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Table of Contents

1. Introduction

Historically, three industry-led diamond (kimberlite) exploration programs have been conducted on Banks Island, NWT: Monopros (1995-1997; northwest Banks Island, aeromagnetic surveys; Aerodat Inc. 1996, 1997; Wallace and Wood, 1997), Diamonds North Resources Limited (2004-2007; northeast Banks Island, aeromagnetic and stream sediment surveys; Mah, 2005; Kienlen and Vanderspiegel, 2006; Jober and Vanderspiegel, 2008), and Rio Tinto Exploration Canada Incorporated (2010-2011; northeast and southeast Banks Island and northwest Victoria Island, aeromagnetic and stream sediment surveys; Wilson et al. 2012a, b; Fig. 1). These studies by industry succeeded in recovering kimberlite indicator minerals (KIMs), and identifying a number of weak to moderate magnetic anomalies (<5.5 nT). However, they were unable to determine if any of the KIMs and magnetic anomalies related to a kimberlitic source(s) on Banks Island, or whether they represented redeposited KIMs from an extra-Banks Island source(s), and/or were derived from non-kimberlitic magnetic anomalies (note, no anomalies were drill-tested). Coincident with their exploration activities, Diamonds North and Rio Tinto registered numerous Prospecting Permits and Mineral Claims (Fig. 1).

At the time when Industry was active on Banks Island (1995-2008), understanding of the glacial history employed in reconstruction of potential glacial dispersal of KIMs held that during that last glaciation (Late Wisconsinan; ~25-10 ka BP), the continental Laurentide Ice Sheet inundated only the south, east and northern coastal regions, leaving the vast majority of Banks Island unglaciated (Dyke and Prest, 1987). Earlier glaciations were held to be more extensive, and there was a reported complex history of interglacials, transgressions by inland seas and proglacial lakes, and an area of northwestern Banks Island considered never to have been glaciated (Prest et al., 1968; Vincent, 1982, 1983, 1990; Barendregt and Vincent, 1990; Barendregt et al., 1998). Subsequent to industry's exploration activity on Banks Island, research by Dr. John England (University of Alberta) and several of his graduate students (England and Furze, 2008, 2011; England et al., 2009; Lakeman, 2012; Lakeman and England, 2012, 2013, 2014; Vaughan, 2014; Vaughan et al. 2014), and that of Dr. David Evans (Evans et al. 2014), fundamentally revised the glacial history of Banks Island. Collectively, they demonstrated that the entirety of Banks Island had been inundated by Laurentide ice during the Late Wisconsinan glaciation, and that significant differences in geomorphology and sedimentology across northern Banks Island, formerly attributed to past glaciations, often reflected the marked differences and temporal shifts in areas of cold-based vs. warm-based ice cover. The implications of this revised glacial history for devising drift sampling programs and interpretation of past KIM drift exploration results is potentially significant.

All formerly established mineral claims and prospecting permits on Banks Island have now expired, or lapsed. To address identified knowledge gaps and facilitate decisions by the mineral exploration industry to either renew diamond-bearing kimberlite exploration on Banks Island, or determine that this area is unlikely to host such mineral resources, and thus focus exploration activities elsewhere, the Geological Survey of Canada (GSC), as part of the Geo-mapping for Energy and Minerals (GEM-2) Program, conducted a targeted drift, stream sediment, and bedrock sampling program. Kimberlite indicator minerals recovered and analyzed from these surveys, along with geological assessments of various terrains and integration of updated glacial reconstructions, are used to produce new regional geoscience data and increase knowledge on the potential provenance of Banks Island KIMs.

1.1 Study Area

Banks Island is the fourth largest island (70 028 km^2) in the Canadian Arctic Archipelago. It is part of the Inuvialuit Settlement Region, and the hamlet of Sachs Harbour, located on southwest Banks Island, supports a population of 114 people (2019 NWT Bureau of Statistics). The physiography of Banks Island is characterized by dissected highlands in the north and south, between which lie areas of broad rolling lowlands and outwash plains (Fyles, 1962; Vincent, 1982, 1983). It lies within a region of continuous permafrost, and exhibits bioclimatic zones ranging from low to high-Arctic (reflecting a host of microclimates), including barren to lichen-covered polar desert bedrock uplands and relatively lush dwarf shrub, sedge and peat-covered meadows in extensive interior lowland regions (Maxwell, 1981; Ecosystem Classification Group, 2013).

1.2 Bedrock Geology

The bedrock geology of Banks Island has been described by Washburn (1947), Thorsteinsson and Tozer (1959, 1962), Hills (1969), Embry and Klovan (1971, 1974), and exhaustively by Miall (1975, 1976, 1979; Fig. 1). Additional insights come from nine wildcat wells drilled in the early 1970s (cf., Plauchut, 1971; Cassan and Evers, 1973; Jutard and Plauchut, 1973), and from recent structural geology studies (Piepjohn et al., 2018). Harrison et al.'s (2013, 2014) regional geological tectonic assemblage maps and GIS compilations have suggested revision of some former bedrock assemblages and naming conventions. As these have not been formally or conventionally adopted (in all cases), naming conventions employed here follow Miall (1975, 1979) and others, but suggested changes have been noted.

Cherty dolomites and quartzose sandstones of the Proterozoic Glenelg Formation (Nelson Head Formation of Harrison et al., 2013) are the oldest bedrock exposed on Banks Island and outcrop along the southeast coast (Fig. 1). Northeastern Banks Island is comprised of interbedded, cliff-forming Late Devonian pre-Mercy Bay Member (Weatherall Formation of Harrison et al., 2013) sandstone, siltstone and calcareous, siliceous and silty shales and minor coal, and Late Devonian Mercy Bay Member and younger (Parry Islands Formation of Harrison et al., 2013) fluvial and deltaic sandstones with minor siltstone, shale, and coal. The Mercy Bay Member sandstones are predominantly quartzose, containing rare plagioclase feldspar grains and sparse greenish biotite mica, clastic dolomite and clastic limonite. The Late Devonian shales are dark grey and carbonaceous to medium grey, silty, and micaceous with pyrite as a minor constituent. Rare, reddish brown shale is also found in the Devonian strata, as are ironstones (Miall, 1976). A prominent, 61 m thick limestone unit (Mercy Bay Member; Embry and Klovan, 1971) is exposed near the top of the coastal bluffs on northeastern Banks Island (Dm2 – Fig. 1).

More than 80% of the island is underlain by generally weak to poorly consolidated Mesozoic and Cenozoic strata (Fig. 1). Early Cretaceous Isachsen Formation is comprised of grey to yellow, fine to mainly coarse-grained sandstone and pebble-conglomeratic sandstone. This formation also includes thin laminae of coal, clay-ironstone and marcasite concretions (Thorsteinson and Tozer, 1962), and the upper parts of this unit are largely a poorly consolidated cross-bedded, white, quartzose sandstone with rare pebble beds (quartz, chert, silicified carbonate) with boulders up to 34 cm diameter, and wood fragments (Miall, 1979). Early Cretaceous Christopher Formation conformably overlies Isachsen beds, and is predominantly comprised of black to brown to grey shale and inter-bedded light grey, fine-grained sandstone. Red and yellow-weathering calcareous siltstones and mudstones, clay ironstones, marcasite concretions, and diagnostic calcite concretions (glendonites) are also found in the Christopher beds (Thorsteinson and Tozer, 1962; Miall, 1979). The Hassel Formation consists of sandstone with minor amounts of carbonaceous shale and coal; glauconitic sands are present at the base of the formation. The base of Late Cretaceous Kanguk Formation exposes a distinctive dark grey to black, bituminous, sulphurous shale member containing bentonitic clay layers and tuff beds (Miall, 1979). The rest of the Kanguk is comprised of shale with minor silty beds. The shale is in places burnt (bocannes), forming a brick-red shale and cindery material (klinker).

The lower unit of the Eureka Sound Formation (shale member; Eureka Sound-West assemblage, Strand Bay Formation of Harrison et al., 2013) is a Paleocene marine deposit characterized by light grey, fine-grained sandstone, coal, and carbonaceous shale. Above this, the deltaic Eureka Sound Formation (cyclic member; Eureka Sound-West, Iceberg Bay Formation of Harrison et al., 2013) is comprised of interbedded sand (unconsolidated), light grey shale, silty sand, silt, siltstone, sandstone, lignitic coal, soil beds, carbonaceous shale, and clay ironstone (Miall, 1979). The carbonaceous shale contains abundant plant stems and wide fronds, and in places carbonized fossil wood up to 60 cm in diameter. Eureka Sound Formation wood is reported to be diagenetically distinguished from the overlying Beaufort Formation wood by its more carbonized and compressed appearance (Thorsteinsson and Tozer, 1962). Sand beds in the upper cyclic member generally display a mottled "salt and pepper" coloration owing to the abundant dark chert grains (Miall, 1979). Exposures of this upper cyclic member in southern Banks Island are much coarser, and while unconsolidated fine to coarse-grained sand predominates, pebble and cobble conglomerate beds, containing clasts up to 12 cm occur; clast types include silicified carbonate sediments, quartzite, black, brown and grey chert, vein quartz, rare diabase, and rare pink granites (Miall, 1979). Thicknesses of the upper Eureka Sound cyclic member across Banks Island range from 60 – 939 m (Miall, 1979). The Miocene Beaufort Formation (Beaufort assemblage, Ballast Brook and Beaufort formations of Harrison et al. (2013)) unconformably overlies the Eureka Sound Formation, and is characterized by a succession of unconsolidated sand, gravel, clay and peat, with abundant wood (Miall, 1979). The Beaufort Formation type section is found on Prince Patrick Island (Tozer, 1956; Fyles, 1990). On northwestern Banks Island, the Beaufort Formation is assigned a Middle to Late Miocene age (Hills and Fyles, 1973). Across much of central and northern Banks Island, the Beaufort Formation deposits occur only as a thin veneer capping an elevated, dissected plateau (Miall, 1979). Mapping of the Beaufort Formation contact is reported to be readily apparent over much of the western island as it imparts a darker colour and smoother texture on the surface than does the Eureka Sound Formation (Miall, 1979). Gravel in the Beaufort Formation is characterized by an abundance of orange and brown chert, which contrasts that of the Eureka Sound Formation which contains typically grey and black chert (Miall, 1979). The Beaufort Formation is noted to also contain rare granites (Miall, 1979). The Beaufort strata thicken westward, reaching 100 m at Ballast Brook (Hills, 1969) and possibly as much as 260 m in the Storkerson Bay A-15 well and 276 m in the Bar Harbour E-76 well (Fig. 1; Miall, 1979). Miall (1979) has also suggested that because deposits of the Beaufort Formation can be found far inland, much of Banks Island was probably, at one time, covered by these sediments. Their seeming absence from much of central and eastern Banks Island would then be explained as a product of both fluvial and glacial erosion.

1.3 Structural Geology

Miall (1975, 1976, 1979) working from a basis of petroleum well sub-surface lithostratigraphic and gravity anomaly data characterized Banks Island as an "Unstable Craton Margin" and described a series of small, broad pericratonic basins, platforms and structural highs. Several periods of minor epirogenic uplift and rifting from Jurassic to Tertiary, produced horst and graben topography, including features such as the Cape Crozier Anticline, Northern and Central Banks basins and the Storkerson Uplift (Fig. 1; Miall, 1979; Jefferson et al., 1988). Little in the way of faulting is identified on the Banks Island geology maps reflecting their pre-dating of much of the seismic exploration activity on Banks, or at least access to these data. Recently, Piepjohn et al., (2018) have demonstrated an extensive array of normal faulting across northern Banks Island, and small-scale, local and isolated deformed zones within otherwise generally undeformed Cretaceous and Paleogene strata. They relate much of the faulting to extension during opening of the Canada Basin (Hadlari et al., 2016), and Eocene Eurekan deformation and possible strike-slip motion along the North American Arctic continental margin.

1.4 Quaternary Glacial History and Surficial Geology

There is a long history of observations and reconstructions of the Quaternary glacial history on Banks Island. Much has centered on the extent and timing of continental glaciations, and has for most of its record argued for both restricted Late Wisconsinan ice cover, multiple pre-Wisconsinan glaciations, transgressions by inland seas and proglacial lakes, and the existence of unglaciated terrain. The implications of this complex array of depositional and erosional environments is that the drift records of Banks Island are assumed to be complex and difficult to reconstruct.

The original Glacial Map of Canada (Wilson et al., 1958) summarized the earliest observations of Hobbs (1945), Washburn (1947), Porsild (1950), Jenness (1952) and Manning (1956) and indicated that during the last glaciation (Late Wisconsinan), glaciers inundated the eastern and southern margins of Banks Island, leaving the west and north unglaciated. The revised 2nd edition of the Glacial Map of Canada (Prest et al., 1968) updated the glacial history based on research by Craig and Fyles (1960, 1965) and Fyles (1962, 1965), and indicated that the southwest, south and east coastal regions had been glaciated during the Late Wisconsinan, as was the northern coastal regions bounding M'Clure Strait. The rest of Banks Island was indicated to have been glaciated during pre-Wisconsinan time, although no actual ice limits or margin retreat positions were affixed to this earlier glaciation.

Vincent was the first to focus aerial photograph interpretation and helicopter-based fieldwork traverses (conducted in 1974 and 1975) on a broad-based study of the glacial history throughout much of Banks Island (Vincent, 1978 a-d, 1980 a, b, 1982, 1983, 1984, 1989; Vincent and Edlund, 1978). Magnetostratigraphy and amino acid racemization dating of pre-Wisconsinan interglacial and glacial deposits, first identified by Fyles (Craig and Fyles, 1965) and Kuc (1974), was also undertaken and progressively expanded by Morris and Vincent (1979), Vincent (1982, 1983, 1990, 1992), Vincent et al. (1983, 1984), Barendregt and Vincent (1990), and Barendregt et al. (1998). Glacial reconstructions based on this research suggested a conformable succession of three distinct glaciations (Banks, Thomsen, and Amundsen; Fig. 2; Vincent, 1982, 1983), dating from >780 000 to ~20 000 years ago; these were separated by two interglacials (Cape Collinson and Morgan Bluffs), and preceded by possibly a third interglacial or the pre-glacial Worth Point Formation. The oldest glaciation (Banks) was considered to have been the most extensive, inundating all of Banks Island save for an area in the northwest that apparently contained no till or glacial erratics and was thus considered to have always remained unglaciated (Fig. 2). Successive glaciations to the Banks Glaciation were progressively less extensive. The Amundsen Glaciation included both an Early Wisconsinan continental ice advance (M'Clure Stade – Bar Harbour, Mercy, Jesse, Carpenter and Sachs tills), and a very restricted Late

Wisconsinan continental ice advance (Russell Stade – Viscount Melville lobe; Fig. 2). This configuration of restricted ice margins was used to argue that much of Banks Island formed a refugium during the last glacial maximum (Vincent, 1982, 1983; Harrington, 2005; MacPhee, 2007).

