, and catalogue number of each product actually installed, particularly optional items and substitute items.

1.4.4.2. Changes made by addenda and change orders.

1.4.5. As-built information:

1.4.5.1. Record changes in red ink.

1.4.5.2. Mark on 1 set of Drawings, Specifications and shop drawings at Final Completion of project and, before final inspection, neatly transfer notations to second set.

1.4.5.3. Submit 1 set in editable AutoCAD 14 file format with all as-built information.

1.4.5.4. Submit all sets as instructed by the Departmental Representative.

1.4.6. As required, surveying to be completed by a Land Surveyor for as-built documents.

1.5. Completion Documents

1.5.1. Submit as instructed by the Departmental Representative, a written certificate that the following have been performed:

1.5.1.1. Work has been completed and inspected by the Departmental Representative in accordance with the Contract.

1.5.1.2. Treatment and disposal of treatable soils have been completed and disposal of all other soils has been completed.

1.5.1.3. Damage has been repaired, deficiencies have been completed, missing items have been provided, and non-conformance has been corrected, in the opinion of the Departmental Representative.

1.5.1.4. Equipment and systems have been tested, adjusted and balanced, and are fully operational, as applicable.

1.5.1.5. Certificates required by the Fire Commissioner of Canada, and utility companies have been submitted, as applicable.

1.5.1.6. Operation of systems has been demonstrated to the personnel as instructed by the Departmental Representative, as applicable.

1.5.1.7. Qualified Professional report documenting backfilling has met all requirements of the Contract.

1.5.1.8. Work is complete and ready for Final Site Inspection.

1.5.2. Defective products will be rejected, regardless of previous inspections. Replace defective products.

1.5.3. Prepare all documentation required as part of any permits or other authorizations obtained or otherwise the responsibility of the Contractor.

2. PART 2 - PRODUCTS

2.1. Not Used

2.1.1. Not Used.

3. PART 3 - EXECUTION

3.1. Not Used

3.1.1. Not Used.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Permits: at least 5 Working Days prior to mobilization to Site, Submit copies of all permits, certificates, approvals, or any other form of authorizations and all reporting required.

1.3.2. Import Fill Material Quality: at least 5 Working Days prior to bringing material onsite, Submit documentation signed and sealed by a Qualified Professional verifying that material is acceptable for import and intended use. Include:

1.3.2.1. Grain-size distribution information.

1.3.2.2. Chemical analyses for Potential Contaminants of Concern, including metals.

1.3.2.3. Testing to be performed by a Qualified Professional at sufficient frequency to characterize all material imported to Site. Test using appropriate guidelines and practices.

1.3.3. Import Fill Material Samples: at least 5 Working Days prior to bringing material to Site, Submit samples of imported fill.

1.3.3.1. Submit samples representative of all material to be imported. Sample frequency subject to acceptance by Departmental Representative.

1.3.3.2. Submit sufficient sample size to allow geotechnical and environmental quality testing.

1.4. Sequencing for Free Phase Products

1.4.1. When floating free phase substance is present, remove free phase from saturated soil or sediment without further contaminating soil, sediment or groundwater prior to commencing other construction Work.

1.4.2. Collect free phase product, load, and transport to a Treatment Facility.

1.5. Onsite Access Roads

1.5.1. Maintain onsite access roads as follows:

1.5.1.1. Obtain permission to use existing onsite access roads.

1.5.1.2. Maintain and clean roads for duration of Work.

1.5.1.3. Control mud and dust from road.

1.5.1.4. Repair damage incurred from use of roads.

1.5.1.5. Provide photographic documentation of roads used by construction vehicles before, during and after Work.

1.5.1.6. The Departmental Representative can instruct cleaning of the onsite access roads.

2. PART 2 - PRODUCTS

2.1. Materials

2.1.1. Erosion and sediment control materials to meet the following minimum requirements:

2.1.1.1. Hay or Straw Bale: wire bound or string tied; securely anchored by at least 2 stakes or rebars driven through bale 300 mm to 450 mm into ground; chinked (filled by wedging) with hay or straw to prevent water from escaping between bales; and entrenched minimum of 100 mm into ground.

2.1.1.2. Silt Fence: assembled, ready to install unit consisting of geotextile attached to driveable posts. Geotextile: uniform in texture and appearance, having no defects, flaws, or tears that would affect its physical properties; and contain sufficient ultraviolet ray inhibitor and stabilizers to provide minimum 2-year service life from outdoor exposure.

2.1.1.3. Net Backing: industrial polypropylene mesh joined to geotextile at both top and bottom with double stitching of heavy-duty cord, with minimum width of 750 mm.

2.1.1.4. Posts: sharpened wood, approximately 50 mm square, protruding below bottom of geotextile to allow minimum 450 mm embedment; post spacing 2.4 m maximum. Securely fasten each post to geotextile and net backing using suitable staples.

2.1.2. Gradations to be within limits specified when tested to ASTM C117-13 (*Standard Test Method for Materials Finer than 0.075 mm (No. 200) Sieve in Mineral Aggregates by Washing*) and ASTM C136-06 (*Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates*). Sieve sizes to SCC CAN/CGSB-8.1-88 (*Sieves, Testing, Woven Wire, Inch Series*) and CAN/CGSB-8.2-M88 (*Sieves, Testing, Woven Wire, Metric Series*).

2.1.3. Import fill materials to meet the following minimum requirements

2.1.3.1. Import fill materials must be granular aggregate composed of inert, clean, tough, durable particles of crushed rock, gravel and sand capable of withstanding the deleterious effects of exposure to water, freeze-thaw, handling, spreading and compacting. The aggregate particles must be uniform in quality and free from clay lumps, wood and free from an excess of flat or elongated pieces.

2.1.3.2. Import fill materials must originate from a clean source, and be the lesser of the Canadian Council of Ministers of the Environment *Soil Quality Guidelines for Commercial and Industrial Land Uses*, and the British Columbia *Contaminated Sites Regulation Schedule 7- Standards Triggering Contaminated Soil Relocation Agreements, Soil Relocation to Non-agricultural Land*.

2.1.3.3. Import fill material that is cobble sized or larger (> 64mm) brought onsite must be tested by the Contractor for Acid Rock Drainage (ARD) and Metals Leaching (ML) potential using acid base accounting (ABA) for assessment of ARD potential and more specifically using the Modified Sobek Test Method. The potential for metals leaching must use Shake Flask Extraction (SFE) Method for analysis of metals leaching. See guidance document Price 2009, *Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials* MEND Report 1.20.1, Natural Resources Canada.

2.1.3.4. Any import fill material which has a discrete sample exceeding the standards or guidelines specified must be removed from the Site and replaced, including relevant placed material, as instructed by the Departmental Representative, and an alternate source of backfill must be provided, with no increases to Contract Amount or Extension of Time for completion of the Work.

2.1.4. Import fill material additional testing:

2.1.4.1. Perform additional testing as instructed by the Departmental Representative.

2.1.4.2. Facilitate testing by the Departmental Representative.

2.1.5. Asphalt, as required, must, at minimum, meet the specifications for: Upper Course #1 mix-type as specified in Section 32 12 16, Hot Mix Asphalt Concrete Paving; of the *BC Master Municipal Construction Document (2009) Platinum Edition.*

3. PART 3 - EXECUTION

3.1. Examination

3.1.1. Site Verification of Conditions:

3.1.1.1. Contractor to determine condition of existing Site and requirements to make the Site suitable for Work.

3.2. Mobilization Requirements

3.2.1. Do not mobilize until instructed by Departmental Representative.

3.2.2. Mobilize all necessary equipment, materials and personnel to the Site in an orderly and efficient manner.

3.3. Site Preparation and Operation

3.3.1. Site Preparation and operation includes construction, operation and maintenance for the duration of the Work,

3.3.2. Remove and dispose all surficial Non-Contaminated Material at a Landfill to allow access for Work.

3.3.3. Clearing and grubbing of the Site to allow access for Work.

3.3.3.1. Clearing consists of removing Non-Contaminated Material vegetation above existing ground surface to facilitate Work. Includes: cutting off trees and brush vegetative growth, felled trees, previously uprooted trees and stumps. Dispose of Non-Contaminated Material at a Landfill.

3.3.3.2. Grubbing consists of excavation of Non-Contaminated Material below existing ground surface to facilitate Work. Includes: stumps, roots, boulders and rock fragments. Dispose of Non-Contaminated Material at a Landfill.
3.3.4. Remove obstructions, ice and snow, from surfaces to be worked.
3.3.5. Protection:
3.3.5.1. Protect existing features with temporary barriers and enclosures as required by applicable local regulations.
3.3.5.2. Keep excavations clean, free of standing water, and loose soil or sediment.
3.3.5.3. Protect natural and man-made features required to remain undisturbed. Unless otherwise required or located in an area to be occupied by new construction, protect existing trees from damage.
3.3.5.4. Protect buried utilities that are required to remain undisturbed.
3.3.5.5. Provide temporary structures to divert flow of surface water from excavation.
3.3.6. Security and Safety:
3.3.6.1. Provide safety measures to ensure worker and public safety.
3.3.6.2. Ensure Site is secure during onsite Work, provide, install, and remove fencing, temporary hoarding, and other security measures as required and specified.
3.3.7. Site including all restoration and excavation areas should be secured with locked fencing, temporary hoarding and security personnel.

3.4. Import Fill Material

3.4.1. Do not import fill material until Departmental Representative has completed and analysed testing. Testing and analysis will depend on parameters. Testing will be performed at industry regular (standard) turnaround times (i.e. not priority, emergency, same day or other rush turnaround times).
3.4.2. Departmental Representative will inspect import fill material, and will not allow import of fill material that varies from Submittal samples.

3.5. Site Restoration

3.5.1. Final site grades must be within 5 cm of pre-existing grades before Work commenced, unless otherwise specified.
3.5.2. Clean permanent access roads of contamination resulting from project activity as required or as instructed of Departmental Representative, with no increases to Contract Amount or Extension of Time for completion of the Work.
3.5.3. Decontaminate equipment used in construction processes and remove from Site at end of construction activities.
3.5.4. Remove all temporary structures including subsurface structures for shoring support.
3.5.5. Upon Final Completion of Work, remove Non-Contaminated Material materials and debris, trim slopes, and correct defects as instructed by the Departmental Representative.

3.5.6. Protect newly graded areas from traffic and erosion and maintain free of trash or debris until demobilization is completed and accepted by the Departmental Representative.
3.5.7. Reinstate pre-existing utilities and other infrastructure to original location and condition, meting current standards, codes, and other requirements, unless otherwise indicated or as instructed by the Departmental Representative.

3.6. Demobilization

3.6.1. Do not demobilize until instructed by Departmental Representative.
3.6.2. Demobilize all necessary equipment, materials, and personnel from Site in an orderly and efficient manner.

END OF SECTION

1. PART 1 - GENERAL

1.1. Measurement Procedures
1.1.1. See 01 11 00.

1.2. Definitions
1.2.1. See 01 11 00.

1.3. Action and Informational Submittals
1.3.1. STF Design: within 10 Working Days after Contract award and prior to construction of Soil Treatment Facility, Submit documentation describing design. Include:
1.3.1.1. Base Preparation
1.3.1.2. Gradients and sump location.
1.3.1.3. Granular and synthetic materials to be used.
1.3.1.4. Procedures for construction.
1.3.1.5. Monitoring and inspection requirements, including frequency or milestones when a Qualified Professional must inspect Works.
1.3.1.6. STF Design must be signed and sealed by a Qualified Professional.

2. PART 2 - PRODUCTS

2.1. Synthetic Material
2.1.1. Liner material to be selected by Qualified Professional. Liner material to meet following minimum requirements:
2.1.1.1. 10 year lifespan.
2.1.1.2. Ultraviolet resistant.
2.1.1.3. Other requirements according to Drawings.

3. PART 3 - EXECUTION

3.1. Design Requirements
3.1.1. Construct Owner Soil Treatment Facility in location shown on Drawings.
3.1.2. Site of construction to be cleared and grubbed, with no sharp protusions.
3.1.3. Compact base material to a minimum of 100% Standard Proctor Maximum Dry Density.
3.1.4. Grade bottom of soil treatment facility to allow collection of water in corner.
3.1.5. Construct sump in corner of drainage.
3.1.6. Place a minimum of 0.5m of granular material above synthetic liner to protect liner during loading operations.

3.1.7. Berms to be a minimum of 0.5m high and to be wrapped in liner material. Place granular material over liner on berms to protect from damage from loading/unloading and weather.

3.2. Owner Soil Treatment Facility Preparation

3.2.1. Prior to transport and placement of material to Owner Soil Treatment Facility:

3.2.1.1. Remove vegetation that could potentially damage Soil Treatment Facility liner, including roots.

3.2.1.2. Inspect base protective layer of liner. Notify Departmental Representative if less than 0.5m thick.

3.2.1.3. Inspect and repair any minor damage to Soil Treatment Facility berm or liner. Notify Departmental Representative of any significant damage.

3.3. Owner Soil Treatment Facility Closure

3.3.1. At completion of transport and placement of material to Owner Soil Treatment Facility:

3.3.1.1. Grade soil for drainage to prevent ponding within soil treatment facility.

3.3.1.2. Place seamless 25 mil oil resistant reinforced polyethylene (OR RPE) ultraviolet resistant cover. Cover to have a minimum 5 year lifespan.

3.3.1.3. Cover to extend a minimum of 0.5m past berm.

Secure cover along perimeter and interior with easily removable weights (eg tires, lumber).

END OF SECTION

31 23 33.01
EXCAVATING, TRENCHING AND BACKFILLING

1. PART 1 - GENERAL

1.1. Measurement Procedures

1.1.1. See 01 11 00.

1.2. Definitions

1.2.1. See 01 11 00.

1.3. Action and Informational Submittals

1.3.1. Temporary Hoarding: at least 5 Working Days prior to installation, Submit a description of temporary hoarding.

1.3.2. Excavation and Backfilling Plan: within 10 Working Days after Contract award and prior to mobilization to Site, Submit documentation describing excavation Work. Include:

1.3.2.1. Excavation slopes design.

1.3.2.2. Temporary support design.

1.3.2.3. Support of structures design.

1.3.2.4. Sequence, methods and means for excavation dewatering and heave protection.

1.3.2.5. Backfilling requirements. Meet or exceed requirements in accordance with the Contract and any other codes, bylaws, rules and regulations applicable to the performance of the Work.

1.3.2.6. Procedures for excavations adjacent to utilities or other structures if the excavation has the potential to impact utilities or other structures.

1.3.2.7. Monitoring and inspection requirements, including frequency or milestones when a Qualified Professional must inspect Works.

1.3.2.8. Excavation and Backfilling Plan must be signed and sealed by a Qualified Professional, as required by ground conditions, excavation depth, shoring type, or support type.

1.3.3. Monitoring and Testing Results: within 5 Working Days of sampling, Submit all monitoring and testing results. Include procedures, frequency of sampling, Quality Assurance and Quality Control testing and documentation to be provided. Provide monitoring and testing results, including any assessments performed by a Qualified Professional. Include:

1.3.3.1. Noise monitoring.

1.3.3.2. Vibration monitoring.

1.3.3.3. Imported fill material, including geotechnical and environmental quality.

1.3.3.4. Compaction testing results.

1.3.3.5. Contaminated Water Treatment Plant water testing.

1.3.3.6. Environmental analytical results for spill or other environmental testing.

1.3.4. Weigh Scale Certification: at least 5 Working Days prior to use, Submit a copy of the Measurement Canada, Weigh Scale Certification for any onsite or offsite weigh scale used during transportation, treatment or disposal.

1.3.5. Weigh Scale Slips: within 10 Working Days of measurement. Submit all onsite and offsite weigh scale slips for material.

2. PART 2 - PRODUCTS

2.1. Backfill Material

2.1.1. Meet backfill requirements as shown on Drawings.

2.1.2. Meet appropriate grain size distribution from Aggregate Gradations; of the BC Ministry of Transportation and Infrastructure, 2012 *Standard Specifications for Highway Construction (Nov. 1, 2011), Volume 1*.

3. PART 3 - EXECUTION

3.1. Site Review

3.1.1. Ensure that all Works comply with the final sealed design documents as prepared by a Qualified Professional.

3.1.2. Qualified Professional to visit Site regularly.

3.2. Install Temporary Hoarding

3.2.1. Place temporary hoarding in accordance with the Contract so as to provide a visual, environmental, and safety barrier between the Site and neighbouring properties.

3.2.2. Temporary hoarding to be a minimum of 2.4 m in height.

3.2.3. Temporary hoarding not to extend beyond the project Site boundary in accordance with the Contract.

3.2.4. Remove and replace temporary hoarding during excavation activities where excavation along the project Site boundary cannot be accomplished while the temporary hoarding is in place.

3.2.5. The type of temporary hoarding used will be as selected by the Contractor, but will be subject to approval. The temporary hoarding must not have visible holes and must be a neutral color subject to acceptance by Departmental Representative. Only signage accepted by the Departmental Representative will be allowed. No advertising, company identifications, or other markings permitted.

3.2.6. Remove temporary hoarding from the Site during the Site Restoration.

3.3. Design, Construction and Operation of Onsite Access Road(s)

3.3.1. Construct, operate and maintain the onsite access road(s) as required.

3.3.2. Design of temporary onsite access roads to be signed and sealed by a Qualified Professional.

3.3.3. Qualified Professional to confirm that the temporary onsite access roads allow for the safe transport of materials and equipment.

3.3.4. Construction of the onsite access road(s) may require the removal of historic piles or dock facilities along the proposed access alignment, as well as abandoned drainage pipes.

3.3.5. Any temporary access, detour and haul roads associated with the project must be constructed to accommodate all required uses and be maintained throughout the course of construction operations in a safe, environmentally sound manner.
3.3.6. Location, alignment, design and construction of all detour, access and haul road(s) subject to the acceptance of the Departmental Representative.
3.3.7. Employ suitable measures to maintain quality, visibility, and safe conditions in the use of access, detour and haul road(s) associated with the Work.

3.4. Temporary Sloping and Shoring

3.4.1. Determine appropriate sloping or shoring to allow excavation of Contaminated Material to limits identified in Drawings. Contaminated Material Extents may increase based on field observations.
3.4.2. Overburden material immediately above Contaminated Material Extents is considered part of Excavation and will be re-used as Owner Supplied Backfill.
3.4.3. Design Requirements:
3.4.3.1. Act as sloping or shoring structures for excavations as well as for stability of nearby buildings during remediation/construction excavation procedures.
3.4.3.2. Allow excavation of all Contaminated Material laterally and vertically on the Site to Contaminated Material Extents in accordance with the Contract in order to result in no residual contamination at the Site.
3.4.3.3. Provide a safe working environment for personnel and equipment within the dewatered excavation area.
3.4.3.4. Additional sloping or shoring may be required and are considered part of the Temporary Sloping and Shoring design.
3.4.3.5. Temporary shoring cannot have any tiebacks or supports which extend beyond the project Site boundary.
3.4.3.6. Temporary shoring must not flex or bend when exposed while excavations are occurring on the Site.
3.4.3.7. Seismic Resistance of Temporary Sloping and Shoring:
3.4.3.7.1. Sloping and shoring structures are temporary structures only. Resistance to seismic loads will be at the discretion of the Qualified Professional.
3.4.3.7.2. Be responsible for any failures and resultant costs should the temporary sloping or shoring fail due to a seismic event during the construction period.
3.4.3.8. All drawings to be signed and sealed by a Qualified Professional.
3.4.3.9. Temporary sloping and shoring designs to be completed in accordance with methods in current version of *Canadian Foundation Engineering Manual*.
3.4.4. Installation:
3.4.4.1. All installation activities must take place on the Site. No staging or construction activities are to take place on adjacent properties.
3.4.4.2. Installation must be regularly inspected by a Qualified Professional.
3.4.5. Maintain side slopes of excavations in safe condition by appropriate methods and in accordance with relevant regulations.

3.4.6. Construct temporary Works to depths, heights and locations to meet project requirements.
3.4.7. During backfill operation:
3.4.7.1. Unless otherwise indicated or as instructed by the Departmental Representative, remove temporary shoring from excavations.
3.4.7.2. Do not remove support until backfilling has reached respective levels of such bracing.
3.4.7.3. Remove support in increments that ensure compacted backfill is maintained at elevation at least 500 mm above toe of support.
3.4.8. Temporary sloping and shoring excavated material:
3.4.8.1. Material excavated for sloping or shoring may be re-used as backfill to replace material removed if accepted by Qualified Professional and Departmental Representative.
3.4.8.2. Material excavated for sloping or shoring that is accepted for backfilling must follow procedures identified by Qualified Professional and meet Contract requirements.
3.4.8.3. Material excavated for sloping or shoring not accepted must be removed from Site at Contractor's expense.

3.5. **Dewatering and Heave Protection**
3.5.1. Keep excavations free of water while Work is in progress.
3.5.2. Provide to Departmental Representative details of proposed dewatering or heave prevention methods, including dikes, well points, and sheet pile cut-offs.
3.5.3. Plan for excavation below groundwater table to avoid quick conditions or heave.
3.5.4. Prevent piping or bottom heave of excavations by groundwater lowering, sheet pile cut-offs, or other means.
3.5.5. Provide and maintain temporary drainage ditches and other diversions outside of excavation limits.
3.5.6. Keep excavations, staging pads, and other Work areas free from water including standby equipment necessary to ensure continuous operation of dewatering system.
3.5.7. Dewatering Methods: includes sheeting and shoring; groundwater control systems; surface or free water control systems employing ditches, diversions, drains, pipes and/or pumps; and other measures necessary to enable Work to be carried out in dry conditions.
3.5.8. Separate Contaminated Water from Non-Contaminated Water and collect and divert to Contaminated Water Treatment Plant as required.

3.6. Excavation
3.6.1. Notify Departmental Representative at least 5 Working Days in advance of excavation operations.
3.6.2. Excavate to lines, grades, elevations and dimensions in accordance with the Contract or as instructed by Departmental Representative.

3.6.3. Excavation of Contaminated Material to extend to extents shown on Drawings with zero percent residual contamination or instructed by the Department Representative at Final Completion.
3.6.4. Elevations shown on Drawings, are approximate and final excavation elevations to be determined based on field conditions as instructed by the Departmental Representative.
3.6.5. Excavation must not interfere with bearing capacity of adjacent foundations.
3.6.6. Machine cut banks and slopes.
3.6.7. Protect bottom of excavations from excessive traffic.
3.6.8. Grade excavation top perimeter to prevent surface water run-off into excavation.
3.6.9. Keep excavated and stockpiled materials safe distance away from edge of excavation.
3.6.10. Restrict vehicle operations directly adjacent to open excavations.
3.6.11. Segregate and handle to minimize the amount of Hazardous Waste materials wherever possible, while complying with Hazardous Waste disposal regulations. Segregation of Hazardous Waste during excavation will be by visual and olfactory characteristics and available in-situ characterization.
3.6.12. Contaminated Material onsite classification will be based on available in-situ characterization or ex-situ characterization as instructed by Departmental Representative.
3.6.13. Non-Contaminated Material onsite classification will be based on available in-situ characterization or ex-situ characterization as instructed by Departmental Representative.
3.6.14. Remove Waste Oversize Debris. Break or cut oversize debris into manageable size.
3.6.14.1. Piles encountered during excavation must be cut off at base of excavation. Piles are not to be extracted.
3.6.14.2. Debris that impinges on infrastructure or neighbouring properties is not to be removed unless instructed by Departmental Representative.
3.6.15. Remove Non-Contaminated Material to Landfill or re-use as Backfill-Owner Supplied as shown on Drawings.
3.6.16. Remove Contaminated Material to onsite Treatment Facility or offsite Treatment Facility or offsite Disposal Facility.
3.6.17. Earth bottoms of excavations to be undisturbed soil or sediment, level, free from loose, soft or organic material.
3.6.18. Notify Departmental Representative when bottom of excavation is reached.
3.6.19. Provide assistance for collection of Confirmation Samples as instructed to the Departmental Representative.
3.6.20. Obtain acceptance by Departmental Representative of completed excavation.

3.7. Excavated Material Screening

3.7.1. Screen only material removed from excavation as shown on Drawings or as instructed by Departmental Representative.

3.7.2. Screen using a 75mm (3") screen size. Screener to have sufficient capacity to not restrict the Work.

3.7.3. Undersized screened material to be stockpiled and transported as per the Contract.

3.7.4. Oversized screened material to be stockpiled within work area at a location determined by Departmental Representative.

3.8. Backfill Types and Compaction

3.8.1. Use only owner supplied backfill or imported backfill material in accordance with the Contract, which has been recommended by a Qualified Professional, and has previously accepted as a Submittal.

3.8.2. Compact material in accordance with the Contract to ensure no long term settlement and is suitable for planned post-remediation use:

3.8.2.1. Compact each layer of material to the more stringent of Excavation Plan or Drawings.

3.8.2.2. Machine compact all fill materials unless otherwise shown on Drawings.

3.9. Backfilling

3.9.1. Do not proceed with backfilling operations until completion of following:

3.9.1.1. Confirmation Sampling, analysis, and assessment have been completed by the Departmental Representative. Confirmation Sampling, analysis, and assessment may take up to 5 Working Days. No Standby Time charges or increases to Contract Amount or Extension of Time for completion of the Work can be incurred for Confirmation Sampling results provided within 5 Working Days, not including day of sample collection.

3.9.1.2. Surveying has been completed by a Land Surveyor for as-built documents

3.9.1.3. Departmental Representative has inspected and excavation limits accepted by the Departmental Representative based on survey data and Confirmation Samples results.

3.9.1.4. Departmental Representative has inspected and accepted backfill material.

3.9.1.5. Proposed backfill material can be sampled and tested for geotechnical and environmental quality. Backfill material testing may take up to 10 Working Days not including day of sample collection.

3.9.1.6. Departmental Representative has inspected and accepted compaction results for previous lift.

3.9.1.7. Removal of shoring and bracing; backfilling of voids with satisfactory backfill material.

3.9.2. Areas to be backfilled to be free from debris, snow, ice, water and frozen ground.

3.9.3. Do not use backfill material which is frozen or contains ice, snow or debris.

3.9.4. Place backfill material in uniform layers not exceeding 300 mm compacted thickness, or in accordance with the Contract. Compact each layer to the satisfaction of the Qualified Professional and in accordance with the Contract before placing succeeding layer.
3.9.5. Backfill compaction to be tested by a Qualified Professional in accordance with Excavation Plan.
3.9.6. Notify Departmental Representative when final backfill grade is reached.
3.9.7. Do not begin subsequent Work until surveying has been completed by the Departmental Representative for documentation.

3.10. Backfill - Owner Supplied

3.10.1. Place in locations as instructed by Departmental Representative.
3.10.2. Be responsible for compacting to the satisfaction of the Qualified Professional and in accordance with the Contract.
3.10.2.1. Collect and test samples as required by the Qualified Professional of owner supplied backfill prior to placement.
3.10.2.2. Identify any geotechnical concerns with owner supplied backfill prior to placement.

3.11. Owner Soil Treatment Facility Preparation

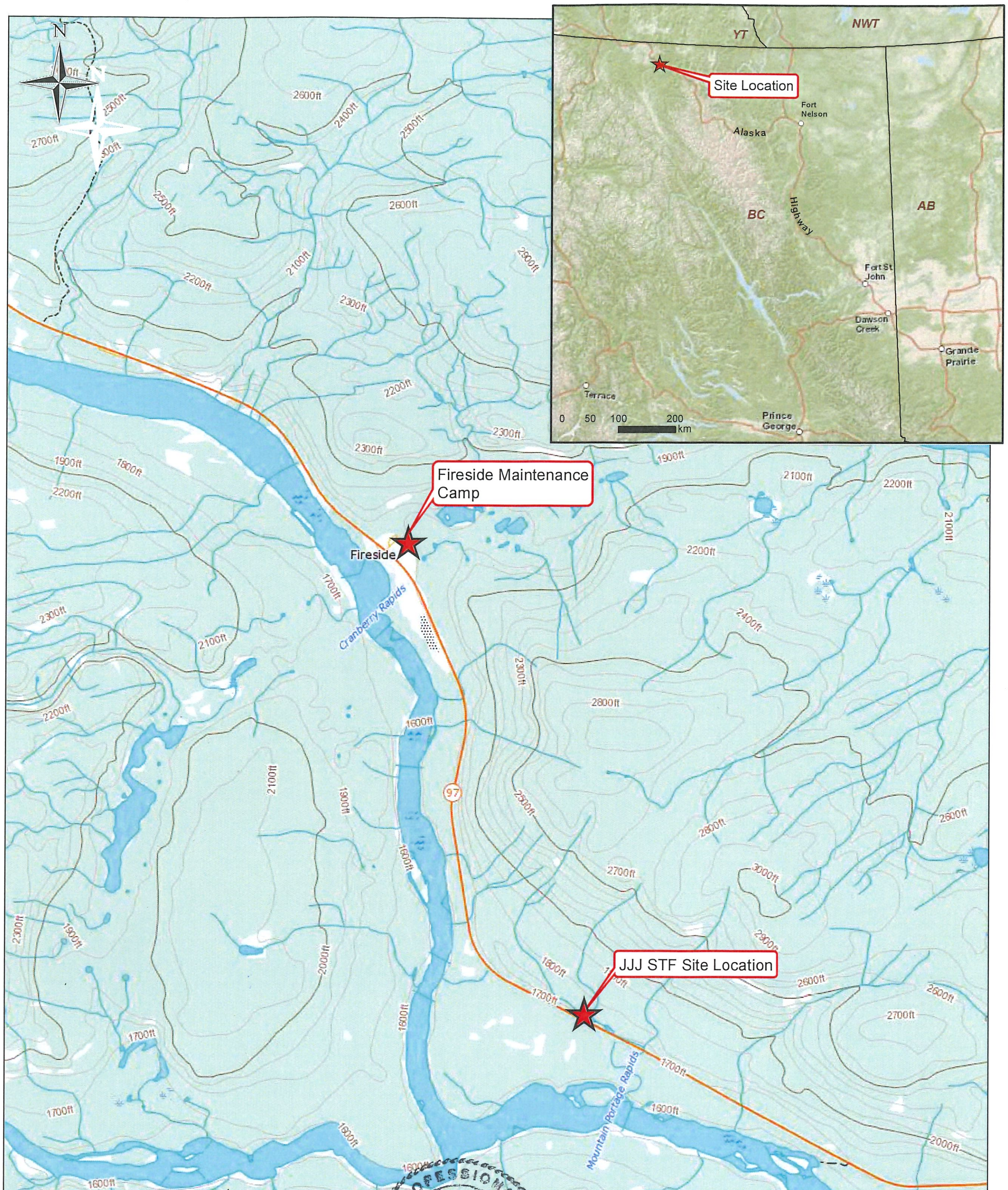
3.11.1. Prior to transport and placement of material to Owner Soil Treatment Facility:
3.11.1.1. Remove vegetation that could potentially damage Soil Treatment Facility liner, including roots.
3.11.1.2. Inspect exposed liners.
3.11.1.3. Inspect and repair any minor damage to Soil Treatment Facility berm or liner. Notify Departmental Representative of any significant damage.

3.12. Owner Soil Treatment Facility Closure

3.12.1. At completion of transport and placement of material to Owner Soil Treatment Facility:
3.12.1.1. Grade soil for drainage to prevent ponding within soil treatment facility.
3.12.1.2. Place seamless 25 mil oil resistant reinforced polyethylene (OR RPE) ultraviolet resistant cover. Cover to have a minimum 5 year lifespan.
3.12.1.3. Cover to extend a minimum of 0.5m past berm.
3.12.1.4. Secure cover along perimeter and interior with easily removable weights (e.g., tires, lumber).

END OF SECTION

Drawing No.	Drawing Title
301	Fireside Maintenance Camp Site Location
302	Site Plan, Infrastructure and Restrictions
303A	Contaminated Materials Extents – AEC 5
303B	Contaminated Materials Extents – AEC 6 & 7
304A	Geological Cross Section A-A’
304B	Geological Cross Section B-B’
305	JJJ STF Site Location
306	Site Plan – JJJ Gravel Pit
307	Soil Treatment Facility #4 Design Specifications
308	Site Restoration



LEGEND

★ Site Location

NOTES

1. Original in colour.
2. Numerical scale reflects full size print. Print scaling will distort this scale, however scale bar will remain accurate.
3. Intended for illustration purposes, accuracy has not been verified for construction or navigation purposes.

PROFESSIONAL ENGINEER
M. A. GUEST
Sept 15/17

SNC • LAVALIN

CLIENT NAME:
Public Works and Government Services Canada

PROJECT LOCATION:
Fireside Maintenance Camp
Alaska Highway, BC

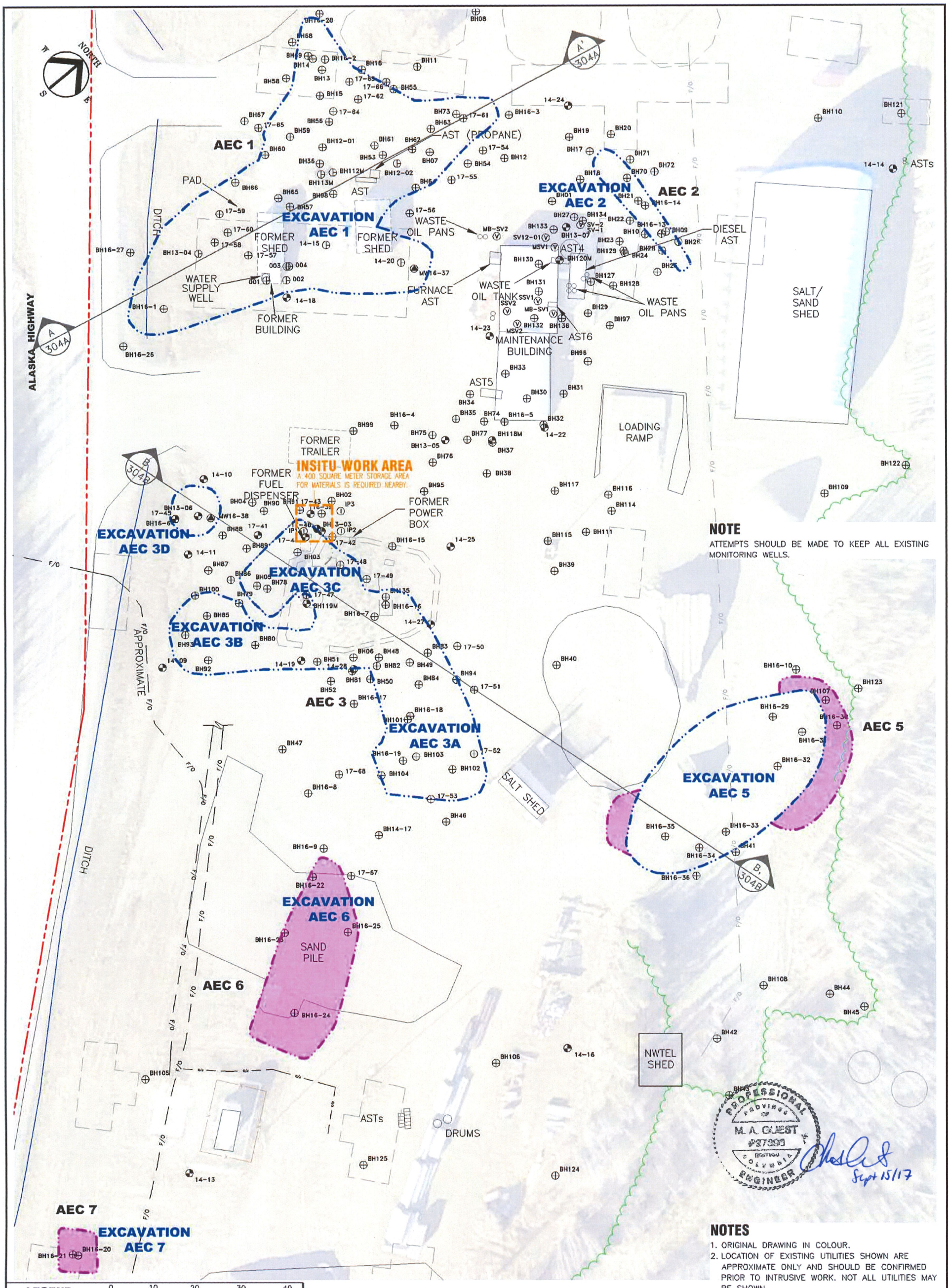
Fireside Maintenance Camp Site Location

0 0.5 1 2 3 4 Kilometers

BY: PB	DATE: 2017-03-03	REF No: 636200-301	REV: 0
CHK'D: CS	SCALE: 1:50,000		

MXD Path: P:\Current Projects\Public Works and Gov't Services Canada\623385 Fireside\4.0 Execution\4.5 GIS and Drawings (Secure)\GIS\MapSeries\623385-001.mxd

Project Path: "P:\Current Projects\Public Works and Gov't Services Canada\623385 Fireside"



NOTE

ATTEMPTS SHOULD BE MADE TO KEEP ALL EXISTING MONITORING WELLS.

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.

LEGEND

0 10 20 30 40 METRES

- SUBJECT PROPERTY LIMITS
- TREE LINE
- FENCE
- FORMER SITE CONFIGURATION
- SITE FEATURE
- FY 2017/2018 PROPOSED APPROXIMATE EXCAVATION LIMIT
- FY 2016/2017 EXCAVATION BOUNDARY
- SECTION LINE
- INSITU WORK AREA
- F/O — FIBRE OPTIC LINE – UNDERGROUND
- APPROXIMATE CUT LINE
- F/O — FIBRE OPTIC LINE – OVERHEAD
- BOREHOLE
- MONITORING WELL
- INJECTION WELL
- SOIL VAPOUR WELL
- DESTROYED MONITORING WELL

REFERENCE DRAWINGS

DWG. NO.	DATE	DESCRIPTION
–	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
4	2017-09-14	ISSUED TO CLIENT	PES	CS
3	2017-08-21	ISSUED TO CLIENT	PES	CS
2	2017-07-20	ISSUED TO CLIENT	PES	CS
1	2017-07-07	ISSUED TO CLIENT	PRT	MG
0	2017-06-16	ISSUED AS DRAFT	PRT	CS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA M. A. GUEST #37303 Sept 15/17

SNC·LAVALIN

CLIENT NAME: PUBLIC SERVICES AND PROCUREMENT CANADA

PROJECT LOCATION: FIRESIDE MAINTENANCE CAMP ALASKA HIGHWAY, BC

TITLE:

SITE PLAN AND INFRASTRUCTURE RESTRICTIONS

DWN BY: BB	SCALE: 1:800	DATE: 2017-03-03	DWG No: 636200-302 REV.: 4
CHK'D: CS	PLOT: 20170914.1148	CADFILE: 636200R14	

PATH: P:\CURRENT PROJECTS\PWGSC\636200 FIRESIDE\4.0 EXECUTION\4.5 GIS AND DRAWINGS\CAD\636200R14.DWG

Excavation Area	Surface Area (m^2)	Estimated Contaminated Soil Volume (m^3)	Estimated Non-Impacted Overburden Volume (m^3)
AEC 5	298	418	-

1. THE FOLLOWING IS A LIST OF ANTICIPATED CONTAMINANTS OF CONCERN ON THE SITE. SOIL – PETROLEUM HYDROCARBONS (BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, VOLATILE PETROLEUM HYDROCARBONS, EXTRACTABLE PETROLEUM HYDROCARBONS, LIGHT EXTRACTABLE PETROLEUM HYDROCARBONS, PETROLEUM HYDROCARBON FRACTIONS F1 TO F3, POLYCYCLIC AROMATIC HYDROCARBONS).
2. PREVIOUS FILL MATERIAL (FY2016/2017 EXCAVATION BOUNDARY) TO BE SEGREGATED AS CLEAN OVERBURDEN WHERE REQUIRED.

DEPTH OF CONTAMINATION

- 1.0m
- 1.5m
- 2.0m
- 2.5m
- 3.0m
- 6.0m
- 8.0m
- OVERBURDEN

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — M. A. GUEST #27396 — Sept 15/17

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.

LEGEND

0 5 METRES 20

- FY 2017/2018 PROPOSED APPROXIMATE EXCAVATION LIMIT
- FY 2016/2017 EXCAVATION BOUNDARY
- FORMER SITE CONFIGURATION
- SITE FEATURE
- MONITORING WELL
- BOREHOLE
- TESTPIT

REFERENCE DRAWINGS

DWG. NO.	DATE	DESCRIPTION
–	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
2	2017-09-14	ISSUED TO CLIENT	PES	CS
1	2017-07-07	ISSUED TO CLIENT	PRT	MG
0	2017-06-16	ISSUED AS DRAFT	PRT	CS

SNC·LAVALIN

CLIENT NAME: PUBLIC SERVICES AND PROCUREMENT CANADA

PROJECT LOCATION: FIRESIDE MAINTENANCE CAMP ALASKA HIGHWAY, BC

TITLE:

CONTAMINATED MATERIALS EXTENTS - AEC 5

DWN BY: PRT	SCALE: 1:400	DATE: 2017-06-15	DWG No: 636200-303A REV.: 2
CHK'D: CS	PLOT: 20170914.1126	CADFILE: 636200R14	

PATH: P:\CURRENT PROJECTS\PWGSC\636200 FIRESIDE\4.0 EXECUTION\4.5 GIS AND DRAWINGS\CAD\636200R14.DWG

Excavation Area	Surface Area (m^2)	Estimated Contaminated Soil Volume (m^3)	Estimated Non-Impacted Overburden Volume (m^3)
AEC 6	639	1,395	-
AEC 7	81	243	-

1. THE FOLLOWING IS A LIST OF ANTICIPATED CONTAMINANTS OF CONCERN ON THE SITE.
   SOIL – PETROLEUM HYDROCARBONS (BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, VOLATILE PETROLEUM HYDROCARBONS, EXTRACTABLE PETROLEUM HYDROCARBONS, LIGHT EXTRACTABLE PETROLEUM HYDROCARBONS, PETROLEUM HYDROCARBON FRACTIONS F1 TO F3, POLYCYCLIC AROMATIC HYDROCARBONS).
2. PREVIOUS FILL MATERIAL (FY2016/2017 EXCAVATION BOUNDARY) TO BE SEGREGATED AS CLEAN OVERBURDEN WHERE REQUIRED.

DEPTH OF CONTAMINATION

- 1.0m
- 1.5m
- 2.0m
- 2.5m
- 3.0m
- 6.0m
- 8.0m
- OVERBURDEN

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
M. A. GUEST
#27356
Sept 15/17

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.

LEGEND

0 5 20 METRES

- FY 2017/2018 PROPOSED APPROXIMATE EXCAVATION LIMIT
- FY 2016/2017 EXCAVATION BOUNDARY
- FORMER SITE CONFIGURATION
- SITE FEATURE
- MONITORING WELL
- BOREHOLE
- TESTPIT

REFERENCE DRAWINGS

–	–	–
DWG. NO.	DATE	DESCRIPTION

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
2	2017-09-14	ISSUED TO CLIENT	PES	CS
1	2017-07-07	ISSUED TO CLIENT	PRT	MG
0	2017-06-16	ISSUED AS DRAFT	PRT	CS

SNC·LAVALIN

CLIENT NAME: PUBLIC SERVICES AND PROCUREMENT CANADA

PROJECT LOCATION: FIRESIDE MAINTENANCE CAMP ALASKA HIGHWAY, BC

TITLE:

CONTAMINATED MATERIALS EXTENTS - AEC 6 & 7

DWN BY: PRT	SCALE: 1:400	DATE: 2017-06-15	DWG No: 636200-303B REV.: 2
CHK'D: CS	PLOT: 20170914.1141	CADFILE: 636200R14	

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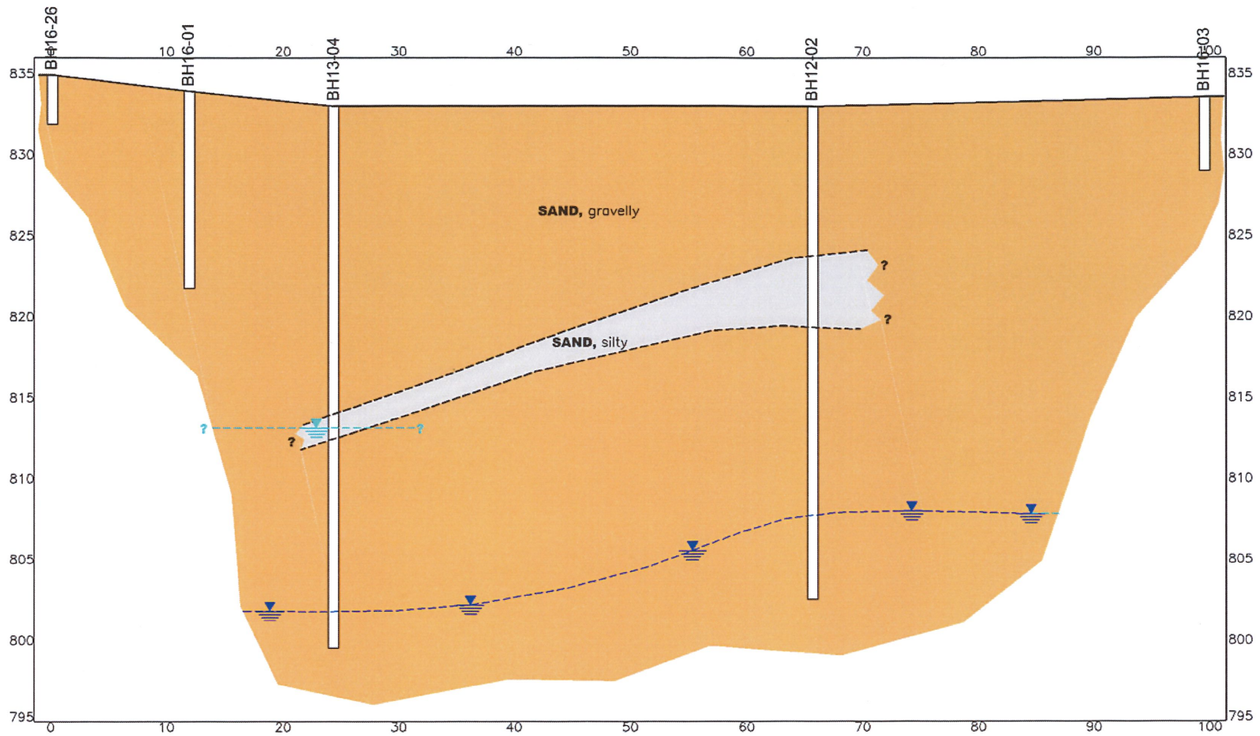

A-A'
302

SECTION

HORIZONTAL SCALE
1:500 (m)

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
M. A. GUEST
#17395

Sept 15/17

NOTES

1. THE CROSS SECTION DEPICTED IS BASED ON INTERPRETATION OF LIMITED GEOLOGICAL DATA. ACTUAL GEOLOGICAL CONDITIONS MAY BE DIFFERENT FROM THOSE INTERPRETED.
2. REFER TO PLAN MAP 636200-302 FOR LOCATION OF CROSS SECTION LINE.
3. INFORMATION PRESENTED IS WITHIN 10m OF SECTION LINE UNLESS INDICATED OTHERWISE ON DRAWING.
4. ORIGINAL DRAWING IN COLOUR.
5. CROSS SECTIONS SHOWN ARE CONDITIONS PRIOR TO FY2016/2017 REMEDIAL EXCAVATION TO ILLUSTRATE NATIVE STRATIGRAPHY.

LEGEND

- **SAND,** gravelly
- **SAND,** silty
- INFERRED STRATIGRAPHIC BOUNDARY
- APPROXIMATE DEPTH OF LOWER PERCHED WATER TABLE
- APPROXIMATE DEPTH OF REGIONAL WATER TABLE

BOREHOLE LEGEND

00-1
END OF BOREHOLE

REFERENCE DRAWINGS

DWG. NO.	DATE	DESCRIPTION
–	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
3	2017-09-14	ISSUED TO CLIENT	PES	CS
2	2017-07-07	ISSUED TO CLIENT	PRT	MG
1	2017-06-16	ISSUED AS DRAFT	PRT	CS
0	2016-07-21	ISSUED TO CLIENT	PES	MG

SNC·LAVALIN

CLIENT NAME: PUBLIC SERVICES AND PROCUREMENT CANADA

PROJECT LOCATION: FIRESIDE ALASKA HIGHWAY, BC

TITLE: **GEOLOGICAL CROSS SECTION A-A'**

DWN BY: PES	SCALE: AS NOTED	DATE: 2016-07-14	DWG No:	REV.: 3
CHK'D: CT	PLOT: 20170914.1149	CADFILE: 636200X02	**636200-304A**	

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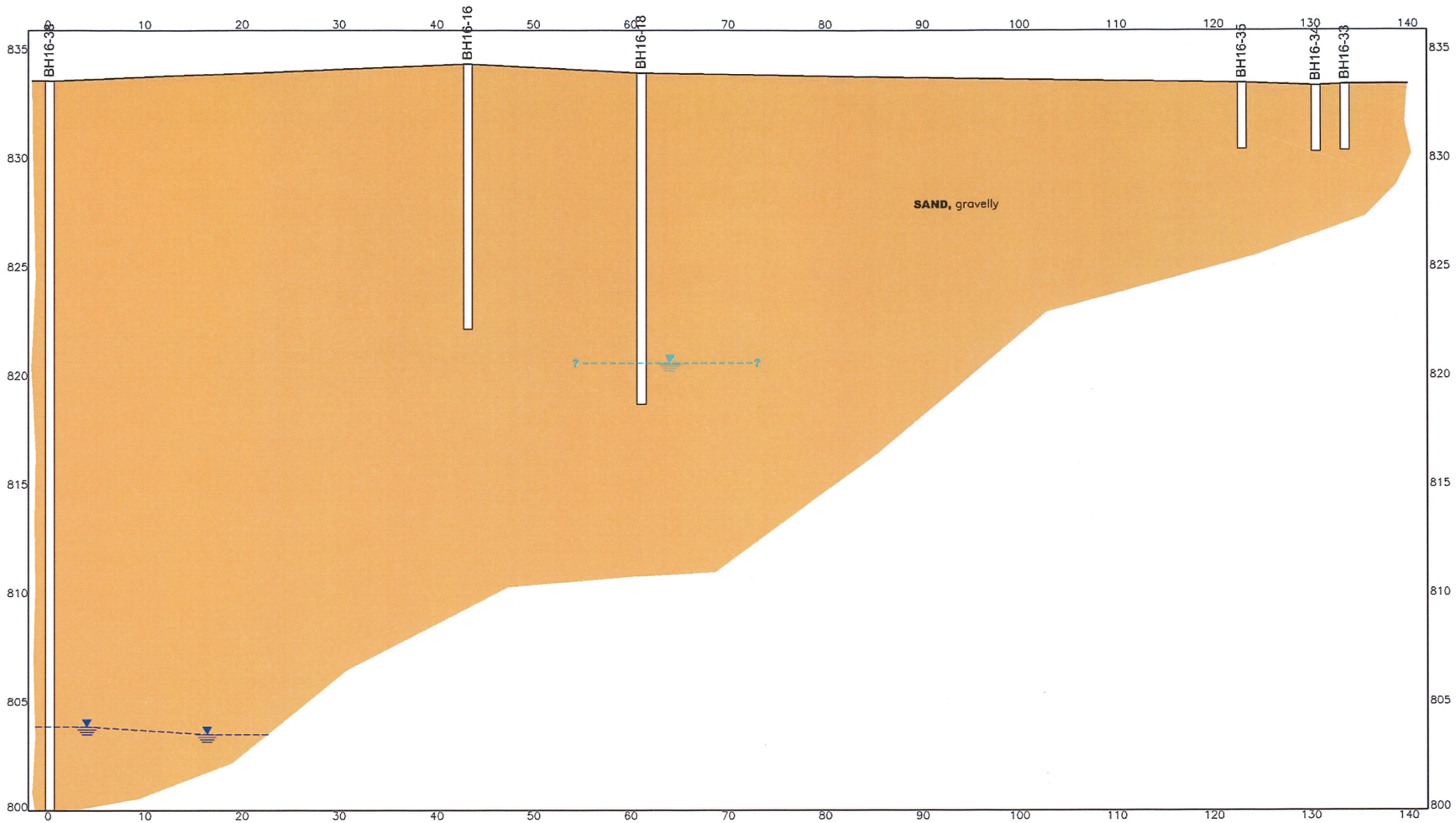

B-B' / 302 **SECTION**
HORIZONTAL SCALE
1:500 (m)

NOTES

1. THE CROSS SECTION DEPICTED IS BASED ON INTERPRETATION OF LIMITED GEOLOGICAL DATA. ACTUAL GEOLOGICAL CONDITIONS MAY BE DIFFERENT FROM THOSE INTERPRETED.
2. REFER TO PLAN MAP 636200-302 FOR LOCATION OF CROSS SECTION LINE.
3. INFORMATION PRESENTED IS WITHIN 10m OF SECTION LINE UNLESS INDICATED OTHERWISE ON DRAWING.
4. ORIGINAL DRAWING IN COLOUR.
5. CROSS SECTIONS SHOWN ARE CONDITIONS PRIOR TO FY2016/2017 REMEDIAL EXCAVATION TO ILLUSTRATE NATIVE STRATIGRAPHY.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
M. A. QUEST
#27300
Sept15/17

LEGEND

SAND, gravelly

APPROXIMATE DEPTH OF SHALLOW PERCHED WATER TABLE

APPROXIMATE DEPTH OF REGIONAL WATER TABLE

BOREHOLE LEGEND

00-1
END OF BOREHOLE

REFERENCE DRAWINGS

–	–	–
DWG. NO.	DATE	DESCRIPTION

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
3	2017-09-14	ISSUED TO CLIENT	PES	CS
2	2017-07-07	ISSUED TO CLIENT	PRT	MG
1	2017-06-16	ISSUED AS DRAFT	PRT	CS
0	2016-07-21	ISSUED TO CLIENT	PES	MG

SNC·LAVALIN

CLIENT NAME: PUBLIC SERVICES AND PROCUREMENT CANADA

PROJECT LOCATION: FIRESIDE ALASKA HIGHWAY, BC

TITLE: **GEOLOGICAL CROSS SECTION B-B'**

DWN BY: PES	SCALE: AS NOTED	DATE: 2016-07-14	DWG No:	REV.: 3
CHK'D: CT	PLOT: 20170914.1150	CADFILE: 636200X02	**636200-304B**	

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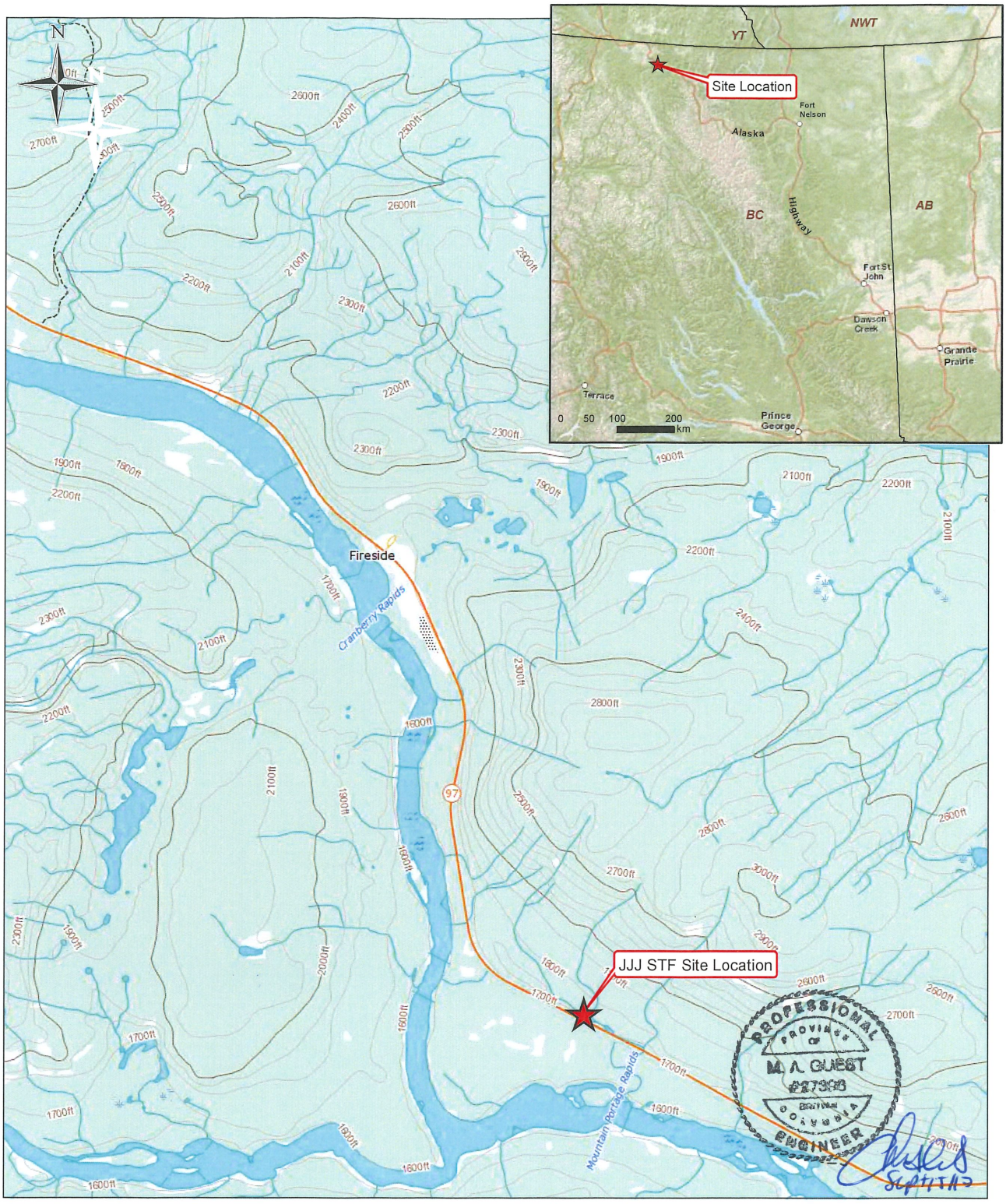

LEGEND

★ Site Location

NOTES

1. Original in colour.
2. Numerical scale reflects full-size print. Print scaling will distort this scale, however scale bar will remain accurate.
3. Intended for illustration purposes, accuracy has not been verified for construction or navigation purposes.

SNC·LAVALIN

CLIENT NAME:	PROJECT LOCATION:
Public Works and Government Services Canada	JJJ STF Alaska Highway, BC

JJJ STF Site Location

0 0.5 1 2 3 4 Kilometers

BY	PB	DATE:	2017-03-03	REF No:	REV: 0
CHK'D:	CS	SCALE:	1:50,000	636200-305	

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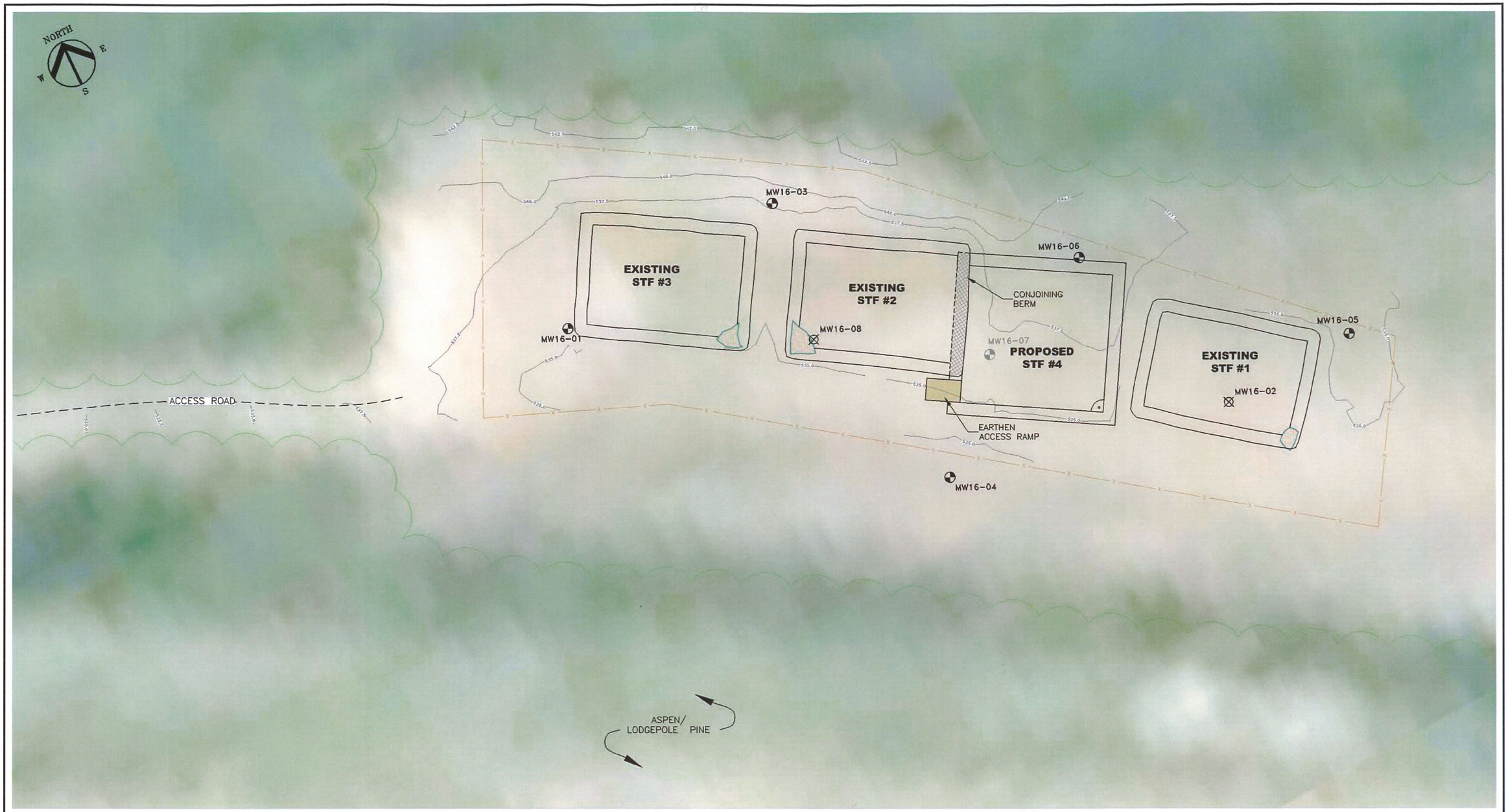

LEGEND

0 25 50 75 METRES

- TREE LINE (APPROX.)
- MONITORING WELL LOCATION
- MONITORING WELL TO BE DECOMMISSIONED
- DECOMMISSIONED MONITORING WELL
- FENCE
- SOIL BERM
- SOIL PILE
- LEACHATE COLLECTION SYSTEM
- TOPOGRAPHICAL LINE AND ELEVATION (masl)

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA M. A. GUEST #27306

Sept 5/17

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.

REFERENCE DRAWINGS

IMAGERY	1969	GOOGLE EARTH
DWG. NO.	DATE	DESCRIPTION

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
2	2017-09-14	ISSUED TO CLIENT	PES	CS
1	2017-07-07	ISSUED TO CLIENT	PRT	MG
0	2017-06-16	ISSUED AS DRAFT	PRT	CS

SNC·LAVALIN

CLIENT NAME: PUBLIC SERVICES AND PROCUREMENT CANADA

PROJECT LOCATION: JJJ GRAVEL PIT KM 839 ALASKA HIGHWAY, FIRESIDE, B.C.

TITLE: **SITE PLAN - JJJ GRAVEL PIT**

DWN BY: PRT	SCALE: 1:1,500	DATE: 2017-06-15	DWG No: 636200-306 REV.: 2
CHK'D: CS	PLOT: 20170914.1157	CADFILE: 636200R14	

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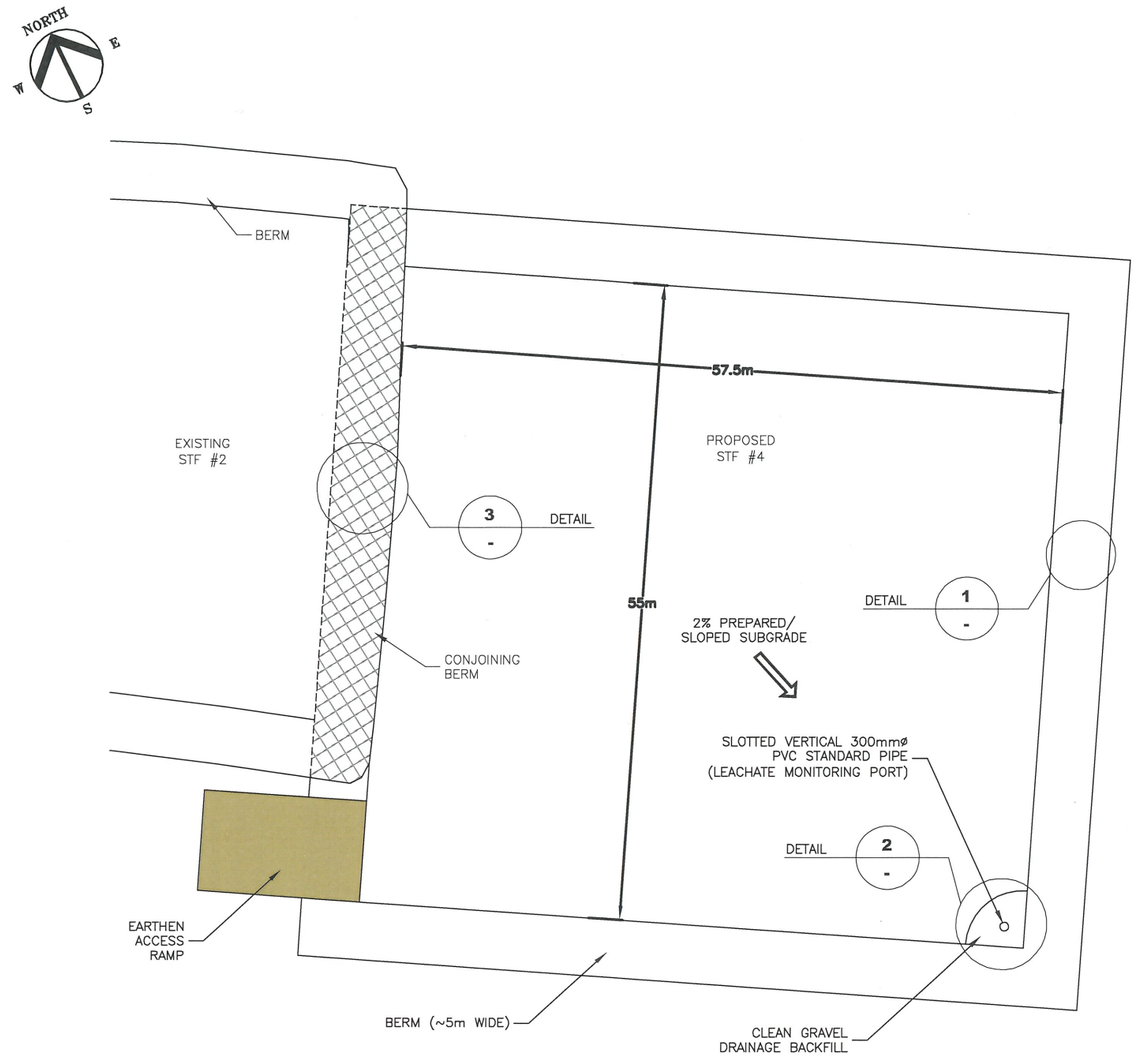
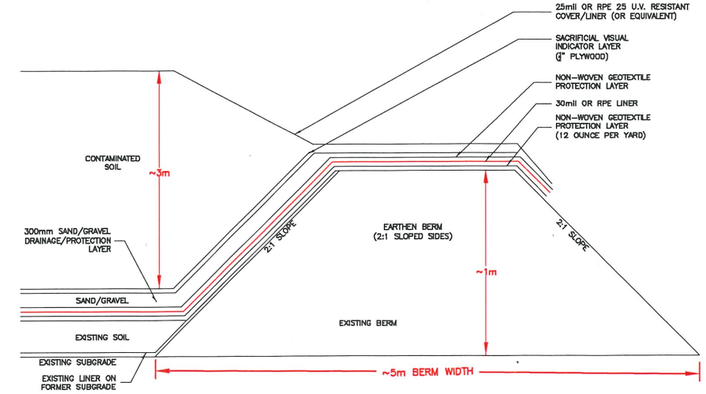


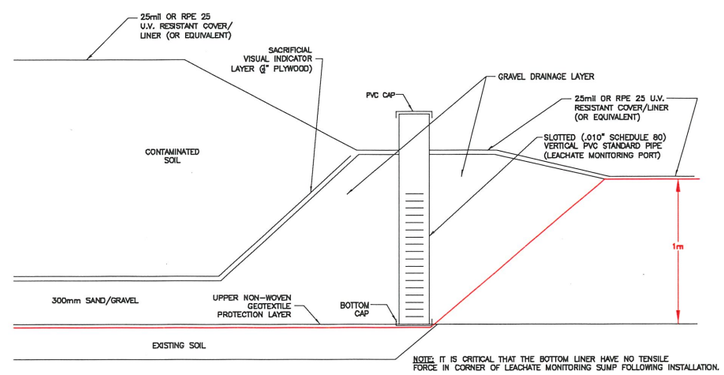
SCALE 1:500

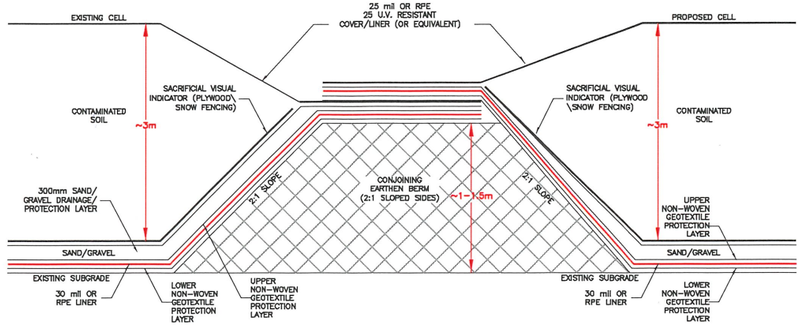
0 5 25 METRES

NOTES:

1. PREPARED SUBGRADE TO BE FREE OF PROTRUSIONS (ANGULAR COARSE FRAGMENTS, DEBRIS, ETC.) PRIOR TO CONTRUCTION OF STF.







LEGEND

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA M. A. GUEST #27396 Sept 15/17

REFERENCE DRAWINGS

IMAGERY	1969	GOOGLE EARTH
DWG. NO.	DATE	DESCRIPTION

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
2	2017-09-14	ISSUED TO CLIENT	PES	CS
1	2017-07-07	ISSUED TO CLIENT	PRT	MG
0	2017-06-16	ISSUED AS DRAFT	PRT	CS

SNC·LAVALIN

CLIENT NAME: PUBLIC SERVICES AND PROCUREMENT CANADA

PROJECT LOCATION: JJJ GRAVEL PIT KM 839 ALASKA HIGHWAY, FIRESIDE, B.C.

TITLE:

SOIL TREATMENT FACILITY #4 DESIGN SPECIFICATIONS

DWN BY: PRT	SCALE: 1:1,500	DATE: 2017-06-15	DWG No: 636200-307 REV.: 2
CHK'D: CS	PLOT: 20170914.1159	CADFILE: 636200R14	

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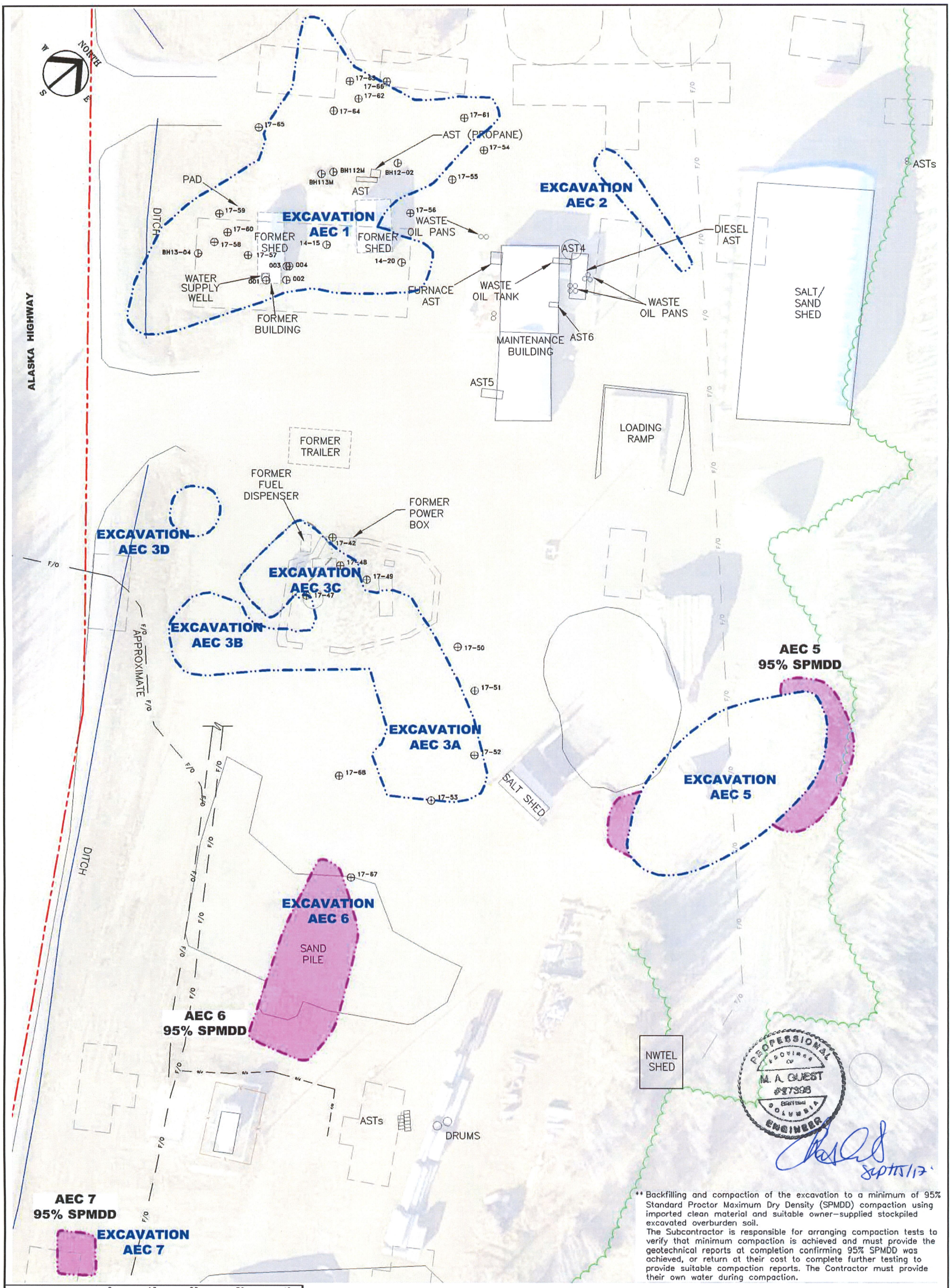

** Backfilling and compaction of the excavation to a minimum of 95% Standard Proctor Maximum Dry Density (SPMDD) compaction using imported clean material and suitable owner-supplied stockpiled excavated overburden soil.
The Subcontractor is responsible for arranging compaction tests to verify that minimum compaction is achieved and must provide the geotechnical reports at completion confirming 95% SPMDD was achieved, or return at their cost to complete further testing to provide suitable compaction reports. The Contractor must provide their own water during compaction.

LEGEND

0 10 20 30 40 METRES

- SUBJECT PROPERTY LIMITS
- TREE LINE
- FENCE
- FORMER SITE CONFIGURATION
- SITE FEATURE
- FY 2017/2018 PROPOSED APPROXIMATE EXCAVATION LIMIT
- FY 2016/2017 EXCAVATION BOUNDARY
- F/O — FIBRE OPTIC LINE — UNDERGROUND
- APPROXIMATE CUT LINE
- F/O — FIBRE OPTIC LINE — OVERHEAD

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.

REFERENCE DRAWINGS

DWG. NO.	DATE	DESCRIPTION
–	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
2	2017-09-14	ISSUED TO CLIENT	PES	CS
1	2017-07-07	ISSUED TO CLIENT	PRT	MG
0	2017-06-16	ISSUED AS DRAFT	PRT	CS

SNC·LAVALIN

CLIENT NAME: PUBLIC SERVICES AND PROCUREMENT CANADA

PROJECT LOCATION: FIRESIDE MAINTENANCE CAMP ALASKA HIGHWAY, BC

TITLE: **SITE RESTORATION**

DWN BY: BB	SCALE: 1:800	DATE: 2017-03-03	DWG No: 636200-308 REV.: 2
CHK'D: CS	PLOT: 20170914.1209	CADFILE: 636200R14	

PATH: P:\CURRENT PROJECTS\PWGSC\636200 FIRESIDE\4.0 EXECUTION\4.5 GIS AND DRAWINGS\CAD\636200R14.DWG

Appendix No.	Appendix Title
A	Environmental Investigations - FY 2016/2017 Remedial Excavation Data Package, Fireside Maintenance Camp, KM 839, Alaska Highway, BC – PSPC Project # R.018392.004/005, dated March 31, 2017 - FY 2015/2016 Feasibility Study Data Report, Fireside Maintenance Camp, KM 839, Alaska Highway, BC – PSPC Project # R.018388.003, dated March 31, 2016

SNC-Lavalin Inc.
#202 – 890 Crace Street
Nanaimo, British Columbia, Canada, V9R 2T3
250.716.9000 250.716.9002

March 31, 2017 Project: 636200

Public Works and Government Services Canada
800 Burrard Street, Room 219
Vancouver, BC V6Z 0B9
ATTENTION: Mr. Jordan Stones, Environmental Specialist

REFERENCE: **FY 2016/2017 Remedial Excavation Data Report**
Fireside Maintenance Camp, Kilometer 839, Alaska Highway, BC
PWGSC Project No. R.018392.004/005

At the request of Public Works and Government Services Canada (PWGSC), SNC-Lavalin Inc. (SNC-Lavalin) has prepared the following Remedial Excavation Data Report for Fireside Maintenance Camp, kilometer 839, Alaska Highway, BC (the "Site").

SNC-Lavalin was retained by PWGSC to provide environmental consulting services during the remediation of contaminated soil identified in portions of the Site and the construction of three soil treatment facilities (STFs) at the JJJ Gravel Pit. The work was completed in fiscal year 2016/2017 (FY 2016/2017) under the Remediation Consultants Contract No. EZ897-160027-003/PWY, Task Authorization (TA) 700352076. All work was conducted in accordance with the SNC-Lavalin workplan for the Remedial Oversight dated August 10, 2016. The location of the Site and the JJJ Gravel Pit are shown on Drawing 636200-001.

This report summarizes the remedial activities completed between October and December 2016, and documents the results of the remediation.

Objectives

The objective of the FY 2016/2017 remediation was to reduce petroleum hydrocarbon (PHC) contaminant mass by excavation of contaminated soil above approximately 8 meters below ground (mbg) at four of the areas of environmental concern (AECs) identified at the Site to support mitigation of future risk. The contaminated soil excavated from the Site was transported off-Site for treatment at the nearby PWGSC managed STFs.

Background

The Fireside Maintenance Camp is approximately 17.9 hectares in size and is located on the east side of Alaska Highway at Km 839 (approximately 380 Km west of Fort Nelson, BC). The operational portion of the camp makes up approximately 7 hectares. Current ownership of the highway and camps is under the province of BC, but maintained by contractors under contracts issued by PWGSC. PWGSC operates the Alaska Highway from Km 133 to Km 966.

The Site has been used as a maintenance camp on the Alaska Highway since the 1940s. Historical releases from near surface petroleum and salt storage/handling facilities at the Site resulted in subsurface contamination (PHC, polycyclic aromatic hydrocarbons, sodium, chloride, and various metals) in surface soil and subsoil (i.e., >1.5 m below grade) and groundwater across the operational yard. The extents of residual impacts have not been fully delineated in all AECs.

Drawing 66200-002 shows the locations of the AECs addressed during the FY2016/2017 remedial excavation.

Regulatory Framework

Current land ownership of the Site is under the province of BC; however, the highway maintenance camp will continue to be maintained by contractors under contracts issued by PWGSC. As such, applicable environmental criteria are both federal guidelines and provincial standards. Remedial guidelines and standards which apply to soil on the Site are based on the land and water uses. Based on our current understanding of the geology, hydrogeology, current and future land/water uses, applicable site-specific factors, and in past consultation with PWGSC to meet the remedial objectives, the soil samples collected during the FY 2016/2017 remediation were assessed by analysis of federally and provincially regulated parameters, and were compared with:

- *Canadian Council of Ministers of the Environment*[1] (CCME) *Canadian Environmental Quality Guidelines* (CEQG) and *Canada Wide Standards for Petroleum Hydrocarbons in Soil* (CWS-PHC) residential and parkland (RL/PL) guidelines; and
- *BC Contaminated Sites Regulation*[2] (CSR) RL/PL standards.

The above are hereafter referred to as the “Guidelines/Standards”. Details are provided in Attachment 3.

Prior to the FY 2016/2017 remediation, monitoring wells expected to be damaged by the excavation activities were decommissioned according to provisions outlined in the BC *Ground Water Protection Regulation*[3] (GWPR).

[1] *Canadian Environmental Quality Guidelines (CEQG),* Canadian Council of Ministers of the Environment (CCME), Winnipeg MB, *including updates to 2015*.
[2] *Contaminated Sites Regulation (CSR), B.C. Reg. 375/96, includes amendments up to B.C. Reg. 184/2016, July 19, 2016.*
[3] *Ground Water Protection Regulation* (GWPR), B.C. Reg. 39/2016, includes amendments up to B.C. Reg. 152/2016, June 10, 2016.

Scope of Work

The FY 2016/2017 remediation construction program was conducted by Site Energy, of Edmonton, Alberta, the remediation contractor retained by PWGSC. Site Energy carried out remedial construction activities between (October 11 to December 23). The consulting services undertaken by SNC-Lavalin in support of the remediation program included overseeing the following scope of work:

- Construction of three STFs at the JJJ Gravel Pit located approximately 4 km south for the Site on the east side of the Alaska Highway;
- Identify and decommission any wells located within the excavation limits;
- Excavation of PHC impacted soil soils from four AECs (AEC 1, a portion of AEC 2, AEC 3, and AEC 5);
- Transportations and placement of PHC contaminated soil at the STF;
- Dewater and treat the water from the remedial excavation as needed;
- Collect and field screen confirmation soil samples from the remedial excavation limits, excavated soil placed in stockpiles, and backfill material and submit to an approved laboratory for analysis of contaminants of concern;
- Excavation of clean granular material sourced from the JJJ Gravel Pit;
- Backfill of the remedial excavation;
- Survey of the extents of final excavation limits on the Site and the completed STF surfaces to provide contract quantity estimates; and,
- Prepare a data package.

As detailed in SNC-Lavalin's work plan, dated August 10, 2016, SNC-Lavalin's scope of work for the duration of the project included project coordination and planning, and remediation construction management.

The contractor's scope of work for the remediation project was detailed in the tender specification prepared by PWGSC, dated August 26, 2016.

STF Construction

Three STFs were constructed by Site Energy at the JJJ Gravel Pit to accommodate contaminated soil from the Fireside Maintenance Camp remedial excavation. Prior to the STF construction, site preparation activities included upgrading the access roads to, and within, the JJJ Gravel Pit, site grading and sloping. For each STF, berms were constructed to 1 m above the ground surface while maintaining a 2:1 slope. A geosynthetic base liner (Brawler SuperGeo L30B 30mil LDPE) was placed over the berms and each STF base surface, followed by a geotextile liner. A 300 mm sand and gravel drainage/protection layer was placed over the liners covering the floor of the STF. This was followed by a coconut matting cover to act as a visual/physical layer for subsequent aeration activities. In the low corner of each STF, a monitoring/extraction port was constructed of polyvinyl chloride (PVC) pipe and gravel for the accumulation and management of potential leachate. To divert any surface water

runoff, a 300 mm ditch was constructed along the backslope of each STF. The final dimension of the each constructed STF is approximately 64 m x 44 m. Select photographs taken during the construction of the STFs are provided in the attachments.

Contaminated soil from the remedial excavation was placed in the STF to a height that did not exceed 3m. Following the placement of the contaminated soils a secure, seamless and reinforced ultra violet resistant cover liner (RhinoSkin 24) was placed over the soils and extended to the outside of the berms. A site plan for the JJJ Gravel Pit is and the STF design specifications are shown on attached Drawings 636200-006 and 636200-007, respectively.

Owner supplied granular materials from the JJJ Gravel Pit were used to construct the berm and the 300mm sand and gravel drainage/protection layer, upon approval by PWGSC.

Remedial Excavation

Details of the remedial tasks completed are discussed below. The methodology used to complete the fieldwork and a summary of the quality assurance/quality control (QA/QC) procedures adopted by SNC-Lavalin and the project laboratory (Maxxam Analytics in Burnaby, BC) are attached. Copies of the laboratory certificates are also attached.

Remedial Activities

Pre-Remediation Well Decommissioning

To eliminate preferential pathways for potential infiltration of contaminated run-off during the excavation activities, monitoring wells anticipated to be located within and/or in close proximity to the proposed excavation footprints were decommissioned with the exception of MWs 16-37 (AEC 1), 13-03, 13-06 and 16-38 (AEC 3) which were protected and retained for subsequent *in situ* treatment. The monitoring wells that were not completely removed within the depth of excavations were decommissioned by filling the entire well piping with appropriate sealant (i.e., hydrated bentonite) to ground surface and removing the well roadbox/stickup protectors prior to the remedial excavation. Table A below summarizes the wells decommissioned.

Table A: Well Decommissioning Summary

Excavation Areas	Well ID
1	BH112M, BH113M, BH12-02, BH13-04, BH14-15, BH14-20, Wells 001, 002, 003 and 004

Note that there were no monitoring wells located within the footprint of the planned excavation areas for AEC 2 and AEC 5. Further, MW 14-19 (located in AEC 3) was able to be retained as the excavation depth in this area was shallow.

Excavation Monitoring and Soil Sampling

The remedial excavation was conducted on-Site between October 16 and December 20, 2016. Based on pre-excavation *in situ* characterization of soil quality results, temporary remedial excavation limits were established to guide the excavation. These estimated limits are shown on Drawings 636200-003, 636200-004, and 636200-005. The final excavation limits and confirmation sample locations are shown on Drawings 636200-008 to 636200-011. Select photographs taken during the remedial excavation are provided in the attachments.

The excavated soils were segregated and the contaminated soil was placed directly into trucks and transported off-Site to the STF at JJJ Gravel Pit for subsequent bio-remediation treatment. Contaminated soil was identified and delineated either by design limits (i.e., estimated extents of the contamination) or by field screening (visual and olfactory observations and organic vapour analyzer [OVA] measurements). Where deemed necessary to obtain analytical certainty, analytical results of soil samples collected from the walls and bases of temporary remedial excavation limits (i.e., interim samples) were used to establish the final limits of the excavation. The remedial excavation was extended to a maximum depth of approximately 8.5 m (at AEC 3).

A total of 21,242 m^3 of contaminated material was removed from the excavation and transported to the STF. In addition, approximately 292 tonnes of non-contaminated material (i.e., metal and concrete debris was transported off-Site for reuse and recycling in Watson Lake. A total of 21,242 m^3 of clean backfill fill material (sourced from the JJJ Gravel Pit) was imported to the Site and placed into the excavations. Due to sub-freezing conditions, compaction testing could not be completed for the backfill.

Following excavation of each AEC, confirmatory soil samples were collected from the side walls, and from the excavation floor. The samples were collected on an approximate 10 m horizontal spacing along the wall and floor of the excavation. Samples were collected near the ground surface and vertically at approximately one meter intervals from the ground surface. The samples were collected either directly from the excavation surface, or from a sample collected by excavator bucket. The location of each sample was recorded by survey with a total station. Samples were placed in glass jars for laboratory analyses. An aliquot of the sample was also placed in plastic bags for subsequent field vapour measurement using an OVA (Gastech combustible gas detector). Samples were placed in a cooler packed with ice for transport by courier to Maxxam. Detailed field sampling procedures are attached.

The specified excavation extents were determined prior to excavation on-Site using drawings provided in the contract specifications and total station survey control. The actual extents of the excavations were surveyed following excavation using a total station.

Results of Remedial Excavation

Stratigraphy, Groundwater Conditions and Field Screening

Consistent with the observations from pre-remediation investigations, the stratigraphy encountered during the remedial excavation consisted of sand or sand and gravel with some cobbles, to the maximum excavated depth of 8.5 m. Occasional sand and silt layers of varying thickness (less than 1 m thick) were observed during the excavation.

Groundwater was not anticipated due to measured depths in monitoring wells below excavation limits, and did not accumulate in any of the excavated areas. Therefore, no water was treated or discharged from the Site.

Descriptions of the soil profile for samples collected from the excavation limits are included in Table 1, attached.

Soil Quality of Excavation Limit Samples

The analytical results of confirmatory soil sampling for the remedial excavation activities indicate that PHC contamination remains present in the floors and/or walls of AEC 1, 2, 3 and 5. The table below summarizes the residual impacts remaining in the excavated areas at the Site.

Table B: Summary of Residual Petroleum Hydrocarbon Contamination

AEC	Results
1	Impacts remain at several locations on the floor of the excavation (4.5 m – 8.0 m bgs) near the centre of the excavation footprint and towards the eastern limit. Surficial impacts remain along the south eastern excavation limit (0.4 m bgs). Deeper impacts remain north of this, along the eastern limit to approximately 7.5 m bgs. Nominal shallow hydrocarbon impacts are present at a few locations along the western excavation limit.
2	Localized nominal toluene impacts remain in soil between 0.5 m and 3.0 m bgs. One location along the western limit has residual PHC impacts at surface (0.5 m bgs).
3	Surficial impacts remain along the southwestern excavation limit. Impacts remain in the southeastern portion of the excavation limit between 0.5 m and 8.0 m bgs. Impacts along the floor of the excavation (between 1.8 m and 8.5 m bgs) remain in the central-north portion of the excavation.
5	Surficial impacts (0.5 m bgs) remain along the eastern and southern limit remain.

The analytical results are presented on Tables 2 through 5, attached, and shown on Drawings 636200-008 to 636200-011 and are compared to the applicable guidelines/standards. The laboratory certificates of analysis are attached.

Excavation Backfill

Imported backfill material was sourced from the PWGSC JJJ Gravel Pit. Soils allocated for use of the Site were sampled by SNC-Lavalin and analyzed for PHC, polycyclic aromatic hydrocarbons (PAH) and metals prior to use on the Site. The initial sampling program in October 2016 consisted of surface soil sampling and test-pitting. Additional sampling was completed in November 2016 (BF16-01 through BF16-22). During the November sampling program, a duplicate of each sample was collected for potential analysis at both Maxxam and AGAT Laboratories (AGAT) for quality assurance / quality control (QA/QC) purposes.

In total 30 backfill samples, including one blind field duplicate, were analyzed for petroleum hydrocarbons and PAHs by Maxxam. Seven of these samples, including the blind field duplicate pair, were also analyzed by AGAT. Of these 30 backfill samples, 18 samples were additionally analyzed for metals. Results of the petroleum hydrocarbon and PAH analysis were below the applicable standards in all samples analyzed with the exception of BF16-01 and BF16-04, which exceeded for toluene only. Due to this, the material represented by samples BF16-01 through BF16-10 were not exported and utilized as backfill. The analytical results for imported backfill samples are presented in Tables 6 through 9, attached.

SNC-Lavalin's geotechnical division under contract to Site Energy completed geotechnical testing of JJJ Gravel Pit soils to confirm suitability for use as backfill material. The practices outlined in the Backfill Recommendation Letter prepared by Tetra Tech[4] were adopted at the Site. For AECs 1, 3 and 5 the backfill material (coarse granular material) was applied in 300 mm lifts. The letter required that AEC 2 be backfilled with structural material (coarse aggregate) however; no coarse oversize rock material was available at the JJJ Gravel Pit. As such, AEC 2 was backfilled in the same manner as the other AECs (i.e., with coarse granular material). Due to the below freezing temperatures, compaction testing of the backfilled areas was not practicable and as such, areas were compacted to the extent possible under those conditions. It is anticipated that compaction testing of the backfilled areas will be confirmed during future work at the Site.

[4] Backfill Recommendation Letter, Tetra Tech, October 18, 2016.

Notice to Reader

This report has been prepared by SNC-Lavalin Inc. (SNC-Lavalin) for Canada, who has been party to the development of the scope of work for this project and understands its limitations[5]. Copyright of this report vests with Her Majesty the Queen in Right of Canada. This report was prepared in accordance with a services contract between SNC-Lavalin and Canada, including General Conditions 2035 of the Standard Acquisition Clauses and Conditions (SACC) Manual.

This report is intended to provide information to Canada to assist it in making business decisions. SNC-Lavalin is not a party to the various considerations underlying the business decisions, and does not make recommendations regarding such business decisions.

The findings, conclusions and recommendations in this report have been developed in a manner consistent with the level of skill normally exercised by environmental professionals currently practicing under similar conditions in the area. The findings contained in this report are based, in part, upon information provided by others. If any of the information is inaccurate, modifications to the findings, conclusions and recommendations may be necessary.

The findings, conclusions and recommendations presented by SNC-Lavalin in this report reflect SNC-Lavalin's best judgement based on the site conditions at the time of the site inspection on the date(s) set out in this report and on information available at the time of preparation of this report. They have been prepared for specific application to this site and are based, in part, upon visual observation of the site, subsurface investigation at discrete locations and depths, and specific analysis of specific materials as described in this report during a specific time interval. Substances other than those described may exist within the site, reported substance parameters may exist in areas of the site not investigated, and concentrations of substances greater or less than those reported may exist between sample locations.

[5] © Her Majesty the Queen in Right of Canada (2017)

The findings and conclusions of this report are valid only as of the date of this report. If site conditions change, new information is discovered, or unexpected site conditions are encountered in future work, including excavations, borings, or other studies, the findings, conclusions and/or recommendations of this report should be re-evaluated. It is recommended that users of this report should engage a suitably qualified professional to assist in interpreting the significance, if any, of the findings.

Christine Stokes, P.Ag.
Project Scientist

Environment & Geoscience
Infrastructure

William CullochDasson, M.Sc., P.Geo.
Project Geoscientist

Environment & Geoscience
Infrastructure

Meredith Guest, P.Eng.
Project Engineer

Environment & Geoscience
Infrastructure

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enc.

Attachments
1 Drawings
2 Tables
3 Regulatory Framework
4 Quality Assurance / Quality Control
5 Field Sampling Methodology
6 FY2016-2017 Remedial Excavation Photographs
7 Laboratory Certificates of Analysis (not included in draft)

ATTACHMENT 1

Drawings

636200-001: Site Location

636200-002: Site Plan, Infrastructure and Restrictions

636200-003: Contaminated Materials Extents – AEC 1 and AEC 2

636200-004: Contaminated Materials Extents – AEC 3

636200-005: Contaminated Materials Extents – AEC 5

636200-006: Site Plan – JJJ Gravel Pit

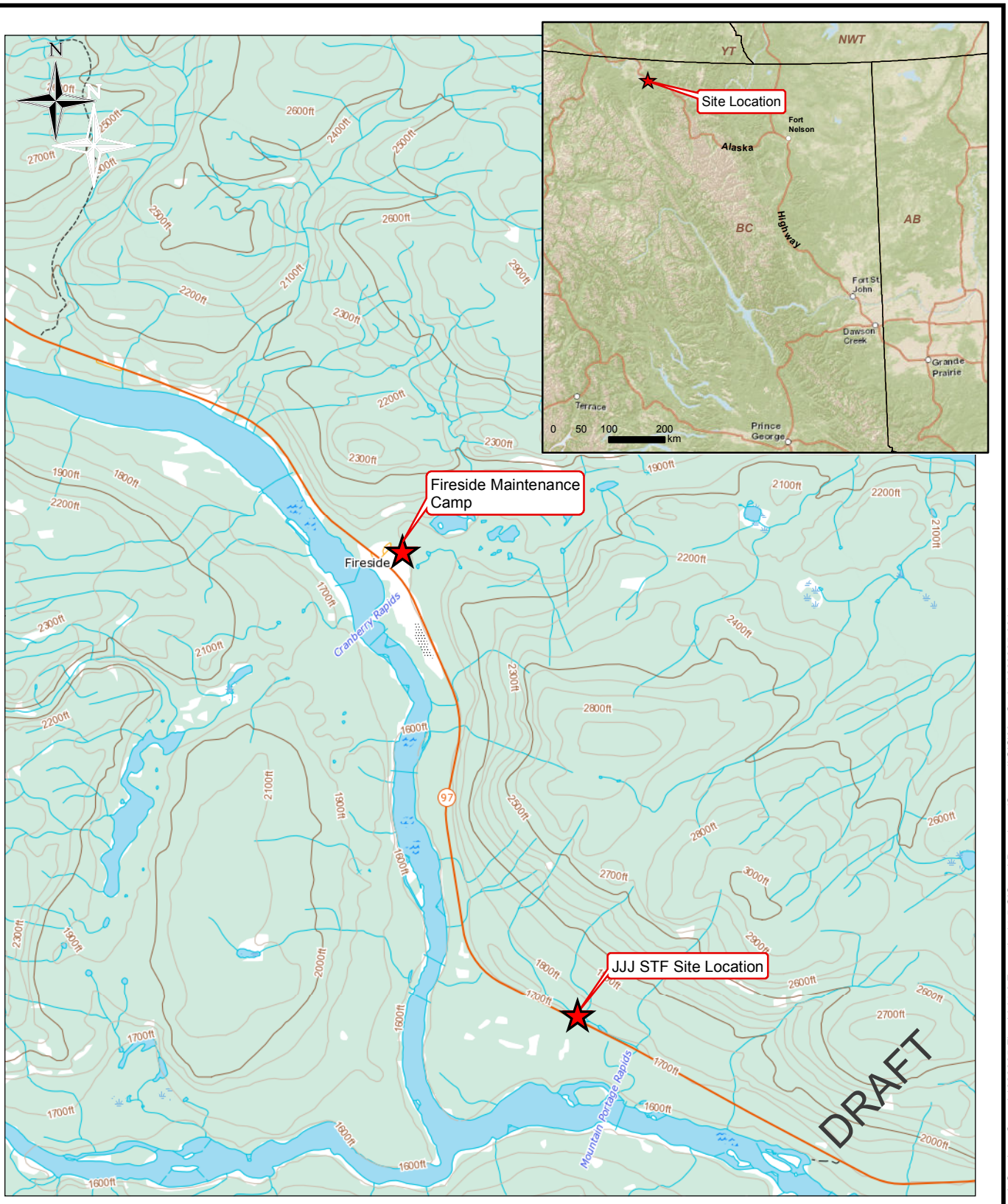
636200-007: Soil Treatment Facility Design Specifications – JJJ Gravel Pit

636200-008: Confirmatory Analytical Results – 2016 Remedial Excavation – AEC 1

636200-009: Confirmatory Analytical Results – 2016 Remedial Excavation – AEC 2

636200-010: Confirmatory Analytical Results – 2016 Remedial Excavation – AEC 3

636200-011: Confirmatory Analytical Results – 2016 Remedial Excavation – AEC 5



LEGEND

★ Site Location

NOTES

1. Original in colour.
2. Numerical scale reflects full-size print. Print scaling will distort this scale, however scale bar will remain accurate.
3. Intended for illustration purposes, accuracy has not been verified for construction or navigation purposes.

SNC·LAVALIN

CLIENT NAME:	PROJECT LOCATION:
Public Works and Government Services Canada	Fireside Maintenance Camp/JJJ STF Alaska Highway, BC

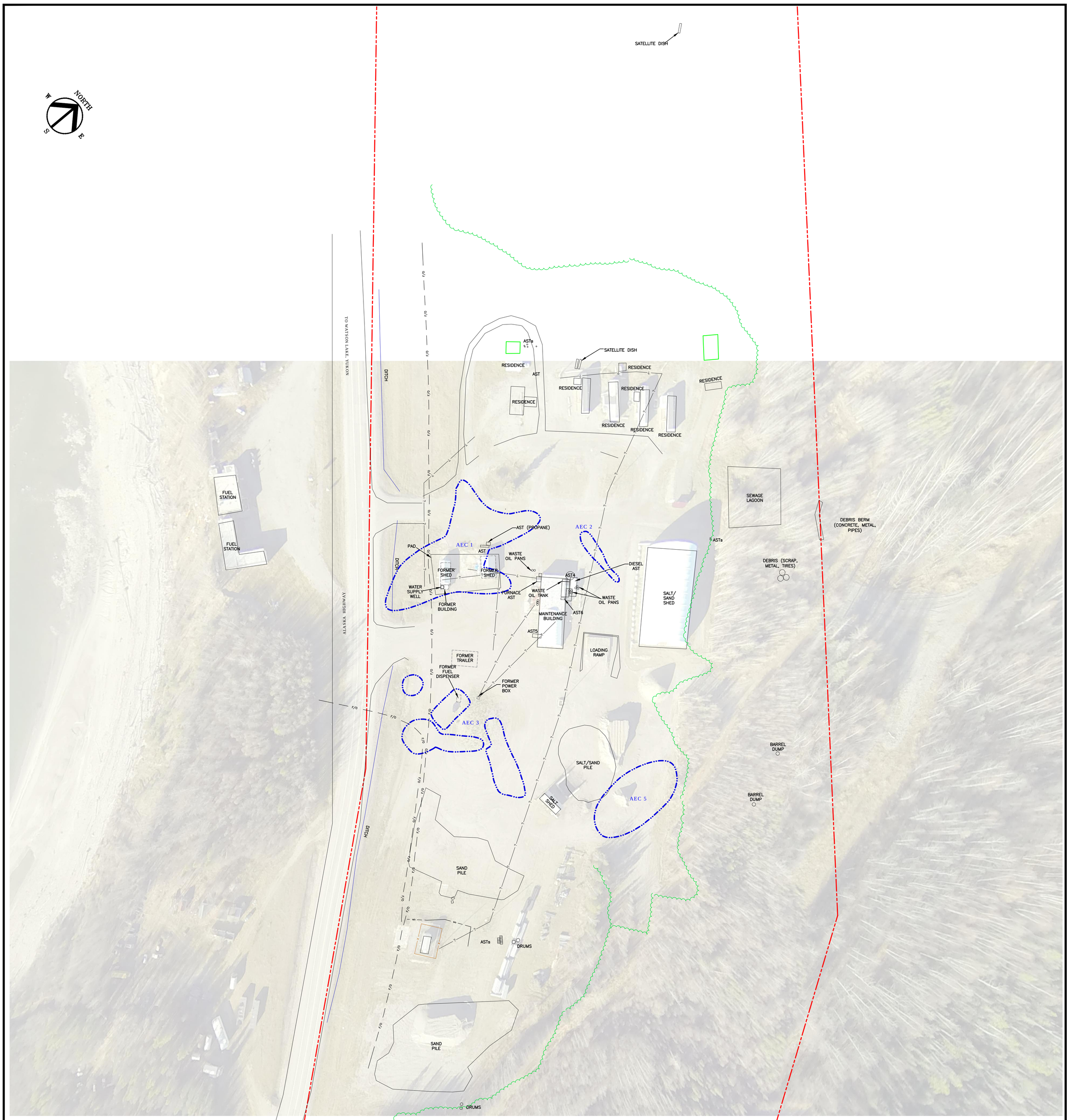
Site Location

0 0.5 1 2 3 4 Kilometers

BY: PB	DATE: 2017-03-03	REF No: 636200-001 REV: 0
CHK'D: CS	SCALE: 1:50,000	

MXD Path: P:\Current Projects\Public Works and Gov't Services Canada\623385 Fireside\4.0 Execution\4.5 GIS and Drawings (Secure)\GIS\MapSeries\623385-001.mxd

Project Path: "P:\Current Projects\Public Works and Gov't Services Canada\623385 Fireside"



DRAFT

LEGEND

2 10 20 40 60 80 100 METRES

- SUBJECT PROPERTY LIMITS
- LOT BOUNDARY
- f/o FIBER OPTIC LINE
- ? UNKNOWN UTILITY
- TREE LINE
- SITE FEATURE
- GARDEN

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.

REFERENCE DRAWINGS

DWG. NO.	DATE	DESCRIPTION
	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
0	2017-03-29	ISSUED AS DRAFT	BB	CS

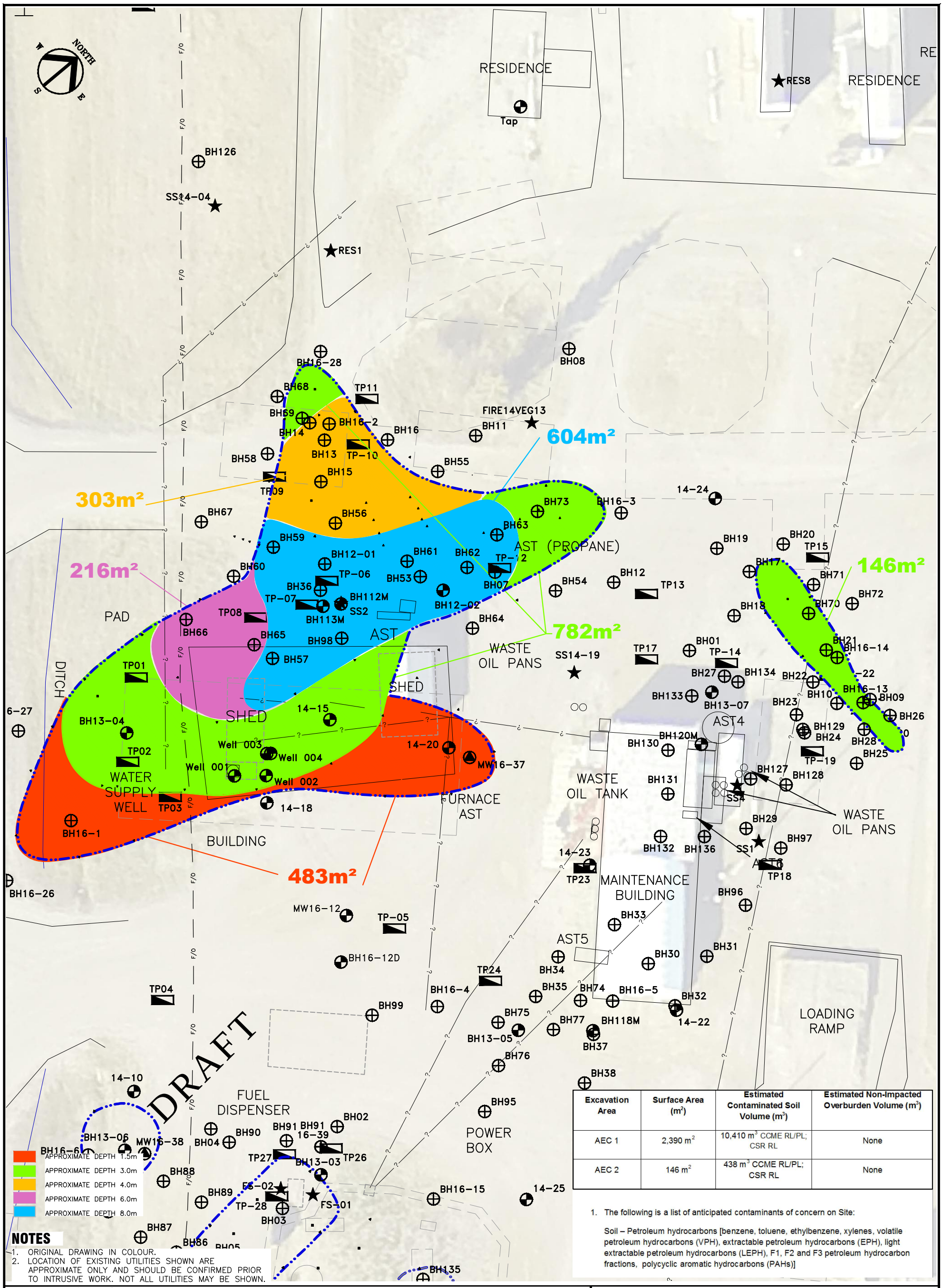
SNC·LAVALIN

CLIENT NAME: PUBLIC WORKS AND GOVERMENT SERVICES CANADA

PROJECT LOCATION: FIRESIDE MAINTENANCE CAMP ALASKA HIGHWAY, BC

SITE PLAN, INFRASTRUCTURE AND RESTRICTIONS

DWN BY: BB	SCALE: 1:1,000	DATE: 2017-03-03	SERIES No: REV.: 0
CHK'D:	PLOT: 20170329.0611	CADFILE: 636200R9	636200-002



Excavation Area	Surface Area (m^2)	Estimated Contaminated Soil Volume (m^3)	Estimated Non-Impacted Overburden Volume (m^3)
AEC 1	2,390 m^2	10,410 m^3 CCME RL/PL; CSR RL	None
AEC 2	146 m^2	438 m^3 CCME RL/PL; CSR RL	None

1. The following is a list of anticipated contaminants of concern on Site:

   Soil – Petroleum hydrocarbons [benzene, toluene, ethylbenzene, xylenes, volatile petroleum hydrocarbons (VPH), extractable petroleum hydrocarbons (EPH), light extractable petroleum hydrocarbons (LEPH), F1, F2 and F3 petroleum hydrocarbon fractions, polycyclic aromatic hydrocarbons (PAHs)]

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.

LEGEND

0 5 25 METRES

- FIBER OPTIC LINE
- UNKNOWN UTILITY
- TREELINE
- FORMER SITE CONFIGURATION
- SITE FEATURE
- CONTAMINATION BOUNDARY
- MONITORING WELL
- BOREHOLE
- TESTPIT
- SURFACE SAMPLE

REFERENCE DRAWINGS

DWG. NO.	DATE	DESCRIPTION
–	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
1	2015-03-29	ISSUED AS DRAFT	BB	CS
0	2016-07-15	INTERNAL REVIEW	DRB	MG

SNC·LAVALIN

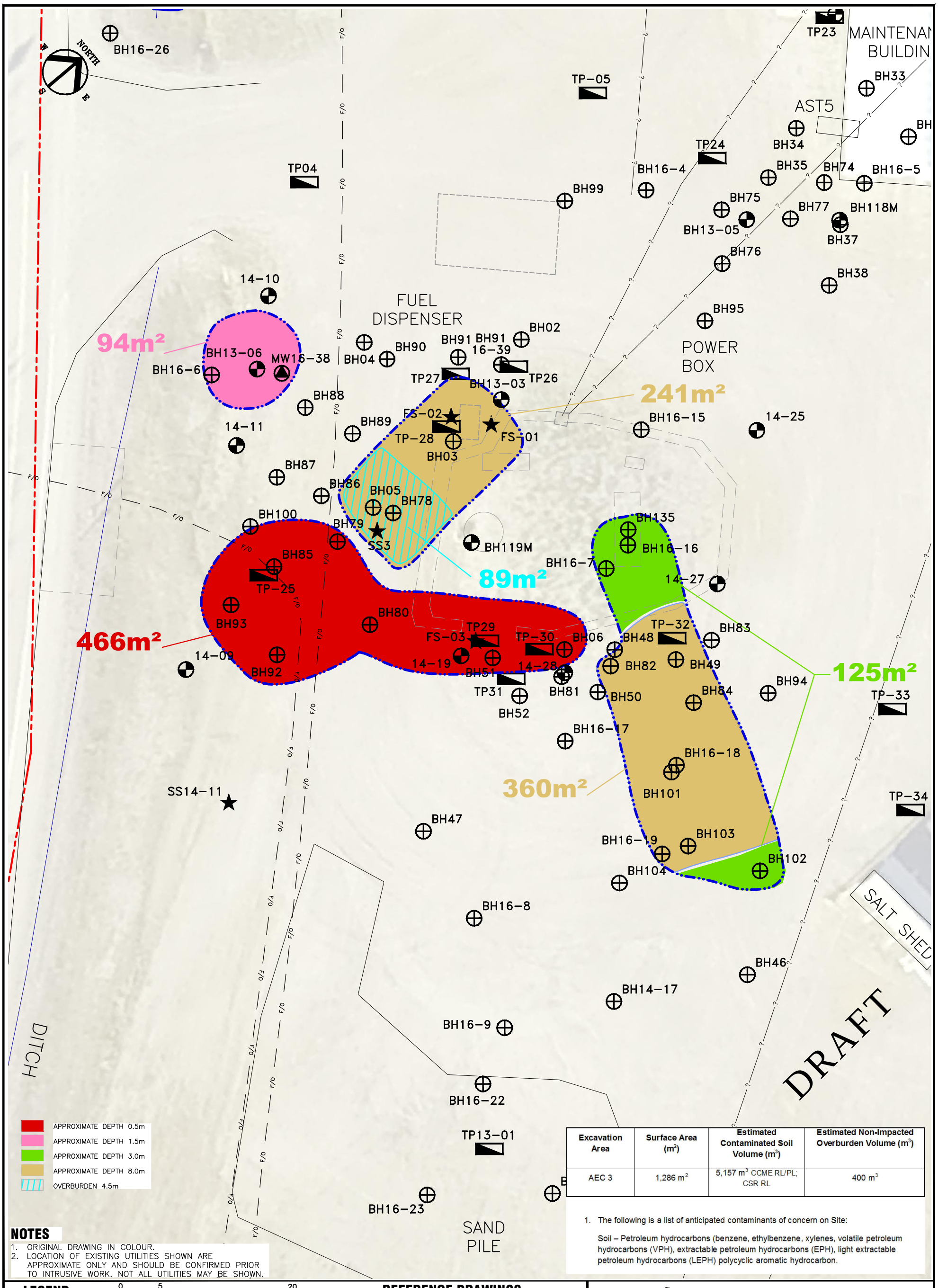
CLIENT NAME: PUBLIC WORKS AND GOVERMENT SERVICES CANADA

PROJECT LOCATION: FIRESIDE MAINTENANCE CAMP ALASKA HIGHWAY, BC

TITLE: CONTAMINATED MATERIALS EXTENTS - AEC 1 AND AEC 2

DWN BY: PES/DRB	SCALE: 1:500	DATE: 2017-03-03	DWG No: 636200-003 REV.: 1
CHK'D:	PLOT: 20170329.0612	CADFILE: 636200R9	

PATH: P:\CURRENT PROJECTS\PWGSC\636200 FIRESIDE\4.0 EXECUTION\4.5 GIS AND DRAWINGS\CAD\636200R9.DWG



Excavation Area	Surface Area (m^2)	Estimated Contaminated Soil Volume (m^3)	Estimated Non-Impacted Overburden Volume (m^3)
AEC 3	1,286 m^2	5,157 m^3 CCME RL/PL; CSR RL	400 m^3

1. The following is a list of anticipated contaminants of concern on Site:

   Soil – Petroleum hydrocarbons (benzene, ethylbenzene, xylenes, volatile petroleum hydrocarbons (VPH), extractable petroleum hydrocarbons (EPH), light extractable petroleum hydrocarbons (LEPH) polycyclic aromatic hydrocarbon.

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.

LEGEND

0 5 METRES 20

- SUBJECT PROPERTY LIMITS
- FIBER OPTIC LINE
- UNKNOWN UTILITY
- TREELINE
- FORMER SITE CONFIGURATION
- SITE FEATURE
- CONTAMINATION BOUNDARY
- MONITORING WELL
- BOREHOLE
- TESTPIT
- SURFACE SAMPLE

REFERENCE DRAWINGS

DWG. NO.	DATE	DESCRIPTION
–	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
1	2017-03-29	ISSUED AS DRAFT	BB	CS
0	2016-07-15	INTERNAL REVIEW	DRB	MG

SNC·LAVALIN

CLIENT NAME: PUBLIC WORKS AND GOVERMENT SERVICES CANADA

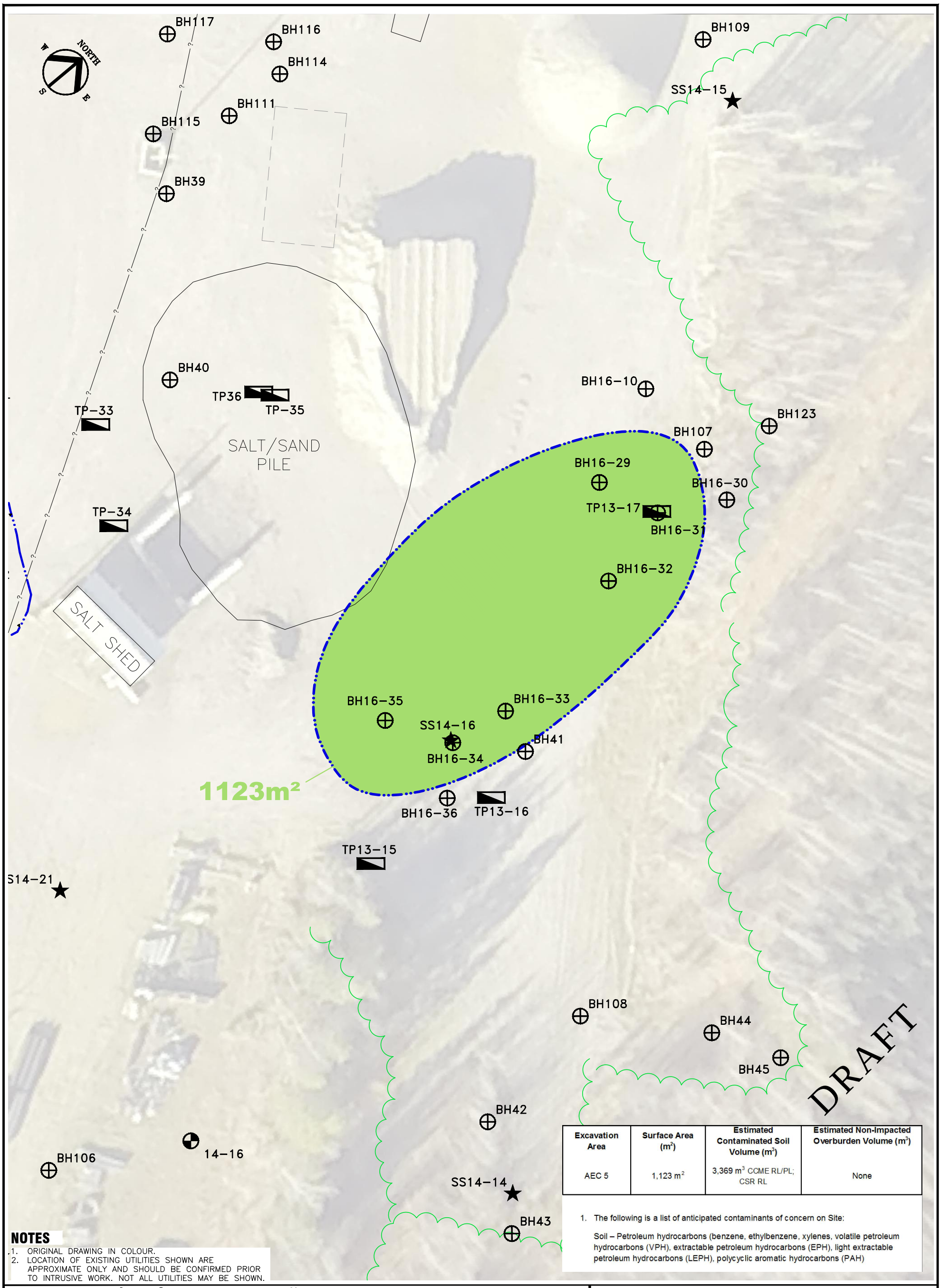
PROJECT LOCATION: FIRESIDE MAINTENANCE CAMP ALASKA HIGHWAY, BC

TITLE: CONTAMINATED MATERIALS EXTENTS - AEC 3

DWN BY: PES/DRB | SCALE: 1:400 | DATE: 2017-03-03 | DWG No: 636200-004 | REV.: 1

CHK'D: | PLOT: 20170329.0612 | CADFILE: 636200R9

PATH: P:\CURRENT PROJECTS\PWGSC\636200 FIRESIDE\4.0 EXECUTION\4.5 GIS AND DRAWINGS\CAD\636200R9.DWG



Excavation Area	Surface Area (m^2)	Estimated Contaminated Soil Volume (m^3)	Estimated Non-Impacted Overburden Volume (m^3)
AEC 5	1,123 m^2	3,369 m^3 CCME RL/PL; CSR RL	None

1. The following is a list of anticipated contaminants of concern on Site:

   Soil – Petroleum hydrocarbons (benzene, ethylbenzene, xylenes, volatile petroleum hydrocarbons (VPH), extractable petroleum hydrocarbons (EPH), light extractable petroleum hydrocarbons (LEPH), polycyclic aromatic hydrocarbons (PAH)

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.

LEGEND

0 5 METRES 20

- UNKNOWN UTILITY
- TREELINE
- FORMER SITE CONFIGURATION
- SITE FEATURE
- CONTAMINATION BOUNDARY
- MONITORING WELL
- BOREHOLE
- TESTPIT
- SURFACE SAMPLE
- APPROXIMATE DEPTH 3.0m

REFERENCE DRAWINGS

DWG. NO.	DATE	DESCRIPTION
–	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
1	2017–03–29	ISSUED AS DRAFT	BB	CS
0	2016–07–15	INTERNAL REVIEW	DRB	MG

SNC·LAVALIN

CLIENT NAME: PUBLIC WORKS AND GOVERMENT SERVICES CANADA

PROJECT LOCATION: FIRESIDE MAINTENANCE CAMP ALASKA HIGHWAY, BC

TITLE: CONTAMINATED MATERIALS EXTENTS - AEC 5

DWN BY: PES/DRB	SCALE: 1:400	DATE: 2017–03–03	DWG No: 636200-005 REV.: 1
CHK'D:	PLOT: 20170329.0612	CADFILE: 636200R9	

PATH: P:\CURRENT PROJECTS\PWGSC\636200 FIRESIDE\4.0 EXECUTION\4.5 GIS AND DRAWINGS\CAD\636200R9.DWG

LEGEND

0 25 50 75 METRES

- TREE LINE (APPROX.)
- FENCE
- SOIL BERM
- SOIL PILE
- GRAVELED AREA
- TOPOGRAPHICAL LINE AND ELEVATION (masl)

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.
3. ROCK PILE LOCATIONS AND SIZE ARE APPROXIMATE ONLY.

REFERENCE DRAWINGS

IMAGERY	1969	GOOGLE EARTH
DWG. NO.	DATE	DESCRIPTION

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
2	2017-03-29	ISSUED AS DRAFT	BB	CS
1	2016-09-29	ADDED NEW FEATURES (MWs, TPs, ETC)	BB	NS
0	2016-07-07	INTERNAL REVIEW	DRB	TM

SNC·LAVALIN

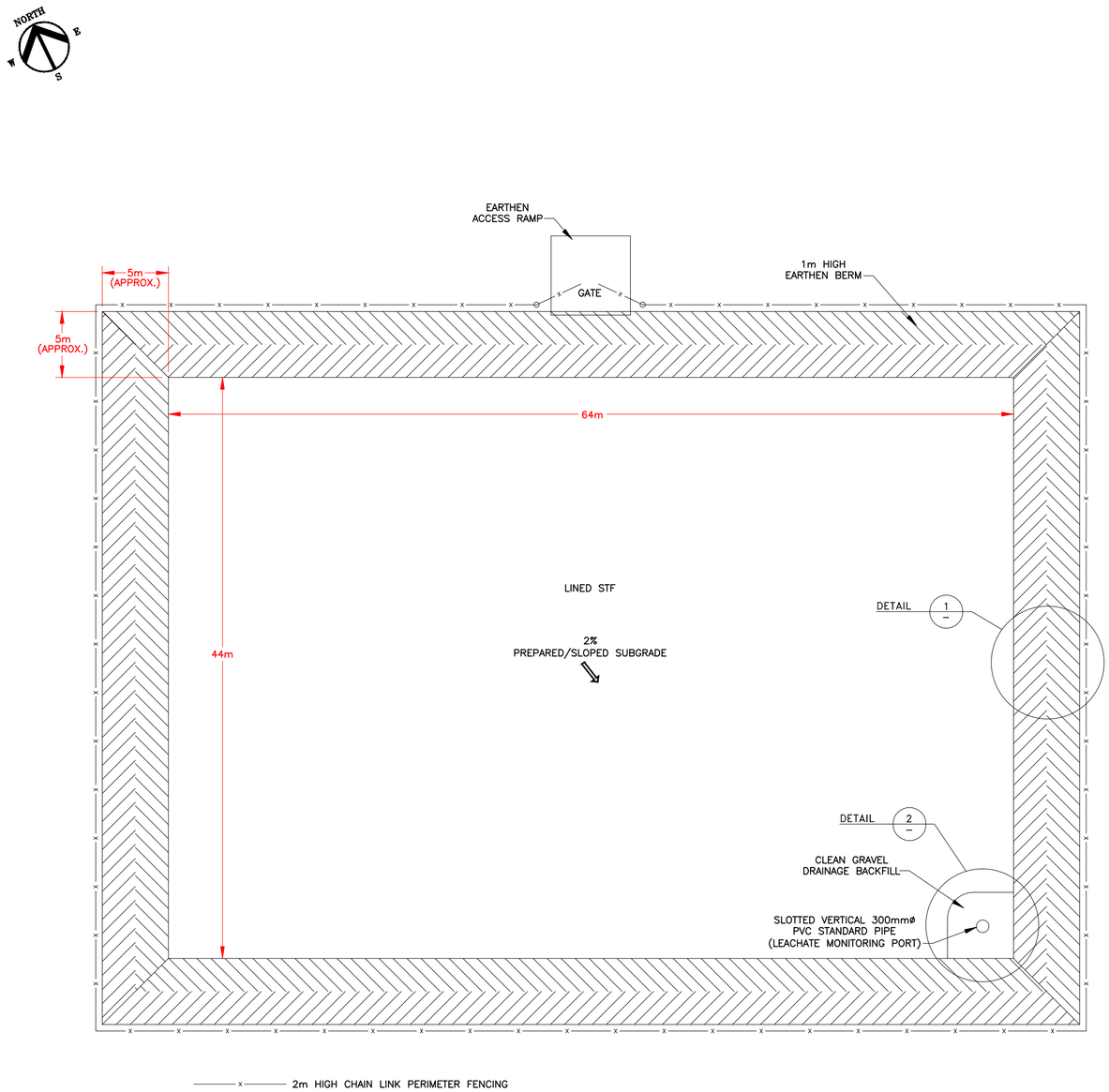
CLIENT NAME: PUBLIC WORKS AND GOVERMENT SERVICES CANADA

PROJECT LOCATION: JJJ GRAVEL PIT KM 839 ALASKA HIGHWAY, FIRESIDE, B.C.

TITLE:

SITE PLAN - JJJ GRAVEL PIT

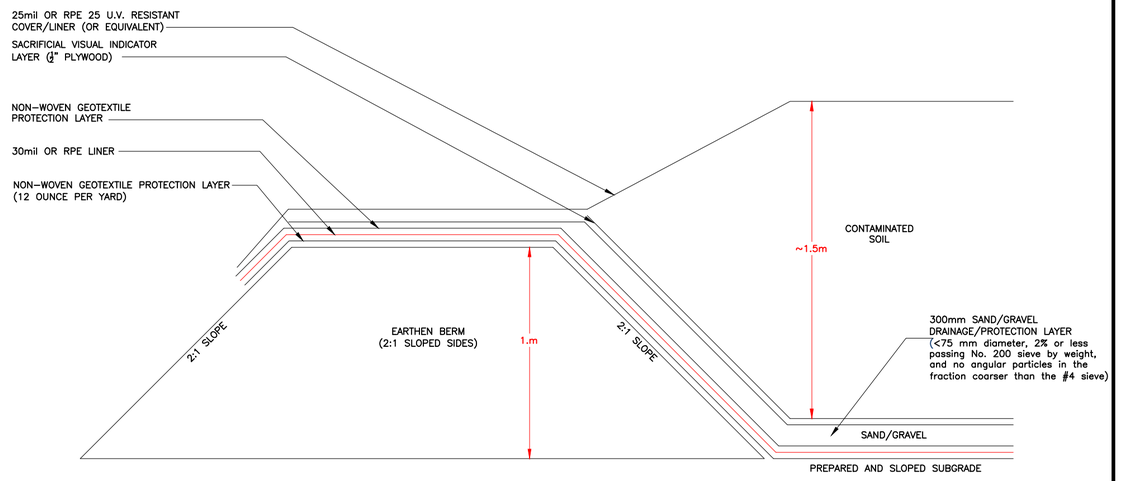
DWN BY: BB	SCALE: 1:1,500	DATE: 2017-03-03	DWG No: REV.: 2
CHK'D:	PLOT: 20170329.0612	CADFILE: 636200R9	636200-006



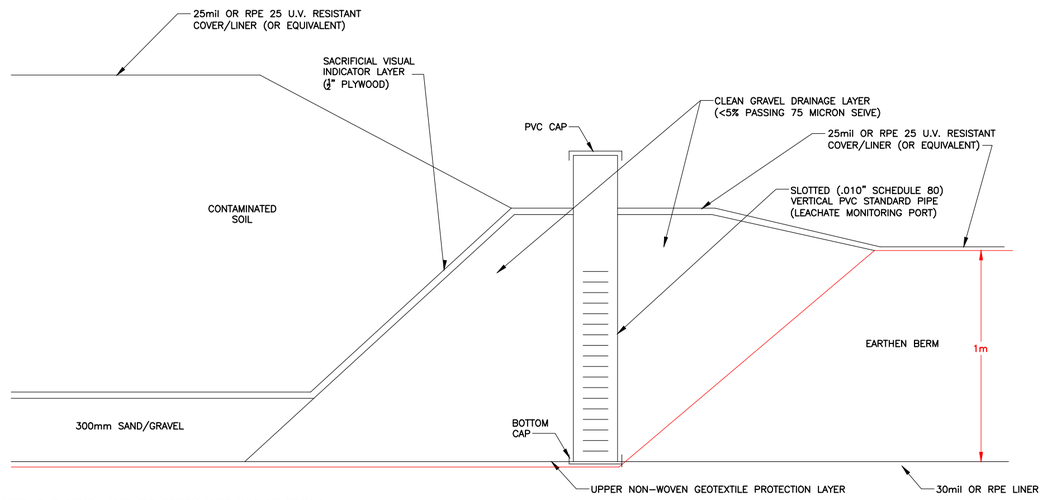
NOTES:

1) PREPARED SUBGRADE TO BE FREE OF PROTRUSIONS (ANGULAR COARSE FRAGMENTS, DEBRIS, ETC.) PRIOR TO CONTRUCTION OF STF.

2) DESIGN SPECIFICATIONS APPLY TO ALL THREE PROPOSED STFS. ORIENTATION OF STFS TO REFLECT SITING CONSIDERATIONS. LEACHATE COLLECTION SYSTEM LOCATION TO BE CONSTRUCTED IN MOST SUITABLE CORNER IN CONSIDERATION OF SITE PREPARATION AND TOPOGRAPHY. SECOND NOTE: EARTHEN ACCESS RAMP AND GATE LOCATIONS TO BE CONSTRUCTED TO PROVIDE EASE OF ACCESS AND TO MINIMIZE INTERFERENCE WITH EXISTING ROADWAYS AND IF NECESSARY, RE-LOCATED ROADWAYS.



DETAIL 1
N.T.S.



NOTE: IT IS CRITICAL THAT THE BOTTOM LINER HAVE NO TENSILE FORCE IN CORNER OF LEACHATE MONITORING SUMP FOLLOWING INSTALLATION.

DETAIL 2
N.T.S.

DRAFT

LEGEND

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. SCALE IS APPROXIMATE.

REFERENCE DRAWINGS

DWG. NO.	DATE	DESCRIPTION
–	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
0	2017-03-29	ISSUED AS DRAFT	BB	CS

SNC·LAVALIN

CLIENT NAME: PUBLIC WORKS AND GOVERMENT SERVICES CANADA

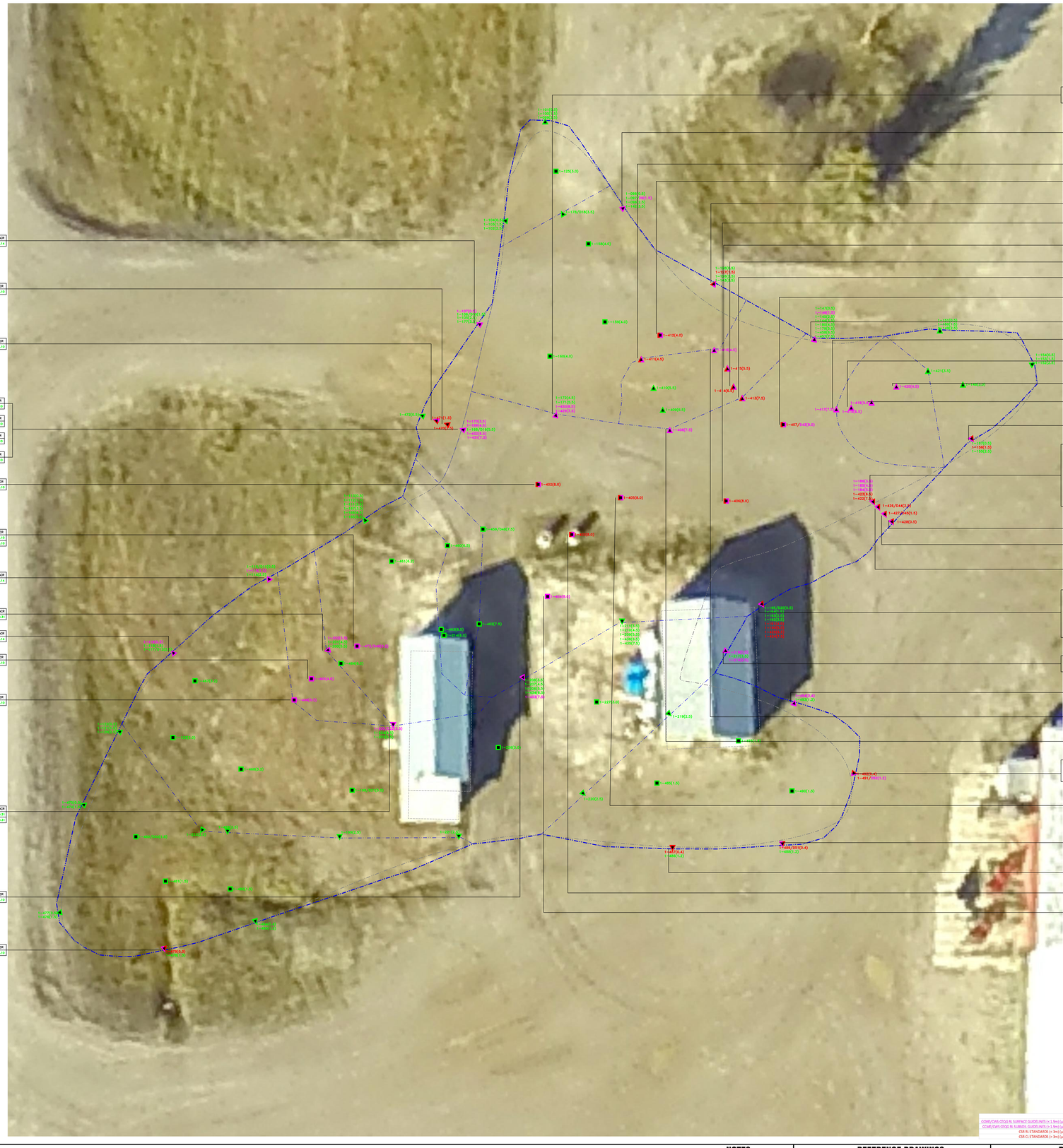
PROJECT LOCATION: JJJ GRAVEL PIT km839 ALASKA HIGHWAY, FIRESIDE, B.C.

TITLE: SOIL TREATMENT FACILITY DESIGN SPECIFICATIONS - JJJ GRAVEL PIT

DWN BY: PRT/BB | SCALE: AS SHOWN | DATE: 2017-03-03 | DWG No: 636200-007 | REV.: 0

CHK'D: | PLOT: 20170329.0612 | CADFILE: 636200R9

PATH: P:\CURRENT PROJECTS\PWGSC\636200 FIRESIDE\4.0 EXECUTION\4.5 GIS AND DRAWINGS\CAD\636200R9.DWG



LEGEND

- EXCAVATION FLOOR SAMPLE LOCATION
- EXCAVATION WALL SAMPLE LOCATION
- (1.0) EXCAVATION SAMPLE DEPTH (m)
- PROPOSED EXCAVATION BOUNDARY
- REMEDIAL EXCAVATION BOUNDARY (SNC, 2016)
- LOCATION WHERE EXCAVATION SOIL SAMPLE EXCEEDS CCME/CWS CCQG RL GUIDELINES FOR ALL PARAMETERS ANALYZED, SHOWN IN GREEN
- LOCATION WHERE EXCAVATION SOIL SAMPLE EXCEEDS CCME/CWS CCQG RL GUIDELINES FOR AT LEAST ONE PARAMETER ANALYZED, SHOWN IN MAGENTA
- LOCATION WHERE EXCAVATION SOIL SAMPLE EXCEEDS CSR RL/CL STANDARDS FOR AT LEAST ONE PARAMETER ANALYZED, SHOWN IN RED

0 5 10 METRES

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.

REFERENCE DRAWINGS

No.	DATE	DESCRIPTION
–	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
–	–	–	–	–
0	2017-03-29	ISSUED AS DRAFT	BB	CS

SNC·LAVALIN

CLIENT NAME: PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

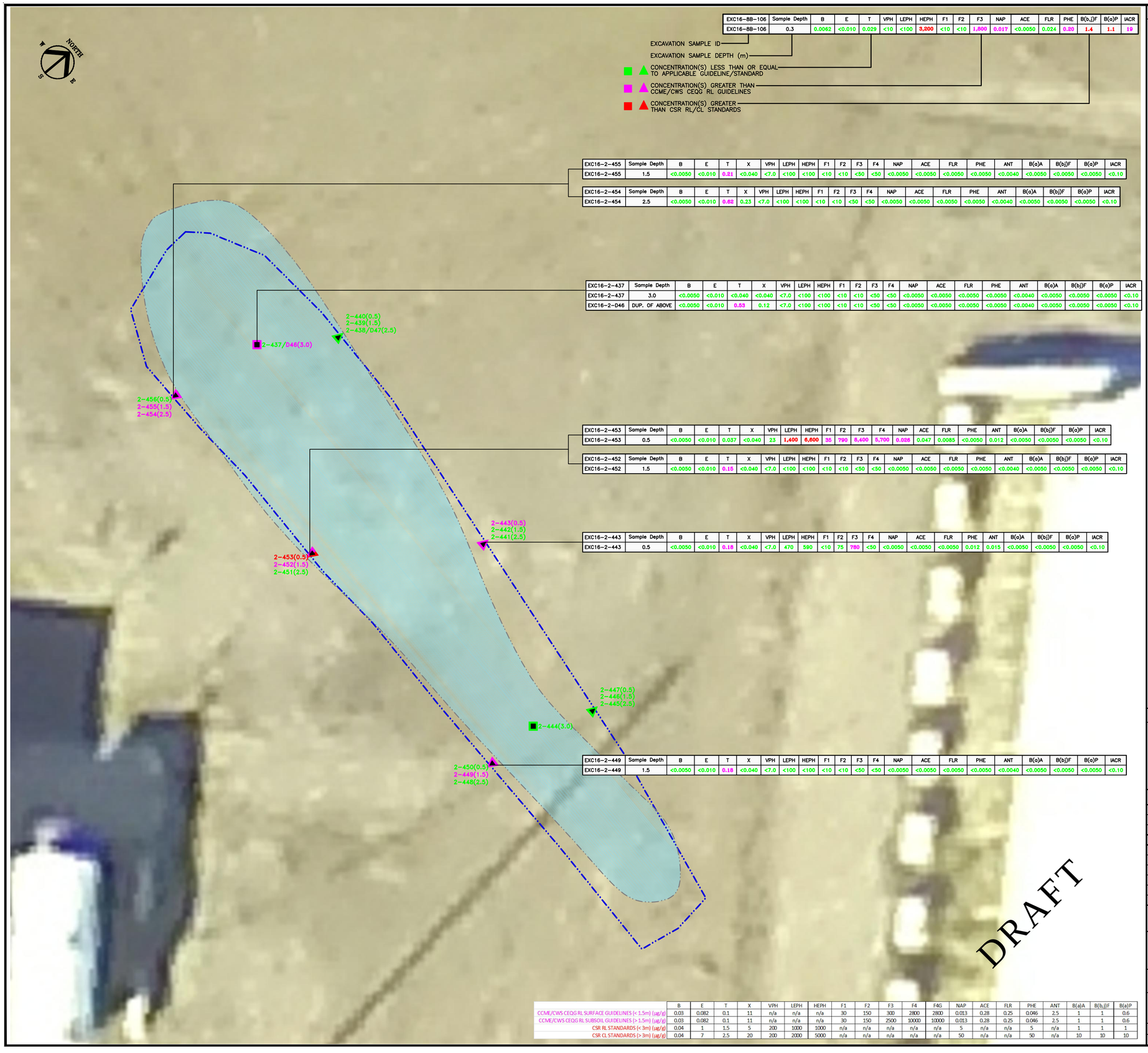
PROJECT LOCATION: FIRESIDE MAINTENANCE CAMP ALASKA HIGHWAY, BC

TITLE: CONFIRMATORY ANALYTICAL RESULTS - 2016 REMEDIAL EXCAVATION - AEC 1

DWN: BY: BB | SCALE: 1:125 | DATE: 2017-03-03 | DWG No: REV: 0

CHK'D: | PLOT: 20170331.0554 | CADFILE: 636200R9 | 636200-008

PATH: P:\CURRENT PROJECTS\PWGSC\636200 FIRESIDE\4.0 EXECUTION\4.5 GIS AND DRAWINGS\CAD\636200R9.DWG



EXC16-BB-106	Sample Depth	B	E	T	VPH	LEPH	HEPH	F1	F2	F3	NAP	ACE	FLR	PHE	B(b,j)F	B(a)P	IACR
EXC16-BB-106	0.3	0.0062	<0.010	0.029	<10	<100	3,200	<10	<10	1,800	0.017	<0.0050	0.024	0.20	1.4	1.1	19

EXCAVATION SAMPLE ID
EXCAVATION SAMPLE DEPTH (m)
CONCENTRATION(S) LESS THAN OR EQUAL TO APPLICABLE GUIDELINE/STANDARD
CONCENTRATION(S) GREATER THAN CCME/CWS CEQG RL GUIDELINES
CONCENTRATION(S) GREATER THAN CSR RL/CL STANDARDS

EXC16-2-455	Sample Depth	B	E	T	X	VPH	LEPH	HEPH	F1	F2	F3	F4	NAP	ACE	FLR	PHE	ANT	B(a)A	B(b)F	B(a)P	IACR
EXC16-2-455	1.5	<0.0050	<0.010	0.21	<0.040	<7.0	<100	<100	<10	<10	<50	<50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0050	<0.10

EXC16-2-454	Sample Depth	B	E	T	X	VPH	LEPH	HEPH	F1	F2	F3	F4	NAP	ACE	FLR	PHE	ANT	B(a)A	B(b)F	B(a)P	IACR
EXC16-2-454	2.5	<0.0050	<0.010	0.62	0.23	<7.0	<100	<100	<10	<10	<50	<50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0050	<0.10

EXC16-2-437	Sample Depth	B	E	T	X	VPH	LEPH	HEPH	F1	F2	F3	F4	NAP	ACE	FLR	PHE	ANT	B(a)A	B(b)F	B(a)P	IACR
EXC16-2-437	3.0	<0.0050	<0.010	<0.040	<0.040	<7.0	<100	<100	<10	<10	<50	<50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0050	<0.10
EXC16-2-D46	DUP. OF ABOVE	<0.0050	<0.010	0.53	0.12	<7.0	<100	<100	<10	<10	<50	<50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0050	<0.10

EXC16-2-453	Sample Depth	B	E	T	X	VPH	LEPH	HEPH	F1	F2	F3	F4	NAP	ACE	FLR	PHE	ANT	B(a)A	B(b)F	B(a)P	IACR
EXC16-2-453	0.5	<0.0050	<0.010	0.037	<0.040	23	1,400	8,600	35	790	8,400	5,700	0.026	0.047	0.0085	<0.0050	0.012	<0.0050	<0.0050	<0.0050	<0.10

EXC16-2-452	Sample Depth	B	E	T	X	VPH	LEPH	HEPH	F1	F2	F3	F4	NAP	ACE	FLR	PHE	ANT	B(a)A	B(b)F	B(a)P	IACR
EXC16-2-452	1.5	<0.0050	<0.010	0.15	<0.040	<7.0	<100	<100	<10	<10	<50	<50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0050	<0.10

EXC16-2-443	Sample Depth	B	E	T	X	VPH	LEPH	HEPH	F1	F2	F3	F4	NAP	ACE	FLR	PHE	ANT	B(a)A	B(b)F	B(a)P	IACR
EXC16-2-443	0.5	<0.0050	<0.010	0.18	<0.040	<7.0	470	590	<10	75	780	<50	<0.0050	<0.0050	<0.0050	0.012	0.015	<0.0050	<0.0050	<0.0050	<0.10

EXC16-2-449	Sample Depth	B	E	T	X	VPH	LEPH	HEPH	F1	F2	F3	F4	NAP	ACE	FLR	PHE	ANT	B(a)A	B(b)F	B(a)P	IACR
EXC16-2-449	1.5	<0.0050	<0.010	0.18	<0.040	<7.0	<100	<100	<10	<10	<50	<50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0050	<0.10

	B	E	T	X	VPH	LEPH	HEPH	F1	F2	F3	F4	F4G	NAP	ACE	FLR	PHE	ANT	B(a)A	B(b,j)F	B(a)P
CCME/CWS CEQG RL SURFACE GUIDELINES (< 1.5m) (ug/g)	0.03	0.082	0.1	11	n/a	n/a	n/a	30	150	300	2800	2800	0.013	0.28	0.25	0.046	2.5	1	1	0.6
CCME/CWS CEQG RL SUBSOIL GUIDELINES (> 1.5m) (ug/g)	0.03	0.082	0.1	11	n/a	n/a	n/a	30	150	2500	10000	10000	0.013	0.28	0.25	0.046	2.5	1	1	0.6
CSR RL STANDARDS (< 3m) (ug/g)	0.04	1	1.5	5	200	1000	1000	n/a	n/a	n/a	n/a	n/a	5	n/a	n/a	5	n/a	1	1	1
CSR CL STANDARDS (> 3m) (ug/g)	0.04	7	2.5	20	200	2000	5000	n/a	n/a	n/a	n/a	n/a	50	n/a	n/a	50	n/a	10	10	10

LEGEND

- EXCAVATION FLOOR SAMPLE LOCATION
- EXCAVATION WALL SAMPLE LOCATION
- (1.0) EXCAVATION SAMPLE DEPTH (m)
- PROPOSED EXCAVATION BOUNDARY
- REMEDIAL EXCAVATION BOUNDARY (SNC, 2016)
- LOCATION WHERE EXCAVATION SOIL SAMPLE MEETS APPLICABLE GUIDELINE/ STANDARD FOR ALL PARAMETERS ANALYZED, SHOWN IN GREEN
- LOCATION WHERE EXCAVATION SOIL SAMPLE EXCEEDS CCME/CWS CEQG RL GUIDELINES FOR AT LEAST ONE PARAMETER ANALYZED, SHOWN IN MAGENTA
- LOCATION WHERE EXCAVATION SOIL SAMPLE EXCEEDS CSR RL/CL STANDARDS FOR AT LEAST ONE PARAMETER ANALYZED, SHOWN IN RED

ALL RESULTS REPORTED IN MICROGRAMS PER GRAM (ug/g)

B	BENZENE	T	TOLUENE
E	ETHYLBENZENE	X	XYLENES
VPH	VOLATILE PETROLEUM HYDROCARBONS		
LEPH	LIGHT EXTRACTABLE PETROLEUM HYDROCARBONS		
HEPH	HEAVY EXTRACTABLE PETROLEUM HYDROCARBONS		
F1	PETROLEUM HYDROCARBON FRACTION 1 (C6-C10 minus BTEX)		
F2	PETROLEUM HYDROCARBON FRACTION 2 (>C10-C16)		
F3	PETROLEUM HYDROCARBON FRACTION 3 (>C16-C34)		
F4	PETROLEUM HYDROCARBON FRACTION 4 (>C34)		
F4G	PETROLEUM HYDROCARBON FRACTION 4 (>C34)		
NAP	NAPTHALENE		
ACE	ACENAPTHALENE		
FLR	FLUORENE		
PHE	PHENANTHRENE		
ANT	ANTHRACENE		
B(a)A	BENZO (a) ANTHRACENE		
B(b,j)F	BENZO (b+j) FLOURANTHENE		
B(a)P	BENZO (a) PYRENE		
DUP	DUPLICATE LAB SAMPLE		

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF FACILITIES AND UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INVESTIGATIVE WORK. NOT ALL FACILITIES OR UTILITIES MAY BE SHOWN.

REFERENCE DRAWINGS

DWG. NO.	DATE	DESCRIPTION
–	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
0	2017-03-29	ISSUED AS DRAFT	BB	CS

0 1 2 3 4 5 METRES

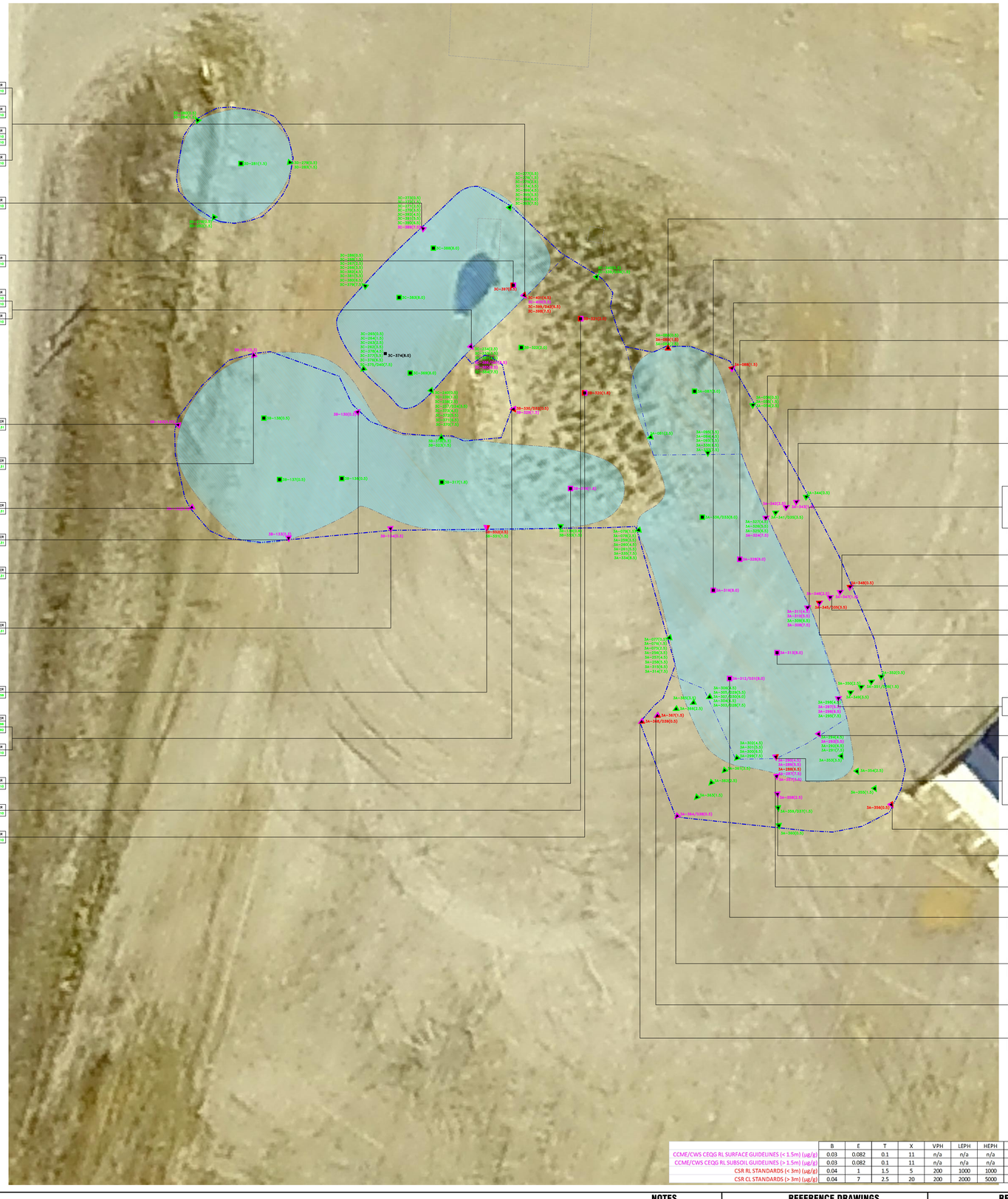
SNC·LAVALIN

CLIENT NAME: PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

PROJECT LOCATION: FIRESIDE MAINTENANCE CAMP ALASKA HIGHWAY, BC

CONFIRMATORY ANALYTICAL RESULTS - 2016 REMEDIAL EXCAVATION - AEC 2

DWN BY: BB	SCALE: 1:100	DATE: 2017-03-03	SERIES No: REV.: 0
CHK'D:	PLOT: 20170331.0555	CADFILE: 636200R9	636200-009



	B	E	T	X	VPH	LEPH	HEPH	F1	F2	F3	F4	F4G	NAP	ACE	FLR	PHE	ANT	B(a)A	B(b,j)F	B(a)P
CCME/CWS CEQG RL SURFACE GUIDELINES (< 1.5m) (µg/g)	0.03	0.082	0.1	11	n/a	n/a	n/a	30	150	300	2800	2800	0.013	0.28	0.25	0.046	2.5	1	1	0.6
CCME/CWS CEQG RL SUBSOIL GUIDELINES (> 1.5m) (µg/g)	0.03	0.082	0.1	11	n/a	n/a	n/a	30	150	2500	10000	10000	0.013	0.28	0.25	0.046	2.5	1	1	0.6
CSR RL STANDARDS (< 3m) (µg/g)	0.04	1	1.5	5	200	1000	1000	n/a	n/a	n/a	n/a	n/a	5	n/a	n/a	5	n/a	1	1	1
CSR CL STANDARDS (> 3m) (µg/g)	0.04	7	2.5	20	200	2000	5000	n/a	n/a	n/a	n/a	n/a	50	n/a	n/a	50	n/a	10	10	10

ALL RESULTS REPORTED IN MICROGRAMS PER GRAM (ug/g)

B	BENZENE	T	TOLUENE
E	ETHYLBENZENE	X	XYLENES
VPH	VOLATILE PETROLEUM HYDROCARBONS		
LEPH	LIGHT EXTRACTABLE PETROLEUM HYDROCARBONS		
HEPH	HEAVY EXTRACTABLE PETROLEUM HYDROCARBONS		
F1	PETROLEUM HYDROCARBON FRACTION 1 (C6–C10 minus BTEX)		
F2	PETROLEUM HYDROCARBON FRACTION 2 (>C10–C16)		
F3	PETROLEUM HYDROCARBON FRACTION 3 (>C16–C34)		
F4	PETROLEUM HYDROCARBON FRACTION 4 (>C34)		
F4G	PETROLEUM HYDROCARBON FRACTION 4 (>C34)		
NAP	NAPTHALENE		
ACE	ACENAPTHALENE		
FLR	FLUORENE		
PHE	PHENANTHRENE		
ANT	ANTHRACENE		
B(a)A	BENZO (a) ANTHRACENE		
B(b,j)F	BENZO (b+j) FLOURANTHENE		
B(a)P	BENZO (a) PYRENE		
DUP	DUPLICATE LAB SAMPLE		

LEGEND

0 2 4 6 8 10 METRES

■	EXCAVATION FLOOR SAMPLE LOCATION
▲	EXCAVATION WALL SAMPLE LOCATION
(1.0)	EXCAVATION SAMPLE DEPTH (m)
—··—	PROPOSED EXCAVATION BOUNDARY
—··—	REMEDIAL EXCAVATION BOUNDARY (SNC, 2016)
■ ▲	LOCATION WHERE EXCAVATION SOIL SAMPLE MEETS APPLICABLE GUIDELINE/ STANDARD FOR ALL PARAMETERS ANALYZED, SHOWN IN GREEN
■ ▲	LOCATION WHERE EXCAVATION SOIL SAMPLE EXCEEDS CCME/CWS CEQG RL GUIDELINES FOR AT LEAST ONE PARAMETER ANALYZED, SHOWN IN MAGENTA
■ ▲	LOCATION WHERE EXCAVATION SOIL SAMPLE EXCEEDS CSR RL/CL STANDARDS FOR AT LEAST ONE PARAMETER ANALYZED, SHOWN IN RED

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.

REFERENCE DRAWINGS

No.	DATE	DESCRIPTION
–	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
–	–	–	–	–
0	2017–03–29	ISSUED AS DRAFT	BB	CS

SNC·LAVALIN

CLIENT NAME: PUBLIC WORKS AND GOVERMENT SERVICES CANADA

PROJECT LOCATION:
FIRESIDE MAINTENANCE CAMP
ALASKA HIGHWAY, BC

TITLE:
CONFIRMATORY ANALYTICAL RESULTS - 2016 REMEDIAL EXCAVATION - AEC 3

DWN BY: BB	SCALE: 1:150	DATE: 2017–03–03	DWG No: 636200-010 REV.: 0
CHK'D:	PLOT: 20170331.0555	CADFILE: 636200R9	

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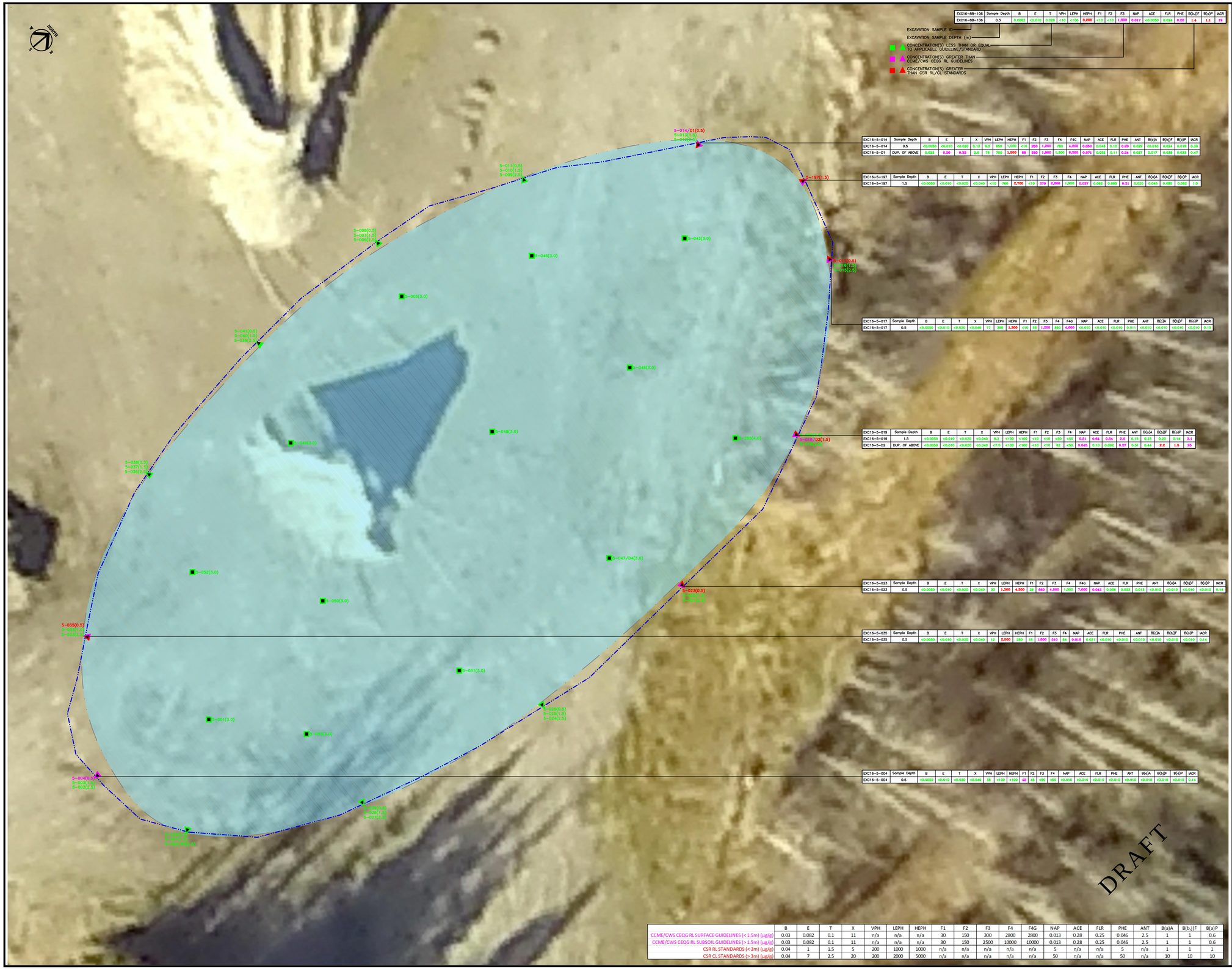


	B	E	T	X	VPH	LEPH	HEPH	F1	F2	F3	F4	F4G	NAP	ACE	FLR	PHE	ANT	B(a)A	B(b,j)F	B(a)P
CCME/CWS CEQG RL SURFACE GUIDELINES (< 1.5m) (µg/g)	0.03	0.082	0.1	11	n/a	n/a	n/a	30	150	300	2800	2800	0.013	0.28	0.25	0.046	2.5	1	1	0.6
CCME/CWS CEQG RL SUBSOIL GUIDELINES (> 1.5m) (µg/g)	0.03	0.082	0.1	11	n/a	n/a	n/a	30	150	2500	10000	10000	0.013	0.28	0.25	0.046	2.5	1	1	0.6
CSR RL STANDARDS (< 3m) (µg/g)	0.04	1	1.5	5	200	1000	1000	n/a	n/a	n/a	n/a	n/a	5	n/a	n/a	5	n/a	1	1	1
CSR CL STANDARDS (> 3m) (µg/g)	0.04	7	2.5	20	200	2000	5000	n/a	n/a	n/a	n/a	n/a	50	n/a	n/a	50	n/a	10	10	10

LEGEND

- EXCAVATION FLOOR SAMPLE LOCATION
- EXCAVATION WALL SAMPLE LOCATION
- (1.0) EXCAVATION SAMPLE DEPTH (m)
- PROPOSED EXCAVATION BOUNDARY
- REMEDIAL EXCAVATION BOUNDARY (SNC, 2016)
- LOCATION WHERE EXCAVATION SOIL SAMPLE MEETS APPLICABLE GUIDELINE/ STANDARD FOR ALL PARAMETERS ANALYZED, SHOWN IN GREEN
- LOCATION WHERE EXCAVATION SOIL SAMPLE EXCEEDS CCME/CWS CEQG RL GUIDELINES FOR AT LEAST ONE PARAMETER ANALYZED, SHOWN IN MAGENTA
- LOCATION WHERE EXCAVATION SOIL SAMPLE EXCEEDS CSR RL/CL STANDARDS FOR AT LEAST ONE PARAMETER ANALYZED, SHOWN IN RED

ALL RESULTS REPORTED IN MICROGRAMS PER GRAM (ug/g)

B	BENZENE	T	TOLUENE
E	ETHYLBENZENE	X	XYLENES
VPH	VOLATILE PETROLEUM HYDROCARBONS		
LEPH	LIGHT EXTRACTABLE PETROLEUM HYDROCARBONS		
HEPH	HEAVY EXTRACTABLE PETROLEUM HYDROCARBONS		
F1	PETROLEUM HYDROCARBON FRACTION 1 (C6-C10 minus BTEX)		
F2	PETROLEUM HYDROCARBON FRACTION 2 (>C10-C16)		
F3	PETROLEUM HYDROCARBON FRACTION 3 (>C16-C34)		
F4	PETROLEUM HYDROCARBON FRACTION 4 (>C34)		
F4G	PETROLEUM HYDROCARBON FRACTION 4 (>C34)		
NAP	NAPTHALENE		
ACE	ACENAPTHALENE		
FLR	FLUORENE		
PHE	PHENANTHRENE		
ANT	ANTHRACENE		
B(a)A	BENZO (a) ANTHRACENE		
B(b,j)F	BENZO (b+j) FLOURANTHENE		
B(a)P	BENZO (a) PYRENE		
DUP	DUPLICATE LAB SAMPLE		

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF FACILITIES AND UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INVESTIGATIVE WORK. NOT ALL FACILITIES OR UTILITIES MAY BE SHOWN.

REFERENCE DRAWINGS

–	–	–
–	–	–
No.	DATE	DESCRIPTION

REVISIONS

–	–	–	–	–
–	–	–	–	–
–	–	–	–	–
–	–	–	–	–
0	2017-03-29	ISSUED AS DRAFT	BB	CS
REV.	DATE	DESCRIPTION	BY	CHK

1 2 4 6 8 10 METRES

SNC·LAVALIN

CLIENT NAME: PUBLIC WORKS AND GOVERMENT SERVICES CANADA

PROJECT LOCATION: FIRESIDE MAINTENANCE CAMP ALASKA HIGHWAY, BC

CONFIRMATORY ANALYTICAL RESULTS - 2016 REMEDIAL EXCAVATION - AEC 5

DWN BY: BB	SCALE: 1:100	DATE: 2017-03-03	SERIES No: REV.: 0
CHK'D:	PLOT: 20170331.0555	CADFILE: 636200R9	636200-011

ATTACHMENT 2

Tables

TABLE 1: Excavation Sample Log

Sample ID	Sample Date (yyyy mm dd)	Sample Type	Description	North (m)	East (m)	Depth (m)	Elev (m)	Headspace (ppm)
Excavation Area 1								
EXC16-1-096	2016 11 13	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616608.0	604107.5	2.5	831.1	15
EXC16-1-097	2016 11 13	North	SAND, fine grained, light brown, damp.	6616608.1	604107.4	1.5	832.2	15
EXC16-1-D9	2016 11 13	North	Blind field duplicate of EXC16-1-097.	6616608.1	604107.4	1.5	832.2	15
EXC16-1-098	2016 11 13	North	SAND, fine grained, light brown, damp.	6616607.9	604107.7	0.5	832.9	15
EXC16-1-099	2016 11 13	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616607.1	604098.3	2.5	831.1	10
EXC16-1-100	2016 11 13	North	SAND, fine grained, light brown, damp.	6616607.1	604098.3	1.5	832.2	10
EXC16-1-101	2016 11 13	North	SAND, fine grained, light brown, damp.	6616607.4	604097.8	0.5	832.9	5
EXC16-1-102	2016 11 13	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616600.8	604101.4	2.5	831.0	10
EXC16-1-103	2016 11 13	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616600.2	604102.1	1.5	832.0	5
EXC16-1-104	2016 11 13	West	SAND, fine grained, light brown, damp.	6616599.6	604102.4	0.5	832.9	10
EXC16-1-105	2016 11 13	West	SAND, fine grained, light brown, damp.	6616592.5	604108.3	2.5	831.0	15
EXC16-1-106	2016 11 13	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616592.3	604108.4	1.5	831.8	10
EXC16-1-D10	2016 11 13	West	Blind field duplicate of EXC16-1-106.	6616592.3	604108.4	1.5	831.8	10
EXC16-1-107	2016 11 13	West	SAND, fine grained, light brown, damp.	6616592.1	604108.6	0.5	832.9	5
EXC16-1-108	2016 11 13	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616584.2	604113.1	2.5	831.0	5
EXC16-1-109	2016 11 13	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616584.1	604113.0	1.5	831.9	0
EXC16-1-110	2016 11 13	West	SAND, fine grained, light brown, damp, hydrocarbon-like odour.	6616583.9	604112.8	0.5	832.8	0
EXC16-1-111	2016 11 13	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616574.3	604114.2	2.5	831.3	0
EXC16-1-112	2016 11 13	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616574.3	604114.0	1.5	832.0	0
EXC16-1-113	2016 11 13	West	SAND, fine grained, light brown, damp.	6616574.4	604113.8	0.5	833.1	0
EXC16-1-114	2016 11 13	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616564.7	604112.9	2.5	831.4	0
EXC16-1-115	2016 11 13	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616565.1	604112.9	1.5	832.2	0
EXC16-1-116	2016 11 13	West	SAND, fine grained, light brown, damp.	6616565.4	604112.4	0.5	833.2	10
EXC16-1-D11	2016 11 13	West	Blind field duplicate of EXC16-1-116.	6616565.4	604112.4	0.5	833.2	10
EXC16-1-117	2016 11 13	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616554.6	604112.6	2.5	831.5	10
EXC16-1-D12	2016 11 13	West	Blind field duplicate of EXC16-1-117.	6616554.6	604112.6	2.5	831.5	10
EXC16-1-118	2016 11 13	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616554.6	604112.4	1.5	832.3	5
EXC16-1-119	2016 11 13	West	SAND, fine grained, light brown, damp.	6616555.3	604112.1	0.5	833.2	10
EXC16-1-120	2016 11 14	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616548.9	604116.1	2.5	830.7	0
EXC16-1-121	2016 11 14	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616548.0	604115.9	1.5	831.6	0
EXC16-1-122	2016 11 14	West	SAND, fine grained, light brown, damp.	6616547.8	604115.9	0.5	832.9	0
EXC16-1-123	2016 11 14	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616550.3	604117.3	3.0	830.4	0
EXC16-1-124	2016 11 14	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616558.1	604117.1	3.0	830.6	10
EXC16-1-D13	2016 11 14	Floor	Blind field duplicate of EXC16-1-124.	6616558.1	604117.1	3.0	830.6	10
EXC16-1-125	2016 11 14	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616605.4	604101.6	3.0	830.4	0
EXC16-1-126	2016 11 14	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616607.7	604118.1	2.5	831.0	10
EXC16-1-127	2016 11 14	North	SAND, fine grained, light brown, damp.	6616607.9	604117.2	1.5	831.9	5
EXC16-1-128	2016 11 14	North	SAND, fine grained, light brown, damp.	6616607.8	604117.2	0.5	832.9	5
EXC16-1-142	2016 11 16	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616607.7	604107.5	3.5	830.1	10
EXC16-1-143	2016 11 16	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616607.1	604117.1	3.5	830.2	20
EXC16-1-144	2016 11 16	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616612.5	604126.4	3.5	830.2	30
EXC16-1-145	2016 11 16	North	SAND, fine grained, light brown, damp.	6616612.8	604126.0	2.5	831.0	30
EXC16-1-146	2016 11 16	North	SAND, fine grained, light brown, damp.	6616613.0	604125.8	1.5	831.8	20
EXC16-1-147	2016 11 16	North	SAND, fine grained, light brown, damp.	6616612.9	604126.1	0.5	832.8	40
EXC16-1-148	2016 11 16	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616620.0	604137.1	3.0	829.7	70
EXC16-1-149	2016 11 16	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616620.7	604132.2	2.5	830.8	40
EXC16-1-150	2016 11 16	North	SAND, medium grained, light brown, damp.	6616621.2	604132.2	1.5	831.7	10
EXC16-1-151	2016 11 16	North	SAND, fine grained, light brown, damp.	6616621.5	604132.3	0.5	832.7	10
EXC16-1-152	2016 11 16	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616624.9	604139.2	2.5	830.8	10
EXC16-1-153	2016 11 16	East	SAND, fine grained, light brown, damp.	6616625.1	604139.4	1.5	831.7	10
EXC16-1-154	2016 11 16	East	SAND, fine grained, light brown, damp.	6616625.4	604139.4	0.5	832.5	10
EXC16-1-155	2016 11 16	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616618.0	604141.2	2.5	830.9	10
EXC16-1-156	2016 11 16	East	SAND, fine grained, light brown, damp.	6616618.0	604141.4	1.5	831.8	10
EXC16-1-157	2016 11 16	East	SAND, fine grained, light brown, damp.	6616617.7	604141.1	0.5	832.7	10
EXC16-1-158	2016 11 17	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616603.5	604108.0	4.0	829.5	35
EXC16-1-159	2016 11 17	Floor	SAND and GRAVEL, medium to coarse grained sand, some silt, some cobbles, grey, damp.	6616600.4	604113.9	4.0	829.5	20
EXC16-1-160	2016 11 17	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616595.0	604113.1	4.0	829.5	20
EXC16-1-161	2016 11 17	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616603.5	604121.1	4.0	829.6	35
EXC16-1-165	2016 11 18	West	COBBLES, some sand, medium to coarse grained sand, some gravel, grey, damp.	6616573.7	604115.0	5.5	828.4	10
EXC16-1-166	2016 11 18	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616573.7	604114.7	4.5	829.3	10
EXC16-1-167	2016 11 18	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616573.9	604114.6	3.5	830.1	10
EXC16-1-168	2016 11 18	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616584.3	604113.6	5.5	828.1	20
EXC16-1-D16	2016 11 18	West	Blind field duplicate of EXC16-1-168.	6616584.3	604113.6	5.5	828.1	20
EXC16-1-169	2016 11 18	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616584.3	604113.3	4.5	829.1	10
EXC16-1-170	2016 11 18	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616584.4	604113.3	3.5	830.0	10
EXC16-1-171	2016 11 18	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616591.6	604117.1	5.5	828.1	20
EXC16-1-172	2016 11 18	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616592.3	604117.1	4.5	828.8	10
EXC16-1-173	2016 11 18	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616598.4	604122.6	3.5	828.2	20
EXC16-1-D17	2016 11 18	North	Blind field duplicate of EXC16-1-173.	6616598.4	604122.6	3.5	828.2	20
EXC16-1-174	2016 11 18	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616598.4	604122.6	3.5	829.1	10
EXC16-1-175	2016 11 18	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616606.6	604126.1	3.5	827.9	10
EXC16-1-176	2016 11 18	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616606.7	604125.8	3.5	828.8	10
EXC16-1-177	2016 11 18	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616592.6	604108.4	3.5	830.1	10
EXC16-1-178	2016 11 18	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616603.6	604104.5	3.5	829.9	10
EXC16-1-D18	2016 11 18	West	Blind field duplicate of EXC16-1-178.	6616603.6	604104.5	3.5	829.9	10
EXC16-1-179	2016 11 19	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616612.5	604126.4	5.5	828.2[a]	30
EXC16-1-180	2016 11 19	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616612.5	604126.4	4.5	829.2[a]	20
EXC16-1-181	2016 11 19	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616613.4	604133.3	5.5	827.9	30
EXC16-1-182	2016 11 19	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616613.9	604133.4	4.5	828.8	20
EXC16-1-183	2016 11 19	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616614.3	604133.7	3.5	829.6	20
EXC16-1-184	2016 11 19	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616602.1	604137.1	5.5	828.6	5
EXC16-1-185	2016 11 19	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616602.1	604137.7	4.5	829.2	5
EXC16-1-186	2016 11 19	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616602.1	604137.9	3.5	830.3	25
EXC16-1-187	2016 11 19	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616601.7	604138.4	2.5	831.3	75
EXC16-1-188	2016 11 19	East	SAND, medium grained, trace gravel, brown, loose, hydrocarbon-like odour.	6616601.6	604138.6	1.5	832.1	100
EXC16-1-D19	2016 11 18	East	Blind field duplicate of EXC16-1-188.	6616601.6	604138.6	1.5	832.1	100
EXC16-1-189	2016 11 19	East	SAND, fine grained, light brown, damp, hydrocarbon-like odour.	6616601.7	604138.5	0.5	832.9	100
EXC16-1-190	2016 11 19	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616593.9	604135.3	5.5	828.4	30
EXC16-1-191	2016 11 19	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616594.1	604136.3	4.5	829.1	20
EXC16-1-192	2016 11 19	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616593.8	604136.8	3.5	830.2	10
EXC16-1-193	2016 11 19	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616593.8	604137.0	2.5	831.3	10
EXC16-1-194	2016 11 19	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616593.7	604137.1	1.5	832.0	10
EXC16-1-195	2016 11 19	East	SAND, fine grained, light brown, damp.	6616593.5	604137.3	0.5	832.7	30
EXC16-1-D20	2016 11 18	East	Blind field duplicate of EXC16-1-195.	6616593.5	604137.3	0.5	832.7	30
EXC16-1-198	2016 11 20	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey,very dense, damp.	6616559.0	604130.3	3.0	830.7	40
EXC16-1-D21	2016 11 20	Floor	Blind field duplicate of EXC16-1-198.	6616559.0	604130.3	3.0	830.7	40
EXC16-1-199	2016 11 20	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey,very dense, damp.	6616555.6	604132.7	2.5	831.6	35
EXC16-1-200	2016 11 20	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey,very dense, damp.	6616565.7	604119.6	5.5	828.6	25
EXC16-1-201	2016 11 20	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey,very dense, damp.	6616565.0	604119.6	4.5	829.5	25
EXC16-1-202	2016 11 20	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey,very dense, damp.	6616564.4	604119.7	3.5	830.1	25
EXC16-1-203	2016 11 20	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey,very dense, damp.	6616566.8	604127.4	5.5	828.7	30

INVERSE Inverse represents interim samples (that were subsequently excavated).

[a] Location not surveyed in. Northings/eastings/elevation estimated from other samples.

TABLE 1 (Cont'd): Excavation Sample Log

Sample ID	Sample Date (yyyy mm dd)	Sample Type	Description	North (m)	East (m)	Depth (m)	Elev (m)	Headspace (ppm)
Excavation Area 1								
EXC16-1-204	2016 11 20	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey,very dense, damp.	6616566.0	604127.8	4.5	829.2	25
EXC16-1-205	2016 11 20	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey,very dense, damp.	6616565.1	604128.4	3.5	830.0	35
EXC16-1-D22	2016 11 20	South	Blind field duplicate of EXC16-1-205.	6616565.1	604128.4	3.5	830.0	35
EXC16-1-206	2016 11 20	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey,very dense, damp.	6616576.4	604131.7	5.5	828.6	30
EXC16-1-207	2016 11 20	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey,very dense, damp.	6616576.1	604132.4	4.5	829.7	20
EXC16-1-208	2016 11 20	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey,very dense, damp.	6616575.9	604132.7	3.5	830.1	20
EXC16-1-209	2016 11 20	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey,very dense, damp.	6616586.2	604133.9	5.5	828.6	20
EXC16-1-210	2016 11 20	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey,very dense, damp.	6616585.8	604134.3	4.5	829.5	15
EXC16-1-211	2016 11 20	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey,very dense, damp.	6616585.5	604134.5	3.5	830.2	20
EXC16-1-212	2016 11 21	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616576.8	604118.6	6.0	827.8	40
EXC16-1-213	2016 11 21	Floor	GRAVEL, some sand, medium to coarse grained, some cobbles, grey, damp.	6616570.9	604118.3	6.0	827.6	10
EXC16-1-214	2016 11 21	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616573.2	604125.3	6.0	827.9	40
EXC16-1-215	2016 11 21	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616569.4	604123.3	6.5	828.1	60
EXC16-1-216	2016 11 21	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616589.2	604138.1	2.5	831.4	20
EXC16-1-217	2016 11 21	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616588.5	604139.5	1.5	832.4	10
EXC16-1-218	2016 11 21	East	SAND, fine grained, light brown, damp.	6616588.6	604139.3	0.5	833.2	15
EXC16-1-219	2016 11 21	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616583.3	604141.7	2.5	831.1	15
EXC16-1-220	2016 11 21	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616573.0	604142.0	2.5	831.0	25
EXC16-1-221	2016 11 21	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616563.3	604139.1	2.5	831.3	10
EXC16-1-222	2016 11 21	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616553.2	604131.1	2.5	831.5	10
EXC16-1-223	2016 11 21	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616547.1	604124.8	2.5	831.1	15
EXC16-1-224	2016 11 21	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616578.1	604120.0	3.0	827.6	10
EXC16-1-225	2016 11 21	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616555.2	604125.0	3.0	830.7	20
EXC16-1-226	2016 11 21	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616570.6	604135.4	3.0	830.6	15
EXC16-1-227	2016 11 21	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616579.4	604137.8	3.0	830.7	35
EXC16-1-402	2016 12 12	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, cobbles, grey/brown, loose, damp.	6616587.4	604120.7	8.0	825.2	20
EXC16-1-403	2016 12 12	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, cobbles, grey/brown, loose, damp.	6616586.8	604125.7	8.0	825.3	10
EXC16-1-404	2016 12 12	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, cobbles, grey/brown, loose, damp.	6616581.9	604128.4	8.0	825.3	20
EXC16-1-405	2016 12 12	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, cobbles, grey/brown, loose, damp.	6616591.9	604126.0	8.0	825.1	20
EXC16-1-406	2016 12 12	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, cobbles, grey/brown, loose, damp.	6616598.5	604131.9	8.0	825.4	35
EXC16-1-407	2016 12 12	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, cobbles, grey/brown, loose, damp.	6616606.3	604130.0	8.0	825.2	35
EXC16-1-D43	2016 12 12	Floor	Blind field duplicate of EXC16-1-407.	6616606.3	604130.0	8.0	825.2	35
EXC16-1-408	2016 12 13	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616598.8	604124.2	7.5	825.7	5
EXC16-1-409	2016 12 13	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616599.4	604122.6	6.5	826.7	5
EXC16-1-410	2016 12 13	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616600.0	604120.7	5.5	827.6	20
EXC16-1-411	2016 12 13	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616600.8	604118.1	4.5	829.0	10
EXC16-1-412	2016 12 13	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616603.2	604117.7	4.0	829.4	25
EXC16-1-413	2016 12 13	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616605.1	604126.1	7.5	826.0	20
EXC16-1-414	2016 12 13	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616605.2	604124.9	6.5	826.7	20
EXC16-1-415	2016 12 13	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616605.8	604123.4	5.5	827.6	25
EXC16-1-416	2016 12 13	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616605.9	604121.5	4.5	828.8	20
EXC16-1-417	2016 12 13	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616610.6	604131.9	7.5	825.5	10
EXC16-1-418	2016 12 13	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616611.6	604132.6	6.5	826.2	10
EXC16-1-419	2016 12 13	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616613.2	604133.3	5.5	827.1	10
EXC16-1-420	2016 12 13	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616615.6	604133.6	4.5	828.2	5
EXC16-1-421	2016 12 13	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616618.5	604134.3	3.5	829.4	5
EXC16-1-422	2016 12 13	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616602.1	604137.9	7.5	826.6[a]	5
EXC16-1-423	2016 12 13	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616602.1	604137.9	6.5	827.6[a]	20
EXC16-1-424	2016 12 13	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616593.9	604135.3	7.5	826.4[a]	15
EXC16-1-425	2016 12 13	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616593.9	604135.3	6.5	827.4[a]	20
EXC16-1-426	2016 12 13	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616602.1	604137.9	2.5	831.3[a]	160
EXC16-1-D44	2016 12 13	South	Blind field duplicate of EXC16-1-426.	6616602.1	604137.9	2.5	831.3[a]	160
EXC16-1-427	2016 12 13	South	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616602.1	604137.9	1.5	832.3[a]	130
EXC16-1-D45	2016 12 13	South	Blind field duplicate of EXC16-1-427.	6616602.1	604137.9	1.5	832.3[a]	130
EXC16-1-428	2016 12 13	South	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616602.1	604137.9	0.5	833.3[a]	65
EXC16-1-429	2016 12 13	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616589.0	604114.3	7.5	825.7	10
EXC16-1-430	2016 12 13	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616589.1	604113.7	6.5	826.2	5
EXC16-1-431	2016 12 14	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616585.4	604113.5	7.5	825.4	15
EXC16-1-432	2016 12 14	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616585.3	604113.2	6.5	826.6	15
EXC16-1-433	2016 12 14	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616577.0	604131.3	7.5	826.2	0
EXC16-1-434	2016 12 14	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616577.0	604131.6	6.5	827.3	0
EXC16-1-435	2016 12 14	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616584.8	604133.3	7.5	825.8	0
EXC16-1-436	2016 12 14	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616584.8	604133.4	6.5	827.0	0
EXC16-1-457	2016 12 15	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616611.1	604127.9	7.5	825.8	10
EXC16-1-458	2016 12 15	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616610.8	604127.7	6.5	827.3	0
EXC16-1-459	2016 12 16	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616581.4	604120.6	7.5	825.8	20
EXC16-1-D48	2016 12 16	Floor	Blind field duplicate of EXC16-1-459.	6616581.4	604120.6	7.5	825.8	20
EXC16-1-460	2016 12 16	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616578.3	604119.7	6.5	827.0	5
EXC16-1-461	2016 12 16	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616573.8	604117.7	6.2	827.7	0

INVERSE Inverse represents interim samples (that were subsequently excavated).

[a] Location not surveyed in. Northings/eastings/elevation estimated from other samples.

TABLE 1 (Cont'd): Excavation Sample Log

Sample ID	Sample Date (yyyy mm dd)	Sample Type	Description	North (m)	East (m)	Depth (m)	Elev (m)	Headspace (ppm)
Excavation Area 1								
EXC16-1-462	2016 12 16	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616576.1	604126.5	7.5	826.0	5
EXC16-1-463	2016 12 16	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616573.3	604124.8	6.5	827.5	5
EXC16-1-464	2016 12 16	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616565.1	604121.6	6.2	828.3	0
EXC16-1-465	2016 12 16	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616562.4	604121.0	4.8	829.2	0
EXC16-1-466	2016 12 16	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616560.1	604121.4	3.5	830.0	5
EXC16-1-467	2016 12 16	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616554.8	604114.8	3.2	830.6	5
EXC16-1-468	2016 12 16	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616553.0	604123.0	3.2	830.7	5
EXC16-1-469	2016 12 16	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616548.7	604126.0	2.5	830.5	0
EXC16-1-470	2016 12 16	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616584.3	604112.4	2.5	831.4	0
EXC16-1-471	2016 12 16	West	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616584.0	604111.3	1.5	832.3	10
EXC16-1-472	2016 12 16	West	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616583.7	604110.0	0.5	833.2	0
EXC16-1-473	2016 12 16	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616567.0	604121.3	6.2	828.0	10
EXC16-1-D49	2016 12 16	Floor	Blind field duplicate of EXC16-1-473.	6616567.0	604121.3	6.2	828.0	10
EXC16-1-474	2016 12 17	West	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616541.9	604117.4	1.5	832.9	25
EXC16-1-475	2016 12 17	West	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616541.3	604117.1	0.5	833.8	15
EXC16-1-476	2016 12 17	West	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616535.5	604123.2	1.5	832.7	15
EXC16-1-477	2016 12 17	West	SAND and GRAVEL, fine to coarse grained sand, fine and coarse gravel, subrounded to rounded, trace silt, grey/brown, loose, damp.	6616534.1	604122.8	0.5	834.1	10
EXC16-1-478	2016 12 17	South	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616538.7	604129.9	1.3	832.5	5
EXC16-1-479	2016 12 17	South	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616538.9	604130.0	0.3	833.3	15
EXC16-1-480	2016 12 17	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616542.6	604121.7	1.8	832.2	60
EXC16-1-D50	2016 12 17	Floor	Blind field duplicate of EXC16-1-480.	6616542.6	604121.7	1.8	832.2	60
EXC16-1-481	2016 12 17	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616542.1	604126.1	1.5	832.2	55
EXC16-1-482	2016 12 17	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616545.8	604130.1	1.5	832.2	40
EXC16-1-483	2016 12 17	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616546.7	604133.0	1.2	832.5	35
EXC16-1-484	2016 12 17	South	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616545.8	604133.4	0.4	833.5	10
EXC16-1-485	2016 12 17	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616578.9	604146.3	1.5	832.4	45
EXC16-1-486	2016 12 17	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616576.7	604150.2	1.2	832.4	30
EXC16-1-487	2016 12 17	South	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616576.3	604150.6	0.4	833.2	45
EXC16-1-488	2016 12 17	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616584.0	604156.2	1.2	832.8	30
EXC16-1-489	2016 12 17	South	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616583.8	604156.8	0.4	833.4	120
EXC16-1-D51	2016 12 17	South	Blind field duplicate of EXC16-1-489.	6616583.8	604156.8	0.4	833.4	120
EXC16-1-490	2016 12 17	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616587.1	604154.0	1.5	832.2	25
EXC16-1-491	2016 12 17	East	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616591.5	604155.1	1.2	832.8	35
EXC16-1-D52	2016 12 17	East	Blind field duplicate of EXC16-1-491.	6616591.5	604155.1	1.2	832.8	35
EXC16-1-492	2016 12 17	East	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616591.9	604155.7	0.4	833.6	15
EXC16-1-493	2016 12 17	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616591.4	604149.3	1.2	832.1	25
EXC16-1-494	2016 12 17	East	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616592.1	604148.4	0.4	833.3	45
EXC16-1-495	2016 12 17	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616586.4	604147.9	1.5	832.2	25
Excavation Area 2								
EXC16-2-437	2016 12 14	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616637.0	604166.2	3.0	829.9	75
EXC16-2-D46	2016 12 14	Floor	Blind field duplicate of EXC16-2-437.	6616637.0	604166.2	3.0	829.9	75
EXC16-2-438	2016 12 14	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616639.5	604167.8	2.5	830.5	50
EXC16-2-D47	2016 12 14	East	Blind field duplicate of EXC16-2-438.	6616639.5	604167.8	2.5	830.5	50
EXC16-2-439	2016 12 14	East	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616639.6	604168.0	1.5	831.4	20
EXC16-2-440	2016 12 14	East	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616639.7	604168.0	0.5	832.5	10
EXC16-2-441	2016 12 14	East	SAND, medium to coarse grained, trace gravel, fine and coarse, subrounded to rounded, grey/brown, loose, damp.	6616637.7	604177.2	2.5	830.9	10
EXC16-2-442	2016 12 14	East	SAND, medium to coarse grained, trace gravel, fine and coarse, subrounded to rounded, grey/brown, loose, damp.	6616638.3	604176.4	1.5	831.9	20
EXC16-2-443	2016 12 14	East	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616638.1	604177.2	0.5	833.0	15
EXC16-2-444	2016 12 14	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616635.7	604184.1	3.0	830.3	25
EXC16-2-445	2016 12 14	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616637.0	604183.1	2.5	830.9	30
EXC16-2-446	2016 12 14	East	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616637.3	604186.3	1.5	831.9	20
EXC16-2-447	2016 12 14	East	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616637.3	604186.3	0.5	832.9[a]	15
EXC16-2-448	2016 12 14	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616633.9	604182.8	2.5	830.9	25
EXC16-2-449	2016 12 14	West	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616633.8	604183.5	1.5	831.7	20
EXC16-2-450	2016 12 14	West	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616633.8	604184.2	0.5	832.9	15
EXC16-2-451	2016 12 14	West	SAND, medium to coarse grained, trace gravel, fine and coarse, subrounded to rounded, grey/brown, loose, damp.	6616633.9	604171.8	2.5	830.9	15
EXC16-2-452	2016 12 14	West	SAND, medium to coarse grained, trace gravel, fine and coarse, subrounded to rounded, grey/brown, loose, damp.	6616633.9	604173.7	1.5	831.8	25
EXC16-2-453	2016 12 14	West	SAND, fine grained, some gravel, trace silt, black, medium dense, damp.	6616633.7	604175.0	0.5	832.9	20
EXC16-2-454	2016 12 14	West	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616633.3	604165.9	2.5	830.9	20
EXC16-2-455	2016 12 14	West	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616633.3	604165.9	1.5	831.9	25
EXC16-2-456	2016 12 14	West	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616633.5	604165.6	0.5	832.9	10
Excavation Area 3A								
EXC16-3A-054	2016 11 11	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616539.7	604209.6	2.5	831.9	10
EXC16-3A-055	2016 11 11	East	SAND and GRAVEL, fine grained sand, trace silt, light brown, medium dense, damp.	6616540.2	604209.7	1.5	833.1	10
EXC16-3A-056	2016 11 11	East	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616540.1	604209.9	0.5	833.8	10
EXC16-3A-057	2016 11 11	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616537.0	604217.4	2.5	831.5	10
EXC16-3A-058	2016 11 11	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616537.3	604218.0	1.5	832.6	5
EXC16-3A-059	2016 11 11	East	SAND and GRAVEL, fine to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616537.6	604218.2	0.5	833.4	10
EXC16-3A-060	2016 11 11	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616534.0	604225.1	2.5	831.1	10
EXC16-3A-061	2016 11 11	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616534.3	604225.1	1.5	832.0	5
EXC16-3A-062	2016 11 11	East	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616534.6	604225.6	0.5	833.2	5
EXC16-3A-063	2016 11 11	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616531.8	604230.5	2.5	831.1	10
EXC16-3A-064	2016 11 11	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616532.4	604230.9	1.5	832.0	10

INVERSE Inverse represents interim samples (that were subsequently excavated).

[a] Location not surveyed in. Northings/eastings/elevation estimated from other samples.

TABLE 1 (Cont'd): Excavation Sample Log

Sample ID	Sample Date (yyyy mm dd)	Sample Type	Description	North (m)	East (m)	Depth (m)	Elev (m)	Headspace (ppm)
Excavation Area 3A								
EXC16-3A-065	2016 11 11	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616533.0	604231.7	0.5	833.1	15
EXC16-3A-066	2016 11 11	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp, hydrocarbon-like odour.	6616528.2	604240.8	2.5	831.6	10
EXC16-3A-067	2016 11 11	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, light brown, loose, damp.	6616528.1	604241.4	1.5	832.2	15
EXC16-3A-068	2016 11 11	East	SAND, fine grained, trace silt, trace gravel, light brown, medium dense, damp, trace rootlets, hydrocarbon-like odour	6616528.4	604240.1	0.5	833.3	80
EXC16-3A-D6	2016 11 11	East	Blind field duplicate of EXC16-3A-068.	6616528.4	604240.1	0.5	833.3	80
EXC16-3A-069	2016 11 11	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616523.3	604245.5	2.5	831.3	25
EXC16-3A-070	2016 11 11	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, light brown, loose, damp.	6616522.9	604246.6	1.5	832.1	20
EXC16-3A-071	2016 11 11	South	SAND and GRAVEL, fine to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp, hydrocarbon-like odour.	6616522.8	604246.9	0.5	833.0	10
EXC16-3A-072	2016 11 11	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616517.8	604239.0	2.5	831.7	15
EXC16-3A-073	2016 11 11	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616516.9	604238.2	1.5	832.3	15
EXC16-3A-074	2016 11 11	East	SAND, fine grained, trace silt, trace gravel, fine, subrounded, light brown, medium dense, damp, trace rootlets.	6616517.3	604237.3	0.5	833.3	10
EXC16-3A-075	2016 11 11	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616518.7	604230.0	2.5	831.2	0
EXC16-3A-076	2016 11 11	East	SAND, medium grained, grey, loose, damp.	6616518.2	604229.3	1.5	833.0	15
EXC16-3A-077	2016 11 11	East	SAND, fine grained, trace silt, trace gravel, fine, subrounded, light brown, medium dense, damp.	6616518.6	604229.6	0.5	831.9	15
EXC16-3A-078	2016 11 11	West	SAND, medium grained, light grey.	6616522.7	604220.0	2.5	832.1	15
EXC16-3A-079	2016 11 11	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616522.6	604219.5	1.5	833.2	15
EXC16-3A-080	2016 11 11	West	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616522.8	604220.8	0.5	831.1	20
EXC16-3A-081	2016 11 11	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616530.6	604210.6	2.5	831.9	25
EXC16-3A-D7	2016 11 11	West	Blind field duplicate of EXC16-3A-081.	6616530.6	604210.6	2.5	831.9	25
EXC16-3A-082	2016 11 11	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616530.0	604211.2	1.5	832.7	10
EXC16-3A-083	2016 11 11	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616530.3	604210.9	0.5	833.8	10
EXC16-3A-084	2016 11 11	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616538.0	604205.6	2.5	831.9	10
EXC16-3A-085	2016 11 11	North	SAND and GRAVEL, fine to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616537.6	604205.1	1.5	832.8	10
EXC16-3A-086	2016 11 11	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616537.8	604204.4	0.5	833.8	15
EXC16-3A-087	2016 11 11	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616537.2	604209.4	3.0	831.4	15
EXC16-3A-088	2016 11 11	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616538.9	604212.8	1.5	832.6	15
EXC16-3A-089	2016 11 11	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616522.8	604240.2	3.0	828.4	20
EXC16-3A-D8	2016 11 11	Floor	Blind field duplicate of EXC16-3A-089.	6616522.8	604240.2	3.0	828.4	20
EXC16-3A-090	2016 11 11	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616522.3	604241.2	5.5	829.4	20
EXC16-3A-091	2016 11 11	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616522.3	604241.8	4.5	830.3	15
EXC16-3A-092	2016 11 11	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616522.4	604243.6	3.5	830.9	20
EXC16-3A-093	2016 11 11	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616534.1	604216.4	5.5	828.5	15
EXC16-3A-094	2016 11 11	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616534.3	604214.9	4.5	829.5	10
EXC16-3A-095	2016 11 11	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616534.5	604213.4	3.5	830.6	10
EXC16-3A-241	2016 11 23	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616535.6	604217.7	3.5	828.8	55
EXC16-3A-242	2016 11 23	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616536.1	604217.7	4.5	829.8	60
EXC16-3A-243	2016 11 23	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616536.2	604218.0	5.5	830.7	60
EXC16-3A-244	2016 11 23	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616533.1	604225.1	3.5	829.0	50
EXC16-3A-245	2016 11 23	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616533.3	604225.3	4.5	830.1	40
EXC16-3A-246	2016 11 23	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616534.0	604225.4	5.5	830.8	45
EXC16-3A-247	2016 11 23	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616531.0	604230.9	3.5	829.2	50
EXC16-3A-248	2016 11 23	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616531.3	604231.2	4.5	830.2	45
EXC16-3A-249	2016 11 23	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616531.7	604231.3	5.5	830.9	40
EXC16-3A-250	2016 11 23	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616528.2	604239.6	3.5	828.6	35
EXC16-3A-251	2016 11 23	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616528.3	604239.6	4.5	829.5	30
EXC16-3A-252	2016 11 23	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616528.4	604239.7	5.5	830.3	35
EXC16-3A-253	2016 11 23	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616517.3	604237.9	3.5	828.9	40
EXC16-3A-254	2016 11 23	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616517.0	604238.0	4.5	829.5	50
EXC16-3A-255	2016 11 23	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616516.6	604238.1	5.5	830.2	55
EXC16-3A-256	2016 11 23	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616519.7	604229.9	3.5	828.7	30
EXC16-3A-257	2016 11 23	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616519.7	604229.7	4.5	829.7	35
EXC16-3A-258	2016 11 23	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616519.3	604229.5	5.5	830.5	20
EXC16-3A-259	2016 11 23	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616524.0	604220.1	3.5	828.8	30
EXC16-3A-260	2016 11 23	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616523.6	604220.0	4.5	830.1	15
EXC16-3A-261	2016 11 23	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616523.3	604219.8	5.5	830.8	15
EXC16-3A-287	2016 12 03	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616521.7	604238.8	7.5	826.3	15
EXC16-3A-288	2016 12 03	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616521.3	604239.6	6.5	827.1	10
EXC16-3A-289	2016 12 03	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616520.9	604240.8	5.5	828.3	10
EXC16-3A-290	2016 12 03	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616520.4	604241.5	4.5	829.3	10
EXC16-3A-291	2016 12 03	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616524.4	604239.1	7.5	826.2	0
EXC16-3A-292	2016 12 03	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616524.2	604240.3	6.5	827.2	0
EXC16-3A-293	2016 12 03	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616523.9	604241.4	5.5	828.2	0
EXC16-3A-294	2016 12 03	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616523.6	604242.3	4.5	829.4	10
EXC16-3A-295	2016 12 03	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616527.1	604239.6	7.5	826.3	15
EXC16-3A-296	2016 12 03	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616527.8	604239.6	6.5	827.5	15
EXC16-3A-297	2016 12 03	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616528.1	604240.0	5.5	828.3	15
EXC16-3A-298	2016 12 03	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616528.3	604240.2	4.5	829.2	20
EXC16-3A-299	2016 12 03	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616519.5	604236.9	7.5	826.1	20
EXC16-3A-300	2016 12 03	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616518.5	604237.0	6.5	826.7	5
EXC16-3A-301	2016 12 03	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616517.7	604237.9	5.5	828.3	15
EXC16-3A-302	2016 12 03	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616516.8	604238.4	4.5	829.3	15
EXC16-3A-303	2016 12 03	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616519.4	604233.8	7.5	825.8	30
EXC16-3A-D28	2016 12 03	West	Blind field duplicate of EXC16-3A-303.	6616519.4	604233.8	7.5	825.8	30
EXC16-3A-304	2016 12 03	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616518.6	604233.4	6.5	827.0	25
EXC16-3A-305	2016 12 03	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616518.2	604233.1	5.5	828.3	25
EXC16-3A-D29	2016 12 03	West	Blind field duplicate of EXC16-3A-305.	6616518.2	604233.1	5.5	828.3	25
EXC16-3A-306	2016 12 03	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616517.6	604232.8	4.5	829.5	5
EXC16-3A-307	2016 12 03	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616518.9	604232.5	6.0	827.4	25
EXC16-3A-D30	2016 12 03	West	Blind field duplicate of EXC16-3A-307.	6616518.9	604232.5	6.0	827.4	25
EXC16-3A-308	2016 12 04	East	SAND, medium to coarse grained, trace gravel, loose.	6616529.7	604232.5	7.5	826.2	20

INVERSE Inverse represents interim samples (that were subsequently excavated).

[a] Location not surveyed in. Northings/eastings/elevation estimated from other samples.

TABLE 1 (Cont'd): Excavation Sample Log

Sample ID	Sample Date (yyyy mm dd)	Sample Type	Description	North (m)	East (m)	Depth (m)	Elev (m)	Headspace (ppm)
Excavation Area 3A								
EXC16-3A-309	2016 12 04	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616530.1	604232.8	6.5	827.1	15
EXC16-3A-310	2016 12 04	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616530.6	604232.8	5.5	828.1	20
EXC16-3A-311	2016 12 04	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616531.2	604232.7	4.5	829.3	10
EXC16-3A-312	2016 12 04	Floor	SAND, medium to coarse grained, trace gravel, loose.	6616522.0	604232.8	8.0	825.1	10
EXC16-3A-D31	2016 12 04	Floor	Blind field duplicate of EXC16-3A-312.	6616522.0	604232.8	8.0	825.1	10
EXC16-3A-313	2016 12 04	Floor	SAND, medium to coarse grained, trace gravel, loose.	6616527.1	604233.8	8.0	825.5	15
EXC16-3A-314	2016 12 04	West	ND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, black staining, hydrocarbon-like od	6616524.0	604224.1	7.5	826.1	10
EXC16-3A-315	2016 12 04	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616523.7	604224.0	6.5	827.2	5
EXC16-3A-316	2016 12 04	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616526.2	604225.3	8.0	825.8	5
EXC16-3A-324	2016 12 05	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616533.6	604223.1	7.5	826.3	35
EXC16-3A-325	2016 12 05	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616533.8	604223.0	6.5	827.3	25
EXC16-3A-326	2016 12 05	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616534.0	604222.8	5.5	828.5	20
EXC16-3A-327	2016 12 05	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616534.4	604222.8	4.5	829.3	15
EXC16-3A-328	2016 12 05	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616530.1	604224.6	8.0	825.2	15
EXC16-3A-334	2016 12 05	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616528.2	604215.5	8.5	826.2	25
EXC16-3A-335	2016 12 05	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616528.1	604215.1	7.5	827.1	20
EXC16-3A-336	2016 12 05	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, black staining.	6616529.9	604219.2	8.0	825.7	15
EXC16-3A-D33	2016 12 05	Floor	Blind field duplicate of EXC16-3A-336.	6616529.9	604219.2	8.0	825.7	15
EXC16-3A-337	2016 12 05	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616532.2	604213.8	7.5	826.5	20
EXC16-3A-338	2016 12 05	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616533.5	604213.4	6.5	827.7	5
EXC16-3A-341	2016 12 07	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616536.0	604225.7	3.5	831.5	25
EXC16-3A-D35	2016 12 07	West	Blind field duplicate of EXC16-3A-341.	6616536.0	604225.7	3.5	831.5	25
EXC16-3A-342	2016 12 07	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616536.8	604224.6	2.5	832.5	20
EXC16-3A-343	2016 12 07	West	SAND and GRAVEL, fine to coarse grained sand, fine and coarse gravel, subrounded to rounded, trace silt, grey/brown, loose, damp.	6616537.5	604225.8	1.5	833.0	15
EXC16-3A-344	2016 12 07	West	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616538.1	604226.6	0.5	833.6	15
EXC16-3A-345	2016 12 07	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616532.6	604231.0	3.5	830.6	20
EXC16-3A-346	2016 12 07	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616533.8	604233.6	2.5	831.2	20
EXC16-3A-347	2016 12 07	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616535.0	604234.2	1.5	832.1	20
EXC16-3A-348	2016 12 07	West	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616536.2	604235.6	0.5	833.2	0
EXC16-3A-349	2016 12 07	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616528.3	604240.6	3.5	830.3	15
EXC16-3A-350	2016 12 07	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616529.4	604241.4	2.5	831.5	25
EXC16-3A-351	2016 12 07	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616530.7	604242.5	1.5	832.4	30
EXC16-3A-D36	2016 12 07	West	Blind field duplicate of EXC16-3A-351.	6616530.7	604242.5	1.5	832.4	30
EXC16-3A-352	2016 12 07	West	SAND, fine grained, trace silt, light brown, medium dense, damp.	6616531.7	604244.0	0.5	833.4	20
EXC16-3A-353	2016 12 07	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616525.9	604242.7	3.5	830.0	10
EXC16-3A-354	2016 12 07	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616525.7	604244.6	2.5	831.5	10
EXC16-3A-355	2016 12 07	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616525.5	604246.8	1.5	832.4	0
EXC16-3A-356	2016 12 07	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616526.5	604248.6	0.5	833.1	5
EXC16-3A-357	2016 12 07	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616518.8	604241.3	3.5	829.9	10
EXC16-3A-358	2016 12 07	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616518.3	604242.5	2.5	831.0	10
EXC16-3A-359	2016 12 07	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616516.7	604245.9	1.5	832.1[a]	20
EXC16-3A-D37	2016 12 07	South	Blind field duplicate of EXC16-3A-359.	6616516.7	604245.9	1.5	832.1[a]	20
EXC16-3A-360	2016 12 07	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616516.7	604245.9	0.5	833.1	5
EXC16-3A-361	2016 12 07	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616516.8	604236.9	3.5	829.9	20
EXC16-3A-362	2016 12 07	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616514.4	604238.4	2.5	831.2	25
EXC16-3A-363	2016 12 07	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616512.6	604239.6	1.5	832.3	30
EXC16-3A-364	2016 12 07	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subangular, brown, loose, damp.	6616511.5	604239.0	0.5	833.5	110
EXC16-3A-D38	2016 12 07	South	Blind field duplicate of EXC16-3A-364.	6616511.5	604239.0	0.5	833.5	110
EXC16-3A-365	2016 12 07	East	SAND, some gravel.	6616516.0	604232.0	3.5	830.5	20
EXC16-3A-366	2016 12 07	East	SAND, trace gravel, loose.	6616514.8	604231.6	2.5	831.3	15
EXC16-3A-367	2016 12 07	East	SAND, some gravel, loose.	6616514.1	604231.4	1.5	832.4	15
EXC16-3A-368	2016 12 07	East	SAND, medium to coarse grained, some gravel, brown, damp/frozen.	6616513.4	604230.6	0.5	833.1	100
EXC16-3A-D39	2016 12 07	East	Blind field duplicate of EXC16-3A-368.	6616513.4	604230.6	0.5	833.1	100
TP16-3-1.3	2016 11 24	Test Pit	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	-	-	1.0-1.3	-	510
EXC16-D25	2016 11 24	Test Pit	Blind field duplicate of TP16-3-1.3.	-	-	1.0-1.3	-	510
TP16-3-1.5	2016 11 24	Test Pit	SAND, medium to coarse grained, trace gravel, fine and coarse, subrounded, grey, loose, hydrocarbon-like odour.	-	-	1.3-1.5	-	380
EXC16-D26	2016 11 24	Test Pit	Blind field duplicate of TP16-3-1.5.	-	-	1.3-1.5	-	380
TP16-3-2.5	2016 11 24	Test Pit	SAND, medium to coarse grained, trace gravel, fine and coarse, subrounded, grey, loose, hydrocarbon-like odour.	-	-	2.0-2.5	-	150
EXC16-D27	2016 11 24	Test Pit	Blind field duplicate of TP16-3-2.5.	-	-	2.0-2.5	-	150
Excavation Area 3B								
EXC16-3B-129	2016 11 17	North	SAND and GRAVEL, fine to medium grained sand, fine gravel, light brown.	6616515.6	604198.0	0.3	833.2	10
EXC16-3B-130	2016 11 17	North	SAND and GRAVEL, fine to medium grained sand, fine gravel, light brown.	6616510.7	604189.5	0.3	833.1	30
EXC16-3B-131	2016 11 17	West	SAND and GRAVEL, fine to medium grained sand, fine gravel, light brown.	6616506.7	604179.8	0.3	833.2	20
EXC16-3B-132	2016 11 17	West	SAND and GRAVEL, fine to medium grained sand, fine gravel, light brown.	6616493.0	604186.8	0.3	833.2	40
EXC16-3B-133	2016 11 17	South	SAND and GRAVEL, fine to medium grained sand, fine gravel, light brown.	6616498.3	604194.3	0.3	833.2	10
EXC16-3B-134	2016 11 17	South	SAND and GRAVEL, fine to medium grained sand, fine gravel, light brown, some organics, hydrocarbon-like odour.	6616506.7	604200.2	0.3	833.3	30
EXC16-3B-135	2016 11 17	Floor	SAND and GRAVEL, fine to medium grained sand, fine gravel, light brown, hydrocarbon-like odour.	6616512.9	604200.9	0.5	833.0	40
EXC16-3B-136	2016 11 17	Floor	SAND, fine grained, trace gravel, light brown.	6616505.8	604194.1	0.5	832.8	-
EXC16-3B-137	2016 11 17	Floor	SAND, fine grained, trace gravel, light brown.	6616501.1	604190.3	0.5	832.8	10
EXC16-3B-138	2016 11 17	Floor	SAND, fine grained, trace gravel, light brown.	6616503.8	604184.8	0.5	832.8	10
EXC16-3B-139	2016 11 17	South	SAND, fine grained, trace gravel, light brown.	6616519.3	604210.9	0.6	833.1	10
EXC16-3B-140	2016 11 17	East	SAND, fine grained, light brown.	6616524.6	604211.9	0.8	833.0	550
EXC16-3B-D14	2016 11 17	East	Blind field duplicate of EXC16-3B-140.	6616524.6	604211.9	0.8	833.0	550
EXC16-3B-141	2016 11 17	North	SAND, fine grained, light brown.	6616522.5	604204.6	0.6	833.2	300
EXC16-3B-162	2016 11 17	Floor	SAND and GRAVEL, fine to medium grained sand, fine gravel, light brown, hydrocarbon-like odour.	6616521.4	604209.3	0.8	832.7	2750
EXC16-3B-D15	2016 11 17	Floor	Blind field duplicate of EXC16-3B-162.	6616521.4	604209.3	0.8	832.7	2750
EXC16-3B-163	2016 11 17	West	SAND and GRAVEL, fine to medium grained sand, fine gravel, light brown.	6616497.2	604180.1	0.3	833.4	15
EXC16-3B-164	2016 11 17	South	SAND and GRAVEL, fine to medium grained sand, fine gravel, light brown.	6616514.1	604207.1	0.3	833.3	20
EXC16-3B-317	2016 12 05	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616512.9	604200.5	1.8	832.0	15
EXC16-3B-318	2016 12 05	North	SILT, some sand, grey/brown, frozen.	6616515.3	604197.7	0.3	833.1	15
EXC16-3B-319	2016 12 05	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616522.0	604208.9	1.8	831.5	15
EXC16-3B-320	2016 12 05	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616529.0	604202.8	1.8	831.5	15
EXC16-3B-321	2016 12 05	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616533.2	604197.1	2.0	831.1	25
EXC16-3B-322	2016 12 05	Floor	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616527.1	604195.5	2.0	831.3	50

INVERSE Inverse represents interim samples (that were subsequently excavated).

[a] Location not surveyed in. Northings/eastings/elevation estimated from other samples.

TABLE 1 (Cont'd): Excavation Sample Log

Sample ID	Sample Date (yyyy mm dd)	Sample Type	Description	North (m)	East (m)	Depth (m)	Elev (m)	Headspace (ppm)
Excavation Area 3B								
EXC16-3B-323	2016 12 05	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616515.1	604198.6	1.5	832.2	0
EXC16-3B-329	2016 12 05	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616522.9	604199.7	1.5	831.8	15
EXC16-3B-330	2016 12 05	West	SILT, some sand, fine grained, grey/brown, frozen.	6616522.6	604199.5	0.5	833.1	110
EXC16-3B-D32	2016 12 05	West	Blind field duplicate of EXC16-3B-330.	6616522.6	604199.5	0.5	833.1	110
EXC16-3B-331	2016 12 05	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616513.7	604206.3	1.5	832.2	55
EXC16-3B-332	2016 12 05	South	SILT, some sand, grey/brown, frozen.	6616513.5	604206.6	0.5	833.0	40
EXC16-3B-333	2016 12 05	South	SILT, some sand, grey/brown, frozen.	6616519.1	604210.8	1.5	832.3	25
Excavation Area 3C								
EXC16-3C-228	2016 11 22	East	SAND, medium grained, some gravel, grey, damp, hydrocarbon-like odour.	6616532.3	604190.7	4.5	829.9	100
EXC16-3C-229	2016 11 22	East	SAND, medium grained, some gravel, grey, damp, hydrocarbon-like odour.	6616532.6	604191.9	3.5	830.8	480
EXC16-3C-D23	2016 11 22	East	Blind field duplicate of EXC16-3C-229.	6616532.6	604191.9	3.5	830.8	480
EXC16-3C-230	2016 11 22	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616532.4	604192.8	2.5	832.0	550
EXC16-3C-231	2016 11 22	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616532.4	604193.0	1.5	833.0	270
EXC16-3C-232	2016 11 22	East	SAND and GRAVEL (FILL), medium to coarse grained sand, some cobbles, grey, damp, hydrocarbon-like odour.	6616531.8	604192.5	0.5	833.7	230
EXC16-3C-233	2016 11 22	East	SAND, medium to coarse grained, some gravel.	6616523.9	604192.3	3.5	830.4	45
EXC16-3C-234	2016 11 22	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616524.3	604193.1	2.5	831.3	35
EXC16-3C-235	2016 11 22	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616524.6	604193.6	1.5	832.2	35
EXC16-3C-236	2016 11 22	East	SAND, fine grained, light brown, damp.	6616524.2	604193.2	0.5	833.2	20
EXC16-3C-237	2016 11 22	East	SAND, medium to coarse grained, some gravel.	6616518.1	604191.6	3.5	830.2	35
EXC16-3C-D24	2016 11 22	East	Blind field duplicate of EXC16-3C-237.	6616518.1	604191.6	3.5	830.2	35
EXC16-3C-238	2016 11 22	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616517.9	604193.0	2.5	831.1	25
EXC16-3C-239	2016 11 22	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616517.8	604193.7	1.5	831.9	15
EXC16-3C-240	2016 11 22	East	SAND, fine grained, light brown, damp.	6616517.6	604193.2	0.5	833.0	10
EXC16-3C-262	2016 11 24	South	SAND, medium grained, light grey, damp.	6616514.8	604187.7	3.5	830.4	35
EXC16-3C-263	2016 11 24	South	SAND, medium grained, light grey, damp.	6616514.5	604187.8	2.5	831.4	35
EXC16-3C-264	2016 11 24	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616514.3	604187.8	1.5	832.2	35
EXC16-3C-265	2016 11 24	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616514.6	604187.8	0.5	832.9	15
EXC16-3C-266	2016 11 24	West	SAND, medium grained, light grey, damp.	6616518.5	604182.4	3.5	830.8	30
EXC16-3C-267	2016 11 24	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616518.6	604182.0	2.5	831.7	45
EXC16-3C-268	2016 11 24	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616518.6	604181.7	1.5	832.2	40
EXC16-3C-269	2016 11 24	West	SAND, fine grained, some gravel, light brown, damp.	6616519.0	604181.3	0.5	833.1	35
EXC16-3C-270	2016 11 24	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616526.0	604180.3	3.5	830.5	25
EXC16-3C-271	2016 11 24	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616525.4	604179.4	2.5	831.5	20
EXC16-3C-272	2016 11 24	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616525.6	604179.3	1.5	832.3	20
EXC16-3C-273	2016 11 24	West	SAND, fine grained, light brown, damp.	6616527.7	604180.0	0.5	833.2	20
EXC16-3C-274	2016 11 24	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616534.4	604185.0	3.5	830.4	15
EXC16-3C-275	2016 11 24	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616535.4	604184.5	2.5	831.6	20
EXC16-3C-276	2016 11 24	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616535.5	604184.5	1.5	832.4	25
EXC16-3C-277	2016 11 24	North	SAND, fine grained, light brown, damp.	6616535.2	604184.5	0.5	833.1	20
EXC16-3C-286	2016 12 03	West	SAND, fine grained, some gravel, light brown, damp.	6616519.0	604181.3	0.5	833.1[a]	-
EXC16-3C-339	2016 12 06	North	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616537.4	604195.5	1.5	831.9	20
EXC16-3C-D34	2016 12 06	North	Blind field duplicate of EXC16-3C-339.	6616537.4	604195.5	1.5	831.9	20
EXC16-3C-340	2016 12 06	North	SILT and SAND, some gravel, brown, damp/frozen.	6616537.3	604195.1	0.3	833.2	10
EXC16-3C-369	2016 12 08	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616517.3	604190.5	8.0	825.8	20
EXC16-3C-370	2016 12 08	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616516.3	604190.7	7.5	826.4	20
EXC16-3C-371	2016 12 08	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616515.5	604190.9	6.5	827.2	10
EXC16-3C-372	2016 12 08	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616514.9	604191.1	5.5	828.2	10
EXC16-3C-373	2016 12 08	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616514.4	604191.6	4.5	829.2	10
EXC16-3C-374	2016 12 08	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616516.7	604187.6	8.0	825.7	10
EXC16-3C-375	2016 12 08	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616515.6	604187.5	7.5	826.3	30
EXC16-3C-D40	2016 12 08	South	Blind field duplicate of EXC16-3C-375.	6616515.6	604187.5	7.5	826.3	30
EXC16-3C-376	2016 12 08	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616515.1	604187.5	6.5	827.0	20
EXC16-3C-377	2016 12 08	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616514.5	604187.2	5.5	827.9	20
EXC16-3C-378	2016 12 08	South	SAND, medium to coarse grained, some gravel, fine and coarse, subrounded to rounded, grey/brown, loose, damp	6616513.7	604187.5	4.5	828.9	10
EXC16-3C-379	2016 12 08	West	SAND, medium to coarse grained, grey/brown, loose, damp.	6616520.4	604182.9	7.5	826.4	0
EXC16-3C-380	2016 12 08	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616520.3	604182.3	6.5	827.1	10
EXC16-3C-381	2016 12 08	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616520.2	604181.4	5.5	827.9	5
EXC16-3C-382	2016 12 08	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616519.6	604181.0	4.5	829.0	5
EXC16-3C-383	2016 12 08	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616521.2	604184.3	8.0	825.9	5
EXC16-3C-384	2016 12 08	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616523.1	604191.8	7.5	826.6	0
EXC16-3C-385	2016 12 08	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616523.8	604192.5	6.5	827.1	0
EXC16-3C-386	2016 12 08	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616524.7	604193.8	5.5	828.1	15
EXC16-3C-D41	2016 12 08	East	Blind field duplicate of EXC16-3C-386.	6616524.7	604193.8	5.5	828.1	15
EXC16-3C-387	2016 12 08	East	SAND, medium to coarse grained, trace gravel, fine and coarse, subrounded to rounded, grey/brown, loose, damp.	6616525.6	604194.6	4.5	829.1	0
EXC16-3C-388	2016 12 10	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616526.8	604182.8	8.0	826.0	45
EXC16-3C-389	2016 12 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616526.6	604181.0	7.5	827.4	25
EXC16-3C-390	2016 12 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616525.5	604180.7	6.5	828.5	0
EXC16-3C-391	2016 12 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616526.7	604179.7	5.5	829.3	0
EXC16-3C-392	2016 12 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616527.1	604179.4	4.5	830.4	0
EXC16-3C-393	2016 12 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616532.8	604184.9	7.5	827.5	40
EXC16-3C-394	2016 12 10	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616533.1	604184.9	6.5	828.6	20
EXC16-3C-395	2016 12 10	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616534.4	604185.0	5.5	829.0[a]	20
EXC16-3C-396	2016 12 10	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	6616534.4	604185.0	4.5	830.0[a]	10
EXC16-3C-397	2016 12 10	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp, hydrocarbon-like odour.	6616530.4	604192.4	8.5	826.9	350
EXC16-3C-398	2016 12 10	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp, hydrocarbon-like odour.	6616530.9	604192.5	7.5	827.5	470
EXC16-3C-399	2016 12 10	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp, hydrocarbon-like odour.	6616531.6	604192.7	6.5	828.5	550
EXC16-3C-D42	2016 12 10	East	Blind field duplicate of EXC16-3C-399.	6616531.6	604192.7	6.5	828.5	550

INVERSE Inverse represents interim samples (that were subsequently excavated).

[a] Location not surveyed in. Northings/eastings/elevation estimated from other samples.

TABLE 1 (Cont'd): Excavation Sample Log

Sample ID	Sample Date (yyyy mm dd)	Sample Type	Description	North (m)	East (m)	Depth (m)	Elev (m)	Headspace (ppm)
Excavation Area 3C								
EXC16-3C-400	2016 12 10	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp, hydrocarbon-like odour.	6616532.3	604192.8	5.5	829.6	100
EXC16-3C-401	2016 12 10	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp, hydrocarbon-like odour.	6616532.5	604193.7	4.5	830.6	160
Excavation Area 3D								
EXC16-3D-278	2016 11 24	South	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616512.8	604166.8	0.5	832.9	15
EXC16-3D-279	2016 11 24	East	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616521.5	604167.3	0.5	832.8	15
EXC16-3D-280	2016 11 24	West	SAND and GRAVEL, medium to coarse grained sand, some cobbles, grey, damp.	6616517.1	604159.1	0.5	833.0	30
EXC16-3D-281	2016 11 24	Floor	SAND, fine grained, light brown, damp.	6616517.8	604164.6	1.5	831.8	20
EXC16-3D-282	2016 11 24	South	SAND, fine grained, light brown, damp.	6616512.8	604166.4	1.5	831.8	5
EXC16-3D-283	2016 11 24	East	SAND, fine grained, light brown, damp.	6616521.3	604167.4	1.5	831.9	65
EXC16-3D-284	2016 11 24	West	SAND, fine grained, light brown, damp.	6616517.1	604159.2	1.5	832.3	70
Excavation Area 5								
EXC16-5-001	2016 11 08	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616549.1	604287.1	3.0	830.0	5
EXC16-5-002	2016 11 08	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616545.0	604285.9	2.5	830.8	0
EXC16-5-003	2016 11 08	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey/brown, loose, damp.	6616543.0	604285.3	1.5	831.7	0
EXC16-5-004	2016 11 08	South	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey/brown, loose, damp.	6616542.3	604285.4	0.5	832.7	0
EXC16-5-005	2016 11 08	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616573.5	604275.5	3.0	830.4	0
EXC16-5-006	2016 11 08	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616573.8	604273.5	2.5	830.8	10
EXC16-5-007	2016 11 08	West	SAND and GRAVEL, fine to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey/brown, loose, damp.	6616574.0	604272.4	1.5	831.7	0
EXC16-5-008	2016 11 08	West	SAND, fine grained, trace silt, grey/brown, medium dense, damp.	6616574.4	604272.1	0.5	832.7	0
EXC16-5-009	2016 11 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616583.1	604275.7	2.5	830.2	0
EXC16-5-010	2016 11 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, light brown, loose, damp.	6616583.2	604275.2	1.5	831.0	5
EXC16-5-011	2016 11 10	West	SAND, fine grained, trace silt, grey/brown, medium dense, damp, trace rootlets.	6616583.0	604275.0	0.5	832.2	5
EXC16-5-012	2016 11 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey/brown, loose, damp, hydrocarbon-like odour.	6616590.8	604281.1	2.5	829.9	5
EXC16-5-013	2016 11 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, light brown, loose, damp.	6616591.6	604280.7	1.5	830.9	5
EXC16-5-014	2016 11 10	West	SAND and GRAVEL, fine to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace silt, trace cobbles, grey, loose, damp, hydrocarbon-like odour.	6616591.9	604280.6	0.5	832.2	60
EXC16-5-D1	2016 11 10	West	Blind field duplicate of EXC16-5-014.	6616591.9	604280.6	0.5	832.2	60
EXC16-5-015	2016 11 10	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey/brown, loose, damp.	6616593.3	604289.1	2.5	830.3	0
EXC16-5-016	2016 11 10	North	SAND, fine grained, trace silt, trace gravel, fine, subrounded to subangular, grey/brown, medium dense, moist, trace wood debris.	6616593.3	604289.6	1.5	831.5	5
EXC16-5-017	2016 11 10	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, light brown, loose, damp, some tar.	6616593.8	604289.6	0.5	832.3	10
EXC16-5-018	2016 11 10	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616585.7	604296.3	2.5	830.3	10
EXC16-5-019	2016 11 10	North	SAND, fine grained, trace silt, grey/brown, medium dense, damp.	6616585.7	604296.4	1.5	831.3	5
EXC16-5-D2	2016 11 10	North	Blind field duplicate of EXC16-5-019.	6616585.7	604296.4	1.5	831.3	5
EXC16-5-020	2016 11 10	North	SAND, fine grained, trace silt, trace gravel, fine, subrounded, grey/brown, medium dense, damp.	6616585.6	604296.7	0.5	832.2	5
EXC16-5-021	2016 11 10	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, brown, loose, damp.	6616575.0	604298.0	2.5	830.5	10
EXC16-5-022	2016 11 10	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616574.9	604298.1	1.5	831.3	5
EXC16-5-023	2016 11 10	East	SAND and GRAVEL, fine to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp, hydrocarbon-like odour.	6616574.9	604298.1	0.5	832.5	5
EXC16-5-024	2016 11 10	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616564.4	604298.8	2.5	831.0	5
EXC16-5-025	2016 11 10	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616564.5	604298.8	1.5	831.6	5
EXC16-5-026	2016 11 10	East	SAND, fine to medium grained, trace silt, grey/brown, medium dense, damp, trace rootlets.	6616564.4	604298.9	0.5	832.5	5
EXC16-5-027	2016 11 10	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616552.0	604295.8	2.5	830.5	10
EXC16-5-028	2016 11 10	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616553.2	604296.1	1.5	831.3	5
EXC16-5-029	2016 11 10	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616552.9	604296.4	0.5	832.2	5
EXC16-5-030	2016 11 10	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616544.3	604290.9	2.5	830.5	5
EXC16-5-D3	2016 11 10	East	Blind field duplicate of EXC16-5-030.	6616544.3	604290.9	2.5	830.5	5
EXC16-5-031	2016 11 10	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616544.1	604291.1	1.5	831.3	10
EXC16-5-032	2016 11 10	East	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, light brown, loose, damp.	6616544.0	604291.2	0.5	832.4	5
EXC16-5-033	2016 11 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616547.5	604279.5	2.5	830.5	15
EXC16-5-034	2016 11 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616547.3	604279.5	1.5	831.6	5
EXC16-5-035	2016 11 10	West	SAND and GRAVEL, fine to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616546.8	604279.3	0.5	833.0	10
EXC16-5-036	2016 11 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616555.2	604274.9	2.5	830.6	10
EXC16-5-037	2016 11 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616555.2	604274.7	1.5	831.7	10
EXC16-5-038	2016 11 10	West	SAND, fine grained, trace silt, grey/brown, medium dense, damp.	6616555.5	604274.0	0.5	832.8	10
EXC16-5-039	2016 11 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616565.1	604272.9	2.5	830.6	5
EXC16-5-040	2016 11 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616565.1	604272.2	1.5	831.9	10
EXC16-5-041	2016 11 10	West	SAND, fine grained, trace silt, grey/brown, medium dense, damp.	6616565.1	604272.0	0.5	832.7	5
EXC16-5-042	2016 11 10	West	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616595.4	604285.8	1.5	831.3	10

INVERSE Inverse represents interim samples (that were subsequently excavated).

[a] Location not surveyed in. Northings/eastings/elevation estimated from other samples.

TABLE 1 (Cont'd): Excavation Sample Log

Sample ID	Sample Date (yyyy mm dd)	Sample Type	Description	North (m)	East (m)	Depth (m)	Elev (m)	Headspace (ppm)
Excavation Area 5								
EXC16-5-043	2016 11 10	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616588.2	604283.5	3.0	829.6	10
EXC16-5-044	2016 11 10	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616585.6	604292.0	3.0	829.8	15
EXC16-5-D5	2016 11 10	Floor	Blind field duplicate of EXC16-5-044.	6616585.6	604292.0	3.0	829.8	15
EXC16-5-045	2016 11 10	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616580.8	604278.6	3.0	829.9	15
EXC16-5-046	2016 11 10	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616581.0	604287.2	3.0	829.9	10
EXC16-5-047	2016 11 10	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, brown, loose, damp.	6616572.9	604294.9	3.0	830.3	15
EXC16-5-D4	2016 11 10	Floor	Blind field duplicate of EXC16-5-047.	6616572.9	604294.9	3.0	830.3	15
EXC16-5-048	2016 11 10	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616572.4	604284.9	3.0	830.3	10
EXC16-5-049	2016 11 10	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, light grey, loose, damp.	6616563.1	604277.9	3.0	830.1	10
EXC16-5-050	2016 11 10	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, light grey, loose, damp.	6616558.6	604286.1	3.0	830.4	10
EXC16-5-051	2016 11 10	Floor	SAND, medium grained sand, trace cobbles, light grey, loose, damp.	6616562.0	604294.3	3.0	830.4	10
EXC16-5-052	2016 11 10	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, dark brown, loose, damp.	6616553.8	604280.0	3.0	830.1	10
EXC16-5-053	2016 11 10	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, black, loose, damp.	6616552.9	604291.4	3.0	829.9	5
EXC16-5-196	2016 11 19	Floor	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616585.6	604292.8	3.3	829.4	10
EXC16-5-197	2016 11 20	North	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to subangular, trace cobbles, grey, loose, damp.	6616596.1	604285.4	1.5	831.7	40
EXC16-5-285	2016 11 24	Floor	SAND and GRAVEL, medium to coarse grained sand, grey, loose, damp.	6616583.0	604294.3	4.0	828.8	10

INVERSE Inverse represents interim samples (that were subsequently excavated).

[a] Location not surveyed in. Northings/eastings/elevation estimated from other samples.

TABLE 2: Summary of Analytical Results for Soil - Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions					MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19) µg/g	HEPH (C19-C32) µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	F4G (>C50) µg/g	MTBE µg/g
Excavation Area 1																		
EXC16-1-096	EXC16-1-096	2016 11 13	2.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-097	EXC16-1-097	2016 11 13	1.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-1-D9	Duplicate	1.5	15	< 0.0050	< 0.010	***0.36***	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-1-098	EXC16-1-098	2016 11 13	0.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-099	EXC16-1-099	2016 11 13	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-100	EXC16-1-100	2016 11 13	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-101	EXC16-1-101	2016 11 13	0.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-102	EXC16-1-102	2016 11 13	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-103	EXC16-1-103	2016 11 13	1.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-104	EXC16-1-104	2016 11 13	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-105	EXC16-1-105	2016 11 13	2.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-106	EXC16-1-106	2016 11 13	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-1-D10	Duplicate	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-1-107	EXC16-1-107	2016 11 13	0.5	5	< 0.0050	< 0.010	***0.40***	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-111	EXC16-1-111	2016 11 13	2.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-112	EXC16-1-112	2016 11 13	1.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-113	EXC16-1-113	2016 11 13	0.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-114	EXC16-1-114	2016 11 13	2.5	0	< 0.0050	< 0.010	0.027	< 0.040	< 0.030	< 7.0	180	< 100	< 10	120	72	< 50	-	< 0.10
EXC16-1-115	EXC16-1-115	2016 11 13	1.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	270	< 100	< 10	***250***	120	< 50	-	< 0.10
EXC16-1-116	EXC16-1-116	2016 11 13	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	210	< 100	< 10	100	190	< 50	-	< 0.10
	EXC16-1-D11	Duplicate	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	220	< 100	< 10	130	200	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	26	*	*	-	*
EXC16-1-117	EXC16-1-117	2016 11 13	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-1-D12	Duplicate	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-1-118	EXC16-1-118	2016 11 13	1.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-119	EXC16-1-119	2016 11 13	0.5	10	< 0.0050	< 0.010	***0.16***	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-120	EXC16-1-120	2016 11 14	2.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-121	EXC16-1-121	2016 11 14	1.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-122	EXC16-1-122	2016 11 14	0.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	31	63	< 50	-	< 0.10
EXC16-1-123	EXC16-1-123	2016 11 14	3.0	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-125	EXC16-1-125	2016 11 14	3.0	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-126	EXC16-1-126	2016 11 14	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-127	EXC16-1-127	2016 11 14	1.5	5	< 0.0050	< 0.010	***2.0***	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-128	EXC16-1-128	2016 11 14	0.5	5	< 0.0050	< 0.010	0.044	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-142	EXC16-1-142	2016 11 16	3.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-143	EXC16-1-143	2016 11 16	3.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-144	EXC16-1-144	2016 11 16	3.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-145	EXC16-1-145	2016 11 16	2.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-146	EXC16-1-146	2016 11 16	1.5	20	0.026	0.014	***0.24***	0.045	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-147	EXC16-1-147	2016 11 16	0.5	40	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-148	EXC16-1-148	2016 11 16	3.0	70	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-149	EXC16-1-149	2016 11 16	2.5	40	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-150	EXC16-1-150	2016 11 16	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-151	EXC16-1-151	2016 11 16	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-152	EXC16-1-152	2016 11 16	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-153	EXC16-1-153	2016 11 16	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-154	EXC16-1-154	2016 11 16	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-155	EXC16-1-155	2016 11 16	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	11	< 10	-	< 0.10
EXC16-1-156	EXC16-1-156	2016 11 16	1.5	10	***0.056***	< 0.010	***0.29***	0.050	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-157	EXC16-1-157	2016 11 16	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-158	EXC16-1-158	2016 11 17	4.0	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-159	EXC16-1-159	2016 11 17	4.0	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	510	390	< 10	86	830	< 10	-	< 0.10
EXC16-1-160	EXC16-1-160	2016 11 17	4.0	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-165	EXC16-1-165	2016 11 18	5.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	10	< 10	< 50	< 50	-	< 0.10
EXC16-1-166	EXC16-1-166	2016 11 18	4.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-167	EXC16-1-167	2016 11 18	3.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-168	EXC16-1-168	2016 11 18	5.5	20	< 0.0050	< 0.010	0.021	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	14	< 50	< 50	-	< 0.10
	EXC16-1-D16	Duplicate	5.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-1-169	EXC16-1-169	2016 11 18	4.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	8.5	500	< 100	12	***390***	140	< 50	-	< 0.10
EXC16-1-170	EXC16-1-170	2016 11 18	3.5	10	< 0.0050	< 0.010	< 0.020	0.047	< 0.030	38	940	< 100	***49***	***730***	190	< 50	-	< 0.10
EXC16-1-171	EXC16-1-171	2016 11 18	5.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	13	< 50	< 50	-	< 0.10
EXC16-1-172	EXC16-1-172	2016 11 18	4.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-177	EXC16-1-177	2016 11 18	3.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-178	EXC16-1-178	2016 11 18	3.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-1-D18	Duplicate	3.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-1-179	EXC16-1-179	2016 11 19	5.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	17	< 10	< 10	-	< 0.10
EXC16-1-180	EXC16-1-180	2016 11 19	4.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	13	< 10	< 10	-	< 0.10
EXC16-1-184	EXC16-1-184	2016 11 19	5.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	1,000	< 100	< 10	***710***	350	< 50	-	< 0.10
EXC16-1-185	EXC16-1-185	2016 11 19	4.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	44	1,700	320	***59***	***1,000***	940	< 50	-	< 0.10
EXC16-1-186	EXC16-1-186	2016 11 19	3.5	25	< 0.0050	***0.13***	< 0.020	1.1	< 0.030	32	1,400	230	24	***970***	630	< 50	-	< 0.10
EXC16-1-190	EXC16-1-190	2016 11 19	5.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	85	**4,900**	200	***110***	***4,200***	1,200	< 50	-	< 0.10
EXC16-1-191	EXC16-1-191	2016 11 19	4.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	13	**3,000**	120	< 10	***2,500***	770	< 50	-	< 0.10
EXC16-1-192	EXC16-1-192	2016 11 19	3.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-193	EXC16-1-193	2016 11 19	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-194	EXC16-1-194	2016 11 19	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-195	EXC16-1-195	2016 11 19	0.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-1-D20	Duplicate	0.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
Federal Guideline/Standard																		
CCME CEQG/CWS Residential Coarse-Grained Surface (< 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (> 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	10,000	n/a
BC Standard																		
CSR Residential Land Use (RL) (< 3.0m)[c]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (> 3.0m)[c]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

RPD Denotes relative percent difference.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[b] Pathways Included: Direct Contact, Eco Soil Contact, Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.

[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[d] BETX/VPH/F1 analysis from soil jar, not methanol-preserved vial; results could be biased low.

TABLE 2 (Cont'd): Summary of Analytical Results for Soil - Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions					MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19) µg/g	HEPH (C19-C32) µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	F4G (>C50) µg/g	MTBE µg/g
Excavation Area 1																		
EXC16-1-198	EXC16-1-198	2016 11 20	3.0	40	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
	EXC16-1-D21	Duplicate	3.0	40	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-1-199	EXC16-1-199	2016 11 20	2.5	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-200	EXC16-1-200	2016 11 20	5.5	25	< 0.0050	< 0.010	0.029	< 0.040	< 0.030	< 10	< 100	< 100	< 10	37	20	< 10	-	< 0.10
EXC16-1-201	EXC16-1-201	2016 11 20	4.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	14	13	< 10	-	< 0.10
EXC16-1-202	EXC16-1-202	2016 11 20	3.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	160	< 100	< 10	130	86	26	-	< 0.10
EXC16-1-203	EXC16-1-203	2016 11 20	5.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-204	EXC16-1-204	2016 11 20	4.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	11	-	< 0.10
EXC16-1-205	EXC16-1-205	2016 11 20	3.5	35	< 0.0050	***0.15***	***0.33***	2.5	< 0.030	11	< 100	< 100	12	14	77	29	-	< 0.10
	EXC16-1-D22	Duplicate	3.5	35	< 0.0050	0.018	0.023	0.23	< 0.030	< 10	< 100	< 100	< 10	20	53	19	-	< 0.10
	QA/QC RPD%				*	*	*	166	*	*	*	*	*	*	37	*	-	*
EXC16-1-206	EXC16-1-206	2016 11 20	5.5	30	< 0.0050	< 0.010	0.022	< 0.040	< 0.030	< 10	< 100	240	< 10	17	280	120	-	< 0.10
EXC16-1-207	EXC16-1-207	2016 11 20	4.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	200	460	< 10	140	590	230	-	< 0.10
EXC16-1-208	EXC16-1-208	2016 11 20	3.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-209	EXC16-1-209	2016 11 20	5.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	12	17	< 10	-	< 0.10
EXC16-1-210	EXC16-1-210	2016 11 20	4.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-211	EXC16-1-211	2016 11 20	3.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-214	EXC16-1-214	2016 11 21	6.0	40	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	11	55	19	-	< 0.10
EXC16-1-216	EXC16-1-216	2016 11 21	2.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	710	190	< 10	***570***	440	35	-	< 0.10
EXC16-1-217	EXC16-1-217	2016 11 21	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-218	EXC16-1-218	2016 11 21	0.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	220	280	< 10	***190***	***480***	180	-	< 0.10
EXC16-1-219	EXC16-1-219	2016 11 21	2.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-220	EXC16-1-220	2016 11 21	2.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	20	-	< 0.10
EXC16-1-221	EXC16-1-221	2016 11 21	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-223	EXC16-1-223	2016 11 21	2.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-226	EXC16-1-226	2016 11 21	3.0	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	13	38	12	-	< 0.10
EXC16-1-227	EXC16-1-227	2016 11 21	3.0	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	11	12	-	< 0.10
EXC16-1-402	EXC16-1-402	2016 12 12	8.0	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	41	**2,800**	140	***52***	***2,100***	460	< 50	-	< 0.10
EXC16-1-403	EXC16-1-403	2016 12 12	8.0	10	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	**2,300**	330	< 10	***1,400***	750	< 50	-	< 0.10
EXC16-1-404	EXC16-1-404	2016 12 12	8.0	20	< 0.0050	< 0.010	< 0.040	0.66	0.10	30	< 100	< 100	***41***	43	< 50	< 50	-	< 0.10
EXC16-1-405	EXC16-1-405	2016 12 12	8.0	20	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	**3,300**	350	< 10	***2,000***	1,100	< 50	-	< 0.10
EXC16-1-406	EXC16-1-406	2016 12 12	8.0	35	< 0.0050	< 0.010	0.058	0.33	< 0.030	140	**9,700**	1,400	***160***	***6,600***	***3,300***	< 50	-	< 0.10
EXC16-1-407	EXC16-1-407	2016 12 12	8.0	35	< 0.0050	< 0.010	0.032	< 0.040	< 0.030	19	**2,400**	370	20	***1,200***	1,000	< 50	-	< 0.10
	EXC16-1-D43	Duplicate	8.0	35	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	1,800	290	< 10	***1,100***	870	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	29	*	*	9	14	*	-	*
EXC16-1-408	EXC16-1-408	2016 12 13	7.5	5	< 0.0050	< 0.010	0.033	< 0.040	< 0.030	32	350	< 100	***31***	***240***	94	< 50	-	< 0.10
EXC16-1-409	EXC16-1-409	2016 12 13	6.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-410	EXC16-1-410	2016 12 13	5.5	20	< 0.0050	< 0.010	0.036	0.28	< 0.030	< 7.0	< 100	< 100	< 10	27	< 50	< 50	-	< 0.10
EXC16-1-411	EXC16-1-411	2016 12 13	4.5	10	< 0.0050	0.046	0.037	1.2	< 0.030	77	**2,300**	< 100	***80***	***1,600***	380	< 50	-	< 0.10
EXC16-1-412	EXC16-1-412	2016 12 13	4.0	25	< 0.0050	***0.11***	0.040	3.0	< 0.030	190	**3,000**	150	***160***	***2,100***	460	< 50	-	< 0.10
EXC16-1-413	EXC16-1-413	2016 12 13	7.5	20	< 0.0050	0.022	0.040	0.85	< 0.030	130	**2,800**	190	***120***	***2,200***	680	< 50	-	< 0.10
EXC16-1-414	EXC16-1-414	2016 12 13	6.5	20	< 0.0050	***0.12***	0.039	3.7	< 0.030	**210**	**4,600**	130	***230***	***3,300***	600	< 50	-	< 0.10
EXC16-1-415	EXC16-1-415	2016 12 13	5.5	25	< 0.0050	***0.25***	0.050	7.7	< 0.030	**380**	**4,500**	200	***490***	***3,300***	720	< 50	-	< 0.10
EXC16-1-416	EXC16-1-416	2016 12 13	4.5	20	< 0.0050	0.042	0.044	1.4	< 0.030	54	1,800	< 100	***65***	***1,200***	280	< 50	-	< 0.10
EXC16-1-417	EXC16-1-417	2016 12 13	7.5	10	< 0.0050	< 0.010	0.045	0.57	0.086	23	100	< 100	26	63	< 50	< 50	-	< 0.10
EXC16-1-418	EXC16-1-418	2016 12 13	6.5	10	< 0.0050	< 0.010	0.049	0.24	< 0.030	22	1,200	< 100	***39***	***880***	260	< 50	-	< 0.10
EXC16-1-419	EXC16-1-419	2016 12 13	5.5	10	< 0.0050	< 0.010	< 0.040	0.047	< 0.030	13	560	< 100	11	***410***	120	< 50	-	< 0.10
EXC16-1-420	EXC16-1-420	2016 12 13	4.5	5	< 0.0050	< 0.010	0.030	0.53	0.076	< 7.0	140	< 100	< 10	96	< 50	< 50	-	< 0.10
EXC16-1-421	EXC16-1-421	2016 12 13	3.5	5	< 0.0050	< 0.010	0.040	0.067	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-422	EXC16-1-422	2016 12 13	7.5	5	< 0.0050	< 0.010	0.048	0.21	< 0.030	53	**2,300**	380	***58***	***1,500***	1,100	< 50	-	< 0.10
EXC16-1-423	EXC16-1-423	2016 12 13	6.5	20	0.0081	< 0.010	0.065	< 0.040	< 0.030	56	**2,100**	490	***51***	***1,200***	1,300	< 50	-	< 0.10
EXC16-1-424	EXC16-1-424	2016 12 13	7.5	15	< 0.0050	< 0.010	0.042	< 0.040	< 0.030	74	**2,700**	< 100	***73***	***2,100***	410	< 50	-	< 0.10
EXC16-1-425	EXC16-1-425	2016 12 13	6.5	20	< 0.0050	< 0.010	0.058	0.16	< 0.030	170	**3,500**	< 100	***170***	***2,800***	510	< 50	-	< 0.10
EXC16-1-426	EXC16-1-426	2016 12 13	2.5	160	0.012	***1.4***	0.087	***35***	< 0.030	**480**	**3,600**	420	***500***	***2,600***	1,300	< 50	-	< 0.10
	EXC16-1-D44	Duplicate	2.5	160	0.013	***1.4***	0.084	***27***	< 0.030	**450**	**4,100**	470	***480***	***2,900***	1,400	< 50	-	< 0.10
	QA/QC RPD%				*	0	*	26	*	6	13	*	4	11	7	*	-	*
EXC16-1-427	EXC16-1-427	2016 12 13	1.5	130	0.016	***1.6***	0.10	***19***	< 0.030	**1,100**	**13,000**	690	***1,200***	***10,000***	***3,100***	< 50	-	< 0.10
	EXC16-1-D45	Duplicate	1.5	130	0.017	***1.6***	***0.13***	***19***	0.036	**1,300**	**13,000**	**1,300**	***1,400***	***8,600***	***3,200***	< 50	-	< 0.10
	QA/QC RPD%				*	0	26	0	*	17	0	61	15	15	3	*	-	*
EXC16-1-428	EXC16-1-428	2016 12 13	0.5	65	0.013	***2.6***	***0.74***	***18***	< 0.030	**1,000**	**9,400**	< 500	***1,200***	***7,100***	***2,100***	< 50	-	< 0.10
EXC16-1-429	EXC16-1-429	2016 12 13	7.5	10	< 0.0050	< 0.010	0.030	< 0.040	< 0.030	56	870	< 100	***57***	***620***	230	< 50	-	< 0.10
EXC16-1-430	EXC16-1-430	2016 12 13	6.5	5	< 0.0050	< 0.010	0.039	0.13	< 0.030	170	1,200	< 100	***220***	***760***	300	< 50	-	< 0.10
EXC16-1-431	EXC16-1-431	2016 12 14	7.5	15	< 0.0050	< 0.010	0.052	0.13	< 0.030	64	1,700	< 100	***62***	***1,200***	230	< 50	-	< 0.10
EXC16-1-432	EXC16-1-432	2016 12 14	6.5	15	< 0.0050	< 0.010	0.033	< 0.040	< 0.030	56	1,100	< 100	***50***	***810***	160	< 50	-	< 0.10
EXC16-1-433	EXC16-1-433	2016 12 14	7.5	0	< 0.0050	< 0.010	0.026	0.94	0.33	150	< 100	< 100	***160***	< 10	< 50	< 50	-	< 0.10
EXC16-1-434	EXC16-1-434	2016 12 14	6.5	0	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	31	< 100	230	29	24	240	89	-	< 0.10
EXC16-1-435	EXC16-1-435	2016 12 14	7.5	0	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-436	EXC16-1-436	2016 12 14	6.5	0	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-457	EXC16-1-457	2016 12 15	7.5	10	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	30	< 50	< 50	-	< 0.10
EXC16-1-458	EXC16-1-458	2016 12 15	6.5	0	< 0.0050	< 0.010	< 0.060	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	21	< 50	< 50	-	< 0.10
EXC16-1-459	EXC16-1-459	2016 12 16	7.5	20	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-1-D48	Duplicate	7.5	20	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-1-460	EXC16-1-460	2016 12 16	6.5	5	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	49	< 50	< 50	-	< 0.10
EXC16-1-461	EXC16-1-461	2016 12 16	6.2	0	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-462	EXC16-1-462	2016 12 16	7.5	5	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	29	< 50	< 50	-	< 0.10
EXC16-1-463	EXC16-1-463	2016 12 16	6.5	5	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	55	< 50	< 50	-	< 0.10
EXC16-1-464	EXC16-1-464	2016 12 16	6.2	0	< 0.0050	< 0.010	< 0.060	< 0.040	< 0.030	49	< 100	< 100	< 10	12	< 50	< 50	-	< 0.10
EXC16-1-465	EXC16-1-465	2016 12 16	4.8	0	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	270	< 100	< 10	***200***	78	< 50	-	< 0.10
EXC16-1-466	EXC16-1-466	2016 12 16	3.5	5	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	350	< 100	< 10	***260***	90	< 50	-	< 0.10
EXC16-1-467	EXC16-1-467	2016 12 16	3.2	5	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-468	EXC16-1-468	2016 12 16	3.2	5	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-469	EXC16-1-469	2016 12 16	2.5	0	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-470	EXC16-1-470	2016 12 16	2.5	0	< 0.0050	< 0.010	0.025	< 0.040	< 0.030	41	**2,100**	< 100	***36***	***1,600***	340	< 50	-	< 0.10
Federal Guideline/Standard																		
CCME CEQG/CWS Residential Coarse-Grained Surface (< 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (> 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	10,000	n/a
BC Standard																		
CSR Residential Land Use (RL) (< 3.0m)[c]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (> 3.0m)[c]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

RPD Denotes relative percent difference.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[b] Pathways Included: Direct Contact, Eco Soil Contact, Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.

[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[d] BETX/VPH/F1 analysis from soil jar, not methanol-preserved vial; results could be biased low.

TABLE 2 (Cont'd): Summary of Analytical Results for Soil - Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions					MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19) µg/g	HEPH (C19-C32) µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	F4G (>C50) µg/g	MTBE µg/g
Excavation Area 1																		
EXC16-1-471	EXC16-1-471	2016 12 16	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	61	**3,300**	130	***58***	***2,700***	***460***	< 50	-	< 0.10
EXC16-1-472	EXC16-1-472	2016 12 16	0.5	0	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	10	< 50	< 50	-	< 0.10
EXC16-1-473	EXC16-1-473	2016 12 16	6.2	10	< 0.0050	< 0.010	0.028	< 0.040	< 0.030	49	190	390	***51***	120	460	190	-	< 0.10
	EXC16-1-D49	Duplicate	6.2	10	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	220	130	< 10	***160***	200	62	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	29	*	*	-	*
EXC16-1-474	EXC16-1-474	2016 12 17	1.5	25	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	200	< 10	< 10	220	82	-	< 0.10
EXC16-1-475	EXC16-1-475	2016 12 17	0.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-476	EXC16-1-476	2016 12 17	1.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-477	EXC16-1-477	2016 12 17	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-478	EXC16-1-478	2016 12 17	1.3	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-479	EXC16-1-479	2016 12 17	0.3	15	< 0.0050	< 0.010	< 0.050	< 0.040	< 0.030	< 7.0	120	**2,600**	< 10	24	***2,400***	1,500	-	< 0.10
EXC16-1-480	EXC16-1-480	2016 12 17	1.8	60	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-1-D50	Duplicate	1.8	60	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-1-481	EXC16-1-481	2016 12 17	1.5	55	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-482	EXC16-1-482	2016 12 17	1.5	40	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-483	EXC16-1-483	2016 12 17	1.2	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-484	EXC16-1-484	2016 12 17	0.4	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	290	< 10	11	250	120	-	< 0.10
EXC16-1-485	EXC16-1-485	2016 12 17	1.5	45	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-486	EXC16-1-486	2016 12 17	1.2	30	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-487	EXC16-1-487	2016 12 17	0.4	45	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	41	**3,100**	**2,800**	***51***	***2,800***	***3,200***	1,300	-	< 0.10
EXC16-1-488	EXC16-1-488	2016 12 17	1.2	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	7.2	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-489	EXC16-1-489	2016 12 17	0.4	120	< 0.0050	< 0.010	0.033	0.060	< 0.030	100	**3,000**	**1,300**	***110***	***2,300***	***1,700***	660	-	< 0.10
	EXC16-1-D51	Duplicate	0.4	120	< 0.0050	< 0.010	0.039	0.079	< 0.030	190	**3,000**	**1,400**	***230***	***2,300***	***1,800***	690	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	62	0	7	71	0	6	4	-	*
EXC16-1-490	EXC16-1-490	2016 12 17	1.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-491	EXC16-1-491	2016 12 17	1.2	35	0.017	< 0.010	0.085	1.5	0.24	**210**	560	440	***200***	***430***	***490***	180	-	< 0.10
	EXC16-1-D52	Duplicate	1.2	35	0.013	0.018	0.073	0.13	< 0.030	54	600	460	***66***	***450***	***500***	170	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	118	7	*	101	5	2	*	-	*
EXC16-1-492	EXC16-1-492	2016 12 17	0.4	15	0.016	0.018	0.090	0.18	< 0.030	93	880	500	***110***	***690***	***540***	150	-	< 0.10
EXC16-1-493	EXC16-1-493	2016 12 17	1.2	25	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-1-494	EXC16-1-494	2016 12 17	0.4	45	0.013	0.055	0.069	0.86	< 0.030	17	650	560	20	***470***	***600***	190	-	< 0.10
EXC16-1-495	EXC16-1-495	2016 12 17	1.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
Excavation Area 2																		
EXC16-2-437	EXC16-2-437	2016 12 14	3.0	75	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-2-D46	Duplicate	3.0	75	< 0.0050	< 0.010	***0.53***	0.12	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-2-438	EXC16-2-438	2016 12 14	2.5	50	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-2-D47	Duplicate	2.5	50	< 0.0050	< 0.010	< 0.060	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-2-439	EXC16-2-439	2016 12 14	1.5	20	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-2-440	EXC16-2-440	2016 12 14	0.5	10	< 0.0050	< 0.010	< 0.060	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-2-441	EXC16-2-441	2016 12 14	2.5	10	< 0.0050	< 0.010	< 0.050	< 0.040	< 0.030	< 7.0	< 100	150	< 10	26	180	< 50	-	< 0.10
EXC16-2-442	EXC16-2-442	2016 12 14	1.5	20	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	22	< 50	< 50	-	< 0.10
EXC16-2-443	EXC16-2-443	2016 12 14	0.5	15	< 0.0050	< 0.010	***0.18***	< 0.040	< 0.030	< 7.0	470	590	< 10	75	***780***	< 50	-	< 0.10
EXC16-2-444	EXC16-2-444	2016 12 14	3.0	25	< 0.0050	< 0.010	< 0.050	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-2-445	EXC16-2-445	2016 12 14	2.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-2-446	EXC16-2-446	2016 12 14	1.5	20	< 0.0050	< 0.010	< 0.050	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-2-447	EXC16-2-447	2016 12 14	0.5	15	< 0.0050	< 0.010	< 0.050	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-2-448	EXC16-2-448	2016 12 14	2.5	25	< 0.0050	< 0.010	< 0.050	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-2-449	EXC16-2-449	2016 12 14	1.5	20	< 0.0050	< 0.010	***0.18***	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-2-450	EXC16-2-450	2016 12 14	0.5	15	< 0.0050	< 0.010	< 0.060	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-2-451	EXC16-2-451	2016 12 14	2.5	15	< 0.0050	< 0.010	< 0.060	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-2-452	EXC16-2-452	2016 12 14	1.5	25	< 0.0050	< 0.010	***0.15***	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-2-453	EXC16-2-453	2016 12 14	0.5	20	< 0.0050	< 0.010	0.037	< 0.040	< 0.030	23	**1,400**	**6,600**	***35***	***790***	***8,400***	***5,700***	-	< 0.10
EXC16-2-454	EXC16-2-454	2016 12 14	2.5	20	< 0.0050	< 0.010	***0.62***	0.23	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-2-455	EXC16-2-455	2016 12 14	1.5	25	< 0.0050	< 0.010	***0.21***	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-2-456	EXC16-2-456	2016 12 14	0.5	10	< 0.0050	< 0.010	< 0.060	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	23	57	< 50	-	< 0.10
Excavation Area 3A																		
EXC16-3A-054	EXC16-3A-054	2016 11 11	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-055	EXC16-3A-055	2016 11 11	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-056	EXC16-3A-056	2016 11 11	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	110	< 10	< 10	110	73	-	< 0.10
EXC16-3A-075	EXC16-3A-075	2016 11 11	2.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-076	EXC16-3A-076	2016 11 11	1.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-077	EXC16-3A-077	2016 11 11	0.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-078	EXC16-3A-078	2016 11 11	2.5	15	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-081	EXC16-3A-081	2016 11 11	2.5	25	< 0.0050	< 0.010	0.052	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-3A-D7	Duplicate	2.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-3A-084	EXC16-3A-084	2016 11 11	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	27	< 50	< 50	-	< 0.10
EXC16-3A-085	EXC16-3A-085	2016 11 11	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	**3,000**	360	< 10	***2,000***	***760***	180	-	< 0.10
EXC16-3A-086	EXC16-3A-086	2016 11 11	0.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-087	EXC16-3A-087	2016 11 11	3.0	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-088	EXC16-3A-088	2016 11 11	1.5	15	0.024	***0.11***	***0.44***	1.4	< 0.030	29	**1,800**	**4,100**	***38***	***960***	***5,200***	***3,900***	***17,000***	< 0.10
EXC16-3A-093	EXC16-3A-093	2016 11 11	5.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-094	EXC16-3A-094	2016 11 11	4.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-095	EXC16-3A-095	2016 11 11	3.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-256	EXC16-3A-256	2016 11 23	3.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	26	< 50	< 50	-	< 0.10
EXC16-3A-257	EXC16-3A-257	2016 11 23	4.5	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	240	< 100	< 10	140	72	< 50	-	< 0.10
EXC16-3A-258	EXC16-3A-258	2016 11 23	5.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	120	< 100	< 10	73	< 50	< 50	-	< 0.10
EXC16-3A-259	EXC16-3A-259	2016 11 23	3.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-260	EXC16-3A-260	2016 11 23	4.5	15	< 0.0050	< 0.010	0.024	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-261	EXC16-3A-261	2016 11 23	5.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-287	EXC16-3A-287	2016 12 03	7.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	7.2	890	120	< 10	***620***	150	< 50	-	< 0.10
EXC16-3A-288	EXC16-3A-288	2016 12 03	6.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	30	**3,400**	120	26	***2,700***	220	< 50	-	< 0.10
Federal Guideline/Standard																		
CCME CEQG/CWS Residential Coarse-Grained Surface (< 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (> 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	10,000	n/a
BC Standard																		
CSR Residential Land Use (RL) (< 3.0m)[c]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (> 3.0m)[c]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

RPD Denotes relative percent difference.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[b] Pathways Included: Direct Contact, Eco Soil Contact, Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.

[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[d] BETX/VPH/F1 analysis from soil jar, not methanol-preserved vial; results could be biased low.

TABLE 2 (Cont'd): Summary of Analytical Results for Soil - Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions					MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19) µg/g	HEPH (C19-C32) µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	F4G (>C50) µg/g	MTBE µg/g
Excavation Area 3A																		
EXC16-3A-289	EXC16-3A-289	2016 12 03	5.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	850	< 100	< 10	***690***	130	< 50	-	< 0.10
EXC16-3A-290	EXC16-3A-290	2016 12 03	4.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	1,200	150	< 10	***1,000***	250	< 50	-	< 0.10
EXC16-3A-291	EXC16-3A-291	2016 12 03	7.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	280	390	< 10	120	490	140	-	< 0.10
EXC16-3A-292	EXC16-3A-292	2016 12 03	6.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	310	560	< 10	110	690	190	-	< 0.10
EXC16-3A-293	EXC16-3A-293	2016 12 03	5.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	9.9	350	410	< 10	***180***	520	150	-	< 0.10
EXC16-3A-294	EXC16-3A-294	2016 12 03	4.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	18	310	530	15	110	660	180	-	< 0.10
EXC16-3A-295	EXC16-3A-295	2016 12 03	7.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-296	EXC16-3A-296	2016 12 03	6.5	15	< 0.0050	< 0.010	< 0.020	0.37	< 0.030	17	340	440	21	***160***	520	140	-	< 0.10
EXC16-3A-297	EXC16-3A-297	2016 12 03	5.5	15	< 0.0050	< 0.010	< 0.020	0.41	< 0.030	19	730	650	22	***420***	810	220	-	< 0.10
EXC16-3A-298	EXC16-3A-298	2016 12 03	4.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	110	230	< 10	53	270	120	-	< 0.10
EXC16-3A-299	EXC16-3A-299	2016 12 03	7.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-300	EXC16-3A-300	2016 12 03	6.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-301	EXC16-3A-301	2016 12 03	5.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	24	< 50	< 50	-	< 0.10
EXC16-3A-302	EXC16-3A-302	2016 12 03	4.5	15	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	31	< 50	< 50	-	< 0.10
EXC16-3A-303	EXC16-3A-303	2016 12 03	7.5	30	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-3A-D28	Duplicate	7.5	30	< 0.0050	< 0.010	0.050	0.11	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-3A-304	EXC16-3A-304	2016 12 03	6.5	25	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-305	EXC16-3A-305	2016 12 03	5.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-3A-D29	Duplicate	5.5	25	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-3A-306	EXC16-3A-306	2016 12 03	4.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-307	EXC16-3A-307	2016 12 03	6.0	25	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-3A-D30	Duplicate	6.0	25	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-3A-308	EXC16-3A-308	2016 12 04	7.5	20	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	870	< 100	< 10	***590***	170	< 50	-	< 0.10
EXC16-3A-309	EXC16-3A-309	2016 12 04	6.5	15	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	51	< 50	< 50	-	< 0.10
EXC16-3A-310	EXC16-3A-310	2016 12 04	5.5	20	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	38	340	< 100	26	***240***	110	< 50	-	< 0.10
EXC16-3A-311	EXC16-3A-311	2016 12 04	4.5	10	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	70	340	< 100	***77***	***270***	51	< 50	-	< 0.10
EXC16-3A-312	EXC16-3A-312	2016 12 04	8.0	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	7.1	1,000	< 100	< 10	***800***	210	< 50	-	< 0.10
	EXC16-3A-D31	Duplicate	8.0	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	990	< 100	< 10	***780***	210	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	1	*	*	3	*	*	-	*
EXC16-3A-313	EXC16-3A-313	2016 12 04	8.0	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	520	< 100	< 10	***350***	140	< 50	-	< 0.10
EXC16-3A-314	EXC16-3A-314	2016 12 04	7.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	63	< 50	< 50	-	< 0.10
EXC16-3A-315	EXC16-3A-315	2016 12 04	6.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-316	EXC16-3A-316	2016 12 04	8.0	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	260	< 100	< 10	***220***	< 50	< 50	-	< 0.10
EXC16-3A-324	EXC16-3A-324	2016 12 05	7.5	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	680	< 100	< 10	***480***	110	< 50	-	< 0.10
EXC16-3A-325	EXC16-3A-325	2016 12 05	6.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	18	130	< 100	< 10	73	< 50	< 50	-	< 0.10
EXC16-3A-326	EXC16-3A-326	2016 12 05	5.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-327	EXC16-3A-327	2016 12 05	4.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-328	EXC16-3A-328	2016 12 05	8.0	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	16	1,000	< 100	< 10	***730***	130	< 50	-	< 0.10
EXC16-3A-334	EXC16-3A-334	2016 12 05	8.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-335	EXC16-3A-335	2016 12 05	7.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-336	EXC16-3A-336	2016 12 05	8.0	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-3A-D33	Duplicate	8.0	15	< 0.0050	< 0.010	0.034	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-3A-337	EXC16-3A-337	2016 12 05	7.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	31	< 50	< 50	-	< 0.10
EXC16-3A-338	EXC16-3A-338	2016 12 05	6.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-341	EXC16-3A-341	2016 12 07	3.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-3A-D35	Duplicate	3.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-3A-342	EXC16-3A-342	2016 12 07	2.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	23	220	< 100	14	***160***	71	< 50	-	< 0.10
EXC16-3A-343	EXC16-3A-343	2016 12 07	1.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	300	300	< 10	***170***	***320***	230	-	< 0.10
EXC16-3A-344	EXC16-3A-344	2016 12 07	0.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	20	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-345	EXC16-3A-345	2016 12 07	3.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	30	**2,300**	170	***40***	***1,700***	440	< 50	-	< 0.10
EXC16-3A-346	EXC16-3A-346	2016 12 07	2.5	20	< 0.0050	< 0.010	0.041	< 0.040	< 0.030	14	250	< 100	12	***190***	< 50	< 50	-	< 0.10
EXC16-3A-347	EXC16-3A-347	2016 12 07	1.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	410	110	< 10	***310***	170	< 50	-	< 0.10
EXC16-3A-348	EXC16-3A-348	2016 12 07	0.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	61	**2,000**	260	***73***	***1,500***	***500***	83	-	< 0.10
EXC16-3A-349	EXC16-3A-349	2016 12 07	3.5	15	< 0.0050	< 0.010	0.036	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-350	EXC16-3A-350	2016 12 07	2.5	25	< 0.0050	< 0.010	0.033	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-351	EXC16-3A-351	2016 12 07	1.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-3A-D36	Duplicate	1.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-3A-352	EXC16-3A-352	2016 12 07	0.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-353	EXC16-3A-353	2016 12 07	3.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	440	760	< 10	150	900	260	-	< 0.10
EXC16-3A-354	EXC16-3A-354	2016 12 07	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	140	260	< 10	46	320	99	-	< 0.10
EXC16-3A-355	EXC16-3A-355	2016 12 07	1.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	15	96	< 50	-	< 0.10
EXC16-3A-356	EXC16-3A-356	2016 12 07	0.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	660	**1,700**	< 10	***180***	***1,900***	600	-	< 0.10
EXC16-3A-357	EXC16-3A-357	2016 12 07	3.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	65	1,900	< 100	***90***	***1,700***	160	< 50	-	< 0.10
EXC16-3A-358	EXC16-3A-358	2016 12 07	2.5	10	< 0.0050	< 0.010	0.044	< 0.040	< 0.030	< 7.0	540	< 100	< 10	***390***	74	< 50	-	< 0.10
EXC16-3A-359	EXC16-3A-359	2016 12 07	1.5	20	< 0.0050	< 0.010	0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-3A-D37	Duplicate	1.5	20	< 0.0050	< 0.010	0.038	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-3A-360	EXC16-3A-360	2016 12 07	0.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	9.1	< 100	< 100	< 10	13	< 50	< 50	-	< 0.10
EXC16-3A-361	EXC16-3A-361	2016 12 07	3.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-362	EXC16-3A-362	2016 12 07	2.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-363	EXC16-3A-363	2016 12 07	1.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	28	< 50	< 50	-	< 0.10
EXC16-3A-364	EXC16-3A-364	2016 12 07	0.5	110	< 0.0050	***0.17***	< 0.020	0.44	< 0.030	31	140	750	***38***	88	***770***	540	-	< 0.10
	EXC16-3A-D38	Duplicate	0.5	110	< 0.0050	***0.14***	< 0.020	0.41	< 0.030	90	120	540	***130***	75	***550***	390	-	< 0.10
	QA/QC RPD%				*	19	*	7	*	*	*	33	*	16	33	32	-	*
EXC16-3A-365	EXC16-3A-365	2016 12 07	3.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-366	EXC16-3A-366	2016 12 07	2.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-367	EXC16-3A-367	2016 12 07	1.5	15	< 0.0050	< 0.010	0.038	0.34	< 0.030	**360**	550	< 100	***390***	***440***	110	< 50	-	< 0.10
EXC16-3A-368	EXC16-3A-368	2016 12 07	0.5	100	< 0.0050	< 0.010	0.041	0.78	< 0.030	**810**	**1,600**	220	***890***	***1,200***	***360***	76	-	< 0.10
	EXC16-3A-D39[d]	Duplicate	0.5	100	< 0.0050	< 0.010	< 0.020	0.38	< 0.030	120	**4,600**	250	***140***	***3,700***	***520***	83	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	97	*	*	102	36	*	-	*
Federal Guideline/Standard																		
CCME CEQG/CWS Residential Coarse-Grained Surface (< 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (> 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	10,000	n/a
BC Standard																		
CSR Residential Land Use (RL) (< 3.0m)[c]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (> 3.0m)[c]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

RPD Denotes relative percent difference.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[b] Pathways Included: Direct Contact, Eco Soil Contact, Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.

[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[d] BETX/VPH/F1 analysis from soil jar, not methanol-preserved vial; results could be biased low.

TABLE 2 (Cont'd): Summary of Analytical Results for Soil - Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions					MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19) µg/g	HEPH (C19-C32) µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	F4G (>C50) µg/g	MTBE µg/g
Excavation Area 3B																		
EXC16-3B-130	EXC16-3B-130	2016 11 17	0.3	30	0.0099	< 0.010	0.080	< 0.040	< 0.030	< 10	< 100	180	< 10	12	230	110	-	< 0.10
EXC16-3B-131	EXC16-3B-131	2016 11 17	0.3	20	< 0.0050	< 0.010	0.024	< 0.040	< 0.030	< 10	< 100	450	< 10	14	***530***	290	-	< 0.10
EXC16-3B-132	EXC16-3B-132	2016 11 17	0.3	40	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	160	< 10	16	200	61	-	< 0.10
EXC16-3B-133	EXC16-3B-133	2016 11 17	0.3	10	0.0052	< 0.010	0.024	< 0.040	< 0.030	< 10	150	550	< 10	50	***680***	450	-	< 0.10
EXC16-3B-134	EXC16-3B-134	2016 11 17	0.3	30	< 0.0050	0.010	< 0.020	0.17	< 0.030	< 10	150	< 100	< 10	96	150	27	-	< 0.10
EXC16-3B-136	EXC16-3B-136	2016 11 17	0.5	-	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	120	< 10	15	120	58	-	< 0.10
EXC16-3B-137	EXC16-3B-137	2016 11 17	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	67	32	-	< 0.10
EXC16-3B-138	EXC16-3B-138	2016 11 17	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	110	48	-	< 0.10
EXC16-3B-139	EXC16-3B-139	2016 11 17	0.6	10	0.012	0.014	0.029	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-3B-163	EXC16-3B-163	2016 11 17	0.3	15	0.0095	< 0.010	0.071	< 0.040	< 0.030	< 10	< 100	450	< 10	15	***450***	240	-	< 0.10
EXC16-3B-317	EXC16-3B-317	2016 12 05	1.8	15	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3B-318	EXC16-3B-318	2016 12 05	0.3	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3B-319	EXC16-3B-319	2016 12 05	1.8	15	< 0.0050	< 0.010	0.026	0.11	< 0.030	< 7.0	260	< 100	< 10	150	110	< 50	-	< 0.10
EXC16-3B-320	EXC16-3B-320	2016 12 05	1.8	15	0.0086	***0.15***	***0.28***	**8.4**	< 0.030	110	**3,100**	1,000	***120***	***1,900***	1,500	330	-	< 0.10
EXC16-3B-321	EXC16-3B-321	2016 12 05	2.0	25	< 0.0050	< 0.010	0.052	***15***	< 0.030	100	1,000	130	***150***	***680***	280	< 50	-	< 0.10
EXC16-3B-322	EXC16-3B-322	2016 12 05	2.0	50	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3B-323	EXC16-3B-323	2016 12 05	1.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3B-329	EXC16-3B-329	2016 12 05	1.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	240	130	< 10	130	180	< 50	-	< 0.10
EXC16-3B-330	EXC16-3B-330	2016 12 05	0.5	110	***0.36***	***6.2***	***6.2***	***99***	< 0.030	**2,100**	**38,000**	**8,900**	***2,300***	***23,000***	***17,000***	1,200	-	< 0.10
	EXC16-3B-D32	Duplicate	0.5	110	***0.42***	***6.5***	***7.0***	***100***	< 0.030	**1,800**	**32,000**	**7,600**	***2,000***	***20,000***	***15,000***	1,100	-	< 0.10
	QA/QC RPD%				15	5	12	1	*	15	17	16	14	14	12	9	-	*
EXC16-3B-331	EXC16-3B-331	2016 12 05	1.5	55	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	34	100	< 50	-	< 0.10
EXC16-3B-332	EXC16-3B-332	2016 12 05	0.5	40	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	7.3	**6,500**	**3,900**	< 10	***2,700***	***6,400***	200	-	< 0.10
EXC16-3B-333	EXC16-3B-333	2016 12 05	1.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
Excavation Area 3C																		
EXC16-3C-233	EXC16-3C-233	2016 11 22	3.5	45	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	17	-	< 0.10
EXC16-3C-234	EXC16-3C-234	2016 11 22	2.5	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-3C-237	EXC16-3C-237	2016 11 22	3.5	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
	EXC16-3C-D24	Duplicate	3.5	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-3C-238	EXC16-3C-238	2016 11 22	2.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-3C-239	EXC16-3C-239	2016 11 22	1.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-3C-240	EXC16-3C-240	2016 11 22	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-3C-262	EXC16-3C-262	2016 11 24	3.5	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-263	EXC16-3C-263	2016 11 24	2.5	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-264	EXC16-3C-264	2016 11 24	1.5	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-265	EXC16-3C-265	2016 11 24	0.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	110	< 10	< 10	94	51	-	< 0.10
EXC16-3C-266	EXC16-3C-266	2016 11 24	3.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-267	EXC16-3C-267	2016 11 24	2.5	45	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-268	EXC16-3C-268	2016 11 24	1.5	40	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	12	< 100	< 100	14	< 10	< 50	< 50	-	< 0.10
EXC16-3C-270	EXC16-3C-270	2016 11 24	3.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-271	EXC16-3C-271	2016 11 24	2.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-272	EXC16-3C-272	2016 11 24	1.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-273	EXC16-3C-273	2016 11 24	0.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-274	EXC16-3C-274	2016 11 24	3.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-275	EXC16-3C-275	2016 11 24	2.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-276	EXC16-3C-276	2016 11 24	1.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-277	EXC16-3C-277	2016 11 24	0.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-286	EXC16-3C-286	2016 12 03	0.5	-	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-339	EXC16-3C-339	2016 12 06	1.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	200	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-3C-D34	Duplicate	1.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-3C-340	EXC16-3C-340	2016 12 06	0.3	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	51	< 50	-	< 0.10
EXC16-3C-369	EXC16-3C-369	2016 12 08	8.0	20	< 0.0050	< 0.010	0.031	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-370	EXC16-3C-370	2016 12 08	7.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-371	EXC16-3C-371	2016 12 08	6.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-372	EXC16-3C-372	2016 12 08	5.5	10	< 0.0050	< 0.010	0.028	0.069	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-373	EXC16-3C-373	2016 12 08	4.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-375	EXC16-3C-375	2016 12 08	7.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-3C-D40	Duplicate	7.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-3C-376	EXC16-3C-376	2016 12 08	6.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-377	EXC16-3C-377	2016 12 08	5.5	20	< 0.0050	< 0.010	0.023	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-378	EXC16-3C-378	2016 12 08	4.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-379	EXC16-3C-379	2016 12 08	7.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-380	EXC16-3C-380	2016 12 08	6.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-381	EXC16-3C-381	2016 12 08	5.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-382	EXC16-3C-382	2016 12 08	4.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-383	EXC16-3C-383	2016 12 08	8.0	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-384	EXC16-3C-384	2016 12 08	7.5	0	< 0.0050	< 0.010	0.031	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	27	63	< 50	-	< 0.10
EXC16-3C-385	EXC16-3C-385	2016 12 08	6.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	510	170	< 10	***260***	320	< 50	-	< 0.10
EXC16-3C-386	EXC16-3C-386	2016 12 08	5.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	1,300	500	< 10	***760***	980	97	-	< 0.10
	EXC16-3C-D41	Duplicate	5.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	1,100	400	< 10	***620***	750	65	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	17	*	*	20	27	*	-	*
EXC16-3C-387	EXC16-3C-387	2016 12 08	4.5	0	< 0.0050	< 0.010	0.021	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-388	EXC16-3C-388	2016 12 10	8.0	45	< 0.0050	< 0.010	0.060	0.098	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-389	EXC16-3C-389	2016 12 10	7.5	25	< 0.0050	< 0.010	***0.25***	0.15	< 0.030	< 7.0	240	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-390	EXC16-3C-390	2016 12 10	6.5	0	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	260	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-391	EXC16-3C-391	2016 12 10	5.5	0	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-392	EXC16-3C-392	2016 12 10	4.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-393	EXC16-3C-393	2016 12 10	7.5	40	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	230	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-394	EXC16-3C-394	2016 12 10	6.5	20	< 0.0050	< 0.010	< 0.040	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-395	EXC16-3C-395	2016 12 10	5.5	20	< 0.0050	< 0.010	0.036	< 0.040	< 0.030	< 7.0	210	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-396	EXC16-3C-396	2016 12 10	4.5	10	< 0.0050	< 0.010	0.054	0.16	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3C-397	EXC16-3C-397	2016 12 10	8.5	350	< 0.0050	0.029	0.030	***28***	< 0.030	190	1,600	< 100	***260***	***1,200***	210	< 50	-	< 0.10
Federal Guideline/Standard																		
CCME CEQG/CWS Residential Coarse-Grained Surface (< 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (> 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	10,000	n/a
BC Standard																		
CSR Residential Land Use (RL) (< 3.0m)[c]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (> 3.0m)[c]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

RPD Denotes relative percent difference.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[b] Pathways Included: Direct Contact, Eco Soil Contact, Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.

[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[d] BETX/VPH/F1 analysis from soil jar, not methanol-preserved vial; results could be biased low.

TABLE 2 (Cont'd): Summary of Analytical Results for Soil - Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions					MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19) µg/g	HEPH (C19-C32) µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	F4G (>C50) µg/g	MTBE µg/g
Excavation Area 3C																		
EXC16-3C-398	EXC16-3C-398	2016 12 10	7.5	470	0.016	< 0.020	***0.14***	***270***	< 0.030	**1,000**	**3,600**	< 100	***1,500***	***2,800***	180	< 50	-	< 0.10
EXC16-3C-399	EXC16-3C-399	2016 12 10	6.5	550	< 0.010	< 0.020	***0.22***	***300***	< 0.030	**1,000**	**4,300**	350	***1,200***	***2,600***	660	< 50	-	< 0.10
	EXC16-3C-D42	Duplicate	6.5	550	0.012	< 0.020	***0.21***	***280***	< 0.030	**780**	**4,000**	290	***1,100***	***3,100***	690	< 50	-	< 0.10
	QA/QC RPD%				*	*	5	7	*	25	7	*	9	18	4	*	-	*
EXC16-3C-400	EXC16-3C-400	2016 12 10	5.5	100	< 0.0050	0.016	0.079	3.7	< 0.030	37	270	< 100	***44***	***180***	110	< 50	-	< 0.10
EXC16-3C-401	EXC16-3C-401	2016 12 10	4.5	160	0.011	0.058	***1.2***	***130***	< 0.030	**1,000**	1,700	210	***1,300***	***1,200***	440	< 50	-	< 0.10
Excavation Area 3D																		
EXC16-3D-278	EXC16-3D-278	2016 11 24	0.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3D-279	EXC16-3D-279	2016 11 24	0.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3D-280	EXC16-3D-280	2016 11 24	0.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	53	< 50	-	< 0.10
EXC16-3D-281	EXC16-3D-281	2016 11 24	1.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3D-282	EXC16-3D-282	2016 11 24	1.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3D-283	EXC16-3D-283	2016 11 24	1.5	65	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3D-284	EXC16-3D-284	2016 11 24	1.5	70	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
Excavation Area 5																		
EXC16-5-001	EXC16-5-001	2016 11 08	3.0	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-002	EXC16-5-002	2016 11 08	2.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-003	EXC16-5-003	2016 11 08	1.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	9.8	< 100	< 100	10	27	< 50	< 50	-	< 0.10
EXC16-5-004	EXC16-5-004	2016 11 08	0.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	35	< 100	< 100	***42***	46	< 50	< 50	-	< 0.10
EXC16-5-005	EXC16-5-005	2016 11 08	3.0	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-006	EXC16-5-006	2016 11 08	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-007	EXC16-5-007	2016 11 08	1.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-008	EXC16-5-008	2016 11 08	0.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-009	EXC16-5-009	2016 11 10	2.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-010	EXC16-5-010	2016 11 10	1.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-011	EXC16-5-011	2016 11 10	0.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	7.6	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-012	EXC16-5-012	2016 11 10	2.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-013	EXC16-5-013	2016 11 10	1.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	7.5	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-014	EXC16-5-014	2016 11 10	0.5	60	< 0.0050	< 0.010	< 0.020	0.13	< 0.030	9.5	650	1,000	< 10	***260***	***1,200***	780	***4,200***	< 0.10
	EXC16-5-D1	Duplicate	0.5	60	0.023	***0.20***	***0.32***	2.6	< 0.030	76	790	**1,500**	***88***	***330***	***1,900***	1,300	***6,300***	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	19	40	*	24	45	50	40	*
EXC16-5-015	EXC16-5-015	2016 11 10	2.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	52	54	-	< 0.10
EXC16-5-016	EXC16-5-016	2016 11 10	1.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	7.6	< 100	210	< 10	< 10	180	130	-	< 0.10
EXC16-5-017	EXC16-5-017	2016 11 10	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	17	360	**1,300**	< 10	56	***1,200***	890	***4,600***	< 0.10
EXC16-5-018	EXC16-5-018	2016 11 10	2.5	10	< 0.0050	< 0.010	0.031	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-019	EXC16-5-019	2016 11 10	1.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	8.2	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-5-D2	Duplicate	1.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	62	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-5-020	EXC16-5-020	2016 11 10	0.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-021	EXC16-5-021	2016 11 10	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-022	EXC16-5-022	2016 11 10	1.5	5	< 0.0050	< 0.010	0.030	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-023	EXC16-5-023	2016 11 10	0.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	33	**1,300**	**4,300**	29	***860***	***4,900***	1,000	***7,600***	< 0.10
EXC16-5-024	EXC16-5-024	2016 11 10	2.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-025	EXC16-5-025	2016 11 10	1.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-026	EXC16-5-026	2016 11 10	0.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-027	EXC16-5-027	2016 11 10	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-028	EXC16-5-028	2016 11 10	1.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-029	EXC16-5-029	2016 11 10	0.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-030	EXC16-5-030	2016 11 10	2.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	60	< 50	< 50	-	< 0.10
	EXC16-5-D3	Duplicate	2.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	52	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	14	*	*	-	*
EXC16-5-031	EXC16-5-031	2016 11 10	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-032	EXC16-5-032	2016 11 10	0.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	200	< 10	23	180	99	-	< 0.10
EXC16-5-033	EXC16-5-033	2016 11 10	2.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-034	EXC16-5-034	2016 11 10	1.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-035	EXC16-5-035	2016 11 10	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	12	**2,500**	280	18	***1,800***	***510***	64	-	< 0.10
EXC16-5-036	EXC16-5-036	2016 11 10	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-037	EXC16-5-037	2016 11 10	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-038	EXC16-5-038	2016 11 10	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-039	EXC16-5-039	2016 11 10	2.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-040	EXC16-5-040	2016 11 10	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-041	EXC16-5-041	2016 11 10	0.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-043	EXC16-5-043	2016 11 10	3.0	10	< 0.0050	< 0.010	< 0.020	0.048	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-045	EXC16-5-045	2016 11 10	3.0	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-046	EXC16-5-046	2016 11 10	3.0	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-047	EXC16-5-047	2016 11 10	3.0	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	EXC16-5-D4	Duplicate	3.0	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-	*
EXC16-5-048	EXC16-5-048	2016 11 10	3.0	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-049	EXC16-5-049	2016 11 10	3.0	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-050	EXC16-5-050	2016 11 10	3.0	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-051	EXC16-5-051	2016 11 10	3.0	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	250	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-052	EXC16-5-052	2016 11 10	3.0	10	< 0.0050	< 0.010	0.035	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-053	EXC16-5-053	2016 11 10	3.0	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-5-197	EXC16-5-197	2016 11 20	1.5	40	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	760	**2,700**	< 10	***370***	***2,600***	1,900	-	< 0.10
EXC16-5-285	EXC16-5-285	2016 11 24	4.0	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
Federal Guideline/Standard																		
CCME CEQG/CWS Residential Coarse-Grained Surface (< 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (> 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	10,000	n/a
BC Standard																		
CSR Residential Land Use (RL) (< 3.0m)[c]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (> 3.0m)[c]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

RPD Denotes relative percent difference.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[b] Pathways Included: Direct Contact, Eco Soil Contact, Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.

[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[d] BETX/VPH/F1 analysis from soil jar, not methanol-preserved vial; results could be biased low.

TABLE 3: Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																			
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
Excavation Area 1																								
EXC16-1-096	EXC16-1-096	2016 11 13	2.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-097	EXC16-1-097	2016 11 13	1.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
	EXC16-1-D9	Duplicate	1.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-098	EXC16-1-098	2016 11 13	0.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-099	EXC16-1-099	2016 11 13	2.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-100	EXC16-1-100	2016 11 13	1.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-101	EXC16-1-101	2016 11 13	0.5	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-102	EXC16-1-102	2016 11 13	2.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-103	EXC16-1-103	2016 11 13	1.5	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-104	EXC16-1-104	2016 11 13	0.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-105	EXC16-1-105	2016 11 13	2.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-106	EXC16-1-106	2016 11 13	1.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
	EXC16-1-D10	Duplicate	1.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-107	EXC16-1-107	2016 11 13	0.5	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-111	EXC16-1-111	2016 11 13	2.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-112	EXC16-1-112	2016 11 13	1.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-113	EXC16-1-113	2016 11 13	0.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-114	EXC16-1-114	2016 11 13	2.5	0	< 0.0050	0.0060	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-115	EXC16-1-115	2016 11 13	1.5	0	< 0.0050	< 0.0050	0.0056	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-116	EXC16-1-116	2016 11 13	0.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
	EXC16-1-D11	Duplicate	0.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-117	EXC16-1-117	2016 11 13	2.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
	EXC16-1-D12	Duplicate	2.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-118	EXC16-1-118	2016 11 13	1.5	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-119	EXC16-1-119	2016 11 13	0.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-120	EXC16-1-120	2016 11 14	2.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-121	EXC16-1-121	2016 11 14	1.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-122	EXC16-1-122	2016 11 14	0.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-123	EXC16-1-123	2016 11 14	3.0	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-125	EXC16-1-125	2016 11 14	3.0	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-126	EXC16-1-126	2016 11 14	2.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-127	EXC16-1-127	2016 11 14	1.5	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-128	EXC16-1-128	2016 11 14	0.5	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-142	EXC16-1-142	2016 11 16	3.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-143	EXC16-1-143	2016 11 16	3.5	20	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-144	EXC16-1-144	2016 11 16	3.5	30	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-145	EXC16-1-145	2016 11 16	2.5	30	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-146	EXC16-1-146	2016 11 16	1.5	20	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-147	EXC16-1-147	2016 11 16	0.5	40	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-148	EXC16-1-148	2016 11 16	3.0	70	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-149	EXC16-1-149	2016 11 16	2.5	40	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-150	EXC16-1-150	2016 11 16	1.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
Federal Guideline																								
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																								
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Most stringent guideline applied.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Laboratory detection limit exceeds regulatory standard/guideline.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 3 (Cont'd): Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
Excavation Area 1																									
EXC16-1-151	EXC16-1-151	2016 11 16	0.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-152	EXC16-1-152	2016 11 16	2.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-153	EXC16-1-153	2016 11 16	1.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-154	EXC16-1-154	2016 11 16	0.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-155	EXC16-1-155	2016 11 16	2.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-156	EXC16-1-156	2016 11 16	1.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-157	EXC16-1-157	2016 11 16	0.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-158	EXC16-1-158	2016 11 17	4.0	35	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-159	EXC16-1-159	2016 11 17	4.0	20	< 0.010	< 0.020	< 0.0050	0.12	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-160	EXC16-1-160	2016 11 17	4.0	20	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-165	EXC16-1-165	2016 11 18	5.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-166	EXC16-1-166	2016 11 18	4.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-167	EXC16-1-167	2016 11 18	3.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-168	EXC16-1-168	2016 11 18	5.5	20	< 0.0050	0.0072	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-1-D16	Duplicate	5.5	20	0.0057	0.013	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-169	EXC16-1-169	2016 11 18	4.5	10	< 0.0050	0.016	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-170	EXC16-1-170	2016 11 18	3.5	10	< 0.0050	0.024	0.013	< 0.0050	0.0063	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-171	EXC16-1-171	2016 11 18	5.5	20	0.0070	0.025	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-172	EXC16-1-172	2016 11 18	4.5	10	0.0057	0.017	< 0.0050	< 0.0050	< 0.0050	0.0061	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-177	EXC16-1-177	2016 11 18	3.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-178	EXC16-1-178	2016 11 18	3.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-1-D18	Duplicate	3.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-179	EXC16-1-179	2016 11 19	5.5	30	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-180	EXC16-1-180	2016 11 19	4.5	20	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-184	EXC16-1-184	2016 11 19	5.5	5	< 0.0050	0.017	0.013	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-185	EXC16-1-185	2016 11 19	4.5	5	***0.014***	< 0.031	0.015	< 0.0050	0.019	0.0073	0.041	< 0.015	0.080	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-186	EXC16-1-186	2016 11 19	3.5	25	***0.52***	2.1	0.042	0.12	***0.30***	***0.62***	0.055	< 0.0080	0.040	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-190	EXC16-1-190	2016 11 19	5.5	30	< 0.056[a]	0.012	0.032	< 0.035	0.053	< 0.0050	0.021	< 0.0050	0.036	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-191	EXC16-1-191	2016 11 19	4.5	20	***0.025***	< 0.0050	0.022	0.068	0.036	< 0.0062	0.016	< 0.0050	0.024	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-192	EXC16-1-192	2016 11 19	3.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-193	EXC16-1-193	2016 11 19	2.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-194	EXC16-1-194	2016 11 19	1.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-195	EXC16-1-195	2016 11 19	0.5	30	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-1-D20	Duplicate	0.5	30	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-198	EXC16-1-198	2016 11 20	3.0	40	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
	EXC16-1-D21	Duplicate	3.0	40	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
EXC16-1-199	EXC16-1-199	2016 11 20	2.5	35	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-200	EXC16-1-200	2016 11 20	5.5	25	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
Federal Guideline																								
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																								
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Most stringent guideline applied.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Laboratory detection limit exceeds regulatory standard/guideline.

TABLE 3 (Cont'd): Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
Excavation Area 1																									
EXC16-1-201	EXC16-1-201	2016 11 20	4.5	25	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-202	EXC16-1-202	2016 11 20	3.5	25	***0.015***	0.070	< 0.0050	< 0.0050	< 0.020	0.015	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-203	EXC16-1-203	2016 11 20	5.5	30	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-204	EXC16-1-204	2016 11 20	4.5	25	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-205	EXC16-1-205	2016 11 20	3.5	35	***0.046***	0.084	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
	EXC16-1-D22	Duplicate	3.5	35	***0.069***	0.13	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
	QA/QC RPD%				40	43	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
EXC16-1-206	EXC16-1-206	2016 11 20	5.5	30	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-207	EXC16-1-207	2016 11 20	4.5	20	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-208	EXC16-1-208	2016 11 20	3.5	20	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-209	EXC16-1-209	2016 11 20	5.5	20	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-210	EXC16-1-210	2016 11 20	4.5	15	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-211	EXC16-1-211	2016 11 20	3.5	20	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-214	EXC16-1-214	2016 11 21	6.0	40	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-216	EXC16-1-216	2016 11 21	2.5	20	***0.067***	0.29	< 0.0050	< 0.0050	0.055	***0.059***	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-217	EXC16-1-217	2016 11 21	1.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-218	EXC16-1-218	2016 11 21	0.5	15	***0.041***	0.21	< 0.0050	0.012	0.039	***0.065***	< 0.0040	0.055	0.036	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-219	EXC16-1-219	2016 11 21	2.5	15	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-220	EXC16-1-220	2016 11 21	2.5	25	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-221	EXC16-1-221	2016 11 21	2.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-223	EXC16-1-223	2016 11 21	2.5	15	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-226	EXC16-1-226	2016 11 21	3.0	15	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-227	EXC16-1-227	2016 11 21	3.0	35	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-402	EXC16-1-402	2016 12 12	8.0	20	***0.050***	0.25	0.062	0.19	***0.30***	***0.16***	0.034	< 0.0050	0.023	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-403	EXC16-1-403	2016 12 12	8.0	10	< 0.0050	0.015	0.030	0.019	0.018	< 0.0050	0.016	< 0.0050	0.019	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-404	EXC16-1-404	2016 12 12	8.0	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-405	EXC16-1-405	2016 12 12	8.0	20	0.0057	0.027	0.041	0.026	0.070	< 0.0050	0.062	< 0.0050	0.033	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-406	EXC16-1-406	2016 12 12	8.0	35	***0.16***	0.14	< 0.14	0.11	0.18	< 0.050[d]	0.24	< 0.050	0.12	< 0.050	< 0.050	-	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.10	0.59
EXC16-1-407	EXC16-1-407	2016 12 12	8.0	35	< 0.0050	0.011	0.034	0.019	0.018	< 0.0050	0.021	< 0.0050	0.033	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-1-D43	Duplicate	8.0	35	< 0.0050	0.011	0.035	0.013	0.013	< 0.0050	0.020	< 0.0050	0.033	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				*	*	3	*	*	*	5	*	0	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-408	EXC16-1-408	2016 12 13	7.5	5	***0.054***	0.35	0.013	0.022	0.022	***0.051***	0.0059	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-409	EXC16-1-409	2016 12 13	6.5	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-410	EXC16-1-410	2016 12 13	5.5	20	< 0.0050	0.031	< 0.0050	< 0.0050	< 0.0050	0.016	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-411	EXC16-1-411	2016 12 13	4.5	10	***1.1***	5.9	0.089	0.21	0.079	***0.43***	0.020	< 0.0050	0.0096	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-412	EXC16-1-412	2016 12 13	4.0	25	***2.4***	13	0.11	0.22	0.061	***0.73***	0.024	< 0.0050	0.013	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-413	EXC16-1-413	2016 12 13	7.5	20	***0.58***	4.1	0.11	0.23	0.10	***0.68***	0.032	< 0.0050	0.023	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-414	EXC16-1-414	2016 12 13	6.5	20	***1.8***	13	0.21	***0.43***	0.21	***0.56***	0.024	< 0.0050	0.011	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-415	EXC16-1-415	2016 12 13	5.5	25	***2.7***	16	0.19	***0.44***	0.22	***0.87***	0.038	< 0.0050	0.022	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-416	EXC16-1-416	2016 12 13	4.5	20	***0.99***	4.6	0.069	0.16	0.051	***0.36***	0.016	< 0.0050	0.0090	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-417	EXC16-1-417	2016 12 13	7.5	10	***0.026***	0.24	0.0056	0.010	0.0090	0.046	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-418	EXC16-1-418	2016 12 13	6.5	10	***0.41***	3.6	0.071	0.14	0.11	***0.45***	0.021	< 0.0050	0.014	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-419	EXC16-1-419	2016 12 13	5.5	10	***0.31***	2.2	0.034	0.077	0.048	***0.21***	0.0087	< 0.0050	0.0063	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-420	EXC16-1-420	2016 12 13	4.5	5	***0.018***	0.23	0.0080	0.012	0.011	***0.052***	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-421	EXC16-1-421	2016 12 13	3.5	5	< 0.0050	0.017	< 0.0050	< 0.0050	< 0.0050	0.0060	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-422	EXC16-1-422	2016 12 13	7.5	5	***0.066***	0.042	0.014	0.062	0.068	0.029	0.19	0.014	0.096	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-423	EXC16-1-423	2016 12 13	6.5	20	< 0.0050	0.023	0.021	0.013	0.036	< 0.0050	0.039	< 0.0050	0.10	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
Federal Guideline																								
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																								
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Most stringent guideline applied.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Laboratory detection limit exceeds regulatory standard/guideline.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 3 (Cont'd): Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
Excavation Area 1																									
EXC16-1-424	EXC16-1-424	2016 12 13	7.5	15	***0.15***	0.12	0.021	0.16	0.10	< 0.0050	0.062	< 0.0050	0.015	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-425	EXC16-1-425	2016 12 13	6.5	20	***0.20***	0.13	< 0.033	0.18	0.12	0.0092	0.056	< 0.0050	0.010	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-426	EXC16-1-426	2016 12 13	2.5	160	***3.1***	13	0.18	***0.55***	***1.1***	***2.0***	0.16	0.015	0.11	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-1-D44	Duplicate	2.5	160	***3.8***	15	0.21	***0.60***	***1.3***	***2.2***	0.15	0.013	0.12	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				20	14	15	9	17	10	6	*	9	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-427	EXC16-1-427	2016 12 13	1.5	130	***16***	31	0.76	***1.6***	***3.5***	***3.4***	0.29	0.018	0.18	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-1-D45	Duplicate	1.5	130	***13***	35	0.55	***1.5***	***3.4***	***3.6***	0.39	< 0.050	0.19	< 0.050	< 0.050	-	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.10	0.59
	QA/QC RPD%				21	12	32	6	3	6	29	*	5	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-428	EXC16-1-428	2016 12 13	0.5	65	***12***	4.2	0.71	***2.5***	***4.9***	***2.6***	0.24	0.014	0.17	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-429	EXC16-1-429	2016 12 13	7.5	10	0.0091	0.022	0.015	0.024	0.0080	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-430	EXC16-1-430	2016 12 13	6.5	5	0.0097	0.022	0.017	0.029	0.010	< 0.0050	0.0072	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-431	EXC16-1-431	2016 12 14	7.5	15	***0.46***	3.6	0.082	0.028	0.048	***0.24***	< 0.0040	< 0.0050	0.0065	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-432	EXC16-1-432	2016 12 14	6.5	15	***0.24***	2.3	0.054	0.030	0.0094	***0.19***	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-433	EXC16-1-433	2016 12 14	7.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-434	EXC16-1-434	2016 12 14	6.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-435	EXC16-1-435	2016 12 14	7.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-436	EXC16-1-436	2016 12 14	6.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-457	EXC16-1-457	2016 12 15	7.5	10	< 0.0050	0.041	< 0.0050	< 0.0050	< 0.0050	0.032	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-458	EXC16-1-458	2016 12 15	6.5	0	< 0.0050	0.022	< 0.0050	< 0.0050	< 0.0050	0.013	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-459	EXC16-1-459	2016 12 16	7.5	20	< 0.0050	0.0070	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-1-D48	Duplicate	7.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-460	EXC16-1-460	2016 12 16	6.5	5	< 0.0050	0.0070	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-461	EXC16-1-461	2016 12 16	6.2	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-462	EXC16-1-462	2016 12 16	7.5	5	< 0.0050	0.0087	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-463	EXC16-1-463	2016 12 16	6.5	5	< 0.0050	0.0067	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-464	EXC16-1-464	2016 12 16	6.2	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-465	EXC16-1-465	2016 12 16	4.8	0	< 0.0050	< 0.0050	0.0072	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-466	EXC16-1-466	2016 12 16	3.5	5	< 0.0050	< 0.0050	0.012	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-467	EXC16-1-467	2016 12 16	3.2	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-468	EXC16-1-468	2016 12 16	3.2	5	< 0.0050	0.0091	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-469	EXC16-1-469	2016 12 16	2.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-470	EXC16-1-470	2016 12 16	2.5	0	***0.016***	0.045	0.028	0.0065	< 0.0050	0.011	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-471	EXC16-1-471	2016 12 16	1.5	10	***0.033***	0.039	0.055	0.022	0.012	***0.21***	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-472	EXC16-1-472	2016 12 16	0.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-473	EXC16-1-473	2016 12 16	6.2	10	***0.017***	0.045	< 0.0050	< 0.0050	0.0057	0.0088	< 0.0040	< 0.0050	0.0058	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-1-D49	Duplicate	6.2	10	0.0090	0.042	< 0.0050	< 0.0050	0.0056	0.0059	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				*	7	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-474	EXC16-1-474	2016 12 17	1.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	0.0063	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-475	EXC16-1-475	2016 12 17	0.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-476	EXC16-1-476	2016 12 17	1.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-477	EXC16-1-477	2016 12 17	0.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-478	EXC16-1-478	2016 12 17	1.3	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-479	EXC16-1-479	2016 12 17	0.3	15	0.0092	0.025	< 0.0050	< 0.0050	< 0.0050	0.013	0.028	< 0.0050	0.0073	< 0.0050	< 0.0050	-	0.0076	< 0.0050	< 0.0050	0.0063	< 0.0050	0.012	< 0.10	< 0.10
EXC16-1-480	EXC16-1-480	2016 12 17	1.8	60	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-1-D50	Duplicate	1.8	60	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
Federal Guideline																									
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Most stringent guideline applied.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Laboratory detection limit exceeds regulatory standard/guideline.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 3 (Cont'd): Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																			
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
Excavation Area 1																								
EXC16-1-481	EXC16-1-481	2016 12 17	1.5	55	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-482	EXC16-1-482	2016 12 17	1.5	40	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-483	EXC16-1-483	2016 12 17	1.2	35	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-484	EXC16-1-484	2016 12 17	0.4	10	0.0082	0.019	< 0.0050	< 0.0050	< 0.0050	0.0063	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-485	EXC16-1-485	2016 12 17	1.5	45	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-486	EXC16-1-486	2016 12 17	1.2	30	< 0.0050	0.0065	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-487	EXC16-1-487	2016 12 17	0.4	45	***0.39***	23	0.072	0.23	***0.47***	***0.32***	0.018	0.0071	0.018	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-488	EXC16-1-488	2016 12 17	1.2	30	< 0.0050	0.0062	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-489	EXC16-1-489	2016 12 17	0.4	120	***0.99***	1.0	0.039	0.089	0.15	***0.10***	0.013	0.024	0.037	0.0057	0.0070	-	0.015	< 0.0050	0.0062	0.0057	< 0.0050	0.0064	< 0.10	0.16
	EXC16-1-D51	Duplicate	0.4	120	***0.94***	1.1	0.050	0.10	0.15	***0.11***	0.012	0.024	0.037	0.0059	0.0057	-	0.012	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0069	< 0.10	0.13
		QA/QC RPD%			5	10	25	12	0	10	*	*	0	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-490	EXC16-1-490	2016 12 17	1.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-491	EXC16-1-491	2016 12 17	1.2	35	***0.42***	0.58	0.023	0.032	0.067	***0.097***	0.022	0.11	0.10	0.033	0.029	-	0.040	0.013	0.026	0.016	< 0.0050	0.016	< 0.10	0.53
	EXC16-1-D52	Duplicate	1.2	35	***0.42***	0.60	0.050	0.041	0.097	***0.42***	0.12	0.58	0.49	0.23	0.18	-	0.23	0.080	0.19	0.094	0.021	0.090	0.28	***3.4***
		QA/QC RPD%			0	3	*	25	37	125	138	136	132	150	144	-	141	*	152	*	*	*	*	146
EXC16-1-492	EXC16-1-492	2016 12 17	0.4	15	***0.37***	2.0	0.19	***0.99***	***0.82***	***2.3***	0.79	8.4	6.4	***1.4***	1.5	-	0.86	0.30	0.45	0.13	0.040	0.10	0.77	***14***
EXC16-1-493	EXC16-1-493	2016 12 17	1.2	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-494	EXC16-1-494	2016 12 17	0.4	45	***0.36***	0.72	0.028	0.052	0.10	***0.11***	0.016	0.020	0.027	0.0051	0.0061	-	0.0083	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0056	< 0.10	0.10
EXC16-1-495	EXC16-1-495	2016 12 17	1.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
Excavation Area 2																								
EXC16-2-437	EXC16-2-437	2016 12 14	3.0	75	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-2-D46	Duplicate	3.0	75	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
		QA/QC RPD%			*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-2-438	EXC16-2-438	2016 12 14	2.5	50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-2-D47	Duplicate	2.5	50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
		QA/QC RPD%			*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-2-439	EXC16-2-439	2016 12 14	1.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-440	EXC16-2-440	2016 12 14	0.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-441	EXC16-2-441	2016 12 14	2.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-442	EXC16-2-442	2016 12 14	1.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-443	EXC16-2-443	2016 12 14	0.5	15	< 0.0050	0.0085	< 0.0050	< 0.0050	< 0.0050	0.012	0.015	< 0.0050	0.0085	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-444	EXC16-2-444	2016 12 14	3.0	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-445	EXC16-2-445	2016 12 14	2.5	30	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-446	EXC16-2-446	2016 12 14	1.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-447	EXC16-2-447	2016 12 14	0.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-448	EXC16-2-448	2016 12 14	2.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-449	EXC16-2-449	2016 12 14	1.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-450	EXC16-2-450	2016 12 14	0.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-451	EXC16-2-451	2016 12 14	2.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-452	EXC16-2-452	2016 12 14	1.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-453	EXC16-2-453	2016 12 14	0.5	20	***0.026***	0.029	0.016	0.047	0.0085	< 0.0050	0.012	< 0.0050	0.017	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-454	EXC16-2-454	2016 12 14	2.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-455	EXC16-2-455	2016 12 14	1.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-2-456	EXC16-2-456	2016 12 14	0.5	10	0.0098	0.025	< 0.0050	< 0.0050	< 0.0050	0.0075	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	0.0061	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
Excavation Area 3A																								
EXC16-3A-054	EXC16-3A-054	2016 11 11	2.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-055	EXC16-3A-055	2016 11 11	1.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
Federal Guideline																								
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																								
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Most stringent guideline applied.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Laboratory detection limit exceeds regulatory standard/guideline.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 3 (Cont'd): Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
Excavation Area 3A																									
EXC16-3A-056	EXC16-3A-056	2016 11 11	0.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-075	EXC16-3A-075	2016 11 11	2.5	0	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-076	EXC16-3A-076	2016 11 11	1.5	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-077	EXC16-3A-077	2016 11 11	0.5	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-078	EXC16-3A-078	2016 11 11	2.5	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-081	EXC16-3A-081	2016 11 11	2.5	25	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
	EXC16-3A-D7	Duplicate	2.5	25	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-3A-084	EXC16-3A-084	2016 11 11	2.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-085	EXC16-3A-085	2016 11 11	1.5	10	***0.045***	0.032	< 0.046	0.055	0.054	< 0.010	< 0.010	< 0.010	0.017	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-086	EXC16-3A-086	2016 11 11	0.5	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-087	EXC16-3A-087	2016 11 11	3.0	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-088	EXC16-3A-088	2016 11 11	1.5	15	***0.37***	1.6	0.069	0.17	***0.36***	***0.83***	0.042	0.078	0.22	0.087	0.088	-	0.16	0.027	0.13	0.093	0.040	0.10	0.21	***2.0***
EXC16-3A-093	EXC16-3A-093	2016 11 11	5.5	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-094	EXC16-3A-094	2016 11 11	4.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-095	EXC16-3A-095	2016 11 11	3.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-256	EXC16-3A-256	2016 11 23	3.5	30	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-257	EXC16-3A-257	2016 11 23	4.5	35	< 0.0050	0.0098	< 0.0050	< 0.0050	< 0.0050	0.0057	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-258	EXC16-3A-258	2016 11 23	5.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-259	EXC16-3A-259	2016 11 23	3.5	30	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-260	EXC16-3A-260	2016 11 23	4.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-261	EXC16-3A-261	2016 11 23	5.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-287	EXC16-3A-287	2016 12 03	7.5	15	***0.068***	0.66	0.0073	0.0075	0.015	0.039	< 0.0040	< 0.0050	0.0098	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-288	EXC16-3A-288	2016 12 03	6.5	10	***0.25***	4.7	0.055	0.055	0.020	***0.094***	< 0.0040	< 0.0050	0.0076	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-289	EXC16-3A-289	2016 12 03	5.5	10	***0.049***	0.29	< 0.0050	0.0083	0.013	0.023	< 0.0040	< 0.0050	0.0054	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-290	EXC16-3A-290	2016 12 03	4.5	10	***0.072***	1.5	0.0098	0.018	0.022	***0.057***	< 0.0040	< 0.0050	0.010	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-291	EXC16-3A-291	2016 12 03	7.5	0	0.0065	0.036	0.0098	< 0.0050	0.0097	0.024	0.0055	0.0092	0.025	< 0.0050	0.0077	-	0.011	< 0.0050	0.011	0.0084	< 0.0050	0.010	< 0.10	0.14
EXC16-3A-292	EXC16-3A-292	2016 12 03	6.5	0	0.0062	0.032	0.018	< 0.0050	0.0087	0.019	0.0091	0.0099	0.036	0.0063	0.0084	-	0.023	< 0.0050	0.025	0.020	< 0.0050	0.023	< 0.10	0.27
EXC16-3A-293	EXC16-3A-293	2016 12 03	5.5	0	0.0075	0.033	0.017	< 0.0050	0.0074	0.023	0.0075	0.0075	0.025	0.0060	0.0066	-	0.016	< 0.0050	0.017	0.014	< 0.0050	0.016	< 0.10	0.20
EXC16-3A-294	EXC16-3A-294	2016 12 03	4.5	10	0.0059	0.030	< 0.0050	< 0.0050	0.011	0.026	0.0055	0.0091	0.029	< 0.0050	0.0068	-	0.0089	< 0.0050	0.0062	0.0058	< 0.0050	0.0070	< 0.10	0.11
EXC16-3A-295	EXC16-3A-295	2016 12 03	7.5	15	< 0.0050	0.014	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-296	EXC16-3A-296	2016 12 03	6.5	15	***0.18***	0.38	0.0094	0.0079	0.0077	0.024	< 0.0040	0.0090	0.020	< 0.0050	< 0.0050	-	0.0070	< 0.0050	0.0053	< 0.0050	< 0.0050	0.0055	< 0.10	0.10
EXC16-3A-297	EXC16-3A-297	2016 12 03	5.5	15	***0.13***	0.56	0.020	0.014	0.045	***0.061***	0.0055	0.016	0.035	< 0.0050	0.0084	-	0.0095	< 0.0050	0.0074	0.0062	< 0.0050	0.0076	< 0.10	0.12
EXC16-3A-298	EXC16-3A-298	2016 12 03	4.5	20	0.0063	0.026	< 0.0050	< 0.0050	< 0.0050	0.0094	< 0.0040	0.0056	0.0091	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-299	EXC16-3A-299	2016 12 03	7.5	20	0.0052	0.0076	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-300	EXC16-3A-300	2016 12 03	6.5	5	0.0069	0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-301	EXC16-3A-301	2016 12 03	5.5	15	< 0.0050	0.0056	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-302	EXC16-3A-302	2016 12 03	4.5	15	< 0.0050	0.0099	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-303	EXC16-3A-303	2016 12 03	7.5	30	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-3A-D28	Duplicate	7.5	30	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-3A-304	EXC16-3A-304	2016 12 03	6.5	25	< 0.0050	0.0083	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-305	EXC16-3A-305	2016 12 03	5.5	25	0.0082	0.0085	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-3A-D29	Duplicate	5.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-3A-306	EXC16-3A-306	2016 12 03	4.5	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
Federal Guideline																									
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Most stringent guideline applied.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Laboratory detection limit exceeds regulatory standard/guideline.

TABLE 3 (Cont'd): Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
Excavation Area 3A																									
EXC16-3A-307	EXC16-3A-307	2016 12 03	6.0	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-3A-D30	Duplicate	6.0	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
		QA/QC RPD%			*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-3A-308	EXC16-3A-308	2016 12 04	7.5	20	< 0.0050	< 0.0050	0.020	0.0077	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	0.0055	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-309	EXC16-3A-309	2016 12 04	6.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	0.020	< 0.0050	< 0.0050	-	0.0092	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.10
EXC16-3A-310	EXC16-3A-310	2016 12 04	5.5	20	< 0.0050	< 0.0050	0.015	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	0.066	< 0.0050	< 0.0050	-	0.020	< 0.0050	< 0.0050	0.0055	< 0.0050	< 0.0050	< 0.10	0.17
EXC16-3A-311	EXC16-3A-311	2016 12 04	4.5	10	< 0.0050	0.014	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-312	EXC16-3A-312	2016 12 04	8.0	10	0.0089	0.046	0.021	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-3A-D31	Duplicate	8.0	10	0.012	0.049	0.019	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
		QA/QC RPD%			*	6	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-3A-313	EXC16-3A-313	2016 12 04	8.0	15	< 0.0050	0.0096	0.025	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-314	EXC16-3A-314	2016 12 04	7.5	10	< 0.0050	0.0092	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-315	EXC16-3A-315	2016 12 04	6.5	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-316	EXC16-3A-316	2016 12 04	8.0	5	0.0089	0.013	< 0.0050	< 0.0050	< 0.0050	0.011	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-324	EXC16-3A-324	2016 12 05	7.5	35	0.010	0.029	0.013	0.0073	< 0.0050	***0.10***	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-325	EXC16-3A-325	2016 12 05	6.5	25	< 0.0050	0.0082	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-326	EXC16-3A-326	2016 12 05	5.5	20	< 0.0050	0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-327	EXC16-3A-327	2016 12 05	4.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-328	EXC16-3A-328	2016 12 05	8.0	15	***0.58***	1.9	0.011	0.029	< 0.0050	***0.13***	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-334	EXC16-3A-334	2016 12 05	8.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-335	EXC16-3A-335	2016 12 05	7.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-336	EXC16-3A-336	2016 12 05	8.0	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-3A-D33	Duplicate	8.0	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
		QA/QC RPD%			*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-3A-337	EXC16-3A-337	2016 12 05	7.5	20	0.011	0.082	< 0.0050	0.0069	0.013	0.025	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-338	EXC16-3A-338	2016 12 05	6.5	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-341	EXC16-3A-341	2016 12 07	3.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-3A-D35	Duplicate	3.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
		QA/QC RPD%			*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-3A-342	EXC16-3A-342	2016 12 07	2.5	20	***0.017***	0.11	0.010	< 0.0050	< 0.0050	0.0091	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-343	EXC16-3A-343	2016 12 07	1.5	15	***0.027***	0.14	0.011	0.014	0.023	0.034	0.012	< 0.0050	0.017	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-344	EXC16-3A-344	2016 12 07	0.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-345	EXC16-3A-345	2016 12 07	3.5	20	***0.016***	0.072	0.12	0.012	0.0084	0.021	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-346	EXC16-3A-346	2016 12 07	2.5	20	< 0.0050	0.0080	0.0082	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-347	EXC16-3A-347	2016 12 07	1.5	20	< 0.0050	0.019	0.016	< 0.0050	< 0.0050	0.0093	< 0.0040	0.013	0.017	0.0071	0.0066	-	0.016	0.0063	0.0091	0.011	< 0.0050	0.011	< 0.10	0.21
EXC16-3A-348	EXC16-3A-348	2016 12 07	0.5	0	***0.25***	1.4	0.077	0.059	0.11	***0.070***	0.0061	< 0.0050	0.012	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-349	EXC16-3A-349	2016 12 07	3.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-350	EXC16-3A-350	2016 12 07	2.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-351	EXC16-3A-351	2016 12 07	1.5	30	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-3A-D36	Duplicate	1.5	30	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
		QA/QC RPD%			*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-3A-352	EXC16-3A-352	2016 12 07	0.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-353	EXC16-3A-353	2016 12 07	3.5	10	***0.014***	0.071	0.014	0.0099	0.019	0.044	0.011	0.014	0.055	0.0078	0.013	-	0.019	< 0.0050	0.014	0.014	< 0.0050	0.015	< 0.10	0.22
EXC16-3A-354	EXC16-3A-354	2016 12 07	2.5	10	0.0060	0.026	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	0.013	< 0.0050	< 0.0050	-	0.0054	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-355	EXC16-3A-355	2016 12 07	1.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-356	EXC16-3A-356	2016 12 07	0.5	5	***0.028***	0.15	0.063	0.027	0.060	***0.20***	0.048	0.079	0.18	0.033	0.035	-	0.081	0.018	0.073	0.068	0.013	0.077	0.11	1.0
Federal Guideline																								
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																								
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Most stringent guideline applied.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Laboratory detection limit exceeds regulatory standard/guideline.

TABLE 3 (Cont'd): Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
Excavation Area 3A																									
EXC16-3A-357	EXC16-3A-357	2016 12 07	3.5	10	***0.22***	4.2	0.014	0.011	0.015	***0.056***	< 0.0040	< 0.0050	0.0076	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-358	EXC16-3A-358	2016 12 07	2.5	10	< 0.0050	0.033	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-359	EXC16-3A-359	2016 12 07	1.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-3A-D37	Duplicate	1.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
		QA/QC RPD%			*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-3A-360	EXC16-3A-360	2016 12 07	0.5	5	< 0.0050	0.036	< 0.0050	< 0.0050	0.0078	0.013	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-361	EXC16-3A-361	2016 12 07	3.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-362	EXC16-3A-362	2016 12 07	2.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-363	EXC16-3A-363	2016 12 07	1.5	30	< 0.0050	0.0066	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-364	EXC16-3A-364	2016 12 07	0.5	110	***0.37***	0.66	< 0.0050	< 0.0050	0.0094	0.021	< 0.0040	< 0.0050	0.010	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-3A-D38	Duplicate	0.5	110	***0.26***	0.58	< 0.0050	< 0.0050	0.0092	0.018	< 0.0040	< 0.0050	0.0099	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
		QA/QC RPD%			35	13	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-3A-365	EXC16-3A-365	2016 12 07	3.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-366	EXC16-3A-366	2016 12 07	2.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-367	EXC16-3A-367	2016 12 07	1.5	15	***0.50***	2.3	0.012	0.022	0.049	0.025	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-368	EXC16-3A-368	2016 12 07	0.5	100	***1.6***	6.4	0.042	0.058	0.15	***0.080***	0.0062	< 0.0050	0.0057	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-3A-D39	Duplicate	0.5	100	***7.9***	34	0.17	0.27	***0.64***	***0.34***	0.017	0.0070	0.012	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
		QA/QC RPD%			133	137	121	129	124	124	*	*	*	*	*	-	*	*	*	*	*	*	*	*
Excavation Area 3B																									
EXC16-3B-130	EXC16-3B-130	2016 11 17	0.3	30	***0.017***	0.035	< 0.0050	< 0.0050	< 0.020	0.014	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3B-131	EXC16-3B-131	2016 11 17	0.3	20	0.011	0.023	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3B-132	EXC16-3B-132	2016 11 17	0.3	40	***0.016***	0.035	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3B-133	EXC16-3B-133	2016 11 17	0.3	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3B-134	EXC16-3B-134	2016 11 17	0.3	30	***0.064***	0.22	< 0.0050	0.011	0.037	***0.067***	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3B-136	EXC16-3B-136	2016 11 17	0.5	-	< 0.010	0.023	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3B-137	EXC16-3B-137	2016 11 17	0.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3B-138	EXC16-3B-138	2016 11 17	0.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3B-139	EXC16-3B-139	2016 11 17	0.6	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3B-163	EXC16-3B-163	2016 11 17	0.3	15	***0.014***	0.030	< 0.0050	< 0.0050	< 0.020	0.011	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3B-317	EXC16-3B-317	2016 12 05	1.8	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3B-318	EXC16-3B-318	2016 12 05	0.3	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3B-319	EXC16-3B-319	2016 12 05	1.8	15	***0.090***	0.40	0.0076	0.023	0.037	***0.063***	0.0076	< 0.0050	0.011	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3B-320	EXC16-3B-320	2016 12 05	1.8	15	***2.2***	10	0.15	***0.45***	***0.75***	***1.4***	0.15	0.035	0.15	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3B-321	EXC16-3B-321	2016 12 05	2.0	25	***2.5***	3.7	0.022	0.045	0.087	***0.089***	0.012	0.0059	0.029	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3B-322	EXC16-3B-322	2016 12 05	2.0	50	< 0.0050	0.017	< 0.0050	< 0.0050	< 0.0050	0.018	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3B-323	EXC16-3B-323	2016 12 05	1.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3B-329	EXC16-3B-329	2016 12 05	1.5	15	***0.018***	0.016	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3B-330	EXC16-3B-330	2016 12 05	0.5	110	***26***	110	1.9	***5.8***	***9.3***	***20***	***2.8***	0.45	2.1	0.067	0.082	-	0.060	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.10	0.96
	EXC16-3B-D32	Duplicate	0.5	110	***23***	93	1.7	***5.1***	***8.2***	***17***	2.4	0.62	1.9	0.062	0.060	-	0.057	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.10	0.92
		QA/QC RPD%			12	17	11	13	13	16	15	32	10	8	31	-	5	*	*	*	*	*	*	4
EXC16-3B-331	EXC16-3B-331	2016 12 05	1.5	55	0.0064	0.040	< 0.0050	< 0.0050	0.011	0.035	0.0079	< 0.0050	0.0081	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3B-332	EXC16-3B-332	2016 12 05	0.5	40	***1.7***	8.5	0.23	***0.69***	***1.6***	***5.4***	1.1	0.12	0.85	< 0.050	< 0.050	-	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.10	0.59
EXC16-3B-333	EXC16-3B-333	2016 12 05	1.5	25	< 0.0050	0.018	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
Excavation Area 3C																									
EXC16-3C-233	EXC16-3C-233	2016 11 22	3.5	45	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3C-234	EXC16-3C-234	2016 11 22	2.5	35	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
Federal Guideline																									
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Most stringent guideline applied.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Laboratory detection limit exceeds regulatory standard/guideline.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 3 (Cont'd): Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
Excavation Area 3C																									
EXC16-3C-237	EXC16-3C-237	2016 11 22	3.5	35	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
	EXC16-3C-D24	Duplicate	3.5	35	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
EXC16-3C-238	EXC16-3C-238	2016 11 22	2.5	25	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3C-239	EXC16-3C-239	2016 11 22	1.5	15	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3C-240	EXC16-3C-240	2016 11 22	0.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3C-262	EXC16-3C-262	2016 11 24	3.5	35	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-263	EXC16-3C-263	2016 11 24	2.5	35	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-264	EXC16-3C-264	2016 11 24	1.5	35	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-265	EXC16-3C-265	2016 11 24	0.5	15	0.0053	0.018	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-266	EXC16-3C-266	2016 11 24	3.5	30	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-267	EXC16-3C-267	2016 11 24	2.5	45	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-268	EXC16-3C-268	2016 11 24	1.5	40	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-270	EXC16-3C-270	2016 11 24	3.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-271	EXC16-3C-271	2016 11 24	2.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-272	EXC16-3C-272	2016 11 24	1.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-273	EXC16-3C-273	2016 11 24	0.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-274	EXC16-3C-274	2016 11 24	3.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-275	EXC16-3C-275	2016 11 24	2.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-276	EXC16-3C-276	2016 11 24	1.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-277	EXC16-3C-277	2016 11 24	0.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-286	EXC16-3C-286	2016 12 03	0.5	-	0.0092	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-339	EXC16-3C-339	2016 12 06	1.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-3C-D34	Duplicate	1.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-3C-340	EXC16-3C-340	2016 12 06	0.3	10	0.0077	0.027	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-369	EXC16-3C-369	2016 12 08	8.0	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-370	EXC16-3C-370	2016 12 08	7.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-371	EXC16-3C-371	2016 12 08	6.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-372	EXC16-3C-372	2016 12 08	5.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-373	EXC16-3C-373	2016 12 08	4.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-375	EXC16-3C-375	2016 12 08	7.5	30	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-3C-D40	Duplicate	7.5	30	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-3C-376	EXC16-3C-376	2016 12 08	6.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-377	EXC16-3C-377	2016 12 08	5.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-378	EXC16-3C-378	2016 12 08	4.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-379	EXC16-3C-379	2016 12 08	7.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-380	EXC16-3C-380	2016 12 08	6.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-381	EXC16-3C-381	2016 12 08	5.5	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-382	EXC16-3C-382	2016 12 08	4.5	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-383	EXC16-3C-383	2016 12 08	8.0	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-384	EXC16-3C-384	2016 12 08	7.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-385	EXC16-3C-385	2016 12 08	6.5	0	< 0.0050	< 0.0050	0.020	< 0.0050	< 0.0050	< 0.0050	0.0071	< 0.0050	0.0067	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-386	EXC16-3C-386	2016 12 08	5.5	15	< 0.0050	< 0.0050	0.056	0.010	0.0091	< 0.0050	0.023	< 0.0050	0.052	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-3C-D41	Duplicate	5.5	15	< 0.0050	< 0.0050	0.048	0.0082	0.0058	< 0.0050	0.017	< 0.0050	0.037	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				*	*	15	*	*	*	*	*	34	*	*	-	*	*	*	*	*	*	*	*
Federal Guideline																									
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Most stringent guideline applied.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Laboratory detection limit exceeds regulatory standard/guideline.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 3 (Cont'd): Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																			
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
Excavation Area 3C																								
EXC16-3C-387	EXC16-3C-387	2016 12 08	4.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-388	EXC16-3C-388	2016 12 10	8.0	45	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-389	EXC16-3C-389	2016 12 10	7.5	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-390	EXC16-3C-390	2016 12 10	6.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-391	EXC16-3C-391	2016 12 10	5.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-392	EXC16-3C-392	2016 12 10	4.5	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-393	EXC16-3C-393	2016 12 10	7.5	40	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-394	EXC16-3C-394	2016 12 10	6.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-395	EXC16-3C-395	2016 12 10	5.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-396	EXC16-3C-396	2016 12 10	4.5	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-397	EXC16-3C-397	2016 12 10	8.5	350	***1.9***	7.1	0.041	0.13	0.22	***0.28***	0.041	0.015	0.048	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-398	EXC16-3C-398	2016 12 10	7.5	470	***34***	39	0.038	0.085	***0.26***	***0.24***	0.038	0.017	0.045	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-399	EXC16-3C-399	2016 12 10	6.5	550	***5.1***	4.1	0.10	***0.32***	***0.46***	***0.36***	0.095	0.024	0.13	< 0.0050	0.0068	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-3C-D42	Duplicate	6.5	550	***4.7***	3.2	0.087	***0.29***	***0.40***	***0.25***	0.088	0.033	0.11	< 0.0050	0.0056	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
		QA/QC RPD%			8	25	14	10	14	36	8	*	17	*	*	-	*	*	*	*	*	*	*	*
EXC16-3C-400	EXC16-3C-400	2016 12 10	5.5	100	***0.30***	0.83	0.014	0.039	0.073	***0.16***	0.016	< 0.0050	0.015	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3C-401	EXC16-3C-401	2016 12 10	4.5	160	***3.8***	9.5	0.082	0.26	***0.45***	***0.98***	0.074	0.014	0.083	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
Excavation Area 3D																								
EXC16-3D-278	EXC16-3D-278	2016 11 24	0.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3D-279	EXC16-3D-279	2016 11 24	0.5	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3D-280	EXC16-3D-280	2016 11 24	0.5	30	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3D-281	EXC16-3D-281	2016 11 24	1.5	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3D-282	EXC16-3D-282	2016 11 24	1.5	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3D-283	EXC16-3D-283	2016 11 24	1.5	65	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3D-284	EXC16-3D-284	2016 11 24	1.5	70	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
Excavation Area 5																								
EXC16-5-001	EXC16-5-001	2016 11 08	3.0	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-002	EXC16-5-002	2016 11 08	2.5	0	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-003	EXC16-5-003	2016 11 08	1.5	0	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-004	EXC16-5-004	2016 11 08	0.5	0	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-005	EXC16-5-005	2016 11 08	3.0	0	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-006	EXC16-5-006	2016 11 08	2.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-007	EXC16-5-007	2016 11 08	1.5	0	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-008	EXC16-5-008	2016 11 08	0.5	0	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-009	EXC16-5-009	2016 11 10	2.5	0	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-010	EXC16-5-010	2016 11 10	1.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-011	EXC16-5-011	2016 11 10	0.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-012	EXC16-5-012	2016 11 10	2.5	5	< 0.010	0.024	< 0.010	< 0.010	0.011	0.031	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-013	EXC16-5-013	2016 11 10	1.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-014	EXC16-5-014	2016 11 10	0.5	60	***0.050***	0.26	0.021	0.046	0.10	***0.20***	0.029	0.013	0.054	< 0.010	0.017	-	0.024	< 0.010	0.019	< 0.020	< 0.020	< 0.020	< 0.10	0.30
	EXC16-5-D1	Duplicate	0.5	60	***0.071***	0.33	0.026	0.052	0.11	***0.24***	0.027	0.031	0.074	0.017	0.028	-	0.038	< 0.010	0.033	< 0.020	< 0.020	0.029	< 0.10	0.47
		QA/QC RPD%			35	24	*	*	10	18	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-5-015	EXC16-5-015	2016 11 10	2.5	0	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-016	EXC16-5-016	2016 11 10	1.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-017	EXC16-5-017	2016 11 10	0.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.011	< 0.010	< 0.010	0.015	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	0.034	< 0.10	0.15
EXC16-5-018	EXC16-5-018	2016 11 10	2.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
Federal Guideline																								
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																								
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Most stringent guideline applied.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Laboratory detection limit exceeds regulatory standard/guideline.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 3 (Cont'd): Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Confirmatory Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
Excavation Area 5																									
EXC16-5-019	EXC16-5-019	2016 11 10	1.5	5	***0.21***	0.18	< 0.010	***0.64***	***0.54***	***2.0***	0.15	1.4	0.92	0.23	0.14	-	0.23	0.073	0.14	0.073	< 0.020	0.077	0.21	***3.1***
	EXC16-5-D2	Duplicate	1.5	5	***0.045***	0.034	0.087	0.10	0.092	***0.27***	0.31	0.22	0.18	0.44	0.50	-	***2.2***	0.72	***1.5***	1.0	0.20	1.0	2.1	***25***
	QA/QC RPD%				*	*	*	146	142	152	70	146	135	63	112	-	162	163	166	*	*	*	*	156
EXC16-5-020	EXC16-5-020	2016 11 10	0.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.012	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-021	EXC16-5-021	2016 11 10	2.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-022	EXC16-5-022	2016 11 10	1.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-023	EXC16-5-023	2016 11 10	0.5	5	***0.042***	0.15	0.018	0.036	0.033	0.013	< 0.010	< 0.010	0.039	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-024	EXC16-5-024	2016 11 10	2.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-025	EXC16-5-025	2016 11 10	1.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-026	EXC16-5-026	2016 11 10	0.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-027	EXC16-5-027	2016 11 10	2.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-028	EXC16-5-028	2016 11 10	1.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-029	EXC16-5-029	2016 11 10	0.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-030	EXC16-5-030	2016 11 10	2.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
	EXC16-5-D3	Duplicate	2.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-5-031	EXC16-5-031	2016 11 10	1.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-032	EXC16-5-032	2016 11 10	0.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-033	EXC16-5-033	2016 11 10	2.5	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-034	EXC16-5-034	2016 11 10	1.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-035	EXC16-5-035	2016 11 10	0.5	10	***0.018***	< 0.032	< 0.010	0.021	< 0.010	< 0.010	< 0.010	< 0.010	0.018	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-036	EXC16-5-036	2016 11 10	2.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-037	EXC16-5-037	2016 11 10	1.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-038	EXC16-5-038	2016 11 10	0.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-039	EXC16-5-039	2016 11 10	2.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-040	EXC16-5-040	2016 11 10	1.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-041	EXC16-5-041	2016 11 10	0.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-043	EXC16-5-043	2016 11 10	3.0	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-045	EXC16-5-045	2016 11 10	3.0	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-046	EXC16-5-046	2016 11 10	3.0	10	< 0.010	0.026	< 0.010	< 0.010	< 0.010	0.018	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-047	EXC16-5-047	2016 11 10	3.0	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
	EXC16-5-D4	Duplicate	3.0	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-5-048	EXC16-5-048	2016 11 10	3.0	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.016	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-049	EXC16-5-049	2016 11 10	3.0	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-050	EXC16-5-050	2016 11 10	3.0	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-051	EXC16-5-051	2016 11 10	3.0	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-052	EXC16-5-052	2016 11 10	3.0	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-053	EXC16-5-053	2016 11 10	3.0	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-5-197	EXC16-5-197	2016 11 20	1.5	40	***0.027***	0.10	0.0066	0.062	0.085	***0.21***	0.020	0.074	0.13	0.045	< 0.020	0.080	0.080	< 0.020	0.062	< 0.050	< 0.050	0.062	0.10	1.0
EXC16-5-285	EXC16-5-285	2016 11 24	4.0	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
Federal Guideline																								
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																								
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260, B6A9839, B6B0632, B6B2566, B6B3266.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Most stringent guideline applied.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Laboratory detection limit exceeds regulatory standard/guideline.

TABLE 4: Summary of Analytical Results for Soil - Hydrocarbons - Interim Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions					MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19) µg/g	HEPH (C19-C32) µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	F4G (>C50) µg/g	MTBE µg/g
Excavation Area 1																		
EXC16-1-108	EXC16-1-108	2016 11 13	2.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	840	< 100	< 10	***610***	170	< 50	-	< 0.10
EXC16-1-109	EXC16-1-109	2016 11 13	1.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	890	170	< 10	***700***	***460***	69	-	< 0.10
EXC16-1-110	EXC16-1-110	2016 11 13	0.5	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	**2,500**	850	< 10	***1,700***	***1,500***	240	-	< 0.10
EXC16-1-124	EXC16-1-124	2016 11 14	3.0	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	770	< 100	< 10	***570***	230	< 50	-	< 0.10
	EXC16-1-D13	Duplicate	3.0	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	860	110	< 10	***690***	270	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	11	*	*	19	*	*	-	*
EXC16-1-161	EXC16-1-161	2016 11 17	4.0	35	< 0.0050	0.016	< 0.020	0.45	< 0.030	25	210	< 100	26	***160***	50	< 10	-	< 0.10
EXC16-1-173	EXC16-1-173	2016 11 18	3.5	20	< 0.0050	< 0.010	0.064	< 0.040	< 0.030	< 7.0	**2,100**	< 100	< 10	***1,600***	470	< 50	-	< 0.10
	EXC16-1-D17	Duplicate	3.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	**2,100**	< 100	< 10	***1,600***	480	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	0	*	*	0	2	*	-	*
EXC16-1-174	EXC16-1-174	2016 11 18	3.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	25	2,000	170	***32***	***1,400***	650	< 50	-	< 0.10
EXC16-1-175	EXC16-1-175	2016 11 18	3.5	10	< 0.0050	0.017	< 0.020	0.64	< 0.030	40	**2,600**	200	***48***	***2,000***	700	< 50	-	< 0.10
EXC16-1-176	EXC16-1-176	2016 11 18	3.5	10	< 0.0050	0.017	< 0.020	0.72	< 0.030	35	1,300	< 100	***54***	***970***	330	< 50	-	< 0.10
EXC16-1-181	EXC16-1-181	2016 11 19	5.5	30	< 0.0050	< 0.010	< 0.020	0.078	< 0.030	37	1,800	150	***37***	***1,400***	450	< 10	-	< 0.10
EXC16-1-182	EXC16-1-182	2016 11 19	4.5	20	< 0.0050	< 0.010	< 0.020	0.13	< 0.030	42	1,500	170	***48***	***1,200***	460	< 10	-	< 0.10
EXC16-1-183	EXC16-1-183	2016 11 19	3.5	20	< 0.0050	< 0.010	< 0.020	0.11	< 0.030	35	1,500	150	***39***	***1,200***	460	< 10	-	< 0.10
EXC16-1-187	EXC16-1-187	2016 11 19	2.5	75	0.014	***2.6***	0.071	***30***	0.35	**590**	**5,200**	760	***680***	***3,400***	2,100	< 50	-	< 0.10
EXC16-1-188	EXC16-1-188	2016 11 19	1.5	100	0.029	***6.6***	0.048	***42***	< 0.030	**1,500**	**16,000**	**2,900**	***1,600***	***12,000***	***8,500***	< 50	-	< 0.10
	EXC16-1-D19	Duplicate	1.5	100	***0.038***	***9.0***	***0.11***	***54***	< 0.030	**1,900**	**12,000**	**2,500**	***2,600***	***8,600***	***6,200***	< 50	-	< 0.10
	QA/QC RPD%				27	31	*	25	*	24	29	15	48	33	31	*	-	*
EXC16-1-189	EXC16-1-189	2016 11 19	0.5	100	***0.031***	***3.9***	< 0.020	**11**	< 0.030	**2,100**	**26,000**	**6,400**	***2,100***	***18,000***	***15,000***	< 250	-	< 0.10
EXC16-1-212	EXC16-1-212	2016 11 21	6.0	40	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	12	1,900	240	12	***1,500***	800	16	-	< 0.10
EXC16-1-213	EXC16-1-213	2016 11 21	6.0	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	-	< 0.10
EXC16-1-215	EXC16-1-215	2016 11 21	6.5	60	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	94	**4,100**	**13,000**	***100***	***3,400***	***17,000***	9,100	-	< 0.10
EXC16-1-222	EXC16-1-222	2016 11 21	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	330	< 100	< 10	***290***	150	21	-	< 0.10
EXC16-1-224	EXC16-1-224	2016 11 21	3.0	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	470	< 100	< 10	***430***	260	54	-	< 0.10
EXC16-1-225	EXC16-1-225	2016 11 21	3.0	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	280	**2,700**	< 10	***170***	***3,300***	1,500	-	< 0.10
Excavation Area 3A																		
EXC16-3A-057	EXC16-3A-057	2016 11 11	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-058	EXC16-3A-058	2016 11 11	1.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-059	EXC16-3A-059	2016 11 11	0.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	620	570	< 10	***300***	***760***	340	1,500	< 0.10
EXC16-3A-060	EXC16-3A-060	2016 11 11	2.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-061	EXC16-3A-061	2016 11 11	1.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	220	< 100	< 10	140	78	< 50	-	< 0.10
EXC16-3A-062	EXC16-3A-062	2016 11 11	0.5	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	**370**	**16,000**	1,000	***510***	***12,000***	***3,300***	< 50	-	< 0.10
EXC16-3A-063	EXC16-3A-063	2016 11 11	2.5	10	< 0.0050	< 0.010	0.048	0.070	< 0.030	**410**	< 100	< 100	***360***	20	< 50	< 50	-	< 0.10
EXC16-3A-064	EXC16-3A-064	2016 11 11	1.5	10	< 0.0050	< 0.010	< 0.020	0.36	< 0.030	**320**	**1,900**	130	***280***	***1,500***	260	< 50	-	< 0.10
EXC16-3A-065	EXC16-3A-065	2016 11 11	0.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-066	EXC16-3A-066	2016 11 11	2.5	10	< 0.0050	< 0.010	< 0.020	0.14	< 0.030	18	940	< 100	24	***720***	180	< 50	-	< 0.10
EXC16-3A-067	EXC16-3A-067	2016 11 11	1.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-068	EXC16-3A-068	2016 11 11	0.5	80	< 0.0050	***1.5***	0.10	***38***	< 0.030	**2,600**	**19,000**	740	***2,900***	***15,000***	***2,900***	170	-	< 0.10
	EXC16-3A-D6	Duplicate	0.5	80	< 0.0050	***1.2***	0.088	***35***	< 0.030	**2,700**	**14,000**	510	***3,000***	***11,000***	***2,000***	110	-	< 0.10
	QA/QC RPD%				*	22	*	8	*	4	30	37	3	31	37	*	-	*
EXC16-3A-069	EXC16-3A-069	2016 11 11	2.5	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	18	61	< 50	-	< 0.10
EXC16-3A-070	EXC16-3A-070	2016 11 11	1.5	20	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	52	< 50	-	< 0.10
EXC16-3A-071	EXC16-3A-071	2016 11 11	0.5	10	< 0.0050	< 0.010	< 0.030	< 0.040	< 0.030	< 7.0	**1,800**	**2,300**	< 10	***630***	***3,300***	790	-	< 0.10
EXC16-3A-072	EXC16-3A-072	2016 11 11	2.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	850	< 100	< 10	***560***	170	< 50	-	< 0.10
EXC16-3A-073	EXC16-3A-073	2016 11 11	1.5	15	< 0.0050	< 0.010	0.026	< 0.040	< 0.030	< 7.0	480	< 100	< 10	***340***	61	< 50	-	< 0.10
EXC16-3A-074	EXC16-3A-074	2016 11 11	0.5	10	< 0.0050	< 0.010	0.064	< 0.040	< 0.030	< 7.0	160	230	< 10	66	180	66	-	< 0.10
EXC16-3A-079	EXC16-3A-079	2016 11 11	1.5	15	< 0.0050	< 0.010	0.043	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-080	EXC16-3A-080	2016 11 11	0.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-082	EXC16-3A-082	2016 11 11	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-083	EXC16-3A-083	2016 11 11	0.5	10	< 0.0050	< 0.010	***0.12***	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-089	EXC16-3A-089	2016 11 11	3.0	20	-	-	-	-	-	-	**3,100**	120	-	***2,200***	440	< 50	-	-
	EXC16-3A-D8	Duplicate	3.0	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	110	**2,800**	110	***150***	***2,200***	490	< 50	-	< 0.10
	QA/QC RPD%				-	-	-	-	-	*	10	*	-	0	11	*	-	*
EXC16-3A-090	EXC16-3A-090	2016 11 11	5.5	20	< 0.0050	< 0.010	< 0.020	0.59	< 0.030	**230**	**3,500**	140	***330***	***2,700***	680	< 50	-	< 0.10
EXC16-3A-091	EXC16-3A-091	2016 11 11	4.5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	170	600	< 100	***160***	***510***	150	< 50	-	< 0.10
EXC16-3A-092	EXC16-3A-092	2016 11 11	3.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	20	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-241	EXC16-3A-241	2016 11 23	3.5	55	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-242	EXC16-3A-242	2016 11 23	4.5	60	< 0.0050	< 0.010	0.026	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-243	EXC16-3A-243	2016 11 23	5.5	60	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-244	EXC16-3A-244	2016 11 23	3.5	50	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	1,600	< 100	< 10	***1,500***	360	< 50	-	< 0.10
EXC16-3A-245	EXC16-3A-245	2016 11 23	4.5	40	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-246	EXC16-3A-246	2016 11 23	5.5	45	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-247	EXC16-3A-247	2016 11 23	3.5	50	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	140	160	< 100	***130***	***180***	< 50	< 50	-	< 0.10
EXC16-3A-248	EXC16-3A-248	2016 11 23	4.5	45	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	110	360	< 100	***100***	***300***	80	< 50	-	< 0.10
EXC16-3A-249	EXC16-3A-249	2016 11 23	5.5	40	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	150	340	< 100	***170***	***250***	< 50	< 50	-	< 0.10
EXC16-3A-250	EXC16-3A-250	2016 11 23	3.5	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	140	< 100	< 10	110	< 50	< 50	-	< 0.10
EXC16-3A-251	EXC16-3A-251	2016 11 23	4.5	30	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	410	< 100	< 10	***260***	110	< 50	-	< 0.10
EXC16-3A-252	EXC16-3A-252	2016 11 23	5.5	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-253	EXC16-3A-253	2016 11 23	3.5	40	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-254	EXC16-3A-254	2016 11 23	4.5	50	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
EXC16-3A-255	EXC16-3A-255	2016 11 23	5.5	55	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	-	< 0.10
TP16-3	TP16-3-1.3	2016 11 24	1.0 - 1.3	510	***0.26***	***4.5***	***7.3***	***89***	< 0.030	**3,300**	**45,000**	**8,100**	***3,600***	***17,000***	***9,600***	54	-	< 0.10
	EXC16-D25	Duplicate	1.0 - 1.3	510	***0.51***	***9.0***	***15***	***170***	< 0.030	**6,200**	**53,000**	**9,700**	***6,900***	***19,000***	***11,000***	70	-	< 0.10
	QA/QC RPD%				65	67	69	63	*	61	16	18	63	11	14	*	-	*
	TP16-3-1.5	2016 11 24	1.3 - 1.5	380	***0.12***	***8.1***	***6.1***	***88***	< 0.030	**2,800**	**7,400**	1,000	***3,100***	***4,800***	***1,900***	< 50	-	< 0.10
	EXC16-D26	Duplicate	1.3 - 1.5	380	***0.039***	***3.0***	***2.2***	***33***	< 0.030	**760**	**8,100**	**1,200**	***850***	***5,300***	***2,300***	< 50	-	< 0.10
	QA/QC RPD%				102	92	94	91	*	115	9	18	114	10	19	*	-	*
	TP16-3-2.5	2016 11 24	2.0 - 2.5	150	***0.047***	***1.6***	***2.1***	***24***	< 0.030	**870**	**11,000**	880	***1,000***	***9,600***	***3,000***	< 50	-	< 0.10
	EXC16-D27	Duplicate	2.0 - 2.5	150	0.030	***0.91***	***1.1***	***14***	< 0.030	**500**	**11,000**	1,000	***600***	***8,800***	***2,900***	< 50	-	< 0.10
	QA/QC RPD%				44	55	62	53	*	54	0	13	50	9	3	*	-	*
Federal Guideline/Standard																		
CCME CEQG/CWS Residential Coarse-Grained Surface (< 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (> 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	10,000	n/a
BC Standard																		
CSR Residential Land Use (RL) (< 3.0m)[c]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (> 3.0m)[c]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260.

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

RPD Denotes relative percent difference.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[b] Pathways Included: Direct Contact, Eco Soil Contact, Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.

[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[d] BETX/VPH/F1 analysis from soil jar, not methanol-preserved vial; results could be biased low.

TABLE 4 (Cont'd): Summary of Analytical Results for Soil - Hydrocarbons - Interim Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions					MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19) µg/g	HEPH (C19-C32) µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	F4G (>C50) µg/g	MTBE µg/g
Excavation Area 3B																		
EXC16-3B-129	EXC16-3B-129	2016 11 17	0.3	10	0.0067	0.030	0.051	0.25	< 0.030	< 10	590	270	< 10	***340***	***560***	55	-	< 0.10
EXC16-3B-135	EXC16-3B-135	2016 11 17	0.5	40	0.028	***1.3***	***2.5***	***13***	< 0.030	200	**7,300**	**2,000**	***230***	***4,800***	***3,700***	190	-	< 0.10
EXC16-3B-164	EXC16-3B-164	2016 11 17	0.3	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	**1,800**	**1,100**	< 10	***760***	***2,100***	67	-	< 0.10
Excavation Area 3C																		
EXC16-3C-228	EXC16-3C-228	2016 11 22	4.5	100	< 0.0050	< 0.010	0.046	***48***	< 0.030	190	**4,400**	1,300	***200***	***3,600***	***3,200***	580	-	< 0.10
EXC16-3C-229	EXC16-3C-229	2016 11 22	3.5	480	***0.074***	***0.85***	***2.2***	***690***	< 0.030	**1,600**	**12,000**	2,500	***1,800***	***9,400***	***5,900***	190	-	< 0.10
	EXC16-3C-D23	Duplicate	3.5	480	***0.097***	0.079	***2.0***	***550***	< 0.030	**1,300**	**13,000**	2,500	***1,500***	***10,000***	***6,900***	230	-	< 0.10
	QA/QC RPD%				27	166	10	23	*	21	8	0	18	6	16	19	-	*
EXC16-3C-230	EXC16-3C-230	2016 11 22	2.5	550	0.016	***0.10***	***0.37***	***380***	< 0.030	**1,300**	**6,100**	280	***1,400***	***5,600***	740	< 40	-	< 0.10
EXC16-3C-231	EXC16-3C-231	2016 11 22	1.5	270	0.023	< 0.010	***0.28***	***56***	< 0.030	**600**	**6,900**	**1,100**	***630***	***5,700***	***2,500***	< 40	-	< 0.10
EXC16-3C-232	EXC16-3C-232	2016 11 22	0.5	230	0.0057	< 0.010	0.048	***18***	< 0.030	200	**6,900**	**1,400**	***230***	***5,100***	***3,100***	67	-	< 0.10
EXC16-3C-235	EXC16-3C-235	2016 11 22	1.5	35	0.011	< 0.010	0.072	***28***	< 0.030	**270**	< 100	< 100	***300***	< 10	< 10	< 10	-	< 0.10
EXC16-3C-236	EXC16-3C-236	2016 11 22	0.5	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	220	< 10	40	***360***	160	-	< 0.10
EXC16-3C-269	EXC16-3C-269	2016 11 24	0.5	35	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	260	< 10	27	230	71	-	< 0.10
Excavation Area 5																		
EXC16-5-042	EXC16-5-042	2016 11 10	1.5	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	11	520	**1,300**	< 10	***220***	***1,600***	1,200	***4,500***	< 0.10
EXC16-5-044	EXC16-5-044	2016 11 10	3.0	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	390	200	< 10	***200***	330	92	-	< 0.10
	EXC16-5-D5	Duplicate	3.0	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	210	120	< 10	110	180	< 50	-	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	58	*	*	-	*
EXC16-5-196	EXC16-5-196	2016 11 19	3.3	10	< 0.0050	< 0.010	0.069	0.044	< 0.030	< 7.0	100	< 100	< 10	46	99	< 50	-	< 0.10
Federal Guideline/Standard																		
CCME CEQG/CWS Residential Coarse-Grained Surface (< 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (> 1.5m)[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	10,000	n/a
BC Standard																		
CSR Residential Land Use (RL) (< 3.0m)[c]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (> 3.0m)[c]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260.

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

RPD Denotes relative percent difference.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[b] Pathways Included: Direct Contact, Eco Soil Contact, Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.

[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[d] BETX/VPH/F1 analysis from soil jar, not methanol-preserved vial; results could be biased low.

TABLE 5: Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Interim Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																			
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
Excavation Area 1																								
EXC16-1-108	EXC16-1-108	2016 11 13	2.5	5	0.0064	0.018	0.016	0.0060	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-109	EXC16-1-109	2016 11 13	1.5	0	0.0053	0.017	0.021	0.0085	0.0082	0.0056	0.0056	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-110	EXC16-1-110	2016 11 13	0.5	0	***0.10***	0.20	0.054	0.079	0.14	***0.080***	0.010	0.0076	0.019	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
EXC16-1-124	EXC16-1-124	2016 11 14	3.0	10	0.011	0.035	0.015	0.0097	0.013	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
	EXC16-1-D13	Duplicate	3.0	10	***0.018***	0.051	0.018	0.011	0.019	0.0074	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.14
		QA/QC RPD%			*	37	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-161	EXC16-1-161	2016 11 17	4.0	35	***0.12***	0.52	< 0.0050	< 0.0050	< 0.020	***0.055***	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-173	EXC16-1-173	2016 11 18	3.5	20	< 0.0050	0.046	0.027	0.0074	0.043	0.011	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-1-D17	Duplicate	3.5	20	< 0.0089	0.034	0.022	0.059	0.037	0.0071	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
		QA/QC RPD%			*	30	*	*	15	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-174	EXC16-1-174	2016 11 18	3.5	10	***0.35***	1.6	0.062	0.17	***0.39***	***0.35***	0.046	< 0.0050	0.025	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-175	EXC16-1-175	2016 11 18	3.5	10	***0.49***	3.3	0.082	0.11	0.12	***0.47***	0.045	0.0052	0.031	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-176	EXC16-1-176	2016 11 18	3.5	10	***0.23***	2.4	0.054	0.12	0.045	***0.48***	0.021	< 0.0050	0.017	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-181	EXC16-1-181	2016 11 19	5.5	30	***1.4***	6.5	0.010	0.24	0.19	***0.79***	< 0.0040	< 0.020	0.024	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-182	EXC16-1-182	2016 11 19	4.5	20	***1.5***	6.4	0.0091	0.17	0.050	***0.80***	< 0.0040	< 0.020	0.023	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-183	EXC16-1-183	2016 11 19	3.5	20	***0.96***	5.7	0.012	0.18	0.032	***0.81***	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-186	EXC16-1-186	2016 11 19	3.5	25	***0.52***	2.1	0.042	0.12	***0.30***	***0.62***	0.055	< 0.0080	0.040	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-187	EXC16-1-187	2016 11 19	2.5	75	***4.0***	17	0.18	***0.73***	***1.8***	***3.3***	0.31	< 0.033	0.17	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-1-188	EXC16-1-188	2016 11 19	1.5	100	***12***	46	0.56	***1.9***	***5.6***	***11***	1.0	0.16	0.65	< 0.050	< 0.050	-	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.10	0.59
	EXC16-1-D19	Duplicate	1.5	100	***9.5***	38	0.31	***1.3***	***3.7***	***8.4***	0.57	0.076	0.43	< 0.0050	0.0053	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
		QA/QC RPD%			23	19	57	37	41	27	55	71	41	*	*	-	*	*	*	*	*	*	*	*
EXC16-1-189	EXC16-1-189	2016 11 19	0.5	100	***13***	51	0.86	***2.7***	***9.4***	***17***	1.7	0.23	1.2	< 0.050	< 0.050	-	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.10	0.59
EXC16-1-212	EXC16-1-212	2016 11 21	6.0	40	***0.032***	0.21	0.0095	< 0.0050	0.068	0.022	0.018	< 0.020	0.024	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-213	EXC16-1-213	2016 11 21	6.0	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-215	EXC16-1-215	2016 11 21	6.5	60	< 0.010	0.068	0.014	0.050	0.067	< 0.010	0.0045	0.041	0.23	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-222	EXC16-1-222	2016 11 21	2.5	10	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-224	EXC16-1-224	2016 11 21	3.0	10	***0.014***	0.027	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-1-225	EXC16-1-225	2016 11 21	3.0	20	0.011	0.035	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
Excavation Area 3A																								
EXC16-3A-057	EXC16-3A-057	2016 11 11	2.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-058	EXC16-3A-058	2016 11 11	1.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-059	EXC16-3A-059	2016 11 11	0.5	10	***0.21***	1.5	0.040	0.16	***0.35***	***0.38***	0.045	0.027	0.060	< 0.010	0.012	-	0.021	< 0.010	0.014	< 0.020	< 0.020	< 0.020	< 0.10	0.27
EXC16-3A-060	EXC16-3A-060	2016 11 11	2.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-061	EXC16-3A-061	2016 11 11	1.5	5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-062	EXC16-3A-062	2016 11 11	0.5	5	***0.18***	0.68	0.073	***0.69***	***0.57***	***0.26***	< 0.035	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-063	EXC16-3A-063	2016 11 11	2.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-064	EXC16-3A-064	2016 11 11	1.5	10	***0.14***	1.6	0.037	0.037	0.019	***0.056***	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-065	EXC16-3A-065	2016 11 11	0.5	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-066	EXC16-3A-066	2016 11 11	2.5	10	***0.41***	1.6	0.033	0.041	0.12	***0.085***	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-067	EXC16-3A-067	2016 11 11	1.5	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-068	EXC16-3A-068	2016 11 11	0.5	80	***23***	61	0.67	***1.4***	***4.2***	***2.1***	0.063	< 0.010	0.042	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
	EXC16-3A-D6	Duplicate	0.5	80	***22***	60	0.53	***1.2***	***2.5***	***1.7***	0.046	< 0.010	0.034	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
		QA/QC RPD%			4	2	23	15	51	21	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-3A-069	EXC16-3A-069	2016 11 11	2.5	25	< 0.010	0.022	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-070	EXC16-3A-070	2016 11 11	1.5	20	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-071	EXC16-3A-071	2016 11 11	0.5	10	< 0.010	< 0.010	0.015	0.040	0.054	0.024	0.18	0.064	0.21	0.029	0.040	-	0.035	< 0.010	0.029	0.028	< 0.020	0.030	< 0.10	0.50
EXC16-3A-072	EXC16-3A-072	2016 11 11	2.5	15	< 0.010	0.027	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
Federal Guideline																								
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																								
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Most stringent guideline applied.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Laboratory detection limit exceeds regulatory standard/guideline.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 5 (Cont'd): Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Interim Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
Excavation Area 3A																									
EXC16-3A-073	EXC16-3A-073	2016 11 11	1.5	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-074	EXC16-3A-074	2016 11 11	0.5	10	***0.016***	0.052	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-079	EXC16-3A-079	2016 11 11	1.5	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-080	EXC16-3A-080	2016 11 11	0.5	20	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-082	EXC16-3A-082	2016 11 11	1.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-083	EXC16-3A-083	2016 11 11	0.5	10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-089	EXC16-3A-089	2016 11 11	3.0	20	***0.019***	0.068	< 0.028	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.014	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
	EXC16-3A-D8	Duplicate	3.0	20	< 0.018[a]	0.057	< 0.023	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.013	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
	QA/QC RPD%				*	18	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-3A-090	EXC16-3A-090	2016 11 11	5.5	20	< 0.010	0.046	0.026	0.025	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-091	EXC16-3A-091	2016 11 11	4.5	15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-092	EXC16-3A-092	2016 11 11	3.5	20	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
EXC16-3A-241	EXC16-3A-241	2016 11 23	3.5	55	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-242	EXC16-3A-242	2016 11 23	4.5	60	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-243	EXC16-3A-243	2016 11 23	5.5	60	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-244	EXC16-3A-244	2016 11 23	3.5	50	< 0.018[a]	0.073	0.056	0.047	0.0089	***0.23***	< 0.0040	< 0.0050	0.0060	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-245	EXC16-3A-245	2016 11 23	4.5	40	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-246	EXC16-3A-246	2016 11 23	5.5	45	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-247	EXC16-3A-247	2016 11 23	3.5	50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-248	EXC16-3A-248	2016 11 23	4.5	45	< 0.0050	0.023	0.0074	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-249	EXC16-3A-249	2016 11 23	5.5	40	< 0.0050	0.0086	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-250	EXC16-3A-250	2016 11 23	3.5	35	< 0.0050	0.011	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-251	EXC16-3A-251	2016 11 23	4.5	30	< 0.0050	0.0063	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-252	EXC16-3A-252	2016 11 23	5.5	35	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-253	EXC16-3A-253	2016 11 23	3.5	40	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-254	EXC16-3A-254	2016 11 23	4.5	50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
EXC16-3A-255	EXC16-3A-255	2016 11 23	5.5	55	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
TP16-3	TP16-3-1.3	2016 11 24	1.0 - 1.3	510	***24***	160	1.9	***6.4***	***11***	***26***	1.7	0.49	1.9	0.066	0.11	-	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.10	0.76
	EXC16-D25	Duplicate	1.0 - 1.3	510	***24***	110	2.0	***6.6***	***11***	***26***	1.8	0.48	1.9	0.067	0.12	-	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.10	0.76
	QA/QC RPD%				0	37	5	3	0	0	6	2	0	2	9	-	*	*	*	*	*	*	*	0
	TP16-3-1.5	2016 11 24	1.3 - 1.5	380	***9.1***	33	0.39	***1.3***	***1.9***	***5.0***	0.31	0.082	0.35	0.013	0.027	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.10
	EXC16-D26	Duplicate	1.3 - 1.5	380	***10***	36	0.43	***1.4***	***2.2***	***6.0***	0.35	0.10	0.41	0.016	0.032	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	0.11
	QA/QC RPD%				9	9	10	7	15	18	12	20	16	*	17	-	*	*	*	*	*	*	*	*
	TP16-3-2.5	2016 11 24	2.0 - 2.5	150	***12***	48	0.61	***2.4***	***3.5***	***3.4***	0.34	0.019	0.24	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	EXC16-D27	Duplicate	2.0 - 2.5	150	***9.4***	37	0.67	***1.9***	***3.8***	***3.7***	0.37	0.020	0.26	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				24	26	9	23	8	8	8	*	8	*	*	-	*	*	*	*	*	*	*	*
Excavation Area 3B																									
EXC16-3B-129	EXC16-3B-129	2016 11 17	0.3	10	***0.29***	1.0	0.0084	0.048	0.15	***0.28***	< 0.0040	< 0.020	0.047	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3B-135	EXC16-3B-135	2016 11 17	0.5	40	***3.7***	12	0.030	***0.54***	***1.5***	***2.7***	0.17	0.053	0.37	< 0.020	0.026	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.32
EXC16-3B-164	EXC16-3B-164	2016 11 17	0.3	20	***0.13***	0.73	0.019	0.029	0.20	***0.48***	< 0.0040	0.062	0.15	< 0.020	0.046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.33
Excavation Area 3C																									
EXC16-3C-228	EXC16-3C-228	2016 11 22	4.5	100	***2.1***	3.9	0.0074	***0.42***	***0.72***	***1.2***	0.045	< 0.020	0.17	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3C-229	EXC16-3C-229	2016 11 22	3.5	480	***18***	37	0.086	***0.94***	***2.5***	***6.7***	0.27	0.13	0.60	< 0.020	0.036	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.32
	EXC16-3C-D23	Duplicate	3.5	480	***21***	42	0.24	***1.4***	***3.9***	***8.1***	0.92	0.23	0.74	< 0.020	0.027	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.32
	QA/QC RPD%				15	13	94	39	44	19	109	56	21	*	29	*	*	*	*	*	*	*	*	*
EXC16-3C-230	EXC16-3C-230	2016 11 22	2.5	550	***31***	75	0.010	0.085	***0.38***	***0.44***	< 0.0040	0.032	0.077	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
Federal Guideline																									
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Most stringent guideline applied.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Laboratory detection limit exceeds regulatory standard/guideline.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 5 (Cont'd): Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Interim Excavation Samples

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
Excavation Area 3C																									
EXC16-3C-231	EXC16-3C-231	2016 11 22	1.5	270	***6.2***	18	0.087	***0.54***	***2.0***	***3.1***	< 0.0040	0.11	0.27	< 0.020	0.048	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.33
EXC16-3C-232	EXC16-3C-232	2016 11 22	0.5	230	***2.5***	6.4	0.11	***0.97***	***1.2***	***2.2***	0.30	0.21	0.54	< 0.020	0.021	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3C-235	EXC16-3C-235	2016 11 22	1.5	35	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3C-236	EXC16-3C-236	2016 11 22	0.5	20	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
EXC16-3C-269	EXC16-3C-269	2016 11 24	0.5	35	***0.016***	0.057	< 0.0050	< 0.0050	0.0070	0.016	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
Excavation Area 5																									
EXC16-5-042	EXC16-5-042	2016 11 10	1.5	10	***0.041***	0.18	0.017	0.032	0.064	***0.17***	0.027	0.017	0.071	< 0.010	0.021	-	0.023	< 0.010	0.021	< 0.020	< 0.020	0.022	< 0.10	0.30
EXC16-5-044	EXC16-5-044	2016 11 10	3.0	15	***0.14***	1.7	0.040	0.16	***0.26***	***0.84***	0.051	0.067	0.078	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
	EXC16-5-D5	Duplicate	3.0	15	***0.085***	0.96	0.022	0.087	0.14	***0.47***	0.028	0.015	0.031	< 0.010	< 0.010	-	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.020	< 0.10	0.14
		QA/QC RPD%			49	56	*	59	60	56	*	*	*	*	*	-	*	*	*	*	*	*	*	*
EXC16-5-196	EXC16-5-196	2016 11 19	3.3	10	***0.096***	0.34	0.0078	0.047	0.071	***0.25***	0.027	0.028	0.043	< 0.0050	< 0.0050	-	0.015	< 0.0050	0.011	0.0067	< 0.0050	0.0069	< 0.10	0.16
Federal Guideline																									
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B6A1853, B6A1874, B6A3068, B6A3932, B6A4334, B6A5664, B6A6260.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Most stringent guideline applied.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Laboratory detection limit exceeds regulatory standard/guideline.

TABLE 6: Sample Log - Import Backfill

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Sample Type	Description	North (m)	East (m)	Depth (m)	Headspace (ppm)
SS16-01-01	SS16-01-01	2016 10 18	Backfill	SAND and GRAVEL, brown, medium dense, dry, some organics.	6612427.9	606404.6	0.3	0
SS16-01-06	SS16-01-06	2016 10 18	Backfill	SAND and GRAVEL, brown, medium dense, dry, some organics.	6612410.0	606392.3	0.3	0
SS16-02-03	SS16-02-03	2016 10 16	Backfill	SAND, trace gravel, fine, brown, loose, damp, some roots, some organics.	6612350.7	606476.1	0.3	0
SS16-02-04	SS16-02-04	2016 10 16	Backfill	SAND, trace gravel, fine, brown, loose, damp, some roots, some organics.	6612341.2	606450.1	0.3	0
TP16-01	TP16-01	2016 10 18	Backfill	SAND, fine grained, brown, dry.	6612380.1	606469.2	0.0-3.0	0
TP16-02	TP16-02	2016 10 18	Backfill	SAND and GRAVEL, brown, dry.	6612391.6	606438.9	0.0-3.0	0
TP16-03	TP16-03	2016 10 18	Backfill	SAND, fine grained, brown, dry.	6612374.7	606426.2	0.0-3.0	0
TP16-04	TP16-04	2016 10 18	Backfill	SAND and GRAVEL, brown, dry.	6612354.5	606451.8	0.0-3.0	0
Backfill	BF16-01	2016 11 15	Backfill	SAND, some silt, some gravel, brown, loose.	-	-	-	0
	BF16-02	2016 11 15	Backfill	SAND, some silt, some gravel, brown, loose.	-	-	-	0
	BF16-03	2016 11 15	Backfill	SAND and GRAVEL, some silt, grey/brown, loose, dry.	-	-	-	0
	BF16-04	2016 11 15	Backfill	SAND and GRAVEL, some silt, grey/brown, loose, dry.	-	-	-	0
	BF16-05	2016 11 15	Backfill	SAND and GRAVEL, some silt, brown, loose, damp.	-	-	-	0
	BF16-06	2016 11 19	Backfill	SAND, fine grained, some gravel, fine and coarse, subrounded, trace silt, brown, medium dense, damp.	-	-	-	0
	BF16-07	2016 11 19	Backfill	SAND, fine grained, gravelly, fine and coarse, subrounded to rounded, grey, loose to medium dense, damp.	-	-	-	0
	BF16-08	2016 11 19	Backfill	GRAVEL and COBBLES, fine and coarse gravel, subrounded to rounded gravel, subrounded to rounded cobbles, sandy, fine to coarse grained, grey, loose, damp.	-	-	-	0
	BF16-09	2016 11 19	Backfill	SAND, medium grained, trace gravel, fine and coarse, subrounded to rounded, grey, loose, damp.	-	-	-	0
	BF16-10	2016 11 19	Backfill	Blind field duplicate of BF16-09.	-	-	-	0
	BF16-11	2016 12 04	Backfill	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	-	-	-	15
	BF16-12	2016 12 04	Backfill	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	-	-	-	10
	BF16-13	2016 12 04	Backfill	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	-	-	-	15
	BF16-14	2016 12 04	Backfill	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	-	-	-	20
	BF16-15	2016 12 04	Backfill	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	-	-	-	10
	BF16-16	2016 12 04	Backfill	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	-	-	-	15
	BF16-17	2016 12 05	Backfill	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	-	-	-	20
	BF16-18	2016 12 05	Backfill	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	-	-	-	15
	BF16-19	2016 12 05	Backfill	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	-	-	-	0
	BF16-20	2016 12 05	Backfill	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	-	-	-	5
	BF16-21	2016 12 05	Backfill	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	-	-	-	5
	BF16-22	2016 12 05	Backfill	SAND and GRAVEL, medium to coarse grained sand, fine and coarse gravel, subrounded to rounded, grey/brown, loose, damp.	-	-	-	5

TABLE 7: Summary of Analytical Results for Soil - Hydrocarbons - Import Backfill

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions				MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19) µg/g	HEPH (C19-C32) µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	MTBE µg/g
SS16-01-01	SS16-01-01	2016 10 18	0.3	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	46	30	< 0.10
SS16-01-06	SS16-01-06	2016 10 18	0.3	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
SS16-02-03	SS16-02-03	2016 10 16	0.3	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
SS16-02-04	SS16-02-04	2016 10 16	0.3	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
TP16-01	TP16-01	2016 10 18	0.0 - 3.0	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
TP16-02	TP16-02	2016 10 18	0.0 - 3.0	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
TP16-03	TP16-03	2016 10 18	0.0 - 3.0	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
TP16-04	TP16-04	2016 10 18	0.0 - 3.0	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
Backfill	BF16-01	2016 11 15	-	0	< 0.0050	< 0.010	***0.19***	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-01[d,e]	2016 11 15	-	0	-	-	***0.13***	-	-	-	-	-	-	-	-	-	-
	BF16-02	2016 11 15	-	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-03	2016 11 15	-	0	< 0.0050	< 0.010	0.032	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-04	2016 11 15	-	0	< 0.0050	< 0.010	***1.7***	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-04[d]	2016 11 15	-	0	-	-	0.08	-	-	-	-	-	-	-	-	-	-
	BF16-05	2016 11 15	-	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-06	2016 11 19	-	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-06[d]	2016 11 19	-	0	< 0.005	< 0.01	< 0.05	< 0.05	< 0.05	< 10	< 20	< 20	< 10	< 20	< 20	23	< 0.1
	BF16-07	2016 11 19	-	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-07[d]	2016 11 19	-	0	< 0.005	< 0.01	< 0.05	< 0.05	< 0.05	< 10	< 20	< 20	< 10	< 20	< 20	< 20	< 0.1
	BF16-08	2016 11 19	-	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-08[d]	2016 11 19	-	0	< 0.005	< 0.01	< 0.05	< 0.05	< 0.05	< 10	< 20	< 20	< 10	< 20	< 20	< 20	< 0.1
	BF16-09	2016 11 19	-	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-10	Duplicate	-	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	*
	BF16-09[d]	2016 11 19	-	0	< 0.005	< 0.01	< 0.05	< 0.05	< 0.05	< 10	< 20	< 20	< 10	< 20	< 20	< 20	< 0.1
	BF16-10[d]	Duplicate	-	0	< 0.005	< 0.01	< 0.05	< 0.05	< 0.05	< 10	< 20	< 20	< 10	< 20	< 20	< 20	< 0.1
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	*
	BF16-11	2016 12 04	-	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-12	2016 12 04	-	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-13	2016 12 04	-	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-14	2016 12 04	-	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-15	2016 12 04	-	10	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-16	2016 12 04	-	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-17	2016 12 05	-	20	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-18	2016 12 05	-	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-19	2016 12 05	-	0	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-20	2016 12 05	-	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-21	2016 12 05	-	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
	BF16-22	2016 12 05	-	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 7.0	< 100	< 100	< 10	< 10	< 50	< 50	< 0.10
Federal Guideline/Standard																	
CCME CEQG/CWS Residential Coarse-Grained Surface[b]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	n/a
BC Standard																	
CSR Residential Land Use (RL)[c]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	320

Associated Maxxam file(s): B692861, B6A2908, B6A4324, B6A9824.
Associated AGAT file(s): 16C162100, 16V162743.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
RPD Denotes relative percent difference.
* RPDs are not calculated where one or more concentrations are less than five times RDL.
RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard.

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[b] Pathways Included: Direct Contact, Eco Soil Contact, Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation (indoor, basement), Vapour Inhalation (indoor, slab-on-grade), Protection of Potable Groundwater.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[d] Analyzed by AGAT.
[e] Original vial re-analyzed by AGAT (due to no second vial available).

TABLE 8: Summary of Analytical Results for Soil - Polycyclic Aromatic Hydrocarbons - Import Backfill

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
SS16-01-01	SS16-01-01	2016 10 18	0.3	0	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
SS16-01-06	SS16-01-06	2016 10 18	0.3	0	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
SS16-02-03	SS16-02-03	2016 10 16	0.3	0	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
SS16-02-04	SS16-02-04	2016 10 16	0.3	0	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
TP16-01	TP16-01	2016 10 18	0.0 - 3.0	0	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
TP16-02	TP16-02	2016 10 18	0.0 - 3.0	0	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
TP16-03	TP16-03	2016 10 18	0.0 - 3.0	0	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
TP16-04	TP16-04	2016 10 18	0.0 - 3.0	0	< 0.010	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	0.041	0.31
Backfill	BF16-01	2016 11 15	-	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-02	2016 11 15	-	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-03	2016 11 15	-	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-04	2016 11 15	-	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-05	2016 11 15	-	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-06	2016 11 19	-	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-06[d]	2016 11 19	-	0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.02	< 0.02	< 0.004	< 0.01	< 0.01	< 0.03	< 0.05	< 0.05	< 0.05	< 0.05	< 0.03	< 0.02	< 0.005	< 0.05	< 0.05	< 0.6
	BF16-07	2016 11 19	-	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-07[d]	2016 11 19	-	0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.02	< 0.02	< 0.004	< 0.01	< 0.01	< 0.03	< 0.05	< 0.05	< 0.05	< 0.05	< 0.03	< 0.02	< 0.005	< 0.05	< 0.05	< 0.6
	BF16-08	2016 11 19	-	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-08[d]	2016 11 19	-	0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.02	< 0.02	< 0.004	< 0.01	< 0.01	< 0.03	< 0.05	< 0.05	< 0.05	< 0.05	< 0.03	< 0.02	< 0.005	< 0.05	< 0.05	< 0.6
	BF16-09	2016 11 19	-	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-10	Duplicate	-	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BF16-09[d]	2016 11 19	-	0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.02	< 0.02	< 0.004	< 0.01	< 0.01	< 0.03	< 0.05	< 0.05	< 0.05	< 0.05	< 0.03	< 0.02	< 0.005	< 0.05	< 0.05	< 0.6
	BF16-10[d]	Duplicate	-	0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.02	< 0.02	< 0.004	< 0.01	< 0.01	< 0.03	< 0.05	< 0.05	< 0.05	< 0.05	< 0.03	< 0.02	< 0.005	< 0.05	< 0.05	< 0.6
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	BF16-11	2016 12 04	-	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-12	2016 12 04	-	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-13	2016 12 04	-	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-14	2016 12 04	-	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-15	2016 12 04	-	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-16	2016 12 04	-	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-17	2016 12 05	-	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-18	2016 12 05	-	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-19	2016 12 05	-	0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-20	2016 12 05	-	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-21	2016 12 05	-	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
	BF16-22	2016 12 05	-	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	< 0.0050	< 0.0050	< 0.0050	-	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.10	< 0.10
Federal Guideline																								
CCME CEQG Residential Land Use (RL)[b]					0.013	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																								
CSR Residential Land Use (RL)[c]					5	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a

Associated Maxxam file(s): B692861, B6A2908, B6A4324, B6A9824.

Associated AGAT file(s): 16V162743.

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

RPD Denotes relative percent difference.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[b] Most stringent guideline applied.

[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[d] Analyzed by AGAT.

TABLE 9: Summary of Analytical Results for Soil - Total Metals - Import Backfill

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Phys	Total Metals																				
				pH	Antimony µg/g	Arsenic µg/g	Barium µg/g	Beryllium µg/g	Cadmium µg/g	Chromium µg/g	Cobalt µg/g	Copper µg/g	Lead µg/g	Lithium µg/g	Manganese µg/g	Mercury µg/g	Molybdenum µg/g	Nickel µg/g	Selenium µg/g	Silver µg/g	Strontium µg/g	Thallium µg/g	Tin µg/g	Uranium µg/g	Vanadium µg/g	Zinc µg/g
SS16-01-01	SS16-01-01	2016 10 18	0.3	7.60	0.43	6.37	204	0.62	0.501	31.3	9.25	15.3	13.8	13.0	453	< 0.050	0.63	30.6	< 0.50	0.098	22.8	0.097	0.66	0.881	41.1	72.4
SS16-01-06	SS16-01-06	2016 10 18	0.3	***8.51***	0.41	5.85	150	< 0.40	0.264	21.5	8.75	12.7	8.01	9.6	408	< 0.050	0.52	22.9	< 0.50	0.065	34.3	0.085	0.39	0.647	29.0	51.5
SS16-02-03	SS16-02-03	2016 10 16	0.3	***8.50***	0.49	5.90	146	< 0.40	0.220	22.5	7.90	15.6	9.45	10.5	313	< 0.050	0.65	24.4	< 0.50	0.077	48.2	0.095	0.36	0.609	29.0	50.3
SS16-02-04	SS16-02-04	2016 10 16	0.3	***8.85***	0.45	4.74	84.0	< 0.40	0.218	17.9	7.91	13.4	5.35	10.0	301	< 0.050	0.38	24.0	< 0.50	0.077	65.4	0.063	0.29	0.595	22.1	42.2
TP16-01	TP16-01	2016 10 18	0.0 - 3.0	***8.70***	0.45	5.11	96.0	< 0.40	0.233	17.4	6.07	11.9	6.58	7.9	252	< 0.050	0.55	17.4	< 0.50	0.061	55.5	0.072	0.23	0.454	20.3	42.5
TP16-02	TP16-02	2016 10 18	0.0 - 3.0	***8.75***	0.55	7.50	137	< 0.40	0.403	23.4	9.79	21.8	9.18	13.2	396	< 0.050	0.62	30.3	< 0.50	0.125	55.3	0.124	0.41	0.643	29.5	58.0
TP16-03	TP16-03	2016 10 18	0.0 - 3.0	***8.55***	0.49	5.64	130	< 0.40	0.333	18.6	6.68	13.6	7.31	7.5	252	< 0.050	0.51	20.9	< 0.50	0.086	40.5	0.072	0.28	0.584	26.0	46.1
TP16-04	TP16-04	2016 10 18	0.0 - 3.0	***8.97***	0.35	4.72	71.9	< 0.40	0.209	14.5	6.25	10.5	4.67	9.3	251	< 0.050	0.37	19.2	< 0.50	< 0.050	72.5	0.055	0.26	0.501	17.3	37.8
Backfill	BF16-01	2016 11 15	-	7.09	0.51	6.0	170	0.69	0.14	29	8.5	14	7.3	-	-	< 0.050	0.75	26	< 0.50	< 0.20	-	0.12	< 1.0	0.62	37	42
	BF16-02	2016 11 15	-	7.93	< 0.50	5.2	140	0.51	0.092	19	6.7	9.1	6.5	-	-	< 0.050	0.62	20	< 0.50	< 0.20	-	< 0.10	< 1.0	0.47	24	35
	BF16-03	2016 11 15	-	7.97	< 0.50	6.3	190	0.47	0.33	22	7.2	14	9.9	-	-	< 0.050	0.80	23	< 0.50	< 0.20	-	< 0.10	< 1.0	0.60	29	46
	BF16-04	2016 11 15	-	***8.68***	< 0.50	6.6	150	< 0.40	0.19	16	6.2	12	5.6	-	-	< 0.050	0.57	21	< 0.50	< 0.20	-	< 0.10	< 1.0	0.57	18	42
	BF16-05	2016 11 15	-	***8.22***	< 0.50	5.1	140	0.44	0.17	20	6.5	14	7.0	-	-	0.063	0.57	22	< 0.50	< 0.20	-	< 0.10	< 1.0	0.53	25	46
	BF16-11	2016 12 04	-	***8.20***	0.67	7.0	180	< 0.40	0.71	***67***	7.5	19	10	-	0.057	-	1.6	***46***	< 0.50	< 0.20	-	0.11	< 1.0	0.55	21	53
	BF16-12	2016 12 04	-	***8.13***	0.88	11	360	< 0.40	0.41	***85***	9.2	26	18	-	0.094	-	2.3	***56***	< 0.50	< 0.20	-	0.14	< 1.0	0.73	27	63
	BF16-13	2016 12 04	-	***8.24***	0.54	5.7	180	< 0.40	0.30	13	6.2	17	8.8	-	0.058	-	0.70	19	< 0.50	< 0.20	-	0.10	< 1.0	0.55	19	49
	BF16-14	2016 12 04	-	***8.19***	0.99	10	350	0.41	0.41	***91***	10	30	22	-	0.077	-	2.4	***60***	< 0.50	< 0.20	-	0.17	< 1.0	0.75	28	70
	BF16-15	2016 12 04	-	***8.02***	0.98	12	310	0.46	0.37	***77***	11	32	19	-	0.099	-	2.3	***58***	< 0.50	< 0.20	-	0.18	< 1.0	0.73	28	71
Federal Guideline																										
CCME CEQG Residential Land Use (RL)[a]				6.0 - 8.0	20	12	500	4	10	64	50	63	140	n/a	n/a	6.6	10	45	1	20	n/a	1	50	23	130	200
BC Standard																										
CSR Residential Land Use (RL)[b]				n/a	20	15	400	4	25 - 35[c]	60	50	150	400	1,600	1,800	15	10	100	3	20	47,000	n/a	50	16	200	450

Associated Maxxam file(s): B692861, B6A2908, B6A9824.

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

RPD Denotes relative percent difference.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

RDL Denotes reported detection limit.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard

[a] Most stringent guideline applied.

[b] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[c] Standard is pH dependent.

ATTACHMENT 3

Regulatory Framework

Federal Guidelines

Canada Wide Standards for Petroleum Hydrocarbons

The *Canadian Council of Ministers of the Environment (CCME)* Canada Wide Standards (CWS) were developed to provide a consistent approach to managing petroleum hydrocarbon sites across Canada. The standards apply to contaminated soil and subsoil and are based in part on land use. They can be applied at any of three tiers of risk assessment, as follows:

- Tier 1 – generic numerical standard;
- Tier 2 – adjustments to the Tier 1 levels based on site-specific information; and
- Tier 3 – site-specific risk assessment.

The CWS apply only to petroleum hydrocarbon fractions (normal straight chain boiling point ranges), including F1 (C6-10), F2 (C10-16), F3 (C16-34) and F4 (C35+). The generic numerical standards are further defined based on soil grain size (fine versus coarse [>75 µm]).

The land use applicable to the standards for the CBSA property is residential land use (RL)/urban park land use (PL), and for Haines Highway is commercial land use (CL). Although the standards based on grain size apply on a sample by sample basis, grain size analysis of selected samples show that the primary texture of soil and subsoil on the Site is coarse-grained.

Canadian Environmental Quality Guidelines

The Canadian Soil Quality Guidelines (SQG) are part of the *Canadian Environmental Quality Guidelines (CEQG)*[6] provided on the CCME website. The guidelines address other soil contaminants besides petroleum hydrocarbon fractions applicable to the Site as follows:

- The federal SQG for BETX are intended to be protective of both environmental (SQGE) and human health (SQGHH) and SQG are derived for different soil textures (coarse and fine) and depths (surface and subsoil). The applicable exposure pathways considered in the application of these guidelines include the most stringent numerical standard of: a) soil ingestion; b) soil dermal contact; c) inhalation of indoor air; d) ecological soil contact; and e) groundwater check values for aquatic life.
- The federal SQG for polycyclic aromatic hydrocarbons (PAH) were updated in October 2008, superseding the previous CCME 1999 and interim 1991 guidelines. The site-specific exposure pathways considered for PAHs included the most stringent of: a) direct contact for human health protection; b) protection of aquatic life; and c) soil contact for environmental health. Guideline values for different soil textures and depths are not specified for the PAH SQG.

Although the CEQG can be used for other parameters historically tested in soil (i.e., metals), these are not Potential Contaminants of Concern (PCOCs) based on the Site contamination history.

British Columbia Provincial Standards

Soil Standards

The BC *Contaminated Sites Regulation*[7] *(CSR)* provides both generic numerical (CSR Schedule 4) and matrix (CSR Schedule 5) soil standards. Generic numerical soil standards (i.e., not site specific) exist for volatile petroleum hydrocarbons (VPH), light extractable petroleum hydrocarbon/heavy extractable petroleum hydrocarbon (LEPH/HEPH) concentrations in soil as well as for metals. Extractable petroleum hydrocarbons ($EPH_{C10-C19}$ and $EPH_{C19-C32}$) include polycyclic aromatic

[6] *Canadian Environmental Quality Guidelines (CEQG),* Canadian Council of Ministers of the Environment (CCME), Winnipeg MB, *including updates to 2015.*

[7] *Contaminated Sites Regulation (CSR), B.C. Reg. 375/96, includes amendments up to B.C. Reg. 184/2016, July 19, 2016.*

hydrocarbons (PAH) while the regulated LEPH and HEPH require a subtraction of PAH concentrations. Where PAH concentrations were not measured, extractable petroleum hydrocarbons (EPH) concentrations are considered conservative when compared to LEPH and HEPH standards.

The matrix numerical soil standards exist for benzene, toluene, ethylbenzene, and xylenes (BTEX) as well as some volatile organic compounds (VOC) and some metals (arsenic, cadmium, chromium, copper, lead, and zinc). The standards used depend on site-specific conditions (e.g., soil pH; intake of contaminated soil and use of groundwater for drinking water for human health protection; and groundwater flow to surface water used by freshwater aquatic life, toxicity to soil invertebrates and plants, and major microbial functional impairment for environmental protection). The site-specific factors considered to be applicable on provincial land adjacent to the Site include the most stringent of: a) intake of contaminated soil; b) groundwater used for drinking water; c) toxicity to soil invertebrates and plants; and d) groundwater flow to surface water used by freshwater aquatic life.

The provincial lands adjacent to the Site are considered wildlands land use, therefore the generic and matrix numerical soil standards apply as follows:

- At a depth of less than 3 m, the numerical standards for urban park land use would apply; and
- At a depth of greater than 3 m, the numerical standards for commercial land use would apply.

ATTACHMENT 4

Quality Assurance / Quality Control

Quality Assurance/Quality Control (QA/QC)

QA/QC Methods

The investigations described in this report incorporated the following quality assurance / quality control (QA/QC) program:

- Completion of field sampling tasks in accordance with in-house written Preferred Operating Procedures (POPs) and senior supervision of field staff.
- Duplicate samples were collected and analyzed at a minimum rate of 10% of total sample population.
- Use of CALA facilities certified to perform the required analyses. This certification requires the lab conform to standards regarding monitoring analytical performance by implementing comprehensive QA/QC procedures and submit to periodic audits by CALA personnel to confirm adherence to these procedures.
- Receipt of analytical data from the laboratory in digital format for direct input into a database.
- Tabulation of the results directly from the database and cross-checking with the printed final laboratory reports.

To evaluate analytical data quality, the relative percent differences (RPD) between the analytical results for original and duplicate samples collected in the field were calculated and compared to established criteria. The RPD is defined as the absolute value of the difference between the two samples, divided by the average of the two results. Since the analytical error increases near the laboratory method detection limit, RPD values have only been calculated where the concentrations are above the practical quantification limit (PQL), defined as five times the detection limit. According to SNC-Lavalin's preferred operation procedures (POPs), the acceptable RPD value for soil samples is less than or equal to 60%.

QA/QC Results

Soil Confirmation Samples

SNC-Lavalin evaluated a total of 52 blind field duplicate soil samples for the 529 confirmation soil samples collected (approximately 10%). The frequency of duplicate samples collected by SNC-Lavalin was considered appropriate and follows SNC-Lavalin's preferred operation procedures.

Analytical results and calculated RPD values for soil samples and their duplicates are included in the analytical tables. For each pair of sample and duplicate sample, the RPD was not calculated if the parameter result for one or both samples was less than the PQL. In all cases, the RPD was inside the acceptable ranges.

Laboratory Analysis

Laboratory matrix spikes, spikes, blanks and laboratory RPDs were within acceptable ranges as specified by Maxxam for all soil. Based on these findings, SNC-Lavalin considers the collected data to be representative and therefore can be relied upon for this investigation.

ATTACHMENT 5

Field Work Methodology

Fieldwork Methodology

The fieldwork was conducted in accordance with SNC-Lavalin's Preferred Operating Procedures (POPs).

Soil Sample Collection Procedure

All sample handling was completed using nitrile gloves. Soil samples were collected either by hand or clean shovel directly from the excavation floor or wall, or from relatively undisturbed soil in the excavator bucket. Sampling equipment was cleaned by power washing or hand washed with Alconox detergent and rinsed in clean water.

Each soil sample was placed into duplicate sample jars fitted with Teflon® lined lids immediately upon collection. Where required for provincial CSR volatile hydrocarbon analyses, samples were also collected by disposable syringe and placed into two laboratory prepared 40 ml vials preserved with methanol and fitted with Teflon® lined caps. The samples were stored in coolers with ice and transported on ice in coolers under chain-of-custody to Maxxam Analytics for analysis. AN aliquot of each sample was also placed into a plastic bag and field screened (dry headspace method) for volatile hydrocarbon vapour concentrations using a GasTech® organic vapour analyzer (OVA) calibrated to a hexane standard.

Chain-of-Custody Procedure

In order to ensure the integrity of the samples, all environmental samples collected by SNC-Lavalin (i.e., soil, water, and soil vapour) were subject to chain-of-custody procedures. These procedures included the following:

- A chain-of-custody was initiated immediately following sample collection by completing a chain-of-custody form provided by the laboratory;
- The chain-of-custody form was maintained with the samples at all times following collection;
- When stored away from the custodian (e.g., overnight), samples were stored where inaccessible to unauthorized third parties;
- Chain-of-custody documents were signed and dated by the custodian upon relinquishment of custody;
- All containers sent out by a third party courier were pre-packed, fastened, and affixed with a custody seal prior to pick-up; and
- The chain-of-custody forms were signed and dated by laboratory personnel upon arrival, and inspected for custody seal and sample integrity.

Transportation of Samples

All environmental samples were transported to the designated laboratory (AGAT) by courier and generally arrived at the laboratory one to two days following pick-up by the courier. Where samples were not analyzed within the hold times, it was noted on the laboratory report.

Duplicate Sample Collection

Duplicate samples were collected for each media at a minimum rate of 10% (i.e., one duplicate for every 10 samples collected). An attempt was made to ensure that the duplicate samples were representative of the same material as follows:

- Soil Duplicates: Soil was collected for duplicate samples from the same layer(s) and material within the sampling location. Given the small-scale heterogeneity in some materials some degree of heterogeneity between duplicates was anticipated to be reflected in the relative percent difference for some parameters

Surveying

As required as part of SNC-Lavalin's scope of work, the horizontal and/or vertical coordinates of the sample locations, extents of final excavation limits, complete STF surface and faces of the 2017/2018 Backfill Material were surveyed using total station equipment.

ATTACHMENT 6

FY2016-2017 Remedial Excavation Photographs

Photograph 1: View of STF construction activities at JJJ Gravel Pit, looking north.

Photograph 2: View of subgrade at STF 3, looking north.

Photograph 3: View of completed Base Liner Installation at STF 1, looking northeast.

Photograph 4: View of the installation of Geotextile over Base Liner.

Photograph 5: View of Completed Protective Geotextile installation at STF 1.

Photograph 6: View of Excavation AEC 3A, looking west on November 16, 2016.

Photograph 7: View of Excavation AEC 1, looking north on November 18, 2016.

Photograph 8: View of excavation AEC 3C, looking east on November 19, 2016.

Photograph 9: View of excavation AEC 3D.

Photograph 10: View of excavation AEC 5.

Photograph 11: View of typical debris encountered in shallow soils.

ATTACHMENT 7

Laboratory Certificates of Analysis (not included in draft)

SNC-Lavalin Inc.
#202 – 3440 Douglas Street
Victoria, British Columbia, Canada, V8Z 3L5
250.385.5028 250.385.5038

March 31, 2016 Project: 636200

Public Works and Government Services Canada
401 - 1230 Government Street
Victoria, BC
V8W 3X4

ATTENTION: Mr. Jordan Stones, Environmental Specialist

REFERENCE: **FY 2015/2016 Feasibility Study Data Report**
Fireside Maintenance Camp, KM 839, Alaska Highway, BC
PWGSC Project No. R.018388.003

Introduction

At the request of Public Works and Government Services Canada (PWGSC), SNC-Lavalin Inc. (SNC-Lavalin) has prepared the following feasibility study data report for the Fireside Maintenance Camp, kilometre 839, Alaska Highway, BC (the "Site").

All proposed work was conducted under the Remediation Consultants Contract No. EZ897-160027/003/PWY and PWGSC Project No. R.018388.003.

Location

The Fireside Maintenance Camp is located approximately 240 km northwest of Fort Nelson, BC, and 150 km southeast of Watson Lake, YT, on the west side of the Alaska Highway.

Objectives

A remedial soil excavation program is anticipated for FY 2016/2017 to address the remediation of petroleum hydrocarbon impacted soil and groundwater at the Site. The feasibility study was intended to provide additional data to facilitate the preparation of a remediation plan and tender specifications.

Activities Performed

A drilling program was conducted at the Site on March 7 to 16, 2016. Figure 1 in Attachment 1 shows the locations of boreholes advanced on the Site. Boreholes were completed using a combination of solid stem auger and ODEX equipped drill rigs. One borehole was completed as a monitoring well. Analytical results for soil and groundwater samples collected from the boreholes and monitoring well

are tabulated in Attachment 2 and laboratory Certificates of Analysis are included in Attachment 3. Borehole logs are included in Attachment 4.

Closure

We trust this provides you with the information you currently require. If you have any questions or require any additional information, please do not hesitate to contact us.

William CullochDasson, M.Sc., P.Geo.
Senior Project Geoscientist

Environment & Geoscience
Infrastructure

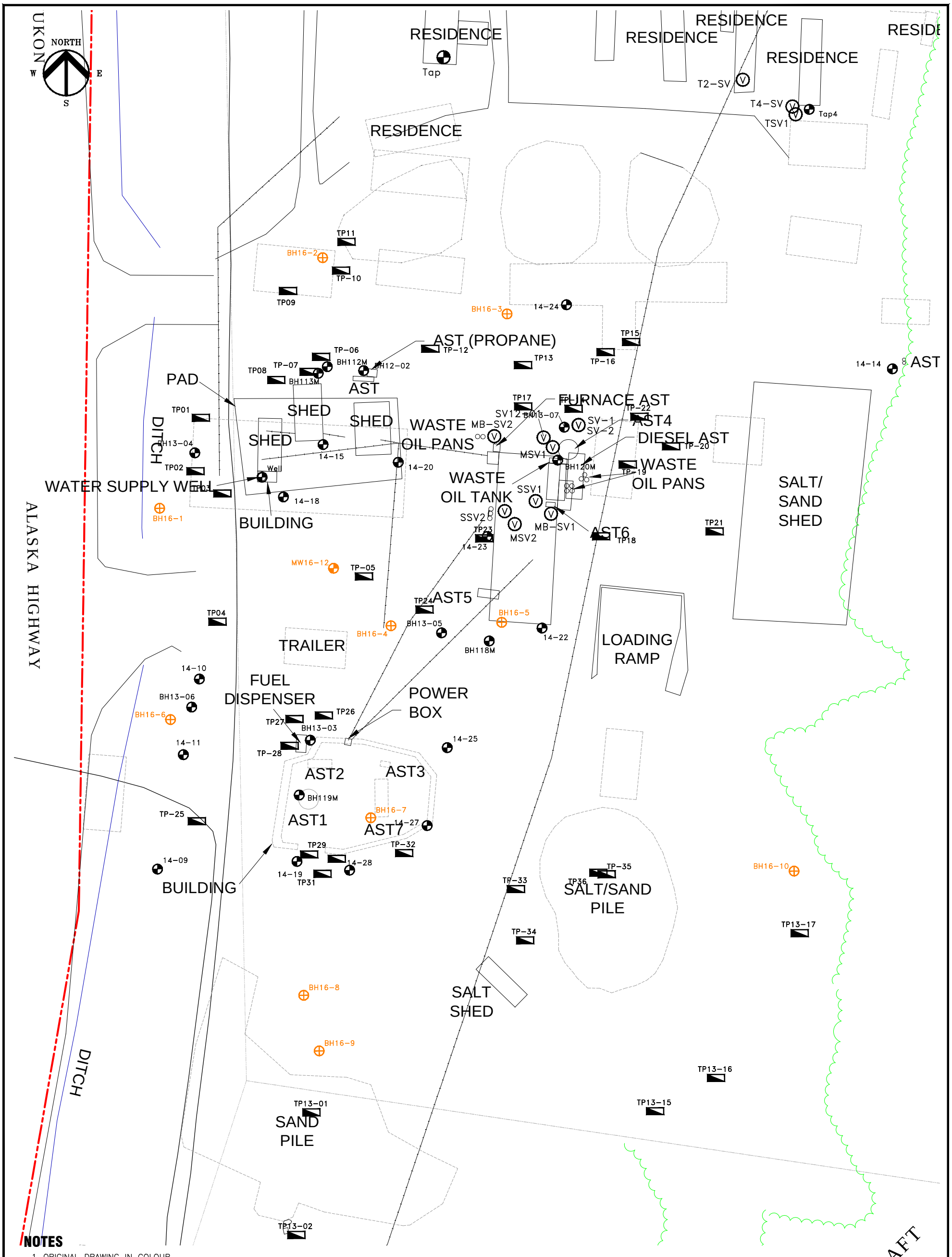
David Kettlewell, M.Sc., P.Geo., CSAP
Senior Project Manager

Environment & Geoscience
Infrastructure

Attachments:
1: Figure 1
2: Tabulated Analytical Results
3: Laboratory Certificates of Analysis
4: Borehole Logs

ATTACHMENT 1

Figure 1



NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.

LEGEND

0 10 20 30 40 METRES

- SUBJECT PROPERTY LIMITS
- LOT BOUNDARY
- FIBER OPTIC LINE
- UNKNOWN UTILITY
- TREELINE
- FENCE
- FORMER SITE CONFIGURATION (PRIOR FIRE)
- BOREHOLE INSTALLED FY2015/2016
- MONITORING WELL INSTALLED FY2015/2016
- MONITORING WELL
- SOIL VAPOUR WELL
- SITE FEATURE
- GARDEN

REFERENCE DRAWINGS

DWG. NO.	DATE	DESCRIPTION
–	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
0	2016-03-31	ISSUED AS DRAFT	PRT	WC

SNC·LAVALIN

CLIENT NAME: PUBLIC WORKS AND GOVERMENT SERVICES CANADA

PROJECT LOCATION: FIRESIDE, ALASKA HIGHWAY, BC

TITLE: FIGURE 1 - SITE PLAN

DWN BY: PB	SCALE: 1:800	DATE: 2016-03-30	DWG No: 623385-102 REV.: 0
CHK'D: MR	PLOT: 20160330.1637	CADFILE: 636200R1	

PATH: P:\CURRENT PROJECTS\PWGSC\636200 FIRESIDE\4.0 EXECUTION\4.5 GIS AND DRAWINGS\CAD\636200R1.DWG

ATTACHMENT 2

Tabulated Analytical Results

TABLE 1: Summary of Analytical Results for Hydrocarbons in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Field Conductivit uS/cm	Monocyclic Aromatic Hydrocarbons				Gross Parameters			Petroleum Hydrocarbon Fractions				MTBE
						Benzene µg/g	Ethyl-benzene µg/g	Toluen µg/g	Xylenes µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19) µg/g	HEPH (C19-C32) µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	MTBE µg/g
BH16-01	BH16-01-1	2016 03 14	0.3 - 0.6	100	61	***0.013***	0.022	0.064	0.075	< 10	< 100	**1,240**	< 10	17	***1,100***	730	< 0.10
	BH16-01-2	2016 03 14	0.9 - 1.2	25	132.3	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	< 10	16	16	< 0.10
	BH16-01-3	Duplicate	0.9 - 1.2	25	132.3	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	*
	BH16-01-5	2016 03 14	11.6 - 11.9	25	57.4	< 0.0050	< 0.010	0.024	< 0.040	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
BH16-02	BH16-02-1	2016 03 07	0.5 - 0.8	250	254	< 0.0050	< 0.010	< 0.020	< 0.040	69	**10,900**	**4,090**	***72***	***4,700***	***9,400***	< 50	< 0.10
	BH16-02-2	2016 03 07	2.0 - 2.3	150	143	< 0.0050	< 0.010	< 0.020	< 0.040	16	**2,410**	954	18	***1,200***	***2,600***	160	< 0.10
BH16-03	BH16-03-1	2016 03 07	0.5 - 0.6	25	404	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	107	< 100	< 10	59	68	< 10	< 0.10
	BH16-03-2	2016 03 07	1.5 - 1.8	25	45	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	73	190	160	< 0.10
	BH16-03-3	Duplicate	1.5 - 1.8	25	45	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	68	180	160	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	7	5	0	*
BH16-04	BH16-04-2	2016 03 14	0.6 - 0.9	25	487	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
	BH16-04-3	2016 03 14	1.5 - 2.1	25	107.8	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
	BH16-04-4	2016 03 14	4.3 - 4.6	5	7.8	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
BH16-05	BH16-05-1	2016 03 15	0.2 - 0.5	200	110	***0.032***	0.082	0.15	0.56	**220**	**1,710**	232	***230***	***1,400***	***730***	54	< 0.10
	BH16-05-3	2016 03 15	1.5 - 2.0	125	132	0.0075	< 0.010	0.029	0.045	< 10	425	< 100	< 10	***350***	190	22	< 0.10
	BH16-05-4	2016 03 15	4.1 - 4.6	25	84	0.0078	0.011	0.032	0.05	< 10	422	149	< 10	***330***	300	80	< 0.10
	BH16-05-7	2016 03 15	15.8 - 16.2	-	-	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
BH16-06	BH16-06-1	2016 03 07	0.5 - 0.6	75	168	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	106	< 10	16	150	98	< 0.10
BH16-07	BH16-07-1	2016 03 07	1.2 - 1.5	11,000	46	< 0.0050	< 0.010	0.024	0.27	**1,200**	**17,900**	480	***1,200***	***15,000***	***1,600***	280	< 0.10
	BH16-07-2	2016 03 07	2.0 - 2.3	425	200	< 0.0050	< 0.010	< 0.020	< 0.040	90	**2,650**	< 100	***93***	***2,400***	260	32	< 0.10
BH16-08	BH16-08-1	2016 03 07	1.5 - 1.8	25	1,798	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	54	170	160	< 0.10
BH16-09	BH16-09-1	2016 03 07	1.5 - 1.8	150	6,670	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
BH16-10	BH16-10-1	2016 03 07	1.5 - 1.8	5	1,010	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	52	170	160	< 0.10
	BH16-10-2	2016 03 07	3.0 - 3.4	25	1,600	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
Federal Standard/Guideline																	
CCME CEQG/CWS Residential/Parkland Coarse-Grained Surface (sample depth < 1.5m						0.0095	0.082	0.37	11	n/a	n/a	n/a	30	150	300	2,800	n/a
CCME CEQG/CWS Residential/Parkland Coarse-Grained Subsoil (sample depth > 1.5m)						0.011	0.082	0.37	11	n/a	n/a	n/a	30	150	2,500	10,000	n/a
BC Standard																	
CSR Residential Land Use (RL)[c]						0.04	1	1.5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	320

Associated Maxxam file(s): B619419, B620873.

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- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

NOTE: Due to shipping error, BETX and VPH samples collected on March 7 were analyzed one day past hold time (vials leaked). Due to lab error, select F2-F4 samples collected on March 7 were analyzed past hold time.

BOLD Concentration greater than CCME CEQG/CWS Residential/Parkland Land Use (RL/PL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[b] Pathways Included: Direct Contact, Eco Soil Contact, Management Limit, Protection of Groundwater for Aquatic Life, Tier 1 - General, Vapour Inhalation (indoor, basement), Vapour Inhalation (indoor, slab-on-grade), Protection of Potable Groundwater.

[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[d] F4 value did not return to baseline; F4 Gravimetric (Gravimetric Heavy Hydrocarbons) not analyzed.

[e] F4 value did not return to baseline and as such F4 Gravimetric (Gravimetric Heavy Hydrocarbons) was completed and reported.

TABLE 1 (Cont'd): Summary of Analytical Results for Hydrocarbons in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[a] (ppm)	Field Conductivit uS/cm	Monocyclic Aromatic Hydrocarbons				Gross Parameters			Petroleum Hydrocarbon Fractions				MTBE
						Benzene µg/g	Ethyl-benzene µg/g	Toluen µg/g	Xylenes µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19) µg/g	HEPH (C19-C32) µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	MTBE µg/g
BH16-12	BH16-12-1	2016 03 11	0.9 - 1.2	75	75	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
	BH16-12-2	2016 03 11	5.5 - 5.8	5	15	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	100	< 10	< 10	120	66[d]	< 0.10
	BH16-12-3	2016 03 11	10.1 - 10.4	-	12.3	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	< 10	110	15[d]	< 0.10
	BH16-12-9	2016 03 12	20.7 - 21.0	-	5.8	< 0.0050	< 0.010	< 0.020	< 0.040	95	**2,120**	271	***99***	***1,800***	730	31[d]	< 0.10
	BH16-12-10	Duplicate	20.7 - 21.0	-	5.8	< 0.0050	0.017	0.035	0.056	100	**1,940**	239	***110***	***1,700***	680	38[d]	< 0.10
	QA/QC RPD%				*	*	*	*	*	5	9	*	11	6	7	*	*
	BH16-12-13	2016 03 13	30.0 - 30.3	-	-	< 0.0050	< 0.010	< 0.020	< 0.040	< 10	< 100	< 100	< 10	12	45	600[e]	< 0.10
Federal Standard/Guideline																	
CCME CEQG/CWS Residential/Parkland Coarse-Grained Surface (sample depth < 1.5m						0.0095	0.082	0.37	11	n/a	n/a	n/a	30	150	300	2,800	n/a
CCME CEQG/CWS Residential/Parkland Coarse-Grained Subsoil (sample depth > 1.5m)						0.011	0.082	0.37	11	n/a	n/a	n/a	30	150	2,500	10,000	n/a
BC Standard																	
CSR Residential Land Use (RL)[c]						0.04	1	1.5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	320

Associated Maxxam file(s): B619419, B620873.

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BOLD Concentration greater than CCME CEQG/CWS Residential/Parkland Land Use (RL/PL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard

[a] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[b] Pathways Included: Direct Contact, Eco Soil Contact, Management Limit, Protection of Groundwater for Aquatic Life, Tier 1 - General, Vapour Inhalation (indoor, basement), Vapour Inhalation (indoor, slab-on-grade), Protection of Potable Groundwater.

[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[d] F4 value did not return to baseline; F4 Gravimetric (Gravimetric Heavy Hydrocarbons) not analyzed.

[e] F4 value did not return to baseline and as such F4 Gravimetric (Gravimetric Heavy Hydrocarbons) was completed and reported.

TABLE 2: Summary of Analytical Results for PAHs in Soil

Sample Location		BH16-01					BH16-02		BH16-03				Federal Guideline	BC Standard
Sample ID		BH16-01-1	BH16-01-2	BH16-01-3	QA/QC	BH16-01-5	BH16-02-1	BH16-02-2	BH16-03-1	BH16-03-2	BH16-03-3	QA/QC	CCME CEQG	CSR
Sample Date (yyyy mm dd)		2016 03 14	2016 03 14	Duplicate	RPD %	2016 03 14	2016 03 07	2016 03 07	2016 03 07	2016 03 07	Duplicate	RPD %	Residential/	Residential
Depth Interval (m)		0.3 - 0.6	0.9 - 1.2	0.9 - 1.2		11.6 - 11.9	0.5 - 0.8	2.0 - 2.3	0.5 - 0.6	1.5 - 1.8	1.5 - 1.8		Parkland	Land Use
Field Screen (ppm)[b]		100	25	25		25	250	150	25	25	25		Land Use	(RL)[d]
Parameter	**Units**	**Analytical Results**											(RL/PL)[c]	
Polycyclic Aromatic Hydrocarbons														
Naphthalene	µg/g	***0.05***	< 0.010	< 0.010	*	< 0.010	< 0.033[a]	< 0.010	< 0.010	< 0.010	< 0.010	*	0.013	5
2-Methylnaphthalene	µg/g	0.093	< 0.020	< 0.020	*	< 0.020	< 0.067	< 0.072	< 0.020	< 0.020	< 0.020	*	n/a	n/a
Acenaphthylene	µg/g	< 0.0050	< 0.0050	< 0.0050	*	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	*	320	n/a
Acenaphthene	µg/g	< 0.0050	< 0.0050	< 0.0050	*	< 0.0050	< 0.082	0.058	< 0.0050	< 0.0050	< 0.0050	*	0.28	n/a
Fluorene	µg/g	< 0.020	< 0.020	< 0.020	*	< 0.020	< 0.15	***0.31***	< 0.020	< 0.020	< 0.020	*	0.25	n/a
Phenanthrene	µg/g	0.029	< 0.010	< 0.010	*	< 0.010	***0.5***	***0.44***	< 0.010	< 0.010	< 0.010	*	0.046	5
Anthracene	µg/g	< 0.0040	< 0.0040	< 0.0040	*	< 0.0040	< 0.0040	< 0.049	< 0.0040	< 0.0040	< 0.0040	*	2.5	n/a
Fluoranthene	µg/g	< 0.020	< 0.020	< 0.020	*	< 0.020	0.39	0.053	< 0.020	< 0.020	< 0.020	*	15.4	n/a
Pyrene	µg/g	< 0.020	< 0.020	< 0.020	*	< 0.020	0.81	0.11	< 0.020	< 0.020	< 0.020	*	7.7	10
Benzo(a)anthracene	µg/g	< 0.020	< 0.020	< 0.020	*	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	*	1	1
Chrysene	µg/g	< 0.020	< 0.020	< 0.020	*	< 0.020	0.022	< 0.020	< 0.020	< 0.020	< 0.020	*	6.2	n/a
Benzo(b+j)fluoranthene	µg/g	< 0.020	< 0.020	< 0.020	*	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	*	6.2	1
Benzo(k)fluoranthene	µg/g	< 0.020	< 0.020	< 0.020	*	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	*	1	1
Benzo(a)pyrene	µg/g	< 0.020	< 0.020	< 0.020	*	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	*	0.6	1
Indeno(1,2,3-cd)pyrene	µg/g	< 0.050	< 0.050	< 0.050	*	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	*	1	1
Dibenz(a,h)anthracene	µg/g	< 0.050	< 0.050	< 0.050	*	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	*	1	1
Benzo(g,h,i)perylene	µg/g	< 0.050	< 0.050	< 0.050	*	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	*	n/a	n/a
B(a)P Equivalency	None	< 0.10	< 0.10	< 0.10	*	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	*	5.3	n/a
Index of Additive Cancer Risk	None	0.31	0.31	0.31	*	0.31	0.31	0.31	0.31	0.31	0.31	*	1	n/a

Associated Maxxam file(s): B619419, B620873.

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n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

BOLD Concentration greater than CCME CEQG Residential/Parkland Land Use (RL/PL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[c] Pathways Included: EH - Soil contact, Freshwater Aquatic Life, HH - Soil Dermal Contact, HH-Off-site migration check, Soil General (whichever is most stringent).

[d] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

TABLE 2 (Cont'd): Summary of Analytical Results for PAHs in Soil

Sample Location		BH16-04			BH16-05				BH16-06	BH16-07		BH16-08	BH16-09	Federal Guideline	BC Standard
Sample ID		BH16-04-2	BH16-04-3	BH16-04-4	BH16-05-1	BH16-05-3	BH16-05-4	BH16-05-7	BH16-06-1	BH16-07-1	BH16-07-2	BH16-08-1	BH16-09-1	CCME CEQG	CSR
Sample Date (yyyy mm dd)		2016 03 14	2016 03 14	2016 03 14	2016 03 15	2016 03 15	2016 03 15	2016 03 15	2016 03 07	2016 03 07	2016 03 07	2016 03 07	2016 03 07	Residential/	Residential
Depth Interval (m)		0.6 - 0.9	1.5 - 2.1	4.3 - 4.6	0.2 - 0.5	1.5 - 2.0	4.1 - 4.6	15.8 - 16.2	0.5 - 0.6	1.2 - 1.5	2.0 - 2.3	1.5 - 1.8	1.5 - 1.8	Parkland	Land Use
Field Screen (ppm)[b]		25	25	5	200	125	25	-	75	11,000	425	25	150	Land Use	(RL)[d]
Parameter	**Units**	**Analytical Results**												(RL/PL)[c]	
Polycyclic Aromatic Hydrocarbons															
Naphthalene	µg/g	< 0.010	< 0.010	< 0.010	***0.53***	***0.18***	***0.19***	< 0.010	< 0.010	< 0.019[a]	< 0.010	< 0.010	***0.045***	0.013	5
2-Methylnaphthalene	µg/g	< 0.020	< 0.020	< 0.020	1.6	0.57	0.63	< 0.020	< 0.020	< 0.086	< 0.069	< 0.020	0.032	n/a	n/a
Acenaphthylene	µg/g	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.032	< 0.0050	< 0.0050	320	n/a
Acenaphthene	µg/g	< 0.0050	< 0.0050	< 0.0050	0.036	0.0079	< 0.0082	< 0.0050	< 0.0050	< 0.88[a]	0.14	< 0.0050	< 0.0050	0.28	n/a
Fluorene	µg/g	< 0.020	< 0.020	< 0.020	0.16	0.059	0.06	< 0.020	< 0.020	***1.8***	***0.37***	< 0.020	< 0.020	0.25	n/a
Phenanthrene	µg/g	< 0.010	< 0.010	< 0.010	***0.11***	***0.05***	***0.051***	< 0.010	< 0.010	***1.2***	***0.18***	< 0.010	< 0.010	0.046	5
Anthracene	µg/g	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0067	< 0.0040	< 0.0040	< 0.0040	2.5	n/a
Fluoranthene	µg/g	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	15.4	n/a
Pyrene	µg/g	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	7.7	10
Benzo(a)anthracene	µg/g	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	1	1
Chrysene	µg/g	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	6.2	n/a
Benzo(b+j)fluoranthene	µg/g	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	6.2	1
Benzo(k)fluoranthene	µg/g	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	1	1
Benzo(a)pyrene	µg/g	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	0.6	1
Indeno(1,2,3-cd)pyrene	µg/g	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	1	1
Dibenz(a,h)anthracene	µg/g	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	1	1
Benzo(g,h,i)perylene	µg/g	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	n/a	n/a
B(a)P Equivalency	None	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	5.3	n/a
Index of Additive Cancer Risk	None	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	1	n/a

Associated Maxxam file(s): B619419, B620873.

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[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[c] Pathways Included: EH - Soil contact, Freshwater Aquatic Life, HH - Soil Dermal Contact, HH-Off-site migration check, Soil General (whichever is most stringent).

[d] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

TABLE 2 (Cont'd): Summary of Analytical Results for PAHs in Soil

Sample Location		BH16-10		BH16-12							Federal Guideline	BC Standard
Sample ID		BH16-10-1	BH16-10-2	BH16-12-1	BH16-12-2	BH16-12-3	BH16-12-9	BH16-12-10	QA/QC	BH16-12-13	CCME CEQG	CSR
Sample Date (yyyy mm dd)		2016 03 07	2016 03 07	2016 03 11	2016 03 11	2016 03 11	2016 03 12	Duplicate	RPD %	2016 03 13	Residential/	Residential
Depth Interval (m)		1.5 - 1.8	3.0 - 3.4	0.9 - 1.2	5.5 - 5.8	10.1 - 10.4	20.7 - 21.0	20.7 - 21.0		30.0 - 30.3	Parkland	Land Use
Field Screen (ppm)[b]		5	25	75	5	-	-	-		-	Land Use	(RL)[d]
Parameter	Units	Analytical Results									(RL/PL)[c]	
Polycyclic Aromatic Hydrocarbons												
Naphthalene	µg/g	< 0.010	< 0.010	< 0.010	0.013	< 0.010	< 0.23[a]	< 0.21[a]	*	< 0.010	0.013	5
2-Methylnaphthalene	µg/g	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	1.5	1.4	7	< 0.020	n/a	n/a
Acenaphthylene	µg/g	< 0.0050	< 0.0050	< 0.0050	0.014	< 0.0050	< 0.29	< 0.043	*	< 0.0050	320	n/a
Acenaphthene	µg/g	< 0.0050	< 0.0050	< 0.0050	0.016	< 0.0050	< 0.11	< 0.096	*	< 0.0050	0.28	n/a
Fluorene	µg/g	< 0.020	< 0.020	< 0.020	0.022	< 0.020	< 0.59[a]	***0.55***	*	< 0.020	0.25	n/a
Phenanthrene	µg/g	< 0.010	< 0.010	< 0.010	***0.11***	< 0.010	***0.89***	***0.81***	9	< 0.010	0.046	5
Anthracene	µg/g	< 0.0040	< 0.0040	< 0.0040	0.076	< 0.0040	< 0.072	< 0.063	*	< 0.0040	2.5	n/a
Fluoranthene	µg/g	< 0.020	< 0.020	< 0.020	0.89	< 0.020	< 0.020	< 0.020	*	< 0.020	15.4	n/a
Pyrene	µg/g	< 0.020	< 0.020	< 0.020	0.54	< 0.020	0.028	0.025	*	< 0.020	7.7	10
Benzo(a)anthracene	µg/g	< 0.020	< 0.020	< 0.020	0.37	< 0.020	< 0.020	< 0.020	*	< 0.020	1	1
Chrysene	µg/g	< 0.020	< 0.020	< 0.020	0.49	< 0.020	< 0.020	< 0.020	*	< 0.020	6.2	n/a
Benzo(b+j)fluoranthene	µg/g	< 0.020	< 0.020	< 0.020	0.6	< 0.020	< 0.020	< 0.020	*	< 0.020	6.2	1
Benzo(k)fluoranthene	µg/g	< 0.020	< 0.020	< 0.020	0.18	< 0.020	< 0.020	< 0.020	*	< 0.020	1	1
Benzo(a)pyrene	µg/g	< 0.020	< 0.020	< 0.020	0.29	< 0.020	< 0.020	< 0.020	*	< 0.020	0.6	1
Indeno(1,2,3-cd)pyrene	µg/g	< 0.050	< 0.050	< 0.050	0.1	< 0.050	< 0.050	< 0.050	*	< 0.050	1	1
Dibenz(a,h)anthracene	µg/g	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	*	< 0.050	1	1
Benzo(g,h,i)perylene	µg/g	< 0.050	< 0.050	< 0.050	0.1	< 0.050	< 0.050	< 0.050	*	< 0.050	n/a	n/a
B(a)P Equivalency	None	< 0.10	< 0.10	< 0.10	0.44	< 0.10	< 0.10	< 0.10	*	< 0.10	5.3	n/a
Index of Additive Cancer Risk	None	0.31	0.31	0.31	***7.2***	0.31	0.31	0.31	*	0.31	1	n/a

Associated Maxxam file(s): B619419, B620873.

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

BOLD Concentration greater than CCME CEQG Residential/Parkland Land Use (RL/PL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[c] Pathways Included: EH - Soil contact, Freshwater Aquatic Life, HH - Soil Dermal Contact, HH-Off-site migration check, Soil General (whichever is most stringent).

[d] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

TABLE 3: Summary of Analytical Results for Hydrocarbons in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Monocyclic Aromatic Hydrocarbons				Gross Parameters					Petroleum Hydrocarbon Fractions				MTBE
			Benzene µg/L	Ethyl-benzene µg/L	Toluene µg/L	Xylenes µg/L	VH (C6- µg/L	VPH (C6- µg/L	EPH (C10- µg/L	LEPH (C10- µg/L	EPH (C19- µg/L	F1- µg/L	F2 (>C10- µg/L	F3 (>C16- µg/L	F4 (>C34- µg/L	MTBE µg/L
MW16-12D	MW16-12-160315	2016 03 15	< 0.40	< 0.40	< 0.40	< 0.40	< 300	< 300	200	200	< 200	< 300	250	< 200	< 200	< 4.0
	MW16-A-160315	Duplicate	< 0.40	< 0.40	< 0.40	< 0.40	< 300	< 300	200	200	< 200	< 300	260	< 200	< 200	< 4.0
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	*	*	*	*
Federal Guideline																
Canadian Drinking Water Quality Guidelines (CDWQG)			5	1.6	24	20	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	15
FGQG Tier 2 Residential/Parkland Land Use (RL/PL)[a]			140	16,000	83	3,900	n/a	n/a	n/a	n/a	n/a	810	1,300	n/a	n/a	340
BC Standard																
CSR Drinking Water (DW)			5	2.4	24	300	15,000[c]	n/a	5,000[c]	n/a	n/a	n/a	n/a	n/a	n/a	15
CSR Aquatic Life (AW)[b]			4,000	2,000	390	n/a	15,000[c]	1,500	5,000[c]	500	n/a	n/a	n/a	n/a	n/a	34,000

Associated Maxxam file(s): B619945.

All terms defined within the body of SNC-Lavalin's report.

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- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline

BOLD Concentration greater than FGQG Tier 2 Residential/Parkland Land Use (RL/PL) Guideline

OUTLINE Concentration greater than CSR Drinking Water (DW) standard

SHADOW Concentration greater than CSR Aquatic Life (AW) standard

[a] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).

[b] Standard to protect freshwater aquatic life.

[c] Applicable at all sites irrespective of water use.

TABLE 4: Summary of Analytical Results for PAHs in Groundwater

Sample Location		MW16-12D			Federal Guideline		BC Standard	
Sample ID		MW16-12-160315	MW16-A-160315	QA/QC	Canadian Drinking Water Quality Guidelines (CDWQG)	FGQG Tier 2 Residential/Parkland Land Use (RL/PL)[a]	CSR Drinking Water (DW)	CSR Aquatic Life (AW)[b]
Sample Date (yyyy mm dd)		2016 03 15	Duplicate	RPD %				
Parameter	Units	Analytical Results						
Polycyclic Aromatic Hydrocarbons								
Naphthalene	µg/L	< 0.10	< 0.10	*	n/a	1.1	n/a	10
2-Methylnaphthalene	µg/L	< 0.10	< 0.10	*	n/a	n/a	n/a	n/a
Acenaphthylene	µg/L	< 0.050	< 0.050	*	n/a	46	n/a	n/a
Acenaphthene	µg/L	< 0.050	< 0.050	*	n/a	5.8	n/a	60
Fluorene	µg/L	< 0.050	< 0.050	*	n/a	3	n/a	120
Phenanthrene	µg/L	< 0.050	< 0.050	*	n/a	0.4	n/a	3
Anthracene	µg/L	< 0.010	< 0.010	*	n/a	0.012	n/a	1
Acridine	µg/L	< 0.050	< 0.050	*	n/a	0.05	n/a	0.5
Fluoranthene	µg/L	< 0.020	< 0.020	*	n/a	0.04	n/a	2
Pyrene	µg/L	< 0.020	< 0.020	*	n/a	0.025	n/a	0.2
Benzo(a)anthracene	µg/L	< 0.010	< 0.010	*	n/a	0.018	n/a	1
Chrysene	µg/L	< 0.050	< 0.050	*	n/a	1.4	n/a	1
Benzo(b+j)fluoranthene	µg/L	< 0.050	< 0.050	*	n/a	0.48	n/a	n/a
Benzo(k)fluoranthene	µg/L	< 0.050	< 0.050	*	n/a	0.48	n/a	n/a
Benzo(a)pyrene	µg/L	< 0.0090	< 0.0090	*	0.01	0.015	0.01	0.1
Indeno(1,2,3-cd)pyrene	µg/L	< 0.050	< 0.050	*	n/a	0.21	n/a	n/a
Dibenz(a,h)anthracene	µg/L	< 0.050	< 0.050	*	n/a	0.26	n/a	n/a
Benzo(g,h,i)perylene	µg/L	< 0.050	< 0.050	*	n/a	0.17	n/a	n/a
Quinoline	µg/L	< 0.24	< 0.24	*	n/a	3.4	n/a	34

Associated Maxxam file(s): B619945.

All terms defined within the body of SNC-Lavalin's report.

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- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline

BOLD Concentration greater than FGQG Tier 2 Residential/Parkland Land Use (RL/PL) Guideline

OUTLINE Concentration greater than CSR Drinking Water (DW) standard

SHADOW Concentration greater than CSR Aquatic Life (AW) standard

[a] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).

[b] Standard to protect freshwater aquatic life.

TABLE 1: Summary of Analytical Results for Hydrocarbons in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions				MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19)[e] µg/g	HEPH (C19-C32)[e] µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	MTBE µg/g
FS-01	FS-01	2001 08 10	0.0 - 0.0	-	< 0.04[a]	***2.3***	< 0.1	***13.9***	-	-	-	-	***550***	***5,400***	***8,600***	77	-
FS-02	FS-02	2001 08 10	0.0 - 0.0	-	< 0.04[a]	***11***	***0.25***	***19.2***	-	-	-	-	***320***	***5,000***	***6,300***	< 10	-
FS-03	FS-03	2001 08 10	0.0 - 0.0	-	< 0.04[a]	< 0.1[a]	< 0.1	< 0.2	-	-	-	-	***160***	***2,400***	***3,500***	200	-
TP-06	FS-06-1.0	2002 10 05	1.0 - 1.0	-	< 0.04[a]	< 0.05	< 0.05	< 0.1	< 0.05	**599**	**10,700**	658	***613***	***10,100***	***2,700***	< 50	-
	FS-06-4.6	2002 10 05	4.6 - 4.6	-	< 0.04[a]	< 0.05	< 0.05	0.2	< 0.05	< 100	**3,230**	384	***59***	***2,310***	***1,650***	< 50	-
TP-07	FS-07-2.0	2002 10 05	2.0 - 2.0	-	< 0.04[a]	***1.48***	***0.33***	**10.7**	< 0.05	**488**	**9,270**	816	***504***	***7,950***	2,390	< 50	-
TP-10	FS-10-0.5	2002 10 05	0.5 - 0.5	-	< 0.04[a]	< 0.05	< 0.05	< 0.1	< 0.05	< 100	**3,680**	< 200	***81***	***3,180***	***721***	< 50	-
TP-12	FS-12-0.5	2002 10 05	0.5 - 0.5	-	***0.69***	***2.94***	0.06	**5.2**	< 0.05	**1,130**	**19,100**	**2,960**	***1,130***	***13,500***	***8,090***	< 50	-
	FS-12-1.2	2002 10 05	1.2 - 1.2	-	***0.24***	***1.79***	< 0.05	**5.8**	< 0.05	**1,110**	**13,400**	**1,490**	***1,120***	***10,300***	***4,400***	< 50	-
TP-14	FS-14-0.5	2002 10 05	0.5 - 0.5	-	< 0.04[a]	< 0.05	< 0.05	0.2	< 0.05	< 100	< 200	< 200	< 30	78	168	67	-
TP-16	FS-16-0.5	2002 10 05	0.5 - 0.5	-	< 0.04[a]	< 0.05	< 0.05	< 0.1	< 0.05	**116**	**3,540**	**1,440**	***115***	***3,170***	***1,900***	640	-
TP-19	FS-19-0.5	2002 10 05	0.5 - 0.5	-	< 0.04[a]	0.07	< 0.05	< 0.1	< 0.05	< 100	< 200	< 200	< 30	90	< 50	< 50	-
	FS-19-2.4	2002 10 05	2.4 - 2.4	-	< 0.04[a]	0.07	< 0.05	< 0.1	< 0.05	< 100	< 200	< 200	< 30	< 50	< 50	< 50	-
	FS-19A-2.4	Duplicate	2.4 - 2.4	-	< 0.04[a]	< 0.05	< 0.05	< 0.1	< 0.05	< 100	< 200	< 200	< 30	< 50	< 50	< 50	-
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	-
TP-20	FS-20-0.5	2002 10 05	0.5 - 0.5	-	< 0.04[a]	< 0.05	< 0.05	< 0.1	< 0.05	< 100	**13,300**	**5,190**	***97***	***7,960***	***11,400***	108	-
TP-22	FS-22-0.5	2002 10 05	0.5 - 0.5	-	< 0.04[a]	***0.34***	0.1	0.7	< 0.05	**136**	**3,000**	**1,080**	***155***	***2,190***	***2,180***	446	-
	FS-22A-0.5	Duplicate	0.5 - 0.5	-	< 0.04[a]	***1.09***	***0.15***	**5.5**	< 0.05	**715**	**8,510**	**2,440**	***722***	***6,270***	***5,100***	804	-
	QA/QC RPD%				*	105	40	155	*	136	96	77	129	96	80	57	-
TP-25	FS-25-0.3	2002 10 05	0.3 - 0.3	-	< 0.04[a]	< 0.05	< 0.05	< 0.1	< 0.05	< 100	**2,400**	647	< 30	***1,620***	***1,400***	218	-
TP-28	FS-28-0.2	2002 10 05	0.2 - 0.2	-	< 0.04[a]	***0.32***	***0.18***	4.4	< 0.05	**531**	**17,400**	**4,800**	***541***	***12,800***	***11,500***	555	-
TP-30	FS-30-0.25	2002 10 05	0.3 - 0.3	-	***0.33***	< 0.05	< 0.05	< 0.1	< 0.05	< 100	< 200	< 200	< 30	52	174	66	-
TP-32	FS-32-0.25	2002 10 05	0.3 - 0.3	-	< 0.04[a]	***0.12***	***0.21***	1.6	< 0.05	**741**	**15,100**	627	***777***	***14,400***	***2,110***	95	-
TP-35	FS-35-1.0	2002 10 05	1.0 - 1.0	-	< 0.04[a]	< 0.05	< 0.05	< 0.02	0.04	-	< 200	< 200	< 30	< 50	< 50	< 50	-
BH01	BH01-01	2003 01 01	1.2 - 1.2	-	-	-	-	-	-	-	< 200	< 200	-	42	58	< 50	-
BH02	BH02-01	2003 01 01	1.2 - 1.2	-	-	-	-	-	-	-	< 200	< 200	-	35	< 50	< 50	-
	BH02-08	2003 01 01	6.6 - 6.6	-	< 0.04[a]	< 0.05	< 0.05	< 0.1	< 0.05	< 100	< 200	< 200	-	44	< 50	< 50	-
BH03	BH03-02	2003 01 01	2.7 - 2.7	-	-	-	-	-	-	-	**17,900**	**6,270**	-	***8,660***	***13,400***	1,660	-
	BH03-06	2003 01 01	7.3 - 7.3	-	-	-	-	-	-	-	1,280	306	-	***851***	***681***	204	-
	BH03-08	2003 01 01	10.1 - 10.1	-	-	-	-	-	-	-	267	< 200	-	148	148	< 50	-
BH04	BH04-03	2003 01 01	4.3 - 4.3	-	-	-	-	-	-	-	< 200	< 200	-	< 30	< 50	< 50	-
	BH04-05	2003 01 01	7.3 - 7.3	-	-	-	-	-	-	-	< 200	< 200	-	31	< 50	< 50	-
	BH04-06	2003 01 01	8.8 - 8.8	-	-	-	-	-	-	-	< 200	< 200	-	< 30	< 50	< 50	-
BH05	BH05-04	2003 01 01	5.5 - 5.5	-	-	-	-	-	-	-	< 200	< 200	-	31	< 50	52	-
	BH05-07	2003 01 01	8.5 - 8.5	-	-	-	-	-	-	-	780	< 200	-	***562***	***320***	< 50	-
BH06	BH06-01	2003 01 01	1.2 - 1.2	-	-	-	-	-	-	-	< 200	< 200	-	< 30	121	< 50	-
	BH06-05	2003 01 01	7.3 - 7.3	-	-	-	-	-	-	-	< 200	< 200	-	< 30	< 50	< 50	-
BH07	BH07-02	2003 01 01	2.7 - 2.7	-	< 0.04[a]	0.06	< 0.05	4.8	< 0.05	**289**	**8,340**	**1,360**	-	***5,250***	***4,200***	< 50	-
	BH07-06	2003 01 01	8.8 - 8.8	-	-	-	-	-	-	-	**2,760**	416	-	***1,600***	***1,230***	< 50	-
BH08	BH08-04	2003 01 01	5.8 - 5.8	-	-	-	-	-	-	-	< 200	< 200	-	< 30	< 50	< 50	-
	BH08-08	2003 01 01	11.9 - 11.9	-	-	-	-	-	-	-	< 200	< 200	-	< 30	< 50	< 50	-
BH09	BH09-03	2003 01 01	4.3 - 4.3	-	-	-	-	-	-	-	< 200	< 200	-	< 30	< 50	< 50	-
	BH09-07	2003 01 01	10.1 - 10.1	-	-	-	-	-	-	-	< 200	< 200	-	< 30	< 50	< 50	-
BH10	BH10-05	2003 01 01	7.3 - 7.3	-	-	-	-	-	-	-	< 200	< 200	-	< 30	< 50	< 50	-
	BH10-08	2003 01 01	11.9 - 11.9	-	-	-	-	-	-	-	< 200	< 200	-	< 30	< 50	< 50	-
BH11	BH11-01	2003 01 01	1.2 - 1.2	-	-	-	-	-	-	-	< 200	< 200	-	< 30	< 50	< 50	-
	BHQAQC-01	Duplicate	1.2 - 1.2	-	-	-	-	-	-	-	< 200	< 200	-	< 30	< 50	< 50	-
	QA/QC RPD%				-	-	-	-	-	-	*	*	-	*	*	*	-
	BH11-07	2003 01 01	10.4 - 10.4	-	-	-	-	-	-	-	< 200	< 200	-	34	< 50	< 50	-
BH12	BH12-01	2003 01 01	1.2 - 1.2	-	< 0.04[a]	< 0.05	< 0.05	< 0.1	< 0.05	< 100	< 200	< 200	-	< 30	< 50	< 50	-
	BHQAQC-02	Duplicate	1.2 - 1.2	-	-	-	-	-	-	-	< 200	< 200	-	< 30	< 50	< 50	-
	QA/QC RPD%				-	-	-	-	-	-	*	*	-	*	*	*	-
	BH12-05	2003 01 01	7.3 - 7.3	-	-	-	-	-	-	-	< 200	< 200	-	< 30	< 50	< 50	-
	BH12-08	2003 01 01	11.9 - 11.9	-	-	-	-	-	-	-	< 200	< 200	-	32	< 50	< 50	-
BH13	BH13-2	2004 11 23	2.0 - 2.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH14	BH14-1	2004 11 23	0.5 - 0.5	-	-	-	-	-	-	-	**15,000**	**5,900**	-	-	-	-	-
	BH14-2	2004 11 23	2.0 - 2.0	-	-	-	-	-	-	-	**4,100**	**2,200**	-	-	-	-	-
	BH14-4	2004 11 23	4.6 - 4.6	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH15	BH15-1	2004 11 23	0.5 - 0.5	-	-	-	-	-	-	-	**3,100**	**360**	-	-	-	-	-
	BH15-2	2004 11 23	2.8 - 2.8	-	-	-	-	-	-	-	**2,600**	< 250	-	-	-	-	-
BH16	BH16-1	2004 11 23	0.5 - 0.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH16-2	2004 11 23	2.6 - 2.6	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH17	BH17-1	2004 11 23	2.4 - 2.4	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH18	BH18-1	2004 11 23	0.5 - 0.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH19	BH19-1	2004 11 26	0.5 - 0.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH20	BH20-1	2004 11 26	0.5 - 0.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH20-2	2004 11 26	2.4 - 2.4	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH21	BH21-1	2004 11 26	0.5 - 0.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	< 250	< 250	-	-	-	-	-
	BH21-2	2004 11 26	2.4 - 2.4	-	-	-	-	-	-	-	**2,100**	< 250	-	-	-	-	-
BH22	BH22-1	2004 11 26	2.5 - 2.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	< 250	< 250	-	-	-	-	-
BH23	BH23-1	2004 11 26	0.5 - 0.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	< 250	< 250	-	-	-	-	-
	BH23-2	2004 11 26	2.2 - 2.2	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH24	BH24-1	2004 11 26	0.5 - 0.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	**1,600**	300	-	-	-	-	-
	BH24-2	2004 11 26	2.4 - 2.4	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	**280**	< 250	-	-	-	-	-
	GR1	Duplicate	2.4 - 2.4	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	< 250	< 250	-	-	-	-	-
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	-
BH25	BH25-1	2004 11 26	0.5 - 0.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH26	BH26-1	2004 11 26	0.5 - 0.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH26-2	2004 11 26	2.0 - 2.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	GR2	Duplicate	2.0 - 2.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	QA/QC RPD%				-	-	-	-	-	-	*	*	-	-	-	-	-
BH27	BH27-2	2004 11 26	3.1 - 3.1	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH28	BH28-2	2004 11 27	3.1 - 3.1	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	GR3	Duplicate	3.1 - 3.1	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	QA/QC RPD%				-	-	-	-	-	-	*	*	-	-	-	-	-
BH29	BH29-1	2004 11 27	0.5 - 0.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH29-2	2004 11 27	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH30	BH30-2	2004 11 27	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	**310**	**6,900**	280	-	-	-	-	-
	BH30-3	2004 11 27	3.1 - 3.1	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH31	BH31-1	2004 11 27	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH32	BH32-1	2004 11 27	1.4 - 1.4	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH32-2	2004 11 27	3.1 - 3.1	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH33	BH33-1	2004 11 27	1.5 - 1.5	-	-	-	-	-	-	-	< 250	500	-	-	-	-	-
BH34	BH34-1	2004 11 28	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH34-2	2004 11 28	3.1 - 3.1	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH35	BH35-1	2004 11 28	1.5 - 1.5	-	-	-	-	-	-	-	**2,000**	480	-	-	-	-	-
	BH35-2	2004 11 28	3.1 - 3.1	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH36	BH36-1	2004 11 28	3.1 - 3.1	-	-	-	-	-	-	-	**2,700**	< 250	-	-	-	-	-
	BH36-2	2004 11 28	6.1 - 6.1	-	-	-	-	-	-	-	**1,500**	< 250	-	-	-	-	-
	GR4	Duplicate	6.1 - 6.1	-	-	-	-	-	-	-	**2,600**	< 250	-	-	-	-	-
	QA/QC RPD%				-	-	-	-	-	-	54	*	-	-	-	-	-
	BH36-3	2004 11 28	9.1 - 9.1	-	-	-	-	-	-	-	**2,300**	< 250	-	-	-	-	-
	BH36-4	2004 11 28	12.0 - 12.0	-	-	-	-	-	-	-	**1,700**	300	-	-	-	-	-
	BH36-5	2004 11 28	15.0 - 15.0	-	-	-	-	-	-	-	**370**	< 250	-	-	-	-	-
BH37	BH37-1	2004 11 29	0.6 - 0.6	-	-	-	-	-	-	-	**12,000**	**2,200**	-	-	-	-	-
BH38	BH38-1	2004 11 29	1.2 - 1.2	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH38-2	2004 11 29	2.4 - 2.4	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH42	BH42-1	2004 11 29	0.9 - 0.9	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH48	BH48-1	2004 11 29	2.1 - 2.1	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	< 250	< 250	-	-	-	-	-
BH49	BH49-1	2004 11 29	0.3 - 0.3	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	**880**	**1,800**	-	-	-	-	-
	BH49-2	2004 11 29	2.4 - 2.4	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	**3,500**	250	-	-	-	-	-
Federal Guideline/Standard																	
CCME CEQG/CWS Residential Coarse-Grained Surface (sample depth < 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (sample depth > 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	n/a
BC Standard																	
CSR Residential Land Use (RL) (sample depth < 3.0m)[d]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (sample depth > 3.0m)[d]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B645259.

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[c] Pathways: Contact (Direct/Eco), Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.

[d] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[e] Where available, values corrected for the presence of individual PAH are shown. Otherwise, uncorrected values are shown.

[f] F4 value did not return to baseline; F4 Gravimetric (Gravimetric Heavy Hydrocarbons) not analyzed.

[g] F4 value did not return to baseline and as such F4 Gravimetric (Gravimetric Heavy Hydrocarbons) was completed; the greater of the two is reported.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

SHADED VPH, LEPH or HEPH concentration greater than CCME CWS Residential F1, F2 or F3 standard (potential CCME exceedance), only applied where no F1, F2 or F3 concentration is available.

TABLE 1 (Cont'd): Summary of Analytical Results for Hydrocarbons in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions				MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19)[e] µg/g	HEPH (C19-C32)[e] µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	MTBE µg/g
BH50	BH50-1	2004 11 29	0.3 - 0.3	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	< 250	< 250	-	-	-	-	-
BH51	BH51-1	2004 11 29	2.4 - 2.4	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	< 250	< 250	-	-	-	-	-
BH52	BH52-1	2004 11 29	0.3 - 0.3	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	< 250	< 250	-	-	-	-	-
	GR6	Duplicate	0.3 - 0.3	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
		QA/QC RPD%			-	-	-	-	-	-	*	*	-	-	-	-	-
	BH52-2	2004 11 29	2.4 - 2.4	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH53	BH53-1	2004 11 30	1.5 - 1.5	-	< 0.04[a]	***3.2***	< 0.5[a]	***23***	< 0.5	**1,800**	**27,000**	**2,400**	-	-	-	-	-
	GR7	Duplicate	1.5 - 1.5	-	-	-	-	-	-	-	**34,000**	**4,000**	-	-	-	-	-
		QA/QC RPD%			-	-	-	-	-	-	23	50	-	-	-	-	-
	BH53-2	2004 11 30	3.1 - 3.1	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	**140**	**4,000**	380	-	-	-	-	-
	BH53-3	2004 11 30	6.1 - 6.1	-	-	-	-	-	-	-	**4,000**	520	-	-	-	-	-
	BH53-5	2004 11 30	9.1 - 9.1	-	-	-	-	-	-	-	**2,900**	410	-	-	-	-	-
	BH53-6	2004 11 30	10.7 - 10.7	-	-	-	-	-	-	-	**4,700**	680	-	-	-	-	-
BH54	BH54-1	2004 11 30	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	< 250	< 250	-	-	-	-	-
	BH54-2	2004 11 30	3.1 - 3.1	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	< 250	< 250	-	-	-	-	-
	BH54-3	2004 11 30	6.1 - 6.1	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH54-5	2004 11 30	10.7 - 10.7	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH55	BH55-1	2004 12 01	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH55-3	2004 12 01	4.6 - 4.6	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH55-4	2004 12 01	7.6 - 7.6	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH55-5	2004 12 01	9.1 - 9.1	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH55-6	2004 12 01	10.7 - 10.7	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH56	BH56-1	2004 12 01	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	**640**	**24,000**	**2,100**	-	-	-	-	-
	BH56-3	2004 12 01	4.6 - 4.6	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH56-5	2004 12 01	7.6 - 7.6	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH56-6	2004 12 01	9.1 - 9.1	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH57	BH57-1	2004 12 07	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	**11,000**	**20,000**	-	-	-	-	-
	GR9	Duplicate	1.5 - 1.5	-	-	-	-	-	-	-	**9,400**	**22,000**	-	-	-	-	-
		QA/QC RPD%			-	-	-	-	-	-	16	10	-	-	-	-	-
	BH57-3	2004 12 07	7.6 - 7.6	-	-	-	-	-	-	-	**2,000**	400	-	-	-	-	-
	BH57-5	2004 12 07	12.2 - 12.2	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH58	BH58-1	2004 12 08	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	< 250	< 250	-	-	-	-	-
	BH58-2	2004 12 08	4.6 - 4.6	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH58-3	2004 12 08	7.6 - 7.6	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH59	BH59-1	2004 12 11	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	**5.8**	< 0.5	**1,800**	**29,000**	980	-	-	-	-	-
	GR10	Duplicate	1.5 - 1.5	-	-	-	-	-	-	-	**30,000**	**1,200**	-	-	-	-	-
		QA/QC RPD%			-	-	-	-	-	-	3	20	-	-	-	-	-
	BH59-2	2004 12 11	4.6 - 4.6	-	-	-	-	-	-	-	**530**	< 250	-	-	-	-	-
	BH59-3	2004 12 11	7.6 - 7.6	-	-	-	-	-	-	-	**1,900**	< 250	-	-	-	-	-
	BH59-4	2004 12 11	10.7 - 10.7	-	-	-	-	-	-	-	**1,100**	< 250	-	-	-	-	-
BH60	BH60-1	2004 12 11	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 100	< 250	< 250	-	-	-	-	-
	BH60-2	2004 12 11	4.6 - 4.6	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH60-3	2004 12 11	7.6 - 7.6	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH61	BH61-1	2005 03 12	10.8 - 10.8	-	-	-	-	-	-	-	**870**	< 250	-	-	-	-	-
	BH61-2	2005 03 12	12.3 - 12.3	-	-	-	-	-	-	-	**1,700**	250	-	-	-	-	-
	BH61-3	2005 03 12	13.5 - 13.5	-	-	-	-	-	-	-	**620**	< 250	-	-	-	-	-
	BH61-4	2005 03 12	16.5 - 16.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH62	BH62-1	2005 03 12	9.0 - 9.0	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	4.4	-	**240**	**3,400**	580	-	-	-	-	-
	GR11	Duplicate	9.0 - 9.0	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	**11**	-	**330**	**4,000**	830	-	-	-	-	-
		QA/QC RPD%			*	*	*	86	-	32	16	35	-	-	-	-	-
	BH62-2	2005 03 12	10.5 - 10.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	**6.6**	-	**470**	**6,000**	1,200	-	-	-	-	-
	BH62-3	2005 03 12	13.5 - 13.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	**7,400**	1,400	-	-	-	-	-
	BH62-4	2005 03 12	16.5 - 16.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
BH63	BH63-1	2005 03 12	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH63-2	2005 03 12	3.0 - 3.0	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	0.8	-	**290**	**3,800**	540	-	-	-	-	-
	BH63-3	2005 03 12	6.0 - 6.0	-	-	-	-	-	-	-	**3,900**	410	-	-	-	-	-
	BH63-4	2005 03 12	9.0 - 9.0	-	-	-	-	-	-	-	**3,300**	310	-	-	-	-	-
	BH63-5	2005 03 12	12.0 - 12.0	-	-	-	-	-	-	-	**2,700**	< 250	-	-	-	-	-
	BH63-6	2005 03 12	15.0 - 15.0	-	-	-	-	-	-	-	**260**	< 250	-	-	-	-	-
BH64	BH64-1	2005 03 13	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	GR12a	Duplicate	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
		QA/QC RPD%			*	*	*	*	-	*	*	*	-	-	-	-	-
	BH64-2	2005 03 13	3.0 - 3.0	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH64-3	2005 03 13	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH64-4	2005 03 13	6.0 - 6.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH64-5	2005 03 13	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH64-6	2005 03 13	9.0 - 9.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH65	BH65-1	2005 03 13	1.5 - 1.5	-	-	-	-	-	-	-	< 250	350	-	-	-	-	-
	BH65-2	2005 03 13	4.5 - 4.5	-	-	-	-	-	-	-	**1,000**	290	-	-	-	-	-
	BH65-3	2005 03 13	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH66	BH66-1	2005 03 13	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH66-2	2005 03 13	4.5 - 4.5	-	-	-	-	-	-	-	**330**	< 250	-	-	-	-	-
	BH66-3	2005 03 13	6.0 - 6.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH66-4	2005 03 13	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH67	BH67-1	2005 03 13	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH67-2	2005 03 13	3.0 - 3.0	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
BH68	BH68-1	2005 03 13	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	GR14	Duplicate	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
		QA/QC RPD%			-	-	-	-	-	-	*	*	-	-	-	-	-
	BH68-2	2005 03 13	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH69	BH69-1	2005 03 13	1.5 - 1.5	-	-	-	-	-	-	-	**4,700**	**3,500**	-	-	-	-	-
	BH69-2	2005 03 13	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH70	BH70-1	2005 03 13	3.0 - 3.0	-	-	-	-	-	-	-	**1,200**	< 250	-	-	-	-	-
	GR15	Duplicate	3.0 - 3.0	-	-	-	-	-	-	-	**1,100**	< 250	-	-	-	-	-
		QA/QC RPD%			-	-	-	-	-	-	9	*	-	-	-	-	-
	BH70-2	2005 03 13	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH71	BH71-1	2005 03 13	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH71-2	2005 03 13	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	GR16	Duplicate	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
		QA/QC RPD%			-	-	-	-	-	-	*	*	-	-	-	-	-
	BH71-3	2005 03 13	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH72	BH72-1	2005 03 13	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH72-2	2005 03 13	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH73	BH73-1	2005 03 14	1.5 - 1.5	-	-	-	-	-	-	-	**5,700**	< 250	-	-	-	-	-
	BH73-2	2005 03 14	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH73-3	2005 03 14	6.0 - 6.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH74	BH74-1	2005 03 14	1.5 - 1.5	-	-	-	-	-	-	-	**1,600**	390	-	-	-	-	-
	BH74-2	2005 03 14	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH75	BH75-1	2005 03 14	1.5 - 1.5	-	-	-	-	-	-	-	**7,700**	**1,700**	-	-	-	-	-
	GR17	Duplicate	1.5 - 1.5	-	-	-	-	-	-	-	**8,100**	**1,700**	-	-	-	-	-
		QA/QC RPD%			-	-	-	-	-	-	5	0	-	-	-	-	-
	BH75-10	2005 03 14	16.5 - 16.5	-	-	-	-	-	-	-	**1,900**	< 250	-	-	-	-	-
	BH75-11	2005 03 14	19.5 - 19.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	GR18	Duplicate	19.5 - 19.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
		QA/QC RPD%			-	-	-	-	-	-	*	*	-	-	-	-	-
	BH75-12	2005 03 14	21.0 - 21.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH75-2	2005 03 14	3.0 - 3.0	-	-	-	-	-	-	-	**4,800**	**1,200**	-	-	-	-	-
	BH75-3	2005 03 14	4.5 - 4.5	-	-	-	-	-	-	-	**21,000**	**3,100**	-	-	-	-	-
	BH75-5	2005 03 14	6.0 - 6.0	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	**160**	**2,000**	260	-	-	-	-	-
	BH75-7	2005 03 14	9.0 - 9.0	-	-	-	-	-	-	-	**7,700**	1,800	-	-	-	-	-
Federal Guideline/Standard																	
CCME CEQG/CWS Residential Coarse-Grained Surface (sample depth < 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (sample depth > 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	n/a
BC Standard																	
CSR Residential Land Use (RL) (sample depth < 3.0m)[d]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (sample depth > 3.0m)[d]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B645259.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] Pathways: Contact (Direct/Eco), Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.
[d] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[e] Where available, values corrected for the presence of individual PAH are shown. Otherwise, uncorrected values are shown.
[f] F4 value did not return to baseline; F4 Gravimetric (Gravimetric Heavy Hydrocarbons) not analyzed.
[g] F4 value did not return to baseline and as such F4 Gravimetric (Gravimetric Heavy Hydrocarbons) was completed; the greater of the two is reported.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.
SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).
SHADED VPH, LEPH or HEPH concentration greater than CCME CWS Residential F1, F2 or F3 standard (potential CCME exceedance), only applied where no F1, F2 or F3 concentration is available.

TABLE 1 (Cont'd): Summary of Analytical Results for Hydrocarbons in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions				MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19)[e] µg/g	HEPH (C19-C32)[e] µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	MTBE µg/g
BH75	BH75-8	2005 03 14	12.0 - 12.0	-	-	-	-	-	-	-	**2,300**	530	-	-	-	-	-
(Cont'd)	BH75-9	2005 03 14	13.5 - 13.5	-	-	-	-	-	-	-	**2,300**	< 250	-	-	-	-	-
BH76	BH76-1	2005 03 14	1.5 - 1.5	-	-	-	-	-	-	-	**3,600**	< 250	-	-	-	-	-
	BH76-2	2005 03 14	3.0 - 3.0	-	-	-	-	-	-	-	**1,400**	< 250	-	-	-	-	-
	BH76-3	2005 03 14	4.5 - 4.5	-	-	-	-	-	-	-	**280**	< 250	-	-	-	-	-
	BH76-4	2005 03 14	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH76-5	2005 03 14	10.5 - 10.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH76-6	2005 03 14	12.0 - 12.0	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
BH77	BH77-1	2005 03 14	1.5 - 1.5	-	-	-	-	-	-	-	< 250	710	-	-	-	-	-
	BH77-2	2005 03 14	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH77-3	2005 03 14	6.0 - 6.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH77-4	2005 03 14	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH77-5	2005 03 14	10.5 - 10.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH78	BH78-1	2005 03 15	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH78-2	2005 03 15	3.0 - 3.0	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH78-3	2005 03 15	4.5 - 4.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	**3,200**	< 250	-	-	-	-	-
	BH78-4	2005 03 15	6.0 - 6.0	-	-	-	-	-	-	-	**2,200**	< 250	-	-	-	-	-
	GR19	Duplicate	6.0 - 6.0	-	-	-	-	-	-	-	**1,900**	< 250	-	-	-	-	-
	QA/QC RPD%				-	-	-	-	-	-	15	*	-	-	-	-	-
	BH78-5	2005 03 15	7.5 - 7.5	-	-	-	-	-	-	-	**2,100**	< 250	-	-	-	-	-
	BH78-6	2005 03 15	9.0 - 9.0	-	-	-	-	-	-	-	**4,200**	710	-	-	-	-	-
	BH78-7	2005 03 15	10.5 - 10.5	-	-	-	-	-	-	-	**650**	< 250	-	-	-	-	-
	BH78-8	2005 03 15	12.0 - 12.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH78-9	2005 03 15	13.5 - 13.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH79	BH79-1	2005 03 15	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH79-2	2005 03 15	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH79-3	2005 03 15	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH79-4	2005 03 15	6.0 - 6.0	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH79-5	2005 03 15	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH79-6	2005 03 15	9.0 - 9.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH79-7	2005 03 15	10.5 - 10.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH80	BH80-1	2005 03 15	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH80-2	2005 03 15	3.0 - 3.0	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH80-3	2005 03 15	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH80-4	2005 03 15	6.0 - 6.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH80-5	2005 03 15	9.0 - 9.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH81	BH81-1	2005 03 15	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH81-2	2005 03 15	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH82	BH82-1	2005 03 15	0.3 - 0.3	-	-	-	-	-	-	-	**12,000**	**350**	-	-	-	-	-
	BH82-2	2005 03 15	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH82-3	2005 03 15	3.0 - 3.0	-	-	-	-	-	-	-	**860**	< 250	-	-	-	-	-
	BH82-4	2005 03 15	6.0 - 6.0	-	< 0.01	< 0.01	0.02	0.03	-	-	**1,100**	< 250	-	-	-	-	-
	BH82-5	2005 03 15	9.0 - 9.0	-	-	-	-	-	-	-	**3,300**	< 250	-	-	-	-	-
	BH82-6	2005 03 15	13.5 - 13.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH82-7	2005 03 15	15.0 - 15.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH83	BH83-1	2005 03 15	0.3 - 0.3	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH83-2	2005 03 15	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH83-3	2005 03 15	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH83-4	2005 03 15	6.0 - 6.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH83-5	2005 03 15	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH84	BH84-1	2005 03 16	0.3 - 0.3	-	-	-	-	-	-	-	**690**	< 250	-	-	-	-	-
	BH84-2	2005 03 16	1.5 - 1.5	-	-	-	-	-	-	-	**2,700**	< 250	-	-	-	-	-
	BH84-3	2005 03 16	3.0 - 3.0	-	-	-	-	-	-	-	**1,600**	< 250	-	-	-	-	-
	BH84-4	2005 03 16	6.0 - 6.0	-	< 0.01	< 0.01	0.01	0.01	-	-	**310**	< 250	-	-	-	-	-
	BH84-5	2005 03 16	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH85	BH85-1	2005 03 16	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH85-2	2005 03 16	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH85-3	2005 03 16	6.0 - 6.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	GR20	Duplicate	6.0 - 6.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	QA/QC RPD%				-	-	-	-	-	-	*	*	-	-	-	-	-
	BH85-4	2005 03 16	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH85-5	2005 03 16	9.0 - 9.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH85-6	2005 03 16	10.5 - 10.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH86	BH86-1	2005 03 16	0.3 - 0.3	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH86-2	2005 03 16	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH86-3	2005 03 16	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH86-4	2005 03 16	6.0 - 6.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH86-5	2005 03 16	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH86-6	2005 03 16	9.0 - 9.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	GR21	Duplicate	9.0 - 9.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	QA/QC RPD%				-	-	-	-	-	-	*	*	-	-	-	-	-
	BH86-7	2005 03 16	10.5 - 10.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH87	BH87-1	2005 03 16	0.3 - 0.3	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH87-2	2005 03 16	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH87-4	2005 03 16	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH87-5	2005 03 16	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH88	BH88-1	2005 03 16	0.3 - 0.3	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH88-2	2005 03 16	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH88-3	2005 03 16	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH88-4	2005 03 16	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH88-5	2005 03 16	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH89	BH89-1	2005 03 16	0.3 - 0.3	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH89-2	2005 03 16	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH89-3	2005 03 16	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH89-4	2005 03 16	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH90	BH90-1	2005 03 16	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH90-2	2005 03 16	3.0 - 3.0	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH90-3	2005 03 16	6.0 - 6.0	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH90-4	2005 03 16	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH91	BH91-1	2005 03 17	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH91-2	2005 03 17	4.5 - 4.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH91-3	2005 03 17	7.5 - 7.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
BH92	BH92-1	2005 03 17	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH92-2	2005 03 17	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH92-3	2005 03 17	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH93	BH93-1	2005 03 17	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH93-2	2005 03 17	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH93-3	2005 03 17	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH94	BH94-1	2005 03 17	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH94-2	2005 03 17	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH94-3	2005 03 17	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH94-4	2005 03 17	6.0 - 6.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH95	BH95-1	2005 03 17	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH95-2	2005 03 17	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH95-3	2005 03 17	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH96	BH96-1	2005 03 17	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	-	-	-	-	-	-	-
BH98	BH98-1	2005 03 17	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH98-2	2005 03 17	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH98-3	2005 03 17	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH98-4	2005 03 17	6.0 - 6.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH98-5	2005 03 17	9.0 - 9.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
Federal Guideline/Standard																	
CCME CEQG/CWS Residential Coarse-Grained Surface (sample depth < 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (sample depth > 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	n/a
BC Standard																	
CSR Residential Land Use (RL) (sample depth < 3.0m)[d]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (sample depth > 3.0m)[d]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B645259.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] Pathways: Contact (Direct/Eco), Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.
[d] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[e] Where available, values corrected for the presence of individual PAH are shown. Otherwise, uncorrected values are shown.
[f] F4 value did not return to baseline; F4 Gravimetric (Gravimetric Heavy Hydrocarbons) not analyzed.
[g] F4 value did not return to baseline and as such F4 Gravimetric (Gravimetric Heavy Hydrocarbons) was completed; the greater of the two is reported.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

SHADED VPH, LEPH or HEPH concentration greater than CCME CWS Residential F1, F2 or F3 standard (potential CCME exceedance), only applied where no F1, F2 or F3 concentration is available.

TABLE 1 (Cont'd): Summary of Analytical Results for Hydrocarbons in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions				MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19)[e] µg/g	HEPH (C19-C32)[e] µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	MTBE µg/g
BH99	BH99-1	2005 03 17	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH99-2	2005 03 17	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH99-3	2005 03 17	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH99-4	2005 03 17	10.5 - 10.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH99-5	2005 03 17	13.5 - 13.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH100	BH100-1	2005 03 17	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH100-2	2005 03 17	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH100-3	2005 03 17	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	GR22	Duplicate	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	QA/QC RPD%				-	-	-	-	-	-	*	*	-	-	-	-	-
	BH100-4	2005 03 17	7.5 - 7.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	< 250	< 250	-	-	-	-	-
	BH100-5	2005 03 17	9.0 - 9.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH100-6	2005 03 17	10.2 - 10.2	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH101	BH101-1	2005 03 17	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	**260**	**4,500**	< 250	-	-	-	-	-
	BH101-2	2005 03 17	3.0 - 3.0	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	**1,300**	< 250	-	-	-	-	-
	BH101-3	2005 03 17	4.5 - 4.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	**480**	< 250	-	-	-	-	-
	BH101-4	2005 03 17	6.0 - 6.0	-	-	-	-	-	-	-	**650**	< 250	-	-	-	-	-
	BH101-6	2005 03 17	7.5 - 7.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	**370**	< 250	-	-	-	-	-
BH102	BH102-1	2005 03 18	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	**330**	< 250	-	-	-	-	-
	BH102-2	2005 03 18	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH102-3	2005 03 18	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH102-4	2005 03 18	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH103	BH103-1	2005 03 18	1.5 - 1.5	-	< 0.04[a]	< 0.5[a]	< 0.5[a]	< 0.5	-	< 100	**260**	< 250	-	-	-	-	-
	BH103-2	2005 03 18	3.0 - 3.0	-	-	-	-	-	-	-	**830**	< 250	-	-	-	-	-
	BH103-3	2005 03 18	4.5 - 4.5	-	-	-	-	-	-	-	**330**	< 250	-	-	-	-	-
	BH103-4	2005 03 18	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
BH104	BH104-1	2005 03 18	1.5 - 1.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH104-2	2005 03 18	3.0 - 3.0	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH104-3	2005 03 18	4.5 - 4.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
	BH104-4	2005 03 18	7.5 - 7.5	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
SS4	SS4	2005 11 08	0.0 - 0.1	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 100	**1,900**	**29,000**	-	-	-	-	-
MR1	MR-1	2006 07 29	0.0 - 0.2	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
MR2	MR-2	2006 07 29	0.0 - 0.2	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
MR3	MR-3	2006 07 29	0.0 - 0.2	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
MR4	MR-4	2006 07 29	0.0 - 0.2	-	-	-	-	-	-	-	< 250	**860**	-	-	-	-	-
	GR2	Duplicate	0.0 - 0.2	-	-	-	-	-	-	-	< 250	**920**	-	-	-	-	-
	QA/QC RPD%				-	-	-	-	-	-	*	7	-	-	-	-	-
MR5	MR-5	2006 07 29	0.0 - 0.2	-	-	-	-	-	-	-	< 250	< 250	-	-	-	-	-
RES1	125-66.02-JLM-RES1-2	2006 07 29	0.6 - 0.6	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	< 250	< 250	< 25	< 80	< 250	< 250	-
RES2	125-66.02-JLM-RES2-1	2006 07 29	0.0 - 0.1	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	< 250	< 250	< 25	< 80	< 250	< 250	-
RES3	125-66.02-JLM-RES3-1	2006 07 29	0.0 - 0.1	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	< 250	< 250	< 25	< 80	< 250	< 250	-
RES4	125-66.02-JLM-RES4-1	2006 07 29	0.0 - 0.1	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	< 250	< 250	< 25	< 80	< 250	< 250	-
RES5	125-66.02-JLM-RES5-2	2006 07 29	0.0 - 0.2	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	< 250	< 250	< 25	< 80	< 250	< 250	-
	125-66.02-JLM-GR1	Duplicate	0.0 - 0.2	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	< 250	< 250	< 25	< 80	< 250	< 250	-
	QA/QC RPD%				*	*	*	*	-	*	*	*	*	*	*	*	-
RES6	125-66.02-JLM-RES6-1	2006 07 29	0.0 - 0.1	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	< 250	< 250	< 25	< 80	< 250	< 250	-
RES7	125-66.02-JLM-RES7-2	2006 07 29	0.0 - 0.2	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	< 250	< 250	< 25	< 80	< 250	< 250	-
RES8	125-66.02-JLM-RES8-1	2006 07 29	0.0 - 0.1	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	< 250	< 250	< 25	< 80	< 250	< 250	-
BH113M	BH113M-2	2006 08 14	22.8 - 22.8	-	< 0.005	< 0.018	< 0.02	0.02	< 0.5	< 100	< 250	< 250	-	< 80	< 250	-	-
BH115	BH115-1	2006 08 14	1.2 - 1.8	-	< 0.005	< 0.018	0.09	0.03	< 0.5	< 100	< 250	< 250	-	< 80	< 250	-	-
BH116	BH116-1	2006 08 14	1.2 - 1.8	-	< 0.005	< 0.018	< 0.02	0.02	< 0.5	< 100	< 250	< 250	-	< 80	< 250	-	-
BH117	BH117-1	2006 08 14	1.2 - 1.8	-	< 0.005	< 0.018	0.04	0.03	< 0.5	< 100	< 250	< 250	-	< 80	< 250	-	-
SP1	SP1	2006 08 14	0.0 - 0.1	-	0.005	< 0.018	< 0.02	0.04	< 0.5	< 100	450	530	-	95	***550***	-	-
	GR58	Duplicate	0.0 - 0.1	-	< 0.005	< 0.018	0.02	0.04	< 0.5	< 100	380	480	-	84	***540***	-	-
	QA/QC RPD%				*	*	*	*	*	*	17	10	-	*	2	-	-
GARDEN1	Garden 1	2006 08 19	0.0 - 0.1	-	0.005	< 0.018	< 0.02	0.02	-	< 100	< 250	< 250	< 25	< 80	< 250	< 250	-
	Garden 1A	2009 10 18	0.0 - 0.1	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	-	-	< 10	< 70	< 100	< 500	< 0.05
	FSGR3	Duplicate	0.0 - 0.1	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	-	-	< 10	< 70	< 100	< 500	< 0.05
	QA/QC RPD%				*	*	*	*	-	*	-	-	*	*	*	*	*
	Garden 1B	2009 10 18	0.0 - 0.1	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	-	-	< 10	< 70	160	< 500	< 0.05
GARDEN2	Garden 2	2006 08 19	0.0 - 0.1	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	< 250	< 250	< 25	< 80	< 250	< 250	-
MSV1	MSV1-1	2009 10 14		-	< 0.005	0.026	< 0.02	1.7	-	**250**	-	-	***250***	***2,100***	***3,000***	850	< 0.05
	MSV1-3	2009 10 14		-	< 0.005	***1.4***	0.06	**10**	-	**540**	-	-	***540***	***4,900***	***3,300***	< 500	< 0.05
BH120M	BH120M-1	2009 10 16	0.0 - 0.6	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	-	-	< 10	***560***	***1,200***	< 500	< 0.05
	BH120M-3	2009 10 16	3.7 - 4.3	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	-	-	< 10	< 70	< 100	< 500	< 0.05
	FSGR	Duplicate	3.7 - 4.3	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	-	-	< 10	70	100	< 500	< 0.05
	QA/QC RPD%				*	*	*	*	-	*	-	-	*	*	*	*	*
AEC7A	AEC7A	2009 10 19	0.0 - 0.1	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	-	-	< 10	< 70	< 100	< 500	< 0.05
	FSGR4	Duplicate	0.0 - 0.1	-	< 0.005	< 0.018	< 0.02	< 0.02	-	< 100	-	-	< 10	< 70	< 100	< 500	< 0.05
	QA/QC RPD%				*	*	*	*	-	*	-	-	*	*	*	*	*
BH127	BH127-1	2010 08 26	0.5 - 0.8	-	< 0.005	***0.253***	< 0.05	**6.05**	< 0.05	**590**	**7,100**	670	***590***	***4,650***	***2,090***	34	< 0.2
	BH127-2	2010 08 26	1.1 - 1.4	-	0.0082	***0.09***	< 0.05	0.675	< 0.05	< 100	**8,300**	690	< 10	***4,260***	***1,590***	42	< 0.2
	GR2	Duplicate	1.1 - 1.4	-	< 0.005	***0.098***	< 0.05	0.768	< 0.05	< 100	**7,650**	520	15	***3,170***	***1,250***	41	< 0.2
	QA/QC RPD%				*	9	*	13	*	*	8	28	*	29	24	*	*
	BH127-3	2010 08 26	2.0 - 2.1	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	< 10	< 20	< 20	< 20	< 0.2
	BH127-6	2010 08 26	4.9 - 5.2	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	< 10	< 20	< 20	< 20	< 0.2
BH128	BH128-1	2010 08 26	0.3 - 0.6	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	270	< 10	< 20	280	308	< 0.2
	BH128-3	2010 08 26	1.8 - 2.1	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	-	-	-	-	< 0.2
BH129	BH129-1	2010 08 26	0.5 - 0.8	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	-	-	-	-	< 0.2
	BH129-3	2010 08 26	1.8 - 2.1	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	-	-	-	-	< 0.2
BH130	BH130-1	2010 08 27	0.3 - 0.6	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	-	-	-	-	< 0.2
	BH130-2	2010 08 27	2.7 - 3.1	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	-	-	-	-	< 0.2
BH131	BH131-2	2010 08 27	0.9 - 1.2	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	-	-	-	-	< 0.2
	BH131-3	2010 08 27	1.4 - 1.5	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	-	-	-	-	< 0.2
BH132	BH132-2	2010 08 27	0.9 - 1.2	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	< 10	< 20	< 20	< 20	< 0.2
	BH132-3	2010 08 27	1.2 - 1.5	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	< 10	< 20	< 20	< 20	< 0.2
	GR3	Duplicate	1.2 - 1.5	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	< 10	< 20	< 20	< 20	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	*
	BH132-5	2010 08 27	2.7 - 3.1	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	-	-	-	-	< 0.2
BH133	BH133-2	2010 08 27	0.9 - 1.1	-	< 0.005	***0.098***	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	-	-	-	-	< 0.2
	BH133-3	2010 08 27	2.7 - 3.1	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	-	-	-	-	< 0.2
BH134	BH134-1	2010 08 27	1.5 - 1.8	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	340	-	-	-	-	< 0.2
BH135	BH135-2	2010 08 27	1.5 - 1.8	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	200	-	-	-	-	< 0.2
	GR4	Duplicate	1.5 - 1.8	-	< 0.005	< 0.015	< 0.05	0.154	< 0.05	< 100	**450**	**1,480**	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	152	-	-	-	-	*
	BH135-3	2010 08 27	2.7 - 3.1	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	< 200	-	-	-	-	< 0.2
BH136	BH136-1	2010 08 26	0.3 - 0.5	-	< 0.005	< 0.015	< 0.05	< 0.071	< 0.05	< 100	< 200	**1,610**	-	-	-	-	< 0.2
BH12-01	BH12-01-1-AD05	2012 10 14	0.3 - 0.6	-	< 0.02	***0.15***	0.09	***23.5***	< 0.05	**1,310**	**26,900**	**5,310**	-	-	-	-	< 0.1
	BH12-01-2-AD05	2012 10 14	0.9 - 1.2	-	0.02	***2.73***	0.07	**7.2**	< 0.05	**708**	**8,220**	**878**	-	-	-	-	< 0.1
	BH12-01-15-AD05	2012 10 14	12.7 - 13.0	-	< 0.02	< 0.05	< 0.05	< 0.1	< 0.05	14	**878**	< 20	-	-	-	-	< 0.1
	BH12-01-32-AD05	2012 10 14	25.5 - 25.8	-	< 0.02	< 0.05	< 0.05	< 0.1	< 0.05	< 10	< 20	< 20	-	-	-	-	< 0.1
	BH12-01-36-AD05	2012 10 14	28.5 - 28.8	-	< 0.02	< 0.05	< 0.05	< 0.1	< 0.05	< 10	< 20	< 20	-	-	-	-	< 0.1
BH12-02	BH12-02-2-AD05	2012 10 14	0.5 - 0.8	-	***0.13***	***5.32***	***0.25***	***18.9***	< 0.05	**254**	**18,500**	**3,070**	-	-	-	-	< 0.1
	BH12-02-3-AD05	2012 10 14	1.2 - 1.5	-	< 0.02	***2.17***	0.05	**6.1**	< 0.05	**348**	**4,920**	164	-	-	-	-	< 0.1
	BH12-02-8-AD05	2012 10 15	5.0 - 5.3	-	< 0.02	< 0.05	< 0.05	< 0.1	< 0.05	16	**1,480**	< 20	-	-	-	-	< 0.1
	BH12-02-26-AD05	2012 10 15	18.8 - 19.1	-	-	-	-	-	-	-	34	27	-	-	-	-	-
	BH12-02-27-AD05	2012 10 15	19.5 - 19.8	-	< 0.02	< 0.05	< 0.05	< 0.1	< 0.05	**38**	**1,700**	189	-	-	-	-	< 0.1
	BH12-02-28-AD05	Duplicate	19.5 - 19.8	-	< 0.02	< 0.05	< 0.05	< 0.1	< 0.05	**36**	**1,740**	186	-	-	-	-	< 0.1
	QA/QC RPD%				*	*	*	*	*	*	2	2	-	-	-	-	*
	BH12-02-30-AD05	2012 10 15	26.4 - 26.7	-	< 0.02	< 0.05	< 0.05	< 0.1	< 0.05	**34**	74	213	-	-	-	-	< 0.1
	BH12-02-31-AD05	Duplicate	26.4 - 26.7	-	< 0.02	< 0.05	< 0.05	< 0.1	< 0.05	< 10	106	125	-	-	-	-	< 0.1
	QA/QC RPD%				*	*	*	*	*	*	36	52	-	-	-	-	*
	BH12-02-32-AD05	2012 10 15	27.9 - 28.2	-	< 0.02	< 0.05	< 0.05	< 0.1	< 0.05	< 10	< 20	< 20	-	-	-	-	< 0.1
SS12-09	SS12-09-AD05	2012 10 20	0.2 - 0.5	-	-	-	-	-	-	-	48	**481**	-	-	-	-	-
Federal Guideline/Standard																	
CCME CEQG/CWS Residential Coarse-Grained Surface (sample depth < 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (sample depth > 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	n/a
BC Standard																	
CSR Residential Land Use (RL) (sample depth < 3.0m)[d]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (sample depth > 3.0m)[d]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B645259.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] Pathways: Contact (Direct/Eco), Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.
[d] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[e] Where available, values corrected for the presence of individual PAH are shown. Otherwise, uncorrected values are shown.
[f] F4 value did not return to baseline; F4 Gravimetric (Gravimetric Heavy Hydrocarbons) not analyzed.
[g] F4 value did not return to baseline and as such F4 Gravimetric (Gravimetric Heavy Hydrocarbons) was completed; the greater of the two is reported.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

SHADED VPH, LEPH or HEPH concentration greater than CCME CWS Residential F1, F2 or F3 standard (potential CCME exceedance), only applied where no F1, F2 or F3 concentration is available.

TABLE 1 (Cont'd): Summary of Analytical Results for Hydrocarbons in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions				MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19)[e] µg/g	HEPH (C19-C32)[e] µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	MTBE µg/g
SS12-10	SS12-10-AD05	2012 10 20	0.2 - 0.5	-	-	-	-	-	-	-	< 20	26	-	-	-	-	-
BH13-03	BH13-03-23-AD05	2013 03 17	17.9 - 18.1	-	< 0.005	< 0.01	< 0.05	< 0.05	< 0.05	< 10	< 10	< 10	-	-	-	-	-
	BH13-03-25-AD05	2013 03 17	19.5 - 19.8	-	< 0.005	< 0.01	< 0.05	< 0.05	< 0.05	< 10	< 10	< 10	-	-	-	-	-
	BH13-03-33-AD05	2013 03 17	25.7 - 25.9	-	< 0.005	< 0.01	< 0.05	< 0.05	< 0.05	**50**	**3,620**	370	-	-	-	-	-
	BH13-03-A-AD05	Duplicate	25.7 - 25.9	-	< 0.005	< 0.01	< 0.05	< 0.05	< 0.05	**50**	**4,460**	450	-	-	-	-	-
	QA/QC RPD%				*	*	*	*	*	0	21	20	-	-	-	-	-
	BH13-03-34-AD05	2013 03 17	26.2 - 26.5	-	< 0.005	< 0.01	< 0.05	< 0.05	< 0.05	**60**	**3,200**	310	-	-	-	-	-
	BH13-03-35-AD05	2013 03 17	26.8 - 27.0	-	< 0.005	< 0.01	< 0.05	< 0.05	< 0.05	20	**1,800**	180	-	-	-	-	-
	BH13-03-36-AD05	2013 03 17	28.1 - 28.4	-	< 0.005	< 0.01	< 0.05	< 0.05	< 0.05	30	**2,770**	260	-	-	-	-	-
TP13-01	TP13-01-1	2013 08 22	0.7 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**2,350**	**1,440**	-	-	-	-	< 0.2
	TP13-01-2	2013 08 22	1.7 - 2.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-02	TP13-02-1	2013 08 22	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-02-2	2013 08 22	1.7 - 2.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-03	TP13-03-1	2013 08 22	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-03-2	2013 08 22	1.0 - 2.2	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-04	TP13-04-1	2013 08 22	0.5 - 0.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-04-2	2013 08 22	1.5 - 1.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-05	TP13-05-1	2013 08 22	0.5 - 0.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-05-2	2013 08 22	1.5 - 1.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-06	TP13-06-1	2013 08 22	0.3 - 0.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-06-2	2013 08 22	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	10	**698**	< 200	-	-	-	-	< 0.2
TP13-07	TP13-07-1	2013 08 22	0.1 - 0.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-07-2	2013 08 22	0.7 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-08	TP13-08-1	2013 08 22	0.5 - 0.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-08-2	2013 08 22	1.0 - 1.3	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-09	TP13-09-1	2013 08 22	0.5 - 0.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-09-101	Duplicate	0.5 - 0.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
	TP13-09-2	2013 08 22	1.0 - 1.3	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-10	TP13-10-1	2013 08 22	0.5 - 0.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-10-2	2013 08 22	1.0 - 1.3	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-11	TP13-11-1	2013 08 22	0.0 - 0.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-11-102	Duplicate	0.0 - 0.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
	TP13-11-2	2013 08 22	1.0 - 1.3	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-12	TP13-12-1	2013 08 22	0.3 - 0.6	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-12-2	2013 08 22	1.0 - 1.3	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-13	TP13-13-1	2013 08 22	0.4 - 0.7	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-13-2	2013 08 22	1.6 - 1.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-14	TP13-14-1	2013 08 22	0.3 - 0.6	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-14-2	2013 08 22	1.0 - 1.3	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	115	-	-	-	-	< 0.2
TP13-15	TP13-15-1	2013 08 22	0.0 - 0.3	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-15-2	2013 08 22	0.4 - 0.7	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-16	TP13-16-1	2013 08 22	0.2 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**210**	**795**	-	-	-	-	< 0.2
	TP13-16-2	2013 08 22	1.0 - 1.3	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-17	TP13-17-1	2013 08 22	0.9 - 1.2	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	21	**1,700**	**1,330**	-	-	-	-	< 0.2
	TP13-17-103	Duplicate	0.9 - 1.2	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	28	**2,290**	**2,490**	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	30	61	-	-	-	-	*
	TP13-17-2	2013 08 22	1.5 - 2.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	**42**	**2,510**	**2,400**	-	-	-	-	< 0.2
TP13-18	TP13-18-1	2013 08 23	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-18-2	2013 08 23	1.4 - 1.7	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-19	TP13-19-1	2013 08 23	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-19-2	2013 08 23	1.8 - 2.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-20	TP13-20-1	2013 08 23	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-20-2	2013 08 23	2.4 - 2.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-21	TP13-21-1	2013 08 23	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-21-2	2013 08 23	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-22	TP13-22-1	2013 08 23	0.1 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-22-2	2013 08 23	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
TP13-23	TP13-23-1	2013 08 23	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	TP13-23-104	Duplicate	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
	TP13-23-2	2013 08 23	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH13-04	BH13-04-1-AD05	2013 09 22	0.3 - 0.6	-	< 0.01	< 0.02	< 0.04	0.17	< 0.06	**640**	**17,700**	**7,800**	-	-	-	-	< 0.2
	BH13-04-21-AD05	2013 09 22	21.8 - 22.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH13-04-22-AD05	2013 09 22	22.6 - 22.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH13-04-2-AD05	2013 09 22	0.8 - 1.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**824**	**1,130**	-	-	-	-	< 0.2
	BH13-04-30-AD05	2013 09 23	31.5 - 31.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH13-05	BH13-05-02-AD05	2013 09 23	1.1 - 1.4	-	< 0.01	< 0.02	< 0.04	0.28	< 0.06	**380**	**4,790**	< 200	-	-	-	-	< 0.2
	BH13-05-A	Duplicate	1.1 - 1.4	-	< 0.01	< 0.02	< 0.04	0.3	< 0.06	**460**	**5,400**	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	7	*	19	12	*	-	-	-	-	*
	BH13-05-14-AD05	2013 09 23	11.6 - 11.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**1,690**	431	-	-	-	-	< 0.2
	BH13-05-27-AD05	2013 09 24	21.9 - 22.2	-	< 0.01	< 0.134[a]	< 0.04	< 0.194	< 0.06	**500**	**11,700**	374	-	-	-	-	< 0.2
	BH13-05-28-AD05	2013 09 24	22.6 - 22.9	-	< 0.01	< 0.116[a]	< 0.04	< 0.18	< 0.06	**290**	**8,530**	465	-	-	-	-	< 0.2
	BH13-05-29-AD05	2013 09 24	23.0 - 23.3	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH13-05-30-AD05	2013 09 24	23.7 - 24.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH13-05-31-AD05	2013 09 24	24.9 - 25.2	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH13-06	BH13-06-01-AD05	2013 09 24	0.3 - 0.6	-	< 0.01	0.01	< 0.04	< 0.08	< 0.06	< 20	**308**	**1,440**	-	-	-	-	< 0.2
	BH13-06-02-AD05	2013 09 24	1.0 - 1.3	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH13-06-31-AD05	2013 09 25	31.7 - 32.0	-	< 0.01	0.016	< 0.04	< 0.08	< 0.06	**81**	**1,860**	150	-	-	-	-	< 0.2
	BH13-06-B	Duplicate	31.7 - 32.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	**120**	**2,530**	208	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	39	31	32	-	-	-	-	*
	BH13-06-32-AD05	2013 09 25	32.3 - 32.6	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	**120**	**2,540**	182	-	-	-	-	< 0.2
	BH13-06-33-AD05	2013 09 25	33.1 - 33.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH13-06-34-AD05	2013 09 25	33.9 - 34.2	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	21	116	< 200	-	-	-	-	< 0.2
	BH13-06-35-AD05	2013 09 25	34.6 - 34.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH13-07	BH13-07-01-AD05	2013 09 25	0.3 - 0.6	-	< 0.01	***2.1***	< 0.04	3.6	< 0.06	**820**	**5,330**	**426**	***850***	-	-	-	< 0.2
	BH13-07-02-AD05	2013 09 25	1.3 - 1.6	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	< 10	-	-	-	< 0.2
	BH13-07-21-AD05	2013 09 26	17.6 - 17.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	< 10	-	-	-	< 0.2
	BH13-07-22-AD05	2013 09 26	18.7 - 19.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH13-08	BH13-08-01	2013 11 30	0.3 - 0.3	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH13-08-02	2013 11 30	0.9 - 0.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH13-08-16	2013 11 30	12.6 - 12.6	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH13-08-42	2013 12 03	30.9 - 30.9	-	< 0.01	0.029	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH13-08-44	2013 12 03	33.5 - 33.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH14-09	BH14-09-02-AD05	2014 02 15	1.4 - 1.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-09-41-AD05	2014 02 17	31.2 - 31.2	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-09-40-AD05	2014 02 17	32.3 - 32.3	-	0.0076	< 0.02	0.03	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH14-10	BH14-10-02-AD05	2014 02 19	1.4 - 1.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-10-25-AD05	2014 02 19	16.6 - 16.6	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-10-35-AD05	2014 02 19	20.6 - 20.6	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-10-42-AD05	2014 02 20	31.9 - 31.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**580**	< 200	-	-	-	-	< 0.2
	BH14-10-44-AD05	2014 02 20	33.1 - 33.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	**46**	**877**	< 200	-	-	-	-	< 0.2
BH14-11	BH14-11-02-AD05	2014 02 21	1.4 - 1.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-11-02A-AD05	Duplicate	1.4 - 1.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
	BH14-11-33-AD05	2014 02 22	21.3 - 21.3	-	0.0072	0.013	0.074	0.28	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-11-47-AD05	2014 02 23	30.5 - 30.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
Federal Guideline/Standard																	
CCME CEQG/CWS Residential Coarse-Grained Surface (sample depth < 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (sample depth > 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	n/a
BC Standard																	
CSR Residential Land Use (RL) (sample depth < 3.0m)[d]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (sample depth > 3.0m)[d]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B645259.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] Pathways: Contact (Direct/Eco), Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.
[d] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[e] Where available, values corrected for the presence of individual PAH are shown. Otherwise, uncorrected values are shown.
[f] F4 value did not return to baseline; F4 Gravimetric (Gravimetric Heavy Hydrocarbons) not analyzed.
[g] F4 value did not return to baseline and as such F4 Gravimetric (Gravimetric Heavy Hydrocarbons) was completed; the greater of the two is reported.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.
SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).
SHADED VPH, LEPH or HEPH concentration greater than CCME CWS Residential F1, F2 or F3 standard (potential CCME exceedance), only applied where no F1, F2 or F3 concentration is available.

TABLE 1 (Cont'd): Summary of Analytical Results for Hydrocarbons in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions				MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19)[e] µg/g	HEPH (C19-C32)[e] µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	MTBE µg/g
BH14-13	BH14-13-01-AD05	2014 02 27	1.1 - 1.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**253**	274	-	-	-	-	< 0.2
	BH14-13-16-AD05	2014 02 27	3.4 - 3.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-13-17-AD05	2014 02 27	11.6 - 11.6	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-13-25-AD05	2014 02 27	18.1 - 18.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-13-25A-AD05	Duplicate	18.1 - 18.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
	BH14-13-30-AD05	2014 02 28	22.1 - 22.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-13-30A-AD05	Duplicate	22.1 - 22.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
BH14-14	BH14-14-01-AD05	2014 02 27	0.2 - 0.2	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	147	121	-	-	-	-	< 0.2
	BH14-14-03-AD05	2014 02 27	1.1 - 1.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-14-05-AD05	2014 02 27	2.0 - 2.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-14-19-AD05	2014 02 28	11.4 - 11.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH14-15	BH14-15-01-AD05	2014 02 28	0.3 - 0.3	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**303**	**738**	-	-	-	-	< 0.2
	BH14-15-02-AD05	2014 02 28	0.9 - 0.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	**160**	**8,140**	**943**	-	-	-	-	< 0.2
	BH14-15-03-AD05	2014 02 28	1.5 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**401**	115	-	-	-	-	< 0.2
	BH14-15-07-AD05	2014 02 28	4.0 - 4.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-15-11-AD05	2014 03 01	8.4 - 8.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-15-13-AD05	2014 03 01	10.5 - 10.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**3,030**	1,230	-	-	-	-	< 0.2
	BH14-15-15-AD05	2014 03 01	12.8 - 12.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**653**	335	-	-	-	-	< 0.2
	BH14-15-18-AD05	2014 03 01	15.4 - 15.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	126	137	-	-	-	-	< 0.2
	BH14-15-26-AD05	2014 03 01	22.4 - 22.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	**40**	**2,020**	138	-	-	-	-	< 0.2
	BH14-15-27-AD05	2014 03 01	23.8 - 23.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-15-27A-AD05	Duplicate	23.8 - 23.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	116	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
	BH14-15-30-AD05	2014 03 01	27.0 - 27.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	132	< 200	-	-	-	-	< 0.2
BH14-17	BH14-17-17-AD05	2014 03 01	10.7 - 10.7	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-17-2-AD05	2014 03 01	1.1 - 1.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	146	229	-	-	-	-	< 0.2
	BH14-17-6-AD05	2014 03 01	3.2 - 3.2	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH14-18	BH14-18-01-AD05	2014 03 02	0.3 - 0.3	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-18-19-AD05	2014 03 02	20.6 - 20.6	-	< 0.01	0.014	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-18-20-AD05	2014 03 02	22.4 - 22.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**171**	< 200	-	-	-	-	< 0.2
	BH14-18-25-AD05	2014 03 02	27.0 - 27.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**521**	< 200	-	-	-	-	< 0.2
	BH14-18-25A-AD05	Duplicate	27.0 - 27.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**259**	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	67	*	-	-	-	-	*
	BH14-18-27-AD05	2014 03 02	29.0 - 29.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	17	**1,130**	< 200	-	-	-	-	< 0.2
BH14-19	BH14-19-02-AD05	2014 03 02	1.7 - 1.7	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-19-24-AD05	2014 03 04	18.9 - 18.9	-	-	-	-	-	-	-	< 200	< 200	-	-	-	-	-
	BH14-19-37-AD05	2014 03 05	31.2 - 31.2	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-19-41A-AD05	2014 03 05	32.8 - 32.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-19-41-AD05	2014 03 05	32.8 - 32.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH14-20	BH14-20-01-AD05	2014 03 03	1.8 - 1.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-20-06-AD05	2014 03 03	6.9 - 6.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-20-21-AD05	2014 03 03	22.0 - 22.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	**43**	**1,320**	105	-	-	-	-	< 0.2
	BH14-20-23-AD05	2014 03 03	23.9 - 23.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-20-23A-AD05	Duplicate	23.9 - 23.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
BH14-21	BH14-21-02-AD05	2014 03 03	1.2 - 1.4	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-21-12-AD05	2014 03 03	8.7 - 8.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH14-22	BH14-22-01-AD05	2014 03 04	1.2 - 1.2	-	0.022	0.013	0.097	0.076	< 0.06	< 20	< 200	234	-	-	-	-	< 0.2
	BH14-22-19-AD05	2014 03 04	26.8 - 26.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-22-19A-AD05	Duplicate	26.8 - 26.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
	BH14-22-30-AD05	2014 03 04	29.1 - 29.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH14-23	BH14-23-01-AD05	2014 03 04	0.6 - 0.6	-	< 0.01	< 0.02	0.02	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-23-02-AD05	2014 03 04	1.2 - 1.2	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-23-15-AD05	2014 03 04	16.3 - 16.3	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-23-16-AD05	2014 03 04	17.5 - 17.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-23-17-AD05	2014 03 04	19.7 - 19.7	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-23-23-AD05	2014 03 04	27.0 - 27.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-23-23A-AD05	Duplicate	27.0 - 27.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
BH14-24	BH14-24-01-AD05	2014 03 05	0.8 - 0.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**208**	169	-	-	-	-	< 0.2
	BH14-24-02-AD05	2014 03 05	1.1 - 1.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-24-03-AD05	2014 03 05	1.5 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-24-12-AD05	2014 03 05	20.1 - 20.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-24-14-AD05	2014 03 05	20.7 - 20.7	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-24-15-AD05	2014 03 05	20.9 - 20.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-24-18-AD05	2014 03 05	24.7 - 24.7	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH14-25	BH14-25-01-AD05	2014 03 06	2.0 - 2.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-25-06-AD05	2014 03 06	9.9 - 9.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-25-09-AD05	2014 03 06	12.8 - 12.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	16	**561**	< 200	-	-	-	-	< 0.2
	BH14-25-09A-AD05	Duplicate	12.8 - 12.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**415**	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	30	*	-	-	-	-	*
BH14-26	BH14-26-23-AD05	2014 03 07	32.8 - 32.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH14-27	BH14-27-01-AD05	2014 03 06	1.5 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-27-06-AD05	2014 03 06	7.8 - 7.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-27-10-AD05	2014 03 07	12.7 - 12.7	-	< 0.01	< 0.02	< 0.06	< 0.08	< 0.06	**540**	**1,830**	< 200	-	-	-	-	< 0.2
	BH14-27-10A-AD05	Duplicate	12.7 - 12.7	-	< 0.01	< 0.072	< 0.078	< 0.08	< 0.06	**1,600**	**3,200**	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	99	54	*	-	-	-	-	*
	BH14-27-11-AD05	2014 03 07	13.1 - 13.1	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH14-28	BH14-28-01-AD05	2014 03 07	0.9 - 0.9	-	0.0061	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-28-07-AD05	2014 03 07	12.8 - 12.8	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	BH14-28-10-AD05	2014 03 07	15.9 - 15.9	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-01	SS14-01-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-01-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-01-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-02	SS14-02-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-02-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-02-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-03	SS14-03-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-D1-01-AD05	Duplicate	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
	SS14-03-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-03-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-04	SS14-04-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-04-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-04-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-05	SS14-05-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-05-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-05-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-06	SS14-06-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-06-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-06-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-07	SS14-07-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-07-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-07-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-08	SS14-08-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-08-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-08-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-D2-01-AD05	Duplicate	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
Federal Guideline/Standard																	
CCME CEQG/CWS Residential Coarse-Grained Surface (sample depth < 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (sample depth > 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	n/a
BC Standard																	
CSR Residential Land Use (RL) (sample depth < 3.0m)[d]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (sample depth > 3.0m)[d]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B645259.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] Pathways: Contact (Direct/Eco), Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.
[d] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[e] Where available, values corrected for the presence of individual PAH are shown. Otherwise, uncorrected values are shown.
[f] F4 value did not return to baseline; F4 Gravimetric (Gravimetric Heavy Hydrocarbons) not analyzed.
[g] F4 value did not return to baseline and as such F4 Gravimetric (Gravimetric Heavy Hydrocarbons) was completed; the greater of the two is reported.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

SHADED VPH, LEPH or HEPH concentration greater than CCME CWS Residential F1, F2 or F3 standard (potential CCME exceedance), only applied where no F1, F2 or F3 concentration is available.

TABLE 1 (Cont'd): Summary of Analytical Results for Hydrocarbons in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions				MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19)[e] µg/g	HEPH (C19-C32)[e] µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	MTBE µg/g
SS14-09	SS14-09-01-AD05	2014 02 20	0.0 - 0.5	-	0.027	0.016	***0.13***	0.11	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-09-02-AD05	2014 02 20	0.5 - 1.0	-	0.029	0.016	***0.15***	0.12	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-D3-01-AD05	Duplicate	0.5 - 1.0	-	0.011	< 0.02	0.053	0.046	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	96	*	*	*	*	*	-	-	-	-	*
	SS14-09-03-AD05	2014 02 20	1.0 - 1.5	-	***0.054***	0.031	***0.3***	0.29	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-10	SS14-10-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-10-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-10-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-11	SS14-11-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-11-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-11-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-12	SS14-12-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-12-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-D4-01-AD05	Duplicate	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
	SS14-12-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-13	SS14-13-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-13-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-13-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-14	SS14-14-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-14-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-14-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-D5-01-AD05	Duplicate	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
SS14-15	SS14-15-01-AD05	2014 02 21	0.0 - 0.5	-	0.03	< 0.02	0.098	0.049	< 0.06	< 20	**190**	**407**	-	-	-	-	< 0.2
	SS14-15-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.0154	< 0.02	0.021	< 0.08	< 0.06	< 20	< 200	134	-	-	-	-	< 0.2
	SS14-15-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-D6-01-AD05	Duplicate	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
SS14-16	SS14-16-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**253**	**1,890**	-	-	-	-	< 0.2
	SS14-16-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**230**	**1,680**	-	-	-	-	< 0.2
	SS14-16-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	**152**	**1,190**	-	-	-	-	< 0.2
	SS14-D7-01-AD05	Duplicate	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	148	**1,100**	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	3	8	-	-	-	-	*
SS14-17	SS14-17-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-17-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-17-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-18	SS14-18-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-18-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-18-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-19	SS14-19-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-19-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-19-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-20	SS14-20-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-20-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-20-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-21	SS14-21-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-21-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-21-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-22	SS14-22-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-D8-01-AD05	Duplicate	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	QA/QC RPD%				*	*	*	*	*	*	*	*	-	-	-	-	*
	SS14-22-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-22-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-23	SS14-23-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-23-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-23-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
SS14-24	SS14-24-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-24-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
	SS14-24-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.01	< 0.02	< 0.04	< 0.08	< 0.06	< 20	< 200	< 200	-	-	-	-	< 0.2
BH16-01	BH16-01-1	2016 03 14	0.3 - 0.6	100	0.013	0.022	0.064	0.075	< 0.030	< 10	< 100	**1,240**	< 10	17	***1,100***	730	< 0.10
	BH16-01-2	2016 03 14	0.9 - 1.2	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	16	16	< 0.10
	BH16-01-3	Duplicate	0.9 - 1.2	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	*
	BH16-01-5	2016 03 14	11.6 - 11.9	25	< 0.0050	< 0.010	0.024	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
BH16-02	BH16-02-1	2016 03 07	0.5 - 0.8	250	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	**69**	**10,900**	**4,090**	***72***	***4,700***	***9,400***	< 50	< 0.10
	BH16-02-2	2016 03 07	2.0 - 2.3	150	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	16	**2,410**	954	18	***1,200***	***2,600***	160	< 0.10
BH16-03	BH16-03-1	2016 03 07	0.5 - 0.6	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	107	< 100	< 10	59	68	< 10	< 0.10
	BH16-03-2	2016 03 07	1.5 - 1.8	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	73	190	160	< 0.10
	BH16-03-3	Duplicate	1.5 - 1.8	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	68	180	160	< 0.10
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	7	5	0	*
BH16-04	BH16-04-2	2016 03 14	0.6 - 0.9	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
	BH16-04-3	2016 03 14	1.5 - 2.1	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
	BH16-04-4	2016 03 14	4.3 - 4.6	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
BH16-05	BH16-05-1	2016 03 15	0.2 - 0.5	200	***0.032***	0.082	***0.15***	0.56	< 0.030	**220**	**1,710**	232	***230***	***1,400***	***730***	54	< 0.10
	BH16-05-3	2016 03 15	1.5 - 2.0	125	0.0075	< 0.010	0.029	0.045	< 0.030	< 10	425	< 100	< 10	***350***	190	22	< 0.10
	BH16-05-4	2016 03 15	4.1 - 4.6	25	0.0078	0.011	0.032	0.05	< 0.030	< 10	422	149	< 10	***330***	300	80	< 0.10
	BH16-05-7	2016 03 15	15.8 - 16.2	-	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
BH16-06	BH16-06-1	2016 03 07	0.5 - 0.6	75	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	106	< 10	16	150	98	< 0.10
BH16-07	BH16-07-1	2016 03 07	1.2 - 1.5	11,000	< 0.0050	< 0.010	0.024	0.27	< 0.030	**1,200**	**17,900**	480	***1,200***	***15,000***	***1,600***	280	< 0.10
	BH16-07-2	2016 03 07	2.0 - 2.3	425	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	**90**	**2,650**	< 100	***93***	***2,400***	260	32	< 0.10
BH16-08	BH16-08-1	2016 03 07	1.5 - 1.8	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	54	170	160	< 0.10
BH16-09	BH16-09-1	2016 03 07	1.5 - 1.8	150	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
BH16-10	BH16-10-1	2016 03 07	1.5 - 1.8	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	52	170	160	< 0.10
	BH16-10-2	2016 03 07	3.0 - 3.4	25	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
BH16-12	BH16-12-1	2016 03 11	0.9 - 1.2	75	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.10
	BH16-12-2	2016 03 11	5.5 - 5.8	5	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	102	< 10	< 10	120	66[f]	< 0.10
	BH16-12-3	2016 03 11	10.1 - 10.4	-	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	< 10	110	15[f]	< 0.10
	BH16-12-9	2016 03 12	20.7 - 21.0	-	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	**95**	**2,120**	271	***99***	***1,800***	***730***	31[f]	< 0.10
	BH16-12-10	Duplicate	20.7 - 21.0	-	< 0.0050	0.017	0.035	0.056	< 0.030	**100**	1,940	239	***110***	***1,700***	***680***	38[f]	< 0.10
	QA/QC RPD%				*	*	*	*	*	5	9	*	11	6	7	*	*
	BH16-12-13	2016 03 13	30.0 - 30.3	-	< 0.0050	< 0.010	< 0.020	< 0.040	< 0.030	< 10	< 100	< 100	< 10	12	45	600[g]	< 0.10
BH16-13	BH16-13-03	2016 06 01	3.0 - 3.2	220	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	73	21	< 0.1
	BH16-13-04	Duplicate	3.0 - 3.2	330	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	69	18	< 0.1
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	6	*	*
	BH16-13-06	2016 06 01	7.9 - 8.1	40	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-14	BH16-14-01	2016 06 01	2.0 - 2.1	40	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	330	< 100	< 10	***230***	170	< 10	< 0.1
	BH16-14-03	2016 06 01	7.9 - 8.1	30	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	140	< 100	< 10	110	94	< 10	< 0.1
BH16-15	BH16-15-01	2016 06 01	1.5 - 1.7	130	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	BH16-15-02	2016 06 01	3.0 - 3.2	55	< 0.005	< 0.01	0.023	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	BH16-15-03	2016 06 01	7.9 - 8.1	75	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	BH16-15-04	Duplicate	7.9 - 8.1	75	< 0.005	< 0.01	0.022	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	*
BH16-16	BH16-16-01	2016 06 01	1.8 - 2.0	90	0.0064	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	BH16-16-03	2016 06 02	8.1 - 8.2	250	0.01	0.023	0.055	0.15	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-17	BH16-17-01	2016 06 02	2.0 - 2.1	0	< 0.005	< 0.01	0.028	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	BH16-17-04	2016 06 02	7.9 - 8.1	0	0.011	0.015	0.061	0.13	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-18	BH16-18-01	2016 06 02	2.0 - 2.1	200	0.0073	< 0.01	0.028	< 0.04	< 0.03	34	**2,600**	180	***38***	***2,900***	530	23	< 0.1
	BH16-18-03	2016 06 02	8.1 - 8.2	15	< 0.005	< 0.01	0.025	< 0.04	< 0.03	< 10	220	< 100	< 10	***180***	26	< 10	< 0.1
	BH16-18-04	Duplicate	8.1 - 8.2	15	< 0.005	< 0.01	0.021	< 0.04	< 0.03	< 10	210	< 100	< 10	***170***	24	< 10	< 0.1
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	6	*	*	*
	BH16-18-05	2016 06 02	10.1 - 10.2	410	< 0.005	< 0.01	0.024	0.048	< 0.03	150	**2,700**	160	***170***	***2,700***	400	72	< 0.1
	BH16-18-06	2016 06 02	14.0 - 14.2	0	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
Federal Guideline/Standard																	
CCME CEQG/CWS Residential Coarse-Grained Surface (sample depth < 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (sample depth > 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	n/a
BC Standard																	
CSR Residential Land Use (RL) (sample depth < 3.0m)[d]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (sample depth > 3.0m)[d]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B645259.
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- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] Pathways: Contact (Direct/Eco), Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.
[d] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[e] Where available, values corrected for the presence of individual PAH are shown. Otherwise, uncorrected values are shown.
[f] F4 value did not return to baseline; F4 Gravimetric (Gravimetric Heavy Hydrocarbons) not analyzed.
[g] F4 value did not return to baseline and as such F4 Gravimetric (Gravimetric Heavy Hydrocarbons) was completed; the greater of the two is reported.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

SHADED VPH, LEPH or HEPH concentration greater than CCME CWS Residential F1, F2 or F3 standard (potential CCME exceedance), only applied where no F1, F2 or F3 concentration is available.

TABLE 1 (Cont'd): Summary of Analytical Results for Hydrocarbons in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Monocyclic Aromatic Hydrocarbons					Gross Parameters			Petroleum Hydrocarbon Fractions				MTBE
					Benzene µg/g	Ethylbenzene µg/g	Toluene µg/g	Xylenes µg/g	Styrene µg/g	VPH (C6-C10) µg/g	LEPH (C10-C19)[e] µg/g	HEPH (C19-C32)[e] µg/g	F1-BTEX µg/g	F2 (>C10-C16) µg/g	F3 (>C16-C34) µg/g	F4 (>C34-C50) µg/g	MTBE µg/g
BH16-19	BH16-19-01	2016 06 02	2.0 - 2.1	35	0.0066	< 0.01	< 0.02	< 0.04	< 0.03	< 10	130	< 100	< 10	110	29	< 10	< 0.1
	BH16-19-03	2016 06 02	7.9 - 8.1	0	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	BH16-19-04	2016 06 02	9.3 - 9.4	15	< 0.005	< 0.01	0.021	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-20	BH16-20-01	2016 06 03	1.2 - 1.4	170	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	BH16-20-02	2016 06 03	2.7 - 2.9	15	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-21	BH16-21-01	2016 06 03	1.2 - 1.4	20	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	BH16-21-02	2016 06 03	2.7 - 2.9	20	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-22	BH16-22-01	2016 06 03	1.2 - 1.4	85	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	**1,600**	**4,300**	< 10	***270***	***3,200***	1,100	< 0.1
BH16-23	BH16-23-01	2016 06 03	0.9 - 1.1	25	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	55	27	< 0.1
BH16-24	BH16-24-01	2016 06 03	0.6 - 0.8	15	< 0.005	< 0.01	0.028	< 0.04	< 0.03	< 10	300	250	12	120	***410***	< 10	< 0.1
BH16-25	BH16-25-01	2016 06 03	1.1 - 1.2	35	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	850	410	< 10	***570***	***1,100***	80	< 0.1
BH16-26	BH16-26-01	2016 06 03	0.5 - 0.6	-	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-27	BH16-27-01	2016 06 03	0.5 - 0.6	-	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-28	BH16-28-01	2016 06 03	0.5 - 0.6	-	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	32	< 10	< 0.1
	BH16-28-02	2016 06 03	3.0 - 3.2	-	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-29	BH16-29-01	2016 06 03	1.2 - 1.4	-	0.014	< 0.01	0.032	0.17	< 0.03	13	140	330	15	39	***430***	190	< 0.1
	BH16-29-02	2016 06 03	2.9 - 3.0	-	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	24	< 10	< 0.1
BH16-30	BH16-30-01	2016 06 03	1.1 - 1.2	20	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	BH16-30-02	2016 06 03	2.7 - 2.9	10	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-31	BH16-31-01	2016 06 03	0.5 - 0.6	-	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	44	17	< 0.1
	BH16-31-02	2016 06 03	2.7 - 2.9	-	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	BH16-31-03	Duplicate	2.7 - 2.9	-	< 0.005	< 0.01	0.032	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	*
BH16-32	BH16-32-01	2016 06 03	0.8 - 0.9	450	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	370	890	< 10	***170***	***1,200***	***15,000***[g]	< 0.1
	BH16-32-02	2016 06 03	2.7 - 2.9	30	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-33	BH16-33-01	2016 06 03	0.5 - 0.6	-	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	**7,300**	**11,000**	< 10	***2,300***	***16,000***	***6,300***	< 0.1
	BH16-33-02	Duplicate	0.5 - 0.6	-	< 0.005	< 0.01	0.024	< 0.04	< 0.03	< 10	**7,400**	**11,000**	< 10	***2,600***	***19,000***	***7,200***	< 0.1
	QA/QC RPD%				*	*	*	*	*	*	1	0	*	12	17	13	*
	BH16-33-03	2016 06 03	2.7 - 2.9	-	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-34	BH16-34-01	2016 06 03	0.5 - 0.6	320	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	10	< 10	< 0.1
	BH16-34-02	Duplicate	0.5 - 0.6	320	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	70	20	< 0.1
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	*
	BH16-34-03	2016 06 03	2.7 - 2.9	10	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-35	BH16-35-01	2016 06 03	0.5 - 0.6	-	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	**2,300**	**3,400**	< 10	***470***	***4,400***	2,100	< 0.1
	BH16-35-03	2016 06 03	2.7 - 2.9	-	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-36	BH16-36-01	2016 06 03	0.5 - 0.6	480	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	BH16-36-03	2016 06 03	2.7 - 3.0	10	0.0075	< 0.01	0.036	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-37	BH16-37-01	2016 06 04	0.6 - 0.8	620	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	18	650	< 100	20	***650***	180	11	< 0.1
	BH16-37-06	2016 06 04	7.9 - 8.1	10	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	BH16-37-07	2016 06 04	11.0 - 11.1	590	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	BH16-37-10	2016 06 04	20.1 - 20.3	190	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	480	< 100	10	***460***	170	< 10	< 0.1
	BH16-37-11	Duplicate	20.1 - 20.3	190	< 0.005	< 0.01	0.025	< 0.04	< 0.03	12	290	< 100	13	***250***	100	< 10	< 0.1
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	59	52	*	*
	BH16-37-12	2016 06 04	21.9 - 22.1	295	0.0061	< 0.01	0.022	< 0.04	< 0.03	< 10	< 100	< 100	< 10	40	34	< 10	< 0.1
	BH16-37-13	2016 06 04	23.9 - 24.1	35	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
BH16-38	BH16-38-01	2016 06 05	1.1 - 1.2	240	< 0.005	0.023	0.025	0.093	< 0.03	< 10	< 100	530	< 10	26	***710***	330	< 0.1
	BH16-38-04	2016 06 05	7.5 - 7.6	150	0.0053	0.011	0.023	< 0.04	< 0.03	< 10	< 100	< 100	< 10	< 10	< 10	< 10	< 0.1
	BH16-38-10	2016 06 05	32.6 - 32.8	560	< 0.005	< 0.01	< 0.02	< 0.04	< 0.03	180	**3,300**	290	***190***	***2,400***	1,100	< 20	< 0.1
	BH16-38-11	2016 06 05	32.6 - 32.8	560	0.008	0.02	0.033	< 0.04	< 0.03	**210**	**2,800**	230	***230***	***2,500***	1,100	110	< 0.1
Federal Guideline/Standard																	
CCME CEQG/CWS Residential Coarse-Grained Surface (sample depth < 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	300	2,800	n/a
CCME CEQG/CWS Residential Coarse-Grained Subsoil (sample depth > 1.5m)[c]					0.03	0.082	0.1	11	5	n/a	n/a	n/a	30	150	2,500	10,000	n/a
BC Standard																	
CSR Residential Land Use (RL) (sample depth < 3.0m)[d]					0.04	1	1.5	5	5	200	1,000	1,000	n/a	n/a	n/a	n/a	320
CSR Commercial Land Use (CL) (sample depth > 3.0m)[d]					0.04	7	2.5	20	50	200	2,000	5,000	n/a	n/a	n/a	n/a	700

Associated Maxxam file(s): B645259.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] Pathways: Contact (Direct/Eco), Management Limit, Protection of Groundwater for Aquatic Life, Vapour Inhalation, Protection of Potable Groundwater.
[d] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[e] Where available, values corrected for the presence of individual PAH are shown. Otherwise, uncorrected values are shown.
[f] F4 value did not return to baseline; F4 Gravimetric (Gravimetric Heavy Hydrocarbons) not analyzed.
[g] F4 value did not return to baseline and as such F4 Gravimetric (Gravimetric Heavy Hydrocarbons) was completed; the greater of the two is reported.

BOLD Concentration greater than CCME CEQG/CWS Residential Land Use (RL) standard.

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

SHADED VPH, LEPH or HEPH concentration greater than CCME CWS Residential F1, F2 or F3 standard (potential CCME exceedance), only applied where no F1, F2 or F3 concentration is available.

TABLE 2: Summary of Analytical Results for PAHs in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	1-Methylnaphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
TP-05	FS-05-1.0	2002 10 05	1.0 - 1.0	-	< 0.05[a]	-	-	< 0.05	< 0.04	< 0.05	< 0.05[a]	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
TP-35	FS-35-1.0	2002 10 05	1.0 - 1.0	-	< 0.05[a]	-	-	< 0.05	< 0.04	< 0.05	< 0.05[a]	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
BH01	BH01-01	2003 01 01	1.2 - 1.2	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH02	BH02-01	2003 01 01	1.2 - 1.2	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH02-08	2003 01 01	6.6 - 6.6	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH03	BH03-02	2003 01 01	2.7 - 2.7	-	< 2[a]	-	-	-	-	-	***3.5***	-	-	1.4	< 0.2	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH03-06	2003 01 01	7.3 - 7.3	-	< 0.8[a]	-	-	-	-	-	***0.34***	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH03-08	2003 01 01	10.1 - 10.1	-	< 0.06[a]	-	-	-	-	-	***0.08***	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH04	BH04-03	2003 01 01	4.3 - 4.3	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH04-05	2003 01 01	7.3 - 7.3	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH04-06	2003 01 01	8.8 - 8.8	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH05	BH05-04	2003 01 01	5.5 - 5.5	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH05-07	2003 01 01	8.5 - 8.5	-	< 0.05[a]	-	-	-	-	-	***0.2***	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH06	BH06-01	2003 01 01	1.2 - 1.2	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH06-05	2003 01 01	7.3 - 7.3	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH07	BH07-02	2003 01 01	2.7 - 2.7	-	***3.99***	-	-	-	-	-	***6.74***	-	-	0.18	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH07-06	2003 01 01	8.8 - 8.8	-	< 0.5[a]	-	-	-	-	-	***0.5***	-	-	0.07	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH08	BH08-04	2003 01 01	5.8 - 5.8	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH08-08	2003 01 01	11.9 - 11.9	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH09	BH09-03	2003 01 01	4.3 - 4.3	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH09-07	2003 01 01	10.1 - 10.1	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH10	BH10-05	2003 01 01	7.3 - 7.3	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH10-08	2003 01 01	11.9 - 11.9	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH11	BH11-01	2003 01 01	1.2 - 1.2	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BHQAQC-01	Duplicate	1.2 - 1.2	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	QA/QC RPD%				*	-	-	-	-	-	*	-	-	*	*	-	*	-	*	*	*	*	-	-	-
	BH11-07	2003 01 01	10.4 - 10.4	-	***0.21***	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH12	BH12-01	2003 01 01	1.2 - 1.2	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BHQAQC-02	Duplicate	1.2 - 1.2	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	QA/QC RPD%				*	-	-	-	-	-	*	-	-	*	*	-	*	-	*	*	*	*	-	-	-
	BH12-05	2003 01 01	7.3 - 7.3	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH12-08	2003 01 01	11.9 - 11.9	-	< 0.06[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH16	BH16-2	2001 11 23	2.6	-	< 0.5[a]	-	< 0.5	< 0.5	< 0.5[a]	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.605	< 5.6[a]
BH24	BH24-1	2004 11 26	0.5 - 0.5	-	***1.3***	-	2	< 0.05	< 0.05	< 0.05	< 0.05[a]	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
BH36	BH36-2	2004 11 28	6.1 - 6.1	-	***0.8***	-	-	-	-	-	< 0.5[a]	-	-	< 0.5	< 0.5	-	< 0.5	-	< 0.5	< 0.5	< 0.5	< 0.5	-	-	-
BH53	BH53-1	2004 11 30	1.5 - 1.5	-	***13***	-	-	-	-	-	< 5[a]	-	-	< 5	< 5[a]	-	< 5[a]	-	< 5[a]	< 5[a]	< 5[a]	< 5[a]	-	-	-
BH54	BH54-1	2004 11 30	1.5 - 1.5	-	< 0.5[a]	-	-	-	-	-	< 0.5[a]	-	-	< 0.5	< 0.5	-	< 0.5	-	< 0.5	< 0.5	< 0.5	< 0.5	-	-	-
	BH54-2	2004 11 30	3.1 - 3.1	-	< 0.5[a]	-	-	-	-	-	< 0.5[a]	-	-	< 0.5	< 0.5	-	< 0.5	-	< 0.5	< 0.5	< 0.5	< 0.5	-	-	-
BH59	BH59-1	2004 12 11	1.5 - 1.5	-	***14***	-	-	-	-	-	***2.7***	-	-	< 0.5	< 0.5	-	< 0.5	-	< 0.5	< 0.5	< 0.5	< 0.5	-	-	-
	GR10	Duplicate	1.5 - 1.5	-	***16***	-	-	-	-	-	***3.1***	-	-	< 0.5	< 0.5	-	< 0.5	-	< 0.5	< 0.5	< 0.5	< 0.5	-	-	-
	QA/QC RPD%				13	-	-	-	-	-	14	-	-	*	*	-	*	-	*	*	*	*	-	-	-
BH63	BH63-1	2005 03 12	1.5 - 1.5	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH63-2	2005 03 12	3.0 - 3.0	-	***2.2***	-	-	-	-	-	***1.7***	-	-	< 0.5	< 0.5	-	< 0.5	-	< 0.5	< 0.5	< 0.5	< 0.5	-	-	-
BH64	BH64-1	2005 03 13	1.5 - 1.5	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH64-2	2005 03 13	3.0 - 3.0	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	GR12b	Duplicate	3.0 - 3.0	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	QA/QC RPD%				*	-	-	-	-	-	*	-	-	*	*	-	*	-	*	*	*	*	-	-	-
BH67	BH67-1	2005 03 13	1.5 - 1.5	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH67-2	2005 03 13	3.0 - 3.0	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH78	BH78-1	2005 03 15	1.5 - 1.5	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH78-2	2005 03 15	3.0 - 3.0	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH78-3	2005 03 15	4.5 - 4.5	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH78-5	2005 03 15	7.5 - 7.5	-	< 0.5[a]	-	-	-	-	-	< 0.5[a]	-	-	< 0.5	< 0.5	-	< 0.5	-	< 0.5	< 0.5	< 0.5	< 0.5	-	-	-
BH79	BH79-1	2005 03 15	1.5 - 1.5	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH79-4	2005 03 15	6.0 - 6.0	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH85	BH85-1	2005 03 16	1.5 - 1.5	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH87	BH87-5	2005 03 16	7.5 - 7.5	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH90	BH90-1	2005 03 16	1.5 - 1.5	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH90-2	2005 03 16	3.0 - 3.0	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH91	BH91-1	2005 03 17	1.5 - 1.5	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH91-2	2005 03 17	4.5 - 4.5	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
	BH91-3	2005 03 17	7.5 - 7.5	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
BH98	BH98-1	2005 03 17	1.5 - 1.5	-	< 0.05[a]	-	-	-	-	-	< 0.05[a]	-	-	< 0.05	< 0.05	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	-	-	-
SS4	SS4	2005 11 08	0.0 - 0.1	-	***0.7***	-	< 0.5	< 0.5	-	< 0.5[a]	< 0.5[a]	< 0.5	< 0.5	0.6	< 0.5	< 0.5	< 0.5	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.605	< 5.6[a]
MR1	MR-1	2006 07 29	0.0 - 0.2	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
Federal Guideline																									
CCME CEQG Residential Land Use (RL)					0.013	n/a	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B645259.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 2 (Cont'd): Summary of Analytical Results for PAHs in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	1-Methylnaphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
MR2	MR-2	2006 07 29	0.0 - 0.2	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
MR3	MR-3	2006 07 29	0.0 - 0.2	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
MR4	MR-4	2006 07 29	0.0 - 0.2	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
	GR2	Duplicate	0.0 - 0.2	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
MR5	MR-5	2006 07 29	0.0 - 0.2	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
RES1	125-66.02-JLM-RES1-2	2006 07 29	0.6 - 0.6	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
RES2	125-66.02-JLM-RES2-1	2006 07 29	0.0 - 0.1	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
RES3	125-66.02-JLM-RES3-1	2006 07 29	0.0 - 0.1	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
RES4	125-66.02-JLM-RES4-1	2006 07 29	0.0 - 0.1	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
RES5	125-66.02-JLM-RES5-2	2006 07 29	0.0 - 0.2	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	0.01	0.01	0.01	0.01	0.02	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	0.012	0.22
	125-66.02-JLM-GR1	Duplicate	0.0 - 0.2	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	0.02	0.01	< 0.01	0.01	0.2	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	0.029	***1.3***
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
RES6	125-66.02-JLM-RES6-1	2006 07 29	0.0 - 0.1	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
RES7	125-66.02-JLM-RES7-2	2006 07 29	0.0 - 0.2	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
RES8	125-66.02-JLM-RES8-1	2006 07 29	0.0 - 0.1	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
BH113M	BH113M-2	2006 08 14	22.8 - 22.8	-	< 0.05[a]	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05[a]	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
SP1	SP1	2006 08 14	0.0 - 0.1	-	< 0.05[a]	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05[a]	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	GR58	Duplicate	0.0 - 0.1	-	< 0.05[a]	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05[a]	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
GARDEN1	Garden 1	2006 08 19	0.0 - 0.1	-	< 0.01	-	< 0.05	< 0.005	< 0.005	0.01	***0.07***	0.02	0.17	0.13	0.04	0.09	0.11	-	< 0.01	0.03	0.02	< 0.005	0.02	0.05	0.99
	Garden 1A	2009 10 18	0.0 - 0.1	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
	FSGR3	Duplicate	0.0 - 0.1	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
	Garden 1B	2009 10 18	0.0 - 0.1	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
GARDEN2	Garden 2	2006 08 19	0.0 - 0.1	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
MSV1	MSV1-1	2009 10 14		-	***0.36***	-	0.83	< 0.005	0.089	0.12	***0.12***	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
	MSV1-3	2009 10 14		-	***6.3***	-	17	< 0.005	***0.73***	***1.4***	***2.3***	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
AEC7A	AEC7A	2009 10 19	0.0 - 0.1	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
	FSGR4	Duplicate	0.0 - 0.1	-	< 0.01	-	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
BH120M	BH120M-1	2009 10 16	0.0 - 0.6	-	***0.03***	-	0.06	< 0.005	0.01	0.02	0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
	BH120M-3	2009 10 16	3.7 - 4.3	-	***0.02***	-	0.09	< 0.005	< 0.005	0.01	0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
	FSGR	Duplicate	3.7 - 4.3	-	***0.02***	-	0.08	< 0.005	< 0.005	0.01	0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.11
	QA/QC RPD%				*	-	12	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
BH127	BH127-1	2010 08 26	0.5 - 0.8	-	< 1.7[a]	-	2.85	< 0.08	< 0.3[a]	***0.531***	***0.559***	< 0.3	< 0.05	< 0.25	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	BH127-2	2010 08 26	1.1 - 1.4	-	***8.63***	-	22.5	< 0.2	< 0.75[a]	***1.28***	***2.71***	< 0.3	< 0.075	0.259	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	GR2	Duplicate	1.1 - 1.4	-	***8.98***	-	20.9	< 0.26	< 0.7[a]	***1.16***	***2.47***	< 0.27	< 0.07	0.171	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	QA/QC RPD%				4	-	7	*	*	10	9	*	*	41	*	*	*	-	*	*	*	*	*	*	*
	BH127-3	2010 08 26	2.0 - 2.1	-	< 0.017[a]	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	BH127-6	2010 08 26	4.9 - 5.2	-	< 0.013	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
BH128	BH128-1	2010 08 26	0.3 - 0.6	-	< 0.013	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	BH128-3	2010 08 26	1.8 - 2.1	-	< 0.013	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
BH129	BH129-1	2010 08 26	0.5 - 0.8	-	< 0.013	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	BH129-3	2010 08 26	1.8 - 2.1	-	< 0.02[a]	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
BH130	BH130-1	2010 08 27	0.3 - 0.6	-	< 0.013	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	BH130-2	2010 08 27	2.7 - 3.1	-	< 0.013	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
BH131	BH131-2	2010 08 27	0.9 - 1.2	-	< 0.015[a]	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	BH131-3	2010 08 27	1.4 - 1.5	-	< 0.015[a]	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
BH132	BH132-2	2010 08 27	0.9 - 1.2	-	< 0.013	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	BH132-3	2010 08 27	1.2 - 1.5	-	***0.015***	-	< 0.05	< 0.05	< 0.05	0.075	***0.322***	0.066	0.101	0.069	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	GR3	Duplicate	1.2 - 1.5	-	< 0.015[a]	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
	BH132-5	2010 08 27	2.7 - 3.1	-	***0.06***	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
BH133	BH133-2	2010 08 27	0.9 - 1.1	-	***0.051***	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	BH133-3	2010 08 27	2.7 - 3.1	-	< 0.013	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
BH134	BH134-1	2010 08 27	1.5 - 1.8	-	< 0.013	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
BH135	BH135-2	2010 08 27	1.5 - 1.8	-	< 0.013	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
	GR4	Duplicate	1.5 - 1.8	-	***0.096***	-	0.258	< 0.05	< 0.05	0.068	***0.179***	< 0.05	< 0.05	< 0.05	< 0.05	< 0.07	< 0.06	-	< 0.05	< 0.06	< 0.05	< 0.05	< 0.05	< 0.066	< 0.64
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
	BH135-3	2010 08 27	2.7 - 3.1	-	< 0.013	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
BH136	BH136-1	2010 08 26	0.3 - 0.5	-	< 0.013	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.061	< 0.59
BH12-01	BH12-01-1-AD05	2012 10 14	0.3 - 0.6	-	***7***	26	40	< 0.01	< 0.01	***5***	***8***	< 0.02	< 0.05	0.9	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
	BH12-01-2-AD05	2012 10 14	0.9 - 1.2	-	***5.8***	14.5	27.4	< 0.01	< 0.01	***2.3***	***3.3***	< 0.02	0.05	0.15	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
	BH12-01-15-AD05	2012 10 14	12.7 - 13.0	-	***0.4***	2.5	0.8	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
	BH12-01-32-AD05	2012 10 14	25.5 - 25.8	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
	BH12-01-36-AD05	2012 10 14	28.5 - 28.8	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
Federal Guideline																									
CCME CEQG Residential Land Use (RL)					0.013	n/a	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B645259.

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.

[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 2 (Cont'd): Summary of Analytical Results for PAHs in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	1-Methylnaphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
BH12-02	BH12-02-2-AD05	2012 10 14	0.5 - 0.8	-	***15***	33	52	< 0.01	< 0.01	***5***	***14***	< 0.02	0.22	0.62	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
	BH12-02-3-AD05	2012 10 14	1.2 - 1.5	-	***5***	13	21	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.05	0.02	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
	BH12-02-8-AD05	2012 10 15	5.0 - 5.3	-	***0.14***	0.4	0.14	< 0.01	< 0.01	< 0.02	0.03	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
	BH12-02-26-AD05	2012 10 15	18.8 - 19.1	-	< 0.01	0.01	0.05	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
	BH12-02-27-AD05	2012 10 15	19.5 - 19.8	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.05	0.04	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
	BH12-02-28-AD05	Duplicate	19.5 - 19.8	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.05	0.04	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
	BH12-02-30-AD05	2012 10 15	26.4 - 26.7	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	0.02	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
	BH12-02-31-AD05	Duplicate	26.4 - 26.7	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
	QA/QC RPD%				*	*	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
	BH12-02-32-AD05	2012 10 15	27.9 - 28.2	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
SS12-09	SS12-09-AD05	2012 10 20	0.2 - 0.5	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
SS12-10	SS12-10-AD05	2012 10 20	0.2 - 0.5	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.02	-	< 0.02	< 0.05	< 0.02	< 0.02	< 0.05	< 0.040	< 0.29
BH13-03	BH13-03-23-AD05	2013 03 17	17.9 - 18.1	-	< 0.005	-	-	-	-	-	< 0.02	-	-	< 0.01	< 0.03	-	-	< 0.05	< 0.05	< 0.03	< 0.05	< 0.005	-	-	-
	BH13-03-25-AD05	2013 03 17	19.5 - 19.8	-	< 0.005	-	-	-	-	-	< 0.02	-	-	< 0.01	< 0.03	-	-	< 0.05	< 0.05	< 0.03	< 0.05	< 0.005	-	-	-
	BH13-03-33-AD05	2013 03 17	25.7 - 25.9	-	***0.084***	-	-	-	-	-	***1.02***	-	-	0.04	< 0.03	-	-	< 0.05	< 0.05	< 0.03	< 0.05	< 0.005	-	-	-
	BH13-03-A-AD05	Duplicate	25.7 - 25.9	-	***0.112***	-	-	-	-	-	***1.37***	-	-	0.06	< 0.03	-	-	< 0.05	< 0.05	< 0.03	< 0.05	< 0.005	-	-	-
	QA/QC RPD%				29	-	-	-	-	-	29	-	-	*	*	-	-	*	*	*	*	*	-	-	-
	BH13-03-34-AD05	2013 03 17	26.2 - 26.5	-	***0.073***	-	-	-	-	-	***1.38***	-	-	0.03	< 0.03	-	-	< 0.05	< 0.05	< 0.03	< 0.05	< 0.005	-	-	-
	BH13-03-35-AD05	2013 03 17	26.8 - 27.0	-	***0.058***	-	-	-	-	-	***0.82***	-	-	0.02	< 0.03	-	-	< 0.05	< 0.05	< 0.03	< 0.05	< 0.005	-	-	-
	BH13-03-36-AD05	2013 03 17	28.1 - 28.4	-	***0.079***	-	-	-	-	-	***1.33***	-	-	0.02	< 0.03	-	-	< 0.05	< 0.05	< 0.03	< 0.05	< 0.005	-	-	-
TP13-01	TP13-01-1	2013 08 22	0.7 - 1.0	-	< 0.1[a]	-	0.056	< 0.1	< 0.22	< 0.6[a]	***0.65***	< 0.32	< 0.1	0.12	< 0.1	0.056	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.12	***1.2***
	TP13-01-2	2013 08 22	1.7 - 2.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-02	TP13-02-1	2013 08 22	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-02-2	2013 08 22	1.7 - 2.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-03	TP13-03-1	2013 08 22	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-03-2	2013 08 22	1.0 - 2.2	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-04	TP13-04-1	2013 08 22	0.5 - 0.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-04-2	2013 08 22	1.5 - 1.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-05	TP13-05-1	2013 08 22	0.5 - 0.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-05-2	2013 08 22	1.5 - 1.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-06	TP13-06-1	2013 08 22	0.3 - 0.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-06-2	2013 08 22	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-07	TP13-07-1	2013 08 22	0.1 - 0.4	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-07-2	2013 08 22	0.7 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-08	TP13-08-1	2013 08 22	0.5 - 0.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-08-2	2013 08 22	1.0 - 1.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-09	TP13-09-1	2013 08 22	0.5 - 0.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-09-101	Duplicate	0.5 - 0.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	TP13-09-2	2013 08 22	1.0 - 1.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-10	TP13-10-1	2013 08 22	0.5 - 0.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-10-2	2013 08 22	1.0 - 1.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-11	TP13-11-1	2013 08 22	0.0 - 0.4	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-11-102	Duplicate	0.0 - 0.4	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	TP13-11-2	2013 08 22	1.0 - 1.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-12	TP13-12-1	2013 08 22	0.3 - 0.6	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-12-2	2013 08 22	1.0 - 1.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-13	TP13-13-1	2013 08 22	0.4 - 0.7	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-13-2	2013 08 22	1.6 - 1.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-14	TP13-14-1	2013 08 22	0.3 - 0.6	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-14-2	2013 08 22	1.0 - 1.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-15	TP13-15-1	2013 08 22	0.0 - 0.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-15-2	2013 08 22	0.4 - 0.7	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-16	TP13-16-1	2013 08 22	0.2 - 0.5	-	< 0.4[a]	-	< 0.4	< 0.4	< 0.4[a]	< 0.4[a]	< 0.4[a]	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	-	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.48	< 4.7[a]
	TP13-16-2	2013 08 22	1.0 - 1.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-17	TP13-17-1	2013 08 22	0.9 - 1.2	-	< 0.4[a]	-	< 0.4	< 0.4	< 0.4[a]	***0.5***	< 0.46[a]	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	-	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.48	< 4.7[a]
	TP13-17-103	Duplicate	0.9 - 1.2	-	< 0.4[a]	-	< 0.4	< 0.4	< 0.4[a]	***0.93***	< 0.56[a]	< 0.4	< 0.4	0.31	< 0.4	< 0.4	-	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.48	< 4.7[a]
	QA/QC RPD%				*	-	*	*	*	60	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	TP13-17-2	2013 08 22	1.5 - 2.0	-	< 0.4[a]	-	< 0.4	< 0.4	< 0.4[a]	***1.5***	< 0.72[a]	< 0.4	< 0.4	0.31	< 0.4	0.21	-	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	0.48	***4.7***
TP13-18	TP13-18-1	2013 08 23	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-18-2	2013 08 23	1.4 - 1.7	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-19	TP13-19-1	2013 08 23	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-19-2	2013 08 23	1.8 - 2.1	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
Federal Guideline																									
CCME CEQG Residential Land Use (RL)					0.013	n/a	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B645259.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 2 (Cont'd): Summary of Analytical Results for PAHs in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	1-Methylnaphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
TP13-20	TP13-20-1	2013 08 23	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-20-2	2013 08 23	2.4 - 2.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-21	TP13-21-1	2013 08 23	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-21-2	2013 08 23	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-22	TP13-22-1	2013 08 23	0.1 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-22-2	2013 08 23	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
TP13-23	TP13-23-1	2013 08 23	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	TP13-23-104	Duplicate	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	TP13-23-2	2013 08 23	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH13-04	BH13-04-1-AD05	2013 09 22	0.3 - 0.6	-	***0.96***	-	3.7	< 0.98	< 4.6[a]	***1.4***	***0.4***	< 0.1	< 0.1	0.062	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-04-2-AD05	2013 09 22	0.8 - 1.1	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-04-21-AD05	2013 09 22	21.8 - 22.1	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-04-22-AD05	2013 09 22	22.6 - 22.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-04-30-AD05	2013 09 23	31.5 - 31.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH13-05	BH13-05-02-AD05	2013 09 23	1.1 - 1.4	-	***3.2***	-	34	< 2.8	< 3.4[a]	***1***	***0.45***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-05-A	Duplicate	1.1 - 1.4	-	***3.7***	-	36	< 3	< 3.6[a]	***1.3***	***0.49***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				14	-	6	*	*	26	9	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BH13-05-14-AD05	2013 09 23	11.6 - 11.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-05-27-AD05	2013 09 24	21.9 - 22.2	-	< 0.28[a]	-	< 0.1	< 3	< 3.8[a]	***1.2***	***4.6***	< 0.34	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-05-28-AD05	2013 09 24	22.6 - 22.9	-	< 0.22[a]	-	< 0.1	< 1.92	< 3.2[a]	***1.2***	***1.6***	< 0.22	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-05-29-AD05	2013 09 24	23.0 - 23.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-05-30-AD05	2013 09 24	23.7 - 24.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-05-31-AD05	2013 09 24	24.9 - 25.2	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH13-06	BH13-06-01-AD05	2013 09 24	0.3 - 0.6	-	***0.066***	-	0.26	< 0.1	< 0.1	0.063	***0.075***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-06-02-AD05	2013 09 24	1.0 - 1.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-06-31-AD05	2013 09 25	31.7 - 32.0	-	< 0.1[a]	-	0.065	< 0.18	< 0.3[a]	***0.32***	***0.73***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-06-B	Duplicate	31.7 - 32.0	-	< 0.1[a]	-	< 0.1	< 0.32	< 0.54[a]	***0.41***	***0.93***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	25	24	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BH13-06-32-AD05	2013 09 25	32.3 - 32.6	-	< 0.16[a]	-	< 0.1	< 0.16	< 0.55[a]	***0.68***	***1.1***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-06-33-AD05	2013 09 25	33.1 - 33.4	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-06-34-AD05	2013 09 25	33.9 - 34.2	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	***0.091***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-06-35-AD05	2013 09 25	34.6 - 34.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH13-07	BH13-07-01-AD05	2013 09 25	0.3 - 0.6	-	***3.2***	-	15	< 1.28	< 0.96[a]	***0.56***	***0.33***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-07-02-AD05	2013 09 25	1.3 - 1.6	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-07-21-AD05	2013 09 26	17.6 - 17.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-07-22-AD05	2013 09 26	18.7 - 19.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH13-08	BH13-08-01	2013 11 30	0.3 - 0.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-08-02	2013 11 30	0.9 - 0.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-08-16	2013 11 30	12.6 - 12.6	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-08-42	2013 12 03	30.9 - 30.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH13-08-44	2013 12 03	33.5 - 33.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH14-09	BH14-09-02-AD05	2014 02 15	1.4 - 1.4	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-09-41-AD05	2014 02 17	31.2 - 31.2	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-09-40-AD05	2014 02 17	32.3 - 32.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH14-10	BH14-10-02-AD05	2014 02 19	1.4 - 1.4	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-10-25-AD05	2014 02 19	16.6 - 16.6	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-10-35-AD05	2014 02 19	20.6 - 20.6	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-10-42-AD05	2014 02 20	31.9 - 31.9	-	< 0.1[a]	-	0.062	< 0.1	0.05	0.1	***0.19***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-10-44-AD05	2014 02 20	33.1 - 33.1	-	< 0.1[a]	-	0.097	< 0.1	0.086	0.2	***0.35***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH14-11	BH14-11-02-AD05	2014 02 21	1.4 - 1.4	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-11-02A-AD05	Duplicate	1.4 - 1.4	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BH14-11-33-AD05	2014 02 22	21.3 - 21.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-11-47-AD05	2014 02 23	30.5 - 30.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH14-13	BH14-13-01-AD05	2014 02 27	1.1 - 1.1	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-13-16-AD05	2014 02 27	3.4 - 3.4	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-13-17-AD05	2014 02 27	11.6 - 11.6	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-13-25-AD05	2014 02 27	18.1 - 18.1	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-13-25A-AD05	Duplicate	18.1 - 18.1	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BH14-13-30-AD05	2014 02 28	22.1 - 22.1	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-13-30A-AD05	Duplicate	22.1 - 22.1	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
Federal Guideline																									
CCME CEQG Residential Land Use (RL)					0.013	n/a	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B645259.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

TABLE 2 (Cont'd): Summary of Analytical Results for PAHs in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	1-Methylnaphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
BH14-14	BH14-14-01-AD05	2014 02 27	0.2 - 0.2	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-14-03-AD05	2014 02 27	1.1 - 1.1	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-14-05-AD05	2014 02 27	2.0 - 2.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-14-19-AD05	2014 02 28	11.4 - 11.4	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH14-15	BH14-15-01-AD05	2014 02 28	0.3 - 0.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-15-02-AD05	2014 02 28	0.9 - 0.9	-	***0.87***	-	1.6	< 0.1	***0.52***	***2.2***	***0.79***	0.052	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-15-03-AD05	2014 02 28	1.5 - 1.5	-	< 0.1[a]	-	0.06	< 0.1	< 0.1	0.11	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-15-07-AD05	2014 02 28	4.0 - 4.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-15-11-AD05	2014 03 01	8.4 - 8.4	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-15-13-AD05	2014 03 01	10.5 - 10.5	-	***0.063***	-	1.3	< 0.1	< 0.14	< 0.1	***1.4***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-15-15-AD05	2014 03 01	12.8 - 12.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-15-18-AD05	2014 03 01	15.4 - 15.4	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-15-26-AD05	2014 03 01	22.4 - 22.4	-	< 0.1[a]	-	< 0.2	< 0.1	< 0.1	< 0.14	< 0.14[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-15-27-AD05	2014 03 01	23.8 - 23.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-15-27A-AD05	Duplicate	23.8 - 23.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BH14-15-30-AD05	2014 03 01	27.0 - 27.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH14-17	BH14-17-17-AD05	2014 03 01	10.7 - 10.7	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-17-2-AD05	2014 03 01	1.1 - 1.1	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-17-6-AD05	2014 03 01	3.2 - 3.2	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH14-18	BH14-18-01-AD05	2014 03 02	0.3 - 0.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-18-19-AD05	2014 03 02	20.6 - 20.6	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-18-20-AD05	2014 03 02	22.4 - 22.4	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-18-25-AD05	2014 03 02	27.0 - 27.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-18-25A-AD05	Duplicate	27.0 - 27.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BH14-18-27-AD05	2014 03 02	29.0 - 29.0	-	< 0.1[a]	-	< 0.18	< 0.1	< 0.1	< 0.26[a]	***0.17***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH14-19	BH14-19-02-AD05	2014 03 02	1.7 - 1.7	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-19-24-AD05	2014 03 04	18.9 - 18.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-19-37-AD05	2014 03 05	31.2 - 31.2	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-19-41A-AD05	2014 03 05	32.8 - 32.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-19-41-AD05	2014 03 05	32.8 - 32.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH14-20	BH14-20-01-AD05	2014 03 03	1.8 - 1.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-20-06-AD05	2014 03 03	6.9 - 6.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-20-21-AD05	2014 03 03	22.0 - 22.0	-	< 0.1[a]	-	0.63	< 0.1	< 0.16	***0.41***	***0.58***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-20-23-AD05	2014 03 03	23.9 - 23.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-20-23A-AD05	Duplicate	23.9 - 23.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
BH14-21	BH14-21-02-AD05	2014 03 03	1.2 - 1.4	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-21-12-AD05	2014 03 03	8.7 - 8.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH14-22	BH14-22-01-AD05	2014 03 04	1.2 - 1.2	-	***0.076***	-	0.13	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-22-19-AD05	2014 03 04	26.8 - 26.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-22-19A-AD05	Duplicate	26.8 - 26.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BH14-22-30-AD05	2014 03 04	29.1 - 29.1	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH14-23	BH14-23-01-AD05	2014 03 04	0.6 - 0.6	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-23-02-AD05	2014 03 04	1.2 - 1.2	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-23-15-AD05	2014 03 04	16.3 - 16.3	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-23-16-AD05	2014 03 04	17.5 - 17.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-23-17-AD05	2014 03 04	19.7 - 19.7	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-23-23-AD05	2014 03 04	27.0 - 27.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-23-23A-AD05	Duplicate	27.0 - 27.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
BH14-24	BH14-24-01-AD05	2014 03 05	0.8 - 0.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-24-02-AD05	2014 03 05	1.1 - 1.1	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-24-03-AD05	2014 03 05	1.5 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-24-12-AD05	2014 03 05	20.1 - 20.1	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-24-14-AD05	2014 03 05	20.7 - 20.7	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-24-15-AD05	2014 03 05	20.9 - 20.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-24-18-AD05	2014 03 05	24.7 - 24.7	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH14-25	BH14-25-01-AD05	2014 03 06	2.0 - 2.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-25-06-AD05	2014 03 06	9.9 - 9.9	-	< 0.1[a]	-	0.28	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-25-09-AD05	2014 03 06	12.8 - 12.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-25-09A-AD05	Duplicate	12.8 - 12.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
Federal Guideline																									
CCME CEQG Residential Land Use (RL)					0.013	n/a	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B645259.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 2 (Cont'd): Summary of Analytical Results for PAHs in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	1-Methylnaphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
BH14-26	BH14-26-23-AD05	2014 03 07	32.8 - 32.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH14-27	BH14-27-01-AD05	2014 03 06	1.5 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-27-06-AD05	2014 03 06	7.8 - 7.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-27-10-AD05	2014 03 07	12.7 - 12.7	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.12	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-27-10A-AD05	Duplicate	12.7 - 12.7	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.3[a]	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BH14-27-11-AD05	2014 03 07	13.1 - 13.1	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
BH14-28	BH14-28-01-AD05	2014 03 07	0.9 - 0.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-28-07-AD05	2014 03 07	12.8 - 12.8	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	BH14-28-10-AD05	2014 03 07	15.9 - 15.9	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-01	SS14-01-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-01-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-01-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-02	SS14-02-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-02-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-02-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-03	SS14-03-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-D1-01-AD05	Duplicate	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	SS14-03-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-03-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-04	SS14-04-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-04-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-04-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-05	SS14-05-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-05-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-05-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-06	SS14-06-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-06-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-06-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-07	SS14-07-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-07-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-07-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-08	SS14-08-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-08-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-08-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-D2-01-AD05	Duplicate	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
SS14-09	SS14-09-01-AD05	2014 02 20	0.0 - 0.5	-	***0.1***	-	0.2	< 0.1	< 0.1	< 0.1	***0.074***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-09-02-AD05	2014 02 20	0.5 - 1.0	-	***0.13***	-	0.24	< 0.1	< 0.1	< 0.1	***0.11***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-D3-01-AD05	Duplicate	0.5 - 1.0	-	***0.067***	-	0.14	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				64	-	53	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	SS14-09-03-AD05	2014 02 20	1.0 - 1.5	-	***0.11***	-	0.21	< 0.1	< 0.1	< 0.1	***0.074***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-10	SS14-10-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-10-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-10-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-11	SS14-11-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-11-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-11-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-12	SS14-12-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-12-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-D4-01-AD05	Duplicate	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	SS14-12-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-13	SS14-13-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-13-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-13-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-14	SS14-14-01-AD05	2014 02 20	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-14-02-AD05	2014 02 20	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-14-03-AD05	2014 02 20	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-D5-01-AD05	Duplicate	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
Federal Guideline																									
CCME CEQG Residential Land Use (RL)					0.013	n/a	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B645259.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

TABLE 2 (Cont'd): Summary of Analytical Results for PAHs in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	1-Methylnaphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
SS14-15	SS14-15-01-AD05	2014 02 21	0.0 - 0.5	-	***0.074***	-	0.13	< 0.1	< 0.1	< 0.1	***0.056***	< 0.1	< 0.1	0.091	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-15-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-15-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-D6-01-AD05	Duplicate	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
SS14-16	SS14-16-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-16-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-16-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-D7-01-AD05	Duplicate	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
SS14-17	SS14-17-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-17-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-17-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-18	SS14-18-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-18-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-18-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-19	SS14-19-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-19-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-19-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-20	SS14-20-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-20-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-20-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-21	SS14-21-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-21-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-21-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-22	SS14-22-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-D8-01-AD05	Duplicate	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	SS14-22-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-22-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-23	SS14-23-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	0.062	0.48	0.41	0.25	0.24	-	0.32	0.11	0.25	0.15	< 0.1	0.17	0.39	***4.5***
	SS14-23-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-23-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
SS14-24	SS14-24-01-AD05	2014 02 21	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-24-02-AD05	2014 02 21	0.5 - 1.0	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	SS14-24-03-AD05	2014 02 21	1.0 - 1.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
FIRE14BKSS1	FIRE14BKSS1	2014 03 01	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
FIRE14BKSS2	FIRE14BKSS2	2014 03 02	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.23	< 0.1	< 0.1	< 0.1	0.3	***1.7***
FIRE14BKSS3	FIRE14BKSS3	2014 03 02	0.0 - 0.5	-	***0.051***	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.14	< 0.1	< 0.1	< 0.1	0.21	***1.4***
FIRE14SS4	FIRE14SS4	2014 02 28	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	***0.066***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.25	< 0.1	< 0.1	< 0.1	0.32	***1.7***
FIRE14SS5	FIRE14SS5	2014 03 01	0.0 - 0.5	-	***0.057***	-	0.1	< 0.1	< 0.1	< 0.1	***0.053***	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
FIRE14SS6	FIRE14SS6	2014 03 01	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
FIRE14SS8	FIRE14SS8	2014 03 01	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	FIRE14-DUP1	Duplicate	0.0 - 0.5	-	< 0.1[a]	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1[a]	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.12	< 1.2[a]
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BH16	BH16-2	2004 11 23	2.6 - 2.6	-	< 0.5[a]	-	-	-	-	-	< 0.5[a]	-	-	< 0.5	< 0.5	-	< 0.5	-	< 0.5	< 0.5	< 0.5	< 0.5	-	-	-	-
BH16-01	BH16-01-1	2016 03 14	0.3 - 0.6	100	***0.05***	-	0.093	< 0.0050	< 0.0050	< 0.020	0.029	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-01-2	2016 03 14	0.9 - 1.2	25	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-01-3	Duplicate	0.9 - 1.2	25	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BH16-01-5	2016 03 14	11.6 - 11.9	25	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
BH16-02	BH16-02-1	2016 03 07	0.5 - 0.8	250	< 0.033[a]	-	< 0.067	< 0.0050	< 0.082	< 0.15	***0.5***	< 0.0040	0.39	0.81	< 0.020	0.022	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-02-2	2016 03 07	2.0 - 2.3	150	< 0.010	-	< 0.072	< 0.0050	0.058	***0.31***	***0.44***	< 0.049	0.053	0.11	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
BH16-03	BH16-03-1	2016 03 07	0.5 - 0.6	25	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-03-2	2016 03 07	1.5 - 1.8	25	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-03-3	Duplicate	1.5 - 1.8	25	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
BH16-04	BH16-04-2	2016 03 14	0.6 - 0.9	25	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-04-3	2016 03 14	1.5 - 2.1	25	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-04-4	2016 03 14	4.3 - 4.6	5	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
BH16-05	BH16-05-1	2016 03 15	0.2 - 0.5	200	***0.53***	-	1.6	< 0.0050	0.036	0.16	***0.11***	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-05-3	2016 03 15	1.5 - 2.0	125	***0.18***	-	0.57	< 0.0050	0.0079	0.059	***0.05***	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-05-4	2016 03 15	4.1 - 4.6	25	***0.19***	-	0.63	< 0.0050	< 0.0082	0.06	***0.051***	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-05-7	2016 03 15	15.8 - 16.2	-	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
BH16-06	BH16-06-1	2016 03 07	0.5 - 0.6	75	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
Federal Guideline																									
CCME CEQG Residential Land Use (RL)					0.013	n/a	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B645259.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 2 (Cont'd): Summary of Analytical Results for PAHs in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	1-Methylnaphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
BH16-07	BH16-07-1	2016 03 07	1.2 - 1.5	11,000	< 0.019[a]	-	< 0.086	< 0.0050	< 0.88[a]	***1.8***	***1.2***	< 0.0067	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-07-2	2016 03 07	2.0 - 2.3	425	< 0.010	-	< 0.069	< 0.032	0.14	***0.37***	***0.18***	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
BH16-08	BH16-08-1	2016 03 07	1.5 - 1.8	25	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
BH16-09	BH16-09-1	2016 03 07	1.5 - 1.8	150	***0.045***	-	0.032	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
BH16-10	BH16-10-1	2016 03 07	1.5 - 1.8	5	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-10-2	2016 03 07	3.0 - 3.4	25	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
BH16-12	BH16-12-1	2016 03 11	0.9 - 1.2	75	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-12-2	2016 03 11	5.5 - 5.8	5	0.013	-	< 0.020	0.014	0.016	0.022	***0.11***	0.076	0.89	0.54	0.37	0.49	-	0.6	0.18	0.29	0.1	< 0.050	0.1	0.44	***7.2***
	BH16-12-3	2016 03 11	10.1 - 10.4	-	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-12-9	2016 03 12	20.7 - 21.0	-	< 0.23[a]	-	1.5	< 0.29	< 0.11	< 0.59[a]	***0.89***	< 0.072	< 0.020	0.028	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	BH16-12-10	Duplicate	20.7 - 21.0	-	< 0.21[a]	-	1.4	< 0.043	< 0.096	***0.55***	***0.81***	< 0.063	< 0.020	0.025	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
	QA/QC RPD%				*	-	7	*	*	*	9	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BH16-12-13	2016 03 13	30.0 - 30.3	-	< 0.010	-	< 0.020	< 0.0050	< 0.0050	< 0.020	< 0.010	< 0.0040	< 0.020	< 0.020	< 0.020	< 0.020	-	< 0.020	< 0.020	< 0.020	< 0.050	< 0.050	< 0.050	< 0.10	0.31
BH16-13	BH16-13-03	2016 06 01	3.0 - 3.2	220	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-13-04	Duplicate	3.0 - 3.2	330	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BH16-13-06	2016 06 01	7.9 - 8.1	40	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-14	BH16-14-01	2016 06 01	2.0 - 2.1	40	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-14-03	2016 06 01	7.9 - 8.1	30	< 0.01	-	0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-15	BH16-15-01	2016 06 01	1.5 - 1.7	130	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-15-02	2016 06 01	3.0 - 3.2	55	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-15-03	2016 06 01	7.9 - 8.1	75	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-15-04	Duplicate	7.9 - 8.1	75	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
BH16-16	BH16-16-01	2016 06 01	1.8 - 2.0	90	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-16-03	2016 06 02	8.1 - 8.2	250	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-17	BH16-17-01	2016 06 02	2.0 - 2.1	0	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-17-04	2016 06 02	7.9 - 8.1	0	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-18	BH16-18-01	2016 06 02	2.0 - 2.1	200	< 0.01	-	0.034	< 0.005	0.043	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-18-03	2016 06 02	8.1 - 8.2	15	< 0.01	-	< 0.02	< 0.005	0.0057	< 0.02	0.024	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-18-04	Duplicate	8.1 - 8.2	15	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	0.024	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BH16-18-05	2016 06 02	10.1 - 10.2	410	< 0.01	-	0.056	< 0.005	0.08	< 0.02	< 0.01	0.0048	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-18-06	2016 06 02	14.0 - 14.2	0	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-19	BH16-19-01	2016 06 02	2.0 - 2.1	35	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-19-03	2016 06 02	7.9 - 8.1	0	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-19-04	2016 06 02	9.3 - 9.4	15	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-20	BH16-20-01	2016 06 03	1.2 - 1.4	170	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-20-02	2016 06 03	2.7 - 2.9	15	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-21	BH16-21-01	2016 06 03	1.2 - 1.4	20	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-21-02	2016 06 03	2.7 - 2.9	20	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-22	BH16-22-01	2016 06 03	1.2 - 1.4	85	< 0.01	-	< 0.02	< 0.005	0.0058	< 0.02	< 0.01	0.02	< 0.02	0.2	< 0.02	0.17	-	0.061	< 0.02	0.059	< 0.05	< 0.05	0.054	0.097	0.84
BH16-23	BH16-23-01	2016 06 03	0.9 - 1.1	25	< 0.01	-	< 0.02	0.022	< 0.005	< 0.02	0.024	0.053	0.19	0.23	0.087	0.38	-	0.66	0.21	0.41	0.37	0.066	0.59	0.62	***7.5***
BH16-24	BH16-24-01	2016 06 03	0.6 - 0.8	15	< 0.01	-	0.043	< 0.005	0.0062	< 0.02	0.016	0.0043	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-25	BH16-25-01	2016 06 03	1.1 - 1.2	35	< 0.01	-	< 0.02	0.027	0.038	< 0.02	0.023	0.016	0.13	0.25	0.061	0.15	-	0.2	0.068	0.13	0.081	< 0.05	0.12	0.2	***2.4***
BH16-26	BH16-26-01	2016 06 03	0.5 - 0.6	-	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-27	BH16-27-01	2016 06 03	0.5 - 0.6	-	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-28	BH16-28-01	2016 06 03	0.5 - 0.6	-	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	0.014	< 0.004	< 0.02	0.023	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-28-02	2016 06 03	3.0 - 3.2	-	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-29	BH16-29-01	2016 06 03	1.2 - 1.4	-	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	0.012	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-29-02	2016 06 03	2.9 - 3.0	-	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-30	BH16-30-01	2016 06 03	1.1 - 1.2	20	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-30-02	2016 06 03	2.7 - 2.9	10	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-31	BH16-31-01	2016 06 03	0.5 - 0.6	-	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-31-02	2016 06 03	2.7 - 2.9	-	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-31-03	Duplicate	2.7 - 2.9	-	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
BH16-32	BH16-32-01	2016 06 03	0.8 - 0.9	450	***0.038***	-	< 0.02	< 0.005	0.014	< 0.02	0.045	0.021	0.025	0.16	< 0.02	0.13	-	0.028	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.044	0.48
	BH16-32-02	2016 06 03	2.7 - 2.9	30	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-33	BH16-33-01	2016 06 03	0.5 - 0.6	-	***0.018***	-	< 0.02	0.0072	0.12	0.2	***0.049***	0.22	0.45	1.7	0.061	0.32	-	0.17	0.032	0.1	0.072	< 0.05	0.12	0.17	***2***
	BH16-33-02	Duplicate	0.5 - 0.6	-	< 0.05[a]	-	< 0.1	0.07	***1.7***	***0.33***	***0.28***	0.25	0.44	2.3	< 0.1	0.38	-	0.15	< 0.1	0.12	< 0.25	< 0.25	< 0.25	0.28	***2.5***
	QA/QC RPD%				*	-	*	*	174	49	*	13	2	30	*	17	-	13	*	18	*	*	*	49	22
	BH16-33-03	2016 06 03	2.7 - 2.9	-	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-34	BH16-34-01	2016 06 03	0.5 - 0.6	320	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-34-02	Duplicate	0.5 - 0.6	320	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	QA/QC RPD%				*	-	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BH16-34-03	2016 06 03	2.7 - 2.9	10	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-35	BH16-35-01	2016 06 03	0.5 - 0.6	-	< 0.01	-	< 0.02	0.011	0.062	0.14	***0.35***	0.17	0.078	0.95	0.061	0.34	-	0.071	< 0.02	0.042	< 0.05	< 0.05	< 0.05	0.087	***1.1***
	BH16-35-03	2016 06 03	2.7 - 2.9	-	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-36	BH16-36-01	2016 06 03	0.5 - 0.6	480	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-36-03	2016 06 03	2.7 - 3.0	10	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
Federal Guideline																									
CCME CEQG Residential Land Use (RL)					0.013	n/a	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

Associated Maxxam file(s): B645259.
All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 2 (Cont'd): Summary of Analytical Results for PAHs in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Field Screen[b] (ppm)	Polycyclic Aromatic Hydrocarbons																				
					Naphthalene µg/g	1-Methylnaphthalene µg/g	2-Methylnaphthalene µg/g	Acenaphthylene µg/g	Acenaphthene µg/g	Fluorene µg/g	Phenanthrene µg/g	Anthracene µg/g	Fluoranthene µg/g	Pyrene µg/g	Benzo(a) anthracene µg/g	Chrysene µg/g	Benzo(b) fluoranthene µg/g	Benzo(b+j) fluoranthene µg/g	Benzo(k) fluoranthene µg/g	Benzo(a) pyrene µg/g	Indeno(1,2,3-cd) pyrene µg/g	Dibenz(a,h) anthracene µg/g	Benzo(g,h,i) perylene µg/g	B(a)P TPE µg/g	Index of Additive Cancer Risk µg/g
BH16-37	BH16-37-01	2016 06 04	0.6 - 0.8	620	< 0.01	-	< 0.02	< 0.005	0.029	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-37-06	2016 06 04	7.9 - 8.1	10	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-37-07	2016 06 04	11.0 - 11.1	590	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-37-10	2016 06 04	20.1 - 20.3	190	< 0.01	-	0.048	< 0.005	0.055	0.062	***0.28***	0.0068	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-37-11	Duplicate	20.1 - 20.3	190	< 0.01	-	0.079	0.013	< 0.005	0.03	***0.18***	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	QA/QC RPD%				*	-	*	*	*	*	43	*	*	*	*	*	-	*	*	*	*	*	*	*	*
	BH16-37-12	2016 06 04	21.9 - 22.1	295	< 0.01	-	0.044	< 0.005	< 0.005	0.024	0.027	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-37-13	2016 06 04	23.9 - 24.1	35	< 0.01	-	< 0.02	< 0.005	0.011	0.056	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
BH16-38	BH16-38-01	2016 06 05	1.1 - 1.2	240	***0.066***	-	0.2	< 0.005	< 0.005	< 0.02	0.012	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-38-04	2016 06 05	7.5 - 7.6	150	< 0.01	-	< 0.02	< 0.005	< 0.005	< 0.02	< 0.01	< 0.004	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-38-10	2016 06 05	32.6 - 32.8	560	***0.017***	-	0.1	0.11	0.059	0.25	***0.89***	< 0.004	< 0.02	0.037	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
	BH16-38-11	2016 06 05	32.6 - 32.8	560	***0.15***	-	0.075	0.032	0.061	0.25	***0.91***	0.13	< 0.02	0.035	< 0.02	< 0.02	-	< 0.02	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	0.041	0.31
Federal Guideline																									
CCME CEQG Residential Land Use (RL)					0.013	n/a	n/a	320	0.28	0.25	0.046	2.5	15.4	7.7	1	6.2	1	1	1	0.6	1	1	n/a	5.3	1
BC Standard																									
CSR Residential Land Use (RL) (sample depth < 3.0m)[c]					5	n/a	n/a	n/a	n/a	n/a	5	n/a	n/a	10	1	n/a	1	1	1	1	1	1	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[c]					50	n/a	n/a	n/a	n/a	n/a	50	n/a	n/a	100	10	n/a	10	10	10	10	10	10	n/a	n/a	n/a

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BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Field screening results are measured based on a 'dry headspace' method using a combustible gas meter calibrated to a hexane standard.
[c] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

TABLE 3: Summary of Analytical Results for Metals in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Phys	Total Metals																					
				pH pH	Antimony µg/g	Arsenic µg/g	Barium µg/g	Beryllium µg/g	Cadmium µg/g	Chromium µg/g	Cobalt µg/g	Copper µg/g	Lead µg/g	Lithium µg/g	Manganese µg/g	Mercury µg/g	Molybdenum µg/g	Nickel µg/g	Selenium µg/g	Silver µg/g	Strontium µg/g	Thallium µg/g	Tin µg/g	Uranium µg/g	Vanadium µg/g	Zinc µg/g
TP-05	FS-05-1.0	2002 10 05	1.0 - 1.0	-	-	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-
TP-06	FS-06-1.0	2002 10 05	1.0 - 1.0	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
TP-12	FS-12-0.5	2002 10 05	0.5 - 0.5	-	-	-	-	-	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-
TP-16	FS-16-0.5	2002 10 05	0.5 - 0.5	-	-	-	-	-	-	-	-	-	66	-	-	-	-	-	-	-	-	-	-	-	-	-
TP-22	FS-22-0.5	2002 10 05	0.5 - 0.5	-	-	-	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-
	FS-22A-0.5	Duplicate	0.5 - 0.5	-	-	-	-	-	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%			-	-	-	-	-	-	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-	-	-
TP-35	FS-35-1.0	2002 10 05	1.0 - 1.0	-	-	-	-	-	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15	BH15-1	2004 11 23	0.5 - 0.5	-	< 10	< 10	181	< 1	-	33	8	-	-	-	-	0.05	< 4	26	0.3	< 2	-	-	< 5	-	22	-
BH24	BH24-1	2004 11 26	0.5 - 0.5	-	< 10	< 10	161	< 1	-	28	11	-	-	-	-	0.02	< 4	29	0.3	< 2	-	-	< 5	-	29	-
	GR7(BH24-1)	Duplicate	0.5 - 0.5	-	< 10	< 10	124	< 1	-	23	9	-	-	-	-	0.05	< 4	28	0.3	< 2	-	-	< 5	-	24	-
	QA/QC RPD%			-	*	*	26	*	-	20	20	-	-	-	-	*	*	4	*	*	-	-	*	-	19	-
BH29	BH29-1	2004 11 27	0.5 - 0.5	***8.6***	< 2	3.9	146	0.22	< 0.5	14.6	4.6	11	5.1	-	-	0.015	1.6	19.4	< 0.4	< 0.5	-	-	< 2	-	22.4	36.6
BH37	BH37-1	2004 11 29	0.6 - 0.6	-	< 10	< 10	139	< 1	-	31	9	-	-	-	-	0.02	< 4	32	0.3	< 2	-	-	< 5	-	29	-
BH42	BH42-1	2004 11 29	0.9 - 0.9	***8.3***	< 2	4.7	169	0.32	< 0.5	26	6.8	10.6	8.8	-	-	0.03	1.6	23.1	< 0.4	< 0.5	-	-	< 2	-	27.2	45
BH49	BH49-1	2004 11 29	0.3 - 0.3	-	< 10	< 10	139	< 1	-	13	6	-	-	-	-	0.03	< 4	18	0.5	< 2	-	-	< 5	-	19	-
BH53	BH53-1	2004 11 30	1.5 - 1.5	-	< 10	< 10	135	< 1	-	25	10	-	-	-	-	0.07	< 4	34	0.3	< 2	-	-	< 5	-	25	-
BH60	BH60-1	2004 12 11	1.5 - 1.5	-	< 10	< 10	128	< 1	-	21	8	-	-	-	-	0.04	< 4	28	0.3	< 2	-	-	< 5	-	23	-
BH97	BH97-1	2005 03 17	0.3 - 0.3	-	< 10	< 10	188	< 1	-	29	10	-	-	-	-	0.07	< 4	31	0.4	< 2	-	-	< 5	-	29	-
	BH97-2	2005 03 17	1.5 - 1.5	-	< 10	< 10	91	< 1	-	17	6	-	-	-	-	0.03	< 4	23	0.2	< 2	-	-	< 5	-	18	-
SS4	SS4	2005 11 08	0.0 - 0.1	7.6	< 0.1	< 10	144	< 1	< 1	10	5	20	23	-	190	0.022	< 0.01	15	0.3	< 0.2	69	-	< 2	-	16	126
Pile 1	Pile 1	2005 12 09	0.0 - 0.1	***8.6***	< 10	< 30[a]	18.1	-	< 3	< 2	< 1	3	< 4	-	69.9	-	< 2	< 2	-	< 2	19	-	< 5	-	1	7
MR1	MR-1	2006 07 29	0.0 - 0.2	6.4	< 0.1	3.5	140	< 1	< 0.2	31	6	7	5.1	-	197	0.01	0.5	21	< 0.2	< 0.1	13	< 0.1	< 5	-	40	33
MR2	MR-2	2006 07 29	0.0 - 0.2	6.6	< 0.1	4.1	97	< 1	< 0.2	31	7	10	5.3	-	301	0.02	0.5	31	0.2	< 0.1	9	< 0.1	< 5	-	33	33
MR3	MR-3	2006 07 29	0.0 - 0.2	6.7	< 0.1	1.2	128	< 1	< 0.2	25	5	6	11.5	-	110	0.02	0.4	18	0.4	< 0.1	12	0.1	< 5	-	21	47
MR4	MR-4	2006 07 29	0.0 - 0.2	***5.7***	< 0.1	3.6	154	< 1	***23.1***	20	5	9	65.6	-	248	0.03	0.5	16	0.3	< 0.1	14	< 0.1	< 5	-	26	***294***
	GR2	Duplicate	0.0 - 0.2	***5.5***	< 0.1	3.6	169	< 1	***33***	22	6	10	87.5	-	259	0.03	0.6	17	0.3	0.1	16	< 0.1	< 5	-	28	***270***
	QA/QC RPD%			*	*	*	9	*	35	10	18	11	29	-	4	*	18	6	*	*	13	*	*	-	7	9
MR5	MR-5	2006 07 29	0.0 - 0.2	6.5	< 0.1	6.1	81	< 1	< 0.2	24	6	9	9.2	-	151	0.04	0.5	22	0.4	< 0.1	14	< 0.1	< 5	-	28	46
RES1	25-66.02-JLM-RES1-	2006 07 29	0.6 - 0.6	***8.1***	< 0.1	5.5	119	< 1	0.3	23	7	15	10.4	-	329	0.05	0.8	24	0.3	< 0.1	27	< 0.1	< 5	-	26	52
RES2	25-66.02-JLM-RES2-	2006 07 29	0.0 - 0.1	7.9	0.6	5.1	159	< 1	0.5	11	5	16	7	-	262	0.08	1.1	17	0.4	0.1	32	< 0.1	< 5	-	20	57
RES3	25-66.02-JLM-RES3-	2006 07 29	0.0 - 0.1	***8.5***	< 0.1	5.3	139	< 1	0.4	19	7	14	9	-	428	0.06	0.8	24	0.5	< 0.1	77	< 0.1	< 5	-	26	54
RES4	25-66.02-JLM-RES4-	2006 07 29	0.0 - 0.1	***8***	< 0.1	5.2	140	< 1	< 0.2	21	7	12	9.2	-	252	0.04	0.5	22	0.3	< 0.1	30	< 0.1	< 5	-	26	46
RES5	25-66.02-JLM-RES5-	2006 07 29	0.0 - 0.2	***8.2***	< 0.1	5.6	160	< 1	0.3	22	7	15	20.1	-	237	0.05	0.7	21	0.4	< 0.1	27	< 0.1	< 5	-	28	53
	125-66.02-JLM-GR1	Duplicate	0.0 - 0.2	***8.2***	< 0.1	5.6	175	< 1	0.3	23	8	15	21.2	-	257	0.05	0.8	21	0.4	< 0.1	27	< 0.1	< 5	-	29	56
	QA/QC RPD%			*	*	0	9	*	0	4	13	0	5	-	8	0	13	0	*	*	0	*	*	-	4	6
RES6	25-66.02-JLM-RES6-	2006 07 29	0.0 - 0.1	***8.3***	< 0.1	4.5	120	< 1	0.2	18	6	14	15.6	-	448	0.05	0.6	22	0.4	0.1	44	< 0.1	< 5	-	23	70
RES7	25-66.02-JLM-RES7-	2006 07 29	0.0 - 0.2	***8.3***	2.5	4	127	< 1	0.2	17	5	12	***665***	-	247	0.05	0.6	18	0.3	< 0.1	37	< 0.1	< 5	-	22	46
RES8	25-66.02-JLM-RES8-	2006 07 29	0.0 - 0.1	***8.2***	0.7	5.9	200	< 1	0.6	15	6	16	11.4	-	428	0.06	1.3	22	0.7	0.1	113	< 0.1	< 5	-	23	66
GARDEN1	Garden 1	2006 08 19	0.0 - 0.1	7.9	1.3	7.9	***813***	< 1	2	14	5	25	11.7	-	203	0.08	5	40	***3.5***	0.4	55	0.2	< 5	-	30	141
	Garden 1A	2009 10 18	0.0 - 0.1	7.8	< 10	< 10	***869***	< 1	2	16	6	30	13	-	-	0.1	7	***47***	< 2[a]	< 2	-	-	< 5	-	32	155
	FSGR3	Duplicate	0.0 - 0.1	8	< 10	< 10	***805***	< 1	2	16	6	30	14	-	-	0.09	7	***46***	< 2[a]	< 2	-	-	< 5	-	36	151
	QA/QC RPD%			*	*	*	8	*	0	0	0	0	7	-	-	11	0	2	*	*	-	-	*	-	12	3
	Garden 1B	2009 10 18	0.0 - 0.1	8	< 10	< 10	365	< 1	2	12	6	16	12	-	-	0.04	< 4	27	< 2[a]	< 2	-	-	< 5	-	25	121
GARDEN2	Garden 2	2006 08 19	0.0 - 0.1	7.7	< 0.1	3.3	230	< 1	0.8	21	7	11	10.4	-	242	0.02	0.4	21	***1.2***	0.1	35	< 0.1	< 5	-	24	75
RES9	Res 9-1	2009 10 18	0.0 - 0.1	***8.8***	< 0.1	2.9	92	< 1	< 0.2	8	3	9	5.5	-	184	0.02	0.5	11	0.3	< 0.1	59	< 0.1	< 5	-	13	31
RES10	Res 10-1	2009 10 18	0.0 - 0.1	***8.1***	0.6	2.9	104	< 1	0.2	8	3	11	7.4	-	200	0.03	0.5	11	0.4	< 0.1	60	< 0.1	< 5	-	12	42
RES11	Res 11-1	2009 10 18	0.0 - 0.1	***8.6***	< 0.1	2.8	89	< 1	< 0.2	9	3	13	5.2	-	167	0.03	0.4	12	0.3	< 0.1	64	< 0.1	< 5	-	13	33
BH127	BH127-1	2010 08 26	0.5 - 0.8	***8.17***	< 10	5.1	235	< 0.5	< 0.5	18.2	6.3	15.4	< 30	-	-	< 0.05	< 4	20.8	< 2.8[a]	< 2	-	-	< 5	-	21.5	66.8
	BH127-2	2010 08 26	1.1 - 1.4	6.78	< 10	10.7	276	0.71	< 0.5	34.6	11.4	15.1	< 30	-	-	< 0.05	< 4	32.6	< 2[a]	< 2	-	-	< 5	-	38.1	71.2
	GR2	Duplicate	1.1 - 1.4	6.64	< 10	10.7	279	0.74	< 0.5	34.6	11.4	17.3	< 30	-	-	< 0.05	< 4	35.1	< 2[a]	< 2	-	-	< 5	-	36.8	67.2
	QA/QC RPD%			2	*	0	1	4	*	0	0	14	*	-	-	*	*	7	*	*	-	-	*	-	3	6
BH128	BH128-1	2010 08 26	0.3 - 0.6	***8.61***	< 10	< 5	152	< 0.5	< 0.5	16.3	5.2	14.2	< 30	-	-	< 0.05	< 4	17.8	< 2[a]	< 2	-	-	< 5	-	20.1	57.6
Federal Guideline																										
CCME CEQG Residential Land Use (RL)				6.0 - 8.0	20	12	500	4	10	64	50	63	140	n/a	n/a	6.6	10	45	1	20	n/a	1	50	23	130	200
BC Standard																										
CSR Residential Land Use (RL) (sample depth < 3.0m)[b]				n/a	20	15	400	4	2 - 35[c]	60[d]	50	150	400	1,600	1,800	15	10	100	3	20	47,000	n/a	50	16	200	450
CSR Commercial Land Use (CL) (sample depth > 3.0m)[b]				n/a	40	15	400	8	2 - 100[c]	60[d]	300	250	700	20,000	19,000	40	40	500	10	40	100,000	n/a	300	200	n/a	600

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[c] Standard is pH dependent.

[d] Individual standards exist for Cr +3 and Cr +6. Reported value represents more stringent standard.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 3 (Cont'd): Summary of Analytical Results for Metals in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Phys	Total Metals																					
				pH pH	Antimony µg/g	Arsenic µg/g	Barium µg/g	Beryllium µg/g	Cadmium µg/g	Chromium µg/g	Cobalt µg/g	Copper µg/g	Lead µg/g	Lithium µg/g	Manganese µg/g	Mercury µg/g	Molybdenum µg/g	Nickel µg/g	Selenium µg/g	Silver µg/g	Strontium µg/g	Thallium µg/g	Tin µg/g	Uranium µg/g	Vanadium µg/g	Zinc µg/g
BH135	BH135-2	2010 08 27	1.5 - 1.8	***8.77***	< 10	< 5	106	< 0.5	< 0.5	14	4	11.4	< 30	-	-	< 0.05	< 4	17.7	< 2[a]	< 2	-	-	< 5	-	17.3	35.6
	GR4	Duplicate	1.5 - 1.8	***8.69***	< 10	< 5	110	< 0.5	< 0.5	14.4	4.2	11.2	< 30	-	-	< 0.05	< 4	16.9	< 2[a]	< 2	-	-	< 5	-	23.6	30.8
	QA/QC RPD%			1	*	*	4	*	*	3	5	2	*	-	-	*	*	5	*	*	-	-	*	-	31	14
	BH135-3	2010 08 27	2.7 - 3.1	***9.01***	< 10	< 5	116	< 0.5	< 0.5	13.7	4.3	12	< 30	-	-	0.095	< 4	16.5	< 2[a]	< 2	-	-	< 5	-	18.2	28.8
BH12-01	BH12-01-1-AD05	2012 10 14	0.3 - 0.6	7.9	0.55	6.2	223	0.39	0.38	19	6.8	22.6	51.4	-	-	0.04	0.89	20.9	0.5	0.1	-	< 0.05	0.95	-	24	69
	BH12-01-2-AD05	2012 10 14	0.9 - 1.2	7	0.48	7.4	160	0.62	0.11	26	9.2	12.2	9.6	-	-	0.02	0.63	26	< 0.1	< 0.05	-	< 0.05	0.49	-	31	48
	BH12-01-32-AD05	2012 10 14	25.5 - 25.8	***8.8***	0.34	4.1	226	0.25	0.13	24	5	11	4.1	-	-	0.01	0.82	18.7	< 0.1	0.2	-	< 0.05	0.25	-	28	27
	BH12-01-36-AD05	2012 10 14	28.5 - 28.8	***8.9***	0.31	4.3	178	0.21	0.25	47	3.7	12.5	3.2	-	-	0.02	1.95	12.8	< 0.1	0.36	-	< 0.05	0.29	-	22	25
BH12-02	BH12-02-27-AD05	2012 10 15	19.5 - 19.8	8	0.36	2.5	79.8	0.2	0.1	11	3.9	9	3.9	-	-	< 0.01	1.21	13.6	< 0.1	0.05	-	< 0.05	0.16	-	16	29
	BH12-02-28-AD05	Duplicate	19.5 - 19.8	***8.1***	0.41	3.2	92.9	0.24	0.13	13	4.7	11.2	4.5	-	-	0.01	1.48	15.6	< 0.1	0.07	-	< 0.05	0.18	-	21	35
	QA/QC RPD%			1	*	25	15	18	26	17	19	22	14	-	-	*	20	14	*	*	-	*	*	-	27	19
	BH12-02-2-AD05	2012 10 14	0.5 - 0.8	7.2	0.48	8.3	118	0.53	0.09	27	9	10.4	11.2	-	-	< 0.01	1.18	24.7	< 0.1	< 0.05	-	< 0.05	0.45	-	32	57
	BH12-02-30-AD05	2012 10 15	26.4 - 26.7	***8.2***	0.26	2.3	87.1	0.16	0.07	15	2.8	16.3	2.7	-	-	0.02	1.3	10.4	0.2	0.06	-	< 0.05	0.17	-	15	30
	BH12-02-31-AD05	Duplicate	26.4 - 26.7	***9.4***	0.32	2.6	91.6	0.2	0.07	16	3.2	17.4	3.3	-	-	0.01	1.12	10.7	0.1	0.07	-	< 0.05	0.23	-	17	35
	QA/QC RPD%			14	*	*	5	22	0	6	13	7	20	-	-	*	15	3	*	*	-	*	*	-	12	15
	BH12-02-3-AD05	2012 10 14	1.2 - 1.5	***8.6***	0.43	3.9	95.6	0.21	0.13	17	5.1	11.7	5.8	-	-	0.04	0.63	18.1	< 0.1	0.1	-	< 0.05	0.33	-	23	30
SS12-01	SS12-01-AD05	2012 10 20	0.2 - 0.5	6.8	0.24	2.2	178	0.44	0.15	24	5.7	10.8	10.3	-	-	0.02	0.37	20.8	***1.8***	0.13	-	0.11	0.54	-	25	82
SS12-02	SS12-02-AD05	2012 10 20	0.2 - 0.5	6.7	0.14	1.4	279	0.34	0.56	21	4.7	10.1	8.2	-	-	0.01	0.3	18.1	***2.8***	0.13	-	0.13	0.45	-	19	84
SS12-03	SS12-03-AD05	2012 10 20	0.2 - 0.5	6.6	0.13	1.4	252	0.36	0.67	20	4.4	11.6	7.7	-	-	0.02	0.27	17.8	***3.1***	0.14	-	0.14	0.42	-	18	80
SS12-04	SS12-04-AD05	2012 10 20	0.2 - 0.5	6.8	0.37	5.3	139	0.4	0.56	20	8.4	9.4	8.3	-	-	< 0.01	0.73	17.5	0.5	0.08	-	< 0.05	0.4	-	30	121
SS12-05	SS12-05-AD05	2012 10 20	0.2 - 0.5	***5.5***	0.46	6.2	147	0.42	0.52	22	8.3	8.4	8.4	-	-	< 0.01	0.89	20.4	0.4	< 0.05	-	0.05	0.43	-	32	104
SS12-06	SS12-06-AD05	2012 10 20	0.2 - 0.5	7	0.16	1.5	261	0.39	0.57	22	4.4	11.3	10.6	-	-	0.02	0.26	15.5	***6.1***	0.09	-	0.1	0.5	-	21	78
SS12-07	SS12-07-AD05	2012 10 20	0.2 - 0.5	6.6	0.27	1.8	192	0.47	0.48	25	6.6	12.7	10.1	-	-	0.02	0.29	23.7	***2.2***	0.11	-	0.07	0.41	-	24	77
SS12-08	SS12-08-AD05	2012 10 20	0.2 - 0.5	6.5	0.45	5.3	308	0.61	0.25	27	8.3	15.6	10.8	-	-	0.02	0.5	29.8	***1.2***	0.18	-	0.07	0.55	-	33	69
SS12-09	SS12-09-AD05	2012 10 20	0.2 - 0.5	6.7	0.28	5.1	274	0.39	0.34	22	7.4	10.4	27.5	-	-	0.03	0.6	17.3	0.3	0.11	-	0.09	1.88	-	33	106
SS12-10	SS12-10-AD05	2012 10 20	0.2 - 0.5	***5.7***	0.27	7.3	269	0.56	0.05	26	7.1	10.1	10.4	-	-	0.03	0.45	23.6	0.4	0.08	-	0.09	1	-	36	56
BH13-03	BH13-03-23-AD05	2013 03 17	17.9 - 18.1	***8.6***	0.5	2.4	25.1	< 0.5	< 0.5	3.6	2.3	6.2	3	-	-	< 0.5	< 0.5	7.6	< 0.5	< 0.5	-	< 0.5	< 0.5	-	4.4	19
	BH13-03-25-AD05	2013 03 17	19.5 - 19.8	***8.5***	< 0.5	2.3	63.3	< 0.5	< 0.5	5.8	2.7	7.4	3.7	-	-	< 0.5	0.6	8.7	< 0.5	< 0.5	-	< 0.5	< 0.5	-	7.7	20
	BH13-03-33-AD05	2013 03 17	25.7 - 25.9	***8.6***	< 0.5	1.9	35.5	< 0.5	< 0.5	9.5	3.7	7.9	3.9	-	-	< 0.5	0.6	12.6	< 0.5	< 0.5	-	< 0.5	< 0.5	-	8.6	22
	BH13-03-A-AD05	Duplicate	25.7 - 25.9	***8.3***	< 0.5	2.1	35.1	< 0.5	< 0.5	9.8	3.6	7.9	3.6	-	-	< 0.5	0.6	12.4	< 0.5	< 0.5	-	< 0.5	< 0.5	-	8.4	21
	QA/QC RPD%			*	*	*	1	*	*	3	3	0	8	-	-	*	*	2	*	*	-	*	*	-	2	5
	BH13-03-34-AD05	2013 03 17	26.2 - 26.5	***8.7***	< 0.5	1.8	46	< 0.5	< 0.5	9.9	3.2	7.8	4.2	-	-	< 0.5	< 0.5	11.7	< 0.5	< 0.5	-	< 0.5	< 0.5	-	8.3	22
	BH13-03-35-AD05	2013 03 17	26.8 - 27.0	***8.4***	< 0.5	1.6	33.7	< 0.5	< 0.5	6.8	2.6	7.7	3.2	-	-	< 0.5	< 0.5	9.4	< 0.5	< 0.5	-	< 0.5	< 0.5	-	6.1	18
	BH13-03-36-AD05	2013 03 17	28.1 - 28.4	***8.7***	< 0.5	1.2	31.2	< 0.5	< 0.5	6.7	2.5	6.6	3	-	-	< 0.5	0.5	10.7	< 0.5	< 0.5	-	< 0.5	< 0.5	-	6.5	18
TP13-01	TP13-01-1	2013 08 22	0.7 - 1.0	***9.25***	0.39	4.96	103	0.42	0.253	22.6	6.59	12.9	5.64	6.7	360	< 0.1	0.45	24.7	< 1	0.059	17.4	0.071	0.23	0.554	27.8	42.1
	TP13-01-2	2013 08 22	1.7 - 2.0	***8.81***	0.62	6.88	96.7	< 0.8	0.329	23.5	7.68	14.1	7.71	10.3	338	< 0.1	0.72	27.5	< 1	0.06	14	0.096	0.33	0.818	27.6	58.4
TP13-02	TP13-02-1	2013 08 22	0.5 - 1.0	***8.77***	0.53	5.9	126	< 0.8	0.296	20.6	6.96	14.4	7.11	9.3	316	< 0.1	0.61	23.8	< 1	0.064	57.3	0.084	0.3	0.615	26.2	48.7
	TP13-02-2	2013 08 22	1.7 - 2.0	***8.68***	0.61	5.96	135	< 0.8	0.285	20.2	7.34	15.1	59.3	9.5	312	0.066	0.69	24.7	< 1	0.054	28.2	0.082	0.32	0.599	25.7	52.3
TP13-03	TP13-03-1	2013 08 22	0.5 - 1.0	***8.39***	0.55	6.68	120	< 0.8	0.246	26.2	7.38	12.9	22.8	8.6	305	< 0.1	0.62	25.6	< 1	< 0.1	20.9	0.074	0.37	1.31	33.2	49.7
	TP13-03-2	2013 08 22	1.0 - 2.2	***8.35***	0.48	5.62	125	< 0.8	0.254	22.7	6.57	12	11.7	8.2	313	< 0.1	0.64	20.6	< 1	0.052	31.3	0.068	0.38	0.655	27.1	52.7
TP13-04	TP13-04-1	2013 08 22	0.5 - 0.8	***8.33***	0.73	5.52	111	< 0.8	0.29	23.2	6.85	13.6	10.5	8.3	278	< 0.1	0.54	26.2	< 1	< 0.1	15.4	0.068	0.37	1.28	30.9	48.4
TP13-05	TP13-05-1	2013 08 22	0.5 - 0.8	***8.18***	0.48	5.37	103	< 0.8	0.236	20.7	6.45	12.3	7.33	8.2	268	< 0.1	0.58	22.6	< 1	< 0.1	17.2	0.07	0.32	0.616	27.1	46.4
	TP13-05-2	2013 08 22	1.5 - 1.8	***8.35***	0.48	4.99	106	< 0.8	0.245	19.6	6.17	11.7	6.95	7.9	257	< 0.1	0.55	22.4	< 1	< 0.1	23	0.065	0.29	0.56	25.7	44.4
TP13-06	TP13-06-1	2013 08 22	0.3 - 0.8	8	0.58	5.62	131	< 0.8	0.463	21.9	7.52	10.7	19.5	9.2	332	< 0.1	0.82	22.6	< 1	0.068	40.5	0.065	0.32	0.548	29.5	68.5
	TP13-06-2	2013 08 22	1.0 - 1.5	***8.47***	0.4	4.69	120	< 0.8	0.264	19	6.36	12.3	6.42	6.1	308	< 0.1	0.45	23.1	< 1	0.077	24.9	0.07	0.22	0.541	27.3	39.5
TP13-07	TP13-07-1	2013 08 22	0.1 - 0.4	7.16	0.28	4.86	137	< 0.8	0.153	20.4	5.36	6.81	9.23	11.7	214	< 0.1	0.53	15.5	< 1	0.058	12.4	0.086	0.53	0.467	33.7	46
TP13-08	TP13-08-1	2013 08 22	0.5 - 0.9	7.96	0.62	7.75	159	0.58	0.301	27.6	8.41	14.7	9.06	11.7	325	< 0.1	0.78	27.4	< 1	0.06	26	0.095	0.48	0.942	34.7	55.1
TP13-09	TP13-09-1	2013 08 22	0.5 - 0.8	***8.06***	0.5	5.37	102	0.42	0.254	30.7	7.78	8.3	6.93	9.5	397	< 0.1	0.68	21.3	< 1	< 0.1	14.7	0.057	0.37	0.627	38.2	62.2
	TP13-09-101	Duplicate	0.5 - 0.8	7.88	0.51	6.07	114	< 0.8	0.235	26.3	8.65	9.21	8.61	9.1	475	< 0.1	0.71	19.7	< 1	< 0.1	16	0.06	0.43	0.589	33	57.4
	QA/QC RPD%			*	2	12	11	*	8	15	11	10	22	*	18	*	4	8	*	*	8	*	*	6	15	8
TP13-10	TP13-10-1	2013 08 22	0.5 - 0.8	7.56	0.24	5.32	149	< 0.8	0.096	23.1	5.32	6.34	10.9	13.8	192	< 0.1	0.69	15	< 1	< 0.1	15.3	0.08	0.49	0.574	32.7	51.9
	TP13-10-2	2013 08 22	1.0 - 1.3	7.75	0.39	5.34	113	< 0.8	0.289	24.5	6.8	13.8	6.01	6.4	381	< 0.1	0.49	26.7	< 1	0.056	18	0.073	0.23	0.614	28.8	43.1
TP13-11	TP13-11-1	2013 08 22	0.0 - 0.4	***8.1***	0.4	6.04	150	< 0.8	0.16	21.4	8.16	8.85	14.4	12.3	410	< 0.1	0.72	17.3	< 1	0.066	12.8	0.079	0.5	0.534	33.4	60.6
	TP13-11-102	Duplicate	0.0 - 0.4	***8.14***	0.57	6.92	124	0.46	0.23	25.1	8.5	12.6	9.24	11.2	320	< 0.1	0.73	25.6	< 1	< 0.1	13.9	0.079	0.4	0.675	30.9	57.1
	QA/QC RPD%			*	*	14	19	*	36	16	4	35	44	*	25	*	1	39	*	*	8	*	*	23	8	6
	TP13-11-2	2013 08 22	1.0 - 1.3	***8.14***	0.68	5.6	161	< 0.8	0.297	22.3	5.98	12.4	35.2	8.6	260	< 0.1	0.62	18	< 1	0.082	48.4	0.071	0.54	0.537	23.8	200
Federal Guideline																										
CCME CEQG Residential Land Use (RL)				6.0 - 8.0	20	12	500	4	10	64	50	63	140	n/a	n/a	6.6	10	45	1	20	n/a	1	50	23	130	200
BC Standard																										
CSR Residential Land Use (RL) (sample depth < 3.0m)[b]				n/a	20	15	400	4	2 - 35[c]	60[d]	50	150	400	1,600	1,800	15	10	100	3	20	47,000	n/a	50	16	200	450
CSR Commercial Land Use (CL) (sample depth > 3.0m)[b]				n/a	40	15	400	8	2 - 100[c]	60[d]	300	250	700	20,000	19,000	40	40	500	10	40	100,000	n/a	300	200	n/a	600

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[c] Standard is pH dependent.

[d] Individual standards exist for Cr +3 and Cr +6. Reported value represents more stringent standard.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 3 (Cont'd): Summary of Analytical Results for Metals in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Phys	Total Metals																						
				pH pH	Antimony µg/g	Arsenic µg/g	Barium µg/g	Beryllium µg/g	Cadmium µg/g	Chromium µg/g	Cobalt µg/g	Copper µg/g	Lead µg/g	Lithium µg/g	Manganese µg/g	Mercury µg/g	Molybdenum µg/g	Nickel µg/g	Selenium µg/g	Silver µg/g	Strontium µg/g	Thallium µg/g	Tin µg/g	Uranium µg/g	Vanadium µg/g	Zinc µg/g
TP13-12	TP13-12-1	2013 08 22	0.3 - 0.6	***8.75***	0.59	6.38	109	< 0.8	0.276	22.5	7.37	12.8	7.27	10.1	315	< 0.1	0.67	25.3	< 1	< 0.1	14.6	0.088	0.33	0.755	26.3	53
	TP13-12-2	2013 08 22	1.0 - 1.3	***8.39***	0.57	6.29	154	0.41	0.302	23.2	7.23	15.6	8.11	9.7	315	< 0.1	0.7	23.9	< 1	0.056	23.5	0.103	0.41	0.612	29.6	53.6
TP13-13	TP13-13-1	2013 08 22	0.4 - 0.7	***9.47***	0.65	5.85	125	0.41	0.349	20.8	7.13	16.2	6.42	10	298	< 0.1	0.78	26.7	< 1	0.089	49.2	0.088	0.2	0.623	26	57.8
	TP13-13-2	2013 08 22	1.6 - 1.9	***9.39***	0.39	4.28	145	< 0.8	0.253	15.4	5.55	12.5	5.41	6.9	237	0.05	0.54	20	< 1	0.072	40.7	0.072	< 0.2	0.446	22.5	48.3
TP13-14	TP13-14-1	2013 08 22	0.3 - 0.6	7.6	0.58	6.56	205	0.52	0.405	23.7	7.13	16.9	29.9	12.1	297	< 0.1	0.58	23	< 1	0.073	32.8	0.08	0.44	0.526	29.9	91.4
	TP13-14-2	2013 08 22	1.0 - 1.3	6.32	0.43	4.97	186	< 0.8	0.384	20.5	6.03	10.9	15.9	10.2	347	< 0.1	0.62	17.8	< 1	0.073	22	0.073	0.36	0.475	29.7	85.6
TP13-15	TP13-15-1	2013 08 22	0.0 - 0.3	7.28	0.66	7.49	168	0.74	0.372	30.5	9.77	14.2	9.07	13.1	337	< 0.1	0.98	29.7	< 1	0.057	13.1	0.101	0.37	1.01	34.5	73
	TP13-15-2	2013 08 22	0.4 - 0.7	7.58	0.5	5.17	93.2	< 0.8	0.333	24.7	6.62	12.7	6.46	7.5	288	< 0.1	0.91	28.5	< 1	< 0.1	14.5	0.061	< 0.2	0.595	30.4	45.6
TP13-16	TP13-16-1	2013 08 22	0.2 - 0.5	***8.66***	0.38	4	82.8	< 0.8	0.273	16.4	5.56	12.8	5.83	6.6	239	< 0.1	0.67	21.8	< 1	0.06	60.5	0.069	0.22	0.505	23.7	40.9
	TP13-16-2	2013 08 22	1.0 - 1.3	***8.87***	0.37	3.79	84.3	< 0.8	0.232	15.3	4.84	9.26	4.8	6.3	203	< 0.1	0.4	16.7	< 1	0.081	53.7	0.057	0.19	0.397	20	37.9
TP13-17	TP13-17-1	2013 08 22	0.9 - 1.2	***8.58***	0.58	5.56	140	0.46	0.17	22.8	6.67	15.2	20.7	13.2	174	< 0.1	0.74	23.8	< 1	0.077	34.6	0.079	0.36	0.7	29.7	59.3
	TP13-17-103	Duplicate	0.9 - 1.2	***8.51***	0.37	4.63	99.1	< 0.8	0.193	16.7	5.46	12.3	9.21	10.6	165	< 0.1	0.71	19.9	< 1	0.08	40.4	0.082	0.33	0.583	29.4	47.6
	QA/QC RPD%			*	*	*	34	*	13	31	20	21	77	*	5	*	4	18	*	*	15	*	*	18	1	22
	TP13-17-2	2013 08 22	1.5 - 2.0	***8.63***	0.36	4.32	87.5	< 0.8	0.232	16.2	5.14	12.1	9.67	9.7	166	< 0.1	0.64	18	< 1	0.068	51.6	0.062	0.37	0.489	27.4	43.3
TP13-18	TP13-18-1	2013 08 23	0.0 - 0.5	***8.38***	0.51	7.98	179	0.57	0.284	28.7	8.81	19	9.83	13	296	< 0.1	0.66	32.5	< 1	0.091	29.5	0.093	0.3	0.746	34.9	60.8
TP13-19	TP13-19-1	2013 08 23	0.0 - 0.5	***8.84***	0.65	5.01	118	< 0.8	0.365	20.1	6.28	13.1	6.8	9.3	257	< 0.1	0.57	24	< 1	0.19	53.7	0.058	0.54	0.516	23.1	53.5
TP13-20	TP13-20-1	2013 08 23	0.0 - 0.5	***8.81***	0.55	4.97	131	< 0.8	0.381	12.8	4.71	11.7	10.2	7.4	254	< 0.1	0.8	14.7	< 1	0.098	81.8	0.069	< 0.2	0.533	20.3	51.1
TP13-21	TP13-21-1	2013 08 23	0.0 - 0.5	***8.7***	0.58	6.14	101	< 0.8	0.243	22.3	6.97	13.6	6.92	9.3	281	< 0.1	0.66	27.4	< 1	< 0.1	13.1	0.068	0.16	0.649	25.8	52.6
TP13-22	TP13-22-1	2013 08 23	0.1 - 0.5	7.91	0.43	5.9	132	< 0.8	0.355	22.8	7.54	9.51	8.11	11	303	< 0.1	0.69	21.8	< 1	0.052	14.3	0.085	0.39	0.69	31.3	75.5
TP13-23	TP13-23-1	2013 08 23	0.0 - 0.5	***8.39***	0.63	6.84	105	< 0.8	0.207	23.6	7.7	15.5	8.23	10.2	327	< 0.1	0.75	26.2	< 1	< 0.1	15.7	0.109	0.32	0.797	27.6	68.4
	TP13-23-104	Duplicate	0.0 - 0.5	***8.35***	0.71	6.89	98.4	< 0.8	0.246	22.8	7.53	15	8.47	10.8	319	< 0.1	0.79	27	< 1	0.067	14.2	0.098	0.36	0.762	26.5	53.5
	QA/QC RPD%			*	12	1	6	*	17	3	2	3	3	*	2	*	5	3	*	*	10	*	*	4	4	24
BH13-04	BH13-04-1-AD05	2013 09 22	0.3 - 0.6	7.67	0.82	6.37	194	< 0.8	1.04	20	6.97	17.4	***153***	10.8	246	< 0.1	1.12	18.7	< 1	0.118	32.7	0.103	1.52	0.506	28.9	81.8
	BH13-04-2-AD05	2013 09 22	0.8 - 1.1	7.7	0.58	7.73	82	< 0.8	0.272	22.3	7.39	13.3	8.99	10.8	164	< 0.1	0.99	28.8	< 1	< 0.1	12.5	0.109	0.37	0.509	26.6	48.8
	BH13-04-21-AD05	2013 09 22	21.8 - 22.1	***8.79***	0.22	5.08	87.8	< 0.8	0.227	11.9	4.79	11	6.31	5.2	201	< 0.1	0.4	17.3	< 1	0.056	54	0.057	0.23	0.329	19.2	26.6
	BH13-04-22-AD05	2013 09 22	22.6 - 22.9	***9.12***	0.22	3.95	202	< 0.8	0.19	10	3.33	10.5	3.92	6	200	< 0.1	0.84	10.3	< 1	0.071	68	< 0.1	0.23	0.322	19.3	21.8
	BH13-04-30-AD05	2013 09 23	31.5 - 31.8	***8.85***	0.24	2.42	54.9	< 0.8	0.111	8.9	3.02	7.53	3.1	< 10	122	< 0.1	0.27	10.3	< 1	0.065	42.4	< 0.1	0.12	0.281	16	19.9
BH13-05	BH13-05-02-AD05	2013 09 23	1.1 - 1.4	***8.83***	0.29	4.91	105	< 0.8	0.249	15.2	4.94	12.9	5.44	< 10	314	< 0.1	0.63	19.4	< 1	0.057	114	0.06	0.17	0.4	22.6	36.6
	BH13-05-A	Duplicate	1.1 - 1.4	***8.72***	0.3	3.96	106	< 0.8	0.257	17.8	4.9	10.6	5.15	6.3	278	< 0.1	0.49	17.6	< 1	0.083	134	0.053	0.14	0.542	22.3	36.1
	QA/QC RPD%			1	*	21	1	*	3	16	1	20	5	*	12	*	*	10	*	*	16	*	*	*	1	1
	BH13-05-14-AD05	2013 09 23	11.6 - 11.9	***8.72***	0.35	5.17	108	< 0.8	0.276	15.8	5.37	8.85	5.67	< 10	329	< 0.1	1.04	29.1	< 1	0.054	91.7	< 0.1	0.1	0.333	16.1	27.6
	BH13-05-27-AD05	2013 09 24	21.9 - 22.2	***8.35***	0.29	4.75	49.3	< 0.8	0.233	14.9	4.14	8.96	3.78	6.5	156	< 0.1	0.44	17	< 1	0.055	58.6	< 0.1	0.16	0.704	21.4	33.9
	BH13-05-28-AD05	2013 09 24	22.6 - 22.9	***8.25***	0.36	5.45	54.4	< 0.8	0.257	13.4	3.75	9.88	4.11	6.1	173	< 0.1	0.52	15.2	< 1	0.067	43.9	< 0.1	0.16	0.869	20.6	32.7
	BH13-05-29-AD05	2013 09 24	23.0 - 23.3	***8.79***	0.33	6.32	173	< 0.8	0.29	21.7	5.7	15.1	6.69	10.9	260	< 0.1	0.46	24.3	< 1	0.087	76.4	0.103	0.34	0.524	26.3	49.7
	BH13-05-30-AD05	2013 09 24	23.7 - 24.0	***8.72***	0.29	***12.4***	82	< 0.8	0.364	14.2	3.99	7.67	2.97	< 10	204	< 0.1	0.61	19.3	< 1	< 0.1	40.9	< 0.1	0.11	0.33	21.7	28.1
	BH13-05-31-AD05	2013 09 24	24.9 - 25.2	***8.7***	0.39	6.01	166	< 0.8	0.308	24.1	6.47	16.2	6.37	11.4	278	< 0.1	0.43	25.3	< 1	0.089	79.4	0.089	0.34	0.54	27.9	46.3
BH13-06	BH13-06-31-AD05	2013 09 25	31.7 - 32.0	***8.68***	0.28	3.37	89.6	< 0.8	0.367	13.9	4.25	9.88	4.55	< 10	146	< 0.1	0.65	16	< 1	0.058	76.2	< 0.1	0.14	0.581	25.6	26.9
	BH13-06-B	Duplicate	31.7 - 32.0	***8.72***	0.25	2.87	101	< 0.8	0.202	11.6	3.69	10.2	4.09	< 10	138	< 0.1	0.55	13.2	< 1	0.061	89.8	< 0.1	0.1	0.803	20.6	24.8
	QA/QC RPD%			0	*	16	12	*	58	18	14	3	11	*	6	*	*	19	*	*	16	*	*	32	22	8
	BH13-06-32-AD05	2013 09 25	32.3 - 32.6	***8.6***	0.2	3.06	53.4	< 0.8	0.159	12.1	4.31	9.73	3.23	< 10	171	< 0.1	0.37	16.1	< 1	0.054	69	< 0.1	0.15	0.465	23	23.9
BH13-07	BH13-07-01-AD05	2013 09 25	0.3 - 0.6	***8.55***	0.91	6.6	122	< 0.8	0.32	13.5	5.12	13.2	13.5	7.3	162	< 0.1	0.71	18.8	< 1	0.067	57.6	0.073	0.26	0.497	20.8	43.8
	BH13-07-02-AD05	2013 09 25	1.3 - 1.6	***8.22***	0.63	7.35	102	< 0.8	0.344	24.2	8.71	11.9	9.64	12.2	259	< 0.1	1.06	28	< 1	< 0.1	16.8	0.095	0.5	0.616	30.3	68.8
	BH13-07-21-AD05	2013 09 26	17.6 - 17.9	***8.67***	0.55	5.18	243	< 0.8	0.391	15	6.08	14.6	7.28	9.5	272	0.052	0.63	20.5	< 1	0.143	71.2	0.108	0.28	0.579	22.6	56.5
	BH13-07-22-AD05	2013 09 26	18.7 - 19.0	***8.97***	0.32	4.65	62.8	< 0.8	0.173	6.8	2.93	7.84	4.18	< 10	111	< 0.1	0.59	11	< 1	0.051	47.4	< 0.1	< 0.2	0.521	14.7	28
BH14-09	BH14-09-02-AD05	2014 02 15	1.4 - 1.4	***8.72***	0.5	4.71	111	0.4	0.395	***74.5***	6.89	17	6.28	9.6	306	< 0.1	0.83	29.8	< 1	0.067	13.3	0.082	0.35	0.63	24.1	47.5
	BH14-09-41-AD05	2014 02 17	31.2 - 31.2	***9.01***	0.28	2.49	110	< 0.8	0.145	14.2	3.4	24.7	3.81	5.4	160	< 0.1	2.52	11.7	< 1	0.064	53.4	< 0.1	0.13	0.322	15.2	29.3
	BH14-09-40-AD05	2014 02 17	32.3 - 32.3	***8.92***	0.36	3.92	84.8	< 0.8	0.167	17.1	3.84	10.2	4.47	< 10	163	< 0.1	1.89	11.6	< 1	0.08	58	0.055	0.16	0.389	17	29.5
BH14-10	BH14-10-33-AD05	2014 02 19	19.8 - 19.8	***9.07***	0.25	3.24	81.5	< 0.8	0.136	11.8	4.38	8.67	4.68	6.6	168	< 0.1	0.73	12.2	< 1	0.057	61	< 0.1	0.19	0.369	15.2	28.5
	BH14-10-42-AD05	2014 02 20	31.9 - 31.9	***8.72***	0.43	4.03	88	< 0.8	0.178	21.7	6.53	15.3	5.91	6.5	202	< 0.1	2.24	21.8	< 1	0.058	48.8	0.07	0.21	0.671	27.3	32.8
	BH14-10-44-AD05	2014 02 20	33.1 - 33.1	***8.72***	0.35	3.12	81.3	< 0.8	0.153	21.5	5.41	18.1	4.83	5.3	166	< 0.1	2.03	20.2	< 1	0.064	58.6	0.056	0.41	0.486	23.4	29.6
BH14-11	BH14-11-02-AD05	2014 02 21	1.4 - 1.4	***8.1***	0.55	6.58	149	0.47	0.171	23.6	7.58	14.2	7.85	10.8	330	< 0.1	0.77	27	< 1	< 0.1	14	0.077	0.35	0.711	26.3	53.6
	BH14-11-02A-AD05	Duplicate	1.4 - 1.4	***8.18***	0.61	7.23	160	0.48	0.179	25.5	7.95	15.6	8.14	11	329	< 0.1	0.98	27.8	< 1	< 0.1	14.7	0.094	0.38	0.777	29	56.5
	QA/QC RPD%			1	*	9	7	2	5	8	5	9	4	*	0	*	*	3	*	*	5	*	*	9	10	5
	BH14-11-33-AD05	2014 02 22	21.3 - 21.3	***8.03***	1.58	***38.5***	***1,680***	0.53	9.71	20.5	***227***	***78.5***	6.68	6.4	**24,700**	0.212	***24.8***	***273***	< 1	0.151	121	***5.37***	0.26	0.748	45.8	***212***
	BH14-11-47-AD05	2014 02 23	30.5 - 30.5	***8.93***	0.29	2.75	155	< 0.8	0.195	16.4	3.39	10.7	5.02	5.8	133	< 0.1	1.17	14.5	< 1	0.056	53.9	0.053	0.18	0.433	18.8	30.1
Federal Guideline																										
CCME CEQG Residential Land Use (RL)				6.0 - 8.0	20	12	500	4	10	64	50	63	140	n/a	n/a	6.6	10	45	1	20	n/a	1	50	23	130	200
BC Standard																										
CSR Residential Land Use (RL) (sample depth < 3.0m)[b]				n/a	20	15	400	4	2 - 35[c]	60[d]	50	150	400	1,600	1,800	15	10	100	3	20	47,000	n/a	50	16	200	450
CSR Commercial Land Use (CL) (sample depth > 3.0m)[b]				n/a	40	15	400	8	2 - 100[c]	60[d]	300	250	700	20,000	19,000	40	40	500	10	40	100,000	n/a	300	200	n/a	600

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[c] Standard is pH dependent.

[d] Individual standards exist for Cr +3 and Cr +6. Reported value represents more stringent standard.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 3 (Cont'd): Summary of Analytical Results for Metals in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Phys	Total Metals																				
				pH pH	Antimony µg/g	Arsenic µg/g	Barium µg/g	Beryllium µg/g	Cadmium µg/g	Chromium µg/g	Cobalt µg/g	Copper µg/g	Lead µg/g	Lithium µg/g	Manganese µg/g	Mercury µg/g	Molybdenum µg/g	Nickel µg/g	Selenium µg/g	Silver µg/g	Strontium µg/g	Thallium µg/g	Tin µg/g	Uranium µg/g	Vanadium µg/g	Zinc µg/g
BH14-13	BH14-13-01-AD05	2014 02 27	1.1 - 1.1	6.73	0.35	3.91	127	< 0.8	0.196	16.2	6.56	33.9	11.1	5.6	358	< 0.1	3.85	17.9	< 1	0.076	89	0.074	0.29	0.293	23.2	83.6
	BH14-13-16-AD05	2014 02 27	3.4 - 3.4	***8.49***	0.34	7.02	213	1.14	0.649	45.6	14	34.4	13.9	31.9	475	< 0.1	1.18	41.5	0.62	0.129	66.7	0.363	0.97	1.78	64.4	91.8
	BH14-13-17-AD05	2014 02 27	11.6 - 11.6	***8.77***	0.63	6.34	74.4	0.66	0.654	13.5	9.7	21.7	15	10.7	431	< 0.1	1.86	19.8	< 1	0.095	238	0.148	0.15	0.585	20	78.2
	BH14-13-25-AD05	2014 02 27	18.1 - 18.1	***8.68***	0.6	6.49	123	0.57	0.637	13.1	6.62	20.2	14.6	11.7	567	0.07	1.51	16.2	< 1	0.099	220	0.131	0.12	0.555	19	74.7
	BH14-13-25A-AD05	Duplicate	18.1 - 18.1	***8.71***	0.61	6.75	121	0.6	0.467	13	7.02	19.9	14.4	10.6	610	0.174	1.74	17.1	0.54	0.076	208	0.166	0.13	0.496	21	78
	QA/QC RPD%			0	*	4	2	5	31	1	6	1	1	*	7	85	14	5	*	*	6	*	*	*	10	4
	BH14-13-30-AD05	2014 02 28	22.1 - 22.1	***8.72***	0.53	5.8	114	0.53	0.433	12.3	6.68	18.4	12.1	10.9	305	0.069	1.28	15.6	***1.35***	0.082	202	0.072	0.15	0.533	20	65.5
	BH14-13-30A-AD05	Duplicate	22.1 - 22.1	***8.89***	0.69	6.03	112	0.54	0.516	13.3	7.21	17.8	13.3	10.8	340	0.074	1.64	16.6	0.67	0.09	239	0.236	0.17	0.563	22.1	69.9
	QA/QC RPD%			2	*	4	2	2	17	8	8	3	9	*	11	7	25	6	67	*	17	*	*	5	10	6
BH14-14	BH14-14-01-AD05	2014 02 27	0.2 - 0.2	***8.56***	0.76	6.58	234	< 0.8	0.547	17.1	6.48	18.9	10.2	8.1	311	< 0.1	1.64	20.3	< 1	0.114	110	0.095	0.3	0.591	24	71.9
	BH14-14-03-AD05	2014 02 27	1.1 - 1.1	***8.2***	0.52	4.72	81.1	0.49	0.19	25.2	6.73	12	9.61	20.1	132	< 0.1	0.69	27.3	< 1	0.064	18.5	0.119	0.41	0.591	29.1	53.6
	BH14-14-05-AD05	2014 02 27	2.0 - 2.0	***8.09***	0.57	6.14	76.8	< 0.8	0.237	21.1	6.23	14.9	7.52	11.4	154	< 0.1	0.71	24.5	< 1	0.116	22.2	0.079	0.34	0.633	25.1	58.5
	BH14-14-19-AD05	2014 02 28	11.4 - 11.4	***8.35***	0.16	2.93	41.5	< 0.8	0.107	5.9	2.69	6.9	2.93	< 10	126	< 0.1	0.39	8.28	< 1	0.055	31.9	< 0.1	< 0.2	0.247	13.3	20.9
BH14-15	BH14-15-01-AD05	2014 02 28	0.3 - 0.3	***10.3***	0.32	4.57	143	< 0.8	0.234	13.6	4.69	10.3	9.18	6.2	214	< 0.1	0.64	14.3	< 1	0.076	54.3	0.057	0.23	0.49	21.2	31.7
	BH14-15-02-AD05	2014 02 28	0.9 - 0.9	7.6	0.72	6.33	234	0.72	0.337	28.9	10.5	18.7	10.3	13.9	369	0.05	0.82	31.6	< 1	< 0.1	14.7	0.103	0.48	0.833	34.5	58.6
	BH14-15-03-AD05	2014 02 28	1.5 - 1.5	***8.72***	0.52	5.05	107	< 0.8	0.201	20.2	6.58	12.6	5.78	8.4	282	< 0.1	0.64	23.9	< 1	< 0.1	14.2	0.068	0.26	0.553	26.2	41.6
BH14-17	BH14-17-17-AD05	2014 03 01	10.7 - 10.7	***8.54***	1.07	9.06	***1,030***	0.62	1.12	15.5	***73.4***	24.1	12.2	12.1	**32,000**	0.055	***19.6***	***81.8***	< 1	0.083	336	***2.63***	0.18	1.83	28.3	149
	BH14-17-2-AD05	2014 03 01	1.1 - 1.1	***9.13***	0.46	5.27	169	< 0.8	0.239	22.5	5.03	18	15.4	6.8	256	< 0.1	3.06	16	< 1	0.109	87.5	0.064	0.58	0.51	21.7	48.7
	BH14-17-6-AD05	2014 03 01	3.2 - 3.2	***9.59***	0.55	4.36	123	< 0.8	0.274	13.4	4.57	12.4	6.11	5.9	344	< 0.1	0.93	17.2	< 1	0.163	83.6	0.077	0.2	1.02	20.7	35.4
BH14-18	BH14-18-01-AD05	2014 03 02	0.3 - 0.3	***9.08***	0.31	3.6	107	< 0.8	0.195	14.5	4.3	10.3	3.84	5.4	255	< 0.1	0.82	13.3	< 1	0.07	72.3	< 0.1	0.16	0.29	19.2	26.8
	BH14-18-19-AD05	2014 03 02	20.6 - 20.6	***9.25***	0.31	3.25	235	< 0.8	0.148	11.8	3.56	10.1	3.6	5.7	177	< 0.1	0.78	12.8	< 1	0.088	83.6	< 0.1	0.15	0.305	18.4	25.3
	BH14-18-20-AD05	2014 03 02	22.4 - 22.4	***8.76***	0.33	3.22	81.6	< 0.8	0.192	17.1	4.12	9.38	3.83	5.6	148	< 0.1	0.77	13.4	< 1	0.06	85.6	0.051	0.18	0.569	19.9	29.3
	BH14-18-25-AD05	2014 03 02	27.0 - 27.0	***8.72***	0.4	3.51	81	< 0.8	0.177	14.1	4.68	9.58	3.93	5.8	158	< 0.1	0.41	17.4	< 1	0.055	54.4	< 0.1	0.13	0.853	22.2	30.5
	BH14-18-25A-AD05	Duplicate	27.0 - 27.0	***8.68***	0.31	3	60.6	< 0.8	0.143	11.3	3.99	8.91	3.26	5.2	150	< 0.1	0.44	14.6	< 1	0.07	51.4	< 0.1	0.1	0.519	18.2	24.9
	QA/QC RPD%			0	*	16	29	*	21	22	16	7	19	*	5	*	*	17	*	*	6	*	*	49	20	20
	BH14-18-27-AD05	2014 03 02	29.0 - 29.0	***8.64***	0.22	3.15	146	< 0.8	0.146	13.4	4.78	8.75	3.47	5.1	233	< 0.1	0.36	13.7	< 1	0.062	55	< 0.1	0.19	0.419	18.9	26.3
BH14-19	BH14-19-02-AD05	2014 03 02	1.7 - 1.7	***8.95***	0.33	3.32	92.2	< 0.8	0.211	13.4	4.58	9.92	3.86	5	286	< 0.1	0.63	15.1	< 1	0.072	54.6	0.055	0.13	0.34	18.4	29.8
	BH14-19-24-AD05	2014 03 04	18.9 - 18.9	7.88	0.85	10.3	***3,150***	< 0.8	***38.1***	10.8	***794***	***360***	6.95	11.3	**93,900**	0.194	***81.8***	***908***	< 1	0.181	137	***23.1***	0.22	1.19	23.8	***627***
	BH14-19-37-AD05	2014 03 05	31.2 - 31.2	***8.89***	0.21	3.3	71	< 0.8	0.13	27.7	4.71	11.2	3.5	6.4	183	< 0.1	0.55	21.3	< 1	< 0.1	50.5	< 0.1	0.2	0.326	23.7	28.8
	BH14-19-41A-AD05	2014 03 05	32.8 - 32.8	***8.82***	0.28	3.09	99.7	< 0.8	0.187	32.9	5.43	15.7	3.73	6.1	214	< 0.1	2.02	23.6	< 1	0.053	56.3	0.052	0.28	0.364	28.6	36.4
BH14-20	BH14-20-01-AD05	2014 03 03	1.8 - 1.8	***8.45***	0.4	4.21	119	< 0.8	0.207	15	5.51	12.9	6.29	6.9	313	< 0.1	0.52	19.2	< 1	0.053	23.4	< 0.1	0.17	0.663	23.9	32.1
	BH14-20-06-AD05	2014 03 03	6.9 - 6.9	***9.1***	0.3	3.35	89.4	< 0.8	0.214	20.3	5.37	9.7	4.27	5.4	226	< 0.1	0.45	21.4	< 1	0.085	58.8	0.051	0.17	0.423	24	31.8
	BH14-20-21-AD05	2014 03 03	22.0 - 22.0	***8.72***	0.31	2.72	66.3	< 0.8	0.153	6.6	2.97	7.98	3.81	< 10	92.3	< 0.1	0.55	9.21	< 1	0.069	53.8	< 0.1	< 0.2	0.584	14	24.8
	BH14-20-23-AD05	2014 03 03	23.9 - 23.9	***8.72***	0.47	3.45	153	< 0.8	0.259	10.1	3.16	10.5	4.36	5	91.6	< 0.1	0.51	11.7	< 1	0.082	42.9	< 0.1	0.12	0.416	17.1	41.2
	BH14-20-23A-AD05	Duplicate	23.9 - 23.9	***8.76***	0.58	4.58	227	< 0.8	0.246	11.7	3.77	13	4.94	5.2	104	0.064	0.56	12.3	0.6	0.093	48	0.055	0.15	0.456	19.8	52.2
	QA/QC RPD%			0	*	28	39	*	5	15	18	21	12	*	13	*	*	5	*	*	11	*	*	*	15	24
BH14-21	BH14-21-02-AD05	2014 03 03	1.2 - 1.4	7.6	0.51	6.12	114	< 0.8	0.218	21.4	7.63	14	7.79	12.3	299	< 0.1	0.78	27.1	< 1	0.054	13.4	0.114	0.42	0.631	24.9	49.6
	BH14-21-12-AD05	2014 03 03	8.7 - 8.8	***9.1***	0.46	3.47	95.8	< 0.8	0.222	20.5	5.54	11	3.82	6.6	238	< 0.1	0.53	20.7	< 1	0.069	56.5	0.053	0.21	0.42	22.6	33.2
BH14-22	BH14-22-01-AD05	2014 03 04	1.2 - 1.2	***8.08***	0.54	5.93	201	0.49	0.452	25.7	7.6	11.9	23.3	13.7	324	< 0.1	1.08	16.8	< 1	0.09	60.4	0.09	0.87	0.564	31.6	62.8
	BH14-22-19-AD05	2014 03 04	26.8 - 26.8	***8.8***	0.55	4.18	191	< 0.8	0.271	21.2	7.3	14.7	7.58	11.9	248	< 0.1	0.52	22.7	< 1	0.091	75	0.107	0.37	0.549	23.7	54.8
	BH14-22-19A-AD05	Duplicate	26.8 - 26.8	***8.93***	0.42	3.57	175	< 0.8	0.279	19.4	7	12.7	6.53	10.9	230	< 0.1	0.47	20.2	< 1	0.087	68.3	0.08	0.31	0.519	22.2	51
	QA/QC RPD%			1	*	16	9	*	3	9	4	15	15	*	8	*	*	12	*	*	9	*	*	6	7	7
	BH14-22-30-AD05	2014 03 04	29.1 - 29.1	***8.76***	0.48	2.79	150	< 0.8	0.344	25.7	6.62	14.4	4.4	9.9	271	< 0.1	0.55	26.4	< 1	0.064	74.5	0.063	0.29	1.19	28.6	46.5
BH14-23	BH14-23-01-AD05	2014 03 04	0.6 - 0.6	***9.07***	0.46	4.62	167	< 0.8	0.234	15.1	5.18	13.6	13	7.8	267	< 0.1	0.73	17.6	< 1	0.1	54.4	0.068	0.42	0.461	21.8	39
	BH14-23-02-AD05	2014 03 04	1.2 - 1.2	***9.17***	0.47	4.14	198	< 0.8	0.409	15.7	5.79	13.8	13.9	9.6	298	< 0.1	0.71	21	< 1	0.094	70.6	0.076	0.35	1.62	23.9	47.5
	BH14-23-15-AD05	2014 03 04	16.3 - 16.3	***8.78***	0.29	3.79	70.3	< 0.8	0.246	10.1	5.21	10.6	4.71	< 10	217	< 0.1	0.63	14.7	< 1	0.07	64.8	< 0.1	0.16	0.346	21	31.3
	BH14-23-16-AD05	2014 03 04	17.5 - 17.5	***8.79***	0.27	3.02	71.7	< 0.8	0.16	18	4.06	7.65	3.49	< 10	156	< 0.1	0.51	16.5	< 1	0.06	47.5	< 0.1	0.17	0.487	20.1	26.9
	BH14-23-17-AD05	2014 03 04	19.7 - 19.7	***8.87***	0.31	3.71	81.7	< 0.8	0.171	14.7	4.02	8.06	3.77	5.2	153	< 0.1	0.49	15.8	< 1	0.06	53.4	< 0.1	0.16	0.329	20	31.3
	BH14-23-23-AD05	2014 03 04	27.0 - 27.0	***8.83***	0.54	4.86	206	< 0.8	0.368	9.9	3.41	11.7	4.27	< 10	148	< 0.1	0.58	12.2	< 1	0.114	50.8	< 0.1	0.14	0.439	16.5	45.2
	BH14-23-23A-AD05	Duplicate	27.0 - 27.0	***8.82***	0.63	5.71	227	< 0.8	0.31	9.6	3.47	12.5	4.85	< 10	153	< 0.1	0.66	12.3	< 1	0.098	53	< 0.1	0.13	0.516	17.4	46.4
	QA/QC RPD%			0	*	16	10	*	17	3	2	7	13	*	3	*	*	1	*	*	4	*	*	*	5	3
Federal Guideline																										
CCME CEQG Residential Land Use (RL)				6.0 - 8.0	20	12	500	4	10	64	50	63	140	n/a	n/a	6.6	10	45	1	20	n/a	1	50	23	130	200
BC Standard																										
CSR Residential Land Use (RL) (sample depth < 3.0m)[b]				n/a	20	15	400	4	2 - 35[c]	60[d]	50	150	400	1,600	1,800	15	10	100	3	20	47,000	n/a	50	16	200	450
CSR Commercial Land Use (CL) (sample depth > 3.0m)[b]				n/a	40	15	400	8	2 - 100[c]	60[d]	300	250	700	20,000	19,000	40	40	500	10	40	100,000	n/a	300	200	n/a	600

All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[c] Standard is pH dependent.
[d] Individual standards exist for Cr +3 and Cr +6. Reported value represents more stringent standard.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 3 (Cont'd): Summary of Analytical Results for Metals in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Phys	Total Metals																					
				pH pH	Antimony µg/g	Arsenic µg/g	Barium µg/g	Beryllium µg/g	Cadmium µg/g	Chromium µg/g	Cobalt µg/g	Copper µg/g	Lead µg/g	Lithium µg/g	Manganese µg/g	Mercury µg/g	Molybdenum µg/g	Nickel µg/g	Selenium µg/g	Silver µg/g	Strontium µg/g	Thallium µg/g	Tin µg/g	Uranium µg/g	Vanadium µg/g	Zinc µg/g
BH14-24	BH14-24-01-AD05	2014 03 05	0.8 - 0.8	***8.92***	0.45	4.85	108	< 0.8	0.257	14.8	4.52	17.6	7.04	< 10	199	< 0.1	0.65	17	< 1	0.079	55.8	0.056	0.17	0.405	21.2	38.1
	BH14-24-02-AD05	2014 03 05	1.1 - 1.1	***11.1***	0.35	2.85	165	< 0.8	0.456	18.7	5.02	8.51	6.84	13.1	188	< 0.1	1.03	13.3	< 1	0.092	60	0.061	0.74	0.55	25.7	***235***
	BH14-24-03-AD05	2014 03 05	1.5 - 1.5	***8.05***	0.48	5.24	73.5	< 0.8	0.177	22.3	6.27	12.4	7.21	13.7	153	< 0.1	0.65	26.5	< 1	< 0.1	13.4	0.083	0.32	0.539	25.3	45.6
	BH14-24-12-AD05	2014 03 05	20.1 - 20.1	***8.43***	0.28	6.27	63.1	< 0.8	0.267	4.3	2.42	10	4.24	< 10	274	< 0.1	0.85	11.1	< 1	< 0.1	23	0.093	< 0.2	0.285	11.4	30
	BH14-24-14-AD05	2014 03 05	20.7 - 20.7	***8.22***	0.85	3.43	336	0.59	0.511	20.7	5.85	33.6	10.4	10.8	135	0.188	0.34	20.6	< 1	0.284	62.5	0.093	0.42	0.842	24.7	87.8
	BH14-24-15-AD05	2014 03 05	20.9 - 20.9	***8.52***	0.82	9.56	257	0.43	0.593	22.1	8.47	21.5	11.9	16	209	0.055	0.56	28.3	< 1	0.16	71.2	0.131	0.47	0.688	27	79.5
	BH14-24-18-AD05	2014 03 05	24.7 - 24.7	***9.09***	0.26	3.58	90.1	< 0.8	0.136	13.5	3.06	7.05	3.06	< 10	199	< 0.1	0.45	11.1	< 1	< 0.1	39	< 0.1	0.12	0.322	16	26.1
BH14-25	BH14-25-01-AD05	2014 03 06	2.0 - 2.0	***9.72***	0.31	2.97	70.7	< 0.8	0.139	17.5	4.73	9.99	4.31	5.4	211	< 0.1	0.45	22.1	< 1	< 0.1	30.5	< 0.1	0.15	0.418	20.2	25.9
	BH14-25-06-AD05	2014 03 06	9.9 - 9.9	***8.95***	0.34	4.05	67.1	< 0.8	0.154	8.7	2.95	7.43	2.91	< 10	133	< 0.1	0.57	10.5	< 1	0.058	46.9	< 0.1	< 0.2	0.414	13.7	29.1
	BH14-25-09-AD05	2014 03 06	12.8 - 12.8	***8.16***	0.34	11.2	61.9	< 0.8	0.398	14.3	8.93	7.61	2.92	6.9	805	< 0.1	4.12	25.3	< 1	< 0.1	41.1	0.327	0.16	1	18.8	33.5
	BH14-25-09A-AD05	Duplicate	12.8 - 12.8	***8.22***	0.31	9.96	71.7	< 0.8	0.406	17.3	8.78	8.36	3.67	9	647	< 0.1	3.4	26.9	< 1	0.061	43.6	0.316	0.19	1.16	19.7	36.8
	QA/QC RPD%			1	*	12	15	*	2	19	2	9	23	*	22	*	19	6	*	*	6	3	*	15	5	9
BH14-26	BH14-26-23-AD05	2014 03 07	32.8 - 32.8	***8.71***	0.28	2.45	74.7	< 0.8	0.139	8.7	3.36	14.8	3.66	< 10	145	< 0.1	1.11	12.1	< 1	< 0.1	88.1	< 0.1	0.11	0.385	16	26.9
BH14-27	BH14-27-01-AD05	2014 03 06	1.5 - 1.5	***9.31***	0.35	3.43	96.8	< 0.8	0.202	12.9	5.11	12	4.98	5.5	297	0.057	0.63	18	< 1	0.06	12.7	0.067	0.26	0.446	21.6	31.4
	BH14-27-06-AD05	2014 03 06	7.8 - 7.8	***8.97***	0.48	***24.5***	109	< 0.8	0.221	8.6	9.89	13.3	7.75	< 10	637	0.084	1.41	23.2	< 1	0.115	60.4	0.071	0.12	0.38	16.3	34.6
	BH14-27-10-AD05	2014 03 07	12.7 - 12.7	***8.41***	0.18	1.27	88.2	< 0.8	0.181	33.3	7.35	8.53	6.06	9	191	0.075	0.62	17.1	< 1	0.067	49.9	0.12	0.27	1.22	15.5	38.4
	BH14-27-10A-AD05	Duplicate	12.7 - 12.7	***8.27***	0.23	2.11	88.2	< 0.8	0.179	15.9	7.19	7.74	5.6	8	273	0.059	0.44	16	< 1	0.053	50	0.106	0.24	0.728	16.9	36.2
	QA/QC RPD%			2	*	*	0	*	1	71	2	10	8	*	35	24	*	7	*	*	0	*	*	51	9	6
	BH14-27-11-AD05	2014 03 07	13.1 - 13.1	***8.39***	0.42	***13***	87.1	< 0.8	0.137	14.1	5.01	10.4	4.55	6.1	176	< 0.1	0.59	14.2	< 1	0.062	47.4	< 0.1	0.16	0.351	19	31.2
BH14-28	BH14-28-01-AD05	2014 03 07	0.9 - 0.9	***8.5***	0.49	5.49	123	< 0.8	0.22	20.3	15.6	8.47	6.83	8.2	1,240	< 0.1	1.13	15.2	< 1	< 0.1	10.8	0.068	0.28	0.415	32.1	47.7
	BH14-28-07-AD05	2014 03 07	12.8 - 12.8	***8.97***	0.45	3.96	342	< 0.8	0.316	20.6	32	12.4	5.22	7.9	**4,430**	0.059	5.91	24.1	< 1	0.097	106	0.167	0.29	0.451	18.6	42.1
	BH14-28-10-AD05	2014 03 07	15.9 - 15.9	***8.52***	0.2	2.5	48.3	< 0.8	0.119	13.2	3.82	6.78	3.19	< 10	165	0.053	0.73	12.1	< 1	0.062	29.3	< 0.1	0.15	0.266	16.6	21.3
SS14-01	SS14-01-01-AD05	2014 02 20	0.0 - 0.5	***8.17***	0.51	5.85	212	0.51	0.413	32.3	8.18	14.3	17.6	11.6	489	< 0.1	1.09	22.7	< 1	0.112	24.7	0.088	0.44	0.527	28.6	80
	SS14-01-02-AD05	2014 02 20	0.5 - 1.0	***8.18***	0.58	6.75	178	0.47	0.349	25.5	7.93	15	13.7	11.2	406	< 0.1	0.95	23.4	< 1	0.106	18.9	0.096	0.4	0.575	27.1	77.4
	SS14-01-03-AD05	2014 02 20	1.0 - 1.5	***8.63***	0.69	7.74	**464**	0.62	0.441	25.5	9.28	18.1	12.6	17	496	< 0.1	0.72	27	< 1	0.177	111	0.1	0.59	0.845	33.3	74.8
SS14-02	SS14-02-01-AD05	2014 02 20	0.0 - 0.5	***8.93***	0.42	5.95	120	< 0.8	0.213	31	6.94	9.11	13.8	11.6	323	0.081	1.04	18	< 1	0.06	18	0.083	0.49	0.521	29.3	71
	SS14-02-02-AD05	2014 02 20	0.5 - 1.0	***8.88***	0.37	7.75	116	0.44	0.19	28.7	9.88	9.07	12.2	14.5	480	< 0.1	1.31	19.4	< 1	0.051	12.1	0.096	0.45	0.604	33.9	65.6
	SS14-02-03-AD05	2014 02 20	1.0 - 1.5	***9.05***	0.47	7.03	129	0.44	0.224	29.2	9.29	16.2	10.3	14.2	388	< 0.1	0.96	26.8	< 1	0.065	14.9	0.11	0.43	0.682	31.3	61.9
SS14-03	SS14-03-01-AD05	2014 02 20	0.0 - 0.5	***8.42***	0.6	8.08	147	0.5	0.305	41.8	8.66	11.7	10	14.2	300	< 0.1	1.64	25.7	< 1	0.053	18.8	0.109	0.47	0.609	32.7	65.2
	SS14-D1-01-AD05	Duplicate	0.0 - 0.5	***8.47***	0.6	8.5	143	0.48	0.235	36.1	8.74	12.4	10.3	15.1	263	< 0.1	1.56	27.6	< 1	< 0.1	22.7	0.11	0.49	0.62	33.6	66.4
	QA/QC RPD%			*	0	5	3	*	26	15	1	6	3	*	13	*	5	7	*	*	19	*	*	2	3	2
	SS14-03-02-AD05	2014 02 20	0.5 - 1.0	7.59	0.56	6.44	100	< 0.8	0.175	25.9	6.86	13.8	7.32	9.1	275	< 0.1	0.82	25.8	< 1	< 0.1	12.8	0.079	0.29	0.818	26.1	47.7
	SS14-03-03-AD05	2014 02 20	1.0 - 1.5	***8.42***	0.57	6.82	115	< 0.8	0.284	24.3	8.04	18.6	7.39	10.9	337	0.079	0.77	30.1	< 1	0.053	15.3	0.113	0.33	0.864	27.4	56.6
SS14-04	SS14-04-01-AD05	2014 02 20	0.0 - 0.5	***8.13***	0.51	6.59	119	< 0.8	0.204	30.1	7	11	8.92	10.9	229	< 0.1	1.17	25.2	< 1	< 0.1	13.4	0.087	0.34	0.543	26.3	55.2
	SS14-04-02-AD05	2014 02 20	0.5 - 1.0	***8.01***	0.57	6.69	122	< 0.8	0.284	25.2	7.61	18.7	7.88	10.6	301	< 0.1	0.82	28	< 1	0.109	14.6	0.098	0.36	0.722	25.9	52.1
	SS14-04-03-AD05	2014 02 20	1.0 - 1.5	***8.43***	0.51	6.08	123	< 0.8	0.353	19.9	6.7	14.6	6.42	9.5	302	< 0.1	0.64	25.8	< 1	0.075	15.5	0.089	0.38	0.584	22.9	54.8
SS14-05	SS14-05-01-AD05	2014 02 20	0.0 - 0.5	***8.2***	0.49	5.51	111	0.47	0.277	43.1	5.91	12.6	7.13	8.1	274	0.221	0.86	24.3	< 1	0.105	18.1	0.08	0.31	0.529	25	48
	SS14-05-02-AD05	2014 02 20	0.5 - 1.0	***8.31***	0.49	5.23	99.6	< 0.8	0.249	30.5	5.96	13.6	6.43	7.2	281	0.309	1.01	27.2	< 1	0.053	28.1	0.071	0.29	0.478	24.5	47.3
	SS14-05-03-AD05	2014 02 20	1.0 - 1.5	***8.32***	0.35	3.97	99.3	< 0.8	0.253	27.4	5.15	12.1	5.34	6.6	272	0.133	0.84	23.3	< 1	0.071	20.4	0.077	0.25	0.419	21.3	39.1
SS14-06	SS14-06-01-AD05	2014 02 20	0.0 - 0.5	6.83	0.52	6.45	98.1	< 0.8	0.295	30.5	7.27	12.9	7.39	9.8	276	< 0.1	0.94	27.3	< 1	< 0.1	10.9	0.074	0.35	0.549	30	45.5
	SS14-06-02-AD05	2014 02 20	0.5 - 1.0	***8.01***	0.97	6.97	121	0.4	0.225	20.8	11	19	8.09	9.7	315	0.057	0.65	23.6	< 1	0.102	19.4	0.066	0.29	0.631	23.5	40
	SS14-06-03-AD05	2014 02 20	1.0 - 1.5	***8.6***	0.38	4.78	103	< 0.8	0.247	19.1	5.71	13.3	5.67	7.6	310	< 0.1	0.65	20.2	< 1	0.092	45.8	0.073	0.26	0.595	22.7	36.1
SS14-07	SS14-07-01-AD05	2014 02 20	0.0 - 0.5	7.88	0.54	4.91	117	0.41	0.265	***69.5***	6.2	16.5	6.39	6.6	302	< 0.1	6.61	22.4	< 1	0.053	15.3	0.057	0.45	0.612	27.2	36.8
	SS14-07-02-AD05	2014 02 20	0.5 - 1.0	***8.21***	0.37	4.61	121	< 0.8	0.219	28.7	5.75	12.9	8.52	7.4	268	< 0.1	0.78	20.1	< 1	0.055	20.3	0.061	0.3	0.671	26.5	35.3
	SS14-07-03-AD05	2014 02 20	1.0 - 1.5	***8.46***	0.41	4.47	129	0.41	0.228	27.9	5.55	13.8	5.83	7.8	267	< 0.1	1.02	19.8	< 1	< 0.1	20.3	0.071	0.39	0.566	26.4	36.6
SS14-08	SS14-08-01-AD05	2014 02 20	0.0 - 0.5	***8.02***	0.41	5.36	140	< 0.8	0.283	34.6	6.82	10.5	7.45	9.1	261	< 0.1	2.44	22	< 1	< 0.1	18.3	0.067	0.51	0.448	28	42.7
	SS14-08-02-AD05	2014 02 20	0.5 - 1.0	7.96	0.37	5.19	116	< 0.8	0.18	23.6	6.06	9.1	6.67	8.1	263	< 0.1	0.93	20.5	< 1	< 0.1	15.7	0.062	0.38	0.392	25.6	37.3
	SS14-08-03-AD05	2014 02 20	1.0 - 1.5	7.52	0.49	5.49	131	0.46	0.251	28.4	7	12.5	6.49	9	310	< 0.1	1.08	27.8	< 1	< 0.1	12	0.079	0.32	0.484	29.9	39.8
	SS14-D2-01-AD05	Duplicate	1.0 - 1.5	***8.33***	0.35	4.63	185	< 0.8	0.155	24.6	5.02	11.2	5.47	6.8	245	< 0.1	1.43	18.1	< 1	< 0.1	13.5	0.057	0.23	0.398	23.8	32.4
	QA/QC RPD%			*	*	*	34	*	47	14	33	11	17	*	23	*	28	42	*	*	12	*	*	*	23	20
SS14-09	SS14-09-01-AD05	2014 02 20	0.0 - 0.5	7.89	0.49	5.69	142	0.49	0.319	23.4	6.55	10.1	8.68	8.8	253	< 0.1	0.79	21.8	< 1	< 0.1	18.2	0.07	0.5	0.51	26.5	52.2
	SS14-09-02-AD05	2014 02 20	0.5 - 1.0	***8.18***	0.47	4.9	99.7	< 0.8	0.227	26.1	6.53	10.6	5.84	8.4	317	< 0.1	0.65	22.7	< 1	< 0.1	15.8	0.071	0.29	0.53	24.7	44.7
	SS14-D3-01-AD05	Duplicate	0.5 - 1.0	7.72	0.46	6.14	136	0.42	0.252	28.9	7.2	11	7.52	8.6	285	< 0.1	0.85	27.9	< 1	< 0.1	15.7	0.067	0.51	0.627	29.8	54.5
	QA/QC RPD%			*	*	*	31	*	10	10	10	4	25	*	11	*	27	21	*	*	1	*	*	17	19	20
	SS14-09-03-AD05	2014 02 20	1.0 - 1.5	***8.07***	0.46	5.26	120	< 0.8	0.244	32.3	6.43	12.7	7.72	7.9	283	< 0.1	1.78	26.6	< 1	< 0.1	15.8	0.068	0.42	0.493	25.6	44.7
Federal Guideline																										
CCME CEQG Residential Land Use (RL)				6.0 - 8.0	20	12	500	4	10	64	50	63	140	n/a	n/a	6.6	10	45	1	20	n/a	1	50	23	130	200
BC Standard																										
CSR Residential Land Use (RL) (sample depth < 3.0m)[b]				n/a	20	15	400	4	2 - 35[c]	60[d]	50	150	400	1,600	1,800	15	10	100	3	20	47,000	n/a	50	16	200	450
CSR Commercial Land Use (CL) (sample depth > 3.0m)[b]				n/a	40	15	400	8	2 - 100[c]	60[d]	300	250	700	20,000	19,000	40	40	500	10	40	100,000	n/a	300	200	n/a	600

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[c] Standard is pH dependent.

[d] Individual standards exist for Cr +3 and Cr +6. Reported value represents more stringent standard.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 3 (Cont'd): Summary of Analytical Results for Metals in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Phys	Total Metals																					
				pH pH	Antimony µg/g	Arsenic µg/g	Barium µg/g	Beryllium µg/g	Cadmium µg/g	Chromium µg/g	Cobalt µg/g	Copper µg/g	Lead µg/g	Lithium µg/g	Manganese µg/g	Mercury µg/g	Molybdenum µg/g	Nickel µg/g	Selenium µg/g	Silver µg/g	Strontium µg/g	Thallium µg/g	Tin µg/g	Uranium µg/g	Vanadium µg/g	Zinc µg/g
SS14-10	SS14-10-01-AD05	2014 02 20	0.0 - 0.5	***8.25***	0.39	4.53	94.5	< 0.8	0.183	20.4	6.27	9.72	6.31	8.2	294	< 0.1	0.51	20.7	< 1	< 0.1	14.1	0.069	0.29	0.504	22.7	41.3
	SS14-10-02-AD05	2014 02 20	0.5 - 1.0	***8.3***	0.44	4.89	95.2	< 0.8	0.206	31.6	6.72	10.5	5.81	8.4	322	< 0.1	0.6	22.2	< 1	< 0.1	15.1	0.062	0.33	0.552	23.2	44.5
	SS14-10-03-AD05	2014 02 20	1.0 - 1.5	***8.56***	0.43	4.71	97.1	< 0.8	0.224	24.7	6.36	10.9	5.88	7.7	346	< 0.1	0.74	24.2	< 1	< 0.1	16.5	0.061	0.28	0.7	24.7	43
SS14-11	SS14-11-01-AD05	2014 02 20	0.0 - 0.5	***8.63***	0.52	6.71	92.1	0.47	0.307	40.1	8.32	11.4	8.45	12.1	203	< 0.1	2.16	22.8	< 1	0.061	15.4	0.101	0.43	0.601	29.8	57.3
	SS14-11-02-AD05	2014 02 20	0.5 - 1.0	***8.18***	0.69	7.31	111	0.4	0.284	25.8	7.96	15.8	8.31	10.4	292	< 0.1	0.91	26.9	< 1	< 0.1	11.8	0.108	0.37	0.992	28.2	50.3
	SS14-11-03-AD05	2014 02 20	1.0 - 1.5	***8.68***	0.62	6.42	121	0.52	0.439	25.6	7.62	14.7	7.41	10.1	318	< 0.1	0.8	25.9	< 1	0.109	13.3	0.114	0.49	0.71	27.8	53.7
SS14-12	SS14-12-01-AD05	2014 02 20	0.0 - 0.5	***8.33***	0.64	6.73	226	0.55	0.331	39	7.68	13.4	9.09	11.4	352	< 0.1	2.46	22.8	< 1	0.08	47.4	0.086	0.58	0.702	30.7	56.7
	SS14-12-02-AD05	2014 02 20	0.5 - 1.0	7.46	0.54	7.1	114	< 0.8	0.295	23.2	7.12	12.1	7.11	10.2	311	< 0.1	0.83	26.7	< 1	< 0.1	16.3	0.094	0.36	0.723	27.1	48.9
	SS14-D4-01-AD05	Duplicate	0.5 - 1.0	***8.05***	0.51	6.56	128	0.41	0.274	22.9	7.17	12.7	7.35	10.4	302	< 0.1	0.87	24.3	< 1	< 0.1	19	0.076	0.36	0.621	25.7	49.3
	QA/QC RPD%			*	6	8	12	*	7	1	1	5	3	*	3	*	5	9	*	*	15	*	*	15	5	1
	SS14-12-03-AD05	2014 02 20	1.0 - 1.5	7.62	0.53	5.22	85.7	< 0.8	0.311	23.8	6.64	8.77	6.23	9.2	268	< 0.1	0.63	23.9	< 1	< 0.1	13.4	0.066	0.28	0.658	26.7	56.1
SS14-13	SS14-13-01-AD05	2014 02 20	0.0 - 0.5	***8.6***	0.68	6.15	144	0.5	0.33	22.2	7.34	15.4	7.48	11.2	319	< 0.1	0.85	24.4	< 1	0.092	73	0.11	0.38	0.703	24	53.2
	SS14-13-02-AD05	2014 02 20	0.5 - 1.0	***8.67***	0.54	5.62	120	< 0.8	0.262	22.8	6.95	13.5	6.61	10.2	296	< 0.1	0.61	25.4	< 1	0.074	71.1	0.078	0.33	0.684	26.6	47.5
	SS14-13-03-AD05	2014 02 20	1.0 - 1.5	***8.54***	0.55	5.43	99.5	< 0.8	0.256	18.6	6.55	12.2	5.95	9.2	288	< 0.1	0.63	22	< 1	0.06	38.3	0.081	0.27	0.64	23.5	47.9
SS14-14	SS14-14-01-AD05	2014 02 20	0.0 - 0.5	***8.46***	0.56	4.5	122	0.41	0.247	27.7	5.71	11.4	6.43	7.7	409	0.06	1.08	20	< 1	0.067	37.7	0.071	0.34	0.503	24.8	40.6
	SS14-14-02-AD05	2014 02 20	0.5 - 1.0	***8.43***	0.61	4.55	111	< 0.8	0.229	38.1	5.34	11.4	6.32	6.6	413	< 0.1	1.39	19	< 1	0.062	29	0.058	0.3	2.07	23.8	38.5
	SS14-14-03-AD05	2014 02 20	1.0 - 1.5	***8.33***	0.69	4.57	130	< 0.8	0.223	37	5.87	12	6.72	7	467	< 0.1	1.35	21.9	< 1	0.101	30.1	0.073	0.31	0.524	25.2	40.1
	SS14-D5-01-AD05	Duplicate	1.0 - 1.5	***8.38***	0.66	4.63	141	< 0.8	0.231	37.9	5.96	11.9	6.82	7.6	444	< 0.1	0.92	22	< 1	0.063	28.8	0.07	0.32	0.491	24.9	42.2
	QA/QC RPD%			*	4	*	8	*	4	2	2	1	1	*	5	*	38	0	*	*	4	*	*	*	1	5
SS14-15	SS14-15-01-AD05	2014 02 21	0.0 - 0.5	7.23	0.38	4.9	184	< 0.8	0.225	21.8	6.12	10.8	10.6	12	311	< 0.1	0.86	17.5	< 1	0.103	29.6	0.092	0.61	0.601	27.9	52.7
	SS14-15-02-AD05	2014 02 21	0.5 - 1.0	6.86	0.28	3.41	161	< 0.8	0.186	23.2	5.82	7.33	9.21	18.7	255	< 0.1	0.75	15.7	< 1	0.091	22.1	0.094	0.45	0.644	30	61.6
	SS14-15-03-AD05	2014 02 21	1.0 - 1.5	7.46	0.44	9.34	94.1	0.46	0.123	26.8	9.51	7.77	9.03	17.2	400	< 0.1	0.79	20.8	< 1	0.053	18.8	0.082	0.42	0.856	33.4	74.3
	SS14-D6-01-AD05	Duplicate	1.0 - 1.5	7.32	0.48	11.4	114	0.44	0.184	29	11.9	9.86	9.71	17.1	599	< 0.1	0.92	23.9	< 1	0.068	18.7	0.075	0.44	0.885	38.8	75.1
	QA/QC RPD%			*	*	20	19	*	40	8	22	24	7	*	40	*	15	14	*	*	1	*	*	3	15	1
SS14-16	SS14-16-01-AD05	2014 02 21	0.0 - 0.5	***8.03***	0.41	4.2	105	< 0.8	0.225	26	5.49	12.5	17.1	7	174	< 0.1	0.68	21.5	< 1	0.069	17.8	0.063	0.31	0.477	23.6	36.5
	SS14-16-02-AD05	2014 02 21	0.5 - 1.0	***8.43***	0.38	3.89	93.5	< 0.8	0.207	22.8	4.9	11.4	17.6	6.4	184	< 0.1	0.71	19.5	< 1	0.06	26.7	0.056	0.29	0.44	19.6	34.4
	SS14-16-03-AD05	2014 02 21	1.0 - 1.5	***8.47***	0.36	4.05	100	< 0.8	0.233	21.1	5.41	11.2	14.9	6.3	239	< 0.1	0.72	18.9	< 1	0.06	38.3	0.064	0.25	0.423	22.2	34.4
	SS14-D7-01-AD05	Duplicate	1.0 - 1.5	***8.47***	0.4	4.22	105	< 0.8	0.242	21.4	5.31	11.4	15.5	7	248	< 0.1	0.74	20.3	< 1	0.061	31.5	0.063	0.31	0.447	22.9	38
	QA/QC RPD%			*	*	*	5	*	4	1	2	2	4	*	4	*	3	7	*	*	19	*	*	*	3	10
SS14-17	SS14-17-01-AD05	2014 02 21	0.0 - 0.5	***8.39***	0.52	3.87	117	0.42	0.172	49.6	6.31	10.4	10.5	19.7	195	< 0.1	3.67	23.3	< 1	0.073	25.2	0.094	0.46	0.565	24.5	55.6
	SS14-17-02-AD05	2014 02 21	0.5 - 1.0	***8.37***	0.55	5.89	95.4	0.44	0.18	30.9	6.79	14.1	9.74	16.9	159	< 0.1	1.25	27.5	< 1	0.058	19	0.119	0.43	0.597	30.3	56.5
	SS14-17-03-AD05	2014 02 21	1.0 - 1.5	***8.33***	0.54	5.67	91.5	< 0.8	0.205	25.2	6.66	14.4	9.06	15.3	159	< 0.1	0.83	25.9	< 1	0.076	18.4	0.109	0.38	0.528	26.6	54.9
SS14-18	SS14-18-01-AD05	2014 02 21	0.0 - 0.5	***8.64***	0.5	4.84	159	< 0.8	0.27	29.6	5.49	14.2	9.37	8.6	239	< 0.1	1.56	16.8	< 1	0.081	62.8	0.068	0.32	0.533	22.4	56
	SS14-18-02-AD05	2014 02 21	0.5 - 1.0	***8.18***	0.48	2.91	93.8	0.46	0.166	26.4	5.1	8.61	9.65	18.3	122	< 0.1	0.82	20.8	< 1	0.053	22.3	0.106	0.36	0.533	22.7	59
	SS14-18-03-AD05	2014 02 21	1.0 - 1.5	***8.35***	0.45	4.22	90.5	0.43	0.198	25.8	5.46	10.6	9.09	14.1	127	< 0.1	0.89	22.7	< 1	< 0.1	18.7	0.092	0.34	0.502	26.2	52.7
SS14-19	SS14-19-01-AD05	2014 02 21	0.0 - 0.5	***8.18***	0.78	5.44	191	< 0.8	0.291	***84.1***	6.49	14.9	20.3	8	353	< 0.1	1.61	20.3	< 1	0.089	51.9	0.087	0.41	0.51	22.9	51.3
	SS14-19-02-AD05	2014 02 21	0.5 - 1.0	***8.04***	0.52	4.94	150	< 0.8	0.253	***64.9***	6.36	15.4	17.8	7.8	285	< 0.1	1.24	20.4	< 1	0.077	41.1	0.07	0.41	0.499	23.8	46.6
	SS14-19-03-AD05	2014 02 21	1.0 - 1.5	***8.14***	0.6	5.49	145	< 0.8	0.293	51.9	6.98	16.3	14.7	8.3	294	< 0.1	1.32	22.7	< 1	0.091	36.3	0.073	0.36	0.525	25.2	52.7
SS14-20	SS14-20-01-AD05	2014 02 21	0.0 - 0.5	***9.27***	0.53	6.11	148	0.4	0.322	31.3	6.73	13	10.3	10	258	< 0.1	1.29	20.7	< 1	0.06	23.7	0.067	0.53	0.519	26.4	53.8
	SS14-20-02-AD05	2014 02 21	0.5 - 1.0	***9.25***	0.52	6.07	157	0.48	0.289	30.4	7.34	13.2	13.1	10.9	286	< 0.1	1.16	21.9	< 1	0.074	25.7	0.084	0.49	0.603	28.5	56.9
	SS14-20-03-AD05	2014 02 21	1.0 - 1.5	***9.09***	0.63	7.06	161	0.43	0.268	23.6	8.17	17.2	9.43	11.5	334	< 0.1	0.81	27.4	< 1	0.085	30.4	0.102	0.45	0.627	28.3	62.5
SS14-21	SS14-21-01-AD05	2014 02 21	0.0 - 0.5	***9.62***	0.4	4.01	94.6	< 0.8	0.196	33.7	4.52	9.64	4.81	6.1	219	< 0.1	0.9	17.8	< 1	0.071	16.4	0.059	0.29	0.39	20.5	30.1
	SS14-21-02-AD05	2014 02 21	0.5 - 1.0	***9.64***	0.43	4.12	97	< 0.8	0.238	36.3	4.74	11	4.48	< 10	251	< 0.1	3.08	18.8	< 1	0.095	22.7	0.055	0.24	0.371	19.9	33.9
	SS14-21-03-AD05	2014 02 21	1.0 - 1.5	***9.68***	0.36	4.23	105	< 0.8	0.184	21.4	4.97	10.3	6.05	5.2	230	< 0.1	0.81	17.2	< 1	0.072	26.5	0.053	0.19	0.377	21	33.2
SS14-22	SS14-22-01-AD05	2014 02 21	0.0 - 0.5	***8.74***	0.47	4.73	95.5	< 0.8	0.271	18.5	5.84	11.1	5.43	8.6	296	< 0.1	0.67	22.6	< 1	< 0.1	55.9	0.073	0.27	0.579	22.2	43.9
	SS14-D8-01-AD05	Duplicate	0.0 - 0.5	***8.72***	0.5	5.05	96.5	< 0.8	0.228	20.1	6.08	11.8	5.78	8.8	307	< 0.1	0.69	22.7	< 1	0.078	56.5	0.06	0.27	0.564	23.6	45.2
	QA/QC RPD%			*	*	*	1	*	17	8	4	6	6	*	4	*	3	0	*	*	1	*	*	3	6	3
	SS14-22-02-AD05	2014 02 21	0.5 - 1.0	***8.79***	0.56	4.98	124	< 0.8	0.3	20.2	6.24	11.5	5.4	9	296	< 0.1	0.7	22.6	< 1	0.071	60.2	0.072	0.26	0.591	24.3	48
	SS14-22-03-AD05	2014 02 21	1.0 - 1.5	***8.76***	0.54	5.22	123	< 0.8	0.331	20.9	6.49	13.2	5.7	9.6	413	< 0.1	0.73	23.7	< 1	0.08	62.2	0.066	0.3	0.584	23.8	48.5
SS14-23	SS14-23-01-AD05	2014 02 21	0.0 - 0.5	***8.47***	0.47	4.96	102	< 0.8	0.182	26.6	5.43	12.2	8.66	8.6	251	< 0.1	0.81	19.4	< 1	0.07	59.1	0.078	0.29	0.4	20.6	46.4
	SS14-23-02-AD05	2014 02 21	0.5 - 1.0	***8.27***	0.58	5.69	132	0.42	0.286	***70.1***	7.18	13.1	10.8	12.4	311	< 0.1	1.03	22.8	< 1	0.095	26.1	0.083	0.42	0.602	25.6	59.5
	SS14-23-03-AD05	2014 02 21	1.0 - 1.5	7.92	0.6	8.26	124	0.59	0.262	35.7	6.88	14.5	14.2	26.5	150	< 0.1	1.38	24.5	< 1	0.165	24.9	0.127	0.69	0.753	50.7	74.7
SS14-24	SS14-24-01-AD05	2014 02 21	0.0 - 0.5	***8.41***	0.83	8.55	197	0.51	0.333	32.2	9.44	22.7	11.4	14.3	405	0.054	1	32.1	< 1	0.132	39.6	0.1	0.61	0.744	31.8	66.9
	SS14-24-02-AD05	2014 02 21	0.5 - 1.0	***8.6***	0.61	5.45	120	< 0.8	0.291	21.4	6.69	12.9	6.38	8.9	285	< 0.1	0.81	22.6	< 1	0.075	61.2	0.073	0.28	0.578	23.8	51.9
	SS14-24-03-AD05	2014 02 21	1.0 - 1.5	***8.81***	0.56	4.56	111	< 0.8	0.299	18	5.5	10.4	5.16	8.6	254	< 0.1	0.68	21	< 1	0.055	63.6	0.06	0.25	0.58	21.9	47.9
Federal Guideline																										
CCME CEQG Residential Land Use (RL)				6.0 - 8.0	20	12	500	4	10	64	50	63	140	n/a	n/a	6.6	10	45	1	20	n/a	1	50	23	130	200
BC Standard																										
CSR Residential Land Use (RL) (sample depth < 3.0m)[b]				n/a	20	15	400	4	2 - 35[c]	60[d]	50	150	400	1,600	1,800	15	10	100	3	20	47,000	n/a	50	16	200	450
CSR Commercial Land Use (CL) (sample depth > 3.0m)[b]				n/a	40	15	400	8	2 - 100[c]	60[d]	300	250	700	20,000	19,000	40	40	500	10	40	100,000	n/a	300	200	n/a	600

All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).
[c] Standard is pH dependent.
[d] Individual standards exist for Cr +3 and Cr +6. Reported value represents more stringent standard.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 3 (Cont'd): Summary of Analytical Results for Metals in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Phys	Total Metals																					
				pH pH	Antimony µg/g	Arsenic µg/g	Barium µg/g	Beryllium µg/g	Cadmium µg/g	Chromium µg/g	Cobalt µg/g	Copper µg/g	Lead µg/g	Lithium µg/g	Manganese µg/g	Mercury µg/g	Molybdenum µg/g	Nickel µg/g	Selenium µg/g	Silver µg/g	Strontium µg/g	Thallium µg/g	Tin µg/g	Uranium µg/g	Vanadium µg/g	Zinc µg/g
FIRE14BKSS1	FIRE14BKSS1	2014 03 01	0.0 - 0.5	6.49	0.44	3.17	200	0.42	0.375	16.9	5.05	4.68	10.9	8.2	259	< 0.1	1.48	12.7	< 1	0.054	21.2	0.079	0.52	0.325	37	67.8
FIRE14BKSS2	FIRE14BKSS2	2014 03 02	0.0 - 0.5	***4.98***	0.15	0.59	324	< 0.8	0.912	9.9	3.06	5.03	9.25	< 10	1,210	< 0.1	0.73	6.78	< 1	0.15	22	< 0.1	0.42	0.465	19.9	80.4
FIRE14BKSS3	FIRE14BKSS3	2014 03 02	0.0 - 0.5	6.54	0.22	1.46	334	< 0.8	1.61	10.9	5.49	9.71	10.9	< 10	464	0.082	0.8	12.5	< 1	0.467	36.3	0.061	0.35	0.31	18.1	86.8
FIRE14SS4	FIRE14SS4	2014 02 28	0.0 - 0.5	7.27	< 0.2	< 1	245	< 0.8	1.39	1.1	2.15	8.12	1.05	< 10	681	0.065	2.93	2.8	< 1	0.084	98.5	< 0.1	< 0.2	< 0.1	< 4	176
FIRE14SS5	FIRE14SS5	2014 03 01	0.0 - 0.5	6.16	0.94	5.54	145	0.54	0.24	22.6	8.51	11	23.1	14.5	412	< 0.1	0.75	21.1	< 1	0.095	20.5	0.092	0.66	0.551	28.5	56.2
FIRE14SS6	FIRE14SS6	2014 03 01	0.0 - 0.5	6.79	0.43	3.77	192	< 0.8	1.04	21.4	6.26	11.5	10.8	8.8	437	< 0.1	0.87	18.7	< 1	0.096	32.6	0.063	0.36	0.391	24.9	102
FIRE14SS8	FIRE14SS8	2014 03 01	0.0 - 0.5	7.15	0.33	4.42	226	0.55	0.292	30.7	8.35	7.36	13.2	8.9	270	< 0.1	0.7	27.2	< 1	0.08	17.1	0.09	0.7	0.412	45.5	65.8
	FIRE14-DUP1	Duplicate	0.0 - 0.5	6.84	0.31	4.2	165	0.61	0.316	28.6	7.39	6.67	7.47	9.4	218	< 0.1	0.7	21.8	< 1	0.074	14.3	0.085	0.57	0.398	41	51.4
	QA/QC RPD%			*	*	*	31	*	8	7	12	10	55	*	21	*	0	22	*	*	18	*	*	*	10	25
Federal Guideline																										
CCME CEQG Residential Land Use (RL)				6.0 - 8.0	20	12	500	4	10	64	50	63	140	n/a	n/a	6.6	10	45	1	20	n/a	1	50	23	130	200
BC Standard																										
CSR Residential Land Use (RL) (sample depth < 3.0m)[b]				n/a	20	15	400	4	2 - 35[c]	60[d]	50	150	400	1,600	1,800	15	10	100	3	20	47,000	n/a	50	16	200	450
CSR Commercial Land Use (CL) (sample depth > 3.0m)[b]				n/a	40	15	400	8	2 - 100[c]	60[d]	300	250	700	20,000	19,000	40	40	500	10	40	100,000	n/a	300	200	n/a	600

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

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n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

[c] Standard is pH dependent.

[d] Individual standards exist for Cr +3 and Cr +6. Reported value represents more stringent standard.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 4: Summary of Analytical Results for Soil Salinity

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Soil Salinity																		
				Salinity mg/L	% Saturation %	Saturation pH pH	Saturated Paste Conductivity uS/cm	Theoretical Gypsum Req. t/ha	Saturated Paste Sodium µg/g	Saturated Paste Chloride µg/g	Water Soluble Calcium µg/g	Water Soluble Magnesium µg/g	Water Soluble Potassium µg/g	Water Soluble Sulphate µg/g	Soluble Sodium mg/L	Soluble Chloride mg/L	Soluble Calcium mg/L	Soluble Magnesium mg/L	Soluble Potassium mg/L	Soluble Sulphate mg/L	Sodium Adsorption Ratio None
TP-32	FS-32-0.25	2002 10 05	0.3 - 0.3	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP-33	FS-33-2.0	2002 10 05	2.0 - 2.0	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP-34	FS-34-1.0	2002 10 05	1.0 - 1.0	> 0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP-35	FS-35-1.0	2002 10 05	1.0 - 1.0	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH02	BH02-01	2003 01 01	1.2 - 1.2	-	-	-	-	-	-	26	-	-	-	-	-	-	-	-	-	-	-
	BH02-08	2003 01 01	6.6 - 6.6	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-
BH05	BH05-04	2003 01 01	5.5 - 5.5	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-
BH06	BH06-01	2003 01 01	1.2 - 1.2	-	-	-	-	-	-	**1,290**	-	-	-	-	-	-	-	-	-	-	-
	BH06-05	2003 01 01	7.3 - 7.3	-	-	-	-	-	-	**564**	-	-	-	-	-	-	-	-	-	-	-
BH12	BH12-01	2003 01 01	1.2 - 1.2	-	-	-	-	-	-	**1,240**	-	-	-	-	-	-	-	-	-	-	-
	BH12-05	2003 01 01	7.3 - 7.3	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-
BH39	BH39-1	2004 11 29	0.6 - 0.6	-	-	-	-	-	55.4	**10,100**	-	-	-	-	-	-	-	-	-	-	-
BH40	BH40-1	2004 11 29	0.6 - 0.6	-	-	-	-	-	56	**10,000**	-	-	-	-	-	-	-	-	-	-	-
	BH40-2	2004 11 29	1.2 - 1.2	-	-	-	-	-	27.4	**4,820**	-	-	-	-	-	-	-	-	-	-	-
BH41	BH41-1	2004 11 29	0.6 - 0.6	-	-	-	-	-	< 5	**393**	-	-	-	-	-	-	-	-	-	-	-
BH46	BH46-1	2004 11 29	0.3 - 0.3	-	-	-	-	-	9.29	**1,550**	-	-	-	-	-	-	-	-	-	-	-
BH47	BH47-1	2004 11 29	0.3 - 0.3	-	-	-	-	-	17.2	**3,130**	-	-	-	-	-	-	-	-	-	-	-
BH52	BH52-2	2004 11 29	2.4 - 2.4	-	-	-	-	-	< 5	45	-	-	-	-	-	-	-	-	-	-	-
BH83	BH83-4	2005 03 15	6.0 - 6.0	-	-	-	-	-	< 5	< 5	-	-	-	-	-	-	-	-	-	-	-
	BH83-5	2005 03 15	7.5 - 7.5	-	-	-	-	-	< 5	< 5	-	-	-	-	-	-	-	-	-	-	-
BH101	BH101-5	2005 03 17	6.9 - 6.9	-	-	-	-	-	< 5	< 5	-	-	-	-	-	-	-	-	-	-	-
BH105	BH105-1	2006 08 07	0.0 - 0.6	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-
BH106	BH106-1	2006 08 07	0.0 - 0.6	-	-	-	-	-	-	**151**	-	-	-	-	-	-	-	-	-	-	-
	BH106-2	2006 08 07	1.1 - 1.4	-	-	-	-	-	-	**240**	-	-	-	-	-	-	-	-	-	-	-
BH107	BH107-1	2006 08 07	0.0 - 0.6	-	-	-	-	-	-	81	-	-	-	-	-	-	-	-	-	-	-
	BH107-2	2006 08 07	1.1 - 1.4	-	-	-	-	-	-	29	-	-	-	-	-	-	-	-	-	-	-
BH108	BH108-1	2006 08 07	0.0 - 0.6	-	-	-	-	-	-	19	-	-	-	-	-	-	-	-	-	-	-
BH109	BH109-1	2006 08 07	0.0 - 0.6	-	-	-	-	-	-	**98**	-	-	-	-	-	-	-	-	-	-	-
	BH109-2	2006 08 07	1.1 - 1.4	-	-	-	-	-	-	**108**	-	-	-	-	-	-	-	-	-	-	-
BH110	BH110-1	2006 08 07	0.0 - 0.6	-	-	-	-	-	-	**144**	-	-	-	-	-	-	-	-	-	-	-
	GR55	Duplicate	0.0 - 0.6	-	-	-	-	-	-	82	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%			-	-	-	-	-	-	55	-	-	-	-	-	-	-	-	-	-	-
	BH110-2	2006 08 07	1.1 - 1.4	-	-	-	-	-	-	**218**	-	-	-	-	-	-	-	-	-	-	-
	GR56	Duplicate	1.1 - 1.4	-	-	-	-	-	-	**255**	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%			-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-
BH111	BH111-1	2006 08 07	1.2 - 1.8	-	-	-	-	-	-	**2,540**	-	-	-	-	-	-	-	-	-	-	-
	BH111-3	2006 08 07	4.3 - 4.9	-	-	-	-	-	-	**1,480**	-	-	-	-	-	-	-	-	-	-	-
	BH111-5	2006 08 07	7.3 - 7.9	-	-	-	-	-	-	**2,340**	-	-	-	-	-	-	-	-	-	-	-
	GR57	Duplicate	7.3 - 7.9	-	-	-	-	-	-	**4,080**	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%			-	-	-	-	-	-	54	-	-	-	-	-	-	-	-	-	-	-
	BH111-6	2006 08 07	8.8 - 9.5	-	-	-	-	-	-	**2,500**	-	-	-	-	-	-	-	-	-	-	-
	BH111-8	2006 08 07	11.9 - 12.2	-	-	-	-	-	-	**752**	-	-	-	-	-	-	-	-	-	-	-
BH112M	BH112M-1	2006 08 07	1.2 - 1.8	-	-	-	-	-	-	69	-	-	-	-	-	-	-	-	-	-	-
	BH112M-3	2006 08 07	4.3 - 4.9	-	-	-	-	-	-	39	-	-	-	-	-	-	-	-	-	-	-
BH121	BH121-1	2009 10 16	0.0 - 0.6	-	-	-	-	-	-	12.9	-	-	-	-	-	-	-	-	-	-	-
BH122	BH122-1	2009 10 16	0.0 - 0.6	-	-	-	-	-	-	24.3	-	-	-	-	-	-	-	-	-	-	-
BH123	BH123-1	2009 10 16	0.0 - 0.6	-	-	-	-	-	-	71.3	-	-	-	-	-	-	-	-	-	-	-
BH124	BH124-1	2009 10 16	0.0 - 0.6	-	-	-	-	-	-	60.6	-	-	-	-	-	-	-	-	-	-	-
	FSGR1	Duplicate	0.0 - 0.6	-	-	-	-	-	-	**161**	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%			-	-	-	-	-	-	91	-	-	-	-	-	-	-	-	-	-	-
BH125	BH125-1	2009 10 16	0.0 - 0.6	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-
	FSGR2	Duplicate	0.0 - 0.6	-	-	-	-	-	-	20.8	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%			-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
BH126	BH126-1	2009 10 16	0.0 - 0.6	-	-	-	-	-	-	28.5	-	-	-	-	-	-	-	-	-	-	-
Federal Guideline																					
CCME CEQG Residential Land Use (RL)				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5
BC Standard																					
CSR Residential Land Use (RL) (sample depth < 3.0m)[a]				n/a	n/a	n/a	n/a	n/a	200	90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[a]				n/a	n/a	n/a	n/a	n/a	1,000	90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 4 (Cont'd): Summary of Analytical Results for Soil Salinity

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Soil Salinity																	
				Salinity mg/L	% Saturation %	Saturation pH pH	Saturated Paste Conductivity uS/cm	Theoretical Gypsum Req. t/ha	Saturated Paste Sodium µg/g	Saturated Paste Chloride µg/g	Water Soluble Calcium µg/g	Water Soluble Magnesium µg/g	Water Soluble Potassium µg/g	Water Soluble Sulphate µg/g	Soluble Sodium mg/L	Soluble Chloride mg/L	Soluble Calcium mg/L	Soluble Magnesium mg/L	Soluble Potassium mg/L	Soluble Sulphate mg/L	Sodium Adsorption Ratio None
BH12-01	BH12-01-1-AD05	2012 10 14	0.3 - 0.6	-	43	7.2	1,820	0	51	43	106	21	9	326	119	101	246	49	20	757	1.81
	BH12-01-2-AD05	2012 10 14	0.9 - 1.2	-	40	7.4	460	0	23	10	14	1	< 2	16	57	24	36	3	3	40	2.45
BH12-02	BH12-02-2-AD05	2012 10 14	0.5 - 0.8	-	38	7.5	480	0.02	41	14	3	< 1	< 2	14	107	37	9	2	2	36	***8.4***
	BH12-02-30-AD05	2012 10 15	26.4 - 26.7	-	31	7.4	1,300	0	70	3	17	5	3	102	227	9	56	17	9	329	***6.82***
	BH12-02-31-AD05	Duplicate	26.4 - 26.7	-	29	7.3	920	0	5	< 2	36	8	4	82	17	6	124	28	13	284	0.36
	QA/QC RPD%			-	*	*	34	*	*	*	72	46	*	22	*	*	76	49	*	15	*
BH13-03	BH13-03-23-AD05	2013 03 17	17.9 - 18.1	-	-	-	-	-	-	**175**	-	-	-	-	-	625	-	-	-	-	-
	BH13-03-25-AD05	2013 03 17	19.5 - 19.8	-	-	-	-	-	-	64	-	-	-	-	-	246	-	-	-	-	-
	BH13-03-33-AD05	2013 03 17	25.7 - 25.9	-	-	-	-	-	-	70	-	-	-	-	-	249	-	-	-	-	-
	BH13-03-A-AD05	Duplicate	25.7 - 25.9	-	-	-	-	-	-	68	-	-	-	-	-	251	-	-	-	-	-
	QA/QC RPD%			-	-	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-
	BH13-03-34-AD05	2013 03 17	26.2 - 26.5	-	-	-	-	-	-	67	-	-	-	-	-	224	-	-	-	-	-
	BH13-03-35-AD05	2013 03 17	26.8 - 27.0	-	-	-	-	-	-	**96**	-	-	-	-	-	342	-	-	-	-	-
	BH13-03-36-AD05	2013 03 17	28.1 - 28.4	-	-	-	-	-	-	**162**	-	-	-	-	-	577	-	-	-	-	-
BH13-04	BH13-04-1-AD05	2013 09 22	0.3 - 0.6	-	53.3	-	-	-	21.5	18.4	-	-	-	-	40.2	34.5	-	-	-	-	-
	BH13-04-2-AD05	2013 09 22	0.8 - 1.1	-	52.1	-	-	-	17.1	18.3	-	-	-	-	32.7	35.1	-	-	-	-	-
	BH13-04-21-AD05	2013 09 22	21.8 - 22.1	-	39.1	-	-	-	13.2	8.8	-	-	-	-	33.8	22.5	-	-	-	-	-
	BH13-04-22-AD05	2013 09 22	22.6 - 22.9	-	38.7	-	-	-	19.2	9.4	-	-	-	-	49.6	24.4	-	-	-	-	-
	BH13-04-30-AD05	2013 09 23	31.5 - 31.8	-	36.8	-	-	-	2.8	4.7	-	-	-	-	7.6	12.9	-	-	-	-	-
BH13-05	BH13-05-02-AD05	2013 09 23	1.1 - 1.4	-	32.1	-	-	-	6.2	9	-	-	-	-	19.4	28.1	-	-	-	-	-
	BH13-05-A	Duplicate	1.1 - 1.4	-	30.2	-	-	-	4.8	6	-	-	-	-	16	19.9	-	-	-	-	-
	QA/QC RPD%			-	6	-	-	-	*	*	-	-	-	-	*	*	-	-	-	-	-
	BH13-05-14-AD05	2013 09 23	11.6 - 11.9	-	42.3	-	-	-	8.1	7.9	-	-	-	-	19	18.7	-	-	-	-	-
	BH13-05-27-AD05	2013 09 24	21.9 - 22.2	-	41.4	-	-	-	37.7	**331**	-	-	-	-	91.2	801	-	-	-	-	-
	BH13-05-28-AD05	2013 09 24	22.6 - 22.9	-	41.7	-	-	-	32.7	**243**	-	-	-	-	78.4	583	-	-	-	-	-
	BH13-05-29-AD05	2013 09 24	23.0 - 23.3	-	45.1	-	-	-	31.7	48.6	-	-	-	-	70.3	108	-	-	-	-	-
	BH13-05-30-AD05	2013 09 24	23.7 - 24.0	-	37.7	-	-	-	19.6	29.2	-	-	-	-	51.9	77.4	-	-	-	-	-
	BH13-05-31-AD05	2013 09 24	24.9 - 25.2	-	47.1	-	-	-	34.6	56.9	-	-	-	-	73.4	121	-	-	-	-	-
BH13-06	BH13-06-31-AD05	2013 09 25	31.7 - 32.0	-	33.2	-	-	-	22.2	87.1	-	-	-	-	66.7	262	-	-	-	-	-
	BH13-06-B	Duplicate	31.7 - 32.0	-	32.7	-	-	-	23.9	**92.8**	-	-	-	-	72.9	283	-	-	-	-	-
	QA/QC RPD%			-	2	-	-	-	7	6	-	-	-	-	9	8	-	-	-	-	-
	BH13-06-32-AD05	2013 09 25	32.3 - 32.6	-	31.6	-	-	-	17.3	52.1	-	-	-	-	54.7	165	-	-	-	-	-
BH13-07	BH13-07-21-AD05	2013 09 26	17.6 - 17.9	-	42.9	-	-	-	4.7	7.2	-	-	-	-	10.9	16.7	-	-	-	-	-
	BH13-07-22-AD05	2013 09 26	18.7 - 19.0	-	38.9	-	-	-	2.3	3.3	-	-	-	-	6	8.6	-	-	-	-	-
BH14-09	BH14-09-02-AD05	2014 02 15	1.4 - 1.4	-	36.1	-	-	-	5	9.8	-	-	-	-	116	27.1	-	-	-	-	-
	BH14-09-40-AD05	2014 02 17	32.3 - 32.3	-	37.6	-	-	-	< 10	45.7	-	-	-	-	83.4	122	-	-	-	-	-
	BH14-09-41-AD05	2014 02 17	31.2 - 31.2	-	34.8	-	-	-	< 10	33.9	-	-	-	-	89.7	97.3	-	-	-	-	-
BH14-10	BH14-10-02-AD05	2014 02 19	1.4 - 1.4	-	35.6	-	-	-	< 10	15.1	-	-	-	-	53.3	42.4	-	-	-	-	-
	BH14-10-25-AD05	2014 02 19	16.6 - 16.6	-	87.1	-	-	-	< 10	33	-	-	-	-	50.3	37.9	-	-	-	-	-
	BH14-10-35-AD05	2014 02 19	20.6 - 20.6	-	36.4	-	-	-	< 10	21.4	-	-	-	-	50.5	58.7	-	-	-	-	-
	BH14-10-42-AD05	2014 02 20	31.9 - 31.9	-	37	-	-	-	< 10	72.7	-	-	-	-	106	196	-	-	-	-	-
	BH14-10-44-AD05	2014 02 20	33.1 - 33.1	-	41.7	-	-	-	< 10	67.5	-	-	-	-	104	162	-	-	-	-	-
BH14-11	BH14-11-02-AD05	2014 02 21	1.4 - 1.4	-	51.6	-	-	-	< 10	38.1	-	-	-	-	89.1	73.8	-	-	-	-	-
	BH14-11-02A-AD05	Duplicate	1.4 - 1.4	-	45.3	-	-	-	< 10	36.7	-	-	-	-	96.5	81	-	-	-	-	-
	QA/QC RPD%			-	13	-	-	-	*	4	-	-	-	-	8	9	-	-	-	-	-
	BH14-11-47-AD05	2014 02 23	30.5 - 30.5	-	41.8	-	-	-	< 10	20.3	-	-	-	-	55.2	48.7	-	-	-	-	-
BH14-13	BH14-13-01-AD05	2014 02 27	1.1 - 1.1	-	79.9	-	-	-	< 10	5.5	-	-	-	-	16.4	6.9	-	-	-	-	-
	BH14-13-25-AD05	2014 02 27	18.1 - 18.1	-	38.2	-	-	-	< 10	2.2	-	-	-	-	21.9	5.8	-	-	-	-	-
	BH14-13-25A-AD05	Duplicate	18.1 - 18.1	-	36.2	-	-	-	< 10	4.2	-	-	-	-	19.7	11.5	-	-	-	-	-
	QA/QC RPD%			-	5	-	-	-	*	*	-	-	-	-	*	*	-	-	-	-	-
	BH14-13-30-AD05	2014 02 28	22.1 - 22.1	-	35.6	-	-	-	< 10	4.6	-	-	-	-	19.1	13	-	-	-	-	-
	BH14-13-30A-AD05	Duplicate	22.1 - 22.1	-	38.3	-	-	-	< 10	3.8	-	-	-	-	18.5	10	-	-	-	-	-
	QA/QC RPD%			-	7	-	-	-	*	*	-	-	-	-	*	*	-	-	-	-	-
BH14-14	BH14-14-01-AD05	2014 02 27	0.2 - 0.2	-	70.5	-	-	-	< 10	8.6	-	-	-	-	18.3	12.2	-	-	-	-	-
	BH14-14-03-AD05	2014 02 27	1.1 - 1.1	-	63.2	-	-	-	< 10	11.5	-	-	-	-	45	18.2	-	-	-	-	-
	BH14-14-05-AD05	2014 02 27	2.0 - 2.0	-	60.6	-	-	-	< 10	32	-	-	-	-	40.1	52.7	-	-	-	-	-
	BH14-14-19-AD05	2014 02 28	11.4 - 11.4	-	38.6	-	-	-	< 10	4	-	-	-	-	16.8	10.3	-	-	-	-	-
Federal Guideline																					
CCME CEQG Residential Land Use (RL)				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5
BC Standard																					
CSR Residential Land Use (RL) (sample depth < 3.0m)[a]				n/a	n/a	n/a	n/a	n/a	200	90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[a]				n/a	n/a	n/a	n/a	n/a	1,000	90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 4 (Cont'd): Summary of Analytical Results for Soil Salinity

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Soil Salinity																	
				Salinity mg/L	% Saturation %	Saturation pH pH	Saturated Paste Conductivity uS/cm	Theoretical Gypsum Req. t/ha	Saturated Paste Sodium µg/g	Saturated Paste Chloride µg/g	Water Soluble Calcium µg/g	Water Soluble Magnesium µg/g	Water Soluble Potassium µg/g	Water Soluble Sulphate µg/g	Soluble Sodium mg/L	Soluble Chloride mg/L	Soluble Calcium mg/L	Soluble Magnesium mg/L	Soluble Potassium mg/L	Soluble Sulphate mg/L	Sodium Adsorption Ratio None
BH14-15	BH14-15-01-AD05	2014 02 28	0.3 - 0.3	-	47.2	-	-	-	< 10	61.3	-	-	-	-	72.9	130	-	-	-	-	-
	BH14-15-02-AD05	2014 02 28	0.9 - 0.9	-	54.3	-	-	-	< 10	32.2	-	-	-	-	86.7	59.3	-	-	-	-	-
	BH14-15-03-AD05	2014 02 28	1.5 - 1.5	-	39.9	-	-	-	5.2	27.3	-	-	-	-	119	68.4	-	-	-	-	-
	BH14-15-07-AD05	2014 02 28	4.0 - 4.0	-	43.8	-	-	-	< 10	70.2	-	-	-	-	80.1	160	-	-	-	-	-
	BH14-15-11-AD05	2014 03 01	8.4 - 8.4	-	34.1	-	-	-	< 10	37.2	-	-	-	-	104	109	-	-	-	-	-
	BH14-15-13-AD05	2014 03 01	10.5 - 10.5	-	43.5	-	-	-	< 10	30	-	-	-	-	61.8	68.9	-	-	-	-	-
	BH14-15-15-AD05	2014 03 01	12.8 - 12.8	-	63	-	-	-	< 10	**230**	-	-	-	-	101	366	-	-	-	-	-
	BH14-15-18-AD05	2014 03 01	15.4 - 15.4	-	45	-	-	-	7.6	**427**	-	-	-	-	175	950	-	-	-	-	-
	BH14-15-26-AD05	2014 03 01	22.4 - 22.4	-	33.3	-	-	-	< 10	**170**	-	-	-	-	41.4	511	-	-	-	-	-
	BH14-15-27-AD05	2014 03 01	23.8 - 23.8	-	38.8	-	-	-	< 10	33.3	-	-	-	-	63.1	85.8	-	-	-	-	-
	BH14-15-27A-AD05	Duplicate	23.8 - 23.8	-	38.5	-	-	-	< 10	19.5	-	-	-	-	42.6	50.8	-	-	-	-	-
	QA/QC RPD%			-	1	-	-	-	*	52	-	-	-	-	*	51	-	-	-	-	-
	BH14-15-30-AD05	2014 03 01	27.0 - 27.0	-	31.5	-	-	-	< 10	9	-	-	-	-	30	28.7	-	-	-	-	-
BH14-17	BH14-17-17-AD05	2014 03 01	10.7 - 10.7	-	51	-	-	-	< 10	23.4	-	-	-	-	34.9	45.8	-	-	-	-	-
	BH14-17-2-AD05	2014 03 01	1.1 - 1.1	-	37.7	-	-	-	7.9	30.6	-	-	-	-	181	81.3	-	-	-	-	-
	BH14-17-6-AD05	2014 03 01	3.2 - 3.2	-	70	-	-	-	10.3	**134**	-	-	-	-	236	191	-	-	-	-	-
BH14-18	BH14-18-01-AD05	2014 03 02	0.3 - 0.3	-	36.9	-	-	-	18	**253**	-	-	-	-	413	684	-	-	-	-	-
	BH14-18-19-AD05	2014 03 02	20.6 - 20.6	-	36.5	-	-	-	5.3	42.1	-	-	-	-	122	115	-	-	-	-	-
	BH14-18-20-AD05	2014 03 02	22.4 - 22.4	-	42.6	-	-	-	< 10	76.8	-	-	-	-	72.4	180	-	-	-	-	-
	BH14-18-25-AD05	2014 03 02	27.0 - 27.0	-	30.2	-	-	-	< 10	76.6	-	-	-	-	35.2	253	-	-	-	-	-
	BH14-18-25A-AD05	Duplicate	27.0 - 27.0	-	31.4	-	-	-	< 10	72.9	-	-	-	-	33.3	232	-	-	-	-	-
	QA/QC RPD%			-	4	-	-	-	*	5	-	-	-	-	*	9	-	-	-	-	-
	BH14-18-27-AD05	2014 03 02	29.0 - 29.0	-	32.8	-	-	-	< 10	61.2	-	-	-	-	45.4	187	-	-	-	-	-
BH14-19	BH14-19-02-AD05	2014 03 02	1.7 - 1.7	-	30.2	-	-	-	30.6	**359**	-	-	-	-	705	1,190	-	-	-	-	-
	BH14-19-24-AD05	2014 03 04	18.9 - 18.9	-	112	-	-	-	< 10	**266**	-	-	-	-	12.8	238	-	-	-	-	-
	BH14-19-37-AD05	2014 03 05	31.2 - 31.2	-	77.3	-	-	-	< 10	7.5	-	-	-	-	20.1	9.7	-	-	-	-	-
BH14-20	BH14-20-01-AD05	2014 03 03	1.8 - 1.8	-	38.4	-	-	-	< 10	10.6	-	-	-	-	68.6	27.5	-	-	-	-	-
	BH14-20-06-AD05	2014 03 03	6.9 - 6.9	-	38.9	-	-	-	< 10	10.7	-	-	-	-	61.3	27.5	-	-	-	-	-
	BH14-20-21-AD05	2014 03 03	22.0 - 22.0	-	35.6	-	-	-	< 10	65.1	-	-	-	-	58.8	183	-	-	-	-	-
	BH14-20-23-AD05	2014 03 03	23.9 - 23.9	-	38.3	-	-	-	< 10	4.9	-	-	-	-	20.8	12.8	-	-	-	-	-
	BH14-20-23A-AD05	Duplicate	23.9 - 23.9	-	40.6	-	-	-	< 10	5.1	-	-	-	-	20.5	12.5	-	-	-	-	-
	QA/QC RPD%			-	6	-	-	-	*	*	-	-	-	-	*	*	-	-	-	-	-
BH14-21	BH14-21-02-AD05	2014 03 03	1.2 - 1.4	-	54.1	-	-	-	< 10	5.8	-	-	-	-	31.6	10.7	-	-	-	-	-
	BH14-21-12-AD05	2014 03 03	8.7 - 8.8	-	34.8	-	-	-	< 10	5.1	-	-	-	-	27.5	14.7	-	-	-	-	-
BH14-22	BH14-22-01-AD05	2014 03 04	1.2 - 1.2	-	59.4	-	-	-	140	**3,290**	-	-	-	-	3,210	5,540	-	-	-	-	-
	BH14-22-19-AD05	2014 03 04	26.8 - 26.8	-	41.4	-	-	-	5.7	61.1	-	-	-	-	131	148	-	-	-	-	-
	BH14-22-19A-AD05	Duplicate	26.8 - 26.8	-	41.7	-	-	-	5.7	56.1	-	-	-	-	130	134	-	-	-	-	-
	QA/QC RPD%			-	1	-	-	-	*	9	-	-	-	-	1	10	-	-	-	-	-
	BH14-22-30-AD05	2014 03 04	29.1 - 29.1	-	41.8	-	-	-	< 10	6.7	-	-	-	-	27.8	16	-	-	-	-	-
BH14-23	BH14-23-01-AD05	2014 03 04	0.6 - 0.6	-	43.5	-	-	-	< 10	11.1	-	-	-	-	114	25.5	-	-	-	-	-
	BH14-23-02-AD05	2014 03 04	1.2 - 1.2	-	40.3	-	-	-	5.7	10.3	-	-	-	-	131	25.6	-	-	-	-	-
	BH14-23-15-AD05	2014 03 04	16.3 - 16.3	-	68.1	-	-	-	< 10	**120**	-	-	-	-	97.8	176	-	-	-	-	-
	BH14-23-16-AD05	2014 03 04	17.5 - 17.5	-	58.5	-	-	-	< 10	**122**	-	-	-	-	105	208	-	-	-	-	-
	BH14-23-17-AD05	2014 03 04	19.7 - 19.7	-	54	-	-	-	< 10	51.8	-	-	-	-	47.4	95.9	-	-	-	-	-
	BH14-23-23-AD05	2014 03 04	27.0 - 27.0	-	42.8	-	-	-	< 10	4.6	-	-	-	-	20.1	10.7	-	-	-	-	-
	BH14-23-23A-AD05	Duplicate	27.0 - 27.0	-	40.1	-	-	-	< 10	6.4	-	-	-	-	24.9	15.9	-	-	-	-	-
	QA/QC RPD%			-	7	-	-	-	*	*	-	-	-	-	*	*	-	-	-	-	-
BH14-24	BH14-24-01-AD05	2014 03 05	0.8 - 0.8	-	38.4	-	-	-	86.1	**1,110**	-	-	-	-	1,980	2,880	-	-	-	-	-
	BH14-24-02-AD05	2014 03 05	1.1 - 1.1	-	64.9	-	-	-	59.9	**1,280**	-	-	-	-	1,380	1,970	-	-	-	-	-
	BH14-24-03-AD05	2014 03 05	1.5 - 1.5	-	43.5	-	-	-	23.4	**368**	-	-	-	-	538	847	-	-	-	-	-
	BH14-24-12-AD05	2014 03 05	20.1 - 20.1	-	40	-	-	-	< 10	5.1	-	-	-	-	16	12.7	-	-	-	-	-
BH14-25	BH14-25-01-AD05	2014 03 06	2.0 - 2.0	-	40.1	-	-	-	9.5	42.3	-	-	-	-	219	106	-	-	-	-	-
	BH14-25-06-AD05	2014 03 06	9.9 - 9.9	-	45.8	-	-	-	< 10	7.4	-	-	-	-	68.1	16.2	-	-	-	-	-
	BH14-25-09-AD05	2014 03 06	12.8 - 12.8	-	41.5	-	-	-	< 10	**131**	-	-	-	-	39.3	317	-	-	-	-	-
	BH14-25-09A-AD05	Duplicate	12.8 - 12.8	-	38.3	-	-	-	< 10	**107**	-	-	-	-	39.4	279	-	-	-	-	-
	QA/QC RPD%			-	8	-	-	-	*	20	-	-	-	-	*	13	-	-	-	-	-
Federal Guideline																					
CCME CEQG Residential Land Use (RL)				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5
BC Standard																					
CSR Residential Land Use (RL) (sample depth < 3.0m)[a]				n/a	n/a	n/a	n/a	n/a	200	90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[a]				n/a	n/a	n/a	n/a	n/a	1,000	90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

TABLE 4 (Cont'd): Summary of Analytical Results for Soil Salinity

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Soil Salinity																	
				Salinity mg/L	% Saturation %	Saturation pH pH	Saturated Paste Conductivity uS/cm	Theoretical Gypsum Req. t/ha	Saturated Paste Sodium µg/g	Saturated Paste Chloride µg/g	Water Soluble Calcium µg/g	Water Soluble Magnesium µg/g	Water Soluble Potassium µg/g	Water Soluble Sulphate µg/g	Soluble Sodium mg/L	Soluble Chloride mg/L	Soluble Calcium mg/L	Soluble Magnesium mg/L	Soluble Potassium mg/L	Soluble Sulphate mg/L	Sodium Adsorption Ratio None
BH14-26	BH14-26-23-AD05	2014 03 07	32.8 - 32.8	-	60.6	-	-	-	< 10	30.5	-	-	-	-	59.7	50.3	-	-	-	-	-
BH14-27	BH14-27-01-AD05	2014 03 06	1.5 - 1.5	-	56.1	-	-	-	6.2	33.2	-	-	-	-	142	59.2	-	-	-	-	-
	BH14-27-06-AD05	2014 03 06	7.8 - 7.8	-	57.4	-	-	-	7.4	80.3	-	-	-	-	171	140	-	-	-	-	-
	BH14-27-10-AD05	2014 03 07	12.7 - 12.7	-	46.9	-	-	-	< 10	52.1	-	-	-	-	33.3	111	-	-	-	-	-
	BH14-27-10A-AD05	Duplicate	12.7 - 12.7	-	44.1	-	-	-	< 10	60.2	-	-	-	-	41	137	-	-	-	-	-
	QA/QC RPD%			-	6	-	-	-	*	14	-	-	-	-	*	21	-	-	-	-	-
	BH14-27-11-AD05	2014 03 07	13.1 - 13.1	-	35.6	-	-	-	< 10	3.5	-	-	-	-	16.8	9.7	-	-	-	-	-
BH14-28	BH14-28-01-AD05	2014 03 07	0.9 - 0.9	-	69.3	-	-	-	7.7	28.8	-	-	-	-	178	41.6	-	-	-	-	-
	BH14-28-07-AD05	2014 03 07	12.8 - 12.8	-	56.9	-	-	-	12	**164**	-	-	-	-	275	287	-	-	-	-	-
	BH14-28-10-AD05	2014 03 07	15.9 - 15.9	-	34.6	-	-	-	< 10	39.1	-	-	-	-	30.5	113	-	-	-	-	-
FIRE14BKSS1	FIRE14BKSS1	2014 03 01	0.0 - 0.5	-	107	-	-	-	< 10	16.8	-	-	-	-	12.1	15.7	-	-	-	-	-
FIRE14BKSS2	FIRE14BKSS2	2014 03 02	0.0 - 0.5	-	226	-	-	-	< 10	47	-	-	-	-	7.7	20.6	-	-	-	-	-
FIRE14BKSS3	FIRE14BKSS3	2014 03 02	0.0 - 0.5	-	263	-	-	-	< 10	52	-	-	-	-	9	19.8	-	-	-	-	-
FIRE14SS4	FIRE14SS4	2014 02 28	0.0 - 0.5	-	280	-	-	-	< 10	**222**	-	-	-	-	8.2	79.2	-	-	-	-	-
FIRE14SS5	FIRE14SS5	2014 03 01	0.0 - 0.5	-	149	-	-	-	< 10	47.5	-	-	-	-	14.5	32	-	-	-	-	-
FIRE14SS6	FIRE14SS6	2014 03 01	0.0 - 0.5	-	179	-	-	-	< 10	44.4	-	-	-	-	9.7	24.8	-	-	-	-	-
FIRE14SS8	FIRE14SS8	2014 03 01	0.0 - 0.5	-	60.1	-	-	-	< 10	13	-	-	-	-	19.1	21.7	-	-	-	-	-
	FIRE14-DUP1	Duplicate	0.0 - 0.5	-	49	-	-	-	< 10	13.1	-	-	-	-	25.1	26.8	-	-	-	-	-
	QA/QC RPD%			-	20	-	-	-	*	1	-	-	-	-	*	*	-	-	-	-	-
RES1	RES1-1	2006 08 07	0.6 - 0.6	-	-	-	-	-	-	**94**	-	-	-	-	-	-	-	-	-	-	-
RES2	RES2-1	2006 08 07	0.0 - 0.1	-	-	-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-
RES3	RES3-1	2006 08 07	0.0 - 0.1	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-
RES4	RES4-1	2006 08 07	0.0 - 0.1	-	-	-	-	-	-	< 5	-	-	-	-	-	-	-	-	-	-	-
RES5	RES5-1	2006 08 07	0.2 - 0.2	-	-	-	-	-	-	19	-	-	-	-	-	-	-	-	-	-	-
RES6	RES6-1	2006 08 07	0.0 - 0.1	-	-	-	-	-	-	< 5	-	-	-	-	-	-	-	-	-	-	-
RES7	RES7-1	2006 08 07	0.0 - 0.1	-	-	-	-	-	-	< 5	-	-	-	-	-	-	-	-	-	-	-
	GR58b	Duplicate	0.0 - 0.1	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%			-	-	-	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-
RES8	RES8-1	2006 08 07	0.0 - 0.1	-	-	-	-	-	-	< 5	-	-	-	-	-	-	-	-	-	-	-
GARDEN1	Garden 1	2006 08 19	0.0 - 0.1	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-
GARDEN2	Garden 2	2006 08 19	0.0 - 0.1	-	-	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-
SS14-01	SS14-01-01-AD05	2014 02 20	0.0 - 0.5	-	58.2	-	-	-	< 10	18.5	-	-	-	-	19.2	31.8	-	-	-	-	-
	SS14-01-02-AD05	2014 02 20	0.5 - 1.0	-	60.9	-	-	-	< 10	23.1	-	-	-	-	20.3	38	-	-	-	-	-
	SS14-01-03-AD05	2014 02 20	1.0 - 1.5	-	60.9	-	-	-	< 10	30.3	-	-	-	-	35.8	49.8	-	-	-	-	-
SS14-02	SS14-02-01-AD05	2014 02 20	0.0 - 0.5	-	49.8	-	-	-	12.2	32.7	-	-	-	-	281	65.7	-	-	-	-	-
	SS14-02-02-AD05	2014 02 20	0.5 - 1.0	-	51.8	-	-	-	13.3	40.8	-	-	-	-	306	78.9	-	-	-	-	-
	SS14-02-03-AD05	2014 02 20	1.0 - 1.5	-	45.9	-	-	-	15.7	38.1	-	-	-	-	362	82.9	-	-	-	-	-
SS14-03	SS14-03-01-AD05	2014 02 20	0.0 - 0.5	-	48.5	-	-	-	< 10	11.6	-	-	-	-	57.8	23.9	-	-	-	-	-
	SS14-D1-01-AD05	Duplicate	0.0 - 0.5	-	53.7	-	-	-	< 10	20.8	-	-	-	-	62.7	38.7	-	-	-	-	-
	QA/QC RPD%			-	10	-	-	-	*	57	-	-	-	-	8	*	-	-	-	-	-
	SS14-03-02-AD05	2014 02 20	0.5 - 1.0	-	44.1	-	-	-	< 10	8.4	-	-	-	-	49	18.9	-	-	-	-	-
	SS14-03-03-AD05	2014 02 20	1.0 - 1.5	-	43.2	-	-	-	< 10	10.9	-	-	-	-	51.3	25.3	-	-	-	-	-
SS14-04	SS14-04-01-AD05	2014 02 20	0.0 - 0.5	-	46	-	-	-	< 10	8.9	-	-	-	-	27.1	19.3	-	-	-	-	-
	SS14-04-02-AD05	2014 02 20	0.5 - 1.0	-	42	-	-	-	< 10	15.8	-	-	-	-	46.5	37.7	-	-	-	-	-
	SS14-04-03-AD05	2014 02 20	1.0 - 1.5	-	41	-	-	-	< 10	12.9	-	-	-	-	44.5	31.5	-	-	-	-	-
SS14-05	SS14-05-01-AD05	2014 02 20	0.0 - 0.5	-	41.2	-	-	-	< 10	8.4	-	-	-	-	24.8	20.3	-	-	-	-	-
	SS14-05-02-AD05	2014 02 20	0.5 - 1.0	-	38.2	-	-	-	< 10	8.4	-	-	-	-	28.4	22	-	-	-	-	-
	SS14-05-03-AD05	2014 02 20	1.0 - 1.5	-	38.5	-	-	-	< 10	7.1	-	-	-	-	25.6	18.3	-	-	-	-	-
SS14-06	SS14-06-01-AD05	2014 02 20	0.0 - 0.5	-	39.7	-	-	-	< 10	22	-	-	-	-	32.9	55.4	-	-	-	-	-
	SS14-06-02-AD05	2014 02 20	0.5 - 1.0	-	42.9	-	-	-	< 10	24.1	-	-	-	-	48.9	56.2	-	-	-	-	-
	SS14-06-03-AD05	2014 02 20	1.0 - 1.5	-	35.5	-	-	-	< 10	18.4	-	-	-	-	35.1	51.8	-	-	-	-	-
SS14-07	SS14-07-01-AD05	2014 02 20	0.0 - 0.5	-	34	-	-	-	< 10	11.2	-	-	-	-	47.6	32.8	-	-	-	-	-
	SS14-07-02-AD05	2014 02 20	0.5 - 1.0	-	38.5	-	-	-	< 10	11.6	-	-	-	-	47.4	30.1	-	-	-	-	-
	SS14-07-03-AD05	2014 02 20	1.0 - 1.5	-	33.9	-	-	-	< 10	9.1	-	-	-	-	41.9	26.9	-	-	-	-	-
Federal Guideline																					
CCME CEQG Residential Land Use (RL)				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5
BC Standard																					
CSR Residential Land Use (RL) (sample depth < 3.0m)[a]				n/a	n/a	n/a	n/a	n/a	200	90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[a]				n/a	n/a	n/a	n/a	n/a	1,000	90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

TABLE 4 (Cont'd): Summary of Analytical Results for Soil Salinity

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Soil Salinity																	
				Salinity mg/L	% Saturation %	Saturation pH pH	Saturated Paste Conductivity uS/cm	Theoretical Gypsum Req. t/ha	Saturated Paste Sodium µg/g	Saturated Paste Chloride µg/g	Water Soluble Calcium µg/g	Water Soluble Magnesium µg/g	Water Soluble Potassium µg/g	Water Soluble Sulphate µg/g	Soluble Sodium mg/L	Soluble Chloride mg/L	Soluble Calcium mg/L	Soluble Magnesium mg/L	Soluble Potassium mg/L	Soluble Sulphate mg/L	Sodium Adsorption Ratio None
SS14-08	SS14-08-01-AD05	2014 02 20	0.0 - 0.5	-	43.5	-	-	-	< 10	9	-	-	-	-	38.9	20.8	-	-	-	-	-
	SS14-08-02-AD05	2014 02 20	0.5 - 1.0	-	43.9	-	-	-	< 10	9.4	-	-	-	-	39.6	21.4	-	-	-	-	-
	SS14-08-03-AD05	2014 02 20	1.0 - 1.5	-	34.5	-	-	-	< 10	6.5	-	-	-	-	34.1	18.9	-	-	-	-	-
	SS14-D2-01-AD05	Duplicate	1.0 - 1.5	-	41.5	-	-	-	< 10	10.1	-	-	-	-	34.2	24.3	-	-	-	-	-
	QA/QC RPD%			-	18	-	-	-	*	*	-	-	-	-	*	*	-	-	-	-	-
SS14-09	SS14-09-01-AD05	2014 02 20	0.0 - 0.5	-	42.9	-	-	-	< 10	7.7	-	-	-	-	25.6	17.9	-	-	-	-	-
	SS14-09-02-AD05	2014 02 20	0.5 - 1.0	-	44.8	-	-	-	< 10	8.7	-	-	-	-	28	19.5	-	-	-	-	-
	SS14-D3-01-AD05	Duplicate	0.5 - 1.0	-	41.7	-	-	-	< 10	11	-	-	-	-	25	26.3	-	-	-	-	-
	QA/QC RPD%			-	7	-	-	-	*	*	-	-	-	-	*	*	-	-	-	-	-
	SS14-09-03-AD05	2014 02 20	1.0 - 1.5	-	35.4	-	-	-	< 10	8.4	-	-	-	-	28.8	23.7	-	-	-	-	-
SS14-10	SS14-10-01-AD05	2014 02 20	0.0 - 0.5	-	37.4	-	-	-	< 10	6.8	-	-	-	-	25.7	18.2	-	-	-	-	-
	SS14-10-02-AD05	2014 02 20	0.5 - 1.0	-	34.5	-	-	-	< 10	6.5	-	-	-	-	26	18.8	-	-	-	-	-
	SS14-10-03-AD05	2014 02 20	1.0 - 1.5	-	35	-	-	-	< 10	5.8	-	-	-	-	28.9	16.6	-	-	-	-	-
SS14-11	SS14-11-01-AD05	2014 02 20	0.0 - 0.5	-	46.4	-	-	-	< 10	23.7	-	-	-	-	84.2	51	-	-	-	-	-
	SS14-11-02-AD05	2014 02 20	0.5 - 1.0	-	42.3	-	-	-	< 10	27.5	-	-	-	-	94.8	65	-	-	-	-	-
	SS14-11-03-AD05	2014 02 20	1.0 - 1.5	-	44.4	-	-	-	7.4	23.2	-	-	-	-	170	52.3	-	-	-	-	-
SS14-12	SS14-12-01-AD05	2014 02 20	0.0 - 0.5	-	54.1	-	-	-	< 10	14.1	-	-	-	-	23.7	26.1	-	-	-	-	-
	SS14-12-02-AD05	2014 02 20	0.5 - 1.0	-	42.4	-	-	-	< 10	12.7	-	-	-	-	21.1	30	-	-	-	-	-
	SS14-D4-01-AD05	Duplicate	0.5 - 1.0	-	42.8	-	-	-	< 10	10.3	-	-	-	-	20.1	24	-	-	-	-	-
	QA/QC RPD%			-	1	-	-	-	*	21	-	-	-	-	*	*	-	-	-	-	-
	SS14-12-03-AD05	2014 02 20	1.0 - 1.5	-	44.6	-	-	-	< 10	10.8	-	-	-	-	19	24.2	-	-	-	-	-
SS14-13	SS14-13-01-AD05	2014 02 20	0.0 - 0.5	-	50.6	-	-	-	< 10	12.7	-	-	-	-	22.5	25	-	-	-	-	-
	SS14-13-02-AD05	2014 02 20	0.5 - 1.0	-	54.4	-	-	-	< 10	9.8	-	-	-	-	13.9	18	-	-	-	-	-
	SS14-13-03-AD05	2014 02 20	1.0 - 1.5	-	39.6	-	-	-	< 10	12.3	-	-	-	-	23	31.1	-	-	-	-	-
SS14-14	SS14-14-01-AD05	2014 02 20	0.0 - 0.5	-	39.9	-	-	-	< 10	12.8	-	-	-	-	24.6	32.1	-	-	-	-	-
	SS14-14-02-AD05	2014 02 20	0.5 - 1.0	-	39.8	-	-	-	< 10	12.2	-	-	-	-	24	30.7	-	-	-	-	-
	SS14-14-03-AD05	2014 02 20	1.0 - 1.5	-	40.3	-	-	-	< 10	12.7	-	-	-	-	23	31.5	-	-	-	-	-
	SS14-D5-01-AD05	Duplicate	1.0 - 1.5	-	44.9	-	-	-	< 10	12.3	-	-	-	-	21.9	27.3	-	-	-	-	-
	QA/QC RPD%			-	11	-	-	-	*	3	-	-	-	-	*	*	-	-	-	-	-
SS14-15	SS14-15-01-AD05	2014 02 21	0.0 - 0.5	-	66.4	-	-	-	141	**3,800**	-	-	-	-	3,240	5,720	-	-	-	-	-
	SS14-15-02-AD05	2014 02 21	0.5 - 1.0	-	65.6	-	-	-	100	**3,340**	-	-	-	-	2,300	5,100	-	-	-	-	-
	SS14-15-03-AD05	2014 02 21	1.0 - 1.5	-	51	-	-	-	72.8	**1,770**	-	-	-	-	1,670	3,470	-	-	-	-	-
	SS14-D6-01-AD05	Duplicate	1.0 - 1.5	-	49.1	-	-	-	62	**1,320**	-	-	-	-	1,430	2,680	-	-	-	-	-
	QA/QC RPD%			-	4	-	-	-	16	29	-	-	-	-	15	26	-	-	-	-	-
SS14-16	SS14-16-01-AD05	2014 02 21	0.0 - 0.5	-	48.4	-	-	-	< 10	63.6	-	-	-	-	110	131	-	-	-	-	-
	SS14-16-02-AD05	2014 02 21	0.5 - 1.0	-	38.4	-	-	-	< 10	29.4	-	-	-	-	87.5	76.4	-	-	-	-	-
	SS14-16-03-AD05	2014 02 21	1.0 - 1.5	-	42	-	-	-	< 10	24.8	-	-	-	-	79.3	59.2	-	-	-	-	-
	SS14-D7-01-AD05	Duplicate	1.0 - 1.5	-	43.7	-	-	-	< 10	27.1	-	-	-	-	78.2	62	-	-	-	-	-
	QA/QC RPD%			-	4	-	-	-	*	9	-	-	-	-	1	5	-	-	-	-	-
SS14-17	SS14-17-01-AD05	2014 02 21	0.0 - 0.5	-	52.5	-	-	-	< 10	72.9	-	-	-	-	94.7	139	-	-	-	-	-
	SS14-17-02-AD05	2014 02 21	0.5 - 1.0	-	55	-	-	-	5.1	**139**	-	-	-	-	117	252	-	-	-	-	-
	SS14-17-03-AD05	2014 02 21	1.0 - 1.5	-	51	-	-	-	< 10	64.7	-	-	-	-	69	127	-	-	-	-	-
SS14-18	SS14-18-01-AD05	2014 02 21	0.0 - 0.5	-	41.8	-	-	-	< 10	15.2	-	-	-	-	48.3	36.4	-	-	-	-	-
	SS14-18-02-AD05	2014 02 21	0.5 - 1.0	-	53.6	-	-	-	< 10	18	-	-	-	-	40.1	33.6	-	-	-	-	-
	SS14-18-03-AD05	2014 02 21	1.0 - 1.5	-	49.2	-	-	-	< 10	19.1	-	-	-	-	40.2	38.9	-	-	-	-	-
SS14-19	SS14-19-01-AD05	2014 02 21	0.0 - 0.5	-	42.3	-	-	-	47.8	**1,110**	-	-	-	-	1,100	2,620	-	-	-	-	-
	SS14-19-02-AD05	2014 02 21	0.5 - 1.0	-	44.3	-	-	-	28.1	**1,080**	-	-	-	-	646	2,430	-	-	-	-	-
	SS14-19-03-AD05	2014 02 21	1.0 - 1.5	-	43.6	-	-	-	27.3	**918**	-	-	-	-	629	2,110	-	-	-	-	-
SS14-20	SS14-20-01-AD05	2014 02 21	0.0 - 0.5	-	49.5	-	-	-	10.2	47.7	-	-	-	-	234	96.3	-	-	-	-	-
	SS14-20-02-AD05	2014 02 21	0.5 - 1.0	-	44.8	-	-	-	10.8	40.3	-	-	-	-	248	89.9	-	-	-	-	-
	SS14-20-03-AD05	2014 02 21	1.0 - 1.5	-	47.7	-	-	-	7.2	23.5	-	-	-	-	166	49.3	-	-	-	-	-
SS14-21	SS14-21-01-AD05	2014 02 21	0.0 - 0.5	-	35.2	-	-	-	8.5	39.1	-	-	-	-	196	111	-	-	-	-	-
	SS14-21-02-AD05	2014 02 21	0.5 - 1.0	-	40.8	-	-	-	7.6	34.9	-	-	-	-	174	85.5	-	-	-	-	-
	SS14-21-03-AD05	2014 02 21	1.0 - 1.5	-	37.3	-	-	-	8.3	33.1	-	-	-	-	192	88.5	-	-	-	-	-
Federal Guideline																					
CCME CEQG Residential Land Use (RL)				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5
BC Standard																					
CSR Residential Land Use (RL) (sample depth < 3.0m)[a]				n/a	n/a	n/a	n/a	n/a	200	90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[a]				n/a	n/a	n/a	n/a	n/a	1,000	90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

TABLE 4 (Cont'd): Summary of Analytical Results for Soil Salinity

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Soil Salinity																	
				Salinity mg/L	% Saturation %	Saturation pH pH	Saturated Paste Conductivity uS/cm	Theoretical Gypsum Req. t/ha	Saturated Paste Sodium µg/g	Saturated Paste Chloride µg/g	Water Soluble Calcium µg/g	Water Soluble Magnesium µg/g	Water Soluble Potassium µg/g	Water Soluble Sulphate µg/g	Soluble Sodium mg/L	Soluble Chloride mg/L	Soluble Calcium mg/L	Soluble Magnesium mg/L	Soluble Potassium mg/L	Soluble Sulphate mg/L	Sodium Adsorption Ratio None
SS14-22	SS14-22-01-AD05	2014 02 21	0.0 - 0.5	-	35.9	-	-	-	< 10	10.8	-	-	-	-	28.2	30	-	-	-	-	-
	SS14-D8-01-AD05	Duplicate	0.0 - 0.5	-	39.5	-	-	-	< 10	12.2	-	-	-	-	23.6	30.8	-	-	-	-	-
	QA/QC RPD%			-	10	-	-	-	*	12	-	-	-	-	*	*	-	-	-	-	-
	SS14-22-02-AD05	2014 02 21	0.5 - 1.0	-	44.8	-	-	-	< 10	7.9	-	-	-	-	16	17.6	-	-	-	-	-
	SS14-22-03-AD05	2014 02 21	1.0 - 1.5	-	48.5	-	-	-	< 10	12.8	-	-	-	-	20.9	26.3	-	-	-	-	-
SS14-23	SS14-23-01-AD05	2014 02 21	0.0 - 0.5	-	44	-	-	-	< 10	10	-	-	-	-	19.6	22.8	-	-	-	-	-
	SS14-23-02-AD05	2014 02 21	0.5 - 1.0	-	50.4	-	-	-	< 10	11.6	-	-	-	-	19.3	23.1	-	-	-	-	-
	SS14-23-03-AD05	2014 02 21	1.0 - 1.5	-	68.4	-	-	-	< 10	19.2	-	-	-	-	18.2	28	-	-	-	-	-
SS14-24	SS14-24-01-AD05	2014 02 21	0.0 - 0.5	-	57.3	-	-	-	5.2	**115**	-	-	-	-	121	201	-	-	-	-	-
	SS14-24-02-AD05	2014 02 21	0.5 - 1.0	-	48	-	-	-	< 10	85	-	-	-	-	99.7	177	-	-	-	-	-
	SS14-24-03-AD05	2014 02 21	1.0 - 1.5	-	44.6	-	-	-	< 10	35.9	-	-	-	-	68.8	80.5	-	-	-	-	-
Federal Guideline																					
CCME CEQG Residential Land Use (RL)				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5
BC Standard																					
CSR Residential Land Use (RL) (sample depth < 3.0m)[a]				n/a	n/a	n/a	n/a	n/a	200	90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m)[a]				n/a	n/a	n/a	n/a	n/a	1,000	90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

TABLE 5: Summary of Analytical Results for VOCs in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Volatile Organic Compounds																																							
				Bromo benzene µg/g	Bromo dichloro methane µg/g	Bromo form µg/g	Bromo methane µg/g	1,3-Butadiene µg/g	Carbon tetra chloride µg/g	Chloro benzene µg/g	Chloro ethane µg/g	Chloro form µg/g	Chloro methane µg/g	Dibromo chloro methane µg/g	1,2-Di bromo ethane µg/g	1,2-Di chloro benzene µg/g	1,3-Di chloro benzene µg/g	1,4-Di chloro benzene µg/g	Dichloro difluoro methane µg/g	1,1-Dichloro ethane µg/g	1,2-Dichloro ethane µg/g	1,1-Dichloro ethylene µg/g	cis-1,2-Dichloro ethylene µg/g	trans-1,2-Dichloro ethylene µg/g	Dichloro methane µg/g	1,2-Dichloro propane µg/g	cis-1,3-Dichloro propene µg/g	trans-1,3-Dichloro propene µg/g	Hexa chloro butadiene µg/g	2-Hexa none µg/g	Methyl ethyl ketone µg/g	Methyl isobutyl ketone µg/g	Methylene bromide µg/g	1,1,1,2-Tetra chloroethane µg/g	1,1,2,2-Tetra chloroethane µg/g	Tetra chloro ethylene µg/g	1,2,3-Tri chloro benzene µg/g	1,2,4-Tri chloro benzene µg/g	1,1,1-Tri chloro ethane µg/g	1,1,2-Tri chloro ethane µg/g	Trichloro ethylene µg/g	Trichloro fluoro methane µg/g	Vinyl chloride µg/g
TP-35	FS-35-1.0	2002 10 05	1.0 - 1.0	-	< 0.01	< 0.01	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	-	-	-	-	-	< 0.01	< 0.01	< 0.01	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
BH82	BH82-4	2005 03 15	6.0 - 6.0	-	< 0.01	< 0.01	< 0.04	-	< 0.01	< 0.01	< 0.02	< 0.01	< 0.04	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	-	-	< 0.5	< 0.2	< 0.01	-	< 0.01	< 0.01	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02
BH84	BH84-4	2005 03 16	6.0 - 6.0	-	< 0.01	< 0.01	< 0.04	-	< 0.01	< 0.01	< 0.02	< 0.01	< 0.04	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	-	-	< 0.5	< 0.2	< 0.01	-	< 0.01	< 0.01	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02
SS4	SS4	2005 11 08	0.0 - 0.1	-	< 0.01	< 0.01	< 0.04	-	< 0.01	< 0.01	< 0.02	< 0.01	< 0.04	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.3	< 0.01	< 0.01	< 0.01	-	< 0.5	< 0.5	< 0.2	< 0.01	-	< 0.01	< 0.01	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02
BH13-04	BH13-04-1-AD05	2013 09 22	0.3 - 0.6	< 0.4	< 0.28	< 0.1	< 0.6	< 0.2	< 0.05	< 0.28	< 0.2	< 0.1	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.58	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.16	< 0.018[a]	< 0.4	< 0.12
	BH13-04-2-AD05	2013 09 22	0.8 - 1.1	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH13-04-21-AD05	2013 09 22	21.8 - 22.1	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH13-04-22-AD05	2013 09 22	22.6 - 22.9	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH13-04-30-AD05	2013 09 23	31.5 - 31.8	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
BH13-05	BH13-05-02-AD05	2013 09 23	1.1 - 1.4	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.074	< 0.2	< 0.1	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH13-05-A	Duplicate	1.1 - 1.4	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.168	< 0.2	< 0.1	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	QA/QC RPD%			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*	*	*	*	*	*
	BH13-05-27-AD05	2013 09 24	21.9 - 22.2	< 0.4	< 0.22	< 0.1	< 0.6	< 0.2	< 0.05	< 0.24	< 0.2	< 0.1	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH13-05-28-AD05	2013 09 24	22.6 - 22.9	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.2	< 0.2	< 0.1	< 0.2	< 0.1	< 0.076	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH13-05-29-AD05	2013 09 24	23.0 - 23.3	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH13-05-30-AD05	2013 09 24	23.7 - 24.0	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH13-05-31-AD05	2013 09 24	24.9 - 25.2	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
BH13-07	BH13-07-01-AD05	2013 09 25	0.3 - 0.6	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.94	< 0.2	< 0.1	< 0.2	< 0.1	< 0.13	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH13-07-02-AD05	2013 09 25	1.3 - 1.6	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH13-07-21-AD05	2013 09 26	17.6 - 17.9	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH13-07-22-AD05	2013 09 26	18.7 - 19.0	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.4	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
BH14-15	BH14-15-01-AD05	2014 02 28	0.3 - 0.3	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	-	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	-	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	-	-	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH14-15-02-AD05	2014 02 28	0.9 - 0.9	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	-	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	-	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	-	-	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH14-15-03-AD05	2014 02 28	1.5 - 1.5	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	-	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	-	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	-	-	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH14-15-15-AD05	2014 03 01	12.8 - 12.8	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	-	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	-	-	-	-	< 0.4	< 0.05	< 0.114	< 0.05	-	-	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
BH14-19	BH14-19-41-AD05	2014 03 05	32.8 - 32.8	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	-	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	-	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	-	-	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH14-19-41A-AD05	Duplicate	32.8 - 32.8	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	-	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	-	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	-	-	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	QA/QC RPD%			*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	-	*	*	*	*	*	*	*	*	*	-	-	-	-	*	*	*	*	-	-	*	*	*	*	*
BH14-23	BH14-23-01-AD05	2014 03 04	0.6 - 0.6	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	-	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.23	< 0.05	< 0.1	< 0.1	-	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	-	-	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH14-23-15-AD05	2014 03 04	16.3 - 16.3	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	-	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	-	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	-	-	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH14-23-16-AD05	2014 03 04	17.5 - 17.5	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	-	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	-	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	-	-	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
	BH14-23-17-AD05	2014 03 04	19.7 - 19.7	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	-	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	-	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	-	-	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
BH14-24	BH14-24-18-AD05	2014 03 05	24.7 - 24.7	< 0.4	< 0.1	< 0.1	< 0.6	< 0.2	< 0.05	< 0.05	< 0.2	< 0.1	< 0.2	< 0.1	-	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	-	-	-	-	< 0.4	< 0.05	< 0.05	< 0.05	-	-	< 0.05	< 0.05	< 0.018[a]	< 0.4	< 0.12
Federal Guideline																																											
CCME CEQG Residential Land Use (RL)				n/a	n/a	n/a	n/a	n/a	5	1	n/a	5	n/a	n/a	n/a	1	1	1	n/a	5	5	5	n/a	n/a	5	5	5	5	n/a	n/a	n/a	n/a	n/a	n/a	5	0.2	2	2	5	5	0.01	n/a	n/a
BC Standard																																											
CSR Residential Land Use (RL) (sample depth < 3.0m)[b]				28	8.2	620	3.9	0.58	5	1	30	5	47	11	0.32	1	1	1	94	5	5	5	5	5	5	5	5	5	62	n/a	22,000	5,300	67	32	4.1	5	2	n/a	5	5	0.015	390	0.79
CSR Commercial Land Use (CL) (sample depth > 3.0m)[b]				92	18	2,200	13	1.2	50	10	65	50	160	26	0.73	10	10	10	310	50	50	50	50	50	50	50	50	50	220	n/a	110,000	47,000	230	73	9.3	5	10	n/a	50	50	0.015	2,000	7.5

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

TABLE 6: Summary of Analytical Results for PCBs in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	PCBs			
				Arochlor 1242 µg/g	Arochlor 1248 µg/g	Arochlor 1254 µg/g	Arochlor 1260 µg/g
SS4	SS4	2005 11 08	0.0 - 0.1	< 0.03	< 0.03	< 0.03	< 0.03
Federal Guideline							
CCME CEQG Residential Land Use (RL)[a]				1.3	1.3	1.3	1.3
BC Standard							
CSR Residential Land Use (RL) (sample depth < 3.0m)[b]				5	5	5	5
CSR Commercial Land Use (CL) (sample depth > 3.0m)[b]				15	15	15	15

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] Guideline is for Total PCBs. It has been conservatively applied to individual arochlor mixtures.

[b] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

TABLE 7: Summary of Analytical Results for Glycols in Soil

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Glycols				
				Propylene glycol µg/g	Ethylene glycol µg/g	Diethylene glycol µg/g	Triethylene glycol µg/g	Tetraethylene glycol µg/g
SS4	SS4	2005 11 08	0.0 - 0.1	< 10	< 10	< 10	< 20	-
BH13-04	BH13-04-1-AD05	2013 09 22	0.3 - 0.6	-	< 20	< 20	< 20	< 20
	BH13-04-2-AD05	2013 09 22	0.8 - 1.1	-	< 20	< 20	< 20	< 20
	BH13-04-21-AD05	2013 09 22	21.8 - 22.1	-	< 20	< 20	< 20	< 20
	BH13-04-22-AD05	2013 09 22	22.6 - 22.9	-	< 20	< 20	< 20	< 20
	BH13-04-30-AD05	2013 09 23	31.5 - 31.8	-	< 20	< 20	< 20	< 20
BH13-05	BH13-05-02-AD05	2013 09 23	1.1 - 1.4	-	< 20	< 20	< 20	< 20
	BH13-05-A	Duplicate	1.1 - 1.4	-	< 20	< 20	< 20	< 20
	QA/QC RPD%			-	*	*	*	*
	BH13-05-27-AD05	2013 09 24	21.9 - 22.2	< 20	< 20	< 20	< 20	< 20
	BH13-05-28-AD05	2013 09 24	22.6 - 22.9	< 20	< 20	< 20	< 20	< 20
	BH13-05-29-AD05	2013 09 24	23.0 - 23.3	< 20	< 20	< 20	< 20	< 20
	BH13-05-30-AD05	2013 09 24	23.7 - 24.0	< 20	< 20	< 20	< 20	< 20
	BH13-05-31-AD05	2013 09 24	24.9 - 25.2	< 20	< 20	< 20	< 20	< 20
BH13-07	BH13-07-01-AD05	2013 09 25	0.3 - 0.6	< 20	< 20	< 20	< 20	< 20
	BH13-07-02-AD05	2013 09 25	1.3 - 1.6	< 20	< 20	< 20	< 20	< 20
	BH13-07-21-AD05	2013 09 26	17.6 - 17.9	< 20	< 20	< 20	< 20	< 20
	BH13-07-22-AD05	2013 09 26	18.7 - 19.0	-	< 20	< 20	< 20	< 20
BH14-09	BH14-09-41-AD05	2014 02 17	31.2 - 31.2	< 20	< 20	< 20	< 20	< 20
BH14-10	BH14-10-42-AD05	2014 02 20	31.9 - 31.9	< 20	< 20	< 20	< 20	< 20
	BH14-10-44-AD05	2014 02 20	33.1 - 33.1	< 20	< 20	< 20	< 20	< 20
BH14-11	BH14-11-02-AD05	2014 02 21	1.4 - 1.4	< 20	< 20	< 20	< 20	< 20
	BH14-11-02A-AD05	Duplicate	1.4 - 1.4	< 20	< 20	< 20	< 20	< 20
	QA/QC RPD%			*	*	*	*	*
BH14-13	BH14-13-30-AD05	2014 02 28	22.1 - 22.1	< 20	< 20	< 20	< 20	< 20
	BH14-13-30A-AD05	Duplicate	22.1 - 22.1	< 20	< 20	< 20	< 20	< 20
	QA/QC RPD%			*	*	*	*	*
BH14-14	BH14-14-19-AD05	2014 02 28	11.4 - 11.4	< 20	< 20	< 20	< 20	< 20
BH14-15	BH14-15-01-AD05	2014 02 28	0.3 - 0.3	< 20	< 20	< 20	< 20	< 20
	BH14-15-02-AD05	2014 02 28	0.9 - 0.9	< 20	< 20	< 20	< 20	< 20
	BH14-15-03-AD05	2014 02 28	1.5 - 1.5	< 20	< 20	< 20	< 20	< 20
	BH14-15-15-AD05	2014 03 01	12.8 - 12.8	< 20	< 20	< 20	< 20	< 20
BH14-19	BH14-19-41-AD05	2014 03 05	32.8 - 32.8	< 20	< 20	< 20	< 20	< 20
	BH14-19-41A-AD05	Duplicate	32.8 - 32.8	< 20	< 20	< 20	< 20	< 20
	QA/QC RPD%			*	*	*	*	*
BH14-20	BH14-20-21-AD05	2014 03 03	22.0 - 22.0	< 20	< 20	< 20	< 20	< 20
BH14-23	BH14-23-01-AD05	2014 03 04	0.6 - 0.6	< 20	< 20	< 20	< 20	< 20
	BH14-23-15-AD05	2014 03 04	16.3 - 16.3	< 20	< 20	< 20	< 20	< 20
	BH14-23-16-AD05	2014 03 04	17.5 - 17.5	< 20	< 20	< 20	< 20	< 20
	BH14-23-17-AD05	2014 03 04	19.7 - 19.7	< 20	< 20	< 20	< 20	< 20
	BH14-23-23-AD05	2014 03 04	27.0 - 27.0	< 20	< 20	< 20	< 20	< 20
	BH14-23-23A-AD05	Duplicate	27.0 - 27.0	< 20	< 20	< 20	< 20	< 20
	QA/QC RPD%			*	*	*	*	*
BH14-24	BH14-24-12-AD05	2014 03 05	20.1 - 20.1	< 20	< 20	< 20	< 20	< 20
	BH14-24-18-AD05	2014 03 05	24.7 - 24.7	< 20	< 20	< 20	< 20	< 20
Federal Guideline								
CCME CEQG Residential Land Use (RL)				n/a	960	n/a	n/a	n/a
BC Standard								
CSR Residential Land Use (RL) (sample depth < 3.0m) [a]				30,000	1,500	n/a	n/a	n/a
CSR Commercial Land Use (CL) (sample depth > 3.0m) [a]				100,000	1,500	n/a	n/a	n/a

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

BOLD Concentration greater than CCME CEQG Residential Land Use (RL) Guideline

SHADOW Concentration greater than CSR Residential Land Use (RL) Standard (Commercial Land Use [CL] below 3.0 m).

[a] The site-specific factors used for determining the matrix standards for this site include: intake of contaminated soil, groundwater used for drinking water, toxicity to soil invertebrates and plants, and groundwater flow to surface water used by freshwater aquatic life (whichever is most stringent).

TABLE 8: Summary of Analytical Results for Hydrocarbons in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Monocyclic Aromatic Hydrocarbons					Gross Parameters					Petroleum Hydrocarbon Fractions				MTBE
			Benzene µg/L	Ethylbenzene µg/L	Toluene µg/L	Xylenes µg/L	Styrene µg/L	VH (C6-C10) µg/L	VPH (C6-C10) µg/L	EPH (C10-C19) µg/L	LEPH (C10-C19)[d] µg/L	EPH (C19-C32) µg/L	F1 (C6-C10) µg/L	F2 (>C10-C16) µg/L	F3 (>C16-C34) µg/L	F4 (>C34-C50) µg/L	MTBE µg/L
BH113M	BH113M (2006)	2006 08 20	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	-
	BH113M (2007)	2007 08 22	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.5
	GR71	Duplicate	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.5
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	*
	BH113M (2008)	2008 10 06	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.5
	GR81	Duplicate	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.5
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	*
	BH113M (2009)	2009 10 19	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	-
	BH113M (2010)	2010 09 08	< 0.500	< 0.500	< 1	< 0.710	< 0.500	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.500
BH118M	BH118M (2009)	2009 10 19	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	350	-	-	-	-	-
	GR82	Duplicate	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	380	-	-	-	-	-
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	-
	BH118M (2010)	2010 09 08	< 0.500	< 0.500	< 1	< 0.710	< 0.500	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.500
	GR1	Duplicate	< 0.500	< 0.500	< 1	< 0.710	< 0.500	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.500
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	*
	BH118M (2011)	2011 09 16	< 0.5	< 0.5	< 0.5	< 0.75	< 0.5	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.5
BH119M	BH119M (2009)	2009 10 19	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	-
	BH119M (2010)	2010 09 08	< 0.500	< 0.500	< 1	< 0.710	< 0.500	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.500
BH120M	BH120M (2009)	2009 10 19	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	-
	BH120M (2010)	2010 09 08	< 0.500	< 0.500	< 1	< 0.710	< 0.500	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.500
BH12-02	MW12-02-AD05	2012 10 24	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 100	< 100	< 100	< 100	< 100	-	-	-	-	< 1
	MW12-A-AD05	Duplicate	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 100	< 100	< 100	< 100	< 100	-	-	-	-	< 1
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	*
	MW12-02-AD05	2013 03 14	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 100	< 100	< 100	< 100	< 100	-	-	-	-	< 1
	MW12-A-AD05	Duplicate	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 100	< 100	< 100	< 100	< 100	-	-	-	-	< 1
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	*
	MW12-02-AD05	2013 07 26	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
BH13-03	MW13-03-AD05	2013 03 14	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-
	MW13-03-AD05	2013 07 26	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	MW13-C-AD05	Duplicate	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	-
	MW13-C-AD05	2013 07 26	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	zMW13-03-AD05	2013 10 01	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
BH13-04	zMW13-04-AD05	2013 10 02	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH13-04	2013 10 29	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH13-04-GW2-AD05	2014 08 18	-	-	-	-	-	-	-	< 400	< 400	< 400	-	-	-	-	-
	MW13-04-141030	2014 10 30	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
	BH13-04-6W03-AD05	2015 10 01	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 300	< 300	< 200	< 200	< 200	-	-	-	-	< 4.0
BH13-05	BH13-05	2013 10 29	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	590	**590**	< 400	-	-	-	-	< 8
	DUP 1	Duplicate	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	690	**680**	< 400	-	-	-	-	< 8
	QA/QC RPD%		*	*	*	*	*	*	*	16	14	*	-	-	-	-	*
	BH13-05-GW2-AD05	2014 08 15	-	-	-	-	-	-	-	200	< 400	< 400	-	-	-	-	-
	BH14-B-GW2-AD05	Duplicate	-	-	-	-	-	-	-	200	< 400	< 400	-	-	-	-	-
	QA/QC RPD%		-	-	-	-	-	-	-	*	*	*	-	-	-	-	-
	MW13-05-141030	2014 10 30	-	-	-	-	-	-	-	360	360	< 200	-	-	-	-	-
	BH13-05-GW03-AD05	2015 09 28	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 300	< 300	910	**910**	< 200	-	-	-	-	< 4.0
	DUP 1	Duplicate	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 300	< 300	890	**890**	< 200	-	-	-	-	< 4.0
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	*
BH13-06	BH13-06	2013 10 29	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	**8,200**	**8,200**	560	-	-	-	-	< 8
	BH13-06-GW2-AD05	2014 08 13	-	-	-	-	-	-	-	340	340	< 400	-	-	-	-	-
	MW13-06-141031	2014 10 31	-	-	-	-	-	-	-	460	460	< 200	-	-	-	-	-
	BH13-06-GW03-AD05	2015 09 28	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 300	< 300	340	340	< 200	-	-	-	-	< 4.0
BH13-07	zMW13-07-AD05	2013 10 01	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH13-07	2013 10 29	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	200	-	-	-	-	< 8
BH13-08	BH13-08	2013 12 09	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	< 400	< 400	270	-	-	-	-	< 8
	BH13-08-100	Duplicate	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	*
	BH13-08-GW01-AD05	2014 03 11	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH13-08-GW2-AD05	2014 08 17	-	-	-	-	-	-	-	< 400	< 400	< 400	-	-	-	-	-
	MW13-08-141101	2014 11 01	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
BH14-09	BH14-09-GW01-AD05	2014 03 12	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH14-09-GW2-AD05	2014 08 18	-	-	-	-	-	-	-	< 400	< 400	< 400	-	-	-	-	-
	MW14-09-141101	2014 11 01	-	-	-	-	-	-	-	< 200	< 200	230	-	-	-	-	-
	BH14-09-6W03-AD05	2015 10 01	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 300	< 300	< 200	< 200	290	-	-	-	-	< 4.0
BH14-10	BH14-10-GW01-AD05	2014 03 11	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	3,400	**3,400**	270	-	-	-	-	< 8
	BH14-10-GW2-AD05	2014 08 13	-	-	-	-	-	-	-	250	250	< 400	-	-	-	-	-
	MW14-10-141030	2014 10 30	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
	BH14-10-GW03-AD05	2015 09 28	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 300	< 300	920	**920**	< 200	-	-	-	-	< 4.0
	PUMPTEST	2014 08 14	-	-	-	-	-	-	-	280	280	< 200	-	-	-	-	-
BH14-11	BH14-11-GW01-AD05	2014 03 10	< 0.8	< 0.8	< 0.8	< 0.8	< 1	740	740	**56,000**	**56,000**	6,600	-	-	-	-	< 8
	BH14-11-GW2-AD05	2014 08 14	-	-	-	-	-	-	-	220	220	< 400	-	-	-	-	-
	MW14-11-141031	2014 10 31	-	-	-	-	-	-	-	1,400	**1,300**	210	-	-	-	-	-
	BH14-11-GW03-AD05	2015 09 28	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 300	< 300	4,400	**4,400**	650	-	-	-	-	< 4.0
BH14-12	BH14-12-GW01-AD05	2014 03 09	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH14-12-GW2-AD05	2014 08 17	-	-	-	-	-	-	-	< 400	< 400	< 400	-	-	-	-	-
	MW14-12-141101	2014 11 01	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
BH14-13	BH14-13-GW01-AD05	2014 03 10	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH14-13-GW2-AD05	2014 08 18	-	-	-	-	-	-	-	< 400	< 400	< 400	-	-	-	-	-
	MW14-13-141101	2014 11 01	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
BH14-14	BH14-14-GW01-AD05	2014 03 09	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH14-14-GW2-AD05	2014 08 19	-	-	-	-	-	-	-	< 400	< 400	< 400	-	-	-	-	-
	MW14-14-141031	2014 10 31	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
BH14-15	BH14-15-GW01-AD05	2014 03 10	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH14-15A-GW01-AD05	Duplicate	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	*
	BH14-15-GW2-AD05	2014 08 14	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	260	260	< 400	-	-	-	-	< 8
	BH14-A-GW2-AD05	Duplicate	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	290	290	< 400	-	-	-	-	< 8
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	*
	MW14-15-141030	2014 10 30	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
	MW14-A-141030	Duplicate	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
	QA/QC RPD%		-	-	-	-	-	-	-	*	*	*	-	-	-	-	-
BH14-16	BH14-16-GW01-AD05	2014 03 09	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH14-16-GW2-AD05	2014 08 19	-	-	-	-	-	-	-	< 400	< 400	< 400	-	-	-	-	-
	MW14-16-141101	2014 11 01	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
BH14-18	BH14-18-GW01-AD05	2014 03 13	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	830	**830**	< 400	-	-	-	-	< 8
	BH14-18-GW2-AD05	2014 08 17	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	280	280	< 400	-	-	-	-	< 8
	MW14-18-141030	2014 10 30	-	-	-	-	-	-	-	720	**720**	< 200	-	-	-	-	-
	BH14-18-GW03-AD05	2015 09 28	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 300	< 300	1,500	**1,500**	360	-	-	-	-	< 4.0
Federal Guideline																	
Canadian Drinking Water Quality Guidelines (CDWQG			5	1.6	24	20	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	15
FGQG Tier 2 Residential Land Use (RL)[a]			140	16,000	83	3,900	72	n/a	n/a	n/a	n/a	n/a	810	1,300	n/a	n/a	340
BC Standard																	
CSR Drinking Water (DW)			5	2.4	24	300	n/a	15,000[c]	n/a	5,000[c]	n/a	n/a	n/a	n/a	n/a	n/a	15
CSR Aquatic Life (AW)[b]			4,000	2,000	390	n/a	720	15,000[c]	1,500	5,000[c]	500	n/a	n/a	n/a	n/a	n/a	34,000

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).

[b] Standard to protect freshwater aquatic life.

[c] Applicable at all sites irrespective of water use.

[d] Where available, values corrected for the presence of individual PAH are shown. Otherwise, uncorrected values are shown.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline

BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline

OUTLINE Concentration greater than CSR Drinking Water (DW) standard

SHADOW Concentration greater than CSR Aquatic Life (AW) standard

YELLOW VPH or LEPH concentration greater than FGQG RL F1 or F2 guideline (potential FGQG exceedance), only applied where no F1 or F2 concentration is available.

TABLE 8 (Cont'd): Summary of Analytical Results for Hydrocarbons in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Monocyclic Aromatic Hydrocarbons					Gross Parameters					Petroleum Hydrocarbon Fractions				MTBE
			Benzene µg/L	Ethylbenzene µg/L	Toluene µg/L	Xylenes µg/L	Styrene µg/L	VH (C6-C10) µg/L	VPH (C6-C10) µg/L	EPH (C10-C19) µg/L	LEPH (C10-C19)[d] µg/L	EPH (C19-C32) µg/L	F1 (C6-C10) µg/L	F2 (>C10-C16) µg/L	F3 (>C16-C34) µg/L	F4 (>C34-C50) µg/L	MTBE µg/L
BH14-19	BH14-19-GW01-AD05	2014 03 10	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	MW14-19-141101	2014 11 01	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
BH14-20	BH14-20-GW01-AD05	2014 03 10	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	370	370	< 400	-	-	-	-	< 8
	BH14-20-GW2-AD05	2014 08 14	< 0.8	< 0.8	< 0.8	< 0.8	-	< 600	< 600	300	300	< 400	-	-	-	-	-
	MW14-20-141101	2014 11 01	-	-	-	-	-	-	-	520	**520**	< 200	-	-	-	-	-
	BH14-20-6W03-AD05	2015 10 01	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 300	< 300	520	**520**	< 200	-	-	-	-	< 4.0
BH14-22	BH14-22-GW01-AD05	2014 03 11	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH14-22A-GW01-AD05	Duplicate	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	*
	BH14-22-GW2-AD05	2014 08 15	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	MW14-22-141031	2014 10 31	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
BH14-23	BH14-23-GW01-AD05	2014 03 11	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH14-23-GW2-AD05	2014 08 15	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	MW14-23-141030	2014 10 30	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
	MW14-B-141030	Duplicate	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
	QA/QC RPD%		-	-	-	-	-	-	-	*	*	*	-	-	-	-	-
BH14-24	BH14-24-GW01-AD05	2014 03 11	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH14-24-GW2-AD05	2014 08 16	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH14-C-GW2-AD05	Duplicate	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	-	-	-	-	-	-	-	< 8
	QA/QC RPD%		*	*	*	*	*	*	*	-	-	-	-	-	-	-	*
	MW14-24-141031	2014 10 31	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
	MW14-C-141031	Duplicate	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
	QA/QC RPD%		-	-	-	-	-	-	-	*	*	*	-	-	-	-	-
BH14-25	BH14-25-GW01-AD05	2014 03 11	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH14-25-GW2-AD05	2014 08 16	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
BH14-26	BH14-26-GW01-AD05	2014 03 13	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH14-26-GW2-AD05	2014 08 17	-	-	-	-	-	-	-	< 400	< 400	< 400	-	-	-	-	-
	MW14-26-141102	2014 11 02	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
	BH14-26-6W03-AD05	2015 10 01	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 300	< 300	< 200	< 200	< 200	-	-	-	-	< 4.0
BH14-27	BH14-27-GW01-AD05	2014 03 12	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH14-27-GW2-AD05	2014 08 15	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	MW14-27-141101	2014 11 01	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
BH14-28	BH14-28-GW01-AD05	2014 03 12	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	BH14-28-GW2-AD05	2014 08 16	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
	MW14-28-141101	2014 11 01	-	-	-	-	-	-	-	< 200	< 200	< 200	-	-	-	-	-
MW16-12D	MW16-12-160315	2016 03 15	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 300	< 300	200	200	< 200	< 300	250	< 200	< 200	< 4.0
	MW16-A-160315	Duplicate	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 300	< 300	200	200	< 200	< 300	260	< 200	< 200	< 4.0
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tap	Tap (2006)	2006 08 20	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	-
	Tap (2007)	2007 08 22	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.5
	GR70	Duplicate	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.5
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	*
	Tap (2008)	2008 10 06	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.5
	2458-0812-TW1	2012 08 08	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 100	< 100	-	< 100	-	-	-	-	-	< 1
Tap FS	Tap FS	2011 09 16	< 0.5	< 0.5	< 0.5	< 0.75	< 0.5	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.5
Tap4	TAP 4-AD05	2013 07 26	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
Well	Well (2004)	2004 12 08	-	-	-	-	-	-	-	< 250	< 250	< 250	-	-	-	-	-
	Well (2005)	2005 11 06	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	-
	GR23	Duplicate	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	-
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	-
	Well (2006)	2006 08 20	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	-
	GR60	Duplicate	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	-
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	-
	Well (2008)	2008 10 06	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.5
	Well (2009)	2009 10 19	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	-
	GR83	Duplicate	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 100	< 100	< 250	< 250	< 250	-	-	-	-	-
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	-
	WELL (2010)	2010 09 08	< 0.500	< 0.500	< 1	2.71	< 0.500	< 100	< 100	320	320	< 250	-	-	-	-	< 0.500
	Well (2011)	2011 09 16	< 0.5	< 0.5	< 0.5	< 0.75	< 0.5	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.5
	GR85	Duplicate	< 0.5	< 0.5	< 0.5	< 0.75	< 0.5	< 100	< 100	< 250	< 250	< 250	-	-	-	-	< 0.5
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	-	-	-	*
	2458-0812-DW1	2012 08 08	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 100	< 100	-	< 100	-	-	-	-	-	< 1
	2458-0812-DW101	Duplicate	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 100	< 100	-	< 100	-	-	-	-	-	< 1
	QA/QC RPD%		*	*	*	*	*	*	*	-	*	-	-	-	-	-	*
	WELL-AD05	2013 07 26	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 600	< 600	< 400	< 400	< 400	-	-	-	-	< 8
Federal Guideline																	
Canadian Drinking Water Quality Guidelines (CDWQG			5	1.6	24	20	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	15
FGQG Tier 2 Residential Land Use (RL)[a]			140	16,000	83	3,900	72	n/a	n/a	n/a	n/a	n/a	810	1,300	n/a	n/a	340
BC Standard																	
CSR Drinking Water (DW)			5	2.4	24	300	n/a	15,000[c]	n/a	5,000[c]	n/a	n/a	n/a	n/a	n/a	n/a	15
CSR Aquatic Life (AW)[b]			4,000	2,000	390	n/a	720	15,000[c]	1,500	5,000[c]	500	n/a	n/a	n/a	n/a	n/a	34,000

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).

[b] Standard to protect freshwater aquatic life.

[c] Applicable at all sites irrespective of water use.

[d] Where available, values corrected for the presence of individual PAH are shown. Otherwise, uncorrected values are shown.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline

BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline

OUTLINE Concentration greater than CSR Drinking Water (DW) standard

SHADOW Concentration greater than CSR Aquatic Life (AW) standard

YELLOW VPH or LEPH concentration greater than FGQG RL F1 or F2 guideline (potential FGQG exceedance), only applied where no F1 or F2 concentration is available.

TABLE 9: Summary of Analytical Results for PAHs in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Polycyclic Aromatic Hydrocarbons																			
			Naphthalene µg/L	2-Methylnaphthalene µg/L	Acenaphthylene µg/L	Acenaphthene µg/L	Fluorene µg/L	Phenanthrene µg/L	Anthracene µg/L	Acridine µg/L	Fluoranthene µg/L	Pyrene µg/L	Benzo(a) anthracene µg/L	Chrysene µg/L	Benzo(b) fluoranthene µg/L	Benzo(b+j) fluoranthene µg/L	Benzo(k) fluoranthene µg/L	Benzo(a) pyrene µg/L	Indeno(1,2,3-cd) pyrene µg/L	Dibenz(a,h) anthracene µg/L	Benzo(g,h,i) perylene µg/L	Quinoline µg/L
BH113M	BH113M (2006)	2006 08 20	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	BH113M (2007)	2007 08 22	< 0.3	-	< 0.1	-	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	-	-	-	< 0.01	-	-	-	< 0.5
	GR71	Duplicate	< 0.3	-	< 0.1	-	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	-	-	-	< 0.01	-	-	-	< 0.5
	QA/QC RPD%		*	-	*	-	*	*	*	*	*	*	*	*	-	-	-	*	-	-	-	*
	BH113M (2008)	2008 10 06	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	GR81	Duplicate	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	QA/QC RPD%		*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*
	BH113M (2009)	2009 10 19	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	BH113M (2010)	2010 09 08	< 0.0500	-	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500[a]	< 0.0500	< 0.0500[a]	< 0.0500[a]	< 0.0500[a]	< 0.0500	< 0.0500	-	< 0.0500	< 0.0100	< 0.0500	< 0.0500	< 0.0500	< 0.0500
BH118M	BH118M (2009)	2009 10 19	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	GR82	Duplicate	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	QA/QC RPD%		*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*
	BH118M (2010)	2010 09 08	< 0.0500	-	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0100	< 0.0500	< 0.0400	< 0.0200	< 0.0100	< 0.0500	< 0.0500	-	< 0.0500	< 0.0100	< 0.0500	< 0.0500	< 0.0500	< 0.0500
	GR1	Duplicate	< 0.0500	-	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0100	< 0.0500	< 0.0400	< 0.0200	< 0.0100	< 0.0500	< 0.0500	-	< 0.0500	< 0.0100	< 0.0500	< 0.0500	< 0.0500	< 0.0500
	QA/QC RPD%		*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*
	BH118M (2011)	2011 09 16	< 0.02	-	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
BH119M	BH119M (2009)	2009 10 19	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	BH119M (2010)	2010 09 08	< 0.0500	-	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0110	< 0.0500	< 0.0400	< 0.0200	< 0.0100	< 0.0500	< 0.0500	-	< 0.0500	< 0.0100	< 0.0500	< 0.0500	< 0.0500	< 0.0500
BH120M	BH120M (2009)	2009 10 19	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	BH120M (2010)	2010 09 08	< 0.0500	-	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0100	< 0.0500	< 0.0400	< 0.0200	< 0.0100	< 0.0500	< 0.0500	-	< 0.0500	< 0.0100	< 0.0500	< 0.0500	< 0.0500	< 0.0500
BH12-02	MW12-02-AD05	2012 10 24	< 0.05	-	< 0.05	< 0.05	< 0.05	0.1	< 0.05[a]	< 0.05	< 0.05[a]	< 0.02	< 0.05[a]	< 0.05	< 0.05	-	< 0.05	< 0.01	< 0.05	< 0.05	< 0.05	< 0.1
	MW12-A-AD05	Duplicate	< 0.05	-	< 0.05	< 0.05	< 0.05	0.09	< 0.05[a]	< 0.05	< 0.05[a]	< 0.02	< 0.05[a]	< 0.05	< 0.05	-	< 0.05	< 0.01	< 0.05	< 0.05	< 0.05	< 0.1
	QA/QC RPD%		*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*
	MW12-02-AD05	2013 03 14	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05[a]	< 0.05	< 0.05[a]	< 0.02	< 0.05[a]	< 0.05	< 0.05	-	< 0.05	< 0.01	< 0.05	< 0.05	< 0.05	< 0.1
	MW12-A-AD05	2013 03 14	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05[a]	< 0.05	< 0.05[a]	< 0.02	< 0.05[a]	< 0.05	< 0.05	-	< 0.05	< 0.01	< 0.05	< 0.05	< 0.05	< 0.1
	MW12-02-AD05	2013 07 26	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
BH13-03	MW13-03-AD05	2013 03 14	< 0.01	-	-	< 0.01	< 0.01	0.02	< 0.01	< 0.1[a]	< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	< 0.01	-	-	-	< 0.1
	MW13-03-AD05	2013 07 26	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
	MW13-C-AD05	Duplicate	< 0.01	-	-	< 0.01	< 0.01	0.02	< 0.01	< 0.1[a]	< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	< 0.01	-	-	-	< 0.1
	QA/QC RPD%		*	-	-	*	*	*	*	*	*	*	*	*	-	-	-	*	-	-	-	*
	MW13-C-AD05	2013 07 26	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
	zMW13-03-AD05	2013 10 01	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
BH13-04	zMW13-04-AD05	2013 10 02	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
	BH13-04	2013 10 29	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
	BH13-04-GW2-AD05	2014 08 18	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW13-04-141030	2014 10 30	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
	BH13-04-6W03-AD05	2015 10 01	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.010	< 0.050	< 0.020	< 0.020	< 0.010	< 0.050	-	< 0.050	< 0.050	< 0.0090	< 0.050	< 0.050	< 0.050	< 0.24
BH13-05	BH13-05	2013 10 29	< 1.4[a]	1.9	< 0.12	0.94	2.3	***2***	< 0.14[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
	DUP 1	Duplicate	< 1.6[a]	2.2	< 0.16	1.1	2.6	***2.3***	< 0.12[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
	QA/QC RPD%		*	15	*	16	12	14	*	*	*	*	*	*	-	*	*	*	*	*	*	*
	BH13-05-GW2-AD05	2014 08 15	0.19	< 0.2	< 0.1	0.12	0.65	***0.65***	< 0.088[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH14-B-GW2-AD05	Duplicate	< 0.48	< 0.2	< 0.44	< 0.2	0.55	***0.65***	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	QA/QC RPD%		*	*	*	*	17	0	*	*	*	*	*	*	-	*	*	*	*	*	*	*
	MW13-05-141030	2014 10 30	< 0.3	< 0.1	< 0.3	0.18	0.83	***1.1***	< 0.06[a]	< 0.05	< 0.02	< 0.02	0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 4[a]
	BH13-05-GW03-AD05	2015 09 28	< 0.16	< 0.10	< 0.21	< 0.079	< 0.24	***0.43***	< 0.054[a]	< 0.050	< 0.020	< 0.020	< 0.010	< 0.050	-	< 0.050	< 0.050	< 0.0090	< 0.050	< 0.050	< 0.050	< 0.70
	DUP 1	Duplicate	< 0.14	< 0.10	< 0.050	< 0.050	< 0.23	***0.43***	< 0.060[a]	< 0.050	< 0.020	< 0.020	< 0.010	< 0.050	-	< 0.050	< 0.050	< 0.0090	< 0.050	< 0.050	< 0.050	< 0.47
	QA/QC RPD%		*	*	*	*	*	0	*	*	*	*	*	*	-	*	*	*	*	*	*	*
BH13-06	BH13-06	2013 10 29	< 4.6[a]	< 2	< 0.86	4.8	< 19[a]	***14***	< 1.6[a]	***0.63***	***0.13***	***0.25***	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
	BH13-06-GW2-AD05	2014 08 13	< 1.2[a]	< 0.2	< 0.56	< 0.1	< 3	***1.6***	< 0.16[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW13-06-141031	2014 10 31	< 0.4	< 0.1	< 0.2	0.46	0.92	***1***	< 0.05[a]	< 0.05	< 0.02	< 0.02	0.011	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 4.5[a]
	BH13-06-GW03-AD05	2015 09 28	< 0.36	< 0.10	< 0.16	< 0.67	< 1.1	***0.77***	< 0.043[a]	< 0.050	< 0.020	< 0.020	< 0.010	< 0.050	-	< 0.050	< 0.050	< 0.0090	< 0.050	< 0.050	< 0.050	< 0.81
Federal Guideline																						
Canadian Drinking Water Quality Guidelines (CDWQ(			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.01	n/a	n/a	n/a	n/a
FGQG Tier 2 Residential/Parkland Land Use (RL/PL)[b]			1.1	180	46	5.8	3	0.4	0.012	0.05	0.04	0.025	0.018	1.4	n/a	0.48	0.48	0.015	0.21	0.26	0.17	3.4
BC Standard																						
CSR Drinking Water (DW)			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.01	n/a	n/a	n/a	n/a
CSR Aquatic Life (AW)[c]			10	n/a	n/a	60	120	3	1	0.5	2	0.2	1	1	n/a	n/a	n/a	0.1	n/a	n/a	n/a	34

All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).
[c] Standard to protect freshwater aquatic life.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline
BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline
OUTLINE Concentration greater than CSR Drinking Water (DW) standard
SHADOW Concentration greater than CSR Aquatic Life (AW) standard

TABLE 9 (Cont'd): Summary of Analytical Results for PAHs in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Polycyclic Aromatic Hydrocarbons																			
			Naphthalene µg/L	2-Methylnaphthalene µg/L	Acenaphthylene µg/L	Acenaphthene µg/L	Fluorene µg/L	Phenanthrene µg/L	Anthracene µg/L	Acridine µg/L	Fluoranthene µg/L	Pyrene µg/L	Benzo(a) anthracene µg/L	Chrysene µg/L	Benzo(b) fluoranthene µg/L	Benzo(b+j) fluoranthene µg/L	Benzo(k) fluoranthene µg/L	Benzo(a) pyrene µg/L	Indeno(1,2,3-cd) pyrene µg/L	Dibenz(a,h) anthracene µg/L	Benzo(g,h,i) perylene µg/L	Quinoline µg/L
BH13-07	zMW13-07-AD05	2013 10 01	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
	BH13-07	2013 10 29	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
BH13-08	BH13-08	2013 12 09	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
	BH13-08-100	Duplicate	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
	BH13-08-GW01-AD05	2014 03 11	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH13-08-GW2-AD05	2014 08 17	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW13-08-141101	2014 11 01	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
BH14-09	BH14-09-GW01-AD05	2014 03 12	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH14-09-GW2-AD05	2014 08 18	< 0.2	< 0.2	< 0.1	< 0.1	< 0.162	0.052	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-09-141101	2014 11 01	< 0.2	< 0.1	< 0.05	< 0.07	< 0.3	0.11	< 0.02[a]	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 2
	BH14-09-6W03-AD05	2015 10 01	< 0.10	< 0.10	< 0.050	< 0.050	< 0.070	< 0.050	< 0.010	< 0.050	< 0.020	< 0.020	< 0.010	< 0.050	-	< 0.050	< 0.050	< 0.0090	< 0.050	< 0.050	< 0.050	< 0.24
BH14-10	BH14-10-GW01-AD05	2014 03 11	< 0.8	< 0.6	< 0.3	2.1	***4***	***5.3***	< 0.28[a]	***0.32***	***0.042***	***0.14***	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 10[a]
	BH14-10-GW2-AD05	2014 08 13	< 0.9	< 0.2	< 0.4	< 1.18	< 2.6	***1.1***	< 0.14[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-10-141030	2014 10 30	< 0.2	< 0.1	< 0.06	< 0.2	0.42	0.3	< 0.02[a]	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 1.5
	BH14-10-GW03-AD05	2015 09 28	< 0.60	< 0.10	< 0.40	< 0.80	< 1.9	***2.7***	< 0.14[a]	< 0.050	0.033	***0.081***	< 0.010	< 0.050	-	< 0.050	< 0.050	< 0.0090	< 0.050	< 0.050	< 0.050	< 1.6
	PUMPTEST	2014 08 14	< 0.55	< 0.10	< 0.17	< 0.66	1.4	***1.1***	< 0.050[a]	< 0.050	< 0.020	< 0.020	< 0.010	< 0.050	-	< 0.050	< 0.050	< 0.0090	< 0.050	< 0.050	< 0.050	< 0.24
BH14-11	BH14-11-GW01-AD05	2014 03 10	< 1.54[a]	< 2.2	< 1.38	< 11.8[a]	***10***	***14***	< 2.2[a]	< 3.8[a]	***0.26***	***0.53***	0.01	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 13[a]
	BH14-11-GW2-AD05	2014 08 14	0.31	< 0.2	< 0.1	< 1.08	0.94	***0.67***	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-11-141031	2014 10 31	< 0.41	< 0.1	< 0.05	< 0.54	1	***1.1***	< 0.072[a]	< 0.05	0.022	***0.031***	0.012	< 0.05	-	< 0.05	< 0.05	0.01	< 0.05	< 0.05	< 0.05	< 0.24
	BH14-11-GW03-AD05	2015 09 28	< 0.49	< 0.10	< 0.42	< 0.71	< 1.2	***2.1***	< 0.19[a]	< 0.050	0.022	***0.052***	< 0.010	< 0.050	-	< 0.050	< 0.050	< 0.0090	< 0.050	< 0.050	< 0.050	< 1.1
BH14-12	BH14-12-GW01-AD05	2014 03 09	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH14-12-GW2-AD05	2014 08 17	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-12-141101	2014 11 01	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
BH14-13	BH14-13-GW01-AD05	2014 03 10	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH14-13-GW2-AD05	2014 08 18	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-13-141101	2014 11 01	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
BH14-14	BH14-14-GW01-AD05	2014 03 09	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH14-14-GW2-AD05	2014 08 19	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-14-141031	2014 10 31	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
BH14-15	BH14-15-GW01-AD05	2014 03 10	< 0.38	< 0.32	< 0.1	0.18	< 0.86	0.12	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1.4
	BH14-15A-GW01-AD05	Duplicate	0.19	< 0.2	< 0.1	0.2	< 0.86	0.12	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 2.8
	QA/QC RPD%		*	*	*	11	*	0	*	*	*	*	*	*	-	*	*	*	*	*	*	*
	BH14-15-GW2-AD05	2014 08 14	< 1.6[a]	< 0.5	< 0.7	< 0.72	< 1.9	0.35	< 0.06[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH14-A-GW2-AD05	Duplicate	0.46	< 0.2	< 0.1	< 0.36	0.93	0.33	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	QA/QC RPD%		*	*	*	*	*	6	*	*	*	*	*	*	-	*	*	*	*	*	*	*
	MW14-15-141030	2014 10 30	< 0.43	< 0.1	< 0.064	< 0.17	0.79	0.3	< 0.043[a]	< 0.05	***0.049***	0.022	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
	MW14-A-141030	Duplicate	0.48	< 0.1	< 0.056	< 0.19	0.89	0.34	< 0.048[a]	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
	QA/QC RPD%		*	*	*	*	12	13	*	*	*	*	*	*	-	*	*	*	*	*	*	*
BH14-16	BH14-16-GW01-AD05	2014 03 09	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH14-16-GW2-AD05	2014 08 19	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-16-141101	2014 11 01	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
BH14-18	BH14-18-GW01-AD05	2014 03 13	< 0.3	0.62	< 0.4	0.18	< 1.6	***0.49***	< 0.16[a]	***0.064***	< 0.04	0.023	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 9[a]
	BH14-18-GW2-AD05	2014 08 17	0.43	1	0.36	< 0.46	0.76	***0.54***	< 0.094[a]	< 0.1[a]	< 0.04	0.022	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-18-141030	2014 10 30	0.45	2	< 0.14	< 0.18	0.86	***0.72***	< 0.1[a]	< 0.05	***0.046***	***0.054***	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
	BH14-18-GW03-AD05	2015 09 28	< 0.59	1.4	< 0.64	< 0.30	< 1.0	***0.84***	< 0.13[a]	< 0.050	0.024	***0.06***	< 0.010	< 0.050	-	< 0.050	< 0.050	< 0.0090	< 0.050	< 0.050	< 0.050	< 1.2
BH14-19	BH14-19-GW01-AD05	2014 03 10	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-19-141101	2014 11 01	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
Federal Guideline																						
Canadian Drinking Water Quality Guidelines (CDWQG			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.01	n/a	n/a	n/a	n/a
FGQG Tier 2 Residential/Parkland Land Use (RL/PL)[b]			1.1	180	46	5.8	3	0.4	0.012	0.05	0.04	0.025	0.018	1.4	n/a	0.48	0.48	0.015	0.21	0.26	0.17	3.4
BC Standard																						
CSR Drinking Water (DW)			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.01	n/a	n/a	n/a	n/a
CSR Aquatic Life (AW)[c]			10	n/a	n/a	60	120	3	1	0.5	2	0.2	1	1	n/a	n/a	n/a	0.1	n/a	n/a	n/a	34

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).

[c] Standard to protect freshwater aquatic life.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline

BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline

OUTLINE Concentration greater than CSR Drinking Water (DW) standard

SHADOW Concentration greater than CSR Aquatic Life (AW) standard

TABLE 9 (Cont'd): Summary of Analytical Results for PAHs in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Polycyclic Aromatic Hydrocarbons																			
			Naphthalene µg/L	2-Methylnaphthalene µg/L	Acenaphthylene µg/L	Acenaphthene µg/L	Fluorene µg/L	Phenanthrene µg/L	Anthracene µg/L	Acridine µg/L	Fluoranthene µg/L	Pyrene µg/L	Benzo(a) anthracene µg/L	Chrysene µg/L	Benzo(b) fluoranthene µg/L	Benzo(b+j) fluoranthene µg/L	Benzo(k) fluoranthene µg/L	Benzo(a) pyrene µg/L	Indeno(1,2,3-cd) pyrene µg/L	Dibenz(a,h) anthracene µg/L	Benzo(g,h,i) perylene µg/L	Quinoline µg/L
BH14-20	BH14-20-GW01-AD05	2014 03 10	< 0.4	1.7	< 0.1	0.14	< 1.5	***1***	< 0.06[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 5[a]
	BH14-20-GW2-AD05	2014 08 14	0.38	1.3	< 0.1	< 0.162	0.79	***1.3***	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-20-141101	2014 11 01	0.83	1.6	< 0.16	< 0.17	1.2	***1.7***	< 0.083[a]	< 0.05	< 0.02	0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
	BH14-20-6W03-AD05	2015 10 01	< 0.45	2.2	< 0.34	< 0.11	< 0.71	***1.3***	< 0.029[a]	< 0.050	< 0.020	< 0.020	< 0.010	< 0.050	-	< 0.050	< 0.050	< 0.0090	< 0.050	< 0.050	< 0.050	< 0.42
BH14-22	BH14-22-GW01-AD05	2014 03 11	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	0.022	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH14-22A-GW01-AD05	Duplicate	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
	BH14-22-GW2-AD05	2014 08 15	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-22-141031	2014 10 31	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
BH14-23	BH14-23-GW01-AD05	2014 03 11	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH14-23-GW2-AD05	2014 08 15	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-23-141030	2014 10 30	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	0.025	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
	MW14-B-141030	Duplicate	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	0.023	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
BH14-24	BH14-24-GW01-AD05	2014 03 11	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH14-24-GW2-AD05	2014 08 16	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-24-141031	2014 10 31	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
	MW14-C-141031	Duplicate	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
BH14-25	BH14-25-GW01-AD05	2014 03 11	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH14-25-GW2-AD05	2014 08 16	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
BH14-26	BH14-26-GW01-AD05	2014 03 13	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH14-26-GW2-AD05	2014 08 17	< 0.2	< 0.2	< 0.1	< 0.1	0.076	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-26-141102	2014 11 02	< 0.1	< 0.1	< 0.05	< 0.05	0.13	0.055	< 0.01	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
	BH14-26-6W03-AD05	2015 10 01	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.010	< 0.050	< 0.020	< 0.020	< 0.010	< 0.050	-	< 0.050	< 0.050	< 0.0090	< 0.050	< 0.050	< 0.050	< 0.24
BH14-27	BH14-27-GW01-AD05	2014 03 12	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH14-27-GW2-AD05	2014 08 15	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-27-141101	2014 11 01	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
BH14-28	BH14-28-GW01-AD05	2014 03 12	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	BH14-28-GW2-AD05	2014 08 16	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 0.48
	MW14-28-141101	2014 11 01	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	-	< 0.05	< 0.05	< 0.009	< 0.05	< 0.05	< 0.05	< 0.24
MW16-12D	MW16-12-160315	2016 03 15	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.010	< 0.050	< 0.020	< 0.020	< 0.010	< 0.050	-	< 0.050	< 0.050	< 0.0090	< 0.050	< 0.050	< 0.050	< 0.24
	MW16-A-160315	Duplicate	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.010	< 0.050	< 0.020	< 0.020	< 0.010	< 0.050	-	< 0.050	< 0.050	< 0.0090	< 0.050	< 0.050	< 0.050	< 0.24
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*
Tap	Tap (2006)	2006 08 20	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	Tap (2007)	2007 08 22	< 0.3	-	< 0.1	-	< 0.05	0.06	< 0.01	< 0.05	< 0.04	0.02	< 0.01	< 0.01	-	-	-	< 0.01	-	-	-	< 0.5
	GR70	Duplicate	< 0.3	-	< 0.1	-	< 0.05	0.06	< 0.01	< 0.05	< 0.04	0.02	< 0.01	< 0.01	-	-	-	< 0.01	-	-	-	< 0.5
	QA/QC RPD%		*	-	*	-	*	*	*	*	*	*	*	*	-	-	-	*	-	-	-	*
	Tap (2008)	2008 10 06	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	2458-0812-TW1	2012 08 08	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05[a]	< 0.05	< 0.05[a]	< 0.02	< 0.05[a]	< 0.05	< 0.05	-	< 0.05	< 0.01	< 0.05	< 0.05	< 0.05	< 0.1
Tap FS	Tap FS	2011 09 16	< 0.02	-	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tap4	TAP 4-AD05	2013 07 26	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
Federal Guideline																						
Canadian Drinking Water Quality Guidelines (CDWQG)			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.01	n/a	n/a	n/a	n/a
FGQG Tier 2 Residential/Parkland Land Use (RL/PL)[b]			1.1	180	46	5.8	3	0.4	0.012	0.05	0.04	0.025	0.018	1.4	n/a	0.48	0.48	0.015	0.21	0.26	0.17	3.4
BC Standard																						
CSR Drinking Water (DW)			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.01	n/a	n/a	n/a	n/a
CSR Aquatic Life (AW)[c]			10	n/a	n/a	60	120	3	1	0.5	2	0.2	1	1	n/a	n/a	n/a	0.1	n/a	n/a	n/a	34

All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
\- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).
[c] Standard to protect freshwater aquatic life.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline
BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline
OUTLINE Concentration greater than CSR Drinking Water (DW) standard
SHADOW Concentration greater than CSR Aquatic Life (AW) standard

TABLE 9 (Cont'd): Summary of Analytical Results for PAHs in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Polycyclic Aromatic Hydrocarbons																		
			Naphthalene µg/L	2-Methylnaphthalene µg/L	Acenaphthylene µg/L	Acenaphthene µg/L	Fluorene µg/L	Phenanthrene µg/L	Anthracene µg/L	Acridine µg/L	Fluoranthene µg/L	Pyrene µg/L	Benzo(a) anthracene µg/L	Chrysene µg/L	Benzo(b) fluoranthene µg/L	Benzo(b+j) fluoranthene µg/L	Benzo(k) fluoranthene µg/L	Benzo(a) pyrene µg/L	Indeno(1,2,3-cd) pyrene µg/L	Dibenz(a,h) anthracene µg/L	Benzo(g,h,i) perylene µg/L	Quinoline µg/L
Well	Well (2004)	2004 12 08	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	Well (2005)	2005 11 06	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	GR23	Duplicate	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	QA/QC RPD%		*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*
	Well (2006)	2006 08 20	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	GR60	Duplicate	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	QA/QC RPD%		*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*
	Well (2008)	2008 10 06	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	Well (2009)	2009 10 19	< 0.3	-	< 0.1	< 0.1	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	GR83	Duplicate	< 0.3	-	< 0.1	-	< 0.05	< 0.05	< 0.01	< 0.05	< 0.04	< 0.02	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
	QA/QC RPD%		*	-	*	-	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*
	WELL (2010)	2010 09 08	< 0.0500	-	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0100	< 0.0500	< 0.0400	0.022	< 0.0100	< 0.0500	< 0.0500	-	< 0.0500	< 0.0100	< 0.0500	< 0.0500	< 0.0500	2.59
	Well (2011)	2011 09 16	< 0.04	-	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	GR85	Duplicate	< 0.04	-	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	QA/QC RPD%		*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*
	2458-0812-DW1	2012 08 08	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05[a]	< 0.05	< 0.05[a]	< 0.02	< 0.05[a]	< 0.05	< 0.05	-	< 0.05	< 0.01	< 0.05	< 0.05	< 0.05	< 0.1
	2458-0812-DW101	Duplicate	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05[a]	< 0.05	< 0.05[a]	< 0.02	< 0.05[a]	< 0.05	< 0.05	-	< 0.05	< 0.01	< 0.05	< 0.05	< 0.05	< 0.1
	QA/QC RPD%		*	-	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*
	WELL-AD05	2013 07 26	< 0.2	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.02[a]	< 0.1[a]	< 0.04	< 0.04[a]	< 0.02[a]	< 0.1	-	< 0.1	< 0.1	< 0.018[a]	< 0.1	< 0.1	< 0.1	< 1
Federal Guideline																					
Canadian Drinking Water Quality Guidelines (CDWQ(			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.01	n/a	n/a	n/a	n/a
FGQG Tier 2 Residential/Parkland Land Use (RL/PL)[b]			1.1	180	46	5.8	3	0.4	0.012	0.05	0.04	0.025	0.018	1.4	n/a	0.48	0.48	0.015	0.21	0.26	0.17	3.4
BC Standard																					
CSR Drinking Water (DW)			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.01	n/a	n/a	n/a	n/a
CSR Aquatic Life (AW)[c]			10	n/a	n/a	60	120	3	1	0.5	2	0.2	1	1	n/a	n/a	n/a	0.1	n/a	n/a	n/a	34

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).

[c] Standard to protect freshwater aquatic life.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline

BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline

OUTLINE Concentration greater than CSR Drinking Water (DW) standard

SHADOW Concentration greater than CSR Aquatic Life (AW) standard

TABLE 10: Summary of Analytical Results for Dissolved Inorganics in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Physical Parameters			Dissolved Inorganics															
			Hardness mg/L	Conductivity µS/cm	Total Dissolved Solids mg/L	pH pH	Ammonia Nitrogen µg/L	Nitrate Nitrogen µg/L	Nitrite Nitrogen µg/L	Nitrate+Nitrite Nitrogen µg/L	Chloride mg/L	Fluoride µg/L	Sulphate mg/L	Phosphate mg/L	Total Alkalinity mg/L	Alkalinity, Bicarbonate mg/L	Alkalinity, Carbonate mg/L	Alkalinity, Hydroxide mg/L	Alkalinity pH 4.5 mg/L	Salinity mg/L	Sodium Adsorption Ratio None
BH113M	BH113M (2006)	2006 08 20	349	-	-	-	-	-	-	-	9.9	-	64.4	-	-	-	-	-	-	-	-
	BH113M (2007)	2007 08 22	298	-	-	-	-	-	-	-	4.01	-	70	-	-	319	-	-	-	7	-
	GR71	Duplicate	318	-	-	-	-	-	-	-	4.21	-	71.9	-	-	325	-	-	-	0.007	-
	QA/QC RPD%		6	-	-	-	-	-	-	-	5	-	3	-	-	2	-	-	-	*	-
	BH113M (2008)	2008 10 06	-	-	-	-	-	-	-	-	2.27	-	80.9	-	-	-	-	-	-	-	-
	GR81	Duplicate	-	-	-	-	-	-	-	-	2.44	-	80.6	-	-	-	-	-	-	-	-
	QA/QC RPD%		-	-	-	-	-	-	-	-	7	-	0	-	-	-	-	-	-	-	-
	BH113M (2009)	2009 10 19	336	567	-	-	-	-	-	-	1.65	-	80.1	-	-	-	-	-	-	**280,000**	-
	BH113M (2010)	2010 09 08	340	-	-	-	-	-	-	-	1.3	-	77.4	-	-	-	-	-	-	< 1,000	-
BH118M	BH118M (2009)	2009 10 19	395	1,290	-	-	-	-	-	-	***158***	-	68	-	-	-	-	-	-	**650,000**	-
	GR82	Duplicate	401	1,140	-	-	-	-	-	-	***160***	-	68.3	-	-	-	-	-	-	**570,000**	-
	QA/QC RPD%		2	12	-	-	-	-	-	-	1	-	0	-	-	-	-	-	-	*	-
	BH118M (2010)	2010 09 08	398	-	-	-	-	-	-	-	92.7	-	66.1	-	-	-	-	-	-	< 1,000	-
	GR1	Duplicate	396	-	-	-	-	-	-	-	92.6	-	65.7	-	-	-	-	-	-	< 1,000	-
	QA/QC RPD%		1	-	-	-	-	-	-	-	0	-	1	-	-	-	-	-	-	*	-
	BH118M (2011)	2011 09 16	454	-	-	-	-	-	-	-	***308***	-	68.8	-	-	-	-	-	-	< 1,000	-
	GR84	Duplicate	448	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH119M	BH119M (2009)	2009 10 19	389	1,300	-	-	-	-	-	-	***191***	-	65.8	-	-	-	-	-	-	**650,000**	-
	BH119M (2010)	2010 09 08	405	-	-	-	-	-	-	-	***214***	-	64	-	-	-	-	-	-	< 1,000	-
BH120M	BH120M (2009)	2009 10 19	327	567	-	-	-	-	-	-	4.87	-	69.6	-	-	-	-	-	-	**280,000**	-
	BH120M (2010)	2010 09 08	358	-	-	-	-	-	-	-	5.2	-	66.6	-	-	-	-	-	-	< 1,000	-
BH12-02	MW12-02-AD05	2012 10 24	401	703	-	7.67	-	78	5	80	5.31	100	76.8	-	-	299	< 1	-	299	-	-
	MW12-A-AD05	Duplicate	404	706	-	7.64	-	82	< 5	80	5.52	***140***	77.8	-	-	299	< 1	-	299	-	-
	QA/QC RPD%		< 1	< 1	-	< 1	-	5	*	0	4	33	1	-	-	0	*	-	0	-	-
	MW12-02-AD05	2013 03 14	422	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-
	MW12-A-AD05	Duplicate	421	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		< 1	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-
	MW12-02-AD05	2013 07 26	417	775	-	7.94	-	-	-	-	11	***150***	95.1	-	357	435	< 1	< 1	-	-	-
BH13-03	MW13-03-AD05	2013 03 14	371	-	-	-	-	-	-	-	***170***	-	-	-	-	-	-	-	-	-	-
	MW13-03-AD05	2013 07 26	425	1,330	-	8.16	-	-	-	-	***200***	89	65.6	-	301	368	< 1	< 1	-	-	-
	MW13-C-AD05	Duplicate	371	-	-	-	-	-	-	-	***144***	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		14	-	-	-	-	-	-	-	33	-	-	-	-	-	-	-	-	-	-
	MW13-C-AD05	2013 07 26	426	1,340	-	8.11	-	-	-	-	***220***	90	63.8	-	301	367	< 1	< 1	-	-	-
BH13-04	zMW13-04-AD05	2013 10 02	318	637	-	8.17	-	316	6.3	322	6.5	100	-	-	269	328	< 1	< 1	-	-	-
	BH13-04	2013 10 29	353	-	-	-	-	-	-	-	7.5	-	-	-	-	-	-	-	-	-	-
	BH13-04-GW2-AD05	2014 08 18	356	-	-	-	-	-	-	-	5.8	-	-	-	-	-	-	-	-	-	-
	MW13-04-141030	2014 10 30	373	-	-	-	-	-	-	-	6.4	-	-	-	-	-	-	-	-	-	-
	BH13-04-6W03-AD05	2015 10 01	365	606	-	8.27	24	100	< 5.0	100	9.8	100	77.9	0.0052	243	297	< 0.50	< 0.50	< 0.50	-	-
BH13-05	BH13-05	2013 10 29	381	-	-	-	-	-	-	-	***200***	-	-	-	-	-	-	-	-	-	-
	DUP 1	Duplicate	378	-	-	-	-	-	-	-	***200***	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		1	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-
	BH13-05-GW2-AD05	2014 08 15	336	-	-	-	-	-	-	-	***130***	-	-	-	-	-	-	-	-	-	-
	BH14-B-GW2-AD05	Duplicate	353	-	-	-	-	-	-	-	***130***	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		5	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-
	MW13-05-141030	2014 10 30	361	-	-	-	-	-	-	-	120	-	-	-	-	-	-	-	-	-	-
	BH13-05-GW03-AD05	2015 09 28	339	437	-	8.08	37	< 20	< 5.0	< 20	40	88	70.1	< 0.0050	89.3	109	< 0.50	< 0.50	< 0.50	-	-
	DUP 1	Duplicate	366	702	-	8.16	17	< 20	9.5	< 20	42	87	67.4	< 0.0050	242	295	< 0.50	< 0.50	< 0.50	-	-
	QA/QC RPD%		8	47	-	*	*	*	*	*	5	1	4	*	92	92	*	*	*	-	-
Federal Guideline																					
Canadian Drinking Water Quality Guidelines (CDWQ(			n/a	n/a	500	6.5 - 8.5	n/a	10,000	1,000	n/a	250	1,500	500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FGQG Tier 2 Residential Land Use (RL)[a]			n/a	n/a	n/a	6.5 - 9.0	77 - 1,916[c]	13,000	60	n/a	120	120	100	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BC Standard																					
CSR Drinking Water (DW)			n/a	n/a	n/a	n/a	n/a	10,000	3,200	10,000	250	1,500	500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CSR Aquatic Life (AW)[b]			n/a	n/a	n/a	n/a	3,700 - 11,300[d]	400,000	200 - 1,000[e]	400,000	1,500	2,000 - 3,000[f]	1,000	n/a	n/a	n/a	n/a	n/a	n/a	15,000	n/a

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- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).
[b] Standard to protect freshwater aquatic life.
[c] Guideline varies with pH and temperature.
[d] Standard varies with pH.
[e] Standard varies with Chloride.
[f] Standard varies with hardness.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline
BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline
OUTLINE Concentration greater than CSR Drinking Water (DW) standard
SHADOW Concentration greater than CSR Aquatic Life (AW) standard

TABLE 10 (Cont'd): Summary of Analytical Results for Dissolved Inorganics in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Physical Parameters			Dissolved Inorganics															
			Hardness mg/L	Conductivity µS/cm	Total Dissolved Solids mg/L	pH pH	Ammonia Nitrogen µg/L	Nitrate Nitrogen µg/L	Nitrite Nitrogen µg/L	Nitrate+Nitrite Nitrogen µg/L	Chloride mg/L	Fluoride µg/L	Sulphate mg/L	Phosphate mg/L	Total Alkalinity mg/L	Alkalinity, Bicarbonate mg/L	Alkalinity, Carbonate mg/L	Alkalinity, Hydroxide mg/L	Alkalinity pH 4.5 mg/L	Salinity mg/L	Sodium Adsorption Ratio None
BH13-06	BH13-06	2013 10 29	784	-	-	-	-	-	-	-	***630***	-	-	-	-	-	-	-	-	-	-
	BH13-06-GW2-AD05	2014 08 13	368	-	-	-	-	-	-	-	71	-	-	-	-	-	-	-	-	-	-
	MW13-06-141030	2014 10 30	447	-	-	-	-	-	-	-	87	-	-	-	-	-	-	-	-	-	-
	BH13-06-GW03-AD05	2015 09 28	409	969	-	8.16	51	31	< 5.0	31	120	86	57.5	< 0.0050	265	323	< 0.50	< 0.50	< 0.50	-	-
BH13-07	zMW13-07-AD05	2013 10 01	411	921	-	8.13	-	139	< 10	139	87	***230***	-	-	264	322	< 1	< 1	-	-	-
	BH13-07	2013 10 29	430	-	-	-	-	-	-	-	120	-	-	-	-	-	-	-	-	-	-
BH13-08	BH13-08-GW01-AD05	2014 03 11	351	934	-	8.1	32	< 40	< 10	< 40	84	98	73.2	0.0053	307	375	< 1	< 1	-	-	-
	BH13-08-GW2-AD05	2014 08 17	363	-	-	-	-	-	-	-	75	-	-	-	-	-	-	-	-	-	-
	MW13-08-141101	2014 11 01	391	-	-	-	-	-	-	-	98	-	-	-	-	-	-	-	-	-	-
BH14-09	BH14-09-GW01-AD05	2014 03 12	383	1,250	-	7.99	50	< 40	< 10	< 40	***170***	100	72.2	< 0.01	327	399	< 1	< 1	-	-	-
	BH14-09-GW2-AD05	2014 08 18	391	-	-	-	-	-	-	-	***170***	-	-	-	-	-	-	-	-	-	-
	MW14-09-141031	2014 10 31	413	-	-	-	-	-	-	-	***150***	-	-	-	-	-	-	-	-	-	-
	BH14-09-6W03-AD05	2015 10 01	436	1,110	-	8.24	21	< 20	< 5.0	< 20	***140***	84	63.3	0.0247	294	358	< 0.50	< 0.50	< 0.50	-	-
BH14-10	BH14-10-GW01-AD05	2014 03 11	425	1,270	-	7.98	50	< 40	< 10	< 40	***130***	64	***130***	< 0.01	375	457	< 1	< 1	-	-	-
	BH14-10-GW2-AD05	2014 08 13	367	-	-	-	-	-	-	-	110	-	-	-	-	-	-	-	-	-	-
	MW14-10-141030	2014 10 30	425	-	-	-	-	-	-	-	96	-	-	-	-	-	-	-	-	-	-
	BH14-10-GW03-AD05	2015 09 28	410	917	-	8.1	84	< 20	< 5.0	< 20	120	92	55.8	0.0053	236	288	< 0.50	< 0.50	< 0.50	-	-
	PUMPTEST	2014 08 14	386	-	-	-	-	-	-	-	110	-	-	-	-	-	-	-	-	-	-
BH14-11	BH14-11-GW01-AD05	2014 03 10	421	1,150	-	7.97	88	< 40	< 10	< 40	***130***	71	94.4	< 0.01	335	408	< 1	< 1	-	-	-
	BH14-11-GW2-AD05	2014 08 14	392	-	-	-	-	-	-	-	90	-	-	-	-	-	-	-	-	-	-
	MW14-11-141030	2014 10 30	433	-	-	-	-	-	-	-	***140***	-	-	-	-	-	-	-	-	-	-
	BH14-11-GW03-AD05	2015 09 28	418	953	-	8.13	36	< 20	< 5.0	< 20	***140***	93	62	< 0.0050	240	292	< 0.50	< 0.50	< 0.50	-	-
BH14-12	BH14-12-GW01-AD05	2014 03 09	416	887	-	7.96	29	< 40	< 10	< 40	65	81	69.9	< 0.01	328	400	< 1	< 1	-	-	-
	BH14-12-GW2-AD05	2014 08 17	369	-	-	-	-	-	-	-	36	-	-	-	-	-	-	-	-	-	-
	MW14-12-141101	2014 11 01	409	-	-	-	-	-	-	-	72	-	-	-	-	-	-	-	-	-	-
BH14-13	BH14-13-GW01-AD05	2014 03 10	383	684	-	8	15	347	< 10	347	2	88	84.9	< 0.01	303	369	< 1	< 1	-	-	-
	BH14-13-GW2-AD05	2014 08 18	360	-	-	-	-	-	-	-	35	-	-	-	-	-	-	-	-	-	-
	MW14-13-141031	2014 10 31	402	-	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	-	-	-
BH14-14	BH14-14-GW01-AD05	2014 03 09	315	585	-	8.18	72	< 40	< 10	< 40	3.8	110	75.4	< 0.01	251	307	< 1	< 1	-	-	-
	BH14-14-GW2-AD05	2014 08 19	327	-	-	-	-	-	-	-	9.2	-	-	-	-	-	-	-	-	-	-
	MW14-14-141030	2014 10 30	321	-	-	-	-	-	-	-	5.4	-	-	-	-	-	-	-	-	-	-
BH14-15	BH14-15-GW01-AD05	2014 03 10	343	654	-	8.08	43	< 40	< 10	< 40	10	70	67.2	< 0.01	284	347	< 1	< 1	-	-	-
	BH14-15A-GW01-AD05	Duplicate	343	667	-	8.09	51	< 40	< 10	< 40	11	70	67.8	< 0.01	291	356	< 1	< 1	-	-	-
	QA/QC RPD%		0	2	-	0	*	*	*	*	10	*	1	*	2	3	*	*	-	-	-
	BH14-15-GW2-AD05	2014 08 14	333	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-
	BH14-A-GW2-AD05	Duplicate	332	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-
	MW14-15-141029	2014 10 29	362	-	-	-	-	-	-	-	6.6	-	-	-	-	-	-	-	-	-	-
	MW14-A-141029	Duplicate	344	-	-	-	-	-	-	-	6.6	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		5	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-
BH14-16	BH14-16-GW01-AD05	2014 03 09	354	663	-	8.15	24	144	< 10	144	3.4	67	85.2	< 0.01	290	354	< 1	< 1	-	-	-
	BH14-16-GW2-AD05	2014 08 19	345	-	-	-	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-
	MW14-16-141031	2014 10 31	347	-	-	-	-	-	-	-	3.8	-	-	-	-	-	-	-	-	-	-
BH14-18	BH14-18-GW01-AD05	2014 03 13	370	694	-	7.99	81	< 40	< 10	< 40	11	98	68	< 0.01	308	376	< 1	< 1	-	-	-
	BH14-18-GW2-AD05	2014 08 17	367	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-
	MW14-18-141029	2014 10 29	374	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-
	BH14-18-GW03-AD05	2015 09 28	357	634	-	8.25	16.5	< 20	< 5.0	< 20	19	97	59	< 0.0050	260	317	< 0.50	< 0.50	< 0.50	-	-
BH14-19	BH14-19-GW01-AD05	2014 03 10	372	1,080	-	7.99	70	38	< 10	38	120	82	73.5	0.0222	315	385	< 1	< 1	-	-	-
	MW14-19-141031	2014 10 31	417	-	-	-	-	-	-	-	***190***	-	-	-	-	-	-	-	-	-	-
BH14-20	BH14-20-GW01-AD05	2014 03 10	405	764	-	8.02	55	< 40	< 10	< 40	17	63	64.9	0.0094	342	417	< 1	< 1	-	-	-
	BH14-20-GW2-AD05	2014 08 14	282	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-
	MW14-20-141031	2014 10 31	352	-	-	-	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-
	BH14-20-6W03-AD05	2015 10 01	382	667	-	8.34	48	< 20	< 5.0	< 20	20	94	53.9	< 0.0050	283	339	3.16	< 0.50	2.63	-	-
Federal Guideline																					
Canadian Drinking Water Quality Guidelines (CDWQ(			n/a	n/a	500	6.5 - 8.5	n/a	10,000	1,000	n/a	250	1,500	500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FGQG Tier 2 Residential Land Use (RL)[a]			n/a	n/a	n/a	6.5 - 9.0	77 - 1,916[c]	13,000	60	n/a	120	120	100	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BC Standard																					
CSR Drinking Water (DW)			n/a	n/a	n/a	n/a	n/a	10,000	3,200	10,000	250	1,500	500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CSR Aquatic Life (AW)[b]			n/a	n/a	n/a	n/a	3,700 - 11,300[d]	400,000	200 - 1,000[e]	400,000	1,500	2,000 - 3,000[f]	1,000	n/a	n/a	n/a	n/a	n/a	n/a	15,000	n/a

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- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).
[b] Standard to protect freshwater aquatic life.
[c] Guideline varies with pH and temperature.
[d] Standard varies with pH.
[e] Standard varies with Chloride.
[f] Standard varies with hardness.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline
BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline
OUTLINE Concentration greater than CSR Drinking Water (DW) standard
SHADOW Concentration greater than CSR Aquatic Life (AW) standard

TABLE 10 (Cont'd): Summary of Analytical Results for Dissolved Inorganics in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Physical Parameters			Dissolved Inorganics															
			Hardness mg/L	Conductivity µS/cm	Total Dissolved Solids mg/L	pH pH	Ammonia Nitrogen µg/L	Nitrate Nitrogen µg/L	Nitrite Nitrogen µg/L	Nitrate+Nitrite Nitrogen µg/L	Chloride mg/L	Fluoride µg/L	Sulphate mg/L	Phosphate mg/L	Total Alkalinity mg/L	Alkalinity, Bicarbonate mg/L	Alkalinity, Carbonate mg/L	Alkalinity, Hydroxide mg/L	Alkalinity pH 4.5 mg/L	Salinity mg/L	Sodium Adsorption Ratio None
BH14-22	BH14-22-GW01-AD05	2014 03 11	323	1,270	-	8.1	19	114	11.6	126	***190***	110	71.4	0.0268	281	343	< 1	< 1	-	-	-
	BH14-22A-GW01-AD05	Duplicate	327	1,270	-	8.07	23	113	10.9	124	***190***	110	74.4	0.0281	279	340	< 1	< 1	-	-	-
	QA/QC RPD%		1	0	-	0	*	*	*	*	0	0	4	*	1	1	*	*	-	-	-
	BH14-22-GW2-AD05	2014 08 15	322	-	-	-	-	-	-	-	98	-	-	-	-	-	-	-	-	-	-
	MW14-22-141030	2014 10 30	359	-	-	-	-	-	-	-	***140***	-	-	-	-	-	-	-	-	-	-
BH14-23	BH14-23-GW01-AD05	2014 03 11	397	1,230	-	8.01	75	220	< 10	220	***170***	95	73.9	0.0075	320	390	< 1	< 1	-	-	-
	BH14-23-GW2-AD05	2014 08 15	393	-	-	-	-	-	-	-	***180***	-	-	-	-	-	-	-	-	-	-
	MW14-23-141030	2014 10 30	415	-	-	-	-	-	-	-	***160***	-	-	-	-	-	-	-	-	-	-
	MW14-B-141030	Duplicate	397	-	-	-	-	-	-	-	***160***	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		4	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-
BH14-24	BH14-24-GW01-AD05	2014 03 11	321	638	-	8.19	36	125	< 10	125	14	100	78.2	< 0.01	263	321	< 1	< 1	-	-	-
	BH14-24-GW2-AD05	2014 08 16	326	-	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-
	BH14-C-GW2-AD05	Duplicate	322	-	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		1	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-
	MW14-24-141030	2014 10 30	336	-	-	-	-	-	-	-	9.7	-	-	-	-	-	-	-	-	-	-
	MW14-C-141030	Duplicate	321	-	-	-	-	-	-	-	8.9	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		5	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-
BH14-25	BH14-25-GW01-AD05	2014 03 11	362	879	-	8.03	18	< 40	< 10	< 40	70	84	67.6	0.0109	307	374	< 1	< 1	-	-	-
	BH14-25-GW2-AD05	2014 08 16	354	-	-	-	-	-	-	-	65	-	-	-	-	-	-	-	-	-	-
BH14-26	BH14-26-GW01-AD05	2014 03 13	383	1,270	-	7.93	52	35	5.2	40	***170***	110	75.1	< 0.01	339	414	< 1	< 1	-	-	-
	BH14-26-GW2-AD05	2014 08 17	367	-	-	-	-	-	-	-	110	-	-	-	-	-	-	-	-	-	-
	MW14-26-141101	2014 11 01	442	-	-	-	-	-	-	-	***160***	-	-	-	-	-	-	-	-	-	-
	BH14-26-6W03-AD05	2015 10 01	411	1,010	-	8.09	52	< 20	< 5.0	< 20	***130***	85	65.1	< 0.0050	249	304	< 0.50	< 0.50	< 0.50	-	-
BH14-27	BH14-27-GW01-AD05	2014 03 12	336	675	-	8.13	49	96	< 10	96	11	110	77.7	0.0051	288	352	< 1	< 1	-	-	-
	BH14-27-GW2-AD05	2014 08 15	353	-	-	-	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-
	MW14-27-141031	2014 10 31	358	-	-	-	-	-	-	-	9.3	-	-	-	-	-	-	-	-	-	-
BH14-28	BH14-28-GW01-AD05	2014 03 12	349	828	-	7.99	63	152	< 10	152	45	100	77.4	< 0.01	311	380	< 1	< 1	-	-	-
	BH14-28-GW2-AD05	2014 08 16	364	-	-	-	-	-	-	-	59	-	-	-	-	-	-	-	-	-	-
	MW14-28-141031	2014 10 31	363	-	-	-	-	-	-	-	74	-	-	-	-	-	-	-	-	-	-
Tap	Tap (2006)	2006 08 20	363	-	-	-	-	-	-	-	0.76	-	85.8	-	-	-	-	-	-	-	-
	Tap (2007)	2007 08 22	365	-	-	-	-	-	-	-	0.37	-	77.3	-	-	-	-	-	-	1	-
	GR70	Duplicate	-	-	-	-	-	-	-	-	0.38	-	77.7	-	-	-	-	-	-	1	-
	QA/QC RPD%		-	-	-	-	-	-	-	-	*	-	1	-	-	-	-	-	-	*	-
	Tap (2008)	2008 10 06	-	-	-	-	-	-	-	-	0.65	-	77.3	-	-	-	-	-	-	-	-
	2458-0812-TW1	2012 08 08	< 1	694	396	8.23	-	-	-	-	0.55	-	73.5	-	-	272	< 1	-	272	297	120
Tap FS	Tap FS	2011 09 16	0.54	-	-	-	-	-	-	-	< 0.5	-	73	-	-	-	-	-	-	< 1,000	-
	GR86	Duplicate	0.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tap4	TAP 4-AD05	2013 07 26	< 1	709	-	8.5	-	-	-	-	1.2	110	89.2	-	287	337	6.44	< 1	-	-	-
Federal Guideline																					
Canadian Drinking Water Quality Guidelines (CDWQG			n/a	n/a	500	6.5 - 8.5	n/a	10,000	1,000	n/a	250	1,500	500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FGQG Tier 2 Residential Land Use (RL)[a]			n/a	n/a	n/a	6.5 - 9.0	77 - 1,916[c]	13,000	60	n/a	120	120	100	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BC Standard																					
CSR Drinking Water (DW)			n/a	n/a	n/a	n/a	n/a	10,000	3,200	10,000	250	1,500	500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CSR Aquatic Life (AW)[b]			n/a	n/a	n/a	n/a	3,700 - 11,300[d]	400,000	200 - 1,000[e]	400,000	1,500	2,000 - 3,000[f]	1,000	n/a	n/a	n/a	n/a	n/a	n/a	15,000	n/a

All terms defined within the body of SNC-Lavalin's report.

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- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline

BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline

OUTLINE Concentration greater than CSR Drinking Water (DW) standard

SHADOW Concentration greater than CSR Aquatic Life (AW) standard

[a] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).

[b] Standard to protect freshwater aquatic life.

[c] Guideline varies with pH and temperature.

[d] Standard varies with pH.

[e] Standard varies with Chloride.

[f] Standard varies with hardness.

TABLE 10 (Cont'd): Summary of Analytical Results for Dissolved Inorganics in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Physical Parameters			Dissolved Inorganics															
			Hardness mg/L	Conductivity µS/cm	Total Dissolved Solids mg/L	pH pH	Ammonia Nitrogen µg/L	Nitrate Nitrogen µg/L	Nitrite Nitrogen µg/L	Nitrate+Nitrite Nitrogen µg/L	Chloride mg/L	Fluoride µg/L	Sulphate mg/L	Phosphate mg/L	Total Alkalinity mg/L	Alkalinity, Bicarbonate mg/L	Alkalinity, Carbonate mg/L	Alkalinity, Hydroxide mg/L	Alkalinity pH 4.5 mg/L	Salinity mg/L	Sodium Adsorption Ratio None
Well	Well (2004)	2004 12 08	-	-	-	-	-	-	-	-	0.41	-	84.7	-	-	-	-	-	-	0.3	-
	Well (2005)	2005 11 06	346	-	-	-	-	-	-	-	0.34	-	87.7	-	-	-	-	-	-	-	-
	GR23	Duplicate	339	-	-	-	-	-	-	-	0.32	-	87.9	-	-	-	-	-	-	-	-
	QA/QC RPD%		2	-	-	-	-	-	-	-	*	-	0	-	-	-	-	-	-	-	-
	Well (2006)	2006 08 20	371	-	-	-	-	-	-	-	0.76	-	85.9	-	-	-	-	-	-	-	-
	GR60	Duplicate	340	-	-	-	-	-	-	-	0.79	-	85.9	-	-	-	-	-	-	-	-
	QA/QC RPD%		9	-	-	-	-	-	-	-	*	-	0	-	-	-	-	-	-	-	-
	Well (2008)	2008 10 06	-	-	-	-	-	-	-	-	0.65	-	76.6	-	-	-	-	-	-	-	-
	Well (2009)	2009 10 19	359	610	-	-	-	-	-	-	0.79	-	71.2	-	-	-	-	-	-	**300,000**	-
	GR83	Duplicate	348	614	-	-	-	-	-	-	0.79	-	71.2	-	-	-	-	-	-	**300,000**	-
	QA/QC RPD%		3	1	-	-	-	-	-	-	*	-	0	-	-	-	-	-	-	*	-
	WELL (2010)	2010 09 08	364	-	-	-	-	-	-	-	< 1	-	65.7	-	-	-	-	-	-	< 1,000	-
	GR2	Duplicate	364	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Well (2011)	2011 09 16	356	-	-	-	-	-	-	-	< 0.5	-	76.1	-	-	-	-	-	-	< 1,000	-
	GR85	Duplicate	-	-	-	-	-	-	-	-	< 0.5	-	76.4	-	-	-	-	-	-	< 1,000	-
	QA/QC RPD%		-	-	-	-	-	-	-	-	*	-	0	-	-	-	-	-	-	*	-
	2458-0812-DW1	2012 08 08	337	624	348	7.87	-	-	-	-	3.45	-	75.5	-	-	257	< 1	-	257	266	0.044
	2458-0812-DW101	Duplicate	332	623	344	7.88	-	-	-	-	1.23	-	75.1	-	-	258	< 1	-	258	266	0.044
	QA/QC RPD%		1	0	1	0	-	-	-	-	95	-	1	-	-	0	*	-	0	*	*
	WELL-AD05	2013 07 26	370	633	-	8.2	-	-	-	-	1.1	110	93	-	272	332	< 1	< 1	-	-	-
Federal Guideline																					
Canadian Drinking Water Quality Guidelines (CDWQG			n/a	n/a	500	6.5 - 8.5	n/a	10,000	1,000	n/a	250	1,500	500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FGQG Tier 2 Residential Land Use (RL)[a]			n/a	n/a	n/a	6.5 - 9.0	77 - 1,916[c]	13,000	60	n/a	120	120	100	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BC Standard																					
CSR Drinking Water (DW)			n/a	n/a	n/a	n/a	n/a	10,000	3,200	10,000	250	1,500	500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CSR Aquatic Life (AW)[b]			n/a	n/a	n/a	n/a	3,700 - 11,300[d]	400,000	200 - 1,000[e]	400,000	1,500	2,000 - 3,000[f]	1,000	n/a	n/a	n/a	n/a	n/a	n/a	15,000	n/a

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline

BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline

OUTLINE Concentration greater than CSR Drinking Water (DW) standard

SHADOW Concentration greater than CSR Aquatic Life (AW) standard

[a] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).

[b] Standard to protect freshwater aquatic life.

[c] Guideline varies with pH and temperature.

[d] Standard varies with pH.

[e] Standard varies with Chloride.

[f] Standard varies with hardness.

TABLE 11: Summary of Analytical Results for Dissolved Metals in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Physical	Geochemical Indicators							Dissolved Metals																					
			Hardness mg/L	Aluminum µg/L	Calcium mg/L	Iron µg/L	Magnesium mg/L	Manganese µg/L	Potassium mg/L	Sodium mg/L	Antimony µg/L	Arsenic µg/L	Barium µg/L	Beryllium µg/L	Boron µg/L	Cadmium µg/L	Chromium µg/L	Cobalt µg/L	Copper µg/L	Lead µg/L	Lithium µg/L	Mercury µg/L	Molybdenum µg/L	Nickel µg/L	Selenium µg/L	Silver µg/L	Strontium µg/L	Thallium µg/L	Titanium µg/L	Tin µg/L	Uranium µg/L	Vanadium µg/L	Zinc µg/L
BH113M	BH113M (2006)	2006 08 20	349	-	76.5	-	32.8	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	BH113M (2007)	2007 08 22	298	7	69.8	< 50	30	1	2.1	4.47	< 1	< 1	46	< 1	50	< 0.2[a]	< 1	< 1	1	< 1	-	< 0.02	0.9	< 1	< 1	< 0.25[a]	250	< 0.1	< 1	-	1.4	-	< 5
	GR71	Duplicate	318	6	69.7	< 50	30.4	1	2.9	4.52	< 1	< 1	48	< 1	50	< 0.2[a]	< 1	< 1	2	< 1	-	< 0.02	0.8	< 1	< 1	< 0.25[a]	260	< 0.1	< 1	-	1.4	-	***7,000***
	QA/QC RPD%		6	15	0	*	1	*	32	*	*	*	4	*	0	*	*	*	67	*	-	*	12	*	*	*	4	*	*	-	0	-	*
	BH113M (2008)	2008 10 06	-	-	77.9	-	35.7	-	1.5	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GR81	Duplicate	-	-	77.8	-	35.8	-	1.5	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		-	-	0	-	0	-	0	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	BH113M (2009)	2009 10 19	336	7	72	< 50	37.9	0.9	1.85	2.97	< 0.5	< 1	46	< 0.5	< 25	< 0.05[a]	< 1	< 0.5	3.6	< 0.25	8.8	< 0.02	0.8	< 1	< 1	< 0.2[a]	241	< 0.1	< 1	< 0.5	1.3	< 0.5	9
	BH113M (2010)	2010 09 08	340	< 5	78.8	< 30	34.8	< 0.300	2.3	2.4	< 0.500	< 0.500	52	< 1	< 100	***0.124***	< 2	< 0.300	< 1	< 0.500	8.7	< 0.0100	< 1	1.1	< 1	< 0.0200	-	< 0.200	< 10	< 0.500	1.32	< 1	< 5
BH118M	BH118M (2009)	2009 10 19	395	8	92.9	< 50	39.5	1.2	2.37	91.6	< 0.5	< 1	93	< 0.5	< 25	< 0.05[a]	< 1	< 0.5	< 0.5	< 0.25	8.5	< 0.02	0.8	< 1	< 1	< 0.2[a]	318	< 0.1	< 1	< 0.5	1.4	< 0.5	< 5
	GR82	Duplicate	401	11	94.6	< 50	39.9	1.1	2.4	92.2	< 0.5	< 1	94	< 0.5	< 25	< 0.05[a]	< 1	< 0.5	< 0.5	< 0.25	8.6	< 0.02	0.8	< 1	< 1	< 0.2[a]	328	< 0.1	< 1	< 0.5	1.5	< 0.5	< 5
	QA/QC RPD%		2	32	2	*	1	*	1	*	*	*	1	*	*	*	*	*	*	*	*	*	0	*	*	*	3	*	*	*	7	*	*
	BH118M (2010)	2010 09 08	398	< 10	100	< 30	35.7	< 0.600	< 2	49.5	< 1	< 1	91	< 2	< 100	***0.06***	< 4	< 0.600	< 2	< 1	< 10	< 0.0100	< 2	< 2	0.69	< 0.0400	-	< 0.400	< 10	< 1	1.73	< 2	< 5
	GR1	Duplicate	396	< 10	99.6	< 30	35.8	< 0.600	< 2	51.4	< 1	< 1	94	< 2	< 100	***0.064***	< 2	< 0.600	< 2	< 1	< 10	< 0.0100	< 2	< 2	0.69	< 0.0400	-	< 0.400	< 10	< 1	1.69	< 2	< 5
	QA/QC RPD%		1	*	0	*	0	*	*	*	*	*	3	*	*	6	*	*	*	*	*	*	*	*	0	*	-	*	*	*	2	*	*
	BH118M (2011)	2011 09 16	454	< 5	113	< 30	41.8	0.87	2.8	184	< 0.5	< 0.5	140	< 1	< 100	***0.031***	< 1	< 0.3	< 1	< 0.5	-	< 0.01	< 1	< 1	< 1	< 0.02	381	< 0.2	15	< 0.5	1.5	< 1	< 5
	GR84	Duplicate	448	< 5	112	< 30	40.7	0.93	2.8	174	< 0.5	< 0.5	139	< 1	< 100	***0.032***	< 1	< 0.3	< 1	< 0.5	-	< 0.01	< 1	< 1	< 1	< 0.02	-	< 0.2	14	< 0.5	1.51	< 1	< 5
	QA/QC RPD%		1	*	1	*	3	*	0	*	*	*	1	*	*	*	*	*	*	*	-	*	*	*	*	*	-	*	7	*	1	*	*
BH119M	BH119M (2009)	2009 10 19	389	12	94.2	< 50	37.2	**53**	2.48	109	< 0.5	< 1	100	< 0.5	< 25	***0.05***	< 1	1.1	< 0.5	< 0.25	6.8	< 0.02	0.6	1	< 1	< 0.2[a]	305	< 0.1	1	< 0.5	1.5	< 0.5	< 5
	BH119M (2010)	2010 09 08	405	< 10	102	< 30	36.6	10.2	2.8	121	< 1	< 1	120	< 2	< 100	***0.066***	< 2	< 0.600	< 2	< 1	< 10	< 0.0100	< 2	< 2	< 0.500	< 0.0400	-	< 0.400	< 10	< 1	1.46	< 2	< 5
BH120M	BH120M (2009)	2009 10 19	327	10	70.4	< 50	36.7	1.6	1.6	4.69	< 0.5	< 1	44	< 0.5	< 25	< 0.05[a]	< 1	< 0.5	< 0.5	< 0.25	7.9	< 0.02	0.8	< 1	< 1	< 0.2[a]	244	< 0.1	< 1	< 0.5	1.3	< 0.5	< 5
	BH120M (2010)	2010 09 08	358	< 5	80.6	< 30	37.9	0.82	3.5	4.8	< 0.500	< 0.500	49	< 1	< 100	***0.028***	< 1	< 0.300	< 1	< 0.500	6.5	< 0.0100	< 1	< 1	< 1	< 0.0200	-	< 0.200	< 10	< 0.500	1.5	< 1	< 5
BH12-02	MW12-02-AD05	2012 10 24	401	3	94.8	***1,390***	40	29	2.09	3.4	0.09	0.1	61.2	< 0.01	7	< 0.01	< 0.5	0.3	< 0.2	< 0.01	7.8	< 0.003	0.39	0.8	< 0.1	< 0.01	-	0.002	***137***	-	1.22	< 0.1	1
	MW12-A-AD05	Duplicate	404	2	95.5	***1,390***	40.3	29	2.06	3.34	0.09	0.2	62.3	< 0.01	7	< 0.01	< 0.5	0.29	< 0.2	0.01	8.1	< 0.003	0.42	0.9	< 0.1	< 0.01	-	< 0.002	***131***	-	1.25	< 0.1	< 1
	QA/QC RPD%		< 1	*	< 1	0	< 1	0	1	*	*	*	2	*	*	*	*	3	*	*	*	*	7	12	*	*	-	*	5	-	2	*	*
	MW12-02-AD05	2013 03 14	422	3	98.1	***1,690***	43.1	11	-	5.74	0.29	0.3	66	< 0.01	11	0.01	< 0.5	0.31	0.3	< 0.07	12.1	< 0.025	0.38	4	< 0.1	< 0.01	-	< 0.03	1.6	-	1.77	0.2	14
	MW12-A-AD05	Duplicate	421	3	98	***1,700***	42.8	11	-	5.67	0.32	0.2	65.2	0.02	11	< 0.01	< 0.5	0.31	0.4	< 0.07	11.9	< 0.025	0.41	3.8	0.2	< 0.01	-	< 0.03	1.8	-	1.73	< 0.1	10
	QA/QC RPD%		< 1	*	< 1	< 1	< 1	0	-	*	*	*	1	*	*	*	*	0	*	*	*	*	7	5	*	*	-	*	12	-	2	*	*
	MW12-02-AD05	2013 07 26	417	3.7	99	19	41.3	29.1	2.78	7.57	< 1	< 0.2	78.9	< 0.2	< 100	***0.039***	< 2	1.42	1.81	< 0.4	10.1	< 0.1[a]	9.6	51.8	0.42	< 0.04	428	< 0.1	< 10	< 10	1.72	< 10	***71.3***
BH13-03	MW13-03-AD05	2013 03 14	371	6	90.3	***400***	35.4	**425**	-	93.1	< 1	< 1	110	< 1	< 10	< 0.05[a]	3	3	< 2	< 1	8	< 0.025	< 3	6	< 1	< 0.1	-	< 0.1	2	-	1	< 1	13
	MW13-03-AD05	2013 07 26	425	4.2	103	188	40.7	10.5	3.03	109	< 1	0.38	116	< 0.2	< 100	< 0.02[a]	< 2	< 1	0.52	< 0.4	7.8	< 0.1[a]	< 2	< 2	0.26	0.037	362	< 0.1	< 10	< 10	1.3	< 10	19.8
	MW13-C-AD05	Duplicate	371	4	90.1	***400***	35.4	**427**	-	92.6	< 1	< 1	110	< 1	< 10	***0.06***	3	3	< 2	< 1	8	< 0.025	< 3	6	< 1	< 0.1	-	< 0.1	2	-	1	< 1	6
	QA/QC RPD%		14	*	13	72	14	190	-	*	*	*	5	*	*	*	*	*	*	*	*	*	*	*	*	*	-	*	*	-	26	*	107
	MW13-C-AD05	2013 07 26	426	3.5	101	195	42	11.2	3.04	113	< 1	0.55	114	< 0.2	< 100	< 0.02[a]	< 2	< 1	0.74	< 0.4	6.9	< 0.1[a]	< 2	< 2	0.21	0.071	367	< 0.1	< 10	< 10	1.28	< 10	< 10
BH13-04	zMW13-04-AD05	2013 10 02	318	< 6	72.9	< 10	33.1	34.9	1.71	3.95	< 1	0.12	60.7	< 0.2	< 100	***0.018***	< 2	< 1	0.43	< 0.4	6.9	< 0.1[a]	< 2	1.2	0.52	< 0.04	252	< 0.1	< 10	< 10	1.39	< 10	8
	BH13-04	2013 10 29	353	3.8	83.5	9.9	35	3.1	1.81	4.77	< 1	0.15	57.9	< 0.2	< 100	***0.02***	< 2	< 1	0.39	< 0.4	7.1	< 0.1[a]	< 2	< 2	0.51	< 0.04	300	< 0.1	< 10	< 10	1.52	< 10	< 10
	BH13-04-GW2-AD05	2014 08 18	356	3.8	77.6	9.3	39.3	< 2	1.95	4.95	< 1	0.31	50.9	< 0.2	< 100	0.012	< 2	< 1	1.52	< 0.4	6.4	< 0.02	< 2	1.2	0.49	< 0.04	259	< 0.1	< 10	< 10	1.55	< 10	5.7
	MW13-04-141030	2014 10 30	373	6.1	83.3	45.1	40.1	2	1.91	5.06	< 0.5	0.26	55.8	< 0.1	< 50	0.011	< 1	< 0.5	0.33	< 0.2	7.8	< 0.01	< 1	1.3	0.46	0.023	277	< 0.05	< 5	< 5	1.55	< 5	< 5
	BH13-04-6W03-AD05	2015 10 01	365	10.3	79.6	12.8	40.5	4.1	1.96	6.79	< 0.50	0.45	46.8	< 0.10	< 50	***0.027***	< 1.0	< 0.50	1.28	< 0.20	7.5	< 0.010	1	< 1.0	0.43	< 0.020	272	< 0.050	< 5.0	< 5.0	1.39	< 5.0	22.3
BH13-05	BH13-05	2013 10 29	381	< 6	93.8	***904***	35.7	**183**	2.66	119	< 1	1.4	92.5	< 0.2	< 100	< 0.02[a]	< 2	< 1	< 0.4	< 0.4	7.4	< 0.1[a]	< 2	< 2	< 0.2	< 0.04	348	< 0.1	< 10	< 10	1.35	< 10	< 10
	DUP 1	Duplicate	378	< 6	93.6	***843***	34.9	**182**	2.74	115	< 1	1.38	92.5	< 0.2	< 100	< 0.02[a]	< 2	< 1	0.48	< 0.4	7.6	< 0.1[a]	< 2	< 2	< 0.2	< 0.04	351	< 0.1	< 10	< 10	1.35	< 10	< 10
	QA/QC RPD%		1	*	0	7	2	1	3	*	*	1	0	*	*	*	*	*	*	*	*	*	*	*	*	*	1	*	*	*	0	*	*
	BH13-05-GW2-AD05	2014 08 15	336	3.9	82.5	***601***	31.6	**78**	1.79	83.4	< 1	0.47	76.4	< 0.2	< 100	< 0.02[a]	< 2	< 1	***4.81***	< 0.4	7.2	< 0.02	1.6	< 2	< 0.2	< 0.04	285	< 0.1	< 10	< 10	1.64	< 10	< 10
	BH14-B-GW2-AD05	Duplicate	353	3.2	84.9	***598***	34.2	**78.4**	1.86	85.2	< 1	0.51	76.1	< 0.2	< 100	< 0.02[a]	< 2	< 1	0.64	< 0.4	7	< 0.02	1.7	< 2	< 0.2	< 0.04	283	< 0.1	< 10	< 10	1.65	< 10	< 10
	QA/QC RPD%		5	*	3	1	8	1	4	*	*	*	0	*	*	*	*	*	*	*	*	*	6	*	*	*	1	*	*	*	1	*	*
	MW13-05-141030	2014 10 30	361	< 3	87.7	***744***	34.4	**87.2**	1.97	83.1	< 0.5	3.93	83.3	< 0.1	< 50	< 0.01	< 1	< 0.5	< 0.2	< 0.2	7.1	< 0.01	< 1	< 1	< 0.1	< 0.02	300	< 0.05	< 5	< 5	1.84	< 5	< 5
	BH13-05-GW03-AD05	2015 09 28	339	9.3	82.4	***376***	32.4	**51.1**	1.73	22.9	< 0.50	0.49	61.2	< 0.10	330	< 0.010	< 1.0	< 0.50	< 0.20	< 0.20	5.7	< 0.010	< 1.0	< 1.0	< 0.10	< 0.020	272	< 0.050	< 5.0	< 5.0	1.46	< 5.0	9.4
	DUP 1	Duplicate	366	7.5	84	***397***	38	49.7	1.94	25.8	< 0.50	0.44	66	< 0.10	74	< 0.010	< 1.0	< 0.50	< 0.20	< 0.20	< 5.0	< 0.010	< 1.0	< 1.0	< 0.10	< 0.020	286	< 0.050	< 5.0	< 5.0	1.65	< 5.0	< 5.0
	QA/QC RPD%		8	*	2	5	16	3	11	12	*	*	8	*	*	*	*	*	*	*	*	*	*	*	*	*	5	*	*	*	12	*	*
BH13-06	BH13-06	2013 10 29	784	3.2	188	***3,730***	76.5	**291**	4.88	**264**	< 1	1.87	459	< 0.2	< 100	< 0.02[a]	< 2	0.97	0.3	< 0.4	17.8	< 0.1[a]	< 2	2.4	< 0.2	< 0.04	762	< 0.1	< 10	< 10	1.25	< 10	< 10
	BH13-06-GW2-AD05	2014 08 13	368	32.9	90.7	***1,720***	34.3	**142**	2.19	44.8	< 1	0.32	63.3	< 0.2	< 100	0.017	< 2	0.72	0.85	< 0.4	8.4	< 0.02	< 2	1.6	< 0.2	< 0.04	317	< 0.1	< 10	< 10	0.87	< 10	6.1
	MW13-06-141030	2014 10 30	447	< 3	114	***2,130***	39.8	**127**	2.66	51.4	< 0.5	0.27	87.1	< 0.1	< 50	< 0.01	< 1	< 0.5	< 0.2	< 0.2	10	< 0.01	< 1	< 1	< 0.1	< 0.02	379	< 0.05	< 5	< 5	0.75	< 5	< 5
	BH13-06-GW03-AD05	2015 09 28	409	13.4	96	***1,030***	41.1	**80.1**	2.45	54.7	< 0.50	0.61	72	< 0.10	206	< 0.010	< 1.0	0.68	< 0.20	< 0.20	9	< 0.010	< 1.0	< 1.0	< 0.10	< 0.020	344	< 0.050	< 5.0	< 5.0	0.73	< 5.0	13.4
BH13-07	zMW13-07-AD05	2013 10 01	411	4.3	110	114	33.3	**1,760**	2.8	27.3	< 1	0.2	46.5	< 0.2	< 100	***0.058***	< 2	5.94	1.19	< 0.4	10.8	< 0.1[a]	6.2	15.1	0.42	< 0.04	385	< 0.1	< 10	< 10	2.24	< 10	10.6
	BH13-07	2013 10 29	430	< 6	103	< 10	42	**264**	2.59	43.8	< 1	< 0.2	73.7	< 0.2	< 100	***0.139***	< 2	1.59	0.22	< 0.4	9.9	< 0.1[a]	1.1	6.1	0.39	< 0.04	365	< 0.1	< 10	< 10	1.54	< 10	< 10
BH13-08	BH13-08-GW01-AD05	2014 03 11	351	< 6	83.1	22	34.9	4.1	2.56	59.7	< 1	0.19	107	< 0.2	< 100	***0.024***	< 2	< 1	1.22	< 0.4	10	< 0.02	< 2	1.8	0.3	< 0.04	308	< 0.1	< 10	< 10	1.34	< 10	5
	BH13-08-GW2-AD05	2014 08 17	363	22.4	84.5	114	37	5.8	2.52	46.3	< 1	0.42	99.7	< 0.2	< 100	< 0.02[a]	1.2	< 1	0.27	< 0.4	8.4	< 0.02	1.4	5	0.14	< 0.04	295	< 0.1	< 10	< 10	1.17	< 10	7.8
	MW13-08-141101	2014 11 01	391	4.5	93.4	80.8	38.3	4.9	2.64	58	< 0.5	0.48	118	< 0.1	< 50	< 0.01	1.5	< 0.5	< 0.2	< 0.2	9.3	< 0.01	1.3	4.2	0.17	< 0.02	325	< 0.05	< 5	< 5	1.33	< 5	< 5
BH14-09	BH14-09-GW01-AD05	2014 03 12	383	< 6	101	7.6	31.9	**115**	2.76	108	< 1	0.13	70.8	< 0.2	< 100	***0.064***	< 2	1.12	1.28	< 0.4	8.8	< 0.02	1	4.2	0.1	< 0.04	362	< 0.1	< 10	< 10	1.8	< 10	5.7
	BH14-09-GW2-AD05	2014 08 18	391	16.2	94.1	291	38	**77.7**	2.63	105	< 1	0.46	86.3	< 0.2	< 100	***0.034***	< 2	0.69	0.74	< 0.4	7.4	< 0.02	< 2	2.2	< 0.2	< 0.04	323	< 0.1	< 10	< 10	1.15	< 10	< 10
	MW14-09-141031	2014 10 31	413	3.4	106	185	35.8	**81.8**	2.92	121	< 0.5	0.36	95.5	< 0.1	< 50	***0.023***	< 1	0.84	< 0.2	< 0.2	8	< 0.01	< 1	1.5	< 0.1	< 0.02	373	< 0.05	< 5	< 5	1.2	< 5	< 5
	BH14-09-6W03-AD05	2015 10 01	436	14.6	101	16.8	44.4	36.6	2.78	84.6	< 0.50	0.33	71.9	< 0.10	< 50	***0.098***	< 1.0	< 0.50	0.49	< 0.20	7.8	< 0.010	< 1.0	< 1.0	< 0.10	< 0.020	329	< 0.050	< 5.0	< 5.0	0.9	< 5.0	< 5.0
Federal Guideline																																	
Canadian Drinking Water Quality Guidelines (CDWQG)			n/a	100	n/a	300	n/a	50	n/a	200	6	10	1,000	n/a	5,000	5	50	n/a	1,000	10	n/a	1	n/a	n/a	50	n/a	n/a	n/a	n/a	n/a	20	n/a	5,000
FGQG Tier 2 Residential/Parkland Land Use (RL/PL)[b]			n/a	100[d]	n/a	300	n/a	n/a	n/a	n/a	2,000	5	2,900	5.3	n/a	0.017	8.9	n/a	2 - 4[e]	1 - 7[e]	n/a	0.026	73	25 - 150[e]	1	0.1	n/a	0.8	100	n/a	15	n/a	30
BC Standard																																	
CSR Drinking Water (DW)			n/a	9,500	n/a	6,500	100	550	n/a	200	6	10	1,000	n/a	5,000	5	50	n/a	1,000	10	730	1	250	n/a	10	n/a	22,000	n/a	n/a	22,000	20	n/a	5,000
CSR Aquatic Life (AW)[c]			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	200	50	10,000	53	50,000	0.1 - 0.6[e]	10	40	20 - 90[e]	40 - 160[e]	n/a	1	10,000	250 - 1,500[e]	10	0.5 - 15[e]	n/a	3	1,000	n/a	3,000	n/a	75 - 2,400[e]

All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).
[c] Standard to protect freshwater aquatic life.
[d] Guideline is pH dependent; based on available data, site pH is > 6.5.
[e] Standard varies with hardness.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline
BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline
OUTLINE Concentration greater than CSR Drinking Water (DW) standard
SHADOW Concentration greater than CSR Aquatic Life (AW) standard

TABLE 11 (Cont'd): Summary of Analytical Results for Dissolved Metals in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Physical	Geochemical Indicators							Dissolved Metals																						
			Hardness mg/L	Aluminum µg/L	Calcium mg/L	Iron µg/L	Magnesium mg/L	Manganese µg/L	Potassium mg/L	Sodium mg/L	Antimony µg/L	Arsenic µg/L	Barium µg/L	Beryllium µg/L	Boron µg/L	Cadmium µg/L	Chromium µg/L	Cobalt µg/L	Copper µg/L	Lead µg/L	Lithium µg/L	Mercury µg/L	Molybdenum µg/L	Nickel µg/L	Selenium µg/L	Silver µg/L	Strontium µg/L	Thallium µg/L	Titanium µg/L	Tin µg/L	Uranium µg/L	Vanadium µg/L	Zinc µg/L
BH14-10	BH14-10-GW01-AD05	2014 03 11	425	< 6	106	***2,900***	39	**179**	3.39	107	< 1	1.11	249	< 0.2	< 100	< 0.02[a]	< 2	0.64	1.4	0.26	14.1	< 0.02	2.2	2.3	0.13	< 0.04	417	< 0.1	< 10	< 10	2.09	< 10	6.1
	BH14-10-GW2-AD05	2014 08 13	367	6.6	92.9	***1,870***	32.8	**115**	2.19	66.6	< 1	0.43	87.5	< 0.2	< 100	***0.019***	< 2	0.53	0.48	< 0.4	8.2	< 0.02	< 2	1.8	< 0.2	< 0.04	301	< 0.1	< 10	< 10	0.77	< 10	6.2
	MW14-10-141030	2014 10 30	425	< 3	105	***1,370***	39.8	**90.8**	2.61	57.5	< 0.5	0.53	87.3	< 0.1	< 50	***0.026***	< 1	0.57	0.44	< 0.2	9.1	< 0.01	< 1	1.7	< 0.1	< 0.02	361	< 0.05	< 5	< 5	1.01	< 5	< 5
	BH14-10-GW03-AD05	2015 09 28	410	13.9	96	***801***	41.4	47.2	2.5	52.7	< 0.50	0.48	84.8	< 0.10	141	< 0.010	< 1.0	< 0.50	0.32	< 0.20	7.1	< 0.010	< 1.0	< 1.0	< 0.10	< 0.020	329	< 0.050	< 5.0	< 5.0	0.56	< 5.0	< 5.0
BH14-11	BH14-11-GW01-AD05	2014 03 10	421	< 6	109	***3,010***	36.4	**127**	2.8	76.9	< 1	1.93	84.9	< 0.2	< 100	< 0.02[a]	< 2	< 1	1.34	< 0.4	10.4	< 0.02	< 2	1	< 0.2	< 0.04	383	< 0.1	< 10	< 10	0.86	< 10	6.2
	BH14-11-GW2-AD05	2014 08 14	392	22.4	101	***1,600***	34.1	**103**	2.27	54.1	< 1	1.41	59.6	< 0.2	< 100	< 0.02[a]	< 2	< 1	0.89	< 0.4	8.4	< 0.02	< 2	1.6	< 0.2	< 0.04	323	< 0.1	< 10	< 10	0.8	< 10	7.4
	MW14-11-141030	2014 10 30	433	14.6	111	***1,300***	37.8	**78.5**	2.74	62.9	< 0.5	0.98	82	< 0.1	< 50	0.011	< 1	< 0.5	0.46	< 0.2	9.1	< 0.01	< 1	1.3	< 0.1	< 0.02	368	< 0.05	< 5	< 5	0.95	< 5	6
	BH14-11-GW03-AD05	2015 09 28	418	14.6	100	***948***	40.8	**62.9**	2.59	65.9	< 0.50	0.79	81	< 0.10	118	< 0.010	< 1.0	< 0.50	< 0.20	< 0.20	9.7	< 0.010	< 1.0	< 1.0	< 0.10	< 0.020	329	< 0.050	< 5.0	< 5.0	0.79	< 5.0	< 5.0
BH14-12	BH14-12-GW01-AD05	2014 03 09	416	< 6	94.7	< 10	43.6	10.8	2.59	36	< 1	< 0.2	135	< 0.2	< 100	***0.027***	< 2	< 1	1.38	< 0.4	9.1	< 0.02	< 2	1.1	< 0.2	< 0.04	371	< 0.1	< 10	< 10	0.9	< 10	5.3
	BH14-12-GW2-AD05	2014 08 17	369	5.9	84	24.3	38.7	8.5	2.37	23.7	< 1	0.25	112	< 0.2	< 100	0.017	1.1	< 1	1.38	< 0.4	7.9	< 0.02	< 2	2.2	0.1	< 0.04	301	< 0.1	< 10	< 10	0.7	< 10	5.3
	MW14-12-141101	2014 11 01	409	5.8	98.8	24.3	39.5	7.4	2.74	41.5	< 0.5	0.17	153	< 0.1	< 50	***0.022***	< 1	< 0.5	0.3	< 0.2	10.1	< 0.01	< 1	1.5	< 0.1	< 0.02	373	< 0.05	< 5	< 5	0.83	< 5	< 5
BH14-13	BH14-13-GW01-AD05	2014 03 10	383	< 6	87.2	< 10	40	< 2	1.76	2.47	< 1	< 0.2	32.5	< 0.2	< 100	< 0.02[a]	< 2	< 1	1.12	< 0.4	7.2	< 0.02	< 2	< 2	***2.83***	< 0.04	301	< 0.1	< 10	< 10	1.63	< 10	5.5
	BH14-13-GW2-AD05	2014 08 18	360	4.3	76.8	20.5	40.8	< 2	1.76	2.22	< 1	0.15	31.6	< 0.2	< 100	< 0.02[a]	3.1	< 1	1.46	< 0.4	7.1	< 0.02	1.1	3	***1.78***	< 0.04	290	< 0.1	< 10	< 10	1.7	< 10	< 10
	MW14-13-141031	2014 10 31	402	4	90.4	7.4	42.7	< 1	1.95	2.63	< 0.5	< 0.1	33.2	< 0.1	< 50	< 0.01	< 1	< 0.5	0.3	< 0.2	7.9	< 0.01	< 1	< 1	***1.32***	< 0.02	323	< 0.05	< 5	< 5	1.79	< 5	< 5
BH14-14	BH14-14-GW01-AD05	2014 03 09	315	4.9	68.4	8.4	34.9	8.9	1.6	4.1	< 1	0.11	40.3	< 0.2	< 100	0.015	< 2	< 1	1.29	< 0.4	7.1	< 0.02	< 2	< 2	0.27	< 0.04	253	< 0.1	< 10	< 10	1.44	< 10	5.3
	BH14-14-GW2-AD05	2014 08 19	327	3.6	70.6	7.5	36.5	< 2	1.81	9.16	< 1	0.22	40.4	< 0.2	< 100	< 0.02[a]	< 2	< 1	1.15	< 0.4	7.1	< 0.02	< 2	< 2	0.28	< 0.04	238	< 0.1	< 10	< 10	1.49	< 10	< 10
	MW14-14-141030	2014 10 30	321	< 3	70.7	< 5	35.2	< 1	1.8	5.76	< 0.5	0.12	42.7	< 0.1	< 50	0.01	< 1	< 0.5	0.39	< 0.2	7.6	< 0.01	< 1	< 1	0.37	< 0.02	263	< 0.05	< 5	< 5	1.53	< 5	< 5
BH14-15	BH14-15-GW01-AD05	2014 03 10	343	< 6	83.7	***2,000***	32.6	**121**	1.94	8.83	< 1	2	86.2	< 0.2	< 100	< 0.02[a]	< 2	0.78	1.21	< 0.4	8.2	< 0.02	< 2	1.2	< 0.2	< 0.04	317	< 0.1	< 10	< 10	0.82	< 10	5.5
	BH14-15A-GW01-AD05	Duplicate	343	6.3	83.8	***2,000***	32.4	**123**	1.93	8.78	< 1	2.02	86.9	< 0.2	< 100	***0.069***	< 2	0.8	1.56	< 0.4	8.2	< 0.02	< 2	1.9	< 0.2	0.028	318	< 0.1	< 10	< 10	0.8	< 10	15
	QA/QC RPD%		0	*	0	0	1	2	1	*	*	1	1	*	*	*	*	3	25	*	*	*	*	45	*	*	0	*	*	*	*	*	93
	BH14-15-GW2-AD05	2014 08 14	333	65.5	77.3	***2,470***	33.9	**58.9**	1.91	9.92	< 1	1.99	66.3	< 0.2	< 100	< 0.02[a]	< 2	< 1	1.1	< 0.4	6.8	< 0.02	1	1.6	< 0.2	< 0.04	275	< 0.1	7.4	< 10	0.52	< 10	7.4
	BH14-A-GW2-AD05	Duplicate	332	10	79.1	***2,370***	32.6	**55.5**	1.82	9.73	< 1	1.99	66.3	< 0.2	< 100	< 0.02[a]	< 2	< 1	0.42	< 0.4	7.1	< 0.02	1.1	1.2	< 0.2	< 0.04	278	< 0.1	< 10	< 10	0.53	< 10	6
	QA/QC RPD%		0	147	2	4	4	6	5	*	*	0	0	*	*	*	*	*	*	*	*	*	10	29	*	*	1	*	*	*	*	*	21
	MW14-15-141029	2014 10 29	362	< 3	84.5	***1,540***	36.7	**55.6**	1.81	4.96	< 0.5	1.42	65.9	< 0.1	< 50	< 0.01	< 1	< 0.5	0.31	< 0.2	7	< 0.01	< 1	< 1	< 0.1	< 0.02	298	< 0.05	< 5	< 5	1.06	< 5	< 5
	MW14-A-141029	Duplicate	344	6	81.6	***1,490***	34.2	**53.4**	1.78	4.99	< 0.5	1.48	63.5	< 0.1	< 50	< 0.01	< 1	< 0.5	0.25	< 0.2	7.3	< 0.01	< 1	< 1	< 0.1	< 0.02	291	< 0.05	< 5	< 5	1.02	< 5	< 5
	QA/QC RPD%		5	*	3	3	7	4	2	*	*	4	4	*	*	*	*	*	*	*	*	*	*	*	*	*	2	*	*	*	4	*	*
BH14-16	BH14-16-GW01-AD05	2014 03 09	354	5.3	82.6	22.7	35.9	41.1	1.76	7.9	< 1	< 0.2	71	< 0.2	< 100	***0.022***	< 2	0.63	1.55	< 0.4	5.9	0.02	< 2	1.3	***3.1***	< 0.04	292	< 0.1	< 10	< 10	1.37	< 10	6.5
	BH14-16-GW2-AD05	2014 08 19	345	42.8	82.2	53.7	33.8	< 2	2.89	10.1	< 1	0.23	89	< 0.2	< 100	0.016	< 2	< 1	1.08	< 0.4	6.3	< 0.02	< 2	< 2	***2.86***	< 0.04	294	< 0.1	< 10	< 10	2	< 10	< 10
	MW14-16-141031	2014 10 31	347	3.8	82.7	20.8	34	< 1	2.01	5.04	< 0.5	0.11	75.7	< 0.1	< 50	< 0.01	< 1	< 0.5	0.36	< 0.2	< 5	< 0.01	< 1	< 1	***2.14***	< 0.02	285	< 0.05	< 5	< 5	1.87	< 5	< 5
BH14-18	BH14-18-GW01-AD05	2014 03 13	370	< 6	92.6	***1,110***	33.8	**122**	1.99	7.68	< 1	0.7	70.2	< 0.2	< 100	< 0.02[a]	< 2	1.37	1.16	< 0.4	9	< 0.02	< 2	1.3	< 0.2	< 0.04	322	< 0.1	< 10	< 10	1	< 10	6.2
	BH14-18-GW2-AD05	2014 08 17	367	6.3	82.8	***2,160***	38.8	**73.4**	2.15	6.9	< 1	0.69	88.4	< 0.2	< 100	< 0.02[a]	< 2	< 1	0.27	< 0.4	8.4	< 0.02	< 2	1.3	< 0.2	< 0.04	304	< 0.1	< 10	< 10	0.62	< 10	< 10
	MW14-18-141029	2014 10 29	374	3.1	89.6	***2,250***	36.5	**70.4**	1.92	7.03	< 0.5	0.75	92.7	< 0.1	< 50	< 0.01	< 1	< 0.5	< 0.2	< 0.2	7.7	< 0.01	< 1	< 1	< 0.1	< 0.02	310	< 0.05	< 5	< 5	0.69	< 5	< 5
	BH14-18-GW03-AD05	2015 09 28	357	16.3	80.2	***1,720***	38	**62.5**	1.82	7.51	< 0.50	1.11	86.5	< 0.10	81	< 0.010	< 1.0	< 0.50	< 0.20	< 0.20	7.6	< 0.010	< 1.0	< 1.0	< 0.10	< 0.020	293	< 0.050	< 5.0	< 5.0	0.66	< 5.0	5.5
BH14-19	BH14-19-GW01-AD05	2014 03 10	372	5	95.2	30.6	32.6	33.6	2.63	78.3	< 1	< 0.2	97.6	< 0.2	< 100	***0.03***	< 2	0.62	1.57	< 0.4	7.8	< 0.02	< 2	1.8	0.14	< 0.04	343	< 0.1	< 10	< 10	1.66	< 10	5.4
	MW14-19-141031	2014 10 31	417	3.5	106	11.2	36.8	25.5	2.84	109	< 0.5	0.11	126	< 0.1	< 50	***0.038***	< 1	< 0.5	0.47	< 0.2	8.3	< 0.01	< 1	2.6	< 0.1	< 0.02	369	< 0.05	< 5	< 5	1.91	< 5	6.3
BH14-20	BH14-20-GW01-AD05	2014 03 10	405	< 6	106	***7,110***	34.4	**440**	2.53	11.8	< 1	0.3	112	< 0.2	< 100	***0.022***	< 2	1.33	0.92	< 0.4	12.4	< 0.02	< 2	1.2	< 0.2	< 0.04	396	< 0.1	< 10	< 10	0.34	< 10	6.8
	BH14-20-GW2-AD05	2014 08 14	282	< 6	58.8	133	32.9	5.6	1.88	7.63	< 1	0.42	84.8	< 0.2	< 100	< 0.02[a]	< 2	< 1	0.45	< 0.4	9.8	< 0.02	< 2	< 2	< 0.2	< 0.04	290	< 0.1	< 10	< 10	0.38	< 10	< 10
	MW14-20-141031	2014 10 31	352	3.7	85.7	***2,180***	33.5	**128**	2.07	11.3	< 0.5	1.28	96.4	< 0.1	< 50	< 0.01	< 1	< 0.5	< 0.2	< 0.2	8.2	< 0.01	< 1	< 1	< 0.1	< 0.02	301	< 0.05	< 5	< 5	0.41	< 5	< 5
	BH14-20-6W03-AD05	2015 10 01	382	10.5	86.4	***1,540***	40.4	**101**	1.99	11	< 0.50	0.29	77.1	< 0.10	< 50	< 0.010	< 1.0	< 0.50	0.24	< 0.20	5.8	< 0.010	< 1.0	< 1.0	< 0.10	< 0.020	307	< 0.050	< 5.0	< 5.0	0.15	< 5.0	14.4
BH14-22	BH14-22-GW01-AD05	2014 03 11	323	< 6	78.2	5.4	30.9	12.2	2.72	125	< 1	< 0.2	90.5	< 0.2	< 100	***0.028***	< 2	< 1	1.36	< 0.4	8.6	< 0.02	< 2	< 2	***1.04***	< 0.04	290	< 0.1	< 10	< 10	1.62	< 10	5.9
	BH14-22A-GW01-AD05	Duplicate	327	3.7	78.4	6.3	31.8	12.9	2.79	128	< 1	< 0.2	90.6	< 0.2	< 100	***0.029***	< 2	< 1	1.52	< 0.4	8.6	< 0.02	< 2	< 2	0.97	< 0.04	290	< 0.1	< 10	< 10	1.7	< 10	6
	QA/QC RPD%		1	*	0	*	3	6	3	*	*	*	0	*	*	*	*	*	11	*	*	*	*	*	7	*	0	*	*	*	5	*	2
	BH14-22-GW2-AD05	2014 08 15	322	37	74.4	45	33.2	< 2	1.93	69.3	< 1	< 0.2	63.3	< 0.2	< 100	***0.018***	< 2	< 1	2.46	< 0.4	6.4	< 0.02	< 2	< 2	0.99	< 0.04	261	< 0.1	< 10	< 10	1.53	< 10	< 10
	MW14-22-141030	2014 10 30	359	3	86.3	< 5	34.9	< 1	2.79	88.7	< 0.5	< 0.1	79.1	< 0.1	< 50	0.014	< 1	< 0.5	< 0.2	< 0.2	7.3	< 0.01	< 1	< 1	0.84	< 0.02	294	< 0.05	< 5	< 5	1.61	< 5	< 5
BH14-23	BH14-23-GW01-AD05	2014 03 11	397	< 6	101	***1,200***	35	**774**	2.94	83	< 1	0.14	77.3	< 0.2	< 100	***0.077***	< 2	6.32	1.08	< 0.4	8.1	< 0.02	4.3	4.9	0.32	< 0.04	420	< 0.1	< 10	< 10	1.45	< 10	6.2
	BH14-23-GW2-AD05	2014 08 15	393	17.5	94.2	24.2	38.4	12.5	2.3	98.6	< 1	0.13	90.6	< 0.2	< 100	***0.056***	< 2	0.95	2.48	< 0.4	9.2	< 0.02	< 2	1.4	0.25	< 0.04	341	< 0.1	< 10	< 10	1.46	< 10	5.2
	MW14-23-141030	2014 10 30	415	4.1	105	5.2	37.1	6.3	2.4	77.6	< 0.5	< 0.1	90	< 0.1	< 50	***0.041***	< 1	1.24	< 0.2	< 0.2	8.4	< 0.01	< 1	< 1	0.32	< 0.02	363	< 0.05	< 5	< 5	1.68	< 5	< 5
	MW14-B-141030	Duplicate	397	3.1	99.1	< 5	36.3	6.1	2.44	75.3	< 0.5	< 0.1	87.2	< 0.1	< 50	***0.039***	< 1	1.2	0.31	< 0.2	8.1	< 0.01	< 1	< 1	0.27	< 0.02	348	< 0.05	< 5	< 5	1.64	< 5	< 5
	QA/QC RPD%		4	*	6	*	2	3	2	*	*	*	3	*	*	*	*	3	*	*	*	*	*	*	*	*	4	*	*	*	2	*	*
BH14-24	BH14-24-GW01-AD05	2014 03 11	321	3.3	70.3	5.6	35.4	**136**	1.83	10.8	< 1	0.17	50.7	< 0.2	< 100	***0.081***	< 2	0.53	1.31	< 0.4	7.7	< 0.02	2.2	2.9	0.29	< 0.04	274	< 0.1	< 10	< 10	1.68	< 10	7.7
	BH14-24-GW2-AD05	2014 08 16	326	10.9	68	20.6	37.9	2.1	1.82	7.3	< 1	0.18	45.8	< 0.2	< 100	***0.018***	1.2	< 1	***7.68***	< 0.4	8.1	< 0.02	1	1.6	0.28	< 0.04	274	< 0.1	< 10	< 10	1.5	< 10	6.1
	BH14-C-GW2-AD05	Duplicate	322	5.9	68.7	17	36.6	2	1.81	7	< 1	0.15	46.9	< 0.2	< 100	***0.02***	1	< 1	1.22	< 0.4	8.8	< 0.02	< 2	1.6	0.34	< 0.04	264	< 0.1	< 10	< 10	1.54	< 10	< 10
	QA/QC RPD%		1	60	1	*	3	5	1	*	*	*	2	*	*	*	*	*	145	*	*	*	*	0	*	*	4	*	*	*	3	*	*
	MW14-24-141030	2014 10 30	336	3.1	72.9	< 5	37.4	< 1	1.92	5.64	< 0.5	0.2	47.7	< 0.1	< 50	0.015	< 1	< 0.5	< 0.2	< 0.2	7.7	< 0.01	< 1	< 1	0.27	< 0.02	274	< 0.05	< 5	< 5	1.57	< 5	< 5
	MW14-C-141030	Duplicate	321	3.5	71.1	< 5	34.9	< 1	1.83	5.29	< 0.5	0.21	45.7	< 0.1	< 50	0.015	< 1	< 0.5	0.3	< 0.2	7.4	< 0.01	< 1	< 1	0.3	< 0.02	267	< 0.05	< 5	< 5	1.51	< 5	< 5
	QA/QC RPD%		5	*	3	*	7	*	5	*	*	*	4	*	*	*	*	*	*	*	*	*	*	*	*	*	3	*	*	*	4	*	*
BH14-25	BH14-25-GW01-AD05	2014 03 11	362	< 6	88.3	9.9	34.5	**222**	2.11	42.3	< 1	0.47	103	< 0.2	< 100	***0.283***	< 2	0.61	1.19	< 0.4	7.5	< 0.02	1.1	4.6	0.15	< 0.04	305	0.497	< 10	< 10	1.33	< 10	6.6
	BH14-25-GW2-AD05	2014 08 16	354	9.6	82	89.2	36.3	**207**	2.08	39.7	< 1	0.74	122	< 0.2	< 100	***0.052***	3.1	< 1	***5.19***	< 0.4	8	< 0.02	5.8	8.9	< 0.2	< 0.04	303	0.063	< 10	< 10	1.37	< 10	< 10
BH14-26	BH14-26-GW01-AD05	2014 03 13	383	< 6	95.8	< 10	34.9	18	2.86	117	< 1	< 0.2	86.6	< 0.2	< 100	***0.043***	< 2	< 1	1.37	< 0.4	9.3	< 0.02	< 2	1	< 0.2	< 0.04	354	< 0.1	< 10	< 10	0.83	< 10	5.5
	BH14-26-GW2-AD05	2014 08 17	367	***136***	89.4	***452***	34.9	**192**	2.81	74.2	< 1	0.37	97.8	< 0.2	< 100	***0.049***	3.7	0.59	***4.2***	0.3	9.2	< 0.02	< 2	3	< 0.2	< 0.04	335	< 0.1	7.2	< 10	0.74	< 10	7.6
	MW14-26-141101	2014 11 01	442	< 3	112	7.5	39.1	**130**	2.93	89.9	< 0.5	< 0.1	105	< 0.1	< 50	***0.048***	< 1	< 0.5	0.33	< 0.2	9.5	< 0.01	< 1	2.4	< 0.1	< 0.02	385	< 0.05	< 5	< 5	0.72	< 5	< 5
	BH14-26-6W03-AD05	2015 10 01	411	9.1	98.8	9.1	39.9	24.8	2.52	75.3	< 0.50	0.22	90.7	< 0.10	< 50	***0.026***	< 1.0	< 0.50	0.27	< 0.20	8.6	< 0.010	< 1.0	< 1.0	< 0.10	< 0.020	344	< 0.050	< 5.0	< 5.0	0.71	< 5.0	< 5.0
Federal Guideline																																	
Canadian Drinking Water Quality Guidelines (CDWQG)			n/a	100	n/a	300	n/a	50	n/a	200	6	10	1,000	n/a	5,000	5	50	n/a	1,000	10	n/a	1	n/a	n/a	50	n/a	n/a	n/a	n/a	n/a	20	n/a	5,000
FGQG Tier 2 Residential/Parkland Land Use (RL/PL)[b]			n/a	100[d]	n/a	300	n/a	n/a	n/a	n/a	2,000	5	2,900	5.3	n/a	0.017	8.9	n/a	2 - 4[e]	1 - 7[e]	n/a	0.026	73	25 - 150[e]	1	0.1	n/a	0.8	100	n/a	15	n/a	30
BC Standard																																	
CSR Drinking Water (DW)			n/a	9,500	n/a	6,500	100	550	n/a	200	6	10	1,000	n/a	5,000	5	50	n/a	1,000	10	730	1	250	n/a	10	n/a	22,000	n/a	n/a	22,000	20	n/a	5,000
CSR Aquatic Life (AW)[c]			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	200	50	10,000	53	50,000	0.1 - 0.6[e]	10	40	20 - 90[e]	40 - 160[e]	n/a	1	10,000	250 - 1,500[e]	10	0.5 - 15[e]	n/a	3	1,000	n/a	3,000	n/a	75 - 2,400[e]

All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).
[c] Standard to protect freshwater aquatic life.
[d] Guideline is pH dependent; based on available data, site pH is > 6.5.
[e] Standard varies with hardness.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline
BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline
OUTLINE Concentration greater than CSR Drinking Water (DW) standard
SHADOW Concentration greater than CSR Aquatic Life (AW) standard

TABLE 11 (Cont'd): Summary of Analytical Results for Dissolved Metals in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Physical	Geochemical Indicators							Dissolved Metals																						
			Hardness mg/L	Aluminum µg/L	Calcium mg/L	Iron µg/L	Magnesium mg/L	Manganese µg/L	Potassium mg/L	Sodium mg/L	Antimony µg/L	Arsenic µg/L	Barium µg/L	Beryllium µg/L	Boron µg/L	Cadmium µg/L	Chromium µg/L	Cobalt µg/L	Copper µg/L	Lead µg/L	Lithium µg/L	Mercury µg/L	Molybdenum µg/L	Nickel µg/L	Selenium µg/L	Silver µg/L	Strontium µg/L	Thallium µg/L	Titanium µg/L	Tin µg/L	Uranium µg/L	Vanadium µg/L	Zinc µg/L
BH14-27	BH14-27-GW01-AD05	2014 03 12	336	< 6	77.5	< 10	34.6	**371**	1.9	12.7	< 1	0.15	48.9	< 0.2	< 100	***0.028***	< 2	0.58	1.24	< 0.4	6.8	< 0.02	1.6	1.9	***2.06***	< 0.04	271	< 0.1	< 10	< 10	1.67	< 10	5.6
	BH14-27-GW2-AD05	2014 08 15	353	4.1	79.6	7.2	37.5	2.4	1.76	9.66	< 1	0.18	41.1	< 0.2	< 100	< 0.02[a]	< 2	< 1	1.81	< 0.4	7.8	< 0.02	< 2	< 2	***1.8***	< 0.04	288	< 0.1	< 10	< 10	1.56	< 10	< 10
	MW14-27-141031	2014 10 31	358	< 3	82.5	< 5	36.9	< 1	1.96	11	< 0.5	0.19	40.3	< 0.1	< 50	< 0.01	< 1	< 0.5	< 0.2	< 0.2	6.9	< 0.01	< 1	< 1	***1.86***	< 0.02	277	< 0.05	< 5	< 5	1.69	< 5	< 5
BH14-28	BH14-28-GW01-AD05	2014 03 12	349	< 6	83.4	7.2	34.2	**202**	2.09	37.2	< 1	< 0.2	58.3	< 0.2	< 100	***0.033***	< 2	0.63	1.28	< 0.4	7.5	< 0.02	< 2	1.1	***2.23***	< 0.04	315	< 0.1	< 10	< 10	1.56	< 10	5.7
	BH14-28-GW2-AD05	2014 08 16	364	13.1	85.5	20.9	36.7	< 2	2.03	34.9	< 1	< 0.2	61	< 0.2	< 100	< 0.02[a]	< 2	< 1	2.85	< 0.4	7.2	< 0.02	< 2	< 2	***1.76***	< 0.04	313	< 0.1	< 10	< 10	1.67	< 10	5.2
	MW14-28-141031	2014 10 31	363	< 3	88.7	< 5	34.4	< 1	2.32	48.6	< 0.5	< 0.1	65.3	< 0.1	< 50	< 0.01	< 1	< 0.5	< 0.2	< 0.2	7	< 0.01	< 1	< 1	***1.97***	< 0.02	320	< 0.05	< 5	< 5	1.74	< 5	< 5
Tap	Tap (2006)	2006 08 20	363	-	71.4	-	33.5	-	1.7	3.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tap (2007)	2007 08 22	365	-	81	-	39.1	-	1.7	2.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GR70	Duplicate	-	-	76.3	-	37	-	1.7	1.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		-	-	6	-	6	-	0	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tap (2008)	2008 10 06	-	-	84.3	-	39.9	-	1.3	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2458-0812-TW1	2012 08 08	< 1	-	< 0.05	-	< 0.05	-	0.09	159	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tap FS	Tap FS	2011 09 16	0.54	-	0.215	-	< 0.1	-	< 2	167	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GR86	Duplicate	0.53	-	0.212	-	< 0.1	-	< 2	166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		2	-	*	-	*	-	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tap4	TAP 4-AD05	2013 07 26	< 1	< 6	< 0.1	19.6	< 0.1	< 2	< 0.1	163	< 1	0.24	< 2	< 0.2	< 100	< 0.02[a]	< 2	< 1	0.3	< 0.4	< 10	< 0.1[a]	< 2	< 2	< 0.2	< 0.04	< 2	< 0.1	< 10	< 10	1.68	< 10	< 10
Well	Well (2004)	2004 12 08	-	-	59.2	-	27.6	-	1	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Well (2005)	2005 11 06	346	-	84.9	-	39.3	-	1.8	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GR23	Duplicate	339	-	85.4	-	39.7	-	1.7	2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		2	-	1	-	1	-	6	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Well (2006)	2006 08 20	371	-	75.1	-	36.7	-	1.6	2.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GR60	Duplicate	340	-	72.7	-	35.3	-	1.5	1.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		9	-	3	-	4	-	6	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Well (2008)	2008 10 06	-	-	84.1	-	39.9	-	1.3	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Well (2009)	2009 10 19	359	-	82.1	-	39.7	-	1.6	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GR83	Duplicate	348	-	82.1	-	39.5	-	1.6	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		3	-	0	-	1	-	0	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WELL (2010)	2010 09 08	364	-	81.2	-	39.3	-	< 2	< 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GR2	Duplicate	364	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Well (2011)	2011 09 16	356	-	81.5	-	37.1	-	2	8.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2458-0812-DW1	2012 08 08	337	-	74	-	37	-	1.67	1.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2458-0812-DW101	Duplicate	332	-	72.5	-	36.6	-	1.67	1.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		1	-	2	-	1	-	0	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WELL-AD05	2013 07 26	370	< 6	82.2	***1.740***	39.9	49.9	2.12	2.02	< 1	1.14	31.4	< 0.2	< 100	< 0.02[a]	< 2	< 1	< 0.4	< 0.4	7.8	< 0.1[a]	< 2	< 2	< 0.2	< 0.04	267	< 0.1	< 10	< 10	1.75	< 10	< 10
Federal Guideline																																	
Canadian Drinking Water Quality Guidelines (CDWQG)[b]			n/a	100	n/a	300	n/a	50	n/a	200	6	10	1,000	n/a	5,000	5	50	n/a	1,000	10	n/a	1	n/a	n/a	50	n/a	n/a	n/a	n/a	n/a	20	n/a	5,000
FGQG Tier 2 Residential/Parkland Land Use (RL/PL)[b]			n/a	100[d]	n/a	300	n/a	n/a	n/a	n/a	2,000	5	2,900	5.3	n/a	0.017	8.9	n/a	2 - 4[e]	1 - 7[e]	n/a	0.026	73	25 - 150[e]	1	0.1	n/a	0.8	100	n/a	15	n/a	30
BC Standard																																	
CSR Drinking Water (DW)			n/a	9,500	n/a	6,500	100	550	n/a	200	6	10	1,000	n/a	5,000	5	50	n/a	1,000	10	730	1	250	n/a	10	n/a	22,000	n/a	n/a	22,000	20	n/a	5,000
CSR Aquatic Life (AW)[c]			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	200	50	10,000	53	50,000	0.1 - 0.6[e]	10	40	20 - 90[e]	40 - 160[e]	n/a	1	10,000	250 - 1,500[e]	10	0.5 - 15[e]	n/a	3	1,000	n/a	3,000	n/a	75 - 2,400[e]

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline

BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline

OUTLINE Concentration greater than CSR Drinking Water (DW) standard

SHADOW Concentration greater than CSR Aquatic Life (AW) standard

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).

[c] Standard to protect freshwater aquatic life.

[d] Guideline is pH dependent; based on available data, site pH is > 6.5.

[e] Standard varies with hardness.

TABLE 12: Summary of Analytical Results for Total Metals in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Phys	Total Metals																														
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Potassium mg/L	Selenium mg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Vanadium mg/L	Zinc mg/L
BH113M	BH113M (2006)	2006 08 20	349	0.006	< 0.001	< 0.001	0.05	< 0.001	< 0.05	< 0.0002[a]	77.8	< 0.001	< 0.001	0.003	< 0.05	< 0.001	0.01	33	0.007	< 0.02[a]	0.0006	< 0.001	1.8	< 0.001	< 0.00025[a]	7.2	0.28	< 0.000100	< 0.001	< 0.001	0.0015	< 0.001	0.019
	BH113M (2007)	2007 08 22	298	-	-	-	-	-	-	-	72.8	-	-	-	-	-	-	32.1	-	-	-	-	-	-	-	4.92	-	-	-	-	-	-	-	-
	GR71	Duplicate	318	-	-	-	-	-	-	-	74.5	-	-	-	-	-	-	31.9	-	-	-	-	-	-	-	6.72	-	-	-	-	-	-	-	-
	QA/QC RPD%		6	-	-	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	31	-	-	-	-	-	-	-	-
	BH113M (2008)	2008 10 06	-	-	-	-	-	-	-	-	74.6	-	-	-	-	-	-	34.3	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-
	GR81	Duplicate	-	-	-	-	-	-	-	-	74.7	-	-	-	-	-	-	34.4	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-
	QA/QC RPD%		-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-
	BH113M (2009)	2009 10 19	336	-	-	-	-	-	-	-	69.9	-	-	-	-	-	-	36.5	-	-	-	-	1.9	-	-	2.6	-	-	-	-	-	-	-	-
	BH113M (2010)	2010 09 08	340	-	-	-	-	-	-	-	79.6	-	-	-	-	-	-	36.4	-	-	-	-	2.5	-	-	2.5	-	-	-	-	-	-	-	-
BH118M	BH118M (2009)	2009 10 19	395	-	-	-	-	-	-	-	90.9	-	-	-	-	-	-	38.5	-	-	-	-	2.4	-	-	86.8	-	-	-	-	-	-	-	-
	GR82	Duplicate	401	-	-	-	-	-	-	-	90.6	-	-	-	-	-	-	38.3	-	-	-	-	2.4	-	-	87	-	-	-	-	-	-	-	-
	QA/QC RPD%		2	-	-	-	-	-	-	-	0	-	-	-	-	-	-	1	-	-	-	-	0	-	-	0	-	-	-	-	-	-	-	-
	BH118M (2010)	2010 09 08	398	-	-	-	-	-	-	-	101	-	-	-	-	-	-	36.8	-	-	-	-	2	-	-	52.4	-	-	-	-	-	-	-	-
	GR1	Duplicate	396	-	-	-	-	-	-	-	98.8	-	-	-	-	-	-	36.6	-	-	-	-	2	-	-	52	-	-	-	-	-	-	-	-
	QA/QC RPD%		1	-	-	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	0	-	-	1	-	-	-	-	-	-	-	-
	BH118M (2011)	2011 09 16	454	-	-	-	-	-	-	-	117	-	-	-	-	-	-	43.7	-	-	-	-	-	-	-	187	-	-	-	-	-	-	-	-
BH119M	BH119M (2009)	2009 10 19	389	-	-	-	-	-	-	-	93.9	-	-	-	-	-	-	36.7	**0.055**	-	-	-	2.6	-	-	106	-	-	-	-	-	-	-	-
	BH119M (2010)	2010 09 08	405	-	-	-	-	-	-	-	102	-	-	-	-	-	-	37.3	-	-	-	-	2.9	-	-	125	-	-	-	-	-	-	-	-
BH120M	BH120M (2009)	2009 10 19	327	-	-	-	-	-	-	-	72.2	-	-	-	-	-	-	36.2	-	-	-	-	1.7	-	-	4.9	-	-	-	-	-	-	-	-
	BH120M (2010)	2010 09 08	358	-	-	-	-	-	-	-	80.7	-	-	-	-	-	-	38.3	-	-	-	-	2.1	-	-	4.7	-	-	-	-	-	-	-	-
BH13-04	BH13-04	2013 10 29	353	-	-	-	-	-	-	-	87.5	-	-	-	-	-	-	39.9	-	-	-	-	-	-	-	5.22	-	-	-	-	-	-	-	-
BH13-05	BH13-05	2013 10 29	381	-	-	-	-	-	-	-	98	-	-	-	-	-	-	37.8	-	-	-	-	-	-	-	114	-	-	-	-	-	-	-	-
	DUP 1	Duplicate	378	-	-	-	-	-	-	-	100	-	-	-	-	-	-	38.1	-	-	-	-	-	-	-	115	-	-	-	-	-	-	-	-
	QA/QC RPD%		1	-	-	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
BH13-06	BH13-06	2013 10 29	784	-	-	-	-	-	-	-	227	-	-	-	-	-	-	96.3	-	-	-	-	-	-	-	**241**	-	-	-	-	-	-	-	-
BH13-07	BH13-07	2013 10 29	430	-	-	-	-	-	-	-	142	-	-	-	-	-	-	61	-	-	-	-	-	-	-	46.1	-	-	-	-	-	-	-	-
BH13-08	BH13-08-GW01-AD05	2014 03 11	351	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.000041***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-09	BH14-09-GW01-AD05	2014 03 12	383	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.000064***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-10	BH14-10-GW01-AD05	2014 03 11	425	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PUMPTEST	2014 08 14	-	6.1	< 0.50	0.7	88.2	< 0.10	< 50	0.042	95,300	< 1.0	< 0.50	< 0.50	**1,860**	< 0.20	9.6	36,000	**119**	< 0.010	< 1.0	1.4	2,530	< 0.10	< 0.020	72,100	306	< 0.050	< 5.0	< 5.0	0.83	< 5.0	< 5.0
BH14-11	BH14-11-GW01-AD05	2014 03 10	421	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-12	BH14-12-GW01-AD05	2014 03 09	416	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.000654***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-13	BH14-13-GW01-AD05	2014 03 10	383	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.000078***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-14	BH14-14-GW01-AD05	2014 03 09	315	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.000056***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-15	BH14-15-GW01-AD05	2014 03 10	343	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	BH14-15A-GW01-AD05	Duplicate	343	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-16	BH14-16-GW01-AD05	2014 03 09	354	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.000344***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-18	BH14-18-GW01-AD05	2014 03 13	370	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-19	BH14-19-GW01-AD05	2014 03 10	372	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.000091***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-20	BH14-20-GW01-AD05	2014 03 10	405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.000013***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-22	BH14-22-GW01-AD05	2014 03 11	323	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	BH14-22A-GW01-AD05	Duplicate	327	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA/QC RPD%		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-23	BH14-23-GW01-AD05	2014 03 11	397	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.000032***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-24	BH14-24-GW01-AD05	2014 03 11	321	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.000814***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-25	BH14-25-GW01-AD05	2014 03 11	362	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-26	BH14-26-GW01-AD05	2014 03 13	383	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.000162***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-27	BH14-27-GW01-AD05	2014 03 12	336	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.000092***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14-28	BH14-28-GW01-AD05	2014 03 12	349	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tap	Tap (2006)	2006 08 20	363	< 0.005	< 0.001	< 0.001	0.025	< 0.001	< 0.05	< 0.0002[a]	82.3	< 0.001	< 0.001	< 0.001	***0.82***	< 0.001	0.007	38.9	0.047	< 0.02[a]	0.0008	< 0.001	1.6	< 0.001	< 0.00025[a]	1.9	0.23	< 0.000100	< 0.001	< 0.001	0.0015	< 0.001	< 0.005
	Tap (2007)	2007 08 22	367	0.016	< 0.001	0.001	0.029	< 0.001	< 0.05	< 0.0002[a]	81.4	< 0.001	< 0.001	< 0.001	***1.38***	< 0.001	-	39.8	**0.052**	< 0.00002	0.0008	< 0.001	-	< 0.001	< 0.00025[a]	2.54	0.26	< 0.0001	-	< 0.001	0.0016	-	< 0.005
	GR70	Duplicate	-	< 0.005	< 0.001	0.001	0.027	< 0.001	< 0.05	< 0.0002[a]	80.5	< 0.001	< 0.001	< 0.001	***1.3***	< 0.001	-	39.8	0.048	< 0.00002	0.0009	< 0.001	-	< 0.001	< 0.00025[a]	2.27	0.24	< 0.0001	-	< 0.001	0.0016	-	< 0.005
	QA/QC RPD%		-	*	*	*	0	7	*	*	*	1	*	*	*	6	*	-	0	*	*	*	*	-	*	*	11	8	*	-	*	*	-	*
	Tap (2008)	2008 10 06	-	-	-	-	-	-	-	-	79.3	-	-	-	-	-	-	37.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2458-0812-TW1	2012 08 08	< 0.1	0.002	< 0.00005	0.0005	0.0002	< 0.00005	0.006	0.00001	< 0.05	< 0.0005	< 0.00005	***0.0054***	0.04	0.00032	< 0.0001	< 0.05	< 0.001	0.000003	0.0009	0.0007	-	< 0.0003	< 0.00001	157	-	< 0.00001	-	< 0.001	0.00137	< 0.0005	0.009
Tap FS	Tap FS	2011 09 16	0.54	< 0.005	< 0.0005	< 0.0005	< 0.02	< 0.001	< 0.1	< 0.000017	< 0.1	< 0.001	< 0.0003	0.0018	< 0.03	< 0.0005	-	< 0.1	0.00035	< 0.00001	< 0.001	< 0.001	-	< 0.001	< 0.00002	172	< 0.005	< 0.0002	< 0.0005	< 0.01	0.00127	< 0.001	0.0063
	GR86	Duplicate	0.53	< 0.005	< 0.0005	< 0.0005	< 0.02	< 0.001	< 0.1	< 0.000017	< 0.1	< 0.001	< 0.0003	0.0017	< 0.03	< 0.0005	-	< 0.1	0.00034	< 0.00001	< 0.001	< 0.001	-	< 0.001	< 0.00002	165	< 0.005	< 0.0002	< 0.0005	< 0.01	0.00124	< 0.001	0.0061
	QA/QC RPD%		2	*	*	*	*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	-	*	*	4	*	*	*	*	*	*	*	*
Federal Guideline																																		
Canadian Drinking Water Quality Guidelines (CDWQG)			n/a	0.1	0.006	0.01	1	n/a	5	0.005	n/a	0.05	n/a	1	0.3	0.01	n/a	n/a	0.05	0.001	n/a	n/a	n/a	0.05	n/a	200	n/a	n/a	n/a	n/a	0.02	n/a	5
FGQG Tier 2 Residential/Parkland Land Use (RL/PL)[b]			n/a	0.1[d]	2	0.005	2.9	0.0053	n/a	0.000017	n/a	0.0089	n/a	0.002 - 0.004[e]	0.3	0.001 - 0.007[e]	n/a	n/a	n/a	0.000026	0.073	0.025 - 0.15[e]	n/a	0.001	0.0001	n/a	n/a	0.0008	n/a	1	0.015	n/a	0.03
BC Standard																																		
CSR Drinking Water (DW)			n/a	9.5	0.006	0.01	1	n/a	5	0.005	n/a	0.05	n/a	1	6.5	0.01	0.73	100	0.55	0.001	0.25	n/a	n/a	0.01	n/a	200	22	n/a	22	n/a	0.02	n/a	5
CSR Aquatic Life (AW)[c]			n/a	n/a	0.2	0.05	10	0.053	50	0.0001 - 0.0006[e]	n/a	0.01	0.04	0.02 - 0.09[e]	n/a	0.04 - 0.16[e]	n/a	n/a	n/a	0.001	10	0.25 - 1.5[e]	n/a	0.01	0.0005 - 0.0015[e]	n/a	n/a	0.003	n/a	1	3	n/a	0.075 - 2.4[e]

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).

[c] Standard to protect freshwater aquatic life.

[d] Guideline is pH dependent; based on available data, site pH is > 6.5.

[e] Standard varies with hardness.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline

BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline

OUTLINE Concentration greater than CSR Drinking Water (DW) standard

TABLE 12 (Cont'd): Summary of Analytical Results for Total Metals in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Phys	Total Metals																												
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Potassium mg/L	Selenium mg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Vanadium mg/L	Zinc mg/L
Well	Well (2004)	2004 12 08	-	-	-	-	-	-	-	-	72.2	-	-	-	-	-	-	36	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	-
	Well (2005)	2005 11 06	346	< 0.005	< 0.001	< 0.001	0.029	< 0.001	< 0.05	< 0.0002[a]	77.2	< 0.001	< 0.001	0.001	***1.14***	< 0.05[a]	0.009	37	0.044	< 0.00002	0.0009	< 0.001	1.5	< 0.001	< 0.00025[a]	1.8	0.24	< 0.000100	< 0.001	< 0.001	0.0016	< 0.001	0.007
	GR23	Duplicate	339	< 0.005	< 0.001	0.001	0.032	< 0.001	< 0.05	< 0.0002[a]	75.6	< 0.001	< 0.001	0.001	***1.38***	< 0.05[a]	0.009	36.4	0.047	< 0.00002	0.0009	< 0.001	1.5	< 0.001	< 0.00025[a]	1.8	0.25	< 0.000100	< 0.001	< 0.001	0.0016	< 0.001	< 0.005
	QA/QC RPD%		2	*	*	*	10	*	*	*	2	*	*	*	19	*	0	2	*	*	*	*	0	*	*	0	4	*	*	*	*	*	*
	Well (2006)	2006 08 20	371	0.019	< 0.001	0.001	0.031	< 0.001	< 0.05	< 0.0002[a]	75.6	< 0.001	< 0.001	< 0.001	***0.77***	< 0.001	0.008	36.2	0.043	< 0.02[a]	0.0009	< 0.001	1.8	< 0.001	< 0.00025[a]	1.9	0.25	< 0.000100	< 0.001	< 0.001	0.0018	< 0.001	0.026
	GR60	Duplicate	340	0.019	< 0.001	0.001	0.028	***7***	< 0.05	< 0.0002[a]	75.3	< 0.001	< 0.001	< 0.001	***0.62***	< 0.001	0.007	36.1	0.04	< 0.02[a]	0.0008	< 0.001	1.6	< 0.001	< 0.00025[a]	2.1	0.22	< 0.000100	< 0.001	< 0.001	0.0016	< 0.001	0.012
	QA/QC RPD%		9	0	*	0	10	*	*	*	0	*	*	*	22	*	13	0	*	*	*	*	12	*	*	10	13	*	*	*	*	*	*
	Well (2008)	2008 10 06	-	-	-	-	-	-	-	-	79.7	-	-	-	-	-	-	38	-	-	-	-	-	-	-	2.2	-	-	-	-	-	-	-
	Well (2009)	2009 10 19	359	< 0.005	< 0.0005	< 0.001	0.028	< 0.0005	< 0.025	< 0.00005[a]	78.4	< 0.001	< 0.0005	< 0.0005	***2.32***	< 0.00025	0.0078	39.5	**0.052**	< 0.02[a]	0.0008	< 0.001	1.67	< 0.001	< 0.0002[a]	2	0.247	< 0.0001	< 0.0005	< 0.001	0.0014	< 0.0005	< 0.005
	GR83	Duplicate	348	< 0.005	< 0.0005	< 0.001	0.025	< 0.0005	< 0.025	< 0.00005[a]	75.9	< 0.001	< 0.0005	< 0.0005	***0.37***	< 0.00025	0.0076	38.3	0.047	< 0.02[a]	0.0008	< 0.001	1.61	< 0.001	< 0.0002[a]	2	0.239	< 0.0001	< 0.0005	0.001	0.0013	< 0.0005	< 0.005
	QA/QC RPD%		3	*	*	*	11	*	*	*	3	*	*	*	145	*	3	3	*	*	*	*	4	*	*	0	3	*	*	*	*	*	*
	WELL (2010)	2010 09 08	364	< 0.005	< 0.000500	0.00082	0.031	< 0.001	< 0.1	< 0.0000170	82.2	< 0.001	< 0.000300	< 0.001	***5.47***	< 0.000500	0.0071	40.4	**0.0754**	< 0.0000100	< 0.001	< 0.001	< 2	< 0.001	< 0.0000200	2	-	< 0.000200	< 0.000500	< 0.01	0.00145	< 0.001	< 0.005
	GR2	Duplicate	364	< 0.005	< 0.000500	0.00083	0.03	< 0.001	< 0.1	< 0.0000170	80	< 0.001	< 0.000300	< 0.001	***5.35***	< 0.000500	0.007	39.8	**0.0734**	< 0.0000100	< 0.001	< 0.001	< 2	< 0.001	< 0.0000200	< 2	-	< 0.000200	< 0.000500	< 0.01	0.00144	< 0.001	< 0.005
	QA/QC RPD%		0	*	*	1	3	*	*	*	3	*	*	*	2	*	1	1	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*
	Well (2011)	2011 09 16	356	< 0.005	< 0.0005	0.00092	0.031	< 0.001	< 0.1	< 0.000017	81.6	< 0.001	0.00054	0.0021	***5.06***	< 0.0005	-	39.3	**0.0633**	< 0.00001	< 0.001	< 0.001	-	< 0.001	< 0.00002	< 2	0.264	< 0.0002	< 0.0005	0.011	0.00138	< 0.001	< 0.005
	2458-0812-DW1	2012 08 08	334	0.002	< 0.00005	0.0012	0.0324	< 0.00005	0.006	0.00001	73.4	< 0.0005	0.00007	< 0.0005	***3.06***	0.00002	0.0071	36.7	0.05	< 0.000003	0.0009	< 0.0005	-	< 0.0003	< 0.00001	1.8	-	< 0.00001	-	0.103	0.00151	< 0.0005	< 0.005
	2458-0812-DW101	Duplicate	332	0.001	< 0.00005	0.0011	0.0306	< 0.00005	0.006	0.00001	72.8	< 0.0005	0.00006	< 0.0005	***3.1***	0.00002	0.0071	36.4	**0.052**	< 0.000003	0.0009	< 0.0005	-	< 0.0003	< 0.00001	1.8	-	< 0.00001	-	0.098	0.00144	< 0.0005	< 0.005
	QA/QC RPD%		1	*	*	9	6	*	*	*	1	*	*	*	1	*	0	1	*	*	*	*	-	*	*	0	-	*	-	5	*	*	*
Federal Guideline																																
Canadian Drinking Water Quality Guidelines (CDWQG)			n/a	0.1	0.006	0.01	1	n/a	5	0.005	n/a	0.05	n/a	1	0.3	0.01	n/a	n/a	0.05	0.001	n/a	n/a	n/a	0.05	n/a	200	n/a	n/a	n/a	n/a	0.02	n/a	5
FGQG Tier 2 Residential/Parkland Land Use (RL/PL)[b]			n/a	0.1[d]	2	0.005	2.9	0.0053	n/a	0.000017	n/a	0.0089	n/a	0.002 - 0.004[e]	0.3	0.001 - 0.007[e]	n/a	n/a	n/a	0.000026	0.073	0.025 - 0.15[e]	n/a	0.001	0.0001	n/a	n/a	0.0008	n/a	1	0.015	n/a	0.03
BC Standard																																
CSR Drinking Water (DW)			n/a	9.5	0.006	0.01	1	n/a	5	0.005	n/a	0.05	n/a	1	6.5	0.01	0.73	100	0.55	0.001	0.25	n/a	n/a	0.01	n/a	200	22	n/a	22	n/a	0.02	n/a	5
CSR Aquatic Life (AW)[c]			n/a	n/a	0.2	0.05	10	0.053	50	0.0001 - 0.0006[e]	n/a	0.01	0.04	0.02 - 0.09[e]	n/a	0.04 - 0.16[e]	n/a	n/a	n/a	0.001	10	0.25 - 1.5[a]	n/a	0.01	0.0005 - 0.0015[e]	n/a	n/a	0.003	n/a	1	3	n/a	0.075 - 2.4[e]

All terms defined within the body of SNC-Lavalin's report.
< Denotes concentration less than indicated detection limit or RPD less than indicated value.
- Denotes analysis not conducted.
n/a Denotes no applicable standard/guideline.
* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.
[b] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).
[c] Standard to protect freshwater aquatic life.
[d] Guideline is pH dependent; based on available data, site pH is > 6.5.
[e] Standard varies with hardness.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline
BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline
OUTLINE Concentration greater than CSR Drinking Water (DW) standard
SHADOW Concentration greater than CSR Aquatic Life (AW) standard

TABLE 13: Summary of Analytical Results for VOCs in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Volatile Organic Compounds																																											
			Bromo benzene µg/L	Bromo dichloro methane µg/L	Bromo form µg/L	Bromo methane µg/L	1,3-Butadiene µg/L	Carbon tetra chloride µg/L	Chloro benzene µg/L	Chloro ethane µg/L	Chloro form µg/L	Chloro methane µg/L	2-Chloro propane µg/L	Dibromo chloro methane µg/L	1,2-Di bromo ethane µg/L	1,2-Di chloro benzene µg/L	1,3-Di chloro benzene µg/L	1,4-Di chloro benzene µg/L	Dichloro difluoro methane µg/L	1,1-Dichloro ethane µg/L	1,2-Dichloro ethane µg/L	1,1-Dichloro ethylene µg/L	cis-1,2-Dichloro ethylene µg/L	trans-1,2-Dichloro ethylene µg/L	Dichloro methane µg/L	1,2-Dichloro propane µg/L	2,2-Dichloro propane µg/L	1,3-Dichloro propane µg/L	cis-1,3-Dichloro propene µg/L	trans-1,3-Dichloro propene µg/L	Hexa chloro butadiene µg/L	2-Hexa none µg/L	Methyl ethyl ketone µg/L	Methyl isobutyl ketone µg/L	Methylene bromide µg/L	Tetra bromo methane µg/L	1,1,1,2-Tetra chloroethane µg/L	1,1,2,2-Tetra chloroethane µg/L	Tetra chloro ethylene µg/L	1,2,3-Tri chloro benzene µg/L	1,2,4-Tri chloro benzene µg/L	1,1,1-Tri chloro ethane µg/L	1,1,2-Tri chloro ethane µg/L	Trichloro ethylene µg/L	Trichloro fluoro methane µg/L	Vinyl chloride µg/L
BH113M	BH113M (2006)	2006 08 20	-	< 0.1	< 0.2	< 0.8	-	< 0.1	< 0.1	< 0.4	< 0.3	< 0.4	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.4	< 0.1	< 0.1	< 0.1	< 6	< 0.1	-	-	< 0.1	< 0.1	-	< 5	< 5	< 2	< 0.2	-	-	< 0.2	< 0.1	-	-	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2
BH13-04	BH13-04	2013 10 29	-	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	-	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
	zMW13-04-AD05	2013 10 02	-	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	-	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH13-05	BH13-05	2013 10 29	-	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	-	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
	DUP 1	Duplicate	-	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	-	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
	QA/QC RPD%		-	*	*	*	-	*	*	*	*	*	-	*	*	*	*	*	*	*	*	*	*	*	*	*	-	-	*	*	*	-	-	-	-	-	*	*	*	*	*	*	*	*	*	*
BH13-07	zMW13-07-AD05	2013 10 01	-	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	-	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
	BH13-07	2013 10 29	-	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	-	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH13-08	BH13-08-GW01-AD05	2014 03 11	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	-	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	-	-	-	-	< 1.8	-	< 1	< 1	< 1	-	-	< 1	< 1	< 1	< 8	< 1
BH14-09	BH14-09-GW01-AD05	2014 03 12	-	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	-	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-10	BH14-10-GW01-AD05	2014 03 11	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	< 1.8	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-11	BH14-11-GW01-AD05	2014 03 10	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	< 1.8	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-12	BH14-12-GW01-AD05	2014 03 09	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	< 1.8	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-13	BH14-13-GW01-AD05	2014 03 10	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	< 1.8	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-14	BH14-14-GW01-AD05	2014 03 09	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	< 1.8	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-15	BH14-15-GW01-AD05	2014 03 10	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	< 1.8	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
	BH14-15A-GW01-AD05	Duplicate	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	< 1.8	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	*	*	*	*	*	*	*	*	*	*	*	*	*	-	-	*	*	*	-	-	-	*	-	*	*	*	*	*	*	*	*	*	*
	BH14-15-GW2-AD05	2014 08 14	< 4	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	< 2	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	< 2	< 2	< 2	< 2	< 1	-	-	-	< 1.8	< 100	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
	BH14-A-GW2-AD05	Duplicate	< 4	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	< 3.2	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	< 2	< 2	< 2	< 2	< 1	-	-	-	< 1.8	< 100	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
	QA/QC RPD%		*	*	*	*	-	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*	*	*	*	*	*	*
BH14-16	BH14-16-GW01-AD05	2014 03 09	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	< 1.8	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-18	BH14-18-GW01-AD05	2014 03 13	-	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	-	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
	BH14-18-GW2-AD05	2014 08 17	< 4	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	< 4	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	< 2	< 2	< 2	< 2	< 1	-	-	-	-	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-19	BH14-19-GW01-AD05	2014 03 10	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	< 1.8	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-20	BH14-20-GW01-AD05	2014 03 10	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	< 1.8	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
	BH14-20-GW2-AD05	2014 08 14	< 4	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	< 2	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	< 2	< 2	< 2	< 2	< 1	-	-	-	-	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-22	BH14-22-GW01-AD05	2014 03 11	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	-	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	-	-	-	-	< 1.8	-	< 1	< 1	< 1	-	-	< 1	< 1	< 1	< 8	< 1
	BH14-22A-GW01-AD05	Duplicate	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	-	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	-	-	-	-	< 1.8	-	< 1	< 1	< 1	-	-	< 1	< 1	< 1	< 8	< 1
	QA/QC RPD%		*	*	*	*	*	*	*	*	*	*	-	*	-	*	*	*	*	*	*	*	*	*	*	*	-	-	*	*	-	-	-	-	*	-	*	*	*	-	-	*	*	*	*	*
BH14-23	BH14-23-GW01-AD05	2014 03 11	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	< 1.8	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-24	BH14-24-GW01-AD05	2014 03 11	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	< 1.8	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-25	BH14-25-GW01-AD05	2014 03 11	< 4	< 2	< 2	< 2	< 10[a]	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	< 1.8	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-26	BH14-26-GW01-AD05	2014 03 13	-	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	-	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-27	BH14-27-GW01-AD05	2014 03 12	-	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	-	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
BH14-28	BH14-28-GW01-AD05	2014 03 12	-	< 2	< 2	< 2	-	< 1[a]	< 1	< 2	< 2[a]	< 2	-	< 2	< 0.4[a]	< 1[a]	< 1	< 1	< 4	< 1	< 1	< 1	< 2[a]	< 2[a]	< 4	< 1	-	-	< 2	< 2	< 1	-	-	-	-	-	< 1	< 1	< 1	< 4	< 4	< 1	< 1	< 1	< 8	< 1
Tap	Tap (2006)	2006 08 20	-	< 0.1	< 0.2	< 0.8	-	< 0.1	< 0.1	< 0.4	< 0.3	< 0.4	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.4	< 0.1	< 0.1	< 0.1	< 6	< 0.1	-	-	< 0.1	< 0.1	-	< 5	< 5	< 2	< 0.2	-	-	< 0.2	< 0.1	-	-	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2
Well	Well (2005)	2005 11 06	-	< 0.1	< 0.2	< 0.8	-	< 0.1	< 0.1	< 0.4	< 0.3	< 0.4	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.4	< 0.1	< 0.1	< 0.1	< 6	< 0.1	-	-	< 0.1	< 0.1	-	< 5	< 5	< 2	< 0.2	-	-	< 0.2	< 0.1	-	-	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2
	GR23	Duplicate	-	< 0.1	< 0.2	< 0.8	-	< 0.1	< 0.1	< 0.4	< 0.3	< 0.4	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.4	< 0.1	< 0.1	< 0.1	< 6	< 0.1	-	-	< 0.1	< 0.1	-	< 5	< 5	< 2	< 0.2	-	-	< 0.2	< 0.1	-	-	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2
	QA/QC RPD%		-	*	*	*	-	*	*	*	*	*	-	*	*	*	*	*	*	*	*	*	*	*	*	*	-	-	*	*	-	*	*	*	*	-	-	*	*	-	-	*	*	*	*	*
	Well (2006)	2006 08 20	-	< 0.1	< 0.2	< 0.8	-	< 0.1	< 0.1	< 0.4	< 0.3	< 0.4	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.4	< 0.1	< 0.1	< 0.1	< 6	< 0.1	-	-	< 0.1	< 0.1	-	< 5	< 5	< 2	< 0.2	-	-	< 0.2	< 0.1	-	-	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2
	GR60	Duplicate	-	< 0.1	< 0.2	< 0.8	-	< 0.1	< 0.1	< 0.4	< 0.3	< 0.4	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.4	< 0.1	< 0.1	< 0.1	< 6	< 0.1	-	-	< 0.1	< 0.1	-	< 5	< 5	< 2	< 0.2	-	-	< 0.2	< 0.1	-	-	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2
	QA/QC RPD%		-	*	*	*	-	*	*	*	*	*	-	*	*	*	*	*	*	*	*	*	*	*	*	*	-	-	*	*	-	*	*	*	*	-	-	*	*	-	-	*	*	*	*	*
Federal Guideline																																															
Canadian Drinking Water Quality Guidelines (CDWQG			n/a	n/a	n/a	n/a	n/a	2	30	n/a	n/a	n/a	n/a	n/a	n/a	3	n/a	1	n/a	n/a	5	14	n/a	n/a	50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	30	n/a	n/a	n/a	n/a	5	n/a	2
FGQG Tier 2 Residential/Parkland Land Use (RL/PL)[b]			n/a	8,500	380	5.6	n/a	0.56	1.3	n/a	1.8	n/a	n/a	1,100	n/a	0.7	150	26	n/a	320	10	39	1.6	1.6	98	16	n/a	n/a	n/a	n/a	1.3	n/a	150,000	58,000	n/a	n/a	3.4	3.2	110	8	24	640	4.7	20	n/a	1.1
BC Standard																																															
CSR Drinking Water (DW)			730	16	100	51	6.1	5	30	46	100	950	1,100	100	0.34	3	n/a	1	7,300	3,700	5	14	370	730	50	9.9	n/a	730	n/a	n/a	8.6	n/a	22,000	2,900	370	n/a	26	3.4	30	n/a	n/a	10,000	12	5	11,000	2
CSR Aquatic Life (AW)[c]			n/a	n/a	n/a	n/a	n/a	130	13	n/a	20	n/a	n/a	n/a	n/a	7	1,500	260	n/a	n/a	1,000	n/a	n/a	n/a	980	n/a	n/a	n/a	n/a	n/a	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1,100	80	240	n/a	n/a	200	n/a	n/a

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\- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).

[c] Standard to protect freshwater aquatic life.

SHADED	Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline
BOLD	Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline
OUTLINE	Concentration greater than CSR Drinking Water (DW) standard
SHADOW	Concentration greater than CSR Aquatic Life (AW) standard

TABLE 14: Summary of Analytical Results for Glycols in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Glycols				
			Diethylene glycol mg/L	Ethylene glycol mg/L	Propylene glycol mg/L	Tetraethylene glycol mg/L	Triethylene glycol mg/L
BH113M	BH113M (2006)	2006 08 20	< 5	< 5	< 5	-	< 10
BH13-04	BH13-04	2013 10 29	< 20	< 20	< 20[a]	< 20	< 20
BH13-05	BH13-05	2013 10 29	< 20	< 20	< 20[a]	< 20	< 20
	DUP 1	Duplicate	< 20	< 20	< 20[a]	< 20	< 20
	QA/QC RPD%		*	*	*	*	*
BH13-07	BH13-07	2013 10 29	< 20	< 20	< 20[a]	< 20	< 20
BH13-08	BH13-08-GW01-AD05	2014 03 11	< 20	< 20	< 20[a]	< 20	< 20
BH14-09	BH14-09-GW01-AD05	2014 03 12	< 20	< 20	< 20[a]	< 20	< 20
BH14-10	BH14-10-GW01-AD05	2014 03 11	< 20	< 20	< 20[a]	< 20	< 20
BH14-11	BH14-11-GW01-AD05	2014 03 10	< 20	< 20	< 20[a]	< 20	< 20
BH14-12	BH14-12-GW01-AD05	2014 03 09	< 20	< 20	< 20[a]	< 20	< 20
BH14-13	BH14-13-GW01-AD05	2014 03 10	< 20	< 20	< 20[a]	< 20	< 20
BH14-14	BH14-14-GW01-AD05	2014 03 09	< 20	< 20	< 20[a]	< 20	< 20
BH14-15	BH14-15-GW01-AD05	2014 03 10	< 20	< 20	< 20[a]	< 20	< 20
	BH14-15A-GW01-AD05	Duplicate	< 20	< 20	< 20[a]	< 20	< 20
	QA/QC RPD%		*	*	*	*	*
	BH14-15-GW2-AD05	2014 08 14	< 20	< 20	< 20[a]	< 20	< 20
	BH14-A-GW2-AD05	Duplicate	< 20	< 20	< 20[a]	< 20	< 20
	QA/QC RPD%		*	*	*	*	*
BH14-16	BH14-16-GW01-AD05	2014 03 09	< 20	< 20	< 20[a]	< 20	< 20
BH14-18	BH14-18-GW01-AD05	2014 03 13	< 20	< 20	< 20[a]	< 20	< 20
BH14-19	BH14-19-GW01-AD05	2014 03 10	< 20	< 20	< 20[a]	< 20	< 20
BH14-20	BH14-20-GW01-AD05	2014 03 10	< 20	< 20	< 20[a]	< 20	< 20
	BH14-20-GW2-AD05	2014 08 14	< 20	< 20	< 20[a]	< 20	< 20
BH14-22	BH14-22-GW01-AD05	2014 03 11	< 20	< 20	< 20[a]	< 20	< 20
	BH14-22A-GW01-AD05	Duplicate	< 20	< 20	< 20[a]	< 20	< 20
	QA/QC RPD%		*	*	*	*	*
	BH14-22-GW2-AD05	2014 08 15	< 20	< 20	< 20[a]	< 20	< 20
BH14-23	BH14-23-GW01-AD05	2014 03 11	< 20	< 20	< 20[a]	< 20	< 20
	BH14-23-GW2-AD05	2014 08 15	< 20	< 20	< 20[a]	< 20	< 20
BH14-24	BH14-24-GW01-AD05	2014 03 11	< 20	< 20	< 20[a]	< 20	< 20
	BH14-24-GW2-AD05	2014 08 16	< 20	< 20	< 20[a]	< 20	< 20
	BH14-C-GW2-AD05	Duplicate	< 20	< 20	< 20[a]	< 20	< 20
	QA/QC RPD%		*	*	*	*	*
BH14-25	BH14-25-GW01-AD05	2014 03 11	< 20	< 20	< 20[a]	< 20	< 20
	BH14-25-GW2-AD05	2014 08 16	< 20	< 20	< 20[a]	< 20	< 20
BH14-26	BH14-26-GW01-AD05	2014 03 13	< 20	< 20	< 20[a]	< 20	< 20
BH14-27	BH14-27-GW01-AD05	2014 03 12	< 20	< 20	< 20[a]	< 20	< 20
	BH14-27-GW2-AD05	2014 08 15	< 20	< 20	< 20[a]	< 20	< 20
BH14-28	BH14-28-GW01-AD05	2014 03 12	< 20	< 20	< 20[a]	< 20	< 20
	BH14-28-GW2-AD05	2014 08 16	< 20	< 20	< 20[a]	< 20	< 20
Federal Guideline							
Canadian Drinking Water Quality Guidelines (CDWQG)			n/a	n/a	n/a	n/a	n/a
FGQG Tier 2 Residential/Parkland Land Use (RL/PL)[b]			n/a	190	500	n/a	n/a
BC Standard							
CSR Drinking Water (DW)			n/a	n/a	18	n/a	n/a
CSR Aquatic Life (AW)[c]			n/a	1,920	5,000	n/a	n/a

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- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline

BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline

OUTLINE Concentration greater than CSR Drinking Water (DW) standard

SHADOW Concentration greater than CSR Aquatic Life (AW) standard

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).

[c] Standard to protect freshwater aquatic life.

TABLE 14 (Cont'd): Summary of Analytical Results for Glycols in Groundwater

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Glycols				
			Diethylene glycol mg/L	Ethylene glycol mg/L	Propylene glycol mg/L	Tetraethylene glycol mg/L	Triethylene glycol mg/L
Tap	Tap (2006)	2006 08 20	< 5	< 5	< 5	-	< 10
	Tap (2007)	2007 08 22	< 5	< 5	< 5	-	< 10
	GR70	Duplicate	< 5	< 5	< 5	-	< 10
	QA/QC RPD%		*	*	*	-	*
Well	Well (2005)	2005 11 06	< 5	< 5	< 5	-	< 10
	GR23	Duplicate	< 5	< 5	< 5	-	< 10
	QA/QC RPD%		*	*	*	-	*
	Well (2006)	2006 08 20	< 5	< 5	< 5	-	< 10
	GR60	Duplicate	< 5	< 5	< 5	-	< 10
	QA/QC RPD%		*	*	*	-	*
Federal Guideline							
Canadian Drinking Water Quality Guidelines (CDWQG)			n/a	n/a	n/a	n/a	n/a
FGQG Tier 2 Residential/Parkland Land Use (RL/PL)[b]			n/a	190	500	n/a	n/a
BC Standard							
CSR Drinking Water (DW)			n/a	n/a	18	n/a	n/a
CSR Aquatic Life (AW)[c]			n/a	1,920	5,000	n/a	n/a

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

* RPDs are not calculated where one or more concentrations are less than five times RDL.

SHADED Concentration greater than Canadian Drinking Water Quality Guidelines (CDWQG) Guideline

BOLD Concentration greater than FGQG Tier 2 Residential Land Use (RL) Guideline

OUTLINE Concentration greater than CSR Drinking Water (DW) standard

SHADOW Concentration greater than CSR Aquatic Life (AW) standard

[a] Laboratory detection limit exceeds regulatory standard/guideline.

[b] Pathways Included: Freshwater Aquatic Life - Coarse, Inhalation - Coarse, Soil Organisms Direct Contact - Coarse (whichever is most stringent).

[c] Standard to protect freshwater aquatic life.

Project No:

Project: Alaska Highway Maintenance Camps

Client:

Location: Fireside

Log of Borehole: FS-03

Enclosure:

Technician: Laurie Washington

SUBSURFACE PROFILE			SAMPLE			VOC Concentration ppm (100 200 300 400) / %LEL (20 40 60 80)	Lab Analysis
Depth	Symbol	Description	Number	Type	Recovery		
		Ground Surface					
0		Granular with cobbles.	1				
		Silty with fine sand. Black seam on top of silt layer. Odour of old diesel.	2				
		Granular with cobbles. HC odour.	3				
1		Granular with cobbles.	4				
2							
3							

Drill Method:

Drill Date: October, 2002

Hole Size:

PWGSC Environmental Services
Western Region
1000, 9700 Jasper Ave.
Edmonton AB T5J-4E2

Datum:

Checked by:

Sheet: 1 of 1

BOREHOLE LOG

BH78

SUPERVISOR: **Tyler Wilen**
TYPE OF RIG: **ODEX / split spoon sampler**
CONTRACTOR: **Geotech Drilling Services Ltd.**
DATE DRILLED: **March 15, 2005**
GROUND ELEV: **~517.2m asl**

CLIENT: **PWGSC**
PGL FILE: **125-66.01**

Depth (m)	Elev.(m-asl)	LITHOLOGY	SAMPLE NAMES AND DEPTHS	COMMENTS	Vapours (ppm)
0.0	517.2	Ground surface			
		Brown SAND GRAVEL, dry, coarse.	BH78-1		
2.0	515.2	Brown SAND, minor gravel, fine, dry.			
			BH78-2		
4.0	513.2				
			BH78-3	PHC-like odour	
6.0	511.2				
		Brown SAND, some gravel, fine, moist.	BH78-4	PHC-like odour	
			BH78-5	medium to strong PHC-like odour	
8.0	509.2	Brown SAND, coarse.			
			BH78-6	PHC-like odour	
10.0	507.2				
			BH78-7	PHC-like odour	
12.0	505.2				
			BH78-8		
14.0	503.2		BH78-9		
		End of Hole at 14m			
16.0	501.2				
18.0	499.2				

PHC Petroleum Hydrocarbon

DETAILED SITE INVESTIGATION
Fireside Maintenance Camp
Km 839, Alaska Highway, BC

POTTINGER GAHERTY ENVIRONMENTAL CONSULTANTS LTD.

BOREHOLE LOG

BH85

SUPERVISOR: **Tyler Wilen**
TYPE OF RIG: **ODEX / split spoon sampler**
CONTRACTOR: **Geotech Drilling Services Ltd.**
DATE DRILLED: **March 16, 2005**
GROUND ELEV: **~517.2m asl**

CLIENT: **PWGSC**
PGL FILE: **125-66.01**

Depth (m)	Elev.(m-asl)	LITHOLOGY	SAMPLE NAMES AND DEPTHS	COMMENTS	Vapours (ppm)
0.0	517.2	Ground surface			
		Brown SAND, some gravel, fine.			
2.0	515.2		BH85-1		
			BH85-2		
4.0	513.2				
6.0	511.2		BH85-3	minor PHC-like odour	
			BH85-4	minor PHC-like odour	
8.0	509.2				
			BH85-5	minor PHC-like odour	
10.0	507.2				
			BH85-6		
		End of Hole at 10.9m			
12.0	505.2				
14.0	503.2				
16.0	501.2				
18.0	499.2				

PHC Petroleum Hydrocarbon

DETAILED SITE INVESTIGATION
Fireside Maintenance Camp
Km 839, Alaska Highway, BC

POTTINGER GAHERTY ENVIRONMENTAL CONSULTANTS LTD.

FRANZ ENVIRONMENTAL INC.
CONSULTING • ENGINEERING • TECHNOLOGIES

Borehole Log: BH12-02

Project No.: 2458-1202
Project: Fireside Maintenance Camp Remediation Feasibility Study
Client: Public Works and Government Services Canada
Location: Fireside Maintenance Camp, KM 839, Alaska Highway, BC
Logged By: John Dewis

SUBSURFACE PROFILE				SAMPLE			
Depth (ft / m)	Symbol	Description	Depth/Elev.	Sample No.	Type	Vapour ppm (0 500 1000 1500)	Well Description
0 / 0		Ground Surface	0.0				
		Sand and Gravel Silty, black staining, moist.	0.3	01 (Heavy Odour)	G	90 ppm	
2				02 (Heavy Odour)	G	150 ppm	
4		***Medium Sand*** Silty, brown, moist.	1.2 / 1.5	03 (Heavy Odour)	G	55 ppm	
6 / 2		***Sand and Gravel*** Trace silt, brown.		04 (Heavy Odour)	G	250 ppm	
8		***Medium to Coarse Sand and Gravel*** Trace silt, trace cobbles; grey staining, slight moisture from 4.9 to 7.9 m.		05 (Heavy Odour)	G	170 ppm	
10				06 (Heavy Odour)	G	45 ppm	
12 / 4				07 (Heavy Odour)	G	25 ppm	
14							
16				08 (Heavy Odour)	G	3350 ppm	
18				09 (Heavy Odour)	G	1050 ppm	
20 / 6							
22				10 (Heavy Odour)	G	170 ppm	
24				11 (Heavy Odour)	G	50 ppm	
26 / 8		***Sand and Gravel*** Silty.	7.9 / 8.8	12	G	85 ppm	
28				13 (Heavy Odour)	G	640 ppm	
30		***Medium Sand and Gravel*** Trace silt, trace cobbles, moist.	9.4	14 (Heavy Odour)	G	100 ppm	
32 / 10				15 (Heavy Odour)	G	35 ppm	
34							
36				16 (Moderate Odour)	G	170 ppm	

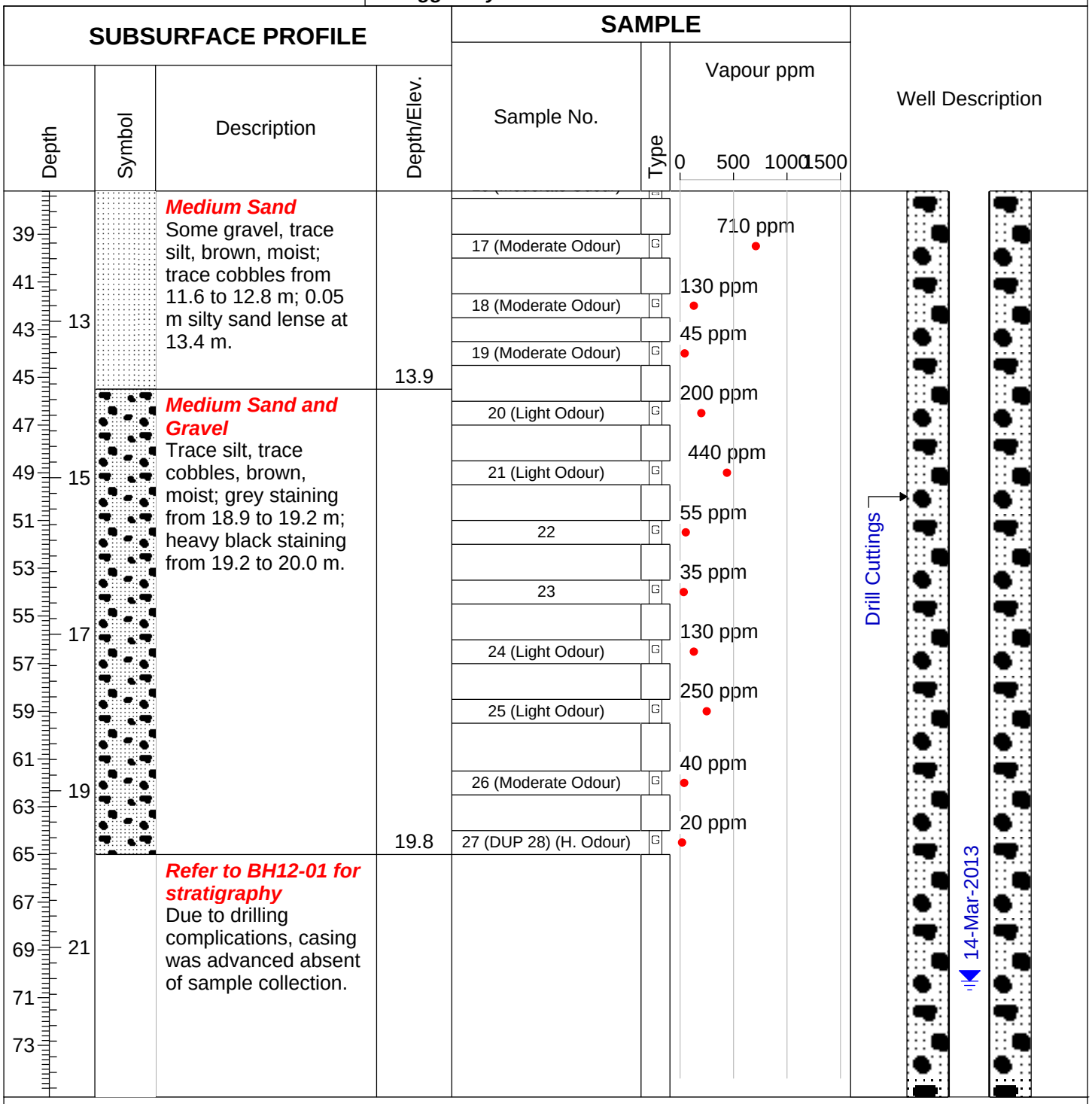
Drilled By: Tervita
Drill Method: Sonic
Drill Date: October 15, 2012

Well Dia: 2" / 5 cm
Hole Dia: 6" / 15 cm
Sheet: 1 of 3

FRANZ ENVIRONMENTAL INC.
CONSULTING • ENGINEERING • TECHNOLOGIES

Borehole Log: BH12-02

Project No.: 2458-1202
Project: Fireside Maintenance Camp Remediation Feasibility Study
Client: Public Works and Government Services Canada
Location: Fireside Maintenance Camp, KM 839, Alaska Highway, BC
Logged By: John Dewis



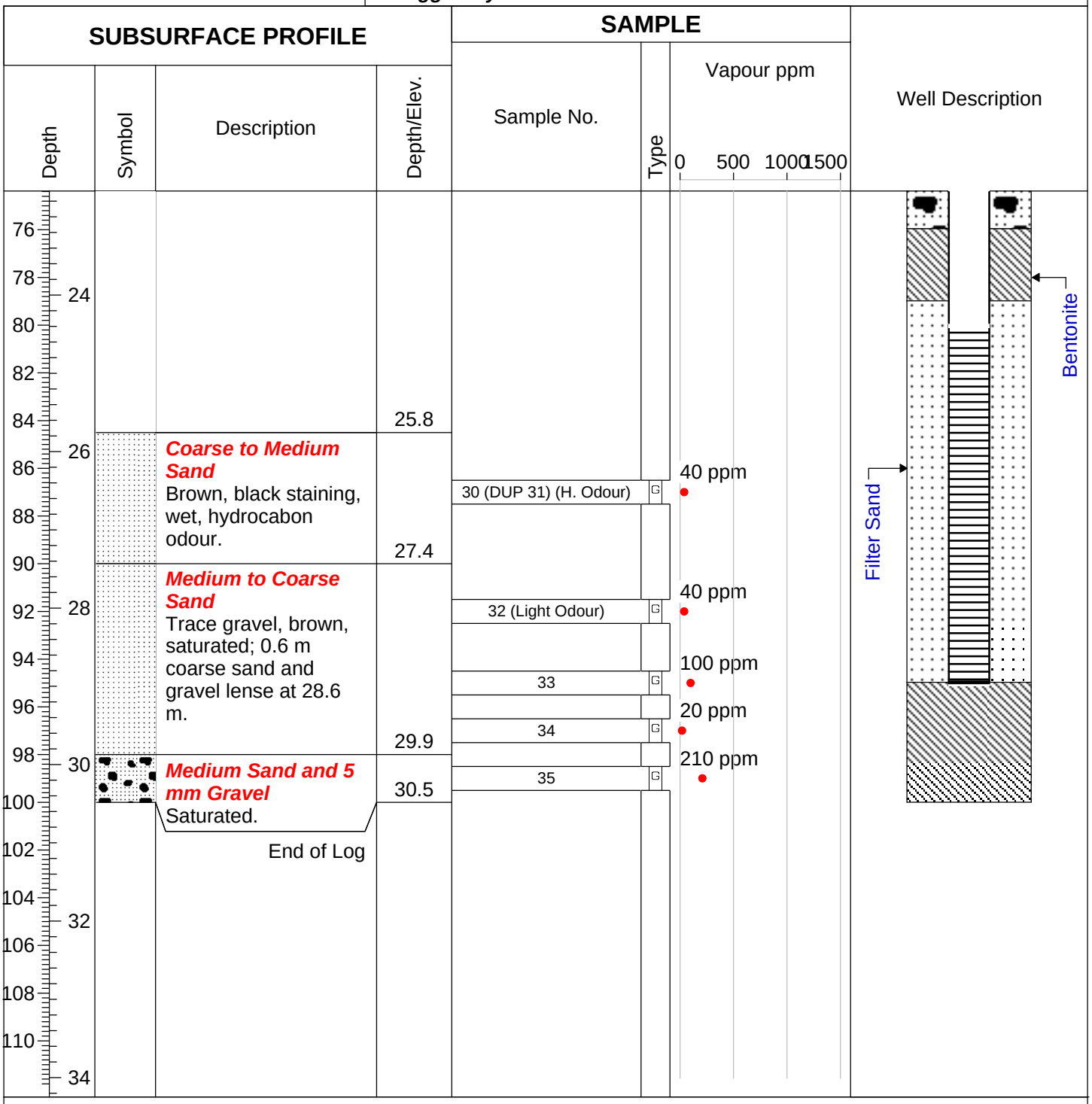
Drilled By: Tervita
Drill Method: Sonic
Drill Date: October 15, 2012

Well Dia: 2" / 5 cm
Hole Dia: 6" / 15 cm
Sheet: 2 of 3

FRANZ ENVIRONMENTAL INC.
CONSULTING • ENGINEERING • TECHNOLOGIES

Borehole Log: BH12-02

Project No.: 2458-1202
Project: Fireside Maintenance Camp Remediation Feasibility Study
Client: Public Works and Government Services Canada
Location: Fireside Maintenance Camp, KM 839, Alaska Highway, BC
Logged By: John Dewis



Drilled By: Tervita
Drill Method: Sonic
Drill Date: October 15, 2012

Well Dia: 2" / 5 cm
Hole Dia: 6" / 15 cm
Sheet: 3 of 3

FRANZ ENVIRONMENTAL INC.
CONSULTING ♦ ENGINEERING ♦ TECHNOLOGIES ♦

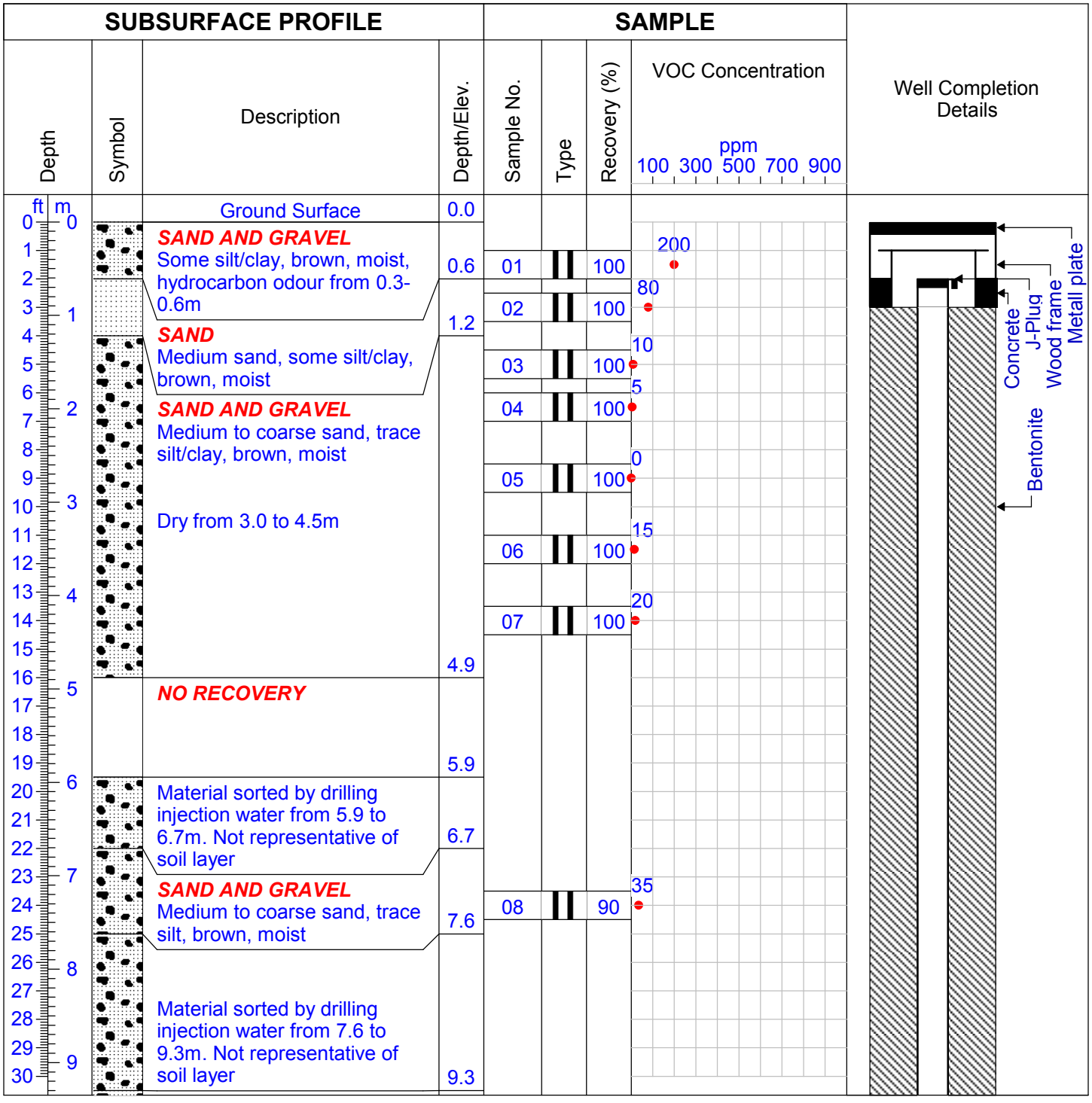
Borehole Log: BH13-04

Project No.: 2458-1302

Project: Fireside Maintenance Camp

Client: PWGSC ***Logged By:*** NR

Location: Fireside Maintenance Camp ***Checked By:*** JD



Drilled By: Tervita

Drill Method: Sonic

Drill Date: 22/09/2013

Top of Casing Elevation: 516.533m

FRANZ ENVIRONMENTAL INC.
CONSULTING ♦ ENGINEERING ♦ TECHNOLOGIES ♦

Borehole Log: BH13-04

Project No.: 2458-1302

Project: Fireside Maintenance Camp

Client: PWGSC ***Logged By:*** NR

Location: Fireside Maintenance Camp ***Checked By:*** JD

SUBSURFACE PROFILE				SAMPLE				
Depth	Symbol	Description	Depth/Elev.	Sample No.	Type	Recovery (%)	VOC Concentration (ppm: 100 300 500 700 900)	Well Completion Details
31–60		***SAND AND GRAVEL*** Medium to coarse sand, trace cobbles, trace silt/clay, brown to light brown, moist		09		90	100	
				10		90	25	
				11		90	100	
				12		90	65	
				13		90	55	
				14		90	45	
				15		100	45	
				16		100	40	
				17		100	35	
				18		100	0	

Drilled By: Tervita

Drill Method: Sonic

Drill Date: 22/09/2013

Top of Casing Elevation: 516.533m

FRANZ ENVIRONMENTAL INC.
CONSULTING ♦ ENGINEERING ♦ TECHNOLOGIES ♦

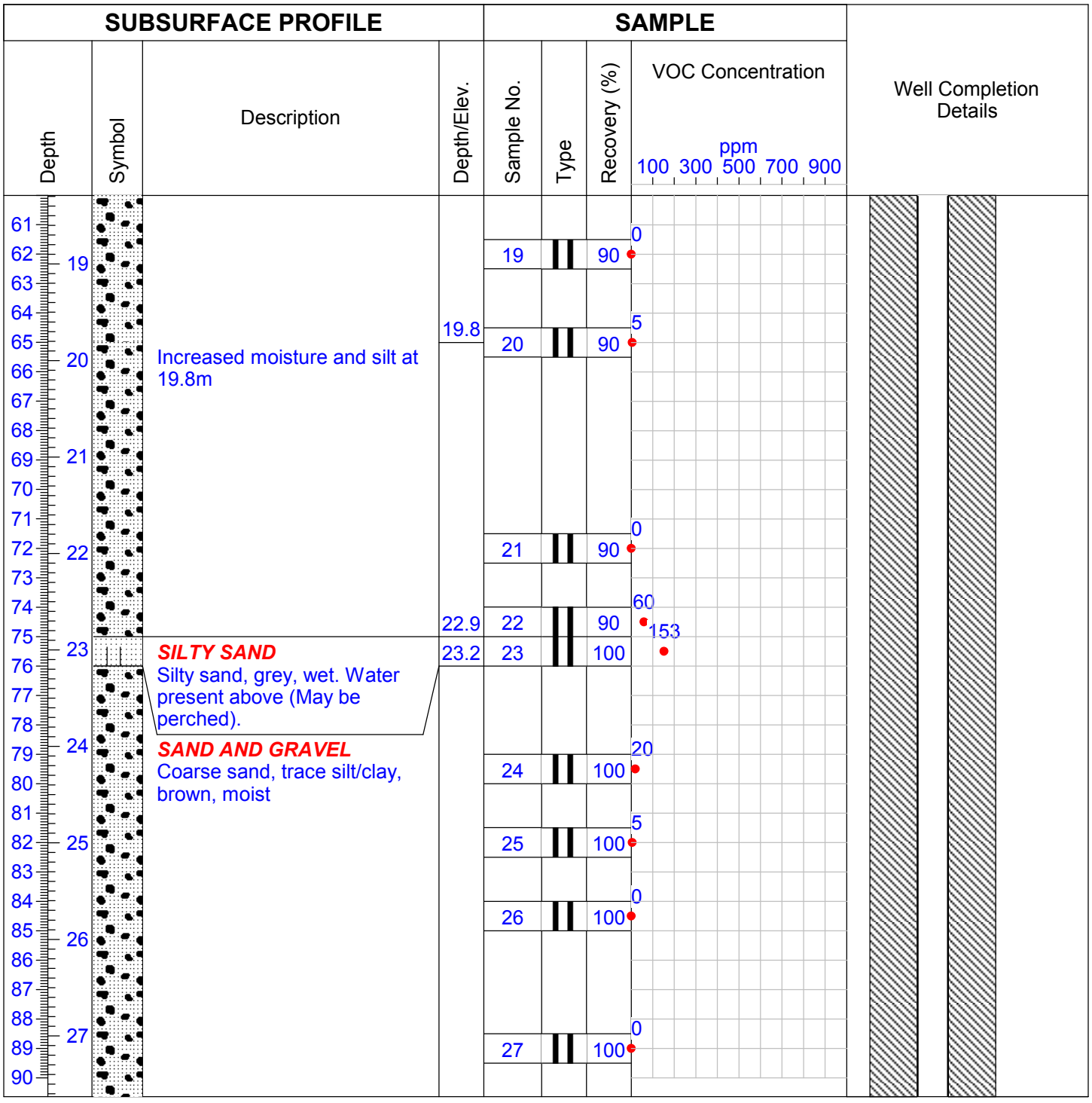
Borehole Log: BH13-04

Project No.: 2458-1302

Project: Fireside Maintenance Camp

Client: PWGSC ***Logged By:*** NR

Location: Fireside Maintenance Camp ***Checked By:*** JD



Drilled By: Tervita

Drill Method: Sonic

Drill Date: 22/09/2013

Top of Casing Elevation: 516.533m

FRANZ ENVIRONMENTAL INC.
CONSULTING ♦ ENGINEERING ♦ TECHNOLOGIES ♦

Borehole Log: BH13-04

Project No.: 2458-1302

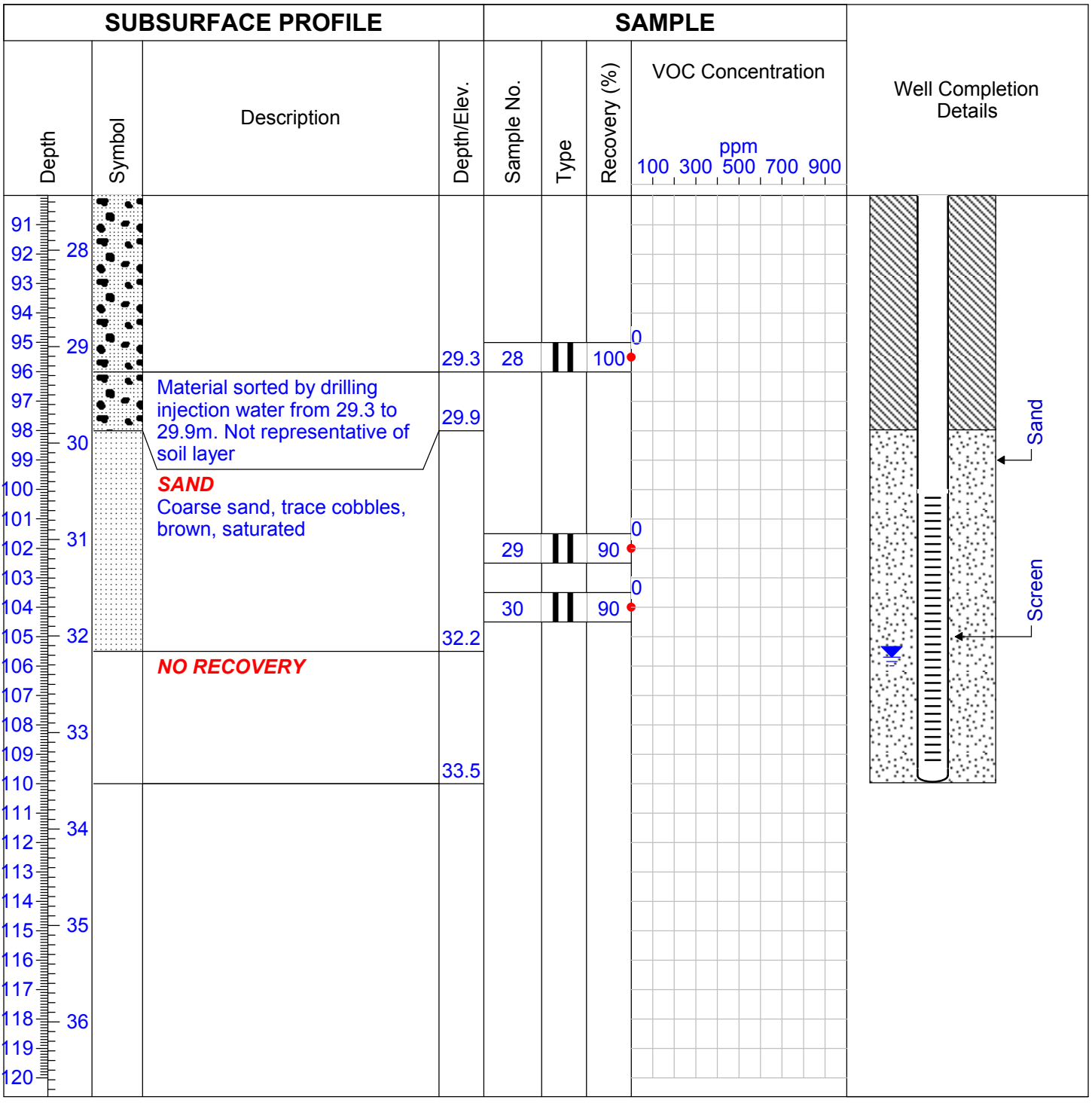
Project: Fireside Maintenance Camp

Client: PWGSC

Logged By: NR

Location: Fireside Maintenance Camp

Checked By: JD



Drilled By: Tervita

Drill Method: Sonic

Drill Date: 22/09/2013

Top of Casing Elevation: 516.533m

Sheet: 4 of 4

FRANZ ENVIRONMENTAL INC.
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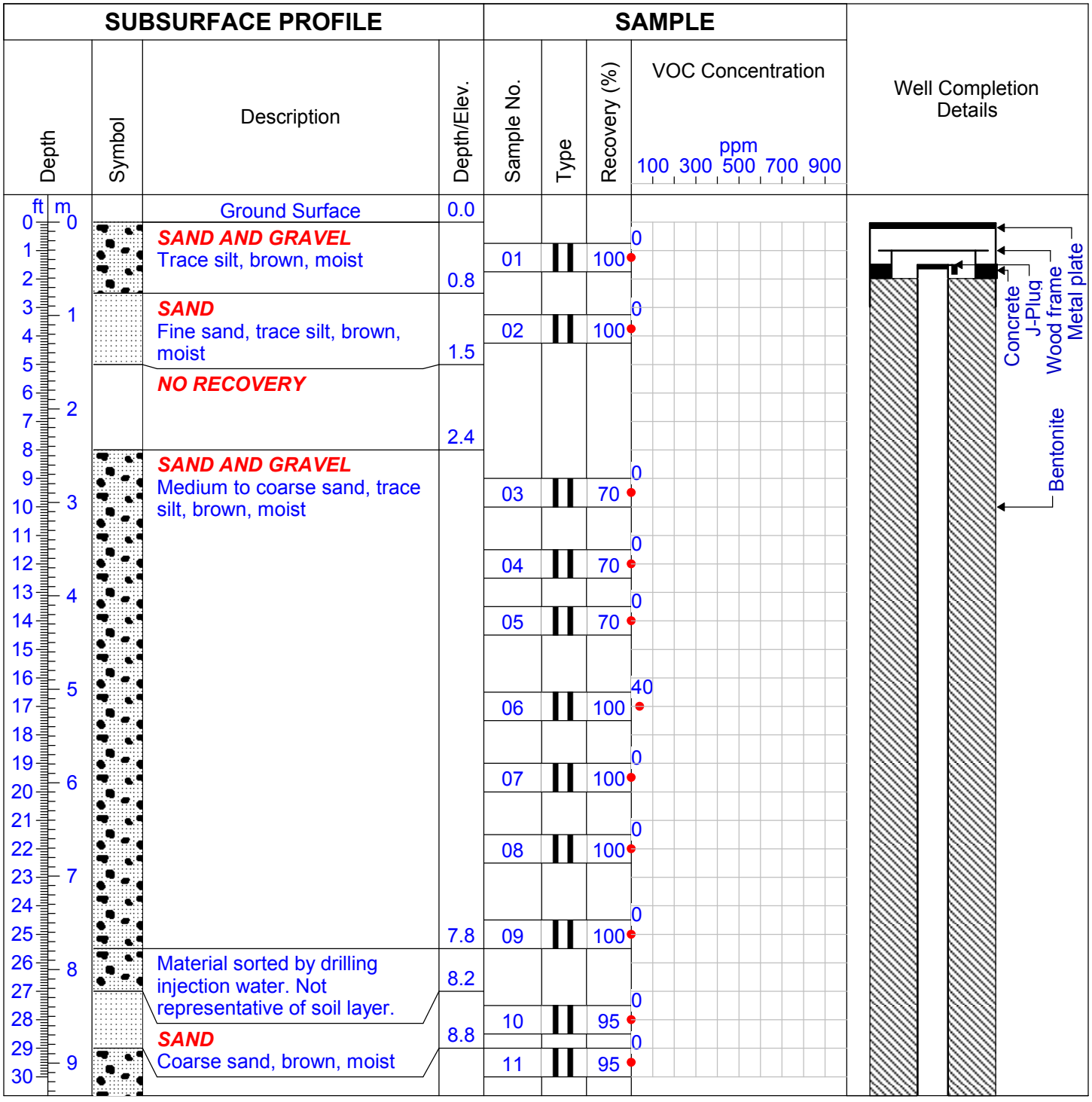
Borehole Log: BH13-06

Project No.: 2458-1302

Project: Fireside Maintenance Camp

Client: PWGSC ***Logged By:*** NR

Location: Fireside Maintenance Camp ***Checked By:*** JD



Drilled By: Tervita

Drill Method: Sonic

Drill Date: 25/09/2013

Top of Casing Elevation: 516.34

Sheet: 1 of 4

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Borehole Log: BH13-06

Project No.: 2458-1302

Project: Fireside Maintenance Camp

Client: PWGSC ***Logged By:*** NR

Location: Fireside Maintenance Camp ***Checked By:*** JD

SUBSURFACE PROFILE				SAMPLE				
Depth	Symbol	Description	Depth/Elev.	Sample No.	Type	Recovery (%)	VOC Concentration (ppm: 100 300 500 700 900)	Well Completion Details
10		***SAND AND GRAVEL*** Medium to coarse sand, trace cobbles, trace silt/clay, brown, moist		12		90	0	
				13		90	0	
11				14		90	0	
12				15		90	50	
				16		90	0	
13			13.7	17		90	0	
14		***NO RECOVERY***						
15								
16								
17								
18								

Drilled By: Tervita

Drill Method: Sonic

Drill Date: 25/09/2013

Top of Casing Elevation: 516.34

FRANZ ENVIRONMENTAL INC.
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Borehole Log: BH13-06

Project No.: 2458-1302

Project: Fireside Maintenance Camp

Client: PWGSC ***Logged By:*** NR

Location: Fireside Maintenance Camp ***Checked By:*** JD

SUBSURFACE PROFILE				SAMPLE				
Depth	Symbol	Description	Depth/Elev.	Sample No.	Type	Recovery (%)	VOC Concentration (ppm: 100 300 500 700 900)	Well Completion Details
61								
62	19							
63								
64			19.8					
65		***SAND AND GRAVEL*** Medium to coarse sand, trace silt/clay, trace cobbles, brown, moist						
66	20							
67				18		100	0	
68								
69	21	Wet at 28.6m		19		100	0	
70								
71				20		100	0	
72	22							
73				21		100	0	
74								
75	23							
76								
77								
78								
79	24			22		100	0	
80								
81				23		100	0	
82	25							
83								
84				24		100	0	
85	26							
86								
87				25		100	0	
88								
89	27							
90				26		100	0	

Drilled By: Tervita

Drill Method: Sonic

Drill Date: 25/09/2013

Top of Casing Elevation: 516.34

FRANZ ENVIRONMENTAL INC.
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Borehole Log: BH13-06

Project No.: 2458-1302

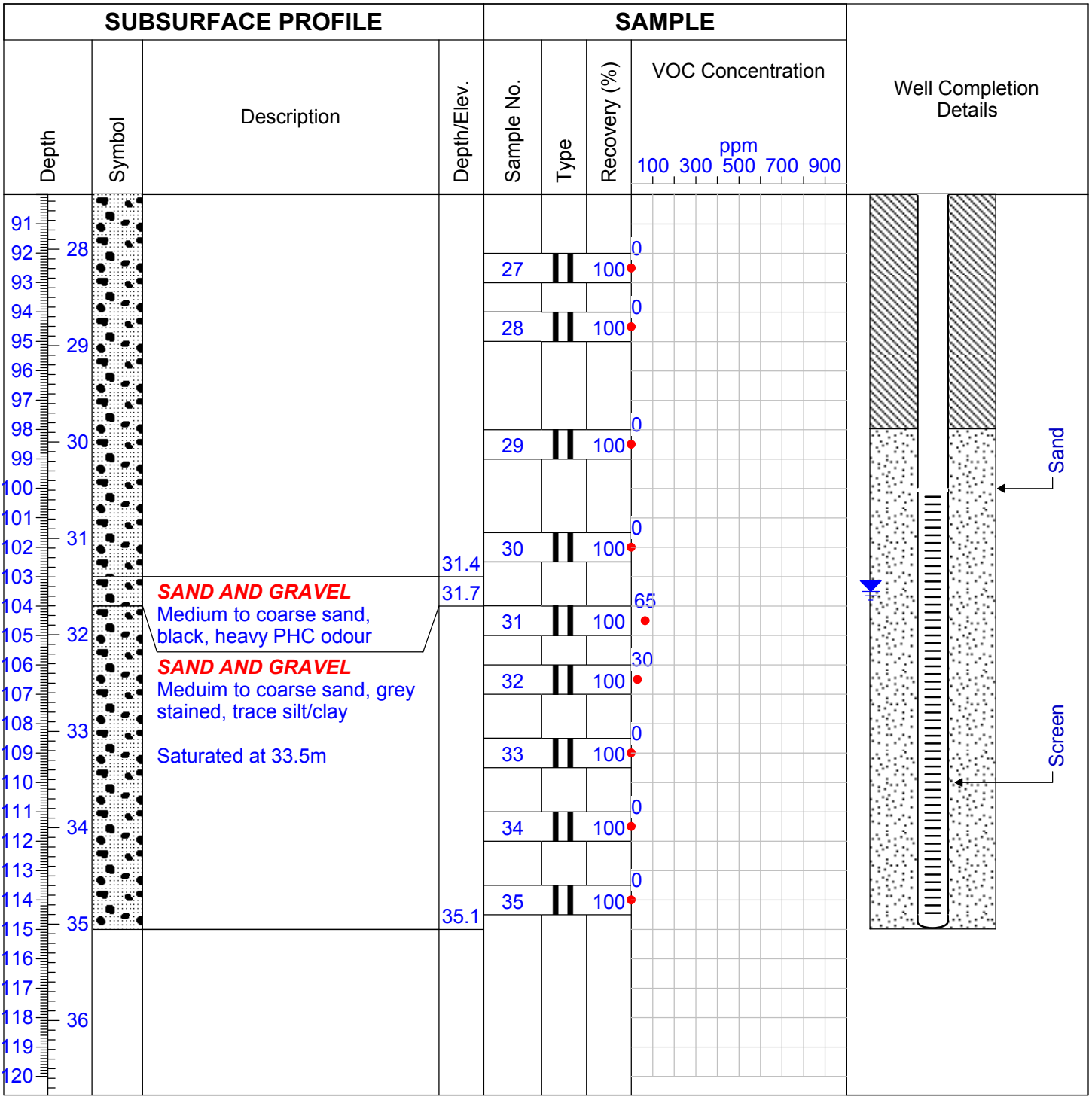
Project: Fireside Maintenance Camp

Client: PWGSC

Logged By: NR

Location: Fireside Maintenance Camp

Checked By: JD



Drilled By: Tervita

Drill Method: Sonic

Drill Date: 25/09/2013

Top of Casing Elevation: 516.34

Sheet: 4 of 4

FRANZ ENVIRONMENTAL INC.
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Borehole Log: BH13-07

Project No.: 2458-1302

Project: Fireside Maintenance Camp

Client: PWGSC

Logged By: NR

Location: Fireside Maintenance Camp

Checked By: JD

SUBSURFACE PROFILE

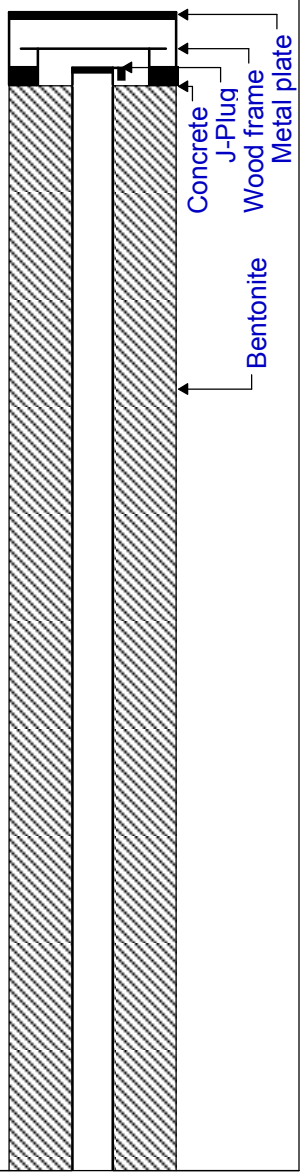
Depth (ft)	Depth (m)	Symbol	Description	Depth/Elev.
0	0		Ground Surface	0.0
0–4	0–1		***SAND AND GRAVEL*** Medium to coarse sand, trace silt/clay, brown, moist	1.2
4–7	1–2		***SAND*** Fine to medium sand, trace silt/clay, brown, moist	2.3
7–30	2–9		***SAND AND GRAVEL*** Medium to coarse sand, trace silt/clay, brown, moist Slightly moist to dry at 3.4m	

SAMPLE

Sample No.	Type	Recovery (%)	VOC Concentration (ppm)
01		100	40
02		100	10
03		100	10
04		100	0
05		100	0
06		100	0
07		100	0
08		100	0
09		100	0
10		100	0
11		100	0

VOC Concentration scale: 100 300 500 700 900 ppm

Well Completion Details



Drilled By: Tervita

Drill Method: Sonic

Drill Date: 25/09/2013

Top of Casing Elevation: 516.828m

FRANZ ENVIRONMENTAL INC.
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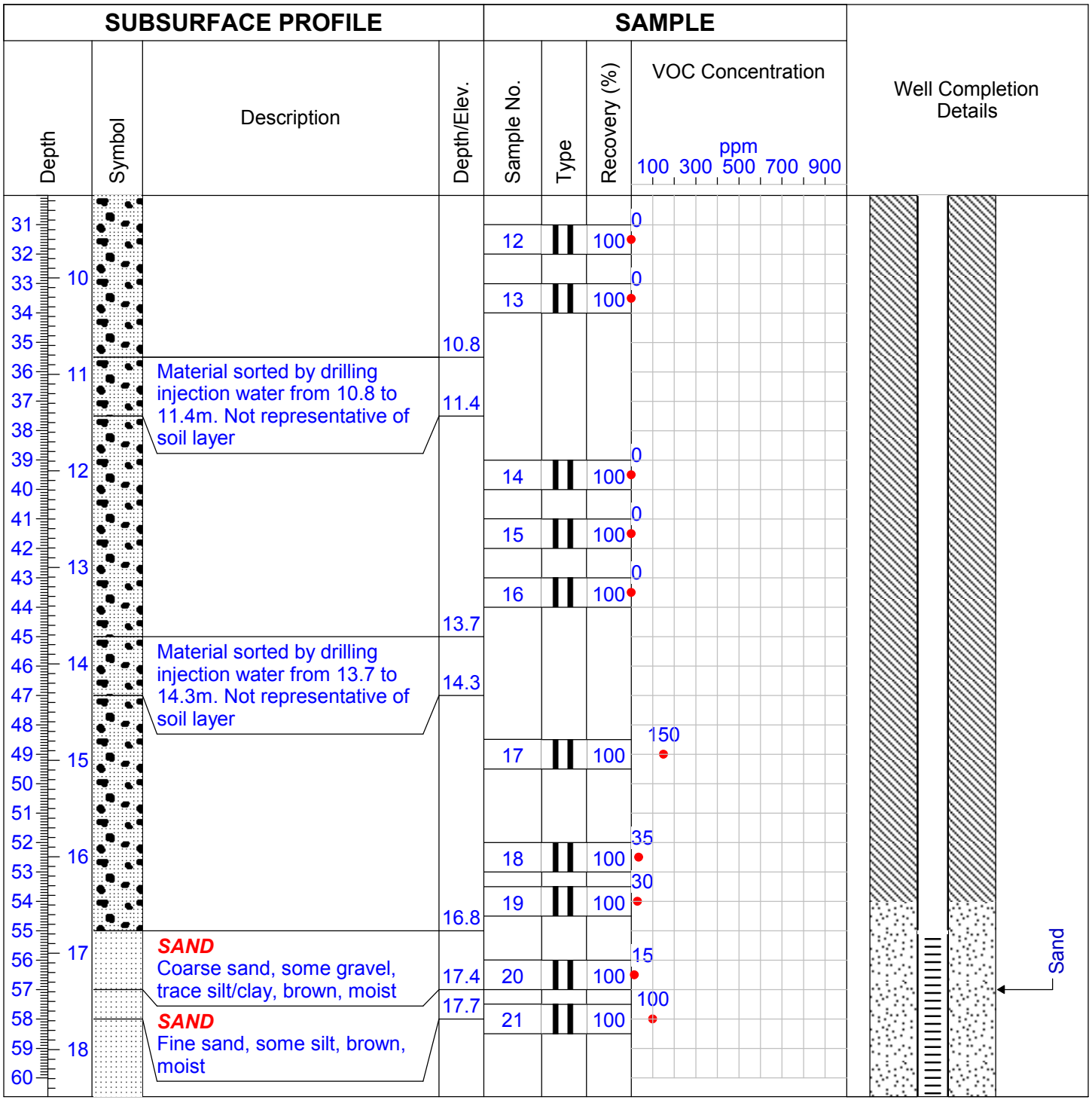
Borehole Log: BH13-07

Project No.: 2458-1302

Project: Fireside Maintenance Camp

Client: PWGSC ***Logged By:*** NR

Location: Fireside Maintenance Camp ***Checked By:*** JD



Drilled By: Tervita

Drill Method: Sonic

Drill Date: 25/09/2013

Top of Casing Elevation: 516.828m

FRANZ ENVIRONMENTAL INC.
CONSULTING ♦ ENGINEERING ♦ TECHNOLOGIES ♦

Borehole Log: BH13-07

Project No.: 2458-1302

Project: Fireside Maintenance Camp

Client: PWGSC

Logged By: NR

Location: Fireside Maintenance Camp

Checked By: JD

SUBSURFACE PROFILE

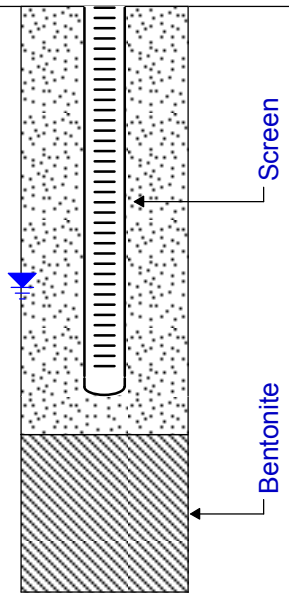
Depth	Symbol	Description	Depth/Elev.
19		***SAND*** Coarse sand, trace gravel, brown, moist Wet at 19.8m	
22.9			22.9

SAMPLE

Sample No.	Type	Recovery (%)	VOC Concentration (ppm)
22		100	30
23		100	30
24		100	30
25		100	0
26		100	0
27		100	0

VOC Concentration ppm: 100 300 500 700 900

Well Completion Details



Drilled By: Tervita

Drill Method: Sonic

Drill Date: 25/09/2013

Top of Casing Elevation: 516.828m

BOREHOLE/MONITORING WELL #: BH14-19

BOREHOLE LOG

Project No: 2458-1401
Project: Fireside Supplemental Drilling Investigation
Client: Public Works and Government Services Canada
Site Location: Fireside Maintenance Camp, KM 839 Alaska Highway, BC
Site ID: AD05

GS Elevation: 517.259 m amsl
TOC Elevation: 517.109 m amsl
Water Level: 31.439 m btoc
Water Level Elevation: 485.735 m amsl
Bottom of Well Depth: 32.988 m btoc

SUBSURFACE PROFILE				SAMPLE								
Depth (ft / m)	Symbol	Description	Elevations (m amsl)\ Depth (mbgs)	Sample ID	Type	Sample Symbol	Recovery	Blow Count	Combustible Vapour Reading (ppmv) (%LEL)	Submitted for Lab Analysis	Well Completion Details	Depth (m)
0 / 0		Ground Surface	0.00									0
1		***SAND AND GRAVEL*** Dry, frozen	0.00	BH14-19-01	BS			NA	10			
2		Trace pebbles from 1.2m to 1.8m										
3 / 1		Light odour from 0 to 1.2m										1
4				BH14-19-02	SS			22,28,23,21	10	X		
5			-1.83									
6		***FINE SAND AND GRAVEL*** Dry to moist	1.83	BH14-19-03	SS			13,16,16,16	5			
7 / 2			-2.44									2
8		***FINE SAND*** Moist, brown, trace gravel from 2.4m to 3m	2.44	BH14-19-04	SS			8,17,14,14	10			
9			-3.05									
10 / 3		Moist, brown, trace silt from 3.9m to 4.6m	3.05	BH14-19-05	BS			NA	15			3
11			-3.96									
12		Trace silt Moderate odour from 3.9m to 4.6m	3.96	BH14-19-06	SS			4,7,8,24	25			
13				BH14-19-07	SS			NA	10			
14												
15												
16 / 4												4
17												
18		Light odour from 4.6m to 4.8m										
19			-5.79									
20		***FINE SAND AND GRAVEL*** Moist, brown	5.79	BH14-19-08	SS			25, 30 for 2"	35			
21												
22				BH14-19-09	BS			NA	5			
23 / 5			-7.32									5
24		***GRAVEL*** Moist, brown, trace pebbles	7.32	BH14-19-10	SS			26,30for5"	5			
25												
26		***SAND AND GRAVEL*** Moist, brown		BH14-19-11	BS			NA	20			
27												
28			-8.84									
29		***COARSE SAND*** Moist, brown, trace pebbles	8.84	BH14-19-12	SS			19,30for 1"	5			
30 / 6			-9.45									6
31		***SAND AND GRAVEL*** Moist, brown	9.45	BH14-19-13	BS			NA	5			
32												
33 / 7												7
8												8
9												9
10												10

Well Completion Details: 5cm Dia. Sch.40PVC Riser; Bentonite; Slough; Bentonite; Slough; Bentonite; Slough

Drilled By: Geotech
Drill Method: ODEX/Splitspoon
Drill Date: March 2 to 5, 2014

Logged By: J. Thomas/R. Samson/M. Jaud
Log Prepared By: L. Pereira
Checked By: J. Dewis

Note: Any decisions/actions made by a third party based on this log are the sole responsibility of the third party.
Franz Environmental Inc. accepts no liability for third party decisions/actions made based on this log.

FRANZ ENVIRONMENTAL INC.
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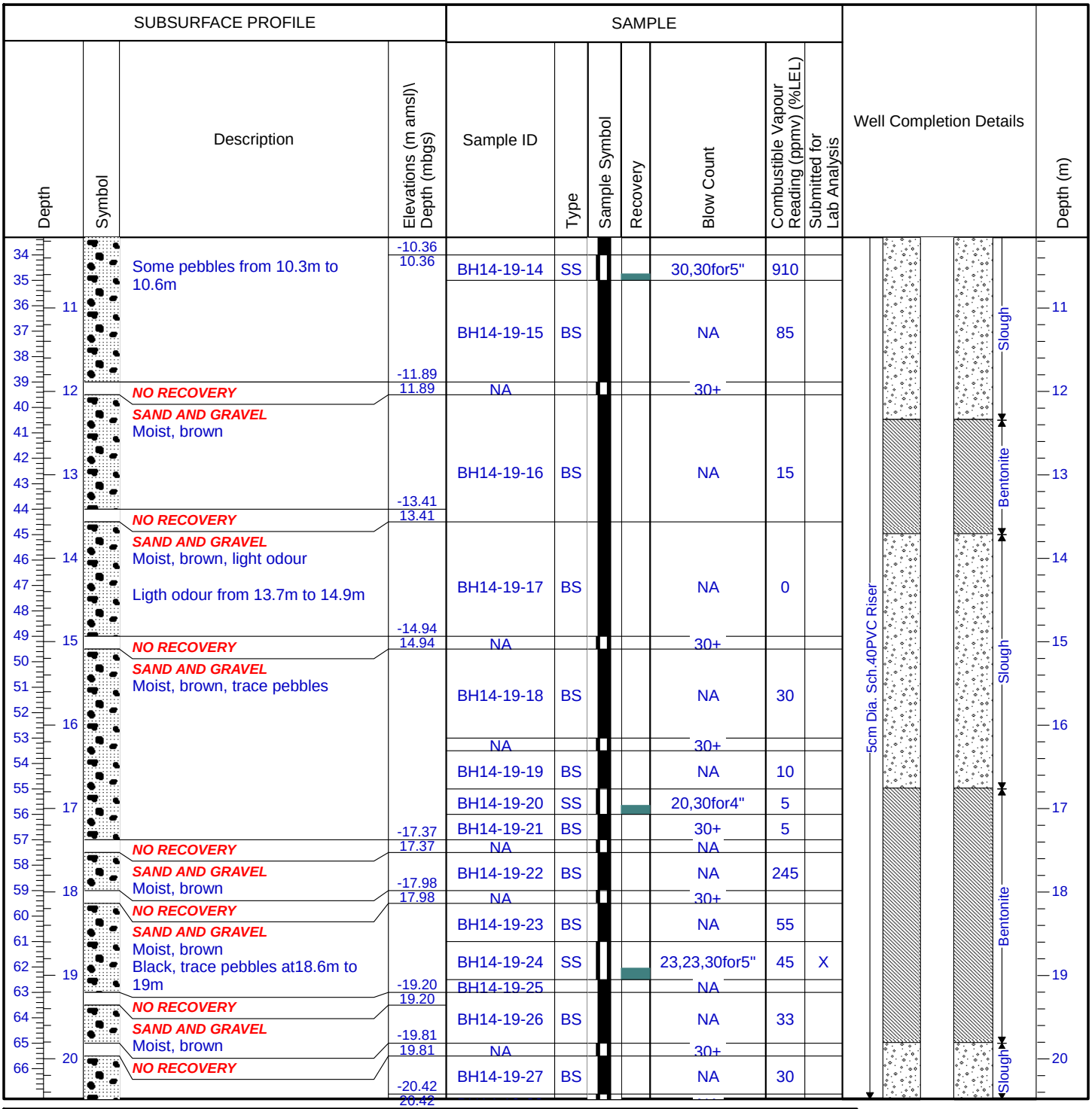
BOREHOLE/MONITORING WELL #: BH14-19

BOREHOLE LOG

Project No: 2458-1401
Project: Fireside Supplemental Drilling Investigation
Client: Public Works and Government Services Canada
Site Location: Fireside Maintenance Camp, KM 839 Alaska Highway, BC
Site ID: AD05

GS Elevation: 517.259 m amsl
TOC Elevation: 517.109 m amsl
Water Level: 31.439 m btoc
Water Level Elevation: 485.735 m amsl
Bottom of Well Depth: 32.988 m btoc



Drilled By: Geotech
Drill Method: ODEX/Splitspoon
Drill Date: March 2 to 5, 2014

Logged By: J. Thomas/R. Samson/M. Jaud
Log Prepared By: L. Pereira
Checked By: J. Dewis

Note: Any decisions/actions made by a third party based on this log are the sole responsibility of the third party.
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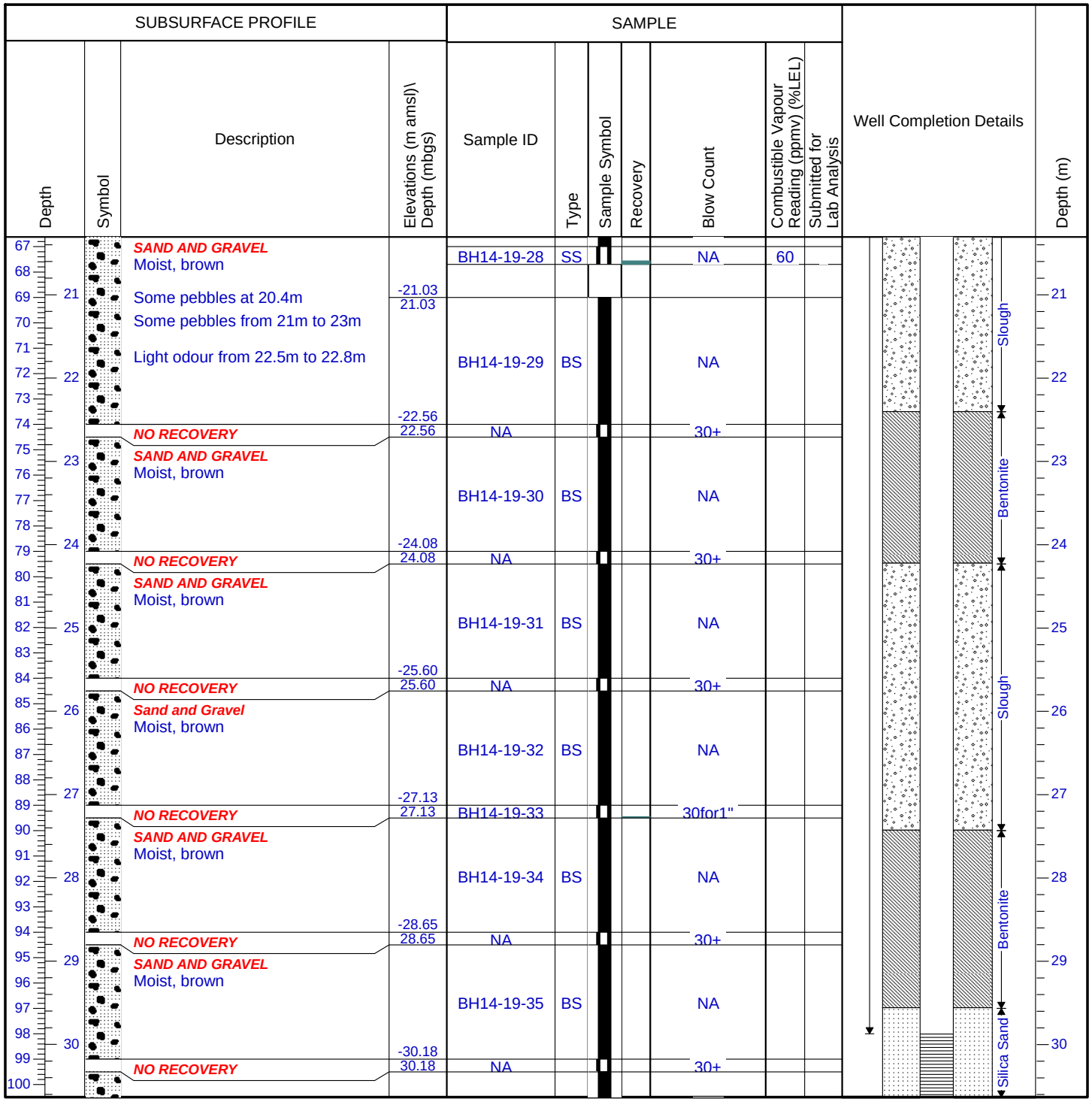
FRANZ ENVIRONMENTAL INC.
♦ CONSULTING ♦ ENGINEERING ♦ TECHNOLOGIES ♦

BOREHOLE/MONITORING WELL #: BH14-19

BOREHOLE LOG

Project No: 2458-1401
Project: Fireside Supplemental Drilling Investigation
Client: Public Works and Government Services Canada
Site Location: Fireside Maintenance Camp, KM 839 Alaska Highway, BC
Site ID: AD05

GS Elevation: 517.259 m amsl
TOC Elevation: 517.109 m amsl
Water Level: 31.439 m btoc
Water Level Elevation: 485.735 m amsl
Bottom of Well Depth: 32.988 m btoc



Drilled By: Geotech
Drill Method: ODEX/Splitspoon
Drill Date: March 2 to 5, 2014

Logged By: J. Thomas/R. Samson/M. Jaud
Log Prepared By: L. Pereira
Checked By: J. Dewis

FRANZ ENVIRONMENTAL INC.
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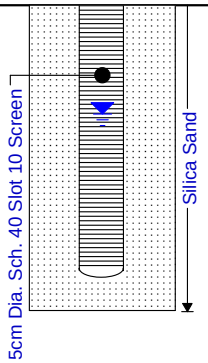
BOREHOLE/MONITORING WELL #: BH14-19

BOREHOLE LOG

Project No: 2458-1401
Project: Fireside Supplemental Drilling Investigation
Client: Public Works and Government Services Canada
Site Location: Fireside Maintenance Camp, KM 839 Alaska Highway, BC
Site ID: AD05

GS Elevation: 517.259 m amsl
TOC Elevation: 517.109 m amsl
Water Level: 31.439 m btoc
Water Level Elevation: 485.735 m amsl
Bottom of Well Depth: 32.988 m btoc

SUBSURFACE PROFILE				SAMPLE								
Depth	Symbol	Description	Elevations (m amsl)\ Depth (mbgs)	Sample ID	Type	Sample Symbol	Recovery	Blow Count	Combustible Vapour Reading (ppmv) (%LEL)	Submitted for Lab Analysis	Well Completion Details	Depth (m)
31		***FINE TO MEDIUM SAND AND GRAVEL*** Moist, brown at 30.3m		BH14-19-36	BS			NA				31
				BH14-19-37	SS			29,30for3"		X		
		Trace pebbles from 31.1m to 31.4m	-31.70	BH14-19-38	BS			NA				
		Very wet at 31.7m	31.70	BH14-19-39	SS			30,30for5"				
32			-32.31	BH14-19-40	BS			NA				32
		Grey, trace pebbles from 32.3m to 32.2m	32.31	BH14-19-41	SS			20,23,29,30		X		
33			-33.22									33
		End of Borehole	33.22									
34												34
35												35
36												36
37												37
38												38
39												39
40												40



Notes:
GS = Grab sample
SS = Splitspoon sample
BS = Bucket sample
TOC = Top of casing
m amsl = Metres above mean sea level
m bgs = Metres below ground surface
m btoc = Metres below top of casing
NA = Not Available

Drilled By: Geotech
Drill Method: ODEX/Splitspoon
Drill Date: March 2 to 5, 2014

Logged By: J. Thomas/R. Samson/M. Jaud
Log Prepared By: L. Pereira
Checked By: J. Dewis

FRANZ ENVIRONMENTAL INC.
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BOREHOLE/MONITORING WELL #: BH14-20

BOREHOLE LOG

Project No: 2458-1401
Project: Fireside Supplemental Drilling Investigation
Client: Public Works and Government Services Canada
Site Location: Fireside Maintenance Camp, KM 839 Alaska Highway, BC
Site ID: AD05

GS Elevation: 517.502 m amsl
TOC Elevation: 517.252 m amsl
Water Level: 19.584 m btoc
Water Level Elevation: 497.733 m amsl
Bottom of Well Depth: 23.867 m btoc

SUBSURFACE PROFILE				SAMPLE							Well Completion Details	
Depth (ft / m)	Symbol	Description	Elevations (m amsl)\ Depth (mbgs)	Sample ID	Type	Sample Symbol	Recovery	Blow Count	Combustible Vapour Reading (ppmv) (%LEL)	Submitted for Lab Analysis		Depth (m)
0 / 0		Ground Surface	0.00									0
		NOT OBSERVED Frozen	0.00									
			-1.52									
5 / 2		***MEDIUM TO COARSE SAND AND GRAVEL*** Dry, grey to brown, some large pebbles from 1.5m to 2.7m	1.52	BH14-20-01	GS			NA	30	X		2
8				BH14-20-02	GS			NA	5			
9 / 3		Dry to moist from 2.7m to 5.8m	-2.74 2.74									3
13 / 4				BH14-20-03	GS			NA	70			4
15				BH14-20-04	GS			NA	360			
16 / 5				BH14-20-05	GS			NA	25			5
			-5.79 5.79									
19 / 6		Moist from 5.5m to 8.1m										6
23 / 7				BH14-20-06	GS			NA	320	X		7
24				BH14-20-07	GS			NA	40			
26 / 8			-8.08 8.08									8
27		Trace large pebbles from 8.1m to 8.8m		BH14-20-08	GS			NA	10			
29 / 9												9
33 / 10				BH14-20-09	GS			NA	110			10
34				BH14-20-10	GS			NA	200			

Bentonite
Slough
Bentonite
Slough
Bentonite
5cm Dia. Sch.40PVC Riser

Drilled By: Mudbay
Drill Method: Sonic
Drill Date: March 3, 2014

Logged By: F. Dane/A. Garnier/M. Jaud
Log Prepared By: L. Pereira
Checked By: J. Dewis

FRANZ ENVIRONMENTAL INC.
♦ CONSULTING ♦ ENGINEERING ♦ TECHNOLOGIES ♦

BOREHOLE/MONITORING WELL #: BH14-20

BOREHOLE LOG

Project No: 2458-1401
Project: Fireside Supplemental Drilling Investigation
Client: Public Works and Government Services Canada
Site Location: Fireside Maintenance Camp, KM 839 Alaska Highway, BC
Site ID: AD05

GS Elevation: 517.502 m amsl
TOC Elevation: 517.252 m amsl
Water Level: 19.584 m btoc
Water Level Elevation: 497.733 m amsl
Bottom of Well Depth: 23.867 m btoc

SUBSURFACE PROFILE				SAMPLE								
Depth	Symbol	Description	Elevations (m amsl)\ Depth (mbgs)	Sample ID	Type	Sample Symbol	Recovery	Blow Count	Combustible Vapour Reading (ppmv) (%LEL)	Submitted for Lab Analysis	Well Completion Details	Depth (m)
11				BH14-20-10				NA				11
37			-11.58									
38		Grey from 11.6m to 11.8m	11.58	BH14-20-11	GS			NA	0			
39												
12												12
40												
41												
42												
13			-13.11									13
43			13.11									
44		Moist, brown, coarse sand, some large pebbles from 13.1m to 13.7m		BH14-20-12	GS			NA	180			
45			-13.72									
46			13.72	BH14-20-13	GS			NA	610			
14		Grey, trace fine sand from 13.7m to 14.6m										14
47				BH14-20-14	GS			NA	10			
48												
49												
15												15
50												
51			-15.54									
52		***MEDIUM TO COARSE SAND***	15.54									
53		Moist, brown		BH14-20-15	GS			NA	100			
16												16
54												
55			-16.76									
56		***MEDIUM TO COARSE SAND AND GRAVEL***	16.76									
17			-17.22	BH14-20-16	GS			NA	10			17
57		Moist, brown from 16.7m to 17.2m	17.22									
58		Orange to brown, trace silt from 17.2m to 17.9m		BH14-20-17	GS			NA	50			
59			-17.98									
18			17.98									18
60		Brown, coarse at 18.2m										
61												
62				BH14-20-18	GS			NA	75			
19			-19.05									19
63			19.05									
64		Black staining, sticky										
65		Moderate odour from 19.2m to 20.1m		BH14-20-19	GS			NA	140			
20												20
66												
67				BH14-20-20	GS			NA	240			
68												
69												
21												21
70												
71			-21.64									
			21.64									

Well Completion Details: Bentonite; Slough; Bentonite; Silica Sand

Drilled By: Mudbay
Drill Method: Sonic
Drill Date: March 3, 2014

Logged By: F. Dane/A. Garnier/M. Jaud
Log Prepared By: L. Pereira
Checked By: J. Dewis

FRANZ ENVIRONMENTAL INC.
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BOREHOLE/MONITORING WELL #: BH14-20

BOREHOLE LOG

Project No: 2458-1401
Project: Fireside Supplemental Drilling Investigation
Client: Public Works and Government Services Canada
Site Location: Fireside Maintenance Camp, KM 839 Alaska Highway, BC
Site ID: AD05

GS Elevation: 517.502 m amsl
TOC Elevation: 517.252 m amsl
Water Level: 19.584 m btoc
Water Level Elevation: 497.733 m amsl
Bottom of Well Depth: 23.867 m btoc

SUBSURFACE PROFILE				SAMPLE								
Depth	Symbol	Description	Elevations (m amsl)\ Depth (mbgs)	Sample ID	Type	Sample Symbol	Recovery	Blow Count	Combustible Vapour Reading (ppmv) (%LEL)	Submitted for Lab Analysis	Well Completion Details	Depth (m)
22		***COARSE SAND*** Moist, black, trace gravel, sticky Strong odour from 21.6m to 23.5m		BH14-20-21	GS			NA	670	X		22
23				BH14-20-22	GS			NA	680			23
		Wet, grey to brown	-23.47 23.47									
24		***MEDIUM TO FINE SAND*** Moderate odour from 22.5m to 24.1m	-24.08 24.08	BH14-20-23	GS			NA	20	X		24
		MEDIUM TO COARSE SAND AND GRAVEL Wet, brown small pebbles	-24.69 24.69	BH14-20-24	GS			NA	230			
25		***MEDIUM TO COARSE SAND*** Wet, brown	-25.15 25.15	BH14-20-25	GS			NA	20			25
		MEDIUM TO COARSE SAND AND GRAVEL Wet, brown	-25.91 25.91									
26		***FINE TO MEDIUM SAND*** Wet, brown		BH14-20-26	GS			NA	25			26
			-26.97 26.97									
27		End of Borehole										27
28												28
29												29
30												30
31												31
32												32

Well Completion Details: 5cm Dia. Sch. 40 Slot 10 Screen; Silica Sand; Bentonite; Slough

Notes:
GS = Grab sample
SS = Sonic sample
BS = Bucket sample
TOC = Top of casing
m amsl = Metres above mean sea level
m bgs = Metres below ground surface
m btoc = Metres below top of casing
NA = Not Available

Drilled By: Mudbay
Drill Method: Sonic
Drill Date: March 3, 2014

Logged By: F. Dane/A. Garnier/M. Jaud
Log Prepared By: L. Pereira
Checked By: J. Dewis

FRANZ ENVIRONMENTAL INC.
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SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-01

PAGE 1 OF 2

Drilling Contractor	Diverse Drilling Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Solid Stem Auger	Ground Surface Elev. (m)	833.925	Borehole Logged By:	YFW
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 03 14
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616540.802	Easting: 604125.738	Log Typed By:	NDS

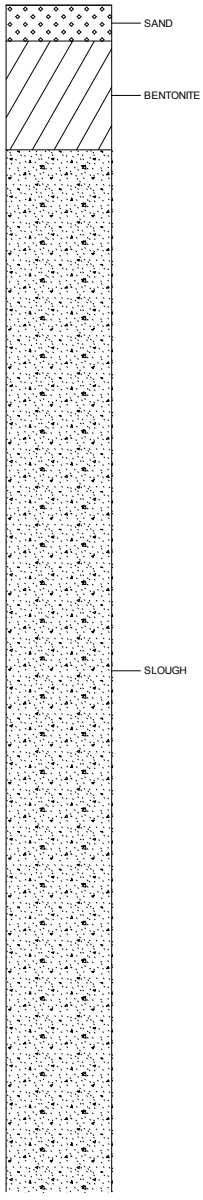
Drilling Legend
- Sample Interval
- Auger Flight

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Reading within indicated scale
Reading outside indicated scale

Soil Vapour (ppm)

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	EC (uS/cm)	% Recovery	Soil Vapour (ppm)
0	SAND and GRAVEL, fine to coarse grained sand, fine to coarse gravel, trace silt, dense, dry.			**1-1**	61	100	
1	SAND, fine grained, reddish brown, loose, damp.			**1-2** **1-3***	132.3	25	
	Below 1.2 m - brown/reddish brown.						
	SAND and GRAVEL, fine to coarse grained sand, fine gravel, rounded to subrounded, trace silt, loose, damp.						
2	Below 2.1 m - occasional coarse gravel.						
3	Below 3.0 m - trace coarse gravel.						
4							
	Below 4.6 m - some coarse gravel.						
5							
6	Below 6.1 m - occasional coarse gravel, moist.						
7							
	SAND and GRAVEL, fine to coarse grained sand, fine to coarse gravel, brown, loose, moist.						
8							
9							
10							



NOTES
Bolded sample denotes sample analyzed. *denotes blind field duplicate. 1-3 is a blind field duplicate of 1-2.

QA YFW 2016 03 28 Print Date:2016-06-28

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-01

PAGE 2 OF 2

Drilling Contractor	Diverse Drilling Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Solid Stem Auger	Ground Surface Elev. (m)	833.925	Borehole Logged By:	YFW
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 03 14
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616540.802	Easting: 604125.738	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Auger Flight

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	EC (uS/cm)	% Recovery	Soil Vapour (ppm)
10	SAND and GRAVEL, fine to coarse grained sand, fine to coarse gravel, brown, loose, moist. *(continued)*						○ Reading within indicated scale ● Reading outside indicated scale 10^1 10^2 10^3 10^4
	Below 10.7 m - some coarse gravel, moist.			1-4	19.2		○ 25
11				1-5	57.4		○ 25
12	Bottom of hole at 12.2 m.						
13							
14							
15							
16							
17							
18							
19							
20							

SLOUGH

NOTES
Bolded sample denotes sample analyzed. *denotes blind field duplicate. 1-3 is a blind field duplicate of 1-2.

QA YFW 2016 03 28 Print Date:2016-06-28

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-03

PAGE 1 OF 1

Drilling Contractor	Diverse Drilling Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Solid Stem Auger	Ground Surface Elev. (m)	833.545	Borehole Logged By:	YFW
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 03 07
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616626.918	Easting: 604142.134	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Auger Flight

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Soil Description

Depth in Metres | Stratigraphy Plot | Sample Interval Core Run | Sample Number | EC (uS/cm) | % Recovery | Soil Vapour (ppm)

Soil Vapour (ppm): ○ Reading within indicated scale; ● Reading outside indicated scale; 10^1 10^2 10^3 10^4

0 SAND, fine grained, trace gravel, fine, trace silt, light brown, loose, dry.
Below 0.3 m - no gravel.

3-1 — EC 404 — 25

1 Below 1.5 m - damp.

3-2
3-3* — EC 45 — 25

2 Below 2.7 m - some gravel, fine to coarse.

3 SAND and GRAVEL, fine to medium grained sand, fine gravel, brown, loose, damp.

4

Bottom of hole at 4.6 m.

5 6 7 8 9 10

SAND
BENTONITE
SAND

NOTES
Bolded sample denotes sample analyzed. *denotes blind field duplicate. 3-3 is a blind field duplicate of 3-2.

QA YFW 2016 03 28 Print Date:2016-06-28

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-13

PAGE 1 OF 1

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.470	Borehole Logged By:	SJWM
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 01
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616635.724	Easting: 604183.965	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic
- Split Spoon

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Soil Description

Depth in Metres

Stratigraphy Plot

Sample Interval Core Run

Sample Number

Blow Count

% Recovery

- Reading within indicated scale
- Reading outside indicated scale

Soil Vapour (ppm)

10^1 10^2 10^3 10^4

Depth (m)	Soil Description	Sample Number	Blow Count	% Recovery	Soil Vapour (ppm)
0	SAND and GRAVEL, fine to medium grained sand, fine gravel, angular to subangular, brown, loose, damp. Between 0.3 m and 0.5 m - hydrocarbon-like odour.		16 10 6	100 56	
1	SAND, fine grained, some gravel, coarse, rounded, trace silt, brown, loose, moist.	13-01		100	
	Below 1.5 m - no silt, no gravel.		1 7 12	56	
2		13-02		100	
			12 30 33		
3	SAND and GRAVEL, fine to medium grained sand, fine and coarse gravel, subrounded to rounded, some cobbles, rounded, loose, damp.	**13-03** ***13-04**	21 26 25		220
4					
5	Between 4.9 m and 5.2 m - dry.				
6			9 9 8		
7		13-05			
8		**13-06**			20
	Bottom of hole at 8.1 m.				
9					
10					

BENTONITE

NOTES
Bolded sample denotes sample analyzed. *denotes blind field duplicate.
13-04 is a blind field duplicate of 13-03.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-14

PAGE 1 OF 1

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.567	Borehole Logged By:	SJWM/ST
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 01
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616636.997	Easting: 604176.849	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Soil Description

Stratigraphy Plot | Sample Interval Core Run | Sample Number | Blow Count | % Recovery

Soil Vapour (ppm)
- ○ Reading within indicated scale
- ● Reading outside indicated scale

10^1 10^2 10^3 10^4

Depth in Metres	Soil Description	Sample Number	% Recovery	Soil Vapour (ppm)
0	SAND and GRAVEL, subangular, trace cobbles, brown, loose, damp.		80	
1	Between 1.2 m and 1.8 m - increased sand.			
2		**14-01**		40
3			100	
4				
5	Between 5.2 m and 5.5 m - increased cobbles, rounded, moist. Below 5.5 m - damp.			
6	Below 6.1 m - some cobbles, trace silt.	14-02	100	
7				
8		**14-03**		30
9	Bottom of hole at 8.5 m.			
10				

BENTONITE

NOTES
Bolded sample denotes sample analyzed.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-16

PAGE 1 OF 2

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	834.339	Borehole Logged By:	SJWM/ST
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 02
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616536.171	Easting: 604207.556	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Depth in Metres | Soil Description | Stratigraphy Plot | Sample Interval Core Run | Sample Number | Blow Count | % Recovery | Soil Vapour (ppm)

Soil Vapour (ppm): ○ Reading within indicated scale; ● Reading outside indicated scale; 10^1 10^2 10^3 10^4

0 SAND and GRAVEL, subangular, trace cobbles, grey, damp.

SAND, trace gravel, trace silt, red/brown, mottled, damp.

1 Below 0.9 m - brown, no mottling, hydrocarbon-like odour.

SAND and GRAVEL, subangular, trace cobbles, brown, damp.

2 **16-01** ○ 90

3

4 16-02

5 BENTONITE

6 SAND and GRAVEL, subangular, trace cobbles, trace silt, brown, damp. — 100

7 Between 7.6 m and 7.9 m - increased silt, dry. — 100

8 **16-03** ○ 250

Between 8.2 m and 8.8 m - oxidized seams.

9 Between 8.8 m and 9.1 m - increased silt, dry. — 100

10

NOTES
Bolded sample denotes sample analyzed. Borehole drilled to 6.1 m on 2016 06 01.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-16

PAGE 2 OF 2

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	834.339	Borehole Logged By:	SJWM/ST
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 02
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616536.171	Easting: 604207.556	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	Blow Count	% Recovery	Soil Vapour (ppm) 10^1 10^2 10^3 10^4 (○ Reading within indicated scale; ● Reading outside indicated scale)	
10	SAND and GRAVEL, subangular, trace cobbles, trace silt, brown, damp. *(continued)*							
11						100		BENTONITE
12				16-04				
	Bottom of hole at 12.2 m.							
13								
14								
15								
16								
17								
18								
19								
20								

NOTES
Bolded sample denotes sample analyzed. Borehole drilled to 6.1 m on 2016 06 01.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-18

PAGE 1 OF 2

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.910	Borehole Logged By:	SJWM
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 02
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616524.491	Easting: 604229.706	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Depth in Metres | Soil Description | Stratigraphy Plot | Sample Interval Core Run | Sample Number | Blow Count | % Recovery | Soil Vapour (ppm)

Soil Vapour (ppm): ○ Reading within indicated scale; ● Reading outside indicated scale; 10^1 10^2 10^3 10^4

0 SAND and GRAVEL, fine to medium grained sand, fine gravel, subangular to subrounded, brown, loose, damp, hydrocarbon-like odour.
Between 0.5 m and 0.6 m - increased fine grained sand, some silt, red/brown, mottled, dense.
Below 0.6 m - trace cobbles, grey.

1

2 **18-01** ○ 200

3 Below 3.1 m - some cobbles, brown, dry to damp.

4

5 BENTONITE

6 18-02 — 100

Below 6.1 m - increased gravel, increased cobbles, dark brown, wet.

7

8 **18-03** ***18-04** ○ 15

9 Below 9.1 m - increased sand, brown, moist. — 100

10

NOTES
Bolded sample denotes sample analyzed. *denotes blind field duplicate.
18-04 is a blind field duplicate of 18-03.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-18

PAGE 2 OF 2

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.910	Borehole Logged By:	SJWM
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 02
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616524.491	Easting: 604229.706	Log Typed By:	NDS

Drilling Legend
Sample Interval
Vibrasonic

Water/NAPL Levels
Water Level 1
Water Level 2
NAPL
NAPL

Reading within indicated scale
Reading outside indicated scale

Soil Vapour (ppm)

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	Blow Count	% Recovery	Soil Vapour (ppm)
10	SAND and GRAVEL, fine to medium grained sand, fine gravel, subangular to subrounded, brown, loose, damp, hydrocarbon-like odour. *(continued)* Between 10.1 m and 10.4 m - dark grey.			18-05			410
11	GRAVEL, coarse, rounded to subrounded, some sand, some cobbles, wet, hydrocarbon-like odour, sheen.					100	
12	SAND, fine to medium grained, brown, loose, wet, hydrocarbon-like odour.					100	
13	SAND and GRAVEL, fine to coarse grained sand, fine and coarse gravel, subrounded to subangular, loose, wet.					100	
14				18-06			0
15	Below 14.6 m - increased gravel.						
	Bottom of hole at 15.2 m.						
16							
17							
18							
19							
20							

BENTONITE

NOTES
Bolded sample denotes sample analyzed. *denotes blind field duplicate.
18-04 is a blind field duplicate of 18-03.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-19

PAGE 1 OF 2

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.844	Borehole Logged By:	SJWM
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 02
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616516.895	Easting: 604236.276	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Reading within indicated scale
Reading outside indicated scale

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	Blow Count	% Recovery	Soil Vapour (ppm) 10^1 10^2 10^3 10^4
0	SAND and GRAVEL, fine to medium grained sand, fine gravel, subangular to subrounded, loose, damp.						
	Below 0.5 m - wood inclusions, black, hydrocarbon-like odour.						
	SAND, brown, mottled red/brown, dense, damp.						
1	SAND and GRAVEL, fine to medium grained sand, fine and coarse gravel, rounded to subrounded, some fine subangular gravel, brown, loose, dry, hydrocarbon-like odour.						
2				**19-01**			35
3							
	Below 3.7 m - no odour.						
4				19-02			
	Below 4.3 m - dry to damp.						
5							BENTONITE
6	Below 6.1 m - increased gravel, dark brown, hydrocarbon-like odour.						
	SAND, fine to coarse grained, some gravel, fine, subangular, dark brown, loose, moist, hydrocarbon-like odour.						
7							
8				**19-03**			0
	Below 8.2 m - wet.						
9	SAND and GRAVEL, fine to coarse grained sand, fine and coarse gravel, subrounded to subangular, some cobbles, brown, loose, wet.						
				19-04			15
10							

NOTES
Bolded sample denotes sample analyzed.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-19

PAGE 2 OF 2

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.844	Borehole Logged By:	SJWM
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 02
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616516.895	Easting: 604236.276	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	Blow Count	% Recovery	Soil Vapour (ppm) 10^1 10^2 10^3 10^4 (○ Reading within indicated scale; ● Reading outside indicated scale)	
10	SAND and GRAVEL, fine to coarse grained sand, fine and coarse gravel, subrounded to subangular, some cobbles, brown, loose, wet. *(continued)*							BENTONITE
	Bottom of hole at 10.7 m.							
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

NOTES
Bolded sample denotes sample analyzed.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-21

PAGE 1 OF 1

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.482	Borehole Logged By:	SJWM/ST
Borehole Dia. (m)	0.10	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 03
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616390.749	Easting: 604273.001	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Soil Description

Stratigraphy Plot | Sample Interval Core Run | Sample Number | Blow Count | % Recovery

Soil Vapour (ppm)
- ○ Reading within indicated scale
- ● Reading outside indicated scale

10^1 10^2 10^3 10^4

Depth in Metres	Soil Description	Sample Number	Soil Vapour (ppm)
0	SAND and GRAVEL, subangular, some silt, dark brown, loose, some organics, organic odour.		
	SAND, trace gravel, subangular, brown, loose, damp to moist.		
1	SAND and GRAVEL, subangular, trace cobbles, trace silt, brown.	21-01	20
2	Between 1.8 m and 2.1 m - pockets of oxidation.		
		21-02	20
3	At 3.0 m - increased cobbles.		
	Bottom of hole at 3.1 m.		
4			
5			
6			
7			
8			
9			
10			

BENTONITE

NOTES
Bolded sample denotes sample analyzed.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-22

PAGE 1 OF 1

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.846	Borehole Logged By:	SJWM/ST
Borehole Dia. (m)	0.10	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 03
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616485.032	Easting: 604243.095	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	Blow Count	% Recovery	Soil Vapour (ppm) 10^1 10^2 10^3 10^4	
0	SAND and GRAVEL, subangular, trace silt, brown, loose, damp.						○ Reading within indicated scale ● Reading outside indicated scale	
1	Between 1.2 m and 1.3 m - black staining, hydrocarbon-like odour.			**22-01**			○ 85	BENTONITE
2	Bottom of hole at 1.5 m.							
3								
4								
5								
6								
7								
8								
9								
10								

NOTES
Bolded sample denotes sample analyzed.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-24

PAGE 1 OF 1

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.688	Borehole Logged By:	SJWM
Borehole Dia. (m)	0.10	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 03
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616462.601	Easting: 604263.572	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	Blow Count	% Recovery	Soil Vapour (ppm) 10^1 10^2 10^3 10^4	
0	SAND and GRAVEL, subangular, brown, loose, damp, trace organics (rootlets).							
1	Below 0.6 m - increased sand, light brown.			**24-01**			○ 15	BENTONITE
	Bottom of hole at 1.5 m.							
2								
3								
4								
5								
6								
7								
8								
9								
10								

○ Reading within indicated scale
● Reading outside indicated scale

NOTES
Bolded sample denotes sample analyzed.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-28

PAGE 1 OF 1

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.446	Borehole Logged By:	SJWM
Borehole Dia. (m)	0.10	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 03
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616609.297	Easting: 604098.067	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Reading within indicated scale
Reading outside indicated scale

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	Blow Count	% Recovery	Soil Vapour (ppm) 10^1 10^2 10^3 10^4
0	SAND and GRAVEL.						
	SAND, fine to medium grained, dense, damp, some black inclusions. Below 0.5 m - red/brown, no black inclusions. Below 0.8 m - brown.			28-01			
2	SAND and GRAVEL, fine to medium grained sand, fine to coarse gravel, subangular to subrounded, trace cobbles, loose, damp.						
3				28-02			
	Below 3.4 m - trace rusty inclusions.						
4							
	Bottom of hole at 4.6 m.						
5							
6							
7							
8							
9							
10							

BENTONITE

NOTES
Bolded sample denotes sample analyzed.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-32

PAGE 1 OF 1

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.122	Borehole Logged By:	ST
Borehole Dia. (m)	0.10	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 03
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616579.543	Easting: 604290.464	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Soil Description

Stratigraphy Plot | Sample Interval Core Run | Sample Number | Blow Count | % Recovery

Soil Vapour (ppm)
- ○ Reading within indicated scale
- ● Reading outside indicated scale

10^1 10^2 10^3 10^4

Depth in Metres	Soil Description	Sample Number	% Recovery	Soil Vapour (ppm)
0	SAND and GRAVEL, trace silt, red/brown, loose, damp.		100	
	Below 0.5 m - grey.			
	Below 0.8 m - black staining, asphalt-like odour.	**32-01**		450
1	SAND, trace gravel, trace silt, brown, loose, damp to wet, trace organics.			
	SAND and GRAVEL, fine to coarse grained sand, fine to coarse gravel, subangular to subrounded, some cobbles, brown, loose, damp.			
2				
		32-02		30
3	SAND and GRAVEL, concrete fragments, subangular, grey/white, loose, dry.			
	Bottom of hole at 3.1 m.			
4				
5				
6				
7				
8				
9				
10				

BENTONITE

NOTES
Bolded sample denotes sample analyzed.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-33

PAGE 1 OF 1

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.376	Borehole Logged By:	SJWM
Borehole Dia. (m)	0.10	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 03
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616561.445	Easting: 604294.194	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Soil Description

Depth in Metres | Stratigraphy Plot | Sample Interval Core Run | Sample Number | Blow Count | % Recovery | Soil Vapour (ppm)

- Reading within indicated scale
- Reading outside indicated scale

Soil Vapour (ppm): 10^1 10^2 10^3 10^4

0 SAND and GRAVEL, fine to medium grained sand, fine and coarse gravel, subangular to subrounded, black, loose, damp, hydrocarbon-like odour. — **33-01** *33-02

SAND, fine grained, grey, dense, damp, hydrocarbon-like odour.

1 Below 0.8 m - brown, no odour.

SAND and GRAVEL, fine to coarse grained sand, fine to coarse gravel, subangular to subrounded, some cobbles, brown, damp.

2 Below 1.8 m - increased sand.

Between 2.4 m and 2.7 m - some rusty inclusions. — **33-03**

3 Bottom of hole at 3.1 m.

BENTONITE

4 5 6 7 8 9 10

NOTES
Bolded sample denotes sample analyzed. *denotes blind field duplicate.
33-02 is a blind field duplicate of 33-01.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-34

PAGE 1 OF 1

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.324	Borehole Logged By:	ST
Borehole Dia. (m)	0.10	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 03
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616554.677	Easting: 604293.115	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Soil Vapour (ppm)
- ○ Reading within indicated scale
- ● Reading outside indicated scale

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	Blow Count	% Recovery	Soil Vapour (ppm) 10^1 10^2 10^3 10^4
0	SAND and GRAVEL, subangular, damp, black staining, hydrocarbon-like odour.					100	
	SAND, grey, damp, trace rootlets, pockets of oxidation.			**34-01** *34-02			○ 320
1	SAND and GRAVEL, subangular, brown, loose, damp, pockets of oxidation.						
2	SAND and GRAVEL, trace silt, grey/white, dry.						
	SAND and GRAVEL, coarse grained sand, subangular, brown, loose, damp.					100	○ 10
3	Below 2.9 m - increased sand, fine to coarse grained.			**34-03**			
	Bottom of hole at 3.1 m.						
4							
5							
6							
7							
8							
9							
10							

BENTONITE

NOTES
Bolded sample denotes sample analyzed. *denotes blind field duplicate.
34-02 is a blind field duplicate of 34-01.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-35

PAGE 1 OF 1

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.459	Borehole Logged By:	SJWM
Borehole Dia. (m)	0.10	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 03
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616550.508	Easting: 604286.379	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Reading within indicated scale
Reading outside indicated scale

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	Blow Count	% Recovery	Soil Vapour (ppm) 10^1 10^2 10^3 10^4
0	SAND and GRAVEL, fine to coarse grained sand, fine to coarse gravel, subangular to subrounded, brown, loose, damp to moist.			35-01			
	Below 0.2 m - black staining, asphalt-like odour.						
1	SAND, fine to medium grained, grey, dense.						
	SAND and GRAVEL, fine to coarse grained sand, fine to coarse gravel, subangular to subrounded, some cobbles, loose, damp.			35-02			
2							
	Between 2.4 m and 2.5 m - grey, very dense, dry.			35-03			
3	Bottom of hole at 3.1 m.						
4							
5							
6							
7							
8							
9							
10							

BENTONITE

NOTES
Bolded sample denotes sample analyzed.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-36

PAGE 1 OF 1

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.138	Borehole Logged By:	ST
Borehole Dia. (m)	0.10	Top of Casing Elev. (m)	n/a	Date Drilled:	2016 06 03
Pipe/Slotted Pipe Dia. (m)	none/none	Northing: 6616550.240	Easting: 604297.445	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Reading within indicated scale
Reading outside indicated scale

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	Blow Count	% Recovery	Soil Vapour (ppm) 10^1 10^2 10^3 10^4
0	SAND and GRAVEL, subangular, loose, damp, black staining.					100	
	SAND, trace silt, brown, grey oxidation, loose, damp. Below 0.5 m - no grey oxidation.			**36-01**			480
1	SAND and GRAVEL, subangular, trace silt, brown, loose, damp.						
2				36-02			
3	Bottom of hole at 3.1 m.			**36-03**			10
4							
5							
6							
7							
8							
9							
10							

BENTONITE

NOTES
Bolded sample denotes sample analyzed.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-38

PAGE 1 OF 4

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.538	Borehole Logged By:	SJWM
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	833.453	Date Drilled:	2016 06 05
Pipe/Slotted Pipe Dia. (m)	0.05/0.05	Northing: 6616518.866	Easting: 604167.813	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Reading within indicated scale
Reading outside indicated scale

Solid PVC
Slotted PVC

Well Name 1: IW16-38

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	Blow Count	% Recovery	Soil Vapour (ppm)
0	SAND and GRAVEL, fine to medium grained sand, fine gravel, subangular to subrounded, black, loose, wet, hydrocarbon-like odour. Below 0.3 m - brown.					100	
1	SAND, fine grained, brown, mottled dark grey, dense, moist to wet, hydrocarbon-like odour.			38-01			240
2	SAND and GRAVEL, fine to medium grained sand, fine and coarse gravel, subangular to rounded, brown, loose, damp. Below 2.4 m - some cobbles.			38-02		80	
3							
4							
5				38-03			
6							
7							
8				38-04			150
9	SAND, fine to medium grained, trace gravel, fine, subrounded to rounded, brown, loose, damp.						
10	SAND and GRAVEL, fine to coarse grained sand, fine to coarse gravel, subangular to subrounded, brown, loose, moist to wet, trace rusty inclusions.						

ROAD BOX
CONCRETE
SAND
GROUT

NOTES
Bolded sample denotes sample analyzed. *denotes blind field duplicate.
38-11 is a blind field duplicate of 38-10.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-38

PAGE 2 OF 4

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.538	Borehole Logged By:	SJWM
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	833.453	Date Drilled:	2016 06 05
Pipe/Slotted Pipe Dia. (m)	0.05/0.05	Northing: 6616518.866	Easting: 604167.813	Log Typed By:	NDS

Drilling Legend: Sample Interval; Vibrasonic

Water/NAPL Levels: Water Level 1; Water Level 2; NAPL; NAPL

Reading within indicated scale; Reading outside indicated scale

Soil Vapour (ppm)

Solid PVC; Slotted PVC

Well Name 1: IW16-38

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	Blow Count	% Recovery
10	SAND and GRAVEL, fine to coarse grained sand, fine to coarse gravel, subangular to subrounded, brown, loose, moist to wet, trace rusty inclusions. *(continued)*			38-05		
11						
12					100	
13						
14						
15					100	
16						
17						
18	Below 18.2 m - increased cobbles, red/brown, wet.				100	
19						
20						

ROAD BOX

GROUT

NOTES
Bolded sample denotes sample analyzed. *denotes blind field duplicate.
38-11 is a blind field duplicate of 38-10.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-38

PAGE 3 OF 4

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.538	Borehole Logged By:	SJWM
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	833.453	Date Drilled:	2016 06 05
Pipe/Slotted Pipe Dia. (m)	0.05/0.05	Northing: 6616518.866	Easting: 604167.813	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Reading within indicated scale
Reading outside indicated scale

Solid PVC
Slotted PVC

Well Name 1: IW16-38

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	Blow Count	% Recovery	Soil Vapour (ppm) 10^1 10^2 10^3 10^4
20	SAND and GRAVEL, fine to coarse grained sand, fine to coarse gravel, subangular to subrounded, brown, loose, moist to wet, trace rusty inclusions. *(continued)*						
21	Below 20.7 - increased sand, decreased cobbles, brown, damp.			38-06		100	
22							
23	Between 22.4 m and 22.5 m - sand seam, medium grained, orange, damp.			38-07		100	
24	Between 23.9 m and 24.4 m - dry.						
25							
26				38-08		100	
27	Between 26.7 m and 26.8 m - dry.						
28							
29				38-09			
30							

ROAD BOX

GROUT

NOTES
Bolded sample denotes sample analyzed. *denotes blind field duplicate.
38-11 is a blind field duplicate of 38-10.

QA SJWM 2016 06 24 Print Date:2016-07-14

SNC·LAVALIN

Client
Public Works and Gov't Services Canada

Location
Fireside Maintenance Camp, BC

Borehole No. : BH16-38

PAGE 4 OF 4

Drilling Contractor	Geotech Drilling Services Ltd.	Date Monitored	n/a	Project Number:	636200
Drilling Method	Vibratory Sonic	Ground Surface Elev. (m)	833.538	Borehole Logged By:	SJWM
Borehole Dia. (m)	0.15	Top of Casing Elev. (m)	833.453	Date Drilled:	2016 06 05
Pipe/Slotted Pipe Dia. (m)	0.05/0.05	Northing: 6616518.866	Easting: 604167.813	Log Typed By:	NDS

Drilling Legend
- Sample Interval
- Vibrasonic

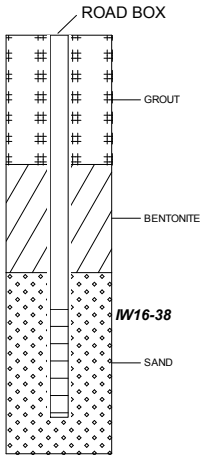
Water/NAPL Levels
- Water Level 1
- Water Level 2
- NAPL
- NAPL

Reading within indicated scale
Reading outside indicated scale

Solid PVC
Slotted PVC

Well Name 1: IW16-38

Depth in Metres	Soil Description	Stratigraphy Plot	Sample Interval Core Run	Sample Number	Blow Count	% Recovery	Soil Vapour (ppm) 10^1 10^2 10^3 10^4
30	SAND and GRAVEL, fine to coarse grained sand, fine to coarse gravel, subangular to subrounded, brown, loose, moist to wet, trace rusty inclusions. *(continued)*					100	
31	Below 30.5 m - dark grey, hydrocarbon-like odour.						
32	Below 31.1 m - increased sand, black, moist to wet, hydrocarbon-like odour.			*38-11			560
33							
	Bottom of hole at 33.5 m.						
34							
35							
36							
37							
38							
39							
40							



NOTES
Bolded sample denotes sample analyzed. *denotes blind field duplicate.
38-11 is a blind field duplicate of 38-10.

QA SJWM 2016 06 24 Print Date:2016-07-14

Appendix No.	Appendix Title
B	Geotechnical Investigations - Tabulated and Actual Sieve Analysis Results and Standard Penetration Test Data

MECHANICAL SIEVE ANALYSIS

Sample No. **BH16-13-01** Date Sampled **01-Jun-16** By **ST** of **SNC-Lavalin Inc.**

Location **Fireside** Sample Type **Bag** Natural Moisture **15.3** %

Description **Silty, clayey, sandy, trace gravel.** Tech **KB/AN**

Specifications

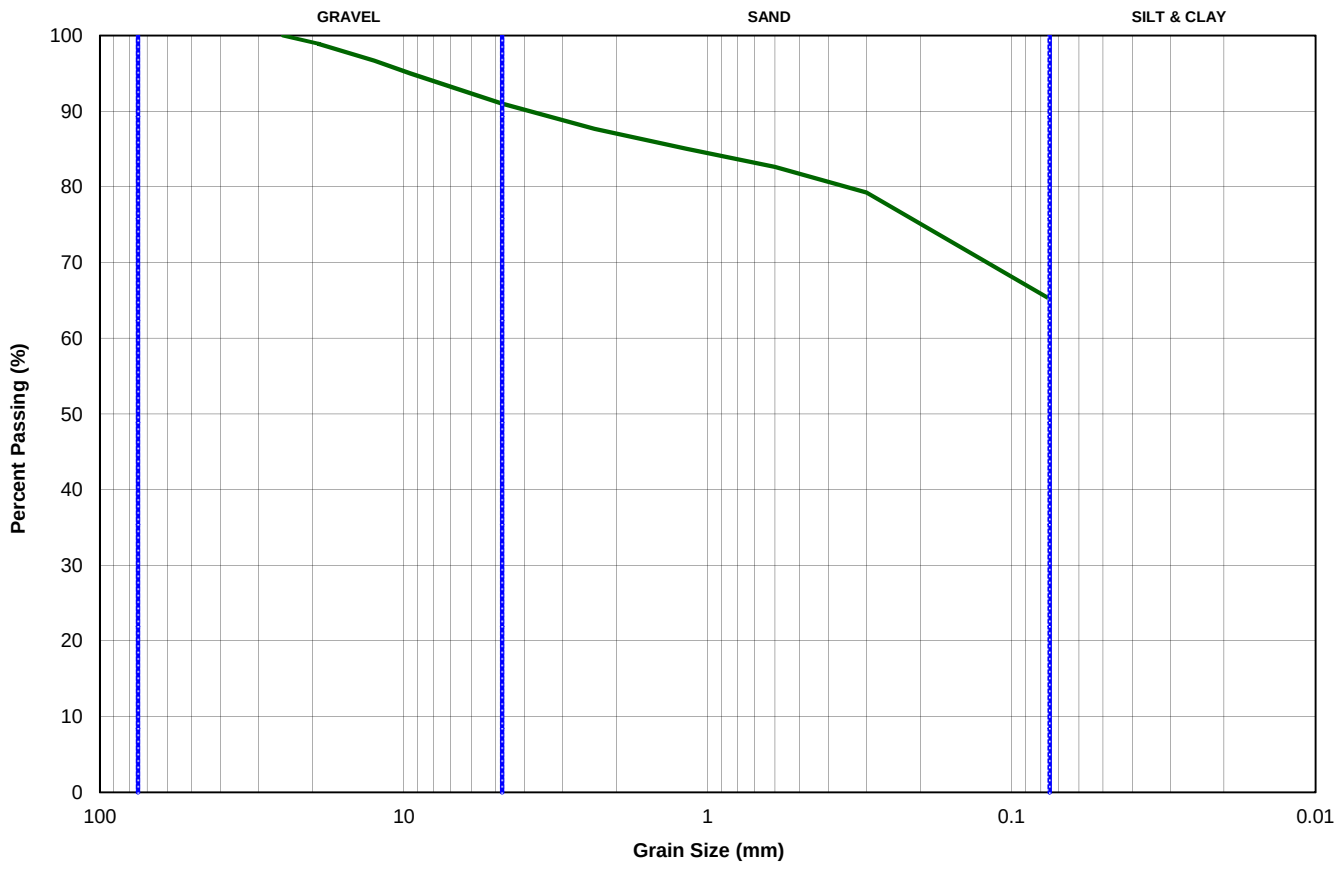
Comments

Fracture **N/A** Method **A**

Sieve Results

Sieve mm	25	19	12.5	9.5	4.75	2.36	1.18	0.600	0.300	0.075
% Passing	100.0	98.9	96.7	95.0	91.0	87.7	85.0	82.6	79.2	65.2

By Type Gravel = **9.0%** Sand = **25.8%** Silt & Clay = **65.2%**



SNC·LAVALIN

Client **Public Works & Government Services** Date **16-Jun-16**

Project **2016 Materials Testing** File No. **636200**

Location **Fireside, British Columbia** Sample No. **BH16-13-01**

MECHANICAL SIEVE ANALYSIS

Sample No. **BH16-13-02** Date Sampled **01-Jun-16** By **ST** of **SNC-Lavalin Inc.**

Location **Fireside** Sample Type **Bag** Natural Moisture **20.0** %

Description **Silt and clay, some sand, trace gravel.** Tech **KB/AN**

Specifications

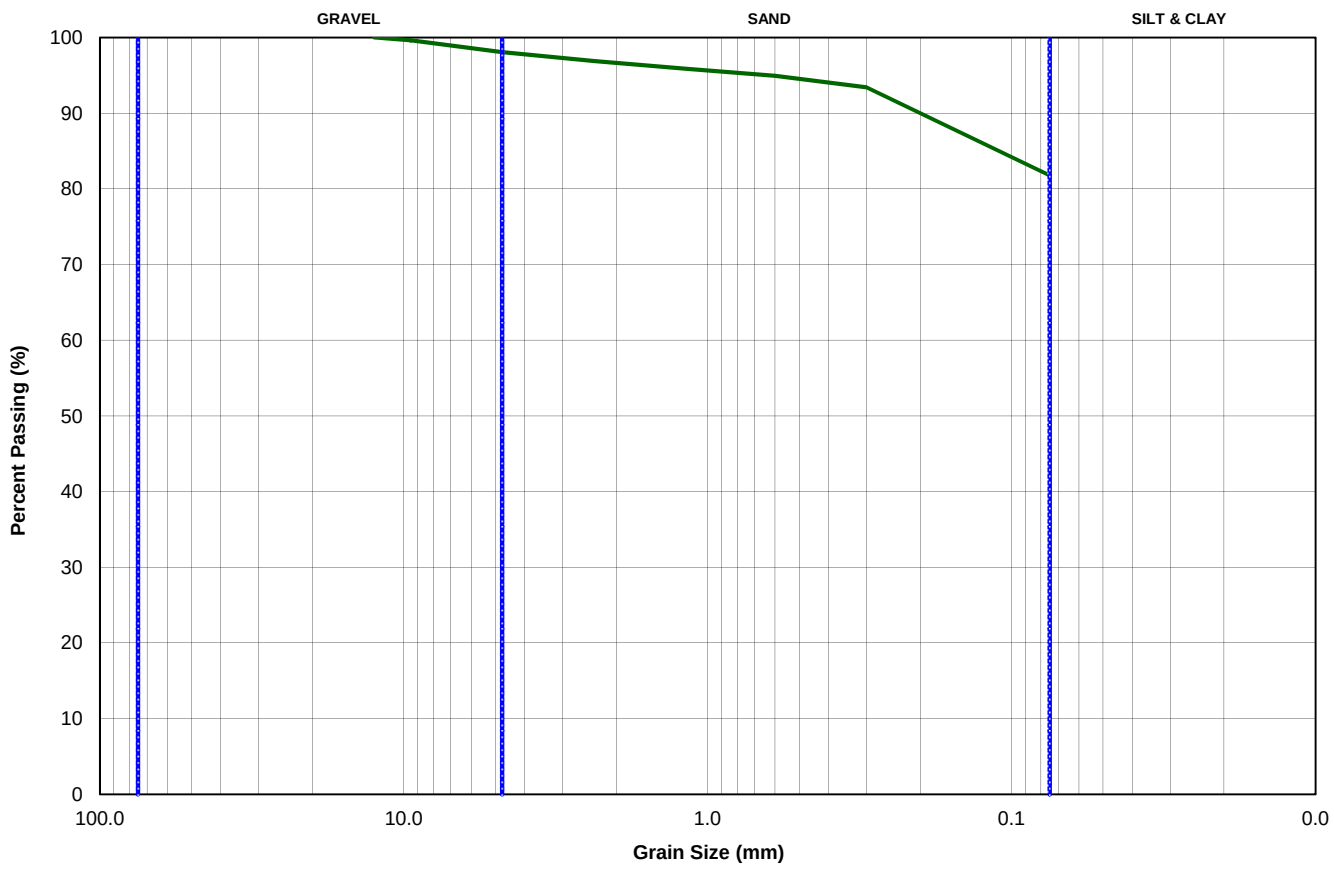
Comments

Fracture	Method
N/A	**A**

Sieve Results

Sieve mm	12.5	9.5	4.75	2.36	1.18	0.600	0.300	0.075
% Passing	100.0	99.6	98.1	96.9	95.9	94.9	93.4	81.8

By Type Gravel = **1.9%** Sand = **16.3%** Silt & Clay = **81.8%**



SNC·LAVALIN

Client **Public Works & Government Services** Date **16-Jun-16**

Project **2016 Materials Testing** File No. **636200**

Location **Fireside, British Columbia** Sample No. **BH16-13-02**

MECHANICAL SIEVE ANALYSIS

Sample No. **BH16-13-03/04** Date Sampled **01-Jun-16** By **ST** of **SNC-Lavalin Inc.**

Location **Fireside** Sample Type **Bag** Natural Moisture **5.7** %

Description **Gravel, sandy, trace silt and clay.** Tech **KB/AN**

Specifications

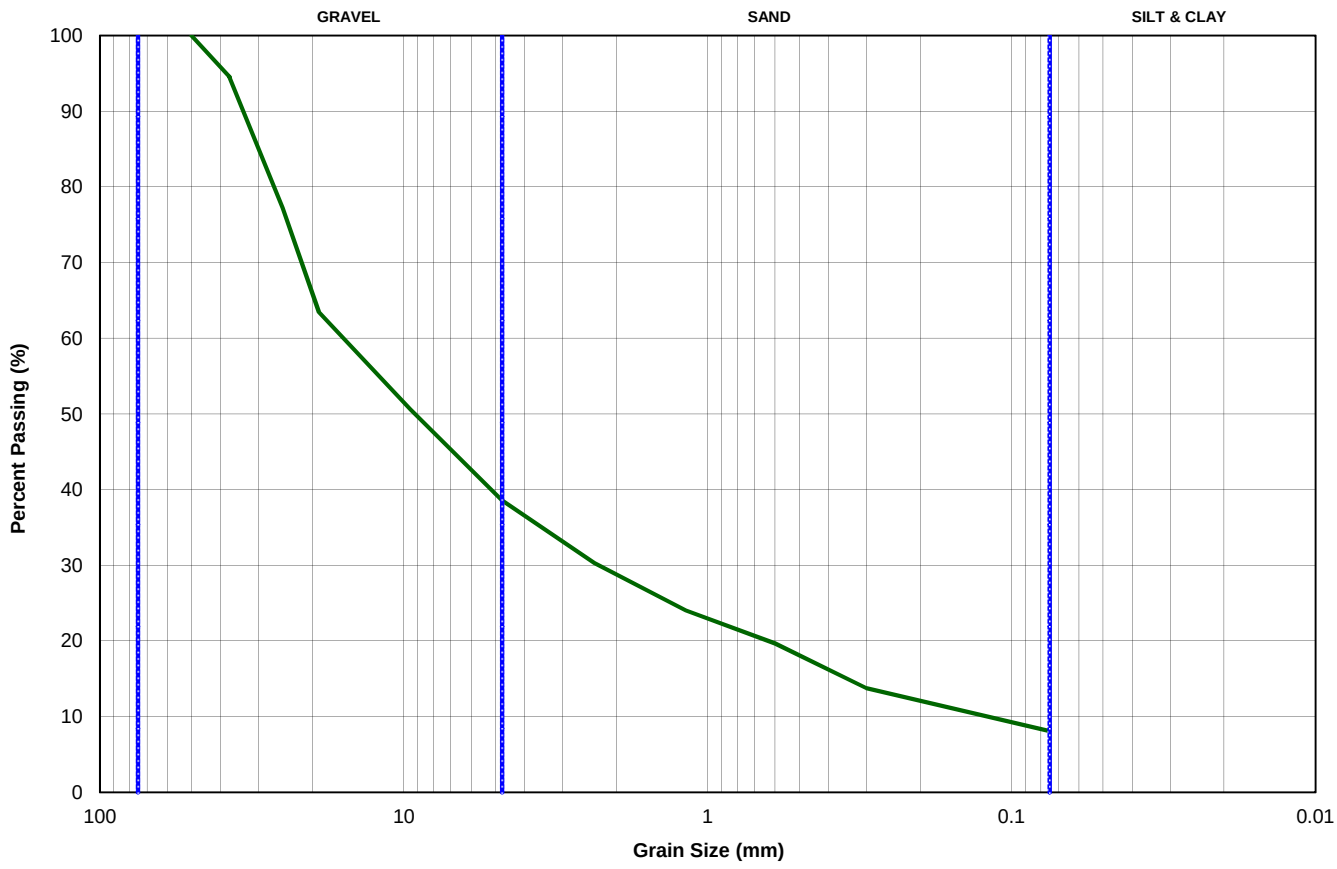
Comments

Fracture **N/A** Method **A**

Sieve Results

Sieve mm	50	37.5	25	19	9.5	4.75	2.36	1.18	0.600	0.300	0.075
% Passing	100.0	94.5	77.2	63.4	50.6	38.6	30.3	24.0	19.7	13.7	8.1

By Type Gravel = **61.4%** Sand = **30.5%** Silt & Clay = **8.1%**



SNC·LAVALIN

Client **Public Works & Government Services** Date **16-Jun-16**

Project **2016 Materials Testing** File No. **636200**

Location **Fireside, British Columbia** Sample No. **16-13-03/04**

MECHANICAL SIEVE ANALYSIS

Sample No. **BH16-13-05** Date Sampled **01-Jun-16** By **ST** of **SNC-Lavalin Inc.**

Location **Fireside** Sample Type **Bag** Natural Moisture **1.6** %

Description **Sand, gravelly, some silt and clay.** Tech **KB/AN**

Specifications

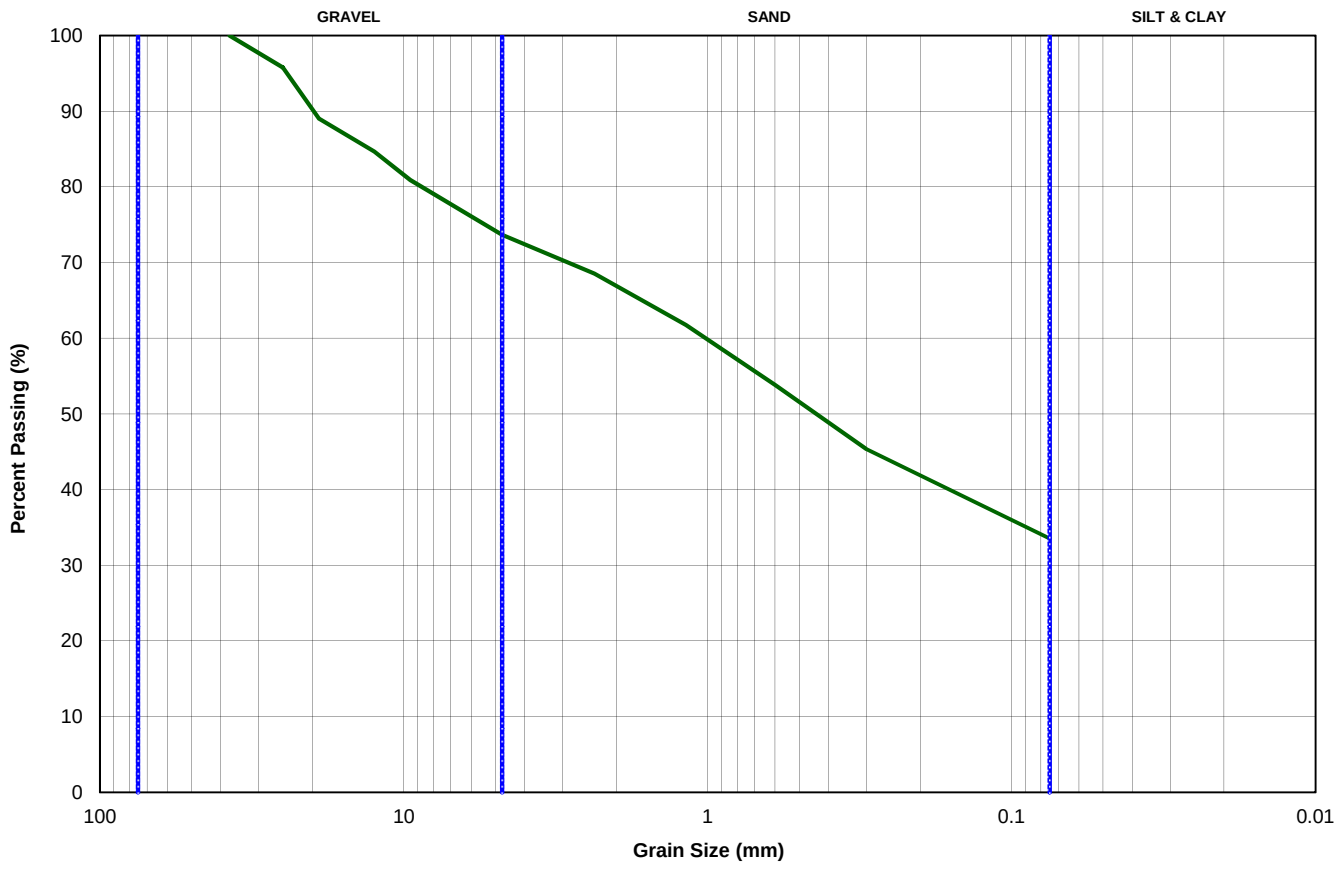
Comments

Fracture **N/A** Method **A**

Sieve Results

Sieve mm	37.5	25	19	12.5	9.5	4.75	2.36	1.18	0.600	0.300	0.075
% Passing	100.0	95.8	89.0	84.7	80.9	73.7	68.5	61.7	53.9	45.3	33.5

By Type Gravel = **26.3%** Sand = **40.2%** Silt & Clay = **33.5%**



SNC·LAVALIN

Client **Public Works & Government Services** Date **16-Jun-16**

Project **2016 Materials Testing** File No. **636200**

Location **Fireside, British Columbia** Sample No. **BH16-13-05**

MECHANICAL SIEVE ANALYSIS

Sample No. **BH16-13-06** Date Sampled **01-Jun-16** By **ST** of **SNC-Lavalin Inc.**

Location **Fireside** Sample Type **Bag** Natural Moisture **2.1** %

Description **Gravel and sand, trace silt and clay.** Tech **KB/AN**

Specifications

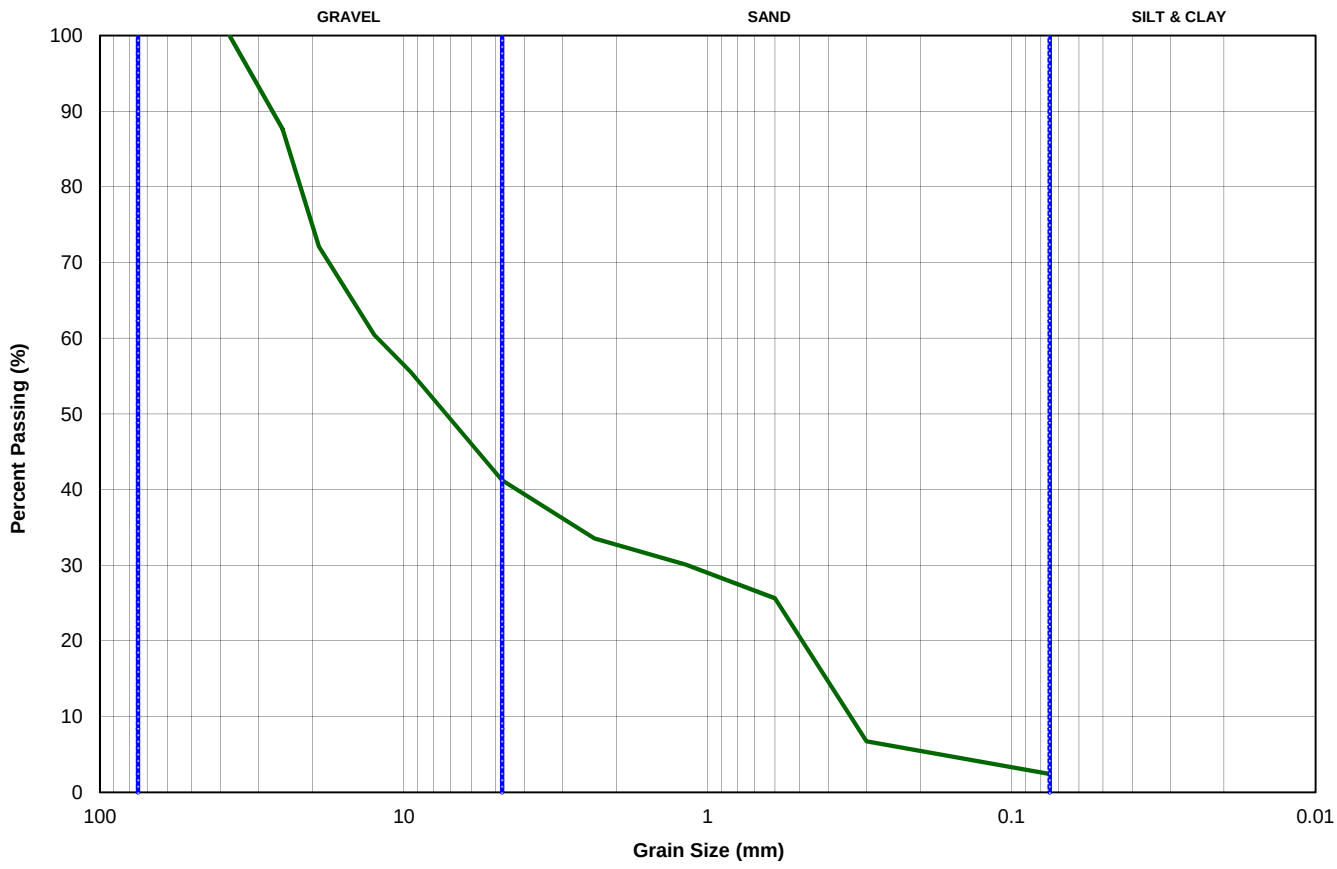
Comments

Fracture **N/A** Method **A**

Sieve Results

Sieve mm	37.5	25	19	12.5	9.5	4.75	2.36	1.18	0.600	0.300	0.075
% Passing	100.0	87.5	72.1	60.4	55.6	41.2	33.5	30.1	25.6	6.7	2.4

By Type Gravel = **58.8%** Sand = **38.8%** Silt & Clay = **2.4%**



SNC·LAVALIN

Client **Public Works & Government Services** Date **16-Jun-16**

Project **2016 Materials Testing** File No. **636200**

Location **Fireside, British Columbia** Sample No. **BH16-13-06**

MECHANICAL SIEVE ANALYSIS

Sample No.	**BH16-16-01**	Date Sampled	**01-Jun-16**	By **ST**	of	**SNC-Lavalin Inc.**	
Location	**Fireside**			Sample Type	**Bag**	Natural Moisture	**2.5** %
Description	**Gravel and sand, trace silt and clay.**					Tech	**KB/AN**

Specifications

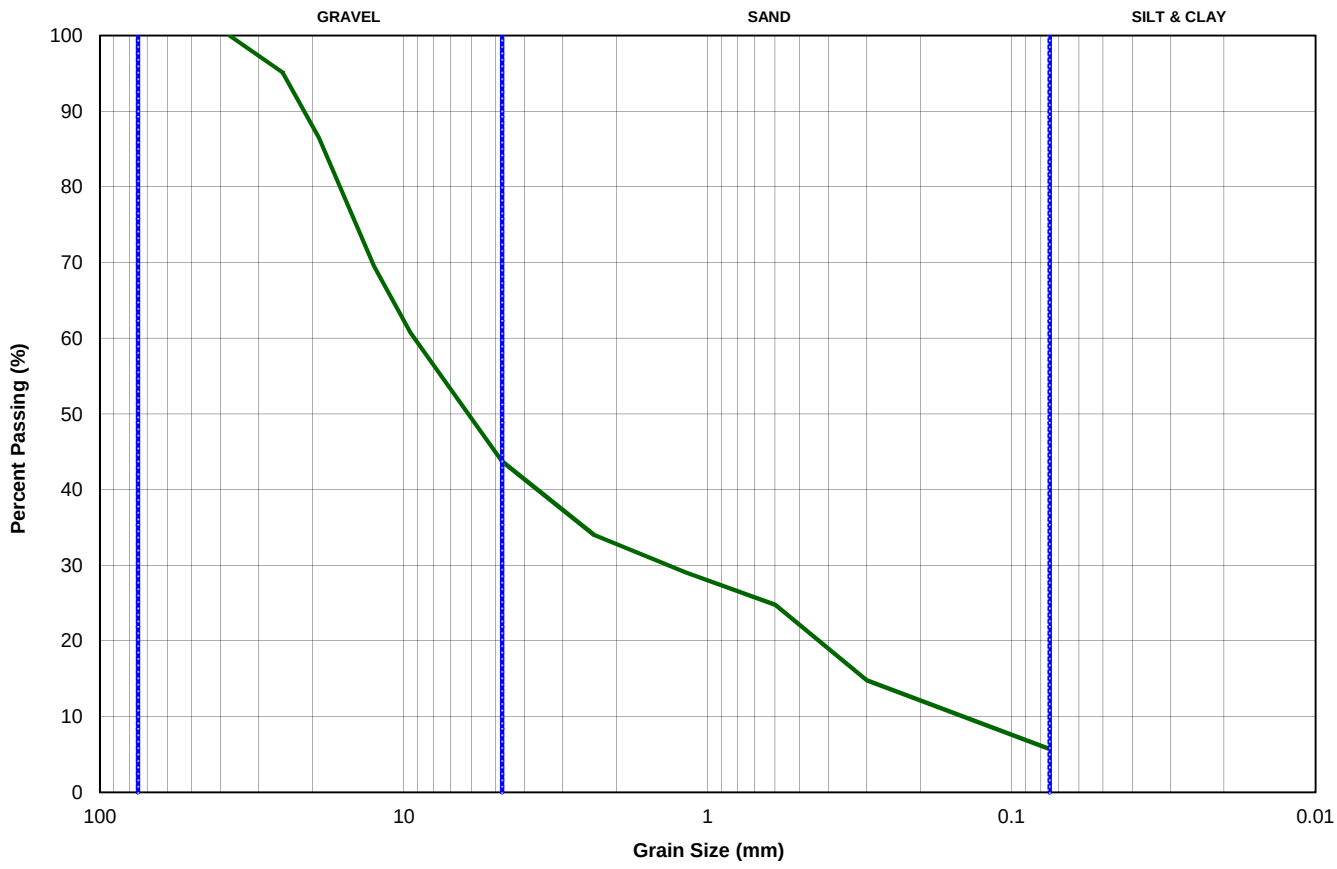
Comments

Fracture	Method
N/A	**A**

Sieve Results

Sieve mm	37.5	25	19	12.5	9.5	4.75	2.36	1.18	0.600	0.300	0.075
% Passing	**100.0**	**95.1**	**86.5**	**69.5**	**60.7**	**43.7**	**34.0**	**29.0**	**24.8**	**14.8**	**5.7**

By Type Gravel = **56.3%** Sand = **38.0%** Silt & Clay = **5.7%**



SNC·LAVALIN

Client	**Public Works & Government Services**	Date	**16-Jun-16**
Project	**2016 Materials Testing**	File No.	**636200**
Location	**Fireside, British Columbia**	Sample No.	**BH16-16-01**

MECHANICAL SIEVE ANALYSIS

Sample No. **BH16-16-02** Date Sampled **01-Jun-16** By **ST** of **SNC-Lavalin Inc.**

Location **Fireside** Sample Type **Bag** Natural Moisture **1.7** %

Description **Gravel, sandy, trace silt and clay.** Tech **KB/AN**

Specifications

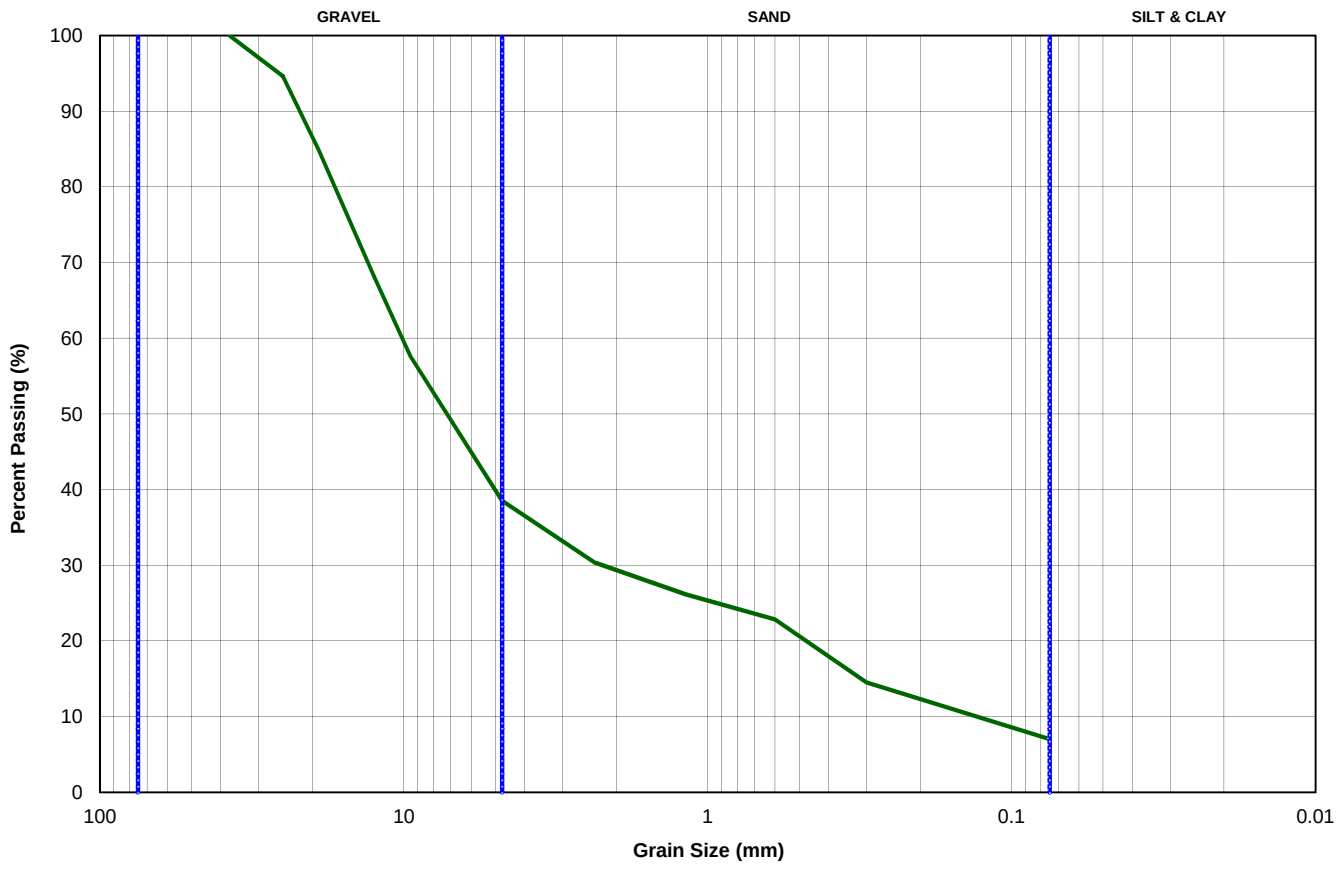
Comments

Fracture **N/A** Method **A**

Sieve Results

Sieve mm	37.5	25	19	12.5	9.5	4.75	2.36	1.18	0.600	0.300	0.075
% Passing	100.0	94.6	84.8	68.1	57.6	38.5	30.4	26.2	22.8	14.5	7.0

By Type Gravel = **61.5%** Sand = **31.5%** Silt & Clay = **7.0%**



SNC·LAVALIN

Client **Public Works & Government Services** Date **16-Jun-16**

Project **2016 Materials Testing** File No. **636200**

Location **Fireside, British Columbia** Sample No. **BH16-16-02**

MECHANICAL SIEVE ANALYSIS

Sample No. **BH16-16-03** Date Sampled **01-Jun-16** By **ST** of **SNC-Lavalin Inc.**

Location **Fireside** Sample Type **Bag** Natural Moisture **1.5** %

Description **Gravel, sandy, trace silt and clay.** Tech **KB/AN**

Specifications

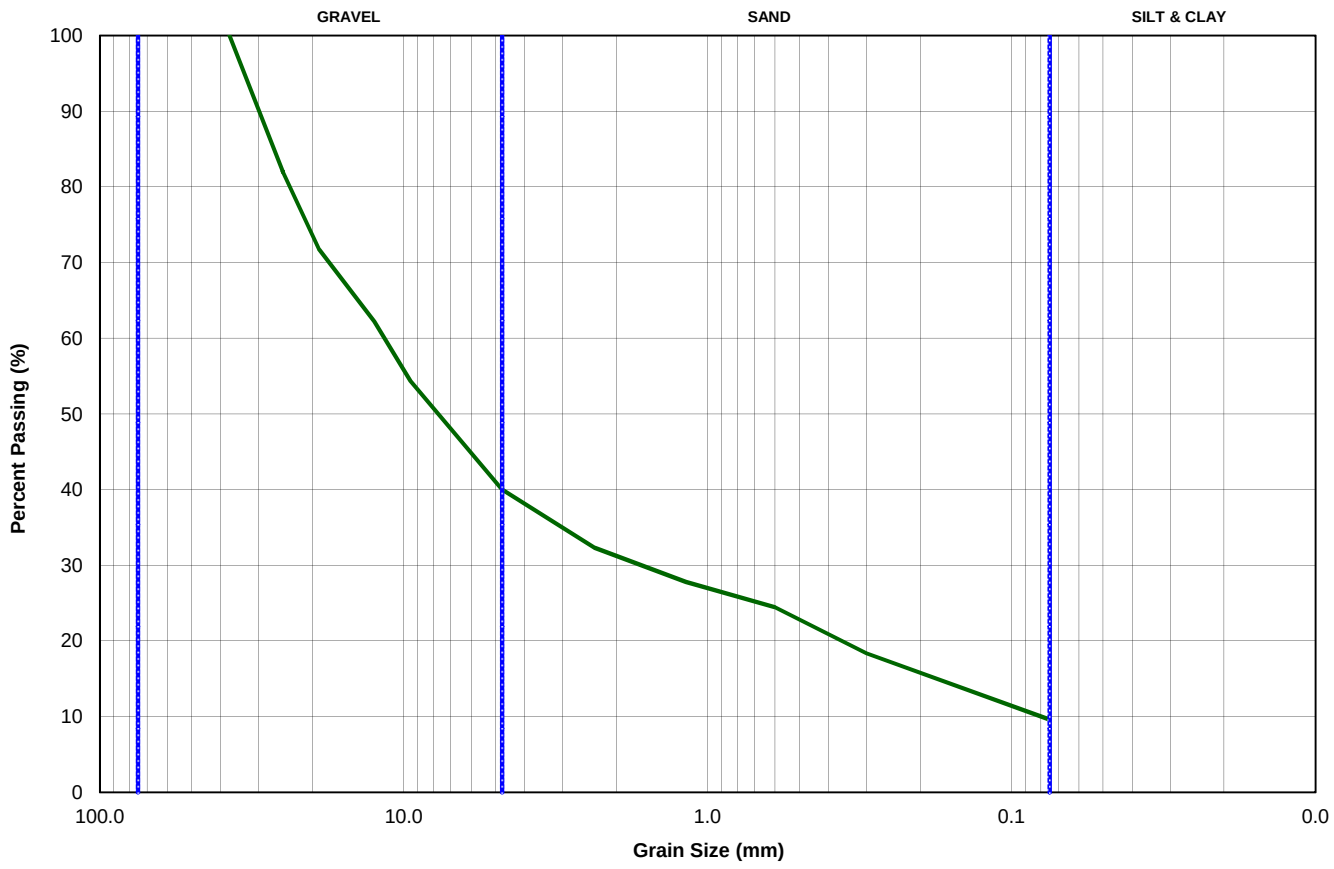
Comments

Fracture **N/A** Method **A**

Sieve Results

Sieve mm	37.5	25	19	12.5	9.5	4.75	2.36	1.18	0.600	0.300	0.075
% Passing	100.0	82.0	71.7	62.2	54.3	40.0	32.3	27.8	24.4	18.4	9.6

By Type Gravel = **60.0%** Sand = **30.4%** Silt & Clay = **9.6%**



SNC·LAVALIN

Client **Public Works & Government Services** Date **16-Jun-16**

Project **2016 Materials Testing** File No. **636200**

Location **Fireside, British Columbia** Sample No. **BH16-16-03**

MECHANICAL SIEVE ANALYSIS

Sample No. **BH16-16-04** Date Sampled **01-Jun-16** By **ST** of **SNC-Lavalin Inc.**

Location **Fireside** Sample Type **Bag** Natural Moisture **2.4** %

Description **Gravel, sandy, trace silt and clay.** Tech **KB/AN**

Specifications

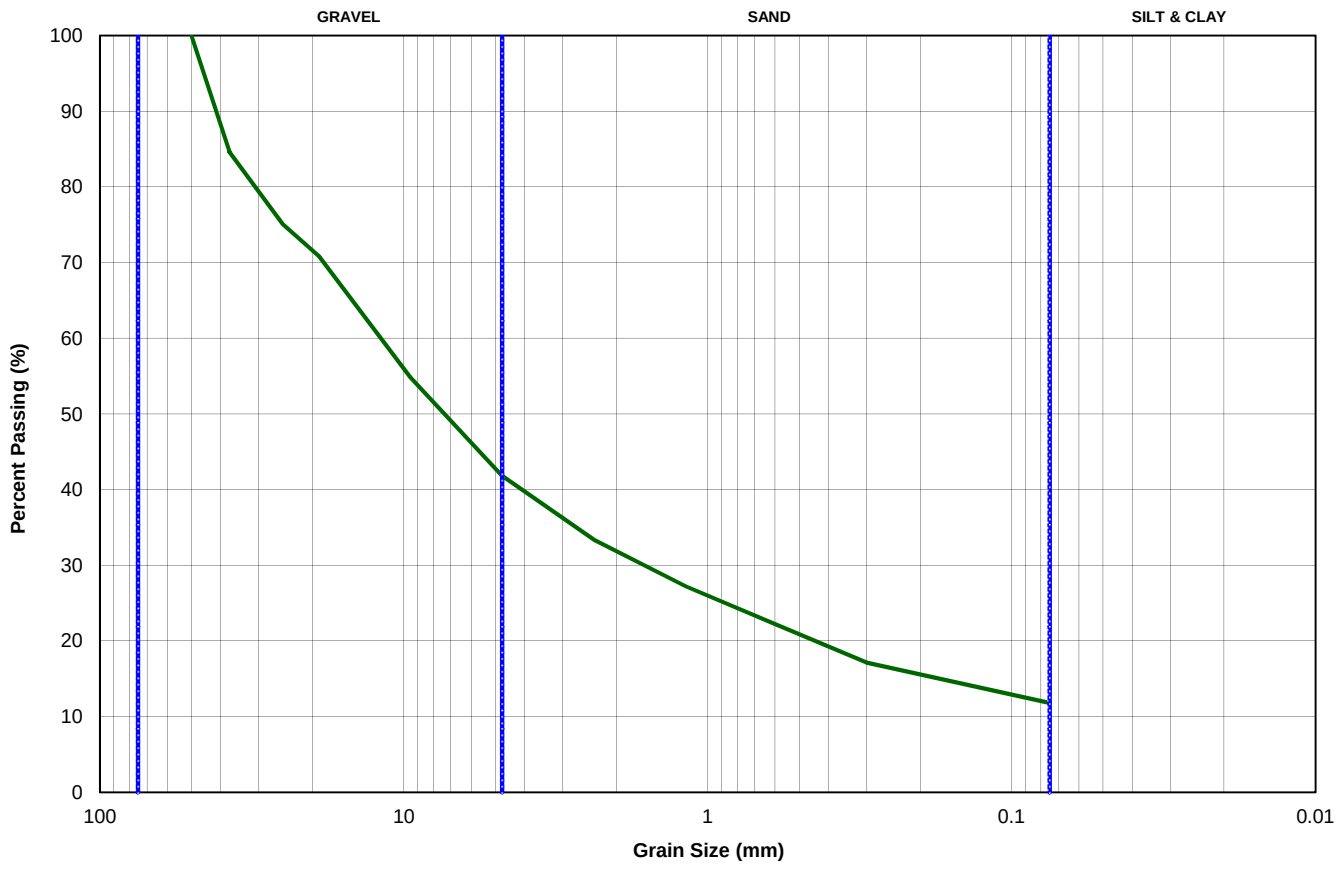
Comments

Fracture **N/A** Method **A**

Sieve Results

Sieve mm	50	37.5	25	19	9.5	4.75	2.36	1.18	0.600	0.300	0.075
% Passing	100.0	84.6	75.1	70.9	54.8	41.8	33.3	27.2	22.2	17.1	11.8

By Type Gravel = **58.2%** Sand = **30.0%** Silt & Clay = **11.8%**



SNC·LAVALIN

Client **Public Works & Government Services** Date **16-Jun-16**

Project **2016 Materials Testing** File No. **636200**

Location **Fireside, British Columbia** Sample No. **BH16-16-04**

MECHANICAL SIEVE ANALYSIS

Sample No. **BH16-28-01** Date Sampled **03-Jun-16** By **ST** of **SNC-Lavalin Inc.**

Location **Fireside** Sample Type **Bag** Natural Moisture **21.4** %

Description **Sand, silty, clayey, trace gravel.** Tech **KB/AN**

Specifications

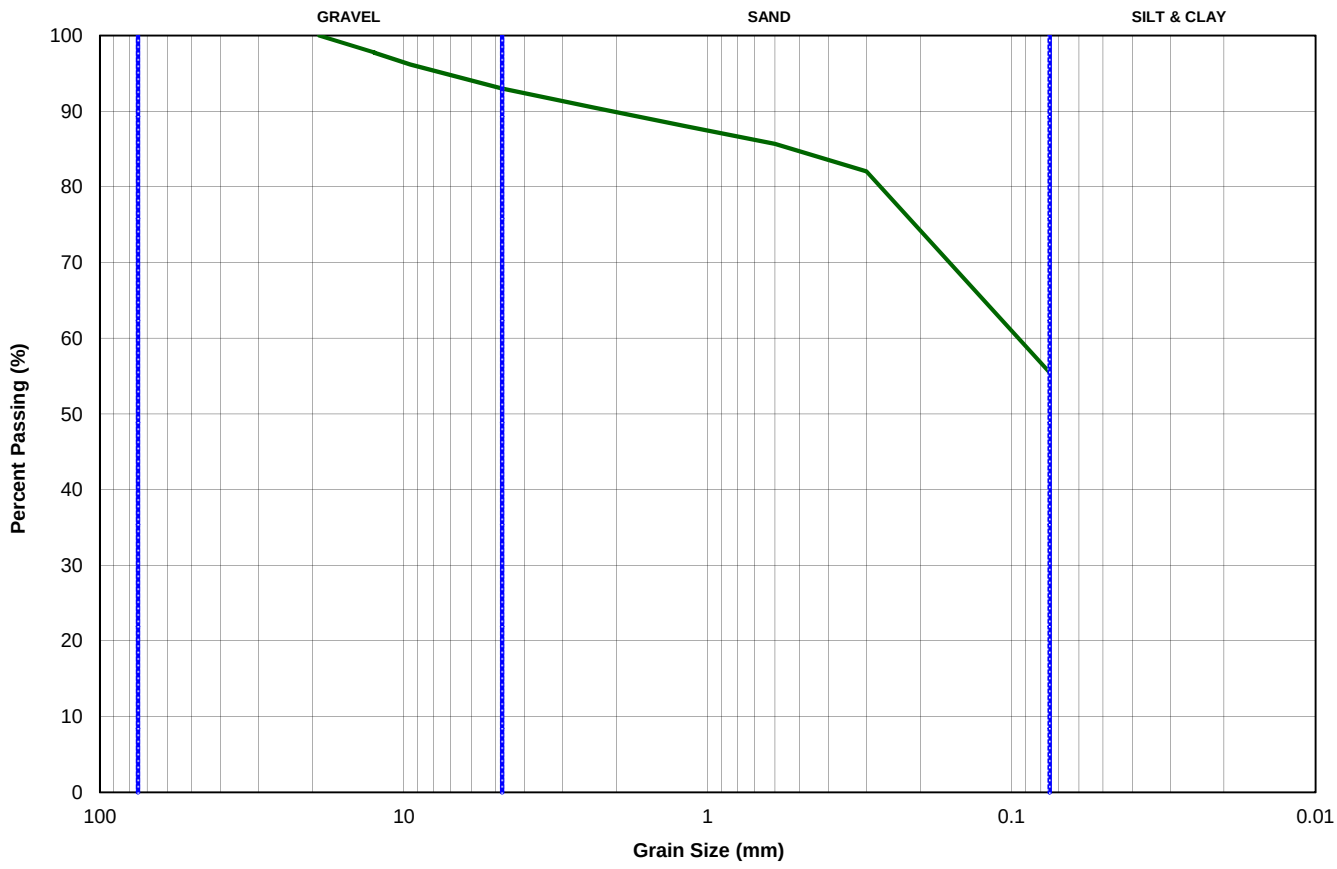
Comments

Fracture **N/A** Method **A**

Sieve Results

Sieve mm	19	12.5	9.5	4.75	2.36	1.18	0.600	0.300	0.075
% Passing	100.0	97.8	96.2	93.0	90.5	88.0	85.7	82.0	55.5

By Type Gravel = **7.0%** Sand = **37.5%** Silt & Clay = **55.5%**



SNC·LAVALIN

Client **Public Works & Government Services** Date **16-Jun-16**

Project **2016 Materials Testing** File No. **636200**

Location **Fireside, British Columbia** Sample No. **BH16-28-01**

MECHANICAL SIEVE ANALYSIS

Sample No. **BH16-28-2** Date Sampled **03-Jun-16** By **ST** of **SNC-Lavalin Inc.**

Location **Fireside** Sample Type **Bag** Natural Moisture **2.8** %

Description **Sand and gravel, trace silt and clay.** Tech **KB/AN**

Specifications

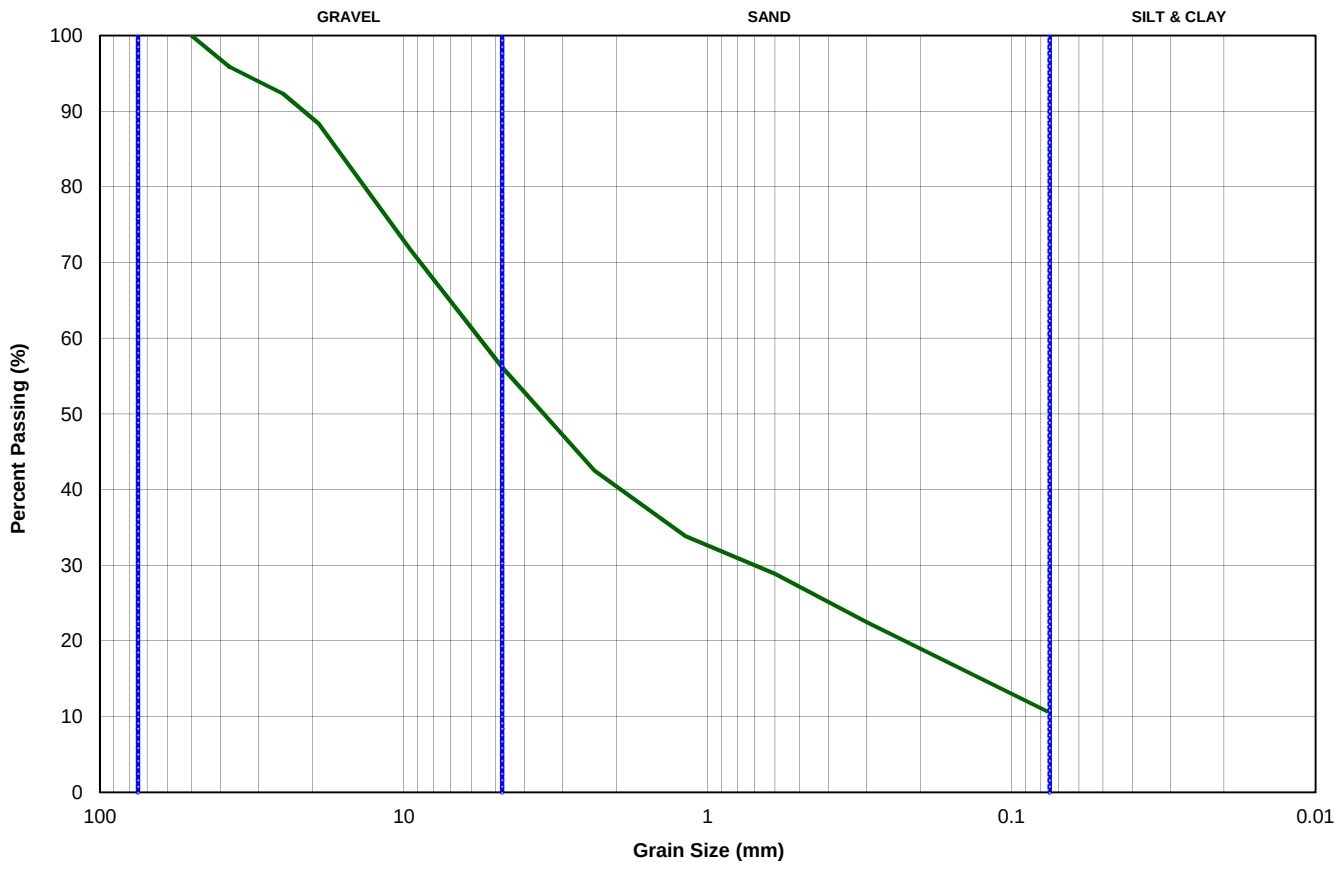
Comments

Fracture **N/A** Method **A**

Sieve Results

Sieve mm	50	37.5	25	19	9.5	4.75	2.36	1.18	0.600	0.300	0.075
% Passing	100.0	95.9	92.3	88.3	71.7	56.1	42.5	33.8	28.8	22.5	10.5

By Type Gravel = **43.9%** Sand = **45.6%** Silt & Clay = **10.5%**



SNC·LAVALIN

Client **Public Works & Government Services** Date **16-Jun-16**

Project **2016 Materials Testing** File No. **636200**

Location **Fireside, British Columbia** Sample No. **BH16-28-2**

MECHANICAL SIEVE ANALYSIS

Sample No. **BH16-28-03** Date Sampled **03-Jun-16** By **ST** of **SNC-Lavalin Inc.**

Location **Fireside** Sample Type **Bag** Natural Moisture **2.0** %

Description **Gravel, sandy, trace silt and clay.** Tech **KB/AN**

Specifications

Comments

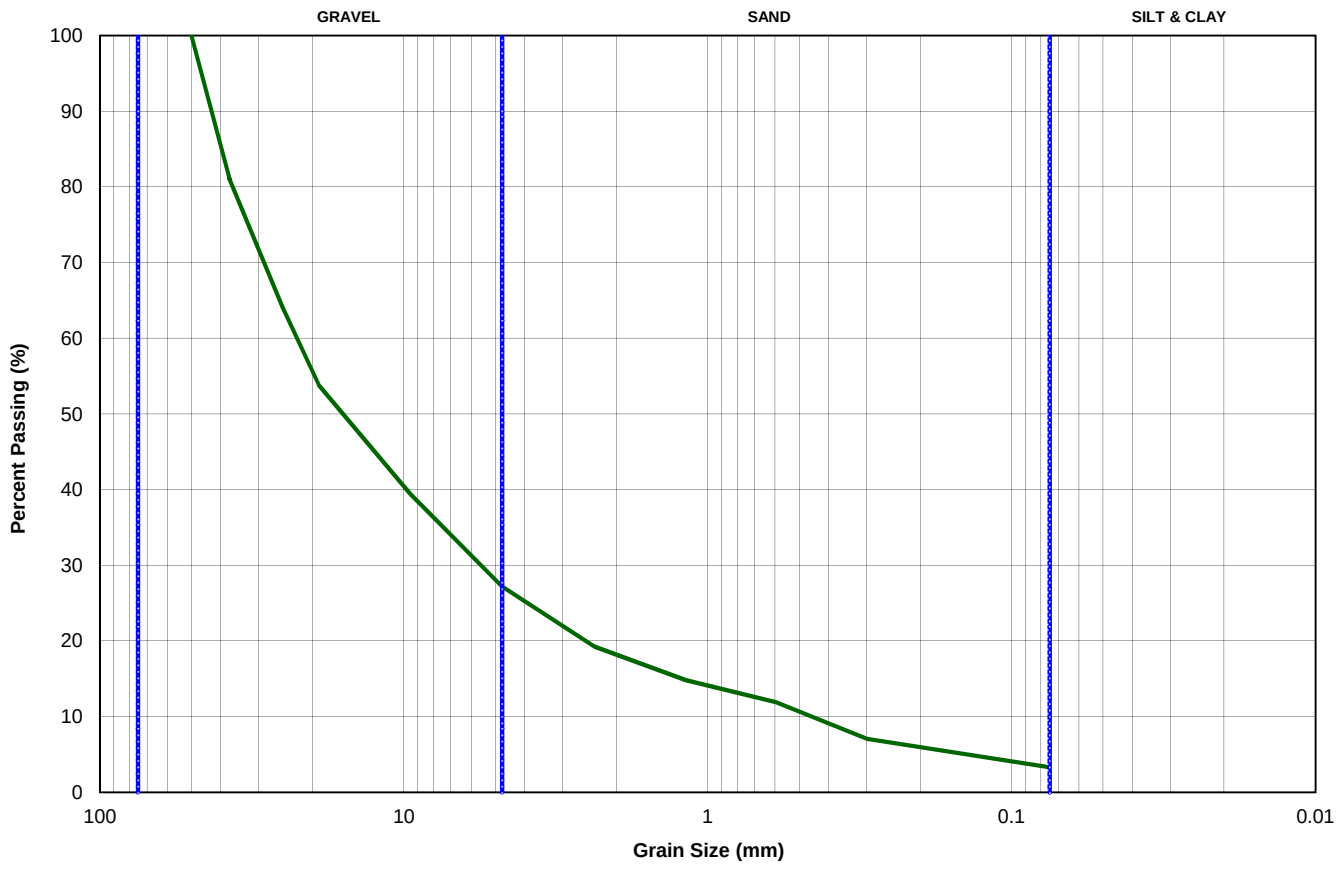
Fracture Method

N/A **A**

Sieve Results

Sieve mm	50	37.5	25	19	9.5	4.75	2.36	1.18	0.600	0.300	0.075
% Passing	100.0	81.1	64.1	53.8	39.4	27.2	19.3	14.8	11.9	7.0	3.3

By Type Gravel = **72.8%** Sand = **23.9%** Silt & Clay = **3.3%**



SNC·LAVALIN

Client **Public Works & Government Services** Date **16-Jun-16**

Project **2016 Materials Testing** File No. **636200**

Location **Fireside, British Columbia** Sample No. **BH16-28-03**

Sieve Analysis Summary

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Depth Interval (m)	Soil classification (by type)			Sieve Analysis (% passing)											
				Gravel %	Sand %	Silt & Clay %	50 mm %	37.5 mm %	25 mm %	19 mm %	12.5 mm %	9.5 mm %	4.75 mm %	2.36 mm %	1.18 mm %	0.6 mm %	0.3 mm %	0.075 mm %
BH16-13	BH16-13-01	2016 06 01	0.9 - 1.1	9	25.8	65.2	100	100	100	98.9	-	95	91	87.7	85	82.6	79.2	65.2
	BH16-13-02	2016 06 01	2.0 - 2.1	1.9	16.3	81.8	100	100	100	100	100	99.6	98.1	96.9	95.9	94.9	93.4	81.8
	BH16-13-03/04	2016 06 01	3.0 - 3.2	61.4	30.5	8.1	100	94.5	77.2	63.4	-	50.6	38.6	30.3	24	19.7	13.7	8.1
	BH16-13-05	2016 06 01	6.4 - 6.6	26.3	40.2	33.5	100	100	95.8	89	84.7	80.9	73.7	68.5	61.7	53.9	45.3	33.5
	BH16-13-06	2016 06 01	7.9 - 8.1	58.8	38.8	2.4	100	100	87.5	72.1	60.4	55.6	41.2	33.5	30.1	25.6	6.7	2.4
BH16-16	BH16-16-01	2016 06 01	1.8 - 2.0	56.3	38	5.7	100	100	95.1	86.5	69.5	60.7	43.7	34	29	24.8	14.8	5.7
	BH16-16-02	2016 06 01	4.0 - 4.1	61.5	31.5	7	100	100	94.6	84.8	68.1	57.6	38.5	30.4	26.2	22.8	14.5	7
	BH16-16-03	2016 06 01	8.1 - 8.2	60	30.4	9.6	100	100	82	71.7	62.2	54.3	40	32.3	27.8	24.4	18.4	9.6
	BH16-16-04	2016 06 01	11.9 - 12.0	58.2	30	11.8	100	84.6	75.1	70.9	-	54.8	41.8	33.3	27.2	22.2	17.1	11.8
BH16-28	BH16-28-01	2016 06 03	0.5 - 0.6	7	37.5	55.5	100	100	100	100	97.8	96.2	93	90.5	88	85.7	82	55.5
	BH16-28-02	2016 06 03	3.0 - 3.2	43.9	45.6	10.5	100	95.9	92.3	88.3	-	71.7	56.1	42.5	33.8	28.8	22.5	10.5
	BH16-28-03	2016 06 03		72.8	23.9	3.3	100	81.1	64.1	53.8	-	39.4	27.2	19.3	14.8	11.9	7	3.3

Standard Penetration Test Summary

Sample Location	Sample Date (yyyy mm dd)	Depth Interval (m)	SPT Info	
			Blow Counts	N (uncorrected)
BH16-12	2016 03 11	5.5 - 6.0	9/10/14	24
	2016 03 11	7.0 - 7.6	9/9/12	21
	2016 03 11	8.5 - 9.1	10/15/18	33
	2016 03 11	10.1 - 10.7	9/11/17	28
	2016 03 12	14.6 - 15.2	28/27/29	56
	2016 03 12	16.2 - 16.8	19/26/26	52
	2016 03 12	20.7 - 21.3	17/31/35	66
	2016 03 12	25.3 - 25.9	16/32/51	83
	2016 03 12	28.3 - 30.0	10/15/16	31
BH16-96	2016 06 01	0.5 - 0.9	16/10/6	16
	2016 06 01	1.5 - 2.0	1/7/12	19
	2016 06 01	2.3 - 2.7	12/30/33	63
	2016 06 01	3.0 - 3.5	21/26/25	51
	2016 06 01	6.1 - 6.6	9/9/8	17

Appendix No.	Appendix Title
C	Groundwater Information - Groundwater Elevation Trends

Table 2
Groundwater Elevation Trends
Fireside Maintenance Yard
KM 839, Alaska Highway, BC

Monitoring Well Information Summary				PGL Monitoring Dates												Franz Monitoring Dates	
				19-Aug-06		22-Aug-07		06-Oct-08		19-Oct-09		08-Sep-10		16-Sep-11		2012	
AEC ID	Station ID	Elevation - Top of Casing (m)	Elevation - Ground (m)	Depth to Water (below top of casing) (m)	Elevation - Water (m)	Depth to Water (below top of casing) (m)	Elevation - Water (m)	Depth to Water (below top of casing) (m)	Elevation - Water (m)	Depth to Water (below top of casing) (m)	Elevation - Water (m)	Depth to Water (below top of casing) (m)	Elevation - Water (m)	Depth to Water (below top of casing) (m)	Elevation - Water (m)	Depth to Water (below top of casing) (m)	Elevation - Water (m)
AEC 1	BH-112	518.303	517.475	Dry (DTB 12.70)	-	Dry (DTB 12.70)	-	Dry (DTB 12.70)	-	-	-	Dry (DTB 12.70)	-	Dry (DTB 12.70)	-	Dry (DTB 12.70)	-
	BH-113	518.401	517.467	23.45	494.951	20.665	497.736	21.169	497.232	20.54	497.861	20.813	497.588	Dry (DTB 24.14)	-	Dry (DTB 24.14)	-
AEC 2	BH-118	518.143	517.292							16.165	501.978	16.535	501.608	19.254	498.889	Dry (DTB 19.46)	-
	BH-120	517.94	518.021							28.171	490.131	28.646	489.656	Dry (DTB 29.68)	-	Dry (DTB 29.68)	-
AEC 3	BH-119	518.302	517.413							15.299	502.641	15.872	502.068	Dry (DTB 17.90)	-	Dry (DTB 17.90)	-

Notes:
Elevations measured in meters above sea level, based on surveys completed by All-North Consultants Ltd.
DTB = Depth to Bottom
BH M = Monitoring Well
- = Not measured

MONITORING REPORT

SNC·LAVALIN

Project No.: 636200
Date: 2014-10-29
Observer: AT, MLC
Weather: -5°C Cloudy
Time: 13:45:00
Approved by:

Public Works and Gov't Services Canada
Fireside Maintenance Camp
BC

Monitoring Well No.	Reference Elevation[1] (m)	Depth to NAPL[2] (m)	Apparent NAPL Thickness[3] (mm)	Depth to Water (m)	Potentiometric Elevation[3] (m)	Depth to Bottom (m)	Calculated Vapour Conc.[4] (ppm)	Time	Comments
BH13-04	517.421	-	0	31.596	485.83	32.78	0	13:45	
BH13-05	517.292	-	0	19.810	497.48	23.51	35	11:35	
BH13-06	517.225	-	0	29.798	487.43	35.21	0	12:25	
BH13-08	517.211	-	0	31.678	485.53	33.95	0	13:58	
BH14-09	517.064	-	0	29.885	487.18	31.92	0	12:42	
BH14-10	517.093	-	0	29.256	487.84	34.08	15	12:15	
BH14-11	517.343	-	0	29.427	487.92	32.15	0	12:34	
BH14-12	517.164	-	0	31.770	485.39	34.05	0	13:49	
BH14-13	517.337	-	0	20.380	496.96	23.15	10	12:54	
BH14-14	516.430	-	0	9.579	506.85	11.26	0	13:20	
BH14-15	517.117	-	0	21.125	495.99	27.51	15	13:35	
BH14-16	516.426	-	0	2.901	513.53	3.59	0	13:06	
BH14-18	517.196	-	0	22.044	495.15	24.31	300	13:41	
BH14-19	517.109	-	0	30.752	486.36	32.97	0	12:08	
BH14-20	517.252	-	0	18.420	498.83	23.88	80	11:19	
BH14-22	517.003	-	0	17.100	499.90	21.26	5	14:20	
BH14-23	517.552	-	0	17.925	499.63	20.60	0	11:28	
BH14-24	516.802	-	0	16.826	499.98	20.89	0	13:27	
BH14-25	517.274	-	0	13.503	503.77	14.30	30	11:43	
BH14-26	517.425	-	0	31.860	485.57	33.08	0	14:08	
BH14-27	517.253	-	0	10.301	506.95	13.78	5	11:54	
BH14-28	517.228	-	0	16.857	500.37	19.87	0	12:01	

[1] Reference Elevation is a mark on the rim of the monitoring well standpipe surveyed with respect to Datum.

[2] Non-Aqueous Phase Liquid

3 NAPL specific gravity assumed to be 0.8

[4] 1% LEL is approximately equivalent to 110 ppm.

MONITORING REPORT

SNC·LAVALIN

Project No.: 636200
Date: 2016-03-06
Observer: LM
Weather: 10°C Sunny
Time: 11:00:00
Approved by:

Public Works and Gov't Services Canada
Fireside Maintenance Camp
BC

Monitoring Well No.	Reference Elevation[1] (m)	Depth to NAPL[2] (m)	Apparent NAPL Thickness[3] (mm)	Depth to Water (m)	Potentiometric Elevation[3] (m)	Depth to Bottom (m)	Calculated Vapour Conc.[4] (ppm)	Time	Comments
BH112M	518.303	-	0	12.700	505.60	12.71	150	12:05	
BH113M	518.401	-	-	-	-	24.11	225	12:20	Dry
BH119M	518.302	-	0	29.615	488.69	29.68	5	14:00	
BH13-06	517.225	-	0	31.247	485.98	35.20	300	14:30	
BH14-10	517.093	-	0	32.043	485.05	34.05	150	14:50	
BH14-11	517.343	-	0	30.988	486.36	31.17	50	15:15	
BH14-18	517.196	-	0	24.175	493.02	24.27	150	12:30	
BH14-20	517.252	-	0	20.941	496.31	23.83	150	11:30	
BH14-25	517.274	-	0	14.303	502.97	14.39	50	16:18	
Monitored on March 14									
MW16-12D	833.738	-	0	26.135	807.60	31.05	25	13:10	

[1] Reference Elevation is a mark on the rim of the monitoring well standpipe surveyed with respect to Geodetic Datum.

[2] Non-Aqueous Phase Liquid

3 NAPL specific gravity assumed to be 0.8

[4] 1% LEL is approximately equivalent to 110 ppm.

Appendix No.	Appendix Title
D	Soil Treatment Facility Construction and Design Specifications - Location Plan (101) - Site Plan (102) - Soil Treatment Facility #4 Design Specifications (103)

1.1 Soil Treatment Facility Construction and Design Specifications

1.1.1 Site Preparation and Siting

The proposed soil treatment facility (STF) is located at the JJJ gravel pit, located approximately 5 km east of Fireside, BC (Drawing 636200-101, Attachment 1). The access is via a short and moderately steep gravel road leading north from Highway 97 at kilometer 839 of the Alaska Highway.

Three STFs were constructed at the site in 2016 to accommodate soil excavated from the Fireside Maintenance Camp. Drawings 636200-101 and 636200-102 (Attachment 1) show the general site configuration and locations of the STFs, respectively. A proposed STF (#4) is proposed to be constructed between STF's #1 and #2.

The topography in this area is moderately undulating with moderate slopes and some earthwork will be required as part of the field fitting (siting) of the STF and to prepare the subgrade to design specifications stated in Section 1.2.

The selected contractor is responsible for final selection of the STF location and may propose alternatives. The contractor is encouraged to evaluate the most practical and cost effective placement and orientation for the construction of the STF in consideration of existing site constraints and to minimize placement of materials in restricted air flow areas (i.e., significant depressions). Proposed alternative locations must have an equivalent surface area as provided by the proposed STF.

The contractor will be responsible for ensuring road access suitable for light vehicles and heavy equipment is available for the proposed STF, or for alternative locations.

The construction and design elements related to site preparation are outlined below:

1. Upgrade, as necessary, the access to the Site to allow for loaded gravel trucks and access by heavy equipment necessary to construct the STF. Gravel may be locally available at the Triple J gravel pit, if and as necessary.
2. Carry out necessary site preparations (cut and fill, soil re-location, etc.) to ensure design specifications for subgrade are achievable. The contractor should include costs for any survey activities they consider necessary to support site preparation. Any site preparations must not result in unstable geotechnical conditions, nor exacerbate existing conditions, that could have the potential to impact the STF design specifications, operability, or access over the long term. The contractor must include a geotechnical evaluation if this is not considered achievable.
3. Restore / upgrade road access suitable for light vehicles and heavy equipment to all four STF locations, including if roads are re-located as part of field fitting the STF (siting).

1.2 Soil Treatment Facility Design and Construction

STF #4 is proposed with approximate dimensions of 57.5 m x 55 m (does not include berms) for the effective treatment surface area. These dimensions are intended to accommodate placement and treatment of approximately 8,600 m^3 of soil for potential future soil placement. Excavation of 2,060 m^3 is to be completed this year and can be placed within the new STF along with excess soils from the existing 3 STFs to minimize their height at the direction of the Departmental Representative following turning and aeration to maximize surface area for contaminated material.

The proposed STF dimensions reflect typical maximum liner sizes that do not require field fusing and provide relative ease of handling. Alternative sizing can be considered if presented by the contractor following the contractor site visit and evaluation of siting constraints. However, similar combined total surface areas for effective treatment must be maintained to ensure STF capacity for the soils anticipated for excavation.

Although the target for duration of treatment of soils is less than or equal to three years, a conservative liner system lifetime of greater than 10 years is required to provide flexibility in soil management at the site. The selected materials are expected to meet the temporal objectives and be compatible with the

anticipated adverse climate, including temperatures ranging between approximately +35°C to -50°C. Any alternative materials proposed must meet these objectives.

Leachate collection is limited only to liquids that may be generated during the mineralization of the hydrocarbon contaminants and that which may be inadvertently introduced during operation and aeration events. For this reason, no surface water flow diversion or control measures are considered necessary at this time outside of the liner system itself.

Drawing 636200-102 (Attachment 1) shows the general site configuration and positions of the proposed and existing STFs. Drawing 636200-103 shows the STF design and related specifications. The following summarizes the construction and design specifications related to each of the three proposed STFs.

1. The subgrade of the STF footprint is to be contoured to one corner of the proposed STF allowing for drainage. No protruding angular coarse fragments or debris should be visible upon deployment of the liner system.
2. Berms and access ramp shall be constructed using locally available materials (e.g., subsoils and/or pit run sand and gravel) and the design includes a level top surface for ease of accessibility and for geotechnical stability. The proposed STF's west (conjoining) berm is to be constructed using the existing east berm of STF #2 in a manner that maintains the integrity and function of the existing berm and liner systems. The conjoining berm should be sloped to the extent that is practicable so that intercepted water can drain from its middle to the outsides. An earthern ramp (maximum 3:1 slope) shall be constructed adjacent the proposed STF #4 to facilitate equipment access during loading and operation of the biocell.
3. Liner system specifications in order of deployment (estimated minimum liner size of 70 m x 50 m to accommodate berm coverage):
    a. Base non-woven geotextile (12 ounce/yard)) for liner protection against abrasion.
    b. Continuous (seamless) 30 mil (or greater) oil resistant (OR) geosynthetic base liner. The minimum liner lifetime is 10 years (i.e., Layfield 6000 series or approved equivalent).
    c. Upper non-woven geotextile (12 ounce/yard) for liner protection against abrasion.
    d. Placement of a 300 mm thick drainage and protection layer using pea gravel or well graded sand and gravel (<75 mm diameter, 2% or less passing No. 200 sieve by weight, and no angular particles in the fraction coarser than the #4 sieve). The material must be of suitable environmental quality and the grain size distribution approved by the Department Representative prior to placement. Alternative materials would require grain size testing and advance approval by the Department Representative. This lift must extend to top of berm to key in / secure liner, with a minimum thickness of 100 mm on top of the berm.
    e. Installation of a near continuous sacrificial visual indicator layer using plywood (4ft x 8ft x ½" thick sheets) to protect against over-excavation and liner damage during aeration events.
    f. Following placement of contaminated soils, secure a continuous (seamless) oil resistant reinforced polyethylene (OR RPE) ultra violet resistant cover liner (or approved equivalent) over placed soils. The estimated liner lifetime minimum requirement is 5 to 10 years. The cover liner should be installed extending a minimum of 0.5 m to 1 m down the outside of the earthen berm. The cover liner must be secured in place (perimeter and interior) using easily removable weights (e.g., tires, lumber, etc.). The cover is estimated at 64 m x 61 m to accommodate the height of placed soil and to extend laterally beyond the top of the berms
    g. The contractor is required to determine the final liner and cover dimensions to meet the design specifications for the STF and provide documentation to demonstrate the Quality Control / Quality Assurance measures taken during subgrade preparation, liner installation, and any necessary panel welding.
4. Prior to placement of soils, clean gravel (<5% passing 75 µm sieve) is to be backfilled around a monitoring port in the low corner of the STF to allow for accumulation and management of

potential leachate. The minimum thickness of gravel is 1.2 m with dimensions approximately 5 m x 5 m. A 300 mm diameter PVC pipe (schedule 80 or thicker) with affixed removable top cap and secured bottom cap is to be placed within the gravel backfill. The PVC pipe is to extend a minimum of 0.3 m above placed soils / gravel. PVC pipe requires its slotted (0.010") interval to extend from the base up to a height of 1 m.

5. An estimated 2,060 m^3 of contaminated soil requires placement within the proposed STF #4 from remedial excavation activities. Additional soils can be placed from the existing STFs during aeration to reduce their current height at the direction of the Departmental Representative. Precautions must be taken to avoid damage to the liner during loading. Any damages caused by construction or loading activities will be the responsibility and at expense of the contractor to repair or replace the liner. The actual depth may vary depending on final soil volume estimates for treatment. Placed soil should not exceed the height of the berm at its edges and must be crowned to the maximum height to encourage runoff to the margins of the STF. The maximum height of placed soil shall not exceed approximately 3.0 m.

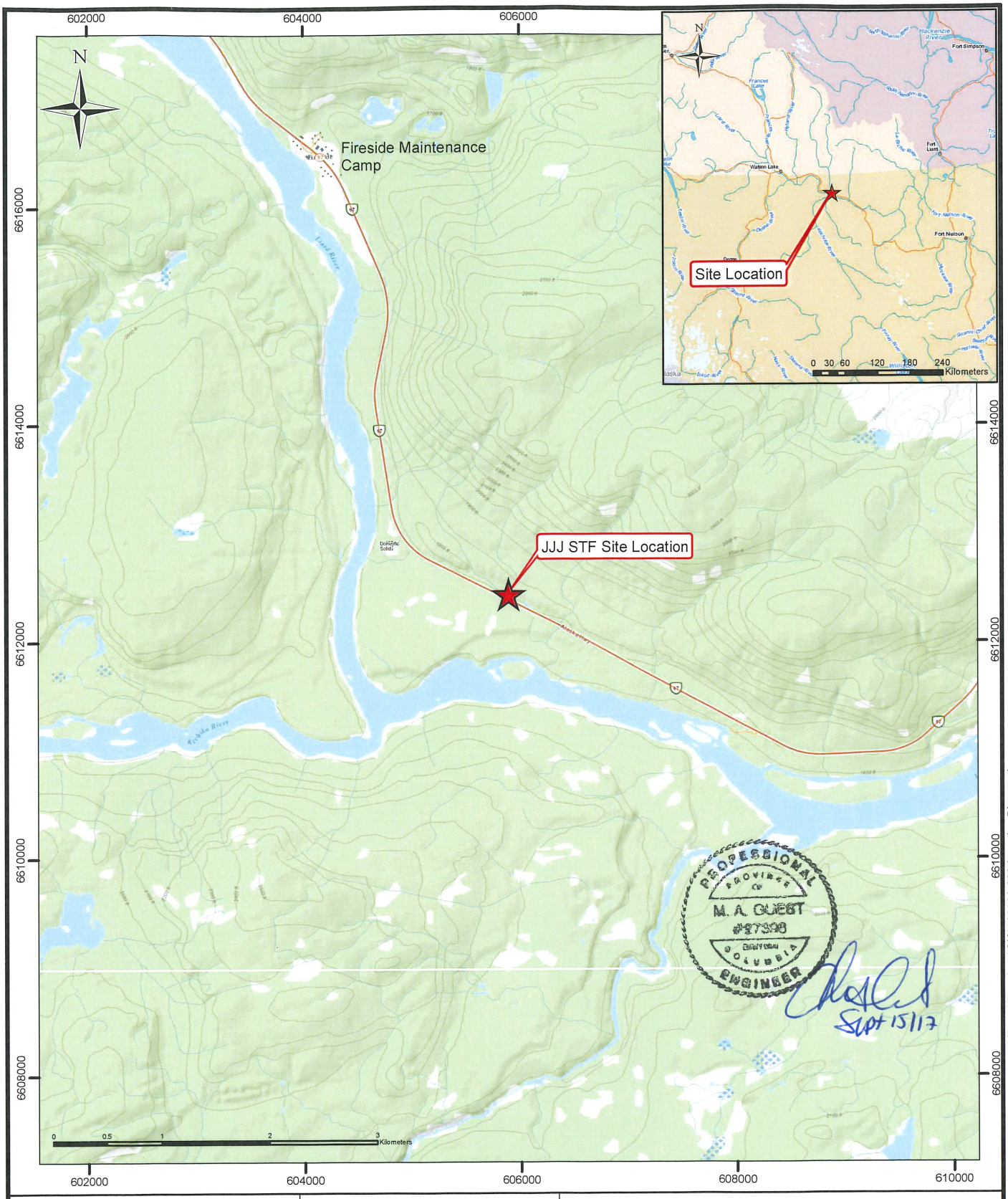
The design outlined above is in general accordance with applicable federal guidance1 and best practices in British Columbia based on the BC Ministry of Environment (MoE) Protocol 15[2].

Instructions for costing in relation to design elements are provided in Appendix 2.

[1] Federal Guidelines for Landfarming Petroleum Hydrocarbon Contaminated Soils, March 2006 (editorial update 2013).
[2] Protocol 15 – Soil Treatment Facility Design and Operation for Bioremediation of Hydrocarbon Contaminated Soil, dated July 17, 2012.

ATTACHMENT 1

Drawings



PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
M. A. GUEST
#37398
Sept 15/17

LEGEND

★ Site Location

<BOL>Notes:</BOL>
1. Intended for Illustration purposes only.
2. Original in colour.

<BOL>References:</BOL>
© OpenStreetMap (and) contributors, CC-BY-SA
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri

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CLIENT NAME:	PROJECT LOCATION:
Public Works and Government Services Canada	JJJ Gravel Pit Km 839 Alaska Highway, Fireside, B.C.

Location Plan

BY: DRB	DATE: 2017-03-15	SCALE: 1:50,000	REF No: 636200-101 REV: 0
CHK'D: MG	PROJ COORD SYS: NAD 1983 UTM Zone 9N		

MXD Path: P:\Current Projects\PWGSC\636200 Fireside\4.0 Execution\4.5 GIS and Drawings\GIS\636200-300-Location Plan.mxd

Project Path: \\Sli2606\projects\Current Projects\PWGSC\636200 Fireside\4.0 Execution\4.5 GIS and Drawings\Exports\PDF

LEGEND

0 25 50 75 METRES

- TREE LINE (APPROX.)
- MONITORING WELL LOCATION
- MONITORING WELL TO BE DECOMMISSIONED
- DECOMMISSIONED MONITORING WELL
- FENCE
- SOIL BERM
- SOIL PILE
- LEACHATE COLLECTION SYSTEM
- TOPOGRAPHICAL LINE AND ELEVATION (masl) (537.5)

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED PRIOR TO INTRUSIVE WORK. NOT ALL UTILITIES MAY BE SHOWN.

REFERENCE DRAWINGS

IMAGERY	1969	GOOGLE EARTH
DWG. NO.	DATE	DESCRIPTION

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
1	2017-07-07	ISSUED TO CLIENT	PRT	MG
0	2017-06-16	ISSUED AS DRAFT	PRT	CS

SNC·LAVALIN

CLIENT NAME: PUBLIC SERVICES AND PROCUREMENT CANADA

PROJECT LOCATION: JJJ GRAVEL PIT, KM 839 ALASKA HIGHWAY, FIRESIDE, B.C.

TITLE:

SITE PLAN - JJJ GRAVEL PIT

DWN BY: PRT	SCALE: 1:1,500	DATE: 2017-06-15	DWG No: 636200-102 REV.: 1
CHK'D: CS	PLOT: 20170707.1122	CADFILE: 636200R11	

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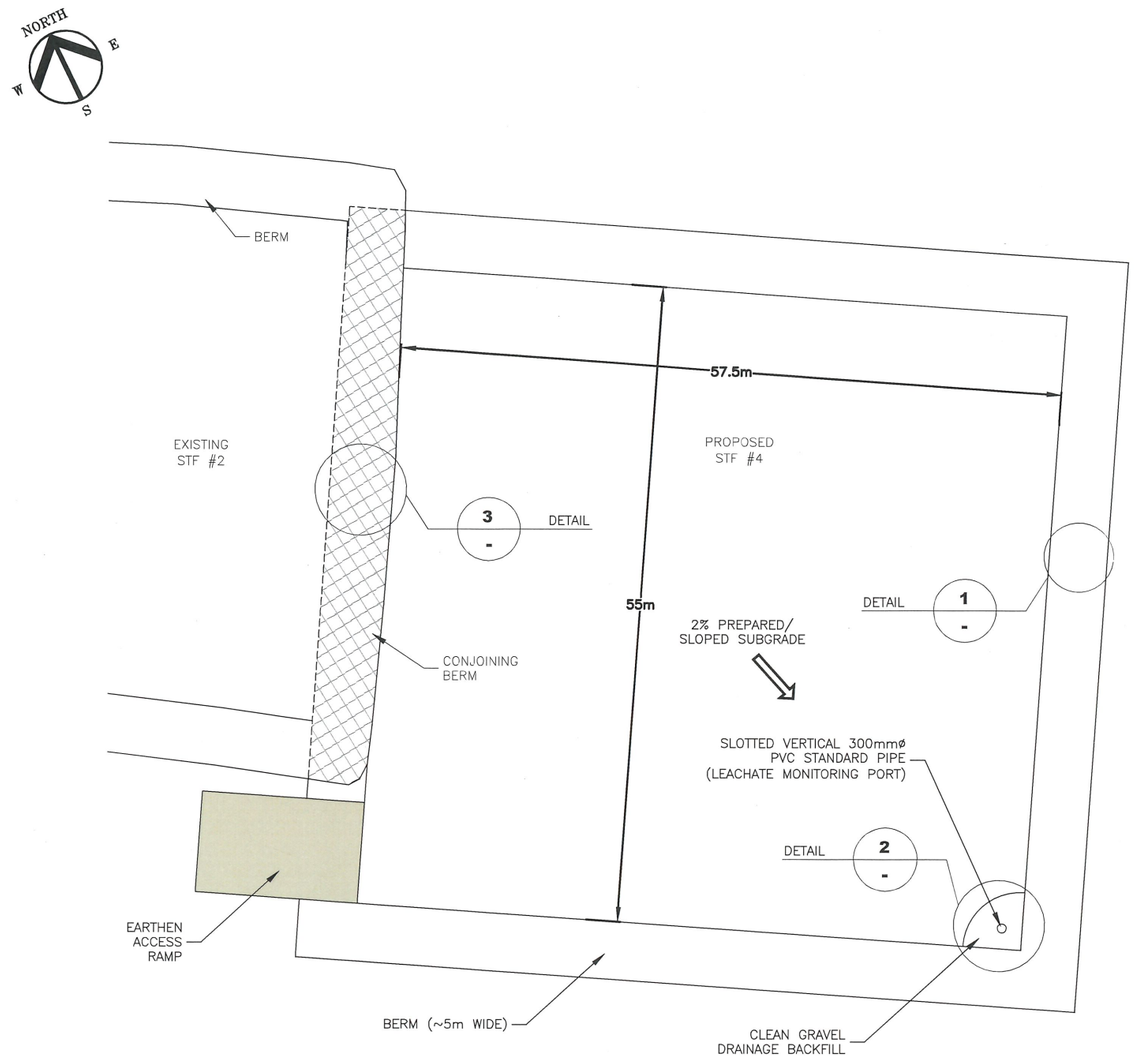
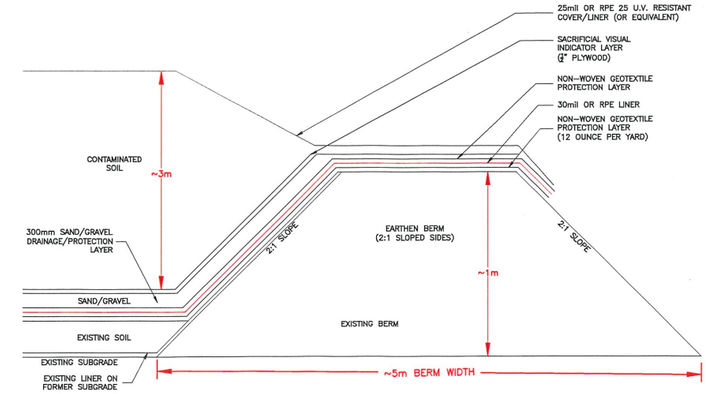


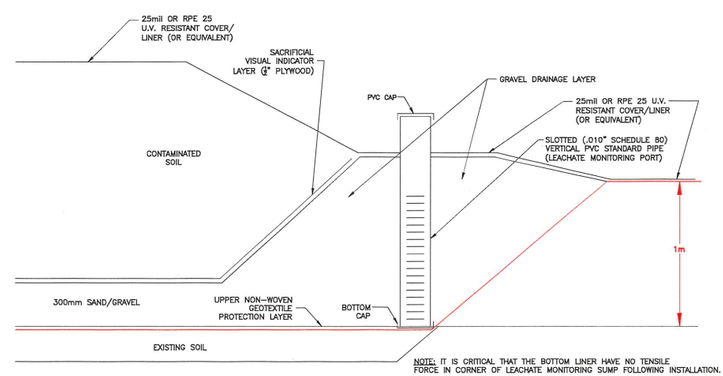
SCALE 1:500

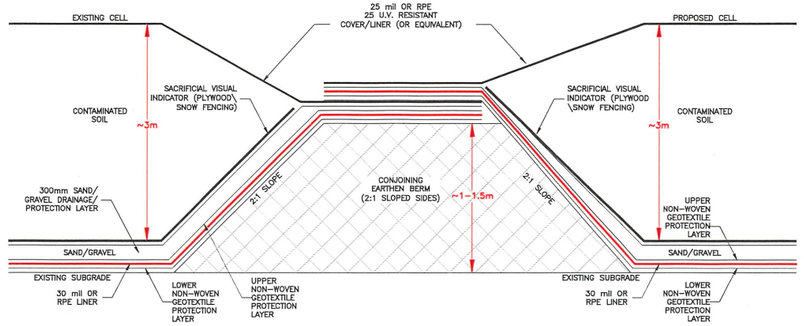
0 5 25 METRES

NOTES:

1. PREPARED SUBGRADE TO BE FREE OF PROTRUSIONS (ANGULAR COARSE FRAGMENTS, DEBRIS, ETC.) PRIOR TO CONTRUCTION OF STF.







LEGEND

PROFESSIONAL ENGINEER
PROVINCE OF
M. A. GUEST
#27396
DISCIPLINE
BRITISH COLUMBIA
Sept 11/17

NOTES

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REFERENCE DRAWINGS

IMAGERY	1969	GOOGLE EARTH
DWG. NO.	DATE	DESCRIPTION

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
1	2017-07-07	ISSUED TO CLIENT	PRT	MG
0	2017-06-16	ISSUED AS DRAFT	PRT	CS

SNC·LAVALIN

CLIENT NAME:
PUBLIC SERVICES AND PROCUREMENT CANADA

PROJECT LOCATION:
JJJ GRAVEL PIT
KM 839 ALASKA HIGHWAY, FIRESIDE, B.C.

TITLE:
SOIL TREATMENT FACILITY #4 DESIGN SPECIFICATIONS

DWN BY: PRT	SCALE: 1:1,500	DATE: 2017-06-15	DWG No: 636200-103 REV.: 1
CHK'D: CS	PLOT: 20170707.1123	CADFILE: 636200R11	

PATH: P:\CURRENT PROJECTS\PWGSC\636200 FIRESIDE\4.0 EXECUTION\4.5 GIS AND DRAWINGS\CAD\636200R11.DWG

Appendix No.	Appendix Title
E	JJJ Gravel Pit Soil Treatment Facility – Mechanical Aeration and Mixing of Soil

JJJ GRAVEL PIT SOIL TREATMENT FACILITY – MECHANICAL AERATION AND MIXING OF SOIL

A new soil treatment facility will be constructed in addition to the three existing facilities at JJJ Gravel Pit to receive additional soil excavated from the Fireside maintenance camp. The existing three STF dimensions are shown on the attached figures. In addition, the approximate volumes in the existing STFs 1, 2 and 3 are 7,500 m^3, 6,000 m^3 and 7,500 m^3, respectively, with respective approximate heights of 4 m, 2.5 m and 4 m of contaminated material requiring aeration. The existing soil treatment facilities shall be mechanically aerated and mixed during, and/or following completion of, placement of soil into the new facility.

The cover liner may require placement during extended periods of wet rain (>5 to 10 mm/day, as determined by the Departmental Representative).

The contractor shall use the following specifications to provide a unit cost for the provision of soil aeration for one event:

1) The soil pile cover liners shall be inspected to confirm condition. Any condition issues that would impact the integrity of the cover liners shall be reported to the Departmental Representative.
2) The soil pile cover liners shall be removed and stored in a manner to avoid damage. The contractor shall be responsible for any damage to the cover liners during removal or storage.
3) During mechanical aeration events soils are to be thoroughly mixed in a manner to avoid damage to the underlying liners, using a tracked excavator equipped with a clean-up bucket, or other approved equipment. Soils consist of sand and gravel.
4) The full breadth and depth of each of the treatment cells shall be mixed to extents defined by the presence of plywood sheeting visual indicator placed on the sides and bottom of the cells. The contractor will be responsible for any damage to the liners underlying the plywood. Any damage to the liners must be reported to the Departmental Representative.
5) Compaction of the aerated soil shall be minimized by sequencing the mixing method to prevent un-necessarily driving equipment over completed areas of the cells.
6) The heights and slopes of the cells following mixing shall be approximately the same as prior to mixing with an allowance for bulking.
7) The contractor shall assist the Departmental Representative in obtaining soil samples as required during aeration and mixing activities.
8) Following aeration and mixing and upon approval by the Departmental Representative, the cover liners shall be replaced over the cells and weights placed to eliminate significant movement of the cover liners that may result in loss or damage. The cells will not be considered closed until the Departmental Representative has approved completion of the work.

The contractor shall provide leachate management during the aeration and mixing activities. Leachate may be used to irrigate the cell(s) during aeration and mixing during warm, clear weather. Contractor shall provide pumping and distribution equipment sufficient to provide

coverage of soil in the cell. In case of high volume and/or sufficiently saturated soil, the contractor may be required to collect leachate from the existing catchment systems and dispose at an approved disposal facility. The unit cost for leachate collection and disposal will be measured by cubic meters (m^3) of leachate collected, transported, and disposed at an approved disposal facility.