

Public Service and Procurement Canada
2720 Riverside Drive
Ottawa, ON K1A 0S5

October 22, 2018

Attention: Robert Galdins, Environmental Analyst

RE: Project-Specific Designated Substance Survey
9th Floor Re-fit Project, Place du Portage Phase 1
50 Victoria Street, Gatineau, Québec

DST File No.: GV-OT-034916

1.0 INTRODUCTION

DST Consulting Engineers Inc. (DST) was retained by Public Services and Procurement Canada (PSPC) to prepare a project-specific Designated Substance Report (DSR) for the 9th Floor Re-fit Project, scheduled to be completed in the Place du Portage Phase I (PDP I), located at 50 Victoria Street, Gatineau, Québec.

Québec's *Act Respecting Occupational Health and Safety S-2.1R, Section 51* requires that every employer must take necessary measures to protect the health and ensure the safety and physical well-being of their workers. The *Canada Labour Code* also stipulates under *Part II, Section 124* that every employer shall ensure that the health and safety at work of every person employed by the employer is protected. By having a DSR conducted, the Project Manager will be able to inform his or her employees, contractors, and tenants of any designated substances that may be present and possibly disturbed throughout the duration of the project.

DST staff completed a visual inspection of building materials for the presence of suspected designated substances and hazardous materials on selected days on September 26, 2018.

2.0 SCOPE OF WORK

The survey implemented by DST, at the request of PSPC, included the 11 designated substances listed in *Section 30* of the *Ontario Occupational Health and Safety Act, R.S.O. 1990, Chapter 0.1*. Designated Substances, as included as part of the survey and as identified under the *Ontario Occupational Health and Safety Act* are as follows:

- Acrylonitrile,
- Arsenic,
- Asbestos (both friable and non-friable),
- Benzene,
- Coke Oven Emissions,
- Ethylene Oxide,
- Isocyanates,
- Lead,

- Mercury,
- Silica, and
- Vinyl Chloride

Other Hazardous Materials which are not classified as Designated Substances (in Ontario), but were included as part of the survey and considered pertinent due to applicable regulations, best practice guidelines and/or potential risks to human health and/or the environment, are:

- Polychlorinated Biphenyls (PCBs),
- Halocarbons,
- Mould,
- Other Hazardous Materials (where deemed pertinent).

3.0 METHODOLOGY

The purpose of the survey program was to identify designated substances and hazardous materials that may be disturbed during future work operations associated with the project. DST staff completed a visual inspection of building materials for the presence of suspected designated substances and hazardous materials on September 26, 2018.

The survey included a limited intrusive investigation into representative locations of drywall (walls and bulkheads), ceramic tiles (floors and walls), decorative brick (walls) and flooring (carpet, tile and raised tile).

The survey included all accessible areas. At the time of the survey the following rooms/areas were inaccessible:

- East office block electrical room,
- The fibre optic room,
- The caged off area in the south-west computer room,
- Janitors room,
- A second, inner layer of drywall was noted at perimeter wall columns. Limited openings (less than a square metre) were created by DST using Low Risk asbestos work procedures, but, due to limited access, it could not be determined if this inner layer had drywall joint compound associated with it.

Materials suspected of containing designated substances and other hazardous materials were visually identified based on the surveyor's knowledge of the historic composition of building products. Equipment that may contain PCBs (e.g. electrical transformers and fluorescent light ballasts) can often be identified by examining manufacturer's labels. For safety reasons, DST personnel do not remove the ballast shields from fluorescent light fixtures to examine the ballast codes unless the electrical circuit for the lighting has been tagged and locked out by a qualified electrician. Visual identification of materials suspected to contain asbestos or lead (in paint) was supported by the collection and analysis of a limited number of representative samples,

where applicable. Materials suspected of containing designated substances other than asbestos or lead (in paint) were identified by appearance, age, and knowledge of historic applications.

In Québec, a material is defined as an asbestos-containing material (ACM) if the material has a minimum asbestos content of 0.1% by dry weight. The disturbance of asbestos-containing materials on construction and demolition projects in the province of Québec is governed by the Act Respecting Occupational Health and Safety, (Québec R.S.Q., Chapter S-2.1), the Safety Code for the Construction Industry, Work Liable to Produce Asbestos Dust Emissions (Québec R.S.Q., Chapter S-2.1, r.4, Section 3.23) and the Regulation Respecting Occupational Health and Safety (Québec R.S.Q., Chapter S-2.1, r.13). As Québec's Occupational Health and Safety Regulations only stipulate that a sufficient number of bulk asbestos samples be collected and do not stipulate a quantity of bulk material samples to be collected, DST utilized the bulk asbestos sampling requirements of *Ontario Regulation 278/05 – Designated Substance, Asbestos on Construction Projects and in Buildings and Repair Operations* for the collection of a representative number of bulk asbestos samples.

ACMs can be divided into two categories: friable and non-friable material. A friable ACM is a material that can be crumbled, powdered, or pulverized by hand pressure and can readily release fibres when disturbed. Common applications of friable ACMs are sprayed or trowelled surfacing materials (e.g. sprayed fireproofing and textured coatings) as well as mechanical and thermal insulation. Non-friable materials are materials that will generally release fibres only when cut or shaped. Common non-friable ACMs include vinyl floor products, drywall joint compound, plaster, asbestos textile products and asbestos cement products (transite). Some of these products may become friable with time or when disturbed.

Representative bulk samples of suspected ACMs were collected by DST during the site investigation. Bulk samples were analyzed by Maxxam Laboratories (Maxxam). The bulk samples were analyzed using polarised light microscopy (PLM). All bulk asbestos samples collected by DST were analyzed using the regulated Québec detection limit of 0.1% or more asbestos by dry weight.

In Canada, the Federal Hazardous Product Act has set the allowable concentration of lead in paints for new consumer products to 0.009% lead content by weight (90 ppm). For the purposes of this survey and report, paints having detectable concentrations of lead greater are considered to be lead-containing.

Selected photographs are included in Appendix A. Laboratory certificates of analysis are attached in Appendix B.

4.0 FINDINGS

Portage I, located at 50 Victoria Street is located in the Hull district of Gatineau and is considered as a key part of the entire Portage portfolio. Portage I is comprised of twenty-two floors of office space for a total of 34,907 m² (useable) and 38,101 m² (rentable) with a typical

floor area of 1,400 m². The major tenant is Industry Canada. The working population is estimated at just over 1,200 persons¹.

At the time of the survey, the 9th Floor was unoccupied. The area consisted of three main office blocks in the north, east and south, two large computer rooms/blocks in the north/south west and a core area with elevators, washrooms and utility rooms. Representative photographs of the office block and computer room areas can be found in Appendix A.

The following sections outline the complete findings of all accessible designated substances and hazardous building materials that were assessed within the project area.

4.1. Asbestos

Table 1 below presents the findings of bulk material samples collected from and applicable to the project area, based on visual observations at the time of the site survey.

Table 1: Summary of Bulk Samples Analyzed for Asbestos Content			
Sample I.D.	Sample Location	Sample Description	Asbestos Content and Type
34916-01A	North Office Block, Floor Outside of West Photocopy Room	Remnant Black/Yellow Mastic and Floor Leveling Compound	Mastic- None Detected
34916-01B	North Office Block, Floor Outside of East Photocopy Room		Mastic- None-Detected Leveling Compound- 1% Chrysotile
34916-01C			Mastic- None-Detected Leveling Compound- Positive Stop- Not Analyzed
34916-02A	North Office Block, Outside of West Photocopy Room	Drywall Joint Compound	None Detected
34916-02B	North Office Block, Outside of East Photocopy Room		None Detected
34916-02C			None Detected
34916-02D	East Office Block, South Mechanical Shaft		None Detected
34916-02E			None Detected
34916-02F	Elevator Corridor, Wall Adjacent Elevator#4		None Detected
34916-02G			None Detected
34916-03A	North Office Block, Baseboard Outside of West Photocopy Room	Baseboard Mastic	None Detected
34916-03B			None Detected
34916-03C	North Office Block, Baseboard Outside of East Photocopy Room		None Detected
34916-04A	North Office Block, West Side	2'x4' Ceiling Tile, Random Fissures	None Detected
34916-04B	North Office Block, Central		None Detected
34916-04C	North Office Block, East Side		None Detected

¹ Portage I and II, General Information. 2018 (http://www.placeduportage.ca/histoire_en.php)

Table 1: Summary of Bulk Samples Analyzed for Asbestos Content			
Sample I.D.	Sample Location	Sample Description	Asbestos Content and Type
34916-05A	North Office Block, Above Ceiling Tiles, Air Handling Ductwork on West Wall	Brown Duct Mastic	None Detected
34916-05B			None Detected
34916-05C			None Detected
34916-06A	North Office Block, Above Ceiling Tiles, Pipe Penetrations on West Wall (at South)	Drywall Joint Compound	None Detected
34916-06B			None Detected
34916-06C			None Detected
34916-07A	North Office Block, Above Ceiling Tiles, Pipe Penetrations on North Wall	Cementitious Firestop/Parging	None Detected
34916-07B			None Detected
34916-07C			None Detected
34916-08A	North Office Block, Joint on Concrete Bulkhead	Black Caulking	None Detected
34916-08B			None Detected
34916-08C			None Detected
34916-09A	North Office Block, Intersection of Window and Concrete Bulkhead	Rigid Brown Caulking	1% Chrysotile
34916-09B			Positive Stop- Not Analyzed
34916-09C			Positive Stop- Not Analyzed
34916-10A	North Office Block, North-East Windows	Black Window Caulking	None Detected
34916-10B			None Detected
34916-10C			None Detected
34916-11A	North Office Block, East Photocopy	12"x12" Vinyl Floor Tiles, Off-White and Associated Mastic	VFT- None Detected Mastic- None Detected
34916-11B			VFT- None Detected Mastic- None Detected
34916-11C	North Office Block, West Photocopy Room		VFT- None Detected Mastic- None Detected
34916-12A	North Office Block, West Photocopy Room	12"x12" Vinyl Floor Tiles, Blue and Associated Mastic	VFT- None Detected Mastic- None Detected
34916-12B			VFT- None Detected Mastic- None Detected
34916-12C	North Office Block, East Photocopy Room		VFT- None Detected Mastic- None Detected
34916-13A	North Office Block, East Photocopy Room, Concrete Block Observed Above Ceiling Tile	Brown Concrete Block Mortar	None Detected
34916-13B			None Detected
34916-13C			None Detected
34916-14A	Elevator Lobby- Adjacent Women's Washroom	Brown Brick Mortar	None Detected
34916-14B			None Detected
34916-14C			None Detected
34916-14D	Elevator Lobby- Adjacent Fibre Optic Room		None Detected
34916-14E			None Detected

Table 1: Summary of Bulk Samples Analyzed for Asbestos Content			
Sample I.D.	Sample Location	Sample Description	Asbestos Content and Type
34916-15A	Elevator Lobby- Floor Adjacent Women's Washroom	Ceramic Tile Grout	None Detected
34916-15B			None Detected
34916-15C			None Detected
34916-16A	Elevator Lobby- Wall Hatch Adjacent Women's Washroom	Grey Concrete Block Mortar	None Detected
34916-16B			None Detected
34916-16C			None Detected
34916-17A	Elevator Lobby, Disabled Persons Washroom	2'x4' Ceiling Tiles, Horizontal Fissures	None Detected
34916-17B			None Detected
34916-17C			None Detected
34916-18A	Elevator Lobby, Disabled Persons Washroom- Wall	Ceramic Tile Grout	None Detected
34916-18B			None Detected
34916-18C			None Detected
34916-19A	Elevator Lobby- Women's Washroom	2'x4' Ceiling Tiles, Deep Random Fissures	None Detected
34916-19B			None Detected
34916-19C			None Detected
34916-20A	Elevator Lobby- Women's Washroom, Ceramic Wall Tile Above Ceiling Tile	Yellow Ceramic Tile Adhesive	None Detected
34916-20B			None Detected
34916-20C	Elevator Lobby- Men's Washroom, Ceramic Wall Tile Above Ceiling Tile		None Detected
34916-21A	Elevator Lobby- Women's Washroom, Air Handling Duct Work Above Ceiling Tile	Grey Duct Mastic	None Detected
34916-21B			None Detected
34916-21C			None Detected
34916-22A	Elevator Lobby- Wall Joint Adjacent Fibre Optic Room	Soft Brown Caulking	None Detected
34916-22B	Elevator Lobby- Wall Joint Adjacent		None Detected
34916-22C	Conveyor Room		None Detected
34916-23A	Elevator Lobby- Wall Adjacent Elevator #4	Grey Mortar - Decorative Vertical Brick	None Detected
34916-23B			None Detected
34916-23C			None Detected
34916-24A	Elevator Lobby- Men's Washroom, Above Ceiling Tile, Pipe Penetration on South Wall	Textured Parging (Glossy Appearance)	None Detected
34916-24B			None Detected
34916-24C			None Detected
34916-25A	Elevator Lobby- Men's Washroom, Above Ceiling Tile, Cast Iron Piping	Drain Pipe Joint Caulking (oakum)	75% Amosite
34916-25B			None Detected
34916-25C			None Detected
34916-26A	North-West Computer Room- North End, Raised Floor	1.5'x1.5' White and Beige Vinyl Flooring	None Detected
34916-26B			None Detected
34916-26C	North-West Computer Room - South End, Raised Floor		None Detected
34916-27A	North-West Computer Room - Stands Supporting Raised Floor	Black Tar	None Detected
34916-27B			None Detected
34916-27C			None Detected

Table 1: Summary of Bulk Samples Analyzed for Asbestos Content			
Sample I.D.	Sample Location	Sample Description	Asbestos Content and Type
34916-28A	North-West Computer Room - Concrete Floor Under Raised Floor	Remnant Black Mastic	None Detected
34916-28B			None Detected
34916-28C			None Detected
34916-29A	North-West Computer Room - North End	2'x4' Ceiling Tiles, White with Light Pinhole	None Detected
34916-29B			None Detected
34916-29C	North-West Computer Room - South End		None Detected
34916-30A	Elevator Lobby- Men's Washroom, Above Ceiling Tile, Pipe Penetration on Wall Adjacent Door	Golden Yellow Caulking	None Detected
34916-30B			None Detected
34916-30C	South-West Computer Room - Corridor Around South/West Side of Building		None Detected
34916-31A	South-West Computer Room - Conveyor Room	12"x12" Vinyl Floor Tiles, Beige with Black Streaks and Associated Mastic	VFT- 3% Chrysotile Mastic- None Detected
34916-31B			VFT- 3% Chrysotile Mastic- None Detected
34916-31C	South-West Computer Room – Narrow Corridor Around South/West Perimeter of Building		VFT- 3% Chrysotile Mastic- None Detected
34916-32A	South-West Computer Room - Conveyor Room North End, Pipe Penetrations at Floor Level	Peach Colour Caulking and Cementitious Material	Caulking- None Detected
34916-32B			Cementitious Material- 1% Chrysotile
34916-32C			Caulking- None Detected
34916-33A	South-West Computer Room - Conveyor Room North End, Pipe Penetrations at Floor Level	Off-White Caulking	None Detected
34916-33B			None Detected
34916-33C			None Detected
34916-34A	South-West Computer Room - Electrical Room, Pipe Penetration on West Wall	Soft Grey Caulking	None Detected
34916-34B			None Detected
34916-34C			None Detected

***Bold** items exceed the 0.1% regulated concentration of asbestos in Québec as per Québec R.S.Q., Chapter S2.1, r.4, as amended.

4.1.1. Asbestos-Containing Materials

Based on the analytical bulk sample results listed above, the following building materials contain regulated amounts of asbestos:

- Approximately five-hundred (500) square metres of non-friable floor leveling compound, was confirmed to contain 1% Chrysotile asbestos (DST Sample ID 34916-01B). The material was observed throughout the north, east and south office blocks often concealed under carpeting. The material was not observed under raised flooring of the north/south-west computer rooms,
- Approximately sixty (60) linear metres of non-friable, rigid, brown joint caulking, observed at the joint between windows and the concrete bulkhead was confirmed to contain 1% Chrysotile asbestos (DST Sample ID 34916-09A). The material was observed throughout the north, east and south office blocks. The location of the material was concealed by drywall bulkheads in the south-west and north-west computer and therefore assumed to be present in those areas,
- Less than one (1) square metre of friable, drain pipe joint caulking (oakum), observed on a black, cast iron drain pipe above the dropped ceiling in men's washroom in the elevator lobby was confirmed to contain 75% Amosite asbestos (DST Sample ID 34916-25A),
- Approximately forty-five (45) square metres of non-friable 12"x12" (30cm x 30cm) vinyl floor tiles, beige with black streaks, observed in the south-west computer rooms - conveyor room and narrow corridor around the south and north-west computer rooms were confirmed to contain 3% Chrysotile asbestos (DST Sample IDs 34916-31A-C); and
- Less than one (1) square metre of non-friable cementitious material, intermixed with peach (painted grey) coloured, soft caulking, observed in the south-west computer room-conveyor room- north end, floor level pipe penetrations was confirmed to contain 1% Chrysotile asbestos (DST Sample ID 34916-32B).

4.1.2. Assumed Asbestos Containing Materials

The following materials are assumed to contain asbestos:

- One (1) pipe fitting with grey cement compound (GCC) insulation was observed in the pipe chase adjacent the men's washroom in the elevator lobby. The material was inaccessible for sampling and laboratory analysis but is assumed to contain asbestos based on visual appearance.

4.1.3. Non-Asbestos-Containing Materials

Bulk sampling and subsequent laboratory analysis has determined that the following building materials do not contain regulated amounts of asbestos:

Surfacing Materials

- Drywall joint compound, observed throughout the floor (DST Sample ID 34916-02A-G); and
- Drywall joint compound observed at pipe penetrations in the north office block, above ceiling tiles, on the west wall (DST Sample ID 34916-06A-C).

Mastics, Caulking, Tars and Adhesives:

- Baseboard mastic, observed throughout the floor (DST Sample ID 34916-03A-C),
- Brown and grey duct mastic, observed on air handling units (AHUs) throughout the floor (DST Sample ID 34916-05A-C and 21A-C),
- Black joint caulking, observed in the north office block, joint on concrete bulkhead (DST Sample ID 34916-08A-C),
- Black window caulking, observed on windows throughout the floor (DST Sample ID 34916-10A-C),
- Yellow tile adhesive affixing ceramic tiles in women's and men's washrooms (DST Sample ID 34916-20A-C),
- Soft brown caulking, observed on wall joints on the south side of the elevator lobby (DST Sample ID 34916-22A-C),
- Black tar, observed around the bases supporting the raised floors in the north/south-west computer rooms (DST Sample ID 34916-27A-C),
- Remnant black mastic, observed on concrete floors under raised tile floors in the north/south-west computer rooms (DST Sample ID 34916-28A-C),
- Golden yellow caulking observed at a pipe penetration in the men's washroom, above ceiling tile (DST Sample ID 34916-30A-C),
- Off-white caulking, observed in the south-west computer room- conveyor room north end, floor level pipe penetrations (DST Sample ID 34916-33A-B), and
- Grey soft caulking observed in the south-west computer rooms electrical room, pipe penetration on west wall (DST Sample ID 34916-34A-B).

Ceiling Tiles:

- 2'x4' (60cm x 120cm) ceiling tiles, random fissures, observed throughout the north, east and south office blocks (DST Sample ID 34916-04A-C),
- 2'x4' (60cm x 120cm) ceiling tiles, deep random fissures, observed in women's washroom (DST Sample ID 34916-19A-C),
- 2'x4' (60cm x 120cm) ceiling tiles, horizontal fissures, observed in persons with disabilities washroom (DST Sample ID 34916-17A-C); and

- 2'x4' (60cm x 120cm) ceiling tiles, white with light pinhole, observed in in the north/south-west computer rooms (DST Sample ID 34916-29A-C).

Cementitious Materials, Mortars and Grouts:

- Cementitious firestop/parging observed at pipe penetrations on the exterior concrete bulkhead above ceiling tiles throughout the floor (DST Sample ID 34916-07A-C),
- Brown concrete block mortar observed above ceiling tile in the north office block, east photocopy room (DST Sample ID 34916-13A-C),
- Brown brick mortar, observed throughout the elevator lobby (DST Sample ID 34916-14A-E),
- Ceramic tile grout observed beneath tiles on the elevator lobby floor and disabled person's washroom walls ((DST Sample IDs 34916-15A-C and 18A-C),
- Grey concrete block mortar observed in the elevator lobby- wall hatch adjacent the women's washroom and assumed concealed throughout the elevator lobby (DST Sample ID 34916-16A-C),
- Grey mortar, affixing decorative vertical bricks in the elevator lobby (DST Sample ID 34916-23A-C), and
- Textured parging (glossy coating) observed at a pipe penetration in the men's washroom, above ceiling tile (DST Sample ID 34916-24A-C).

Flooring and Associated Mastics:

- 12"x12" (30cm x 30cm) vinyl Floor Tiles, Off-White and blue patterns and associated mastics, observed in photocopy rooms of the north office block and lunch room of the east office block (DST Sample ID 34916-11A-C and 12A-C), and
- 1.5' x 1.5' white and beige raised tile flooring, observed in the north/south-west computer rooms (DST Sample ID 34916-26A-C).

4.2. Lead

Table 2 below presents the findings of bulk lead (in paint) samples collected from and applicable to the project areas, based on visual observations at the time of the site survey.

Table 2: Summary of Bulk Paint Samples Analyzed for Lead Content Analysis by Inductively Coupled Plasma – Optical Emission Spectrometry (ICP-OES)			
Sample I.D.	Sample Location	Sample Description	Lead Content (ppm or µg/g)
LP-01	South-West Office Block Wall	White Paint	<20
LP-02	Doorway to North-West Office Block	Black Paint	<20

Based on the analytical results outlined in Table 2, the following paints contain concentrations of lead less than the Federal Canada Consumer Product Safety Act's limit of 90 ppm:

- White paint, sampled from wall of the south-west computer room (DST Sample ID LP-01); and
- Black paint observed on doors leading to the north-west computer room (DST Sample ID LP02).

All additional painted surface coatings were in good condition at the time of the site survey. As such, sampling without matrix interference (i.e. removing the paint without the substrate material) would have proved exceedingly difficult. Additional paint applications are suspected to contain detectable concentrations of lead.

Lead is also assumed to be present in the following materials:

- Solder associated with the joints of copper piping,
- Ceramic tile glazing, and
- Emergency light batteries.

4.3. Mercury

Mercury is assumed to be present in the following materials:

- Fluorescent light fixtures containing T-8 fluorescent light tubes were observed in the project area. Fluorescent light tubes contain mercury in a vapour form and in the phosphor coating on the lamp tube.

4.4. Silica

Based on the historic composition of building materials, silica is assumed to be present in:

- Concrete and cement,
- Cementitious parging materials,
- Interior masonry building materials,

- Ceramic tiles, grouts, mortar,
- Drywall building elements,
- Ceiling tiles,
- Floor leveling compounds and mastics,
- Vinyl flooring products.

4.5. Halocarbons

Halocarbons are suspected to be present as a coolant in water fountains observed in the elevator lobby.

4.6. Other Designated Substances and Hazardous Materials

The following Designated Substances and Hazardous Materials were neither observed, nor suspected of being present, in forms or quantities that would impact work operations associated with the project:

- Acrylonitrile,
- Arsenic,
- Benzene,
- Coke Oven Emissions,
- Ethylene Oxide,
- Isocyanates,
- Mould,
- PCBs, and
- Vinyl Chloride.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the site investigation, sampling and analysis, the following Designated Substances and Hazardous Materials are present or are suspected to be present in forms and quantities expected to have an impact on work operations associated with the Project, scheduled to be completed at the 9th Floor of Place du Portage Phase I, in Gatineau, Québec.

- Asbestos-Containing Materials,
- Lead,
- Mercury,
- Silica, and
- Halocarbons.

DST's recommendations for each material, which are based upon both regulatory compliance and best practice guidelines, are included in the following sections below.

5.1. Asbestos

Appropriate asbestos abatement practices should be followed, including the use of proper respiratory protection and ventilation as per the Canada Occupational Health and Safety

Regulations, PSPC Asbestos Management Standard, and in the province of Québec, R.S.Q., Chapter S2.1, r.4, Section 3.23, as amended, if asbestos-containing materials are disturbed. Appropriate work practices, including adequate ventilation and respiratory protection must be utilized during work operations to ensure that allowable asbestos exposure concentrations, as outlined in Québec's Regulation Respecting Occupational Health and Safety (Québec R.S.Q., Chapter S-2.1, r.13) are not exceeded.

The disturbance of asbestos-containing materials on construction and demolition projects in the province of Québec is governed by Québec R.S.Q., Chapter S2.1, r.4, Section 3.23. This regulation classifies all asbestos disturbances as either Low Risk, Moderate Risk, or High Risk, each of which has defined precautionary measures. All asbestos materials are subject to specific handling and disposal precautions, and must be removed prior to demolition or renovation. The Québec Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST) must be notified of any project involving removal of asbestos-containing materials.

Removing or disturbing identified friable ACMs (such as pipe insulation, cast iron joint caulking) with an area less than one (1) square metre must be completed using a minimum Moderate-Risk Work Procedures. The handling or removal friable material containing asbestos greater than one (1) square metre must be completed using High-Risk Work Procedures. It should be noted that the removal of good condition pipe fitting insulation can be completed using Moderate-Risk glovebag procedures, provided the glovebag seal can be maintained throughout the removal process.

Low Risk asbestos work procedures can be used for the removal or disturbance of non-friable ACMs (e.g. caulking, cementitious material, levelling compound, vinyl floor tiles), provided the materials remain in a non-friable condition and are removed with non-powered hand tools and wetting. Should these conditions not be met, then more stringent work procedures (e.g. Moderate or High Risk) are required.

The breaking, cutting, drilling, abrading, grinding, sanding, or vibrating of non-friable asbestos-containing materials if the work is done by means of a power tool that is attached to a dust-collecting device equipped with HEPA filters, must be performed using Moderate Risk asbestos work procedures. The breaking, cutting, drilling, abrading, grinding, sanding, or vibrating of non-friable asbestos-containing materials, if the work is done by means of a power tool that is not attached to a dust-collecting device equipped with HEPA filters, requires High-Risk asbestos work procedures.

The handling and packaging of asbestos waste must comply with the requirements of Québec R.S.Q., Chapter S2.1, r.4, Section 3.23.10 and the Regulation Respecting Occupational Health and Safety (Québec R.S.Q., Chapter S-2.1, r.13). The Federal Transportation of Dangerous Goods Act and Provincial Transportation of Dangerous Substances Regulation controls the transport of the waste to a disposal site.

The following recommendations apply to ACMs and suspected ACMs:

- Appropriate work procedures and precautionary measures must be used, as outlined in *Québec, R.S.Q., Chapter S2.1, r.4, Section 3.23, PSPC Asbestos Management Standard*, and the *Canada Occupational Health and Safety Regulations*, as amended, when performing work that may disturb ACMs or suspected ACMs, including prior to building demolition.
- Disturbance and/or removal of ACMs must be appropriately recorded as part of the building's Asbestos Management Plan.
- Before undertaking any work activity that involves asbestos-containing materials, an Asbestos Exposure Control Plan shall be developed, in accordance with the requirements of the *Canada Occupational Health and Safety Regulations*, which includes classification of asbestos specific work activities, onsite labelling of ACMs, and education/training of applicable federal employees specific to ACMs.
- If ACMs or suspected ACMs become damaged and worker exposure to the material is likely to occur, the damaged material must be repaired or removed following work procedures outlined in *Quebec Regulation R.S.Q., Chapter S2.1, r.4, Section 3.23, as amended, PSPC Asbestos Management Standard, and Canada Labour Code, Occupational Health and Safety Regulations, as amended*.
- Disposal of asbestos waste must comply with the requirements of Québec R.S.Q., Chapter S2.1, r.4, Section 3.23.10 and the Regulation Respecting Occupational Health and Safety (Québec R.S.Q., Chapter S-2.1, r.13). The Federal Transportation of Dangerous Goods Act and Provincial Transportation of Dangerous Substances Regulation controls the transport of the waste to a disposal site.

DST made the attempt to evaluate the project areas to identify hazardous materials present. In spite of these efforts, some ACMs may be concealed and not observed at the time of the survey. As such, should any previously unidentified suspect ACMs be encountered as part of future work, these materials are to be treated as ACMs and handled accordingly, unless sampling proves otherwise. Materials that have not been analyzed, but are visibly similar to other materials identified as asbestos-containing, must be considered asbestos-containing unless proven otherwise by laboratory analysis.

5.2. Lead

In Québec, there is no specific regulation regarding the disturbance of lead on construction projects. However, the CSST has published the document entitled: *Guide de Prévention – L'exposition au plomb*. Similarly, the Occupational Health and Safety (OHS) Branch of the Ontario Ministry of Labour (MoL) has published the document entitled: *Guideline: Lead on Construction Projects*. The Ontario guideline document classifies all disturbances of lead-containing materials as Type 1, Type 2a, Type 2b, Type 3a or Type 3b work, based on presumed airborne concentrations of lead generated during the work. The MoL assigns different levels of respiratory protection and work procedures for each classification. In the

absence of specific legislation for lead on construction projects, these guidelines should be followed when disturbing lead-containing materials. In the event of conflict, the more stringent procedures should be applied.

Paint containing elevated concentrations of lead can pose a health risk to humans if ingested or inhaled. Such lead paints are also a risk to the environment with the potential to contaminate soil and groundwater. Paints with elevated lead content can also pose a health risk to workers while completing work operations.

Although the Hazardous Products Act's *Surface Coating Materials Regulations SOR/2005-109*, as amended, has set a limit of 90 parts per million (ppm) for surface coating materials, there may be a potential for exposure to high levels of lead depending on the activities performed that disturb the lead-containing materials, even at low lead concentrations. Conducting a risk assessment to assess the potential for exposure to lead should be performed to determine the need to follow procedures such as those in the guidelines referenced above.

Appropriate work practices including adequate ventilation and respiratory protection must be utilized during work operations to ensure that allowable lead exposure concentrations, as outlined in Québec's Regulation Respecting Occupational Health and Safety (Québec R.S.Q., Chapter S-2.1, r.13) are not exceeded.

The disposal of construction waste containing lead in Québec is dependent upon the result(s) of leachate test(s). The waste can be classified as "hazardous", "non-hazardous" or "registerable solid waste", depending on the results of the leachate test, in accordance with Regulation Respecting Hazardous Materials (O.C. 1310-97), under the Environmental Quality Act, R.S.Q., c. Q-2-(21).

The Provincial Transport of Dangerous Substances Regulation and Federal Transportation of Dangerous Goods Act controls the transport of the waste to a disposal site.

Prior to or during renovation work, the following procedures should be performed for lead-containing materials that are anticipated to be disturbed:

- Copper piping solder can be cut a small distance (e.g. 50 mm) from the solder joints to avoid direct disturbance of the lead material,
- Ceramic tiles, can be removed using Type 1 work procedures and respiratory protection provided that only non-powered hand tools are used,
- Emergency light batteries and other batteries should be removed when decommissioned and disposed of as lead-containing waste.

5.3. Mercury

In Québec, there is no specific regulation regarding the disturbance of mercury on construction projects. The CSST has published worker respiratory and clothing protective measures based on presumed airborne concentrations of mercury generated during the work, as well as clean-up

procedures for minor and major disturbances of mercury containing products. This information should be followed during the disturbance of materials or products containing mercury.

The disposal of construction waste containing mercury in Québec must be completed in accordance with Regulation Respecting Hazardous Materials (O.C. 1310-97), under the Environmental Quality Act, R.S.Q., c. Q-2-(21).

Appropriate work practices including adequate ventilation and respiratory protection must be utilized during work operations to ensure that allowable mercury exposure levels, as outlined in Québec's Regulation Respecting Occupational Health and Safety (Québec R.S.Q., Chapter S-2.1, r.13) are not exceeded.

5.4. Silica

In Québec, there is no specific regulation regarding the disturbance of silica on construction projects. However, the CSST has published the document entitled: *Guide des bonnes pratiques – Prévention de l'exposition des travailleurs a la silice*. In addition, the OHS Branch of the Ontario MoL have published *Guideline: Silica on Construction Projects*. This document classifies all silica disturbances as Type 1, Type 2 or Type 3 work, and assigns different levels of respiratory protection and work procedures for each classification. In the absence of specific legislation for silica on construction projects, these guidelines should be followed when disturbing silica-containing materials. In the event of conflict, the more stringent procedures should be applied.

As a general rule, it is preferable to use more stringent dust suppression techniques and engineering controls as opposed to relying on respiratory protection to control worker exposure. Respiratory protection should only be relied on as a last resort when dust suppression techniques and engineering controls fail to control worker.

Appropriate work practices including adequate ventilation and respiratory protection must be utilized during work operations to ensure that allowable silica exposure levels, as outlined in Québec's Regulation Respecting Occupational Health and Safety (Québec R.S.Q., Chapter S-2.1, r.13) are not exceeded.

5.5. Halocarbons

The handling, transport and disposal of halocarbons is governed by the following:

- Federal Halocarbon Regulations (FHR), 2003,
- Ozone-depleting Substances and Halocarbon Alternatives Regulations, 2016,
- Environmental Code of Practice for Elimination of Fluorocarbon Emissions from Refrigeration and Air Conditioning Systems, 2015, and
- Provincial Transport of Dangerous Substances Regulation and Federal Transport of Dangerous Goods Act.

When suspected halocarbon-containing equipment is taken out of service, the halocarbons must be captured and reclaimed by a certified service technician using methods and containers that are designed to contain the halocarbon. The service technician must provide written

acknowledgement of the requirements of the FHR. Appropriate records of service technician certification and records of equipment decommissioning must be provided and maintained in accordance with requirements of the FHR.

6.0 CLOSURE

A Limitations of Report section, which forms an integral part of this report, is attached.

We trust that the information contained herein meets your needs. Should you have any questions or comments, please do not hesitate to contact us.

DST CONSULTING ENGINEERS INC.


for
Andrew Cooney, BA, AMRT
Environmental Scientist
acooney@dstgroup.com


Matthew DesRoches, M.Sc.(A), CIH, ROH
Senior Technical Advisor
mdesroches@dstgroup.com

LIMITATIONS OF REPORT

This report is intended for client use only. Any use of this document by a third party, or any reliance on or decisions made based on the findings described in this report, are the sole responsibility of such third parties, and DST Consulting Engineers Inc. accepts no responsibility for damages, suffered by any third party as a result of decisions made or actions conducted based on this report. No other warranties are implied or expressed.

The data, conclusions and recommendations which are presented in this report, and the quality thereof, are based on a scope of work authorized by the client. The sampling program included bulk sampling in select representative areas for laboratory analysis. Note, however, that no scope of work, no matter how exhaustive, can guarantee to identify all contaminants. This report therefore cannot warranty that all building conditions are represented by those identified at specific locations.

Recommendations, when included, are made in good faith and are based on several successful experiences. If either the condition of the building or the health of the occupants changes in the future with respect to potential indoor air quality issues, the case should be reviewed and appropriate measures taken. DST is not in a position to evaluate the health risks associated with exposure to the mould referenced in this report. Since human reactions to mould exposure vary widely amongst individuals, and specific segments of the population are generally recognized to be more susceptible than others, an evaluation of health risks can only be made on an individual basis and even then, only by a licensed medical practitioner equipped with knowledge of the individual's medical history.

Note also that standards, guidelines and practices related to environmental investigations may change with time. Those which were applied at the time of this investigation may be obsolete or unacceptable at a later date.

Any comments given in this report on potential remediation problems and possible methods are intended only for the guidance of the designer. The scope of work may not be sufficient to determine all of the factors that may affect construction, clean-up methods and/or costs. Contractors bidding on this project or undertaking clean-ups should, therefore, make their own interpretation of the factual information presented and draw their own conclusions as to how the conditions may affect their work.

Any results from an analytical laboratory or other subcontractor reported herein have been carried out by others, and DST Consulting Engineers Inc. cannot warranty their accuracy. Similarly, DST cannot warranty the accuracy of information supplied by the client.

APPENDIX A

Select Photographs



Photo 1: 9th floor east office block, typical conditions of the 9th floor office block areas.



Photo 2: 9th floor, north-west computer room area.



Photo 3: Non-friable floor leveling compound, was confirmed to contain 1% Chrysotile asbestos (DST Sample ID 34916-01B). The material was observed throughout the north, east and south office blocks often concealed under carpeting.



Photo 4: Non-friable, rigid, brown joint caulking, observed at the joint between windows and the concrete bulkhead was confirmed to contain 1% Chrysotile asbestos (DST Sample ID 34916-09A). The material was observed throughout the north, east and south office blocks.



Photo 5: Friable, cast iron joint filler (oakum), observed on a black, cast iron drain pipe above the dropped ceiling in men's washroom in the elevator lobby was confirmed to contain 75% Amosite asbestos (DST Sample ID 34916-25A).



Photo 6: Non-friable 12"X12" vinyl floor tiles, beige with black streaks pictured in the observed in the narrow corridor around the south and north-west computer rooms was confirmed to contain 3% Chrysotile asbestos (DST Sample IDs 34916-31A-C).



Photo 7: Non-friable 12"X12" vinyl floor tiles, beige with black streaks observed in the south-west computer room- conveyor room was confirmed to contain 3% Chrysotile asbestos (DST Sample IDs 34916-31A-C).

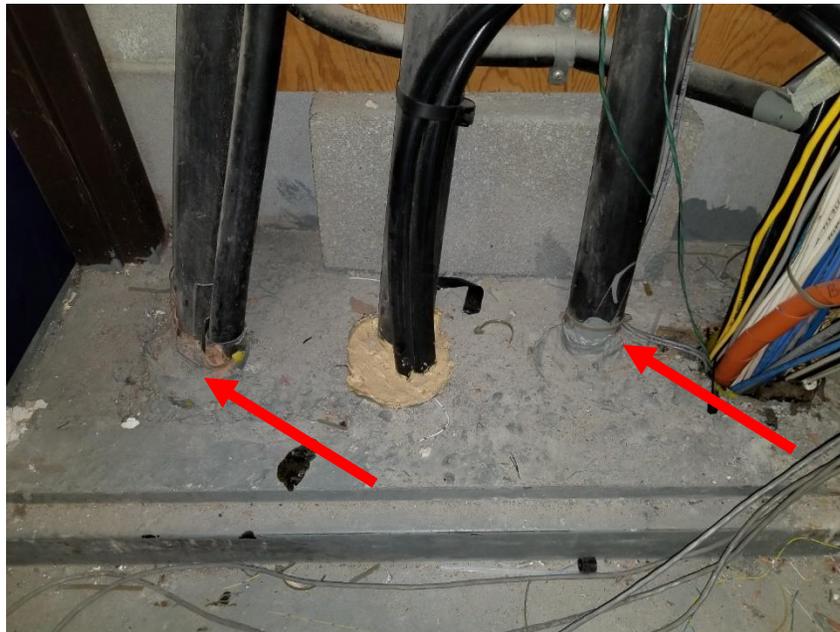


Photo 8: Non-friable cementitious material, intermixed with peach coloured (painted grey), soft caulking, observed in the south-west computer room- conveyor room north end, floor level pipe penetrations was confirmed to contain 1% Chrysotile asbestos (DST Sample ID 34916-32B).



Photo 9: One (1) grey cement compound (GCC) pipe fitting was observed in the pipe chase adjacent the men's washroom in the elevator lobby. The material was inaccessible for bulk sampling, but is assumed to contain asbestos based on appearance.



Photo 10: Halocarbons are assumed to be present as a coolant in water fountains observed in the elevator lobby.

APPENDIX B

Laboratory Certificate of Analysis – Bulk Asbestos and Lead

Certificate of Analysis

DST Consulting Engineers Inc. (Ottawa)

203-2150 Thurston Dr.

Ottawa, ON K1G5T9

Attn: Andrew Cooney

Client PO: PDP 9th Floor

Project: GV OT 034916

Custody:

Report Date: 5-Oct-2018

Order Date: 3-Oct-2018

Order #: 1840406

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Parcel ID	Client ID
-----------	-----------

1840406-01	LP-01
------------	-------

1840406-02	LP-02
------------	-------

Approved By:



Mark Foto, M.Sc.
Lab Supervisor

Any use of these results implies your agreement that our total liability in connection with this work, however arising shall be limited to the amount paid by you for this work, and that our employees or agents shall not under circumstances be liable to you in connection with this work

Certificate of Analysis
Client: **DST Consulting Engineers Inc. (Ottawa)**
Client PO: PDP 9th Floor

Report Date: 05-Oct-2018
Order Date: 3-Oct-2018
Project Description: **GV OT 034916**

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Metals, ICP-OES	based on MOE E3470, ICP-OES	4-Oct-18	4-Oct-18

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

- n/a: not applicable
- ND: Not Detected
- MDL: Method Detection Limit
- Source Result: Data used as source for matrix and duplicate samples
- %REC: Percent recovery.
- RPD: Relative percent difference.

Certificate of Analysis
 Client: DST Consulting Engineers Inc. (Ottawa)
 Client PO: PDP 9th Floor

Report Date: 05-Oct-2018
 Order Date: 3-Oct-2018
 Project Description: GV OT 034916

Sample Results

Lead		Matrix: Paint Sample Date: 26-Sep-18		
Paracel ID	Client ID	Units	MDL	Result
1840406-01	LP-01	ug/g	20	<20
1840406-02	LP-02	ug/g	20	<20

Laboratory Internal QA/QC

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Matrix Blank									
Lead	ND	20	ug/g						
Matrix Duplicate									
Lead	93.9	20	ug/g	93.3			0.6	30	
Matrix Spike									
Lead	260		ug/L	46.7	85.5	70-130			

Your Project #: GV-OT-034916
 Site Location: PDP- 9TH FLOOR
 Your C.O.C. #: na

Attention: Andrew Cooney

DST Consulting Engineers Inc
 Ottawa - Standing Offer
 2150 Thurston Dr
 Unit 203
 Ottawa, ON
 CANADA K1G 5T9

Report Date: 2018/10/18
 Report #: R5446479
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B8R4678
Received: 2018/10/17, 15:18

Sample Matrix: Solid
 # Samples Received: 108

Analyses	Date		Laboratory Method	Reference
	Quantity Extracted	Analyzed		
Asbestos by PLM - 0.1 RDL (1, 2)	108	N/A	2018/10/18 COR3SOP-00002	IRSSST 244

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing. Maxxam is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Maxxam, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Maxxam Analytics' Asbestos Laboratory is accredited by NVLAP for bulk asbestos analysis by polarized light microscopy, NVLAP Code 600163-0.

This report may not be reproduced, except in full, without the written approval of Maxxam Analytics. This report may not be used by the client to claim product endorsement by NVLAP, NIST or any other agency of the U.S. Government.

Maxxam Analytics' scope of accreditation includes EPA-600/M4-82-020: "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" and EPA-600/R-93/116: "Method for the Determination of Asbestos in Bulk Building Materials".

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your Project #: GV-OT-034916
Site Location: PDP- 9TH FLOOR
Your C.O.C. #: na

Attention: Andrew Cooney

DST Consulting Engineers Inc
Ottawa - Standing Offer
2150 Thurston Dr
Unit 203
Ottawa, ON
CANADA K1G 5T9

Report Date: 2018/10/18
Report #: R5446479
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B8R4678

Received: 2018/10/17, 15:18

- (1) This test was performed by Maxxam Analytics Mississauga
- (2) P.O.B. - Percent of Bulk

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Alisha Williamson, Project Manager
Email: AWilliamson@maxxam.ca
Phone# (613) 274-0573
=====

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-01A					
Maxxam ID: IAV541					Analyst: Banu Gurgen-Keough
					Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Non-homogeneous black/yellow mastic	Not Detected		Tar Non-Fibrous

34916-01B					
Maxxam ID: IAV542					Analyst: Banu Gurgen-Keough
					Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	90	Non-homogeneous black/yellow mastic	Not Detected		Tar Non-Fibrous
Layer 2	10	Homogeneous beige cementitious material	Chrysotile 1%		Non-Fibrous

34916-02A					
Maxxam ID: IAV543					Analyst: Banu Gurgen-Keough
					Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous white drywall joint compound	Not Detected		Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSSST 244 by Polarized Light Microscopy

34916-02B			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV544			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous white drywall joint compound	Not Detected		Non-Fibrous

34916-02C			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV545			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous white drywall joint compound	Not Detected		Non-Fibrous

34916-02D			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV546			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous white drywall joint compound	Not Detected		Non-Fibrous

34916-02E			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV547			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous white drywall joint compound	Not Detected		Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSSST 244 by Polarized Light Microscopy

34916-02F			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV548			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous white drywall joint compound	Not Detected		Non-Fibrous

34916-03A			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV549			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous beige mastic	Not Detected		Non-Fibrous

34916-03B			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV550			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous beige mastic	Not Detected		Non-Fibrous

34916-03C			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV551			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous beige mastic	Not Detected		Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-04A						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV552						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous beige ceiling tile	Not Detected	Cellulose	40%	Perlite
				Fibrous Glass	40%	Non-Fibrous

34916-04B						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV553						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous beige ceiling tile	Not Detected	Cellulose	40%	Perlite
				Fibrous Glass	40%	Non-Fibrous

34916-04C						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV554						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous beige ceiling tile	Not Detected	Cellulose	40%	Perlite
				Fibrous Glass	40%	Non-Fibrous

34916-05A						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV555						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous brown mastic	Not Detected			Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-05B			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV556			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous brown mastic	Not Detected		Non-Fibrous

34916-05C			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV557			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous brown mastic	Not Detected		Non-Fibrous

34916-06A			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV558			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous white drywall joint compound	Not Detected		Non-Fibrous

34916-06B			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV559			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous white drywall joint compound	Not Detected		Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-06C			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV560		Date Analyzed: 2018/10/17			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous white drywall joint compound	Not Detected		Non-Fibrous

34916-07A			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV561		Date Analyzed: 2018/10/17			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous grey plaster	Not Detected		Non-Fibrous

34916-07B			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV562		Date Analyzed: 2018/10/17			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous grey plaster	Not Detected		Non-Fibrous

34916-07C			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV563		Date Analyzed: 2018/10/17			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous grey plaster	Not Detected		Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-08A						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV564						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	100	Homogeneous black caulking	Not Detected		Non-Fibrous	

34916-08B						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV565						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	100	Homogeneous black caulking	Not Detected		Non-Fibrous	

34916-08C						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV566						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	100	Homogeneous black caulking	Not Detected		Non-Fibrous	

34916-09A						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV567						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	100	Homogeneous grey/brown caulking	Chrysotile 1%		Non-Fibrous	

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-09B		Analyst: Banu Gurgen-Keough	
Maxxam ID: IAV568		Date Analyzed: 2018/10/17	
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>
Layer 1			N/A
	<u>Other Fibres</u>	<u>Particulate</u>	
Comment: Not analyzed - positive stop			

34916-09C		Analyst: Banu Gurgen-Keough	
Maxxam ID: IAV569		Date Analyzed: 2018/10/17	
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>
Layer 1			N/A
	<u>Other Fibres</u>	<u>Particulate</u>	
Comment: Not analyzed - positive stop			

34916-10A		Analyst: Banu Gurgen-Keough	
Maxxam ID: IAV570		Date Analyzed: 2018/10/17	
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>
Layer 1	100	Homogeneous dark grey caulking	Not Detected
	<u>Other Fibres</u>	<u>Particulate</u>	
			Non-Fibrous

34916-10B		Analyst: Banu Gurgen-Keough	
Maxxam ID: IAV571		Date Analyzed: 2018/10/17	
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>
Layer 1	100	Homogeneous dark grey caulking	Not Detected
	<u>Other Fibres</u>	<u>Particulate</u>	
			Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-10C					Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV572					Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	100	Homogeneous dark grey/brown caulking	Not Detected		Non-Fibrous	

34916-11A					Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV573					Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	99	Homogeneous white vinyl floor tile	Not Detected		Non-Fibrous	
Layer 2	1	Homogeneous yellow mastic	Not Detected		Non-Fibrous	

34916-11B					Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV574					Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	99	Homogeneous white vinyl floor tile	Not Detected		Non-Fibrous	
Layer 2	1	Homogeneous yellow mastic	Not Detected		Non-Fibrous	

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-11C					Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV575					Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	99	Homogeneous white vinyl floor tile	Not Detected			Non-Fibrous
Layer 2	1	Homogeneous yellow mastic	Not Detected			Non-Fibrous

34916-12A					Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV576					Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	99	Homogeneous purple vinyl floor tile	Not Detected			Non-Fibrous
Layer 2	1	Homogeneous yellow mastic	Not Detected			Non-Fibrous

34916-12B					Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV577					Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	99	Homogeneous purple vinyl floor tile	Not Detected			Non-Fibrous
Layer 2	1	Homogeneous yellow mastic	Not Detected			Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-12C						Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV578						Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>		
Layer 1	99	Homogeneous purple vinyl floor tile	Not Detected		Non-Fibrous		
Layer 2	1	Homogeneous yellow mastic	Not Detected		Non-Fibrous		

34916-13A						Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV579						Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>		
Layer 1	100	Homogeneous brown cementitious material	Not Detected		Non-Fibrous		

34916-13B						Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV580						Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>		
Layer 1	100	Homogeneous brown cementitious material	Not Detected		Non-Fibrous		

34916-13C						Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV581						Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>		
Layer 1	100	Homogeneous brown cementitious material	Not Detected		Non-Fibrous		

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-14A			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV582			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous brown cementitious material	Not Detected		Non-Fibrous

34916-14B			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV583			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous brown cementitious material	Not Detected		Non-Fibrous

34916-14C			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV584			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous brown cementitious material	Not Detected		Non-Fibrous

34916-14D			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV585			Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous brown cementitious material	Not Detected		Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-14E					Analyst:	Banu Gurgen-Keough
Maxxam ID:		IAV586			Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	100	Homogeneous brown cementitious material	Not Detected		Non-Fibrous	

34916-15A					Analyst:	Banu Gurgen-Keough
Maxxam ID:		IAV587			Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	80	Homogeneous grey cementitious material	Not Detected		Non-Fibrous	
Layer 2	20	Homogeneous dark grey cementitious material	Not Detected		Non-Fibrous	

34916-15B					Analyst:	Banu Gurgen-Keough
Maxxam ID:		IAV588			Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	80	Homogeneous grey cementitious material	Not Detected		Non-Fibrous	
Layer 2	20	Homogeneous dark grey cementitious material	Not Detected		Non-Fibrous	

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-15C						Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV589						Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>		
Layer 1	80	Homogeneous grey cementitious material	Not Detected		Non-Fibrous		
Layer 2	20	Homogeneous dark grey cementitious material	Not Detected		Non-Fibrous		

34916-16A						Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV590						Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>		
Layer 1	100	Homogeneous grey cementitious material	Not Detected		Non-Fibrous		

34916-16B						Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV591						Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>		
Layer 1	100	Homogeneous grey cementitious material	Not Detected		Non-Fibrous		

34916-16C						Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV592						Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>		
Layer 1	100	Homogeneous grey cementitious material	Not Detected		Non-Fibrous		

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-17A						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV593						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous beige ceiling tile	Not Detected	Cellulose	40%	Perlite
				Fibrous Glass	30%	Non-Fibrous

34916-17B						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV594						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous beige ceiling tile	Not Detected	Cellulose	40%	Perlite
				Fibrous Glass	30%	Non-Fibrous

34916-17C						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV595						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous beige ceiling tile	Not Detected	Cellulose	40%	Perlite
				Fibrous Glass	30%	Non-Fibrous

34916-18A						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV596						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous grey grout	Not Detected			Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-18B		Analyst: Banu Gurgen-Keough	
Maxxam ID: IAV597	Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>
Layer 1	100	Homogeneous grey grout	Not Detected
			<u>Other Fibres</u>
			<u>Particulate</u>
			Non-Fibrous

34916-18C		Analyst: Banu Gurgen-Keough	
Maxxam ID: IAV598	Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>
Layer 1	100	Homogeneous grey grout	Not Detected
			<u>Other Fibres</u>
			<u>Particulate</u>
			Non-Fibrous

34916-19A		Analyst: Banu Gurgen-Keough	
Maxxam ID: IAV599	Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>
Layer 1	100	Homogeneous beige ceiling tile	Not Detected
			<u>Other Fibres</u>
			Cellulose 35%
			Fibrous Glass 35%
			<u>Particulate</u>
			Perlite
			Non-Fibrous

34916-19B		Analyst: Banu Gurgen-Keough	
Maxxam ID: IAV600	Date Analyzed: 2018/10/17		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>
Layer 1	100	Homogeneous beige ceiling tile	Not Detected
			<u>Other Fibres</u>
			Cellulose 35%
			Fibrous Glass 35%
			<u>Particulate</u>
			Perlite
			Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-19C						Analyst:	Banu Gurgen-Keough
Maxxam ID:		IAV601				Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>	
Layer 1	100	Homogeneous beige ceiling tile	Not Detected	Cellulose	35%	Perlite	
				Fibrous Glass	35%	Non-Fibrous	

34916-20A						Analyst:	Banu Gurgen-Keough
Maxxam ID:		IAV602				Date Analyzed:	2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>	
Layer 1	70	Homogeneous grey cementitious material	Not Detected			Non-Fibrous	
Layer 2	30	Homogeneous yellow mastic	Not Detected			Non-Fibrous	

34916-20B						Analyst:	Banu Gurgen-Keough
Maxxam ID:		IAV603				Date Analyzed:	2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>	
Layer 1	70	Homogeneous grey cementitious material	Not Detected			Non-Fibrous	
Layer 2	30	Homogeneous yellow mastic	Not Detected			Non-Fibrous	

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-20C		Analyst: Banu Gurgen-Keough			
Maxxam ID: IAV604		Date Analyzed: 2018/10/18			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous grey cementitious material	Not Detected		Non-Fibrous

34916-21A		Analyst: Banu Gurgen-Keough			
Maxxam ID: IAV605		Date Analyzed: 2018/10/18			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous grey mastic	Not Detected		Non-Fibrous

34916-21B		Analyst: Banu Gurgen-Keough			
Maxxam ID: IAV606		Date Analyzed: 2018/10/18			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous grey mastic	Not Detected		Non-Fibrous

34916-21C		Analyst: Banu Gurgen-Keough			
Maxxam ID: IAV607		Date Analyzed: 2018/10/18			
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous grey mastic	Not Detected		Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSSST 244 by Polarized Light Microscopy

34916-22A						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV608						Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	100	Homogeneous brown caulking	Not Detected		Non-Fibrous	

34916-22B						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV609						Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	100	Homogeneous brown caulking	Not Detected		Non-Fibrous	

34916-22C						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV610						Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	100	Homogeneous brown caulking	Not Detected		Non-Fibrous	

34916-23A						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV611						Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	100	Homogeneous grey cementitious material	Not Detected		Non-Fibrous	

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-23B						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV612						Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	100	Homogeneous grey cementitious material	Not Detected		Non-Fibrous	

34916-23C						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV613						Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	100	Homogeneous grey cementitious material	Not Detected		Non-Fibrous	

34916-24A						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV614						Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	100	Homogeneous grey cementitious material	Not Detected		Non-Fibrous	

34916-24B						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV615						Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	100	Homogeneous grey cementitious material	Not Detected		Non-Fibrous	

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-24C		Analyst: Banu Gurgen-Keough	
Maxxam ID: IAV616	Date Analyzed: 2018/10/18		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>
Layer 1	100	Homogeneous grey cementitious material	Not Detected
			<u>Other Fibres</u>
			Non-Fibrous

34916-25A		Analyst: Banu Gurgen-Keough	
Maxxam ID: IAV617	Date Analyzed: 2018/10/18		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>
Layer 1	100	Homogeneous beige fibrous material	Amosite 75%
			<u>Other Fibres</u>
			Cotton 5%
			<u>Particulate</u>
			Non-Fibrous

34916-25B		Analyst: Banu Gurgen-Keough	
Maxxam ID: IAV618	Date Analyzed: 2018/10/18		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>
Layer 1			N/A
	Comment: Not analyzed - positive stop		

34916-25C		Analyst: Banu Gurgen-Keough	
Maxxam ID: IAV619	Date Analyzed: 2018/10/18		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>
Layer 1			N/A
	Comment: Not analyzed - positive stop		

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSSST 244 by Polarized Light Microscopy

34916-26A						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV620						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous brown countertop	Not Detected	Cellulose	20%	Non-Fibrous

34916-26B						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV621						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous brown countertop	Not Detected	Cellulose	20%	Non-Fibrous

34916-26C						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV622						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous brown countertop	Not Detected	Cellulose	20%	Non-Fibrous

34916-27A						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV623						Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous black caulking	Not Detected			Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-27B			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV624			Date Analyzed: 2018/10/18		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black caulking	Not Detected		Non-Fibrous

34916-27C			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV625			Date Analyzed: 2018/10/18		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black caulking	Not Detected		Non-Fibrous

34916-28A			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV626			Date Analyzed: 2018/10/18		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous yellow/black mastic	Not Detected		Tar Non-Fibrous

34916-28B			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV627			Date Analyzed: 2018/10/18		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous black mastic	Not Detected		Tar Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-28C						Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV628						Date Analyzed:	2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>	
Layer 1	100	Homogeneous black mastic	Not Detected			Tar Non-Fibrous	

34916-29A						Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV629						Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>	
Layer 1	100	Homogeneous grey ceiling tile	Not Detected	Cellulose	40%	Perlite	
				Fibrous Glass	40%	Non-Fibrous	

34916-29B						Analyst:	Banu Gurgen-Keough
Maxxam ID: IAV630						Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>	
Layer 1	100	Homogeneous grey ceiling tile	Not Detected	Cellulose	40%	Perlite	
				Fibrous Glass	40%	Non-Fibrous	

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-29C						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV631						Date Analyzed: 2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous grey ceiling tile	Not Detected	Cellulose	40%	Perlite
				Fibrous Glass	40%	Non-Fibrous

34916-30A						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV632						Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous yellow mastic	Not Detected			Non-Fibrous

34916-30B						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV633						Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous yellow mastic	Not Detected			Non-Fibrous

34916-30C						Analyst: Banu Gurgen-Keough
Maxxam ID: IAV634						Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>		<u>Particulate</u>
Layer 1	100	Homogeneous yellow mastic	Not Detected			Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-31A						Analyst:	Banu Gurgen-Keough
Maxxam ID:		IAV635				Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>		<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	99	Homogeneous beige vinyl floor tile	Chrysotile	3%			Non-Fibrous
Layer 2	1	Homogeneous black mastic	Not Detected				Tar Non-Fibrous

34916-31B						Analyst:	Banu Gurgen-Keough
Maxxam ID:		IAV636				Date Analyzed:	2018/10/17
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>		<u>Other Fibres</u>	<u>Particulate</u>	
Layer 1	99	Homogeneous beige vinyl floor tile	Chrysotile	3%			Non-Fibrous
Layer 2	1	Homogeneous black mastic	Not Detected				Tar Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-31C						Analyst:	Banu Gurgen-Keough	
Maxxam ID:		IAV637				Date Analyzed:		2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>		<u>Other Fibres</u>	<u>Particulate</u>		
Layer 1	99	Homogeneous beige vinyl floor tile	Chrysotile	3%			Non-Fibrous	
Layer 2	1	Homogeneous black mastic	Not Detected				Tar Non-Fibrous	

34916-32A						Analyst:	Banu Gurgen-Keough	
Maxxam ID:		IAV638				Date Analyzed:		2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>		<u>Other Fibres</u>	<u>Particulate</u>		
Layer 1	100	Homogeneous peach caulking	Not Detected				Non-Fibrous	

34916-32B						Analyst:	Banu Gurgen-Keough	
Maxxam ID:		IAV639				Date Analyzed:		2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>		<u>Other Fibres</u>	<u>Particulate</u>		
Layer 1	100	Homogeneous white cementitious material	Chrysotile	1%			Non-Fibrous	

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-32C			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV640			Date Analyzed: 2018/10/18		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous peach caulking	Not Detected		Non-Fibrous

34916-33A			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV641			Date Analyzed: 2018/10/18		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous off-white mastic	Not Detected		Non-Fibrous

34916-33B			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV642			Date Analyzed: 2018/10/18		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous off-white mastic	Not Detected		Non-Fibrous

34916-33C			Analyst: Banu Gurgen-Keough		
Maxxam ID: IAV643			Date Analyzed: 2018/10/18		
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous off-white mastic	Not Detected		Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-34A					Analyst: Banu Gurgen-Keough
Maxxam ID: IAV644					Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous grey caulking	Not Detected		Non-Fibrous

34916-34B					Analyst: Banu Gurgen-Keough
Maxxam ID: IAV645					Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous grey caulking	Not Detected		Non-Fibrous

34916-34C					Analyst: Banu Gurgen-Keough
Maxxam ID: IAV646					Date Analyzed: 2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous grey caulking	Not Detected		Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd

Maxxam Job #: B8R4678
Report Date: 2018/10/18

DST Consulting Engineers Inc
Client Project #: GV-OT-034916
Site Location: PDP- 9TH FLOOR
Sampler Initials: AC

Asbestos Analytical Results

IRSST 244 by Polarized Light Microscopy

34916-01C				Analyst:	Banu Gurgen-Keough
Maxxam ID:		IAV647	Date Analyzed:		2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	90	Homogeneous black/yellow mastic	Not Detected		Tar Non-Fibrous
Layer 2	10	Homogeneous beige cementitious material	N/A		
Comment: Not analyzed - positive stop					

34916-02G				Analyst:	Banu Gurgen-Keough
Maxxam ID:		IAV648	Date Analyzed:		2018/10/18
	<u>P.O.B</u>	<u>Sample Morphology</u>	<u>Asbestos</u>	<u>Other Fibres</u>	<u>Particulate</u>
Layer 1	100	Homogeneous white drywall joint compound	Not Detected		Non-Fibrous

The limit of quantitation is 0.10%, although asbestos may be qualitatively detected at concentrations less than 0.10%. Samples for which asbestos is detected at <0.10% are reported as trace, "<0.10%". "Not Detected" indicates that no asbestos fibres were observed.

Calibrated Visual Estimate (%)
Date Format : yyyy/mm/dd



Maxxam Job #: B8R4678
Report Date: 2018/10/18

DST Consulting Engineers Inc
Client Project #: GV-OT-034916
Site Location: PDP- 9TH FLOOR
Sampler Initials: AC

Analyst Summary

Asbestos by PLM - 0.1 RDL

Banu Gurgen-Keough

TEST SUMMARY

Maxxam ID: IAV541
Sample ID: 34916-01A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV542
Sample ID: 34916-01B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV543
Sample ID: 34916-02A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV544
Sample ID: 34916-02B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV545
Sample ID: 34916-02C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV546
Sample ID: 34916-02D
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV547
Sample ID: 34916-02E
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

TEST SUMMARY

Maxxam ID: IAV548
Sample ID: 34916-02F
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV549
Sample ID: 34916-03A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV550
Sample ID: 34916-03B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV551
Sample ID: 34916-03C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV552
Sample ID: 34916-04A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV553
Sample ID: 34916-04B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV554
Sample ID: 34916-04C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

TEST SUMMARY

Maxxam ID: IAV555
Sample ID: 34916-05A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV556
Sample ID: 34916-05B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV557
Sample ID: 34916-05C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV558
Sample ID: 34916-06A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV559
Sample ID: 34916-06B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV560
Sample ID: 34916-06C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV561
Sample ID: 34916-07A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

TEST SUMMARY

Maxxam ID: IAV562
Sample ID: 34916-07B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV563
Sample ID: 34916-07C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV564
Sample ID: 34916-08A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV565
Sample ID: 34916-08B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV566
Sample ID: 34916-08C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV567
Sample ID: 34916-09A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV568
Sample ID: 34916-09B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

TEST SUMMARY

Maxxam ID: IAV569
Sample ID: 34916-09C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV570
Sample ID: 34916-10A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV571
Sample ID: 34916-10B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV572
Sample ID: 34916-10C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV573
Sample ID: 34916-11A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV574
Sample ID: 34916-11B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV575
Sample ID: 34916-11C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

TEST SUMMARY

Maxxam ID: IAV576
Sample ID: 34916-12A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV577
Sample ID: 34916-12B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV578
Sample ID: 34916-12C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV579
Sample ID: 34916-13A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV580
Sample ID: 34916-13B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV581
Sample ID: 34916-13C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV582
Sample ID: 34916-14A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgun-Keough

TEST SUMMARY

Maxxam ID: IAV583
Sample ID: 34916-14B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV584
Sample ID: 34916-14C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV585
Sample ID: 34916-14D
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV586
Sample ID: 34916-14E
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV587
Sample ID: 34916-15A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV588
Sample ID: 34916-15B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5785476	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV589
Sample ID: 34916-15C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgen-Keough

TEST SUMMARY

Maxxam ID: IAV590
Sample ID: 34916-16A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV591
Sample ID: 34916-16B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV592
Sample ID: 34916-16C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV593
Sample ID: 34916-17A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV594
Sample ID: 34916-17B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV595
Sample ID: 34916-17C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV596
Sample ID: 34916-18A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgen-Keough

TEST SUMMARY

Maxxam ID: IAV597
Sample ID: 34916-18B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV598
Sample ID: 34916-18C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV599
Sample ID: 34916-19A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV600
Sample ID: 34916-19B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV601
Sample ID: 34916-19C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV602
Sample ID: 34916-20A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV603
Sample ID: 34916-20B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

TEST SUMMARY

Maxxam ID: IAV604
Sample ID: 34916-20C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV605
Sample ID: 34916-21A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV606
Sample ID: 34916-21B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV607
Sample ID: 34916-21C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV608
Sample ID: 34916-22A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV609
Sample ID: 34916-22B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV610
Sample ID: 34916-22C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

TEST SUMMARY

Maxxam ID: IAV611
Sample ID: 34916-23A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV612
Sample ID: 34916-23B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV613
Sample ID: 34916-23C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV614
Sample ID: 34916-24A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV615
Sample ID: 34916-24B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV616
Sample ID: 34916-24C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV617
Sample ID: 34916-25A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

TEST SUMMARY

Maxxam ID: IAV618
Sample ID: 34916-25B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV619
Sample ID: 34916-25C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV620
Sample ID: 34916-26A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV621
Sample ID: 34916-26B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV622
Sample ID: 34916-26C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV623
Sample ID: 34916-27A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV624
Sample ID: 34916-27B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

TEST SUMMARY

Maxxam ID: IAV625
Sample ID: 34916-27C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV626
Sample ID: 34916-28A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV627
Sample ID: 34916-28B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV628
Sample ID: 34916-28C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV629
Sample ID: 34916-29A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV630
Sample ID: 34916-29B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV631
Sample ID: 34916-29C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

TEST SUMMARY

Maxxam ID: IAV632
Sample ID: 34916-30A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV633
Sample ID: 34916-30B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV634
Sample ID: 34916-30C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV635
Sample ID: 34916-31A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV636
Sample ID: 34916-31B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788294	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV637
Sample ID: 34916-31C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788299	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV638
Sample ID: 34916-32A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788299	N/A	2018/10/18	Banu Gurgun-Keough

TEST SUMMARY

Maxxam ID: IAV639
Sample ID: 34916-32B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788299	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV640
Sample ID: 34916-32C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788299	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV641
Sample ID: 34916-33A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788299	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV642
Sample ID: 34916-33B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788299	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV643
Sample ID: 34916-33C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788299	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV644
Sample ID: 34916-34A
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788299	N/A	2018/10/18	Banu Gurgun-Keough

Maxxam ID: IAV645
Sample ID: 34916-34B
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788299	N/A	2018/10/18	Banu Gurgun-Keough

TEST SUMMARY

Maxxam ID: IAV646
Sample ID: 34916-34C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788299	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV647
Sample ID: 34916-01C
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788299	N/A	2018/10/18	Banu Gurgen-Keough

Maxxam ID: IAV648
Sample ID: 34916-02G
Matrix: Solid

Collected:
Shipped:
Received: 2018/10/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Asbestos by PLM - 0.1 RDL	MIC	5788299	N/A	2018/10/18	Banu Gurgen-Keough

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Banu Gurgun-Keough, Supervisor

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.