Based on interpretations of stratigraphy exposed in coastal bluffs, geomorphology, and amino-acid racemization dating of surface shell collections, Vincent (1982, 1983) also proposed a series of ice-marginal/ice-dammed lakes and postglacial marine transgressions and regressions that were associated with the various glaciations and till sheets. In some cases, these water bodies represented small to large topographic impoundments, whereas others, such as the post-Thomsen glacial Big Sea, transgressed almost half the island from 60 and up to 215 m above sea level. Thus, in light of the more restricted Amundsen Glaciation extents (Early and Late Wisconsinan), much of the surficial geology west of the Jesse Till (Fig. 2) would potentially constitute raised marine sediments overlying till, or washed till. In the M'Clure stade (Early Wisconsinan) of the Amundsen Glaciation, Lake Ivitaruk is suggested to have formed throughout the Thomsen River valley, impounded between the Prince of Wales lobe to the southeast, and the Prince Albert lobe to the north. Post-M'Clure stade marine transgressions included the East Coast Sea (~120 m) formed along the east and southeast Banks Island coastal periphery, the Investigator Sea (~30 m) along the northern coast, and the Meek Point Sea (~20 m) along the western coast.

The glacial reconstructions of Vincent (1982, 1983) were largely accepted, with one chief modification by Dyke (1987) and Dyke and Prest (1987) that placed the Late Wisconsinan ice limit (18 ^{14}C ka BP) in configuration with the Jesse Till (Fig. 3). This revised configuration was made in consideration of glacial reconstructions and minimum glaciation levels on adjacent islands, and the isostatic correction of gradients on what Vincent (1982, 1983) had considered to be glacial moraines that were subsequently reinterpreted as ice shelf moraines (Hodgson and Vincent, 1984; Hodgson, 1994). That the majority of Banks Island remained ice free during the Late Wisconsinan, however, remained entrenched in the glacial history and modeling literature.

Recent detailed and methodical aerial photograph and field-based mapping, exploration, chrono- and litho-stratigraphic, and facies investigations on Banks, Melville, and Eglinton islands has fundamentally revised the glacial history of Banks Island, rejecting or reinterpreting the majority of Fyles (1962), Vincent (1982, 1983), Barendregt and Vincent (1990), Barendregt et al. (1998) and others' conclusions. The implications of this collective new research for interpretation of drift stratigraphy on Banks Island are significant, and are herein summarized. This discussion is not meant to be an exhaustive treatment of the material, for which readers are instead referred to England and Furze (2008, 2011), England et al. (2009), Lakeman (2012), Lakeman and England (2012, 2013, 2014), Nixon (2012), Evans et al. (2014), Nixon and England (2014), Vaughan (2014), and Vaughan et al. (2014).

It is now recognized that the continental Laurentide Ice Sheet inundated all of Banks Island during the Late Wisconsinan glaciation. Absolute limits of ice are unknown, but based on stratigraphy and minimum age constraints provided by radiocarbon dates on ice-transported and *in situ* shells, the margins are demonstrated (England et al. 2009; Lakeman and England, 2013) to have lain west of the outer-most islands along Banks Island's west coast, presumably terminating somewhere along the continental shelf (Fig. 3). Numerous maximum and minimum-limiting radiocarbon ages of ~31 ^{14}C ka BP and ~13.75 cal ka BP, respectively, collected from areas previously mapped as Bernard Till (Fig. 2), and from ice-contact deltas emanating from ice descending off of Banks Island into deglacial higher sea levels, indicate that the uppermost till, found across Banks Island correlates to a Late Wisconsinan advance and retreat (England and Furze, 2008; England et al., 2009; Lakeman and

England, 2012, 2013). This is perhaps the most stark revision of Vincent's (1982, 1983) work, as it simultaneously erases the notion of limited Late Wisconsinan ice cover, and rejects the chronostratigraphic linkage between interpretations of bluff exposures along the west (Worth Point), southwest (Duck Hawk Bluffs) and east (Morgan Bluffs) Banks Island coasts, and the proposed co-eval Banks Glaciation Bernard Till that was considered to have mantled most of the central and western regions of the island (Fig. 2; Vincent, 1982, 1983, 1990; Vincent et al. 1983, 1984; Barendregt et al., 1998).

Lakeman's (2012) and Lakeman and England's (2014) detailed lithofacies and stratigraphic reconstruction of the Morgan Bluffs succession demonstrates how previous reconstructions have erred in their dependence on single exposures, their correlation by deposit type without consideration of lithofacies and facies assemblages, and their inability to recognize the significance of glaciotectonism (cf., Evans et al. 2014; Vaughan et al. 2014). By fully considering lateral in addition to vertical successions, Lakeman (2012) and Lakeman and England (2014) were able to reject many of the previously labeled tills as debris flow, turbidites and glaciomarine deposits, which had previously been interpreted as a succession of discrete thin tills and interglacials correlated with the Thomsen Glaciation (Vincent, 1982, 1983). Similar reinterpretations have been made from detailed lithofacies and stratigraphic analysis of the Duck Hawk Bluffs and Worth Point sections (Evans et al., 2014; Vaughan et al., 2014). What remains consistent is the identification of a lowermost, magnetically reversed till, constrained as >780 ka, and underlain by proposed Jaramillo Subchron normal sediments (Barendregt et al., 1998), hence dating between 0.99-0.78 Ma. Subsequent to this, overlying sediments are largely ascribed to fluvial/marine deposits, changes in which may reflect different climatic and tectonic drivers, and not as evidence of glaciation (Lakeman, 2012; Lakeman and England, 2014).

On the issue of past marine transgressions and glacial lakes postulated by Vincent (1982, 1983), Lakeman and England (2013, p.102) report that "Despite exhaustive field surveys throughout northern and eastern Banks Island, England et al. (2009) and Lakeman and England (2012) did not observe any of the raised marine deposits and shorelines reported." Similarly, no sedimentary evidence of Lake Ivitaruk, extending >300 km along the Thomsen River valley was found (Lakeman and England, 2013), although they did note multiple glaciolacustrine deposits of rhythmically-bedded silt conforming to separate, small ice-dammed lakes in the Thomsen River valley (Fig. 3). Lakeman and England (2012, 2014) also describe small ice-dammed lakes that formed within what they now termed the "Jesse moraine belt" (Jesse Till of Vincent, 1982, 1983; Fig. 2) impounded between ice lobes, or against the slope and the retreating Prince of Wales Strait ice lobe (Fig. 3). Marine limits recorded by Lakeman and England (2013) in Mercy and Castel bays of 41 and 37 m, respectively (dated to ~13.75 cal ka BP), identify a significant amount of glacioisostatic unloading of the Late Wisconsinan northwestern Laurentide Ice Sheet, thusly accommodating the geomorphic observations supporting a thicker and pervasive ice cover on Banks Island. Marine limits on the west Banks Island coast range from ~13-40 m, while on the east coast, they range from 27 m in southeastern Jesse Bay, up to 60 m at the northeastern Parker Point (Lakeman and England, 2013). All of these elevations represent minimums of past glacioisostatic depression since the entire coastline of Banks Island is currently being transgressed, reflecting its position beyond the zero isobase (cf., Andrews and Peltier, 1989; Lajeunesse and Hanson, 2008; Nixon, 2012, Grasby et al., 2013). Extensive sandurs and glaciofluvial outwash in major west-draining valleys (e.g., Bernard, Storkerson, and Big rivers) extend from the Jesse moraine belt dated at ~12.75 cal ka BP (Lakeman and England, 2012) to a base level similar to the modern sea level on the west coast of Banks Island. This suggests that the modern west coast shoreline actually equates to the ~13 cal ka BP shoreline. These broad and extensive sandurs are today occupied by small misfit streams, indicating their dynamic link to the retreating Late Wisconsinan

Laurentide Ice Sheet and abandonment once ice had retreated off of the east coast of Banks Island (post-Jesse moraine belt).

Under the revised glacial reconstruction, following a pervasive Late Wisconsinan ice cover, cold-based ice (cf. Dyke, 1993) retreated eastward during what is now termed the Beaufort Phase, as a series of digitate lobes oriented within major valleys (Fig. 3; Lakeman and England, 2012, 2013). Lateral meltwater channels record the topographically conformable retreat of this ice, indicating that ice cover was thin. Cold-based ice conditions are implied by the virtual absence of moraines, other than rare ice thrusted frozen sediments along former margins, and by the minor scattering of erratics and the very thin, discontinuous and largely absent till veneer (Lakeman and England, 2013). On central and western areas of Banks Island (equating to Vincent's (1982, 1983) Bernard Till), clasts and rare boulders of mafic erratics derived from western Victoria Island occur sparsely; sandstone and granite (Canadian Shield origin) erratics are also found ubiquitously, albeit rarely (England et al., 2009; Lakeman and England, 2012, 2013, 2014; Smith and Farineau, 2015). Upland surfaces are characterized by *in situ* weathered bedrock and colluviated material, and even where sediment exists that is interpreted as till, it largely consists of reworked local poorly-consolidated bedrock material (Lakeman and England, 2012, 2013). Large and extensive glaciofluvial valley trains began forming as the ice retreated eastward, depositing and remobilizing largely local bedrock and sedimentary material.

By ~14 cal ka BP, ice had retreated to the island's central interior, forming a prominent curvilinear margin (Fig. 3), distinct from the previous lobate flow pattern; this ice is considered to have remained cold-based (Lakeman and England, 2013). Lateral meltwater channels draining northward along this curvilinear ice front and down the Thomsen River valley into Castel and Mercy bays contacted marine limit deltas the age of which are constrained by mollusc shell dates of ~13.75 cal ka BP (England and Furze, 2008; England et al. 2009, Lakeman and England, 2012, 2013). This northward phase of ice flow down the Thomsen River valley converged with thick (>600 m) westward flowing ice in M'Clure Strait and is labeled the Thomsen Phase (Fig. 3; Lakeman and England, 2013). Subsequent ice retreat occurred southwards and east towards Prince of Wales Strait. The Jesse moraine belt (Fig. 3), marks a prominent stillstand or readvance of the Laurentide Ice Sheet on eastern Banks Island (Prince of Wales Phase) forming an ice lobe that occupied Prince of Wales Strait and terminated in M'Clure Strait as a tidewater trunk glacier (Lakeman and England, 2012, 2013). Abundant mollusc shell dates constrain the age of deposition of the Jesse moraine belt as occurring between ~13.75 – 12.75 cal ka BP (Lakeman and England, 2012). Morphometry of the Jesse moraine belt is distinctly different from any other deposits on Banks Island, and signals the change from cold-based ice to polythermal conditions (Lakeman and England, 2012). Abundant ice-cored controlled moraines (cf., Evans, 2009), sharp-crested ice thrust moraines, and nested end moraines are found within the Jesse moraine belt, as is foliated, clast-rich buried ice (presumed to be buried glacial ice; French, 1974; Lakeman and England, 2012, 2013; Smith and Farineau, 2015; Rudy et al. 2017). Till thicknesses of 0.5 to 2 m within the Jesse moraine belt are also dramatically different from the general absence or scant veneer of till elsewhere across the island. These deposits are associated with a deglacial landsystem (cf., Dyke and Evans, 2003; Evans, 2009) that reflects the strong advection of material from areas of warm-based flow to peripheral cold-based margins (i.e., polythermal glaciers) where it is variously deposited in proglacial debris aprons or becomes adfrozen to the glacier base and is thrust and stacked as a series of controlled moraines.

2. Methods

2.1 Sample Collection

Samples for KIMs and other heavy minerals were collected on Banks Island over two summer field seasons (Smith, 2015; Smith et al., 2016). In 2015, a basecamp was established at Johnson Point (72°46.3'N; 118°29.3'W) and a helicopter was used to access sites along eastern coastal and central interior regions (Fig. 4). In 2016, working with a helicopter based at Sachs Harbour, samples were collected at Duck Hawk Bluffs (SW Banks Island; 71°58.7'N; 125°29.9'W) and in the Nelson Head area (SE Banks Island; 71°14.5'N; 123°05.6'W) before moving north to a basecamp at Polar Bear Cabin (74°08.3'N; 119°59.7'W) within Aulavik National Park, where collections from central interior and northern Banks Island were made (Fig. 4). In both summers, to varying degrees, helicopter mechanical and weather issues significantly limited the number and geographic distribution of samples that could be collected.

The selection of sample sites was informed by previous industry collections, and was designed to both test and expand these surveys, particularly as they related to comprehending potential glacial dispersal histories under the new model of Late Wisconsinan glaciation (cf., England et al., 2009; Lakeman and England, 2012). Sample collection sites included areas within Aulavik National Park (established 1992), a region industry would have been excluded from operating. Samples were also collected from pre-Late Wisconsinan till and glaciofluvial deposits identified in Duck Hawk Bluffs (Evans et al., 2014) and Morgan Bluffs (Lakeman and England, 2014) in order to assess potential earlier glacial KIM dispersal that may subsequently have been reworked by Late Wisconsinan ice flow. The Jesse moraine belt was revealed to be extensively underlain by buried glacial ice (French, 1974; Lakeman and England, 2012, Smith and Farineau, 2015), within which retrogressive thaw slumps are now exponentially being triggered and expanding, contributing significant sediment loads to streams and rivers (Rudy et al., 2017; Lewkowicz and Way, 2019). Several samples specifically targeted material from these slumps in order to test potential differences in KIM contents between what was considered more englacial till/debris capping thick buried glacial ice (>25 m; Smith and Farineau, 2015), from other areas considered more likely to be basal till.

Samples of unconsolidated Lower Cretaceous fluvial and alluvial fan Isachsen Formation strata, comprised dominantly of quartz arenite and lithic arenite (also limestone, shale, and chert) derived from local and farther-travelled Proterozoic Glenelg and Shaler Group (which is of first order or multi-cycle derivation from the Canadian Shield; Miall, 1979) were also collected to determine if they might host KIMs. Finally, unconsolidated fluvial Beaufort Formation sediments, which comprise the uppermost bedrock unit on Banks Island were sampled for KIMs. Previously, the extent of Beaufort Formation strata on Banks Island was delimitated to western and central areas (Fig. 5; Miall, 1975; Vincent, 1983, 1990). During the course of fieldwork in 2015, deposits of conspicuously orange-coloured gravel containing deeply weathered rounded quartzites and abundant black and grey chert (with minor red and green chert) were identified capping upland terraces at numerous sites in northeastern Banks Island (Fig. 5). These neither correlate with Vincent's (1983) glaciofluvial or ice-contact deposits, nor Vincent's (1990) Beaufort Formation deposits. Visually, these deposits strongly suggest great antiquity and a non-glacial origin (e.g., clast sizes, absence of striae, lithological compliment, degree of pebble rounding and oxidation/weathering), as does a clear geomorphic pattern of isolated plateau remnants and former peneplains and associated incised fluvial terraces that can be traced 10s of kilometres across the landscape (Fig. 5). For these reasons, they are herein interpreted as Beaufort Formation deposits, *sensu lato*. Given the location of these sites within catchments where industry surveys had previously recovered KIMs, and the fact that the Beaufort Formation is reported to contain rare granites (Miall, 1979; hence, a potential Canadian Shield origin), focus was paid to collecting samples of these and other mapped Beaufort Formation sediments throughout the field area over both summer field seasons in order to test for the potential of bedrock inheritance of KIMs.

Several strategies were employed in sample collection, and these followed established GSC protocols (Spirito et al., 2011; McClenaghan et al., 2013, in press). Bulk samples (n=18) were typically collected from unconsolidated Beaufort Formation and Isachsen Formation sediments, tills and glaciofluvial deposits (Appendix 1A). At surface collection sites, holes were dug ~50-70 cm deep (accordant with depth of the active layer at time of sampling), and then a 19 litre (5 gallon) plastic pail was filled with the basal sediments (15-30 kg), discarding cobbles (>64 mm), while retaining the pebble fraction (2-64 mm) for later lithic, provenance, and shape analysis. At exposed section locations (e.g., Duck Hawk Bluffs), vertical faces were cleaned with a shovel until all slumped material had been removed, and then the sample was collected.

Sieved samples (<2.38 mm (#8 mesh); n=30) were collected from stream sediments, Beaufort Formation deposits and one till sample (Appendix 1A). Samples were predominantly wet-sieved directly into plastic 19 litre pails while standing in the stream environment and followed NGR stream sediment sampling protocols (McCurdy et al., 2012). Stream sediment samples were collected at sites where stream flow would naturally trap heavy minerals, such as at the head of mid-channel bars, and behind boulder traps (cf., Prior et al., 2009; Smith, 2015). In cases of dry, ephemeral stream beds, and in coarser clastic, sand-poor sediments, material was dry-sieved to produce a sand concentrate.
A total of 48 samples (including 2 duplicates; 15SUV019, 15SUV055) were collected on Banks Island as part of the GSC's KIM investigations: 30 stream sediment samples, 7 Beaufort Formation deposits, 5 till samples, 4 glaciofluvial sediment samples, and 2 bedrock samples (unconsolidated Isachsen Formation sandstone; Appendix 1A, 1B).

2.2 KIM Sample Processing and Quality Control

Field samples for KIM and other heavy mineral analysis were shipped to Overburden Drilling Management Limited (ODM; Ottawa, ON) for processing using established GSC protocols (Fig. 6; McClenaghan et al., 2013, in press; Plouffe et al., 2013). Received samples were disaggregated and sieved at 2 mm. The <2 mm fraction was then passed across a shaker table to pre-concentrate the heavy fraction, which was then micropanned to recover fine-grained gold, sulphide and other indicator minerals. These micropanned grains were recorded and described and then returned to the preconcentrates which were then sieved at 0.25 mm. The 0.25 to 2.0 mm concentrate was then refined using a heavy liquid separation (3.2 specific gravity (SG)). Concentrates were then ferromagnetically separated. The non-ferromagnetic heavy mineral fractions were sieved into <0.25 (archived), 0.25-0.5, 0.5-1.0 and 1.0-2.0 mm size fractions. The 0.25-0.5 mm >3.2 SG fraction was subjected to paramagnetic separations, producing <0.6 amp (strongly paramagnetic), 0.6-0.8 (moderately paramagnetic), 0.8-1.0 amp (weakly paramagnetic) and >1.0 amp (non-paramagnetic) fractions to assist counting and picking of indicator minerals in this fine fraction. The 0.25-0.5 mm fraction was also cleaned with oxalic acid to remove oxidation stains as a further aid to mineral identification and picking. Six samples from Beaufort Formation deposits were processed in a similar manner for KIM recovery in the 0.18-0.25 mm heavy mineral fraction; this required separate sieving, paramagnetic separation and oxalic acid cleaning. In support of broader reconnaissance geological sampling objectives and to further constrain mineral dispersal studies, ODM's metamorphosed or magmatic massive sulphide indicator minerals (MMSIM®; Averill, 2001) and other heavy minerals were also picked. Visual identification of a limited number of KIMs and MMSIM grains were verified by ODM using an EDS-equipped SEM.

GSC quality-control checks on sample processing included the insertion of two KIM-spiked blanks in each of the sample year batches (Appendix 1A, 1B, 2; 15SUV017, 15SUV029, 16SUV021, 16SUV029). In order to mimic the range of sample sediment types being submitted to ODM for processing, the blanks included bulk samples of both the GSC's Linton till and Bathurst weathered granite (grus; mimicking a fluvial sediment), each of which is known to contain no KIMs (Plouffe et al., 2013). Based on results from previous industry sampling programs, it was presumed that KIM concentrations in the GSC Banks Island samples were likely to be low or zero. In addition to using the blanks as a means of monitoring carry-over of grains between samples, the four GSC blanks were spiked with known numbers and sizes of different KIMs previously picked by ODM from Buffalo Head Hills (Alberta) till and glaciofluvial samples (Smith and Paulen, 2016) as a means of testing KIM recovery. Preference was given to those grains confirmed by ODM using SEM, in which case, these grains were washed with acetone and then inspected to ensure that any adhering SEM stub glue was removed. Only euhedral chromites were selected, and the forsterite grains came from a particularly olivine-rich sample, estimated by ODM to contain >60 000 grains. All spike KIM grains were photographed before they were inserted into the blanks in order to facilitate their later confirmation after sample processing and KIM picking. Two duplicate field sample were also collected in 2015 and submitted as a blind duplicate pairs – samples 15SUV018 and 15SUV019 were collected at the base of individual dug pits from the same upland gravel deposit, approximately 10 m apart, and sample 15SUV031 and 15SUV055 were collected from the same dug pit.

2.3 Mineral chemistry

Selected KIM and other heavy indicator minerals were mounted, polished and then analyzed to determine major and minor elements by electron probe microanalysis (EPMA) at the University of Alberta's Arctic Resources Geochemistry Laboratory. EPMA data were acquired for 10 elements (Ti, Na, K, Si, Fe, Cr, Mg, Ca, Al, Mn, O) with a JEOL JXA-8900R electron microprobe, fitted with 5 wavelength-dispersive spectrometers. Wavelength dispersive spectroscopy (WDS) was employed at a 40° takeoff angle, operating at a 20 kV accelerating voltage, a 20 nA probe current, a 2 µm beam diameter, and count times on peaks and backgrounds ranged from 20 to 60 s. A variety of natural minerals (silicate and oxide) were used for standardization. Data reduction used Probe for EPMA software (Donovan et al., 2015), while the X-ray intensity data were reduced based on the φ (ρZ) method of Armstrong (1995). EPMA geochemistry was used to test the identity of visually-picked (and in some cases SEM-based EDS) KIMs, and when required, eliminate or reclassify individual grains.

Trace and rare earth element (REE) concentrations in garnet, olivine, clinopyroxene, spinel, Mg-ilmenite and rutile grains were determined by laser ablation inductively coupled mass spectrometry (LA-ICP-MS) using a Resonetics Resolution LR50 193 nm laser coupled to a ThermoScientific Element 2XR ICP-MS. The mass spectrometer was operated in low mass resolution mode ($M/\Delta M$=ca. 300) with a power setting of ~1300 W and a torch depth of ~3.6 mm. Spot size ablation craters of 60-130 µm were used depending on the mineral grain type, and data was acquired using the rapid peak-hopping multichannel mode of the ICP-MS (cf., Poitras et al., 2018). Data was reduced offline using Iolite v3.32 software (Woodhead et al., 2007; Paton et al., 2011). Concentrations were calibrated with reference to the NIST SRM 612 glass standard and internal secondary standards (cf., Liu et al., 2018; Poitras et al., 2018). Garnet trace element concentrations are normalized to ^{43}Ca; olivine trace element concentrations are normalized to ^{29}Si.

Magnesian-ilmenite Hf isotope compositions have been used to infer kimberlite emplacement ages with varying levels of accuracy and precision (cf., Nowell et al., 2003; Poitras et al., 2018). As kimberlites on Victoria Island, Parry Peninsula and elsewhere in the western Canadian Arctic have a disparate range of ages, Hf isotope compositional analysis was undertaken on Banks Island samples as a further means of discriminating potential KIM sources. Preparation of Mg-ilmenite grains follows that outlined by Poitras et al. 2018 (their *Supplemental Material 2*). Individual grains were dug out of chemical analytical mounts, inspected, and then rigorously cleaned before being dissolved in a mixture of 1:3 concentrated HNO_3:HF, evaporated to dryness, and then re-dissolved in concentrated HCl. Dissolved Mg-ilmenite solutions were then evolved chromatographically, and purified solutions were analyzed for Hf isotopic signatures by multi-collector (MC-)ICP-MS according to the instrument analytical protocols of Nowell et al. (2003).

3. Results

3.1 KIM Sample Processing Quality Assurance – Quality Control

Results of KIM recovery in spiked blanks and duplicate samples 15SUV018 and 15SUV019, and 15SUV031 and 15SUV055 are provided in Appendix 2. In 2015, 19 and 16 known KIMs that were 1-2 mm or 0.5-1.0 mm in size were inserted into blank samples 15SUV017 and 15SUV029, respectively, and submitted blindly to ODM for processing. Recovery of the spike KIM grains was 90 and 81%.

In the till sample (15SUV017), only the two 1-2 mm chromite grains were not recovered. In the 15SUV029 sample, one additional pyrope garnet was picked and 1 of 2 chromites were not recovered in the 1-2 mm size fraction, while 2 pyrope garnets and 1 chromite were not recovered from the 0.5-1.0 mm size fraction. It is well documented that both types of GSC in-house blanks do not contain any KIMs (Plouffe et al., 2013; GSC unpublished data). Visual comparisons of spiked grains and picked grains indicated that the additional 1-2 mm sized pyrope garnet was one of the 0.5-1.0 mm spike pyrope grains, and thus is simply a sieving artifact. It has been indicated (Averill and McClenaghan, 1994) that in the case of orange garnets, it is much more difficult to discriminate and select kimberlitic versus crustal garnets purely on the basis of colour. Often there may be considerable abundances of orange crustal almandine and spessartine grains, and thus ODM picks up to 30 percent ambiguous orange grains that may or may not be kimberlitic in order to ensure that no true kimberlitic grains are missed. ODM did pick 4 almandine grains, which they confirmed by SEM analysis, from sample 15SUV029. Visual comparison between the pyrope spike grains and these almandine grains recovered by ODM indicate they do not include the missing 0.5-1.0 mm size pyrope. In the duplicate samples, 15SUV018 yielded 3 chromites in the 0.25-0.5 mm size fraction, 15SUV019 yielded 2 pyrope garnets in the 0.25-0.50 mm size fraction, 15SUV031 yielded a single chromite grain in the 0.25-0.5 mm size fraction, while no KIMs were recovered in sample 15SUV055. The difference between these is considered insignificant, and also indicates a likely absence of carry-over between successively tabled samples.

In 2016, spike grains inserted into the blank samples were 0.5-1.0 or 0.25-0.5 mm in size in order to better reflect actual KIM size ranges in the 2015 routine samples. Twenty and 21 grains were inserted in blanks 16SUV021 and 16SUV029, respectively (Appendix 2). Picking results from these two blanks is considered poor. Spiked KIM grain recoveries in the 0.5 – 1.0 mm size fraction are better than the finer 0.25-0.5 mm fraction. In the 0.5-1.0 mm fraction, 1 of 2 Mg-ilmenites were not recovered in sample 16SUV021, while 1 of 1 Mg-ilmenites were not recovered in sample 16SUV029. In the 0.25-0.5 mm fraction of sample 16SUV021, 0 of 4 Cr-diopsides, 0 of 2 Mg-ilmenites, and 2 of 4 chromites were not recovered. An eclogitic garnet (GO), that was indicated by ODM to be SEM-confirmed was picked, but no such grain was included in the spike. Curiously, while 5 forsterite grains were inserted in the blank sample, 20 grains were recovered by ODM, of which 15 were picked out of the sample, 5 of which were confirmed by SEM. Grain fracture and splitting does not explain this disparity, nor does carry-over from the previously processed sample (16SUV020) which had no KIMs. In the 0.5-1.0 mm size fraction of sample 16SUV029, 0 of 1 Mg-ilmenites were not picked, while in the 0.25-0.5 mm size fraction, 0 of 1 chromium diopsides, 0 of 5 Mg-ilmenites and 2 of 5 forsterites were not picked.

3.2 Kimberlite Indicator Mineral – Abundances

For archival purposes, the unedited data files reported by ODM for sample processing are reported in Appendix 3A (year 2015) and 3B (year 2016). Amended and compiled data for the two years of sampling are presented in Appendix 4A-4J. A total of 48 samples (including 2 duplicates; 15SUV019 and 15SUV055) were collected on Banks Island as part of the GSC's KIM investigations. These included 30 stream sediment samples, 7 Beaufort Formation deposits, 5 till samples, 4 glaciofluvial deposits, and 2 bedrock samples (unconsolidated Isachsen Formation sandstone; Appendix 4A). KIM abundances are reported on an "as-picked" (raw data) basis in three size fractions (1.0-2.0 mm, 0.5-1.0 mm, 0.25-0.5 mm; Appendix 4C). These KIM identifications and numbers were then confirmed and where necessary, corrected, based on EPMA chemistry (discussed below; Appendix 4C). These corrected KIM abundances (Appendix 4C) were then normalized to a 10 kg <2 mm table feed weight (Appendix 4D), and also normalized to a 50 g nonferromagnetic heavy mineral concentrate (HMC) 0.25-0.5 mm picking fraction weight (Appendix 4E). While simple presence/absence of KIMs has significance, use of normalized abundance data is important when comparing disparate sample types, varying sample masses, sampling programs, and for removing biases for natural sediment density-concentrating mechanisms present in stream environments (cf., McClenaghan et al., 2002; Prior et al., 2009; McClenaghan, 2011; Day et al., 2018). KIMs were recovered in 32 of the 48 samples, yielding a total of 334 grains. No KIMs were found within the 1.0-2.0 mm size range, 6.0% were within the 0.5-1.0 mm size, and 94.0% in the 0.25-0.5 mm size. Normalizing the KIM data to a 10 kg table feed (<2 mm) weight does not dramatically change the percentage compositional data from the raw data. Chromites were the dominant KIM recovered (62.5%), followed by pyrope garnets (14.1%), Mg-ilmenites (15.6%), and forsterite (olivine; 7.0%); eclogitic garnets (0.7%) and Cr-diopsides (0.6%) are rare (Appendix 4D). When normalized to 50 g of the nonferromagnetic 0.25-0.5 mm picking fraction though, chromites remain the most abundant KIM, but decline to 46.6%, pyrope garnets increase significantly to 31.6%, followed by Mg-ilmenites (17.1%), forsterite (3.3%), eclogitic garnet (0.7%) and Cr-diopsides (0.7%; Appendix 4E).

Six of the 7 Beaufort Formation samples were also examined for KIMs in the 0.18-0.25 mm fraction in order to further characterize the KIM content in these ancient fluvial deposits, and to test for potential KIM comminution. The time-consuming nature, and hence cost of picking this fine fraction, means this is a step rarely included in KIM surveys, but can be added to bolster individual KIM numbers when trying to qualify aspects of geochemistry (e.g., McClenaghan et al., 2008). Results show generally higher KIM abundances in the 0.18-0.25 mm fraction as compared to the coarser fractions, along with an increase in the number of Mg-ilmenite grains (18.0 to 23.5%) and a decrease in pyrope garnets (48.0 to 34.6%; Appendix 4D). It should be noted that both Mg-ilmenites and chromites were not picked to completion in sample 16SUV023. This sample contains significantly higher KIM abundances than all other samples, particularly garnets, and may be skewing results.

None of the pre-Late Wisconsinan till samples from Morgan Bluffs (15SUV022, -023; Lakeman and England, 2014) or Duck Hawk Bluffs (16SUV019, -020; Evans et al., 2014) returned any KIMs (Appendix 4C). The “old” (?>0.99 Ma; Barendregt et al., 1998) preglacial gravel from Morgan Bluffs (15SUV024; lithofacies 3 of Lakeman and England (2014)) returned a diverse, low abundance KIM assemblage (Appendix 4C), and is one of only two samples that contained an eclogitic garnet. Only 1 of the 2 basal glaciofluvial outwash samples from Duck Hawk Bluffs (16SVU018) had any KIMs; 4 chromites (Appendix 4C). The only other till sample collected as part of this study (a Late Wisconsinan till from within the Jessie moraine belt) was from an area west of Johnson Point (15SUV054; Fig. 4c; Appendix 1A), and it returned two chromite grains (Appendix 4C). Neither of the two Isachsen Formation sandstone samples yielded KIMs (16SUV022, -024; Appendix 4C). Interestingly, the four Morgan Bluffs and Duck Hawk Bluffs till samples, the two Duck Hawk Bluffs glaciofluvial samples, and the two Isachsen Formation bedrock samples all had extremely low nonferromagnetic HMC 0.25-0.5 mm sample masses (Appendix 4B, 4F), representing between 7.7 and 71.4 times less than the 50 g mass used to standardize grain counts to. The one other till sample collected (15SUV054) has a nonferromagnetic HMC 0.25-0.5 mm mass of only 10.6 g (Appendix 4B, 4E). Five of the 7 Beaufort Formation samples recorded large nonferromagnetic HMC 0.25-0.5 mm mass deficiencies compared to the 50 g standard (2.1-19.2 times; Appendix 4E), including sample 16SUV023 which had the highest number of garnets and the highest overall number of KIMs in the raw picked data. When the 50 g picking fraction standardization is factored in, the KIM numbers for sample 16SUV023 become exceptional (Appendix 4E), indicating that its high numbers in the raw picked sample is not the simple product of nonferromagnetic heavy mineral concentration in a fluvial environment. Similarly, even when the mass of the total HMC 0.25-2.0 mm (SG>3.2) fraction, normalized to a 10 kg Table Feed (<2 mm) is considered (Appendix 4B), Beaufort Formation samples are generally half that of the stream sediment samples (average of 31.6 and 74.6, respectively). This suggests that there is a relative deficiency of heavy minerals within Beaufort Formation samples compared to modern stream sediment samples, although to what degree this could reflect post-depositional weathering is uncertain. Both modern stream and Beaufort Formation sediment samples have significantly higher HMC concentrations than the 5 till samples from this study (avg. 5.9 g/10 kg Table Feed (<2 mm); Appendix 4B).

3.3 Kimberlite Indicator Mineral – Grain Morphology

All the KIM grains picked by ODM were inspected and photographed using paleontological microscopes at GSC Calgary, prior to their being mounted for chemical analysis. Photomicrographs are reproduced in Appendix 5. KIM grain morphology has been used to help discriminate near- from far-travelled grains. The absence of kelyphitic rims, increased grain rounding, and the absence of fractures can be proxies for transport-induced physical weathering (cf., Mosig, 1980; Afanas’ev et al., 1984; Garvie and Robinson, 1984; McCandless, 1990; Averill and McClenaghan, 1994; Dredge et al., 1996; McClenaghan and Kjarsgaard, 2001, 2007; Cummings et al., 2014). Inherent properties of individual kimberlites, their emplacement history, and individual mineral physical properties may also be significant in controlling grain morphology independent of actual glacial/fluvial/eolian transport, abrasion, and weathering (cf., Pokhilenko et al., 2010; Jones and Russell, 2018). No kelyphitic rims, or remnant coatings were seen on any of the recovered garnets from Banks Island. However, the sub-kelyphitic "orange-peel" texture was seen on 11 of 23 pyrope garnets (excluding the 16SUV023 sample; c.f., samples 15SUV026 and 16SUV030 – Appendix 5, where it is prominently displayed), and on 4 of the 6 eclogitic garnets. In sample 16SUV023, the "orange-peel" texture was seen on 10 of 25 pyrope garnets in the 0.25-0.5 mm fraction, and in 6 of 18 pyrope garnets in the 0.18-0.25 mm fraction. Recovered pyrope garnets are generally sub-angular to sub-rounded, often displaying conchoidal fracture surfaces. Within sample 16SUV023, the pyrope garnets tend to be more sub-angular to angular, and the angularity is higher in the finer 0.25-0.18 mm fraction than the 0.5-0.25 mm fraction. Conchoidal fracture surfaces are seen in many of the 16SUV023 pyrope garnets, and more of these mineral grains have jagged edges than are seen with the other Banks Island pyrope garnets. These differences may reflect the relative transport/depositional systems operating in deposit 16SUV023 (Beaufort Formation fluvial) and the fracture of grains along pre-existing internal weakness/fracture planes versus most of the others which were recovered from primary and reworked glacial deposits (e.g., Averill and McClenaghan, 1994; Cummings et al., 2014). The Mg-ilmenite grains display a range of surface characteristics, including pitted surfaces, conchoidal fracture, and prismatic overgrowths of what may be microcrystalline ilmenite (e.g., Appendix 5 – 16SUV014, upper right of three grains). Chromite grains largely display varying degrees of resorbed octahedral crystal faces, although distorted, elongated and subhedral crystal shapes are also seen (Appendix 5), which are suggested by Yannan and Matsyuk (1991) and Lee et al. (2003) as being characteristic of kimberlitic or lamproitic sources. Note, in the sample 15SUV009 photographs, 15 of the 20 grains picked by ODM as chromites were determined by EPMA to be Mg-ilmenite grains instead.

3.4 Other Heavy Minerals and MMSIMs

Non-kimberlitic heavy indicator minerals (from heavy mineral concentrate (HMC) ≥3.2 SG) picked by ODM are described in Appendix 4F (Picking Remarks) and Appendix 4G, tabulated in Appendix 4H, and summarized in Table 1.

For the 0.25-0.5 mm size fractions of those samples selected for ODM's MMSIM screening (Averill, 2001), results are provided in Appendix 4F and 4G and are included in the heavy mineral tabulations of Appendix 4H. Generally, there were few non-KIM heavy minerals identified/picked in the 0.5-1.0 mm fraction of the Banks Island samples. The most abundant non-KIMs in the 0.25-0.5 mm fraction were pyrite, chalcopyrite, sphalerite and vesuvianite. Pyrite abundance in the 0.25-0.5 mm fraction of the subset of samples submitted for MMSIM is highly variable, ranging from ~300 000 grains to zero (Appendix 4G, 4H). High pyrite abundances are found in Beaufort Formation and stream sediment samples, but these types of sediment samples can also have low or zero concentrations, so there is no discernible trend. Next to pyrite, chalcopyrite is the most common of the identified/picked grains in the 0.25-0.5 mm size fraction (30 of 48 samples), with up to 31 individual grains picked in a single sample. Chalcopyrite is absent, however, in 6 of the 7 Beaufort Formation samples. The 0.25-0.5 mm fraction of 10 samples contained sphalerite and vesuvianite grains.

The vesuvianite grains are potentially a useful indicator of glacial dispersal from western Victoria Island. Contact metamorphism between intrusive gabbro sheets and silty dolostones produced vesuvianite which outcrops on Victoria Island in the Neoproterozoic Shaler Supergroup (Nabelek et al., 2013). Vesuvianite grains are not found in any of the Beaufort Formation samples. Other minerals described by Nabelek et al. (2013) as having formed in the Shaler Supergroup during contact metamorphism and fluid flow include diopside, garnet (grossular and andradite), phlogopite, serpentine, chlorite, and Fe-sequestered sulphides (pyrite). Chlorite, phlogopite, and serpentine have specific gravities ≤3.3 and may thus have been too low to have been recovered in the heavy liquid separation employed in this study. Diopside was prevalent in 28 of the heavy mineral concentrates which were characterized by ODM as largely augite-diopside, or augite-goethite-diopside assemblages (Appendix 4F-H), pointing to the high abundance of these heavy minerals (but not picked). None of the Beaufort Formation samples contained these diopside-rich assemblages, and only 3 diopside grains from 2 Beaufort Formation samples were picked reflecting their rarity (Appendix 4G, 4H). Andradite was recovered in 5 of the Banks Island samples (none of the Beaufort Formation samples). Stream sediment surveys in dolomitized Shaler Supergroup terrains at the head of Minto Inlet on western Victoria Island (McCurdy et al., 2012, 2017), recovered both sphalerite and galena grains, pointing to the presence of potential MVT Pb-Zn mineralization (unknown localities). The sphalerite and galena grains recovered in the Banks Island samples could thus be derived from this area, and glacially transported westward. Isotopic and geochemical analyses of recovered sphalerite and galena grains may provide a mechanism for correlating with Victoria Island mineral grains/source, and is currently being explored.

3.5 KIM Chemistry

EPMA data of all Banks Island KIMs and other heavy minerals picked by ODM are presented in Appendix 6A, and then separately by mineral type in Appendix 6B to 6J. Chemical classifications of KIMs and other heavy minerals picked are listed in Table 1. Based on EPMA data, 22 of the 356 KIM grains visually identified and picked by ODM were rejected as KIMs, representing 6.2% of the total. Additionally, 20 picked KIMs were re-classified; 16 chromites were geochemically re-classified as ilmenites/Mg-ilmenite, 2 eclogitic garnets were re-classified as Cr-pyrope garnets, and 2 Mg-ilmenites were re-classified as chromites. Total mineral identification variance from what ODM picked is 11.8% (n=42).

3.5.1 Garnet

Of the 122 garnets picked (and/or confirmed by EPMA; excluding replicate samples), 66 were Cr-pyropes (wt%Cr_2O_3≥1.0; Appendix 6B). Garnets were classified using the scheme of Grütter et al. (2004), derivation of which and final classifications are shown in Appendix 6B and plotted in Figure 7. There are forty G0 (unclassified), 5 low-Cr megacrystic G1 garnets, 9 eclogitic G3 garnets, 4 eclogitic G4 garnets (Na_2O>0.07 wt%), 41 lherzoilitic G9 garnets, 12 harzburgitic G10 garnets (3 of which plot within the diamond stability field and are classified as G10Ds), 9 high TiO_2 peridotitic G11 garnets, and 2 wehrlitic G12 garnets. Of the 3 G10D's, 1 occurs in the Beaufort Formation sample 16SUV023 (as do 6 of the 12 G10 graphite phase), and the other two occur in stream sediment samples 15SUV014 and 16SUV025.

A plot of Na_2O vs TiO_2 (wt%; Fig. 8) indicates that most (n=39) of the Cr-pyrope garnets plot within the websteritic/pyroxenitic/type 2 eclogitic zone, with a lesser abundance of megacrystic garnets (n=27), and no diamondiferous type 1 eclogitic grains. Eclogitic garnets (Cr2O3 wt% <1.0; G0, G1, G3, G4) were also analyzed following the statistical discrimination methodology of Hardman et al. (2018a; Appendix 6B); results are displayed on a graphical plot of ln(Mg/Fe) versus ln(Ti/Si) (Fig. 9). This plot differs from the Ca# (molar Ca/[Ca+Mg]) vs Mg# discrimination of Schulze (2003), and is considered to better separate mantle versus crustal-sourced eclogitic garnets (Hardman et al., 2018a, b;

Poitras et al., 2018). Regardless of which discrimination scheme is used, a chemical compositional overlap between the two sources remains. Results for 34 low-Cr garnets (excluding all andradite garnets; ln(Ti/Si) >-3.0; Appendix 6B) suggest only two of the Banks Island low-Cr garnets are conclusively mantle derived (16SUV023, G4; and 16SUV028, G1). However, numerous grains plot within the 5 and 10% confidence interval bounds of Hardman et al.'s (2018a) calibration dataset (and their full 10% discrimination error), suggesting that while the vast majority of low-Cr garnets are likely crustal-derived, more than simply the two that lie beyond the 10% crustal confidence interval (CI) may be mantle-derived (Fig. 9).

Trace and rare earth element (REE) compositions provide sensitive tracers of metasomatic processes and have been increasingly used to characterize and qualify different populations of garnets and Cr-pyropes (cf., Griffin et al., 1996; Stachel et al., 1998, 2004; Cox and Barnes (2005); Banas et al., 2009; Viljoen et al., 2014; Hardman et al., 2018b; Liu et al., 2018; Poitras et al., 2018). Analytical results of trace and REE analysis are presented in Appendix 7, and by individual mineral grain types in Appendix 7A through 7H. Garnets (Appendix 7A) were further subdivided to isolate the Cr-pyrope G9, G10, G11, and G12s (n=39, 12, 8, and 2, respectively; excludes high Ca-andradites and one lost G11 grain), and their elemental concentrations were normalized to the C1 carbonaceous chondrite values of McDonough and Sun (1995; Appendix 7A). Results for each mineral grain were plotted and then grouped by populations of (1) heavy rare earth element (HREE)-enriched (n=27), (2) sinusoidal (n=25), (3) middle rare earth elements (MREE)-depleted (n=4), and (4) others (n=6; Fig. 10). All but 1 of the HREE-enriched grains have lanthanum (La) concentrations below chondrite levels, and 14 (of 27 total) also have cerium (Ce) below chondrite levels. Concentrations 10x chondrite levels and greater for the HREE-enriched grains generally occur from samarium (Sm) upwards, and there is little difference in the average REE composition of the G9 versus G11 grains, other than a slight enrichment of the heaviest REE in the G11 grains (Appendix 7A, Fig. 10A). There is quite a bit of variation within the sinusoidal group, including the degree of curvature (particularly with the HREE), elemental concentrations above and below chondrite values, and the elements where peak and low concentrations occur (Appendix 7A, Fig. 10B). The sinusoidal group includes 35% of G9s, 67% of G10s (including 2 of 3 G10Ds), 13% of G11s and 100% of G12s (Fig. 10B). All of the sinusoidal group G9s have La concentrations below chondrite levels, as does the 1 G11, but only 2 of the 8 G10s; all other grains, including the 2 G12s have La concentrations above chondrite level. Highest elemental abundances above chondrite levels in the sinusoidal curves occur in the LREE; neodymium (Nd) in 4 of 14 G9s, 6 of the 8 G10s, and both G12s; Sm in 5 G9s, 1 G10, 1 G11, and 1 G10; and europium (Eu) in 4 G9s. Lowest abundances in the HREE (close to chondrite levels) occur typically in holmium (Ho), erbium (Er), and thulium (Tm), but show a wide variation (particularly in the G9s), including gadolinium (Gd), terbium (Tb), ytterbium (Yb) and lutetium (Lu); excluding La, Tm is the lowest HREE in 6 of 14 G9s and 2 of 8 G10s; Ho in 4 of 8 G10s and 1 of 2 G12s; Er in the 1 G11, 2 of the G10s, and 1 of each of the G9 and G12s. The degree of sinuosity is higher for the G10, G11 and G12s, then it is for the G9s, and differences between the two sets are most pronounced in the HREE fractions where the G10, G11 and G12s trend towards chondrite normal levels and the G9s show greater enrichment (Fig. 10B).

Metasomatic depletion and enrichment of REE in Cr-pyropes is similarly reflected in Y and Zr concentrations (Griffin and Ryan, 1995; Griffin et al. 1999; Banas et al., 2009; Smit et al., 2014; Stachel et al., 2018). All but two of the hartzburgitic (G10) Cr-pyropes from this study exhibit depleted mantle source characteristics, as do all the low-Ti ($TiO_2 \leq 0.02$ wt%) lherzolitic Cr-pyropes, and all the MREE-depleted and LREE-depleted (normal to slightly humped; Fig. 10, Appendix 7) Cr-pyropes (Fig. 11). Most lherzolitic (G9) Cr-pyropes from this study are high-Ti ($Ti0_2 \geq 0.06$ wt%), and display characteristics of high temperature melt-metasomatism (Fig. 11). The spread of higher Y and

Zr values follows the trend of grain core to rim characteristics that are reflective of zoning and secondary replacement rims (Griffin et al., 1999).

Ni-in-garnet geothermometry determinations were made on the Cr-pyropes, and are displayed in Figure 12 in a combined histogram and cumulative probability plot. Ni-in-garnet temperature reconstruction using the methodologies of Ryan et al. (1996), Griffin et al. (1989), and Canil (1999) are included in Appendix 8 for comparative purposes, and are used for modelling geotherms in P (kbar) and conversions to depth (km) of projections to modelled geotherms. The Ni-in-garnet geothermometer is based on the strong temperature dependence of the partitioning of Ni between garnet and olivine, and provides a means of reconstructing the thermal state of the lithosphere from which they were derived (Ryan et al., 1996). This provides a means of characterizing the sample garnet population as a reflection of those which may have been derived from the diamond stability window, considered to occur between 900-1200°C. While sample numbers are low (n=61; 15 from stream sediment samples and 46 from Beaufort Formation samples), it appears to suggest that some Cr-pyropes from both sample media display potential of being derived from diamondiferous kimberlitic magma. The stream sediment samples appear to exhibit characteristics of a cooler geotherm, while those from Beaufort Formation sediments appear to contain garnets from a wide range of temperatures, a third of which exist within a hot geotherm where no diamonds would either exist within the lithosphere, or survive the transport path to the surface.

REE plots of Cr-pyrope garnets were also grouped according to derived Ni-in-garnet geothermometry temperatures (following methodology of Ryan et al. (1996); Fig. 13). The 800-950°C Ni-in-garnet temperature group contains 7 strongly sinusoidal traces, 1 MREE-depleted grain (15SVU026_r2g9 (G10)) and one HREE-enriched grain (15SUV028_r2g10 (G9)). Almost all LREE are above chondrite levels, while MREE and HREE trend towards chondrite-normal levels. Both of the wehrlitic G12 grains occur in this Ni-in-garnet temperature grouping. Fifteen grains are in the 950-1100°C Ni-in-garnet range, 1 of which is strongly MREE-depleted (16SUV025_r3g7 (G9)), 3 of which are low sinuosity (15SUV014_r2g3 (G10); 15SUV014_r2g4 (G10D); 16SUV025_r3g6 (G10D)), and the rest (n=11) HREE-enriched, with MREE and HREE trending towards 10x chondrite levels. The 1100-1250°C Ni-in-garnet group exhibits the greatest variability in REE trends, including two G10 grains (16SUV023_r2g4 and 16SUV023_r2g5m3) and a G9 (16SUV015_r1g6) which are the most divergent (HREE-enriched, high sinuosity, and normal, respectively), otherwise the rest of grains in this Ni-in-garnet temperature grouping (n=13) are weakly sinusoidal to HREE-enriched at levels, at or below those in the 950-1100°C. The 1250-1400°C group (n=8) are all G9 grains, and are generally the most HREE-enriched of all temperature groupings, and the most consistent in terms of REE trends. The 1400-1650°C group (n=10) is also generally HREE-enriched, but generally at or below that of the 1250-1400°C group, and with a higher variability in REE trends.

3.5.2 Spinel – Chromite

Chromites were the most abundant visually identified indicator mineral (n=215), and were present in 29 of 47 samples (Appendix 4C). Fifty-four of the grains were identified as euhedral, the rest as subeuhedral (resorbed) to distorted crystal shapes (Appendix 5), which as indicated by Averill (2011) can provide some discrimination between non-kimberlitic (angular, well defined crystal faces) and kimberlitic (resorbed surfaces, less obvious crystal faces) sources. Chemical compositions of the chromite grains are provided in Appendix 6C (EPMA) and 7B (ICPMS). Mantle-derived chromites exhibit wide variations in both major and minor element concentrations, and a number of geochemical indices have been developed to discriminate different populations; Cr-spinel with >61 wt% Cr_2O_3, 10-16 wt% MgO, <0.50 wt% TiO_2, <8 wt% Al_2O_3 and <6 wt% Fe_2O_3 have been correlated with diamond inclusion compositions (Fig. 14A-E; Sobolev, 1977; Fipke et al., 1989, 1995; Griffin et al., 1997;

McClenaghan and Kjarsgaard, 2007; Roeder and Schulze, 2008). Overall, only 1-3 of the Banks chromite-spinels plot within the variously defined diamond inclusion, or diamond intergrowth chromite fields (Fig. 14A, B, C). While 3 grains in the TiO_2 – Cr_2O_3 division of Fipke et al., 1995 (Fig. 14B) do fall within diamond inclusion and intergrowth fields, it is noted that in their analysis of kimberlitic, lamproitic, and non-diatreme sources, the range of values is significant, and there is a great deal of overlap between the populations, making discrimination uncertain. The spinel Mg# - Cr# plot (Fig. 14D; after Roeder and Schulze, 2008; Liu et al., 2018; El Dien et al. 2019) suggests approximately half of the Banks grains fall within the bounds of values from cratonic peridotites, although there is also significant overlap with non-cratonic peridotite compositions. It is further noted that the Banks Cr# values tend to be on the lower end of the cratonic spectrum, which is lower than most of those associated with till-derived spinels from central Victoria Island samples (cf., Liu et al., 2018). The Cr_2O_3 – Al_2O_3 and Cr_2O_3 – TiO_2 indices of Sobolev (1971, 1977; see also McClenaghan and Kjarsgaard, 2007; Fig. 14E) provide further discrimination of the chrome spinels, similarly indicating an absence of chromites from diamond inclusion fields, and a mixed population of potentially kimberlitic and non-diatreme derived grains.

3.5.3 Mg-Ilmenite

During the KIM picking process, ODM visually identified 99 Mg-ilmenite grains in the GSC Banks Island samples, 71 of which were classified as crustal Mg-ilmenite. Using EPMA, 4 of the crustal Mg-ilmenite grains were reclassified as pseudorutile, and 2 were reclassified as chromite. EPMA also reclassified 17 picked chromites as Mg-ilmenites, producing a total of 110 Mg-ilmenite grains (Appendix 6E). Two methods were used to discriminate kimberlitic from non-kimberlitic (i.e., crustal) Mg-ilmenites. In the bivariate plot of MgO versus Cr_2O_3 (Fig. 15A) non-kimberlitic ilmenites are identified as those with <4.0 wt% MgO. Of the total 110 ilmenites, 83 are classified as non-kimberlitic (includes 2 Beaufort Formation grains that were misidentified as ilmenite (non-crustal)), while 27 (~25%) were classified as kimberlitic (i.e., non-crustal; includes 2 stream sediment and 1 Beaufort Formation samples that were misidentified as crustal ilmenites). Using the TiO_2 versus Cr_2O_3 classification of Wyatt et al. (2004), 26 kimberlitic versus 84 non-kimberlitic grains are depicted (Fig. 15B). The Beaufort Formation samples yielded 12 kimberlitic versus 4 non-kimberlitic Mg-ilmenite grains (75%), although it is noted that 11 of the 12 kimberlitic Mg-ilmenite grains came from sample 16SUV023; only one other Beaufort Formation sample yielded a kimberlitic Mg-ilmenite grain (15SUV030), and sample 16SUV023 contained only 3 non-kimberlitic ilmenite (Appendix 6E). By comparison, only 16 kimberlitic Mg-ilmenites (from 7 different samples) were recovered from the 94 stream sediment sample ilmenite grains (17%; Appendix 6E).

3.5.4 Olivine

Visually identified olivine grains that were analyzed by EPMA include forsterite, fayalite, diopside and bronzite (Appendix 6F). Olivines can be derived from kimberlite, but can also be sourced from basaltic rocks; resolving between the two is important. Considering only the forsterite grains (n=24), the Banks Island samples yielded lower Mg# (average 0.83) than those typically associated with kimberlite xenocrysts and diamond inclusions (Mg# 0.89-0.94; Bussweiler et al., 2015, 2017; Stachel and Harris, 2008; Fig. 16). Similarly, the Banks Island olivines generally have elemental compositions greater than those associated with kimberlitic olivines which generally have chemical compositions of: $CaO \leq 0.1$wt%, $MnO \leq 0.15$ wt%, an $dCr_2O_3 \leq 0.03$ wt% (Appendix 6F; Fipke et al., 1995; Bussweiler et al., 2015, 2017). Only 1 forsteritic olivine was recovered from a Beaufort Formation deposit (15SUV030), and only 1 forsterite grain from stream sediment sample 15SUV020 plots within the bounds of Fipke et al.'s (1995) kimberlite inclusion field (Fig. 16).

3.5.5 Cr-diopside

There were 26 clinopyroxene grains picked by ODM from the Banks Island KIM samples (Appendix 6G). These included 2 Cr-diopsides, 20 low Cr-diopsides, and 4 diopside grains. Six of the low Cr-diopsides were recovered from 2 Beaufort Formation samples. The clinopyroxene grains are generally Mg-poor with Mg# (100Mg/(Mg+Fe^{2+})) <88, with only 4 considered to be Mg-rich (Mg# ≥88). Concentrations of Cr_2O_3 vary between 0.33 – 1.28 wt% (Fig. 17). Cr-rich diopside with >1.5 wt% Cr_2O_3 are only associated with kimberlites and mantle xenoliths (Deer et al., 1982; Fipke et al., 1989, 1995; McClenaghan and Kjarsgaard, 2007). None of Banks Island Cr-diopside plot within these parameters. However, kimberlites also contain diopside with <1.5 wt% Cr_2O_3, and a variety of discrimination plots have been utilized to characterize these (cf., Schulze, 1987; McCandless and Gurney, 1989; Nimis, 1998; Morris et al., 2002). Based on these various plots, only 1 of the Banks Island Cr-diopside grains (15SUV014; a stream sediment sample) plots within the bounds of peridotite mantle assemblages (Fig. 17). The other Cr-diopside (15SUV024; a fluvial gravel deposit) with a Mg# of 88 and Cr_2O_3 wt% of 0.6, is interpreted to be from mantle lherzolite (McClenaghan et al., 2006). The low Cr-diopside grains largely plot within, or above, the websteritic assemblage, with 4 grains in the megacryst assemblage.

4. Discussion

4.1 Beaufort Formation and the Potential for KIM Bedrock Inheritance

Six of the 7 Beaufort Formation (*sensu lato*) samples contained a total of 131 KIMs of different mineralogy, many of which display what are interpreted as kimberlitic chemical compositions (Appendix 4; Fig. 7-15). The presence of KIMs in these samples indicates that during the time at which the fluvial Beaufort Formation sediments were being deposited by ancient rivers, crossing what was then a contiguous arctic coastal plain (i.e., no arctic islands or inter-island channels existed), exposed kimberlites, or secondarily reworked kimberlitic materials were being actively eroded and redeposited. Beaufort Formation deposits on Banks Island are reported to have a general westerly azimuth, and contain rare granite clasts (Hills and Fyles, 1973; Miall, 1979). These characteristics were similarly observed in outcrops and searches of surface deflation lags at all such sites during the course of this project's fieldwork (Fig. 5). The granite erratics are clearly far travelled; the closest granitic outcrop to Banks Island is a granodiorite in southern Hadley Bay on northern Victoria Island (Thorsteinsson and Tozer, 1962; 450 km east of 16SUV023), while granitic terrain of the Canadian Shield outcrops extensively on western Somerset Island, Boothia Peninsula, and throughout the continental mainland fringing southern Victoria Island and extending westward as far as Great Bear Lake (Fig. 5 – see inset Canada map). Kimberlites are known to occur both within and beyond margins of exposed Canadian Shield granitic terrain on western Somerset Island (850 km away), central and southern Bathurst Peninsula (>1000 km), southeastern Victoria Island (550 km away), areas around Great Bear Lake (>700 km; including 13 on Parry Peninsula; 500 km away), and abundantly further south through the Slave Craton (Stubley and Irwin, 2019).

While locations of known kimberlites and granite outcrops coincide, it seems unlikely that KIMs in Beaufort Formation deposits on Banks Island were derived from such distant kimberlite sources. KIMs in the Beaufort Formation deposits are small, e.g., no KIMs were recovered in the 1-2 mm size fraction, and are rare (6.3%) in the 0.5-1.0 mm size fraction; the same, however, holds true for all stream and glacial sediment samples collected on Banks Island. While transport-related grain abrasion and comminution would result in smaller KIM grain sizes, the travel distances to known kimberlites appears too great to account for the mineralogical suite and abundances of KIMs recovered (cf., Averill and McClenaghan, 1994; Dredge et al., 1996; McClenaghan, 2005; McClenaghan and Kjarsgaard, 2007; Cummings et al., 2014). Consider that the combined glacial and fluvial dispersal trains of pyrope garnets in Attawapiskat (ON) and Lac de Gras (NWT) kimberlite fields are ~300 and 180 km, respectively (McClenaghan, 2005). The site at which sample 16SUV023 was collected (surface dug pit) is a prominent Beaufort Formation fluvial peneplain, that unconformably overlies Eureka Sound Formation sediments, extends 0.4 x 2 km, and for which lateral equivalent surfaces can be seen extending northward on the east side of Thomsen River valley, as a series of discontinuous, uplands capped by conspicuously orange-covered sandy-gravel (Fig. 5, 18).

The 16SUV023 sample is particularly noteworthy. It contains the highest abundance of KIMs of any sample collected on Banks Island by either the GSC or industry (n=140; more than twice that of the next highest sample; Fig. 4C; Appendix 4). While most KIM samples on Banks Island are dominated by chromites, this sample contains a majority of garnets, at abundances more than an order of magnitude greater than any other sample. The potential bias of fluvial concentration of heavy minerals also does not appear to be the source of this anomalous abundance. This sample has markedly low HMC weights, and when normalized to a nonferromagnetic HMC 0.25-0.5 mm picking fraction weight of 50 g, its dominance is only magnified to 6 times greater than the next most abundant sample (Appendix 4E). It is noted though, that this sample contains the most gold grains (9) of any of the GSC Banks Island samples (Appendix 4I), suggesting some degree of heavy mineral concentration. Cummings et al. (2014) in their comminution experiments indicate that the tendency for kimberlitic pyrope garnets to fracture may increase their relative abundance compared to other KIMs down flow from a source. As discussed previously, the recovered pyrope garnet grains do exhibit a sub-angular to sub-rounded morphology, but the prominence of sub-kelyphitic “orange-peel” texture in sample 16SUV023 (10 of 25 garnets in the 0.25-0.5 mm fraction and 6 of 18 garnets in the 0.18-0.25 mm fraction; Appendix 5) suggests a relative lack of abrasion, and hence a proximal source, not one several hundreds to >1000 km away. It is suggested, therefore, that sample 16SUV023 records the presence of a proximal Banks Island kimberlite source. Intentions to collect additional samples of Beaufort Formation deposits from the area were lost due to helicopter mechanical issues. It is useful to note though that 9 stream sediment samples collected by Rio Tinto in areas 30-50 km south of 16SUV023 returned zero KIMs (Fig. 1, 4C).

The presence of KIMs within unconsolidated fluvial Beaufort Formation deposits, and the identification of previously undocumented erosional remnant Beaufort Formation outliers on northeastern and central Banks Island clearly represents a potential of bedrock inheritance of KIMs that must be considered in models of subsequent glacial erosion and dispersal, and the interpretation of regional sample collections. These and other considerations of glacial history on Banks Island are discussed below.

4.2 Glacial History and Potential KIM Dispersal

During the last glaciation (Late Wisconsinan), the Laurentide Ice Sheet dispersed flow westward across the western Canadian arctic from a dome centered in the Keewatin area of northwest Hudson Bay. At maximum glacial extent, the prominent M’Clintock Ice Divide formed on eastern Victoria Island and as depicted by Dyke and Prest (1987; in accordance with the glacial reconstructions of Vincent (1983) and others) was suggested to feed flow westerly across all of Victoria Island onto the eastern rim of Banks Island (Fig. 19a). Limited extent ice streams occupied central Amundsen Gulf and M'Clure Strait, terminating in ice shelves. The only known kimberlite this maximum glacial extent ice flow reconstruction would have encountered is the Snow Goose cluster on east-central Victoria Island. Generalized ice flow patterns would not have carried this north of Johnson Point, Banks Island (Fig. 19a). On Banks Island, this flow pattern would potentially entrain and disperse locally sourced bedrock and sediments in a west-northwest fashion, largely perpendicular to the coastline (Fig. 19a), but would not correlate with the majority of positive KIM samples that were collected west of the Jesse moraine belt (Fig. 4).

During deglaciation, Dyke and Prest (1987) depicted progressively increasing topographic confinement of flow on Victoria Island, but most of this did not extend onto Banks Island, and only then along the very periphery of the eastern coastal region. Ice flow histories for Vincent's (1982, 1983) conjectured older (pre-Late Wisconsinan) glaciations and tills (Fig. 2) are unknown in terms of source area, although they can be presumed to have drawn from ice sheets similarly centered in the Keewatin, central Canadian arctic mainland, or arctic islands (cf., Barendregt and Duk-Rodkin, 2004). It seems likely that regardless of source of former ice sheets, the Amundsen Gulf basin would have served as an effective draw down for ice westward towards the Beaufort Sea, rather than advancing perpendicularly northwards across it and onto Banks Island. This would then rule out redistribution of KIMs from Parry Peninsula kimberlites, or those in and around Great Bear Lake and the central and southern Slave Craton. Domes and ice divides from earlier glaciations forming east of the Late Wisconsinan M'Clintock Ice Divide, could potentially redistribute KIMs from sites on Somerset Island, Boothia Peninsula, and the northern Slave Craton. A very limited collection of four samples of the lowermost (oldest, ? >0.78Ma) till at the base of Morgan Bluffs (Lakeman and England, 2014) and Duck Hawk Bluffs (Evans et al., 2014) returned no KIMs, and only 1 of 3 associated glaciofluvial deposits (Morgan Bluffs) yielded any KIMs (3 garnets and 1 Cr-diopside) which do not geochemically differ significantly from other Banks Island KIMs (Appendix 4, 6).

The recent revisions of Late Wisconsinan glacial history on Banks Island (England et al., 2009; Lakeman and England, 2012, 2013) clearly document pervasive Laurentide Ice Sheet cover over Banks Island (Fig. 19B), and prominent ice streams in M'Clure Strait and Amundsen Gulf out onto the continental margin. This establishes the potential for last glacial redistribution of KIMs from sites across Victoria and Banks islands. Hypothetical ice flow patterns at maximum glacial extents sees ice flow across the Victoria Island Snow Goose kimberlite cluster (550 km away) that is carried across central Banks Island (Fig. 19B). More importantly, it is recognized (Stokes et al., 2009; Lakeman and England, 2012) that during deglaciation, a shifting series of local topographic divides began to emerge along the Shaler Mountains and peripheral highland areas on Victoria Island at times when a contiguous ice flow across the eastern half of Banks Island continued (Lakeman and England's (2012) Thomsen Phase ice flow; Fig. 3). This progressive shift in ice flow patterns provides for several potential geographical sources of erratic material from Victoria Island to be carried onto central, northern and southern Banks Island (Fig. 19C, D).

Lakeman and England (2012) indicate that much of the last glacial cover of Banks Island occurred under cold-based ice. Under such conditions, quarrying and entrainment of debris is limited. However, while this may describe the situation under full-glacial conditions (Lakeman and England's (2012) Beaufort Phase ice flow; Fig. 3), the presence of glacially streamlined landforms and flow sets of these features on Victoria Island (Stokes et al., 2009) clearly identifies warm-based glacier conditions at times when westward ice flow off the Shaler Mountain divide(s) extended across eastern Banks Island, conforming to the deglacial landsystem of Dyke and Evans (2003). This provides a mechanism for erosion and entrainment of potentially unknown kimberlitic sources on the Prince Albert Peninsula of northwestern Victoria Island, and their dispersal westward onto Banks Island. Lakeman and England (2012) characterize the Thomsen Phase of ice flow as largely cold-based, but progressively lobate flow points to warm, or at least polythermal conditions, and entrained debris within the ice would have been deposited as a thin, discontinuous till cover, outwash deposits, or controlled moraines. Areas of Vincent's (1982, 1983) Baker Till (Fig. 2), extensively reside within Lakeman and England's (2012, 2013) Thomsen phase of ice flow, and are reported to have tills comprised of sand, silt and clay derived from underlying Cretaceous bedrock, with rare erratic clasts of quartzite, granite and limestone (ranging from pebbles to cobbles and rare boulders; Lakeman and England, 2012). As ice continued to retreat under polythermal conditions, increasing opportunities for local, Banks Island-sourced bedrock erosion and entrainment of debris may have occurred. However, this may have occurred only during the waning stages of regional deglaciation (between 14 – 12.75 ka cal yr BP; Lakeman and England, 2012), providing both a short temporal window, and more importantly in terms of potential KIM redistribution from a hypothetical Banks Island kimberlitic source, across a relatively short (<40 km) dispersal path. Most of the KIM samples on northeastern Banks Island lying beyond the limits of the Jesse moraine belt occur beyond the limits of Lakeman and England's (2012) mapping. Field observations from this study recorded similar muted glacial landforms (controlled moraines) and outwash deposits within 20 km of the Jesse moraine belt, and then little evidence beyond a scattering of erratics over much of the Devonian carbonate uplands (areas of Vincent's (1982, 1983) Plateau and southeastern Baker tills; Fig. 2).

Field observations also record the presence of abundant kames in the Thomsen River valley and eastern Banks Island (beyond and within the Jesse moraine belt). These depositional features commonly form along steep-fronted margins of polythermal glaciers, where supraglacial streams incised debris-rich bands of ice at the glacier margin, forming conspicuous conical piles of sorted sediments, in places >10 m high (Fig. 20). Field investigations of magnetic anomalies in Diamonds North's aeromagnetic survey, and their identification of ~150 magnetic "features" (Jober and Vanderspiegel, 2008), demonstrated that many of these corresponded to kames and associated outwash deposits. Presumably the fluvial nature of the kames is providing a mechanism for concentrating iron-rich minerals beyond background concentrations in regional low magnetic signature bedrock or discontinuous till cover. Several of the higher KIM abundance stream sediment samples are found in proximity to individual and clusters of kame deposits (e.g., Fig. 4C, D, west of Johnson Point; industry's 49 chromite, 7 pyrope garnet, 5 Mg-ilmenite sample, and the adjacent GSC sample 16SUV028).

As discussed, the Jesse moraine belt is conspicuously different from all other terrain on Banks Island. It has the thickest till, a dramatic increase in abundance and size of erratic boulders (particularly mafic basalt and gabbro derived from the Minto Inlier and Shaler Mountains on Victoria Island; Lakeman and England, 2012), and preserves widespread buried glacial ice (Smith and Farineau, 2015; Rudy et al., 2017). The Jesse moraine belt is evidence of a fundamentally different style of glaciation, and as suggested by Lakeman and England (2012), correlates to a prominent stillstand or re-advance of warm-based ice northwards up Prince of Wales Strait. It is also likely the first time during the Late Wisconsinan glaciation that ice draining from the Minto Inlet area of western Victoria Island was advected onto northeastern Banks Island (north of Johnson Point; Fig. 19D). The importance of these observations is that characteristics of KIMs or glacial sediments from samples collected inside the Jesse moraine belt, cannot be extended to glacial deposits beyond its limits (excepting those of the glaciofluvial outwash deposits in the major rivers that cross Banks Island and whose headwaters emanate from the edge of the Jesse moraine belt). Further, any potential kimberlitic-bearing terrain or bedrock along eastern Banks Island that may have been glacially eroded and redeposited westward prior to the formation of the Jesse moraine belt, now lies largely concealed below its cover – i.e., it would be unlikely to find a dispersal train leading from deposits within the Jesse moraine belt to those situated west (glacially down flow) of its limits.

4.3 Bedrock Geology and Kimberlite Preservation Potential

Some consideration needs to be given for the types of bedrock and their degree of lithification in terms of what the topographic expression a kimberlite erupting through these rocks might have in the Banks Island landscape today. As discussed, >80% of the island is covered by poor to weakly lithified Mesozoic and Cenozoic sediments (Fig. 1). Any kimberlite erupting prior to the Mesozoic would likely be deeply buried in all areas of the island except for the northeastern quadrant where the Devonian Mercy Bay strata extensively outcrops (Fig. 1). If a kimberlite had erupted through the well-lithified Mercy Bay strata then it could either form a positive relief feature (more resistant to weathering/erosion), or a recessive feature (i.e., lake/pond; less resistant to weather/erosion). Elsewhere on Banks Island, any kimberlite outcropping at surface would have to be Cretaceous or younger, and in most areas would still likely be extensively buried by the generally poorly lithified Paleocene-Eocene Eureka Sound Formation strata (Fig. 1). Where the Eureka Sound Formation cover has been eroded away (fluvial/glacial), then it would be expected that given the poor to weakly-lithified nature of underlying Cretaceous bedrock, a kimberlite would tend to have positive relief (more resistant to weathering/erosion). Given how generally subdued the landscape is across most of Banks Island, a conspicuous positive topographic landform, of a possible kimberlitic rock type, has never been identified throughout its historical exploration, nor in Diamond North's extensive survey of magnetic anomalies in the northeastern quadrant (excepting what are now recognized as glacial kames; Fig. 20). Only in areas of thick glacial cover in the Jesse moraine belt and glaciofluvial outwash in the Thomsen and other major river valleys could modern sediment conceal a kimberlite.

5. Conclusions

Abundant chemical and morphological evidence indicates the heavy mineral suite picked from both stream sediment and Beaufort Formation samples on Banks Island contain indicator minerals that are kimberlitic in origin. While the Ni-in-garnet geothermometry suggests the potential for entrainment of minerals and diamonds by kimberlitic magma within the diamond stability window, the wide range of paleotemperatures, and particularly the higher spread of temperatures in the Beaufort Formation chrome pyropes (>1200°C) suggests that were all such garnets to be entrained by a single kimberlitic source, than much of the diamond potential could be reduced, or at least have a diminished capacity for preservation of larger diamonds. If multiple kimberlitic sources existed (i.e., those sampled by Beaufort Formation fluvial environments), then different eruption histories and diamond potential could also exist. Similarly, kimberlites sampled by Beaufort Formation fluvial environments may differ spatially from those eroded and redeposited by later glaciations.

In the context of resolving potentially different kimberlitic sources, the relatively small number of samples and recovered KIMs may complicate attempts at discerning geochemical differences between KIMs collected from different sample media (Beaufort Formation vs. stream sediment vs. glacial sediments), and from different locations on Banks Island. Integration of this study's data with data sets from industry, including those from the Snow Goose kimberlite cluster on Victoria Island and those from Parry Peninsula (Liu et al., 2019), will address this small number of samples issue in a subsequent publication. Clearly, the abundance of KIMs collected by Rio Tinto on Prince Albert Peninsula on northwestern Victoria Island (Fig. 4C) suggests that this is an area of interest for future diamond exploration as it may signal the presence of unknown proximal kimberlites, there or to the east, and may be a potential source for fluvially or glacially-dispersed KIMs on northeastern Banks Island. At the same time, a different kimberlitic source remains to be identified for KIMs recovered on southeastern Banks Island (Nelson Head). As discussed, the anomalous 16SUV023 Beaufort Formation sample suggests a proximal kimberlite source(s) on Banks Island. The 2 clusters of G10D Cr-pyrope garnets on northeastern Banks Island (GSC and industry data; Fig. 4C), and the presence of usually fast-weathering forsterite grains argues for the potential of diamondiferous kimberlite source(s) either locally on eastern Banks Island, or perhaps, from somewhere on northwestern Victoria Island.

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8. List of Figures

Figure 1. Basemap of Banks Island, NWT, illustrating areas of historical industry-led diamond exploration mineral claims, prospecting permits, and sample collection. Geology and structural elements of Miall (1975) overlie a Landsat image base.

Figure 2. Distribution and names of Vincent's (1982, 1983) till sheets and glaciations on Banks Island, NWT.

Figure 3. Inferred Late Wisconsinan ice margins on Banks Island. The glacial maximum limits of Dyke & Prest (1987) follow the western edge of the Jesse Moraine of Fyles (1962, 1965) and Vincent (1982, 1983), and then skirt the northern and southern coasts, leaving the majority of Banks Island unglaciated. Ice margins from Lakeman and England (2012, 2013) identifying complete Late Wisconsinan inundation of Banks Island by the Laurentide Ice Sheet, and retreat of cold-based (Beaufort phase) and polythermal and warm-based ice (Thomsen and Prince of Wales phases).

Figure 4. Distribution of kimberlite indicator mineral (KIM) samples collected by the GSC, Diamonds North and Rio Tinto (n = 48, 198, 260, respectively) on Banks Island and northwest Victoria Island, Canadian Arctic Archipelago. **4A** Simple presence (red circles) and absence (black circles) distribution of KIMs, undistinguished by collector. Lateral bounds of the Jesse moraine belt (delineating where glacier ice continued to occupy Prince of Wales Strait during late stages of deglaciation) is delineated by heavy black lines; **4B** Detail of KIMs recovered on southern Banks Island (Nelson Head area). Proportionally-sized pie charts are used to identify mineral types and total numbers of KIMs recovered from all size fractions picked. GSC-collected sample pie charts are outlined in red. KIM abundances have been corrected for all samples to a 20 kg table feed (<2 mm) weight, and have also been corrected based on microprobe geochemistry to include only those KIMs with strong or possible geochemical affinities to kimberlitic sources – or, where not reported – as indicated by Diamonds North/Rio Tinto as "kimberlitic/non-kimberlitic". In order to facilitate comparisons where possible, the geochemical discriminators used by Diamonds North and Rio Tinto have been employed with the GSC samples. These include: all G0 garnets (almandine, andradite and spessartine) have been excluded; GSC almandine grains that classify as G3 and G4 garnets are included; pyrope and eclogitic garnets were combined and reported under the "garnet" classification; kimberlitic/non-kimberlitic ilmenites have been classified according to Wyatt et al (2004), and only the kimberlitic Mg-ilmenites have been included; only chromite grains with TiO_2 >0.5 (wt%); only forsteritic olivines; and only grains identified as Cr-diopsides or CP5 (ultramafic mantle-derived cpx of Rio Tinto) – no low-Cr diopsides (CP4 of Rio Tinto); **4C** Detail of KIM samples collected on northern Banks Island and northwest Victoria Island. GSC-collected sample pie charts are outlined in red. KIM abundances have been similarly corrected as detailed in 4B; **4D** Location of each GSC KIM sample using a simplified year (15, 16) and number (e.g., _02, _33) designation.

Figure 5. Historical distributions of Neogene Beaufort Formation fluvial deposits on Banks Island. Red stars identify areas of Beaufort Formation outliers identified by this study. Many of these outlier deposits on northeastern Banks Island occur within catchments where industry had recovered KIMs. Photo of Site 15SUV018 illustrates the typical flat surface morphology, dark orange staining, and the presence of accordant deposits on uplands stretching westward across central-northern Banks Island (black arrows). Samples 15SUV018 and 15SUV019 were collected in close proximity to each other from this site. Rare erratic boulders are considered glacially deposited, but there is no evidence of significant till deposited on these uplands (i.e., presumed cold-based ice cover). Location of Beaufort

Formation sample 16SUV023 indicated. Pink shading on Canada index map identifies extents of the exposed Canadian Shield (granite source).

Figure 6. Flow chart illustrating the processing steps of glacial sediment samples for indicator minerals as per GSC protocols (adapted from Plouffe et al., 2013; McClenaghan et al. 2013, in press). Samples targeted for KIM recovery are passed twice across the shaking table. While the <0.25 mm sample is generally not picked for KIMs, several samples from Beaufort Formation deposits had this step added to capture more of the total KIM population.

Figure 7. Cr_2O_3 vs CaO (wt%) composition for all GSC Banks Island garnets (Appendix 6B; minus analytical repeats and the Ca-member grossular and andradite grains). Garnet classification according to Grütter et al. (2004); dashed red line is the graphite-diamond constraint line.

Figure 8. TiO_2 vs Na_2O (wt%) composition for GSC Banks Island garnets (Appendix 6B; only those grains with $TiO_2<1.2$ wt% are shown).

Figure 9. Classification schema of Hardman et al. (2018a) used to discriminate the GSC Banks Island low chrome garnets (Cr_2O_3 wt%<1.0) into possible mantle or crust origins.

Figure 10. Plots of GSC Banks Island garnet, C1 chondrite-normalized (McDonough and Sun (1995)), rare earth element (REE) concentrations for those classified by Grütter et al. (2004) as G9, G10, G11 or G12 (Appendix 7A). **A)** Cr-pyrope garnets with C1 chondrite-normalized heavy-REE enriched profiles. Heavy red and black lines illustrate the average concentrations for the G9 and G11 garnets, respectively; **B)** Cr-pyrope garnets with C1 chondrite-normalized sinusoidal REE profiles. Heavy red, blue, and purple lines illustrate the average concentrations for the G9, G10 and G12 garnets, respectively; **C)** Cr-pyrope garnets with C1 chondrite-normalized middle-REE depleted profiles (n=4), along with other anomalous profiles of normal, slightly-humped, and humped (cf., Banas et al., 2009). Heavy blue line illustrates the average concentrations for the three G10 garnets.

Figure 11. Yitrium (Y) versus Zirconium (Zr) (ppm) for Banks Island Cr-pyrope garnets. Points in red are Beaufort Formation samples, blue are stream sediment samples. Fields and metasomatic trends from Griffin et al. (1999). Low-Ti is $TiO2 \leq 0.02$ wt%; high-Ti is $TiO2>0.06$ wt%.

Figure 12. Ni-in-garnet geothermometry (Ryan et al., 1996) for GSC Banks Island Cr-pyrope garnets (n=61) between 450 and 1800°C. G9 garnets are unlabelled, all others are as indicated. Dark line is the relative probability curve of the distribution. Diamond stability window typically sits between 900 and 1200°C.

Figure 13. Plots of GSC Banks Island Cr-pyrope garnet rare earth element (REE) concentrations grouped by Ni-in-garnet geothermometry temperature determinations (calculated according to Ryan et al. (1996)), using only those garnets classified by Grütter et al. (2004) as G9, 10, 11, or 12 (Appendix 6B). Solid black line averages exclude 2 outliers in the 800-950°C group, 1 outlier in the 950-1100°C group, and 3 outliers in the 1100-1250°C group. Data points illustrated by circle symbols are from Beaufort Formation samples; triangle symbols are from stream sediment samples.

Figure 14. Plots for Cr-spinel (chromites) from GSC Banks Island samples (n=215). **A)** Cr_2O_3 versus MgO bivariate plot (diamond inclusion and intergrowth fields from Fipke et al. (1995)); **B)** Cr_2O_3 versus TiO_2 plot with the lamproite, diamondiferous kimberlite, non-kimberlite and non-lamproite sources of Fipke et al. (1995); **C)** Al_2O_3 versus Cr_2O_3 bivariate plot with diamond inclusion field from Sobolev (1977); **D)** Mg# versus Cr# of spinel; fields of global non-cratonic and cratonic peridotites from Liu et al. (2018); **E)** TiO_2 versus Cr_2O_3 plot after McClenaghan and Kjarsgaard (2007).

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Figure 16. Bivariate plot of MAGNUM (Mg#; Mg/(Mg+Fe)) versus Cr_2O_3 wt% for GSC Banks Island forsterite grains. Red line outlines the diamond inclusion field compositions from Fipke et al. (1995) – greatly distorted to accommodate low Mg# of these Banks Island samples.

Figure 17. Cr_2O_3 versus Mg# (100Mg/(Fe+Mg)) in Cr-diopside, low-Cr diopside and diopside grains from Banks Island, NWT (classification after McClenaghan et al., 2006).

Figure 18. Location of sample 16SUV023. **A)** Prominent Beaufort Formation peneplain gravelled surface outlined by red dashed line (0.4 x 2.0 km). View to southwest. Absence of ice wedge polygons points to coarse nature of deposit in comparison to adjacent finer Eureka Sound Formation strata. **B)** Pebble-gravel surface exhibiting orange-oxidized, rounded quartzite, and dominant sub-rounded to sub-angular black and grey chert, with lesser tan, green, and red chert; clast sizes average 1-3 cm diameter. **C)** Looking north along peneplain surface from sample site. Note absence of glacial erratic cobbles or boulders, and conspicuous bright orange-colour.

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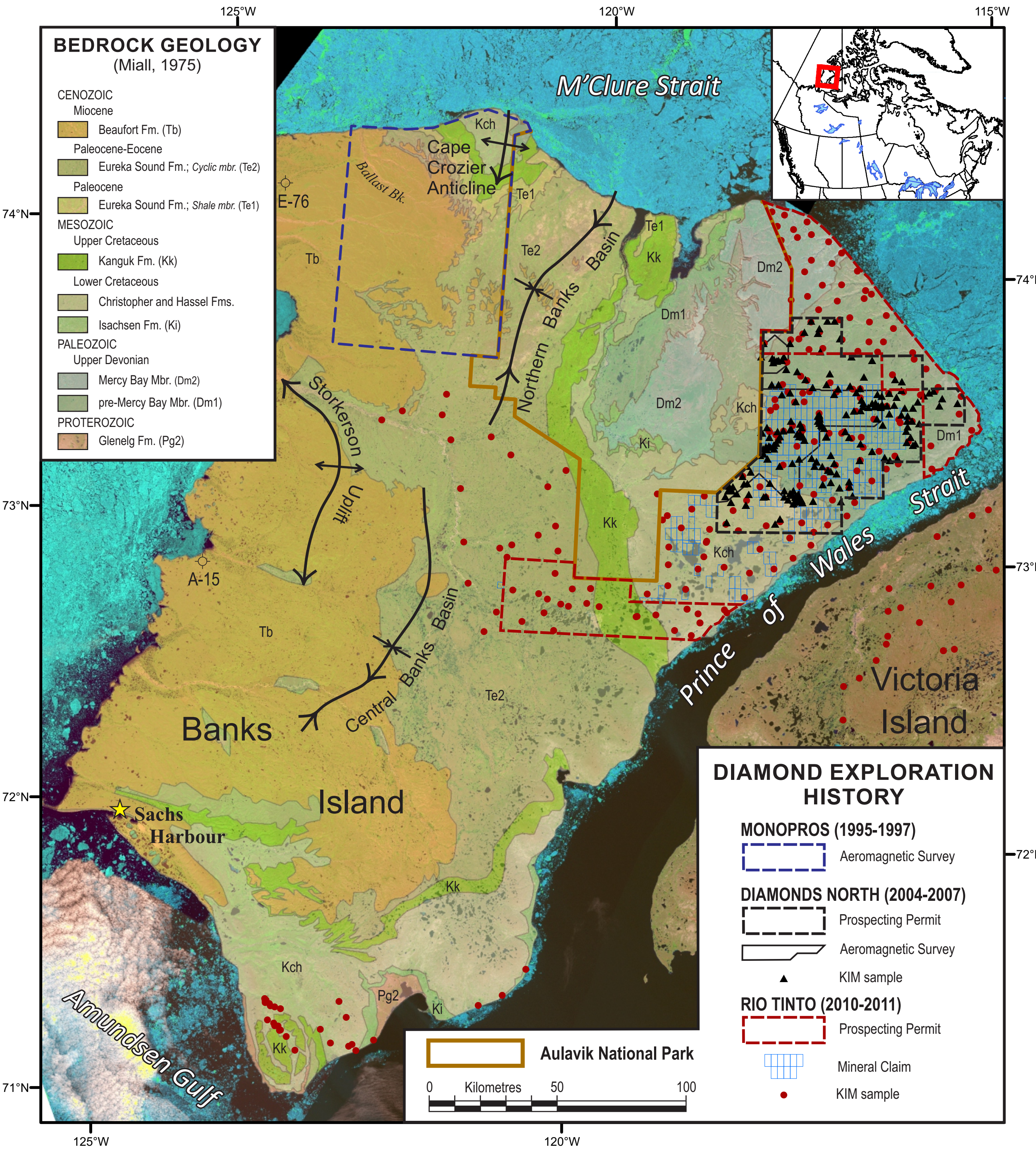


Figure 1. Basemap of Banks Island, NWT, illustrating areas of historical industry-led diamond exploration mineral claims, prospecting permits, and sample collection. Geology and structural elements of Miall (1975) overlie a Landsat image base.

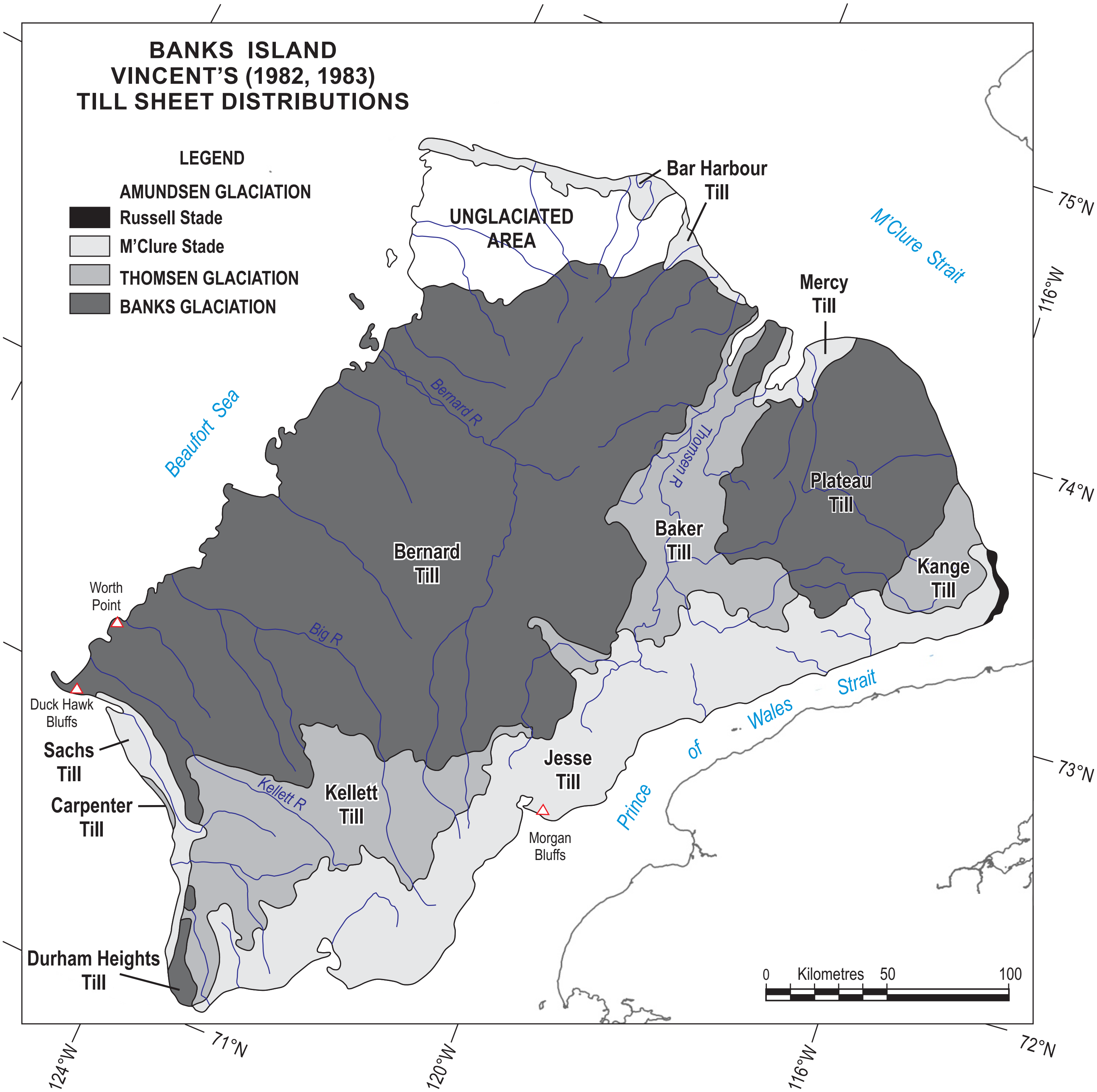


Figure 2. Distribution and names of Vincent's (1982, 1983) till sheets and glaciations on Banks Island, NWT.

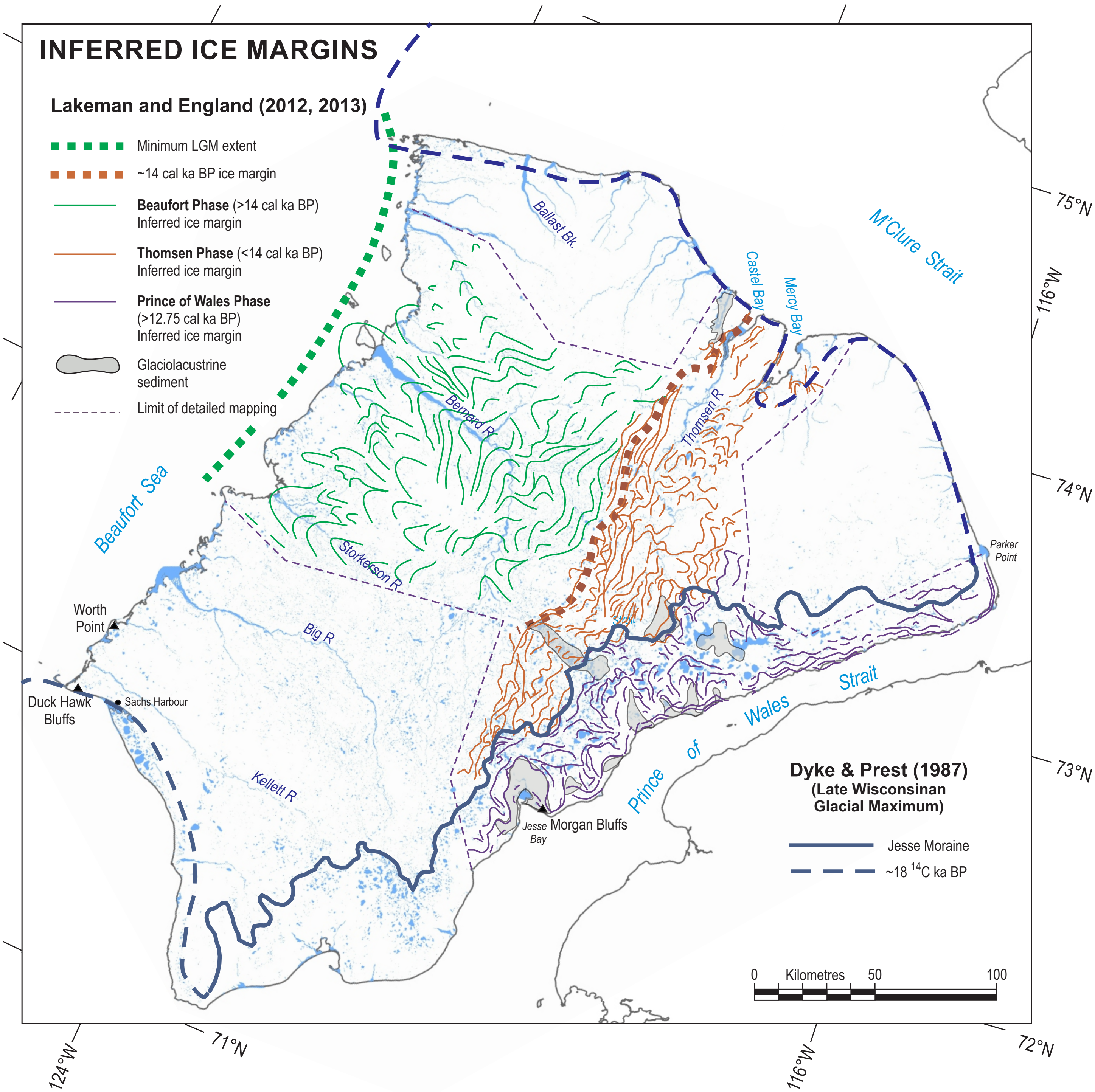
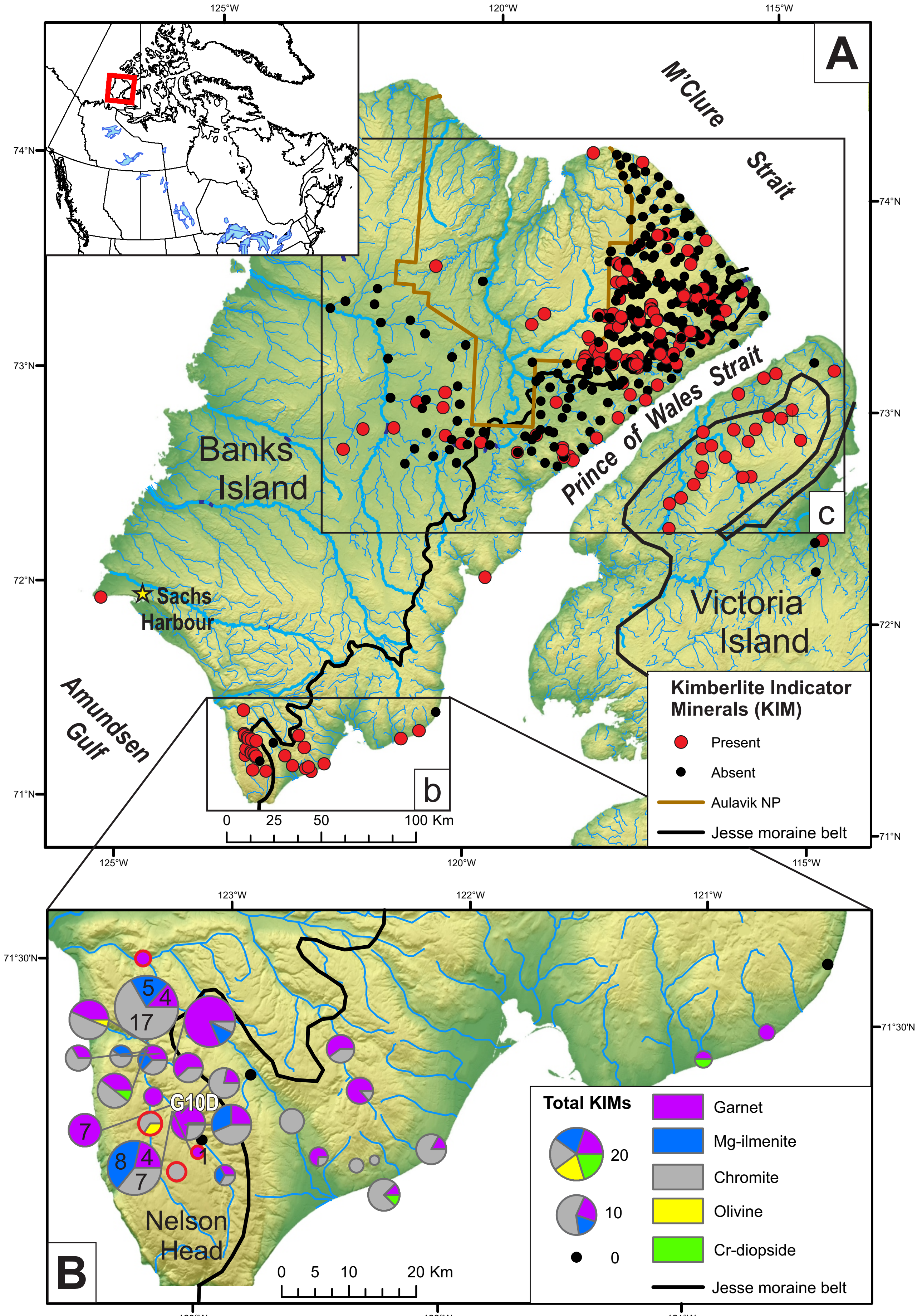
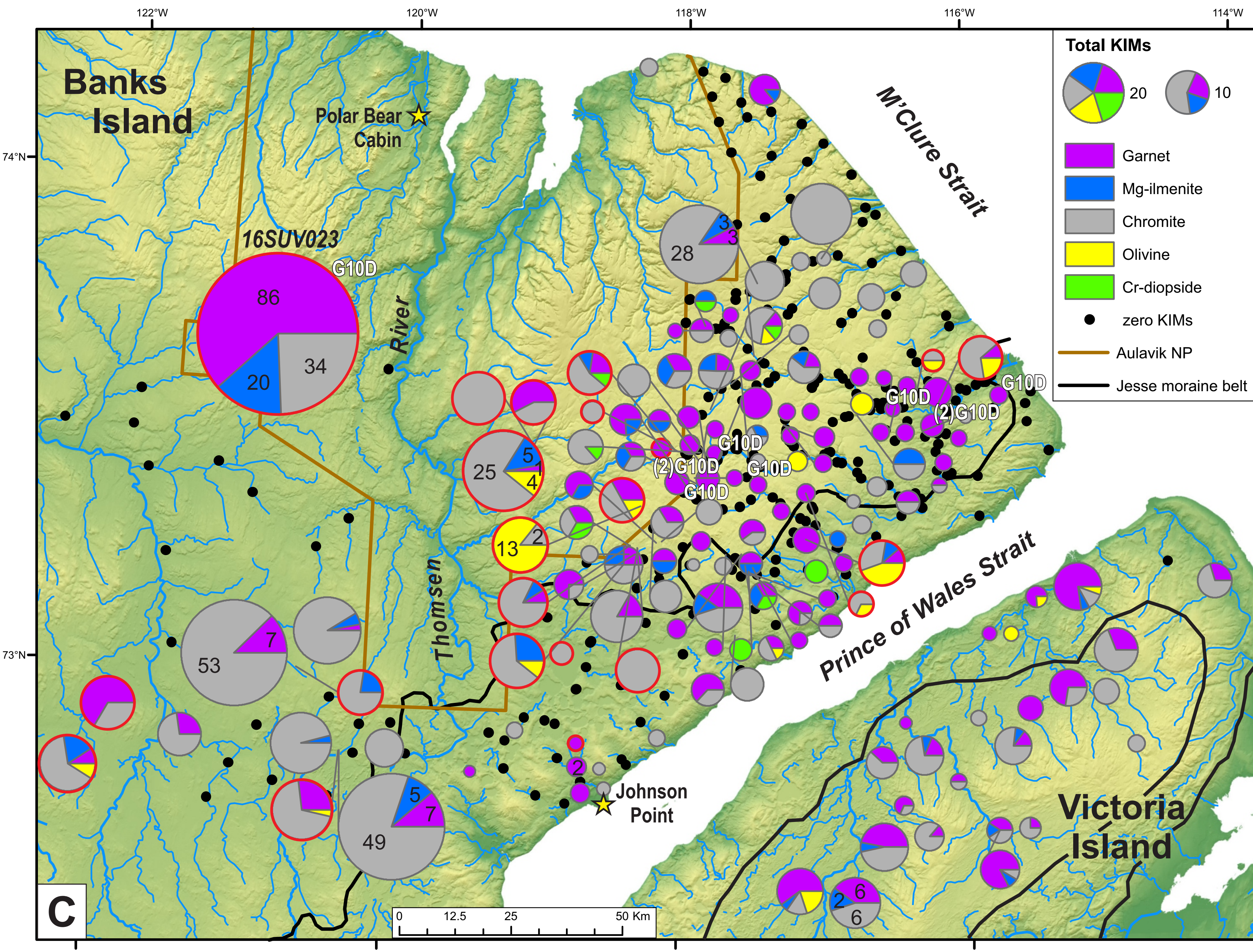


Figure 3. Inferred Late Wisconsinan ice margins on Banks Island. The glacial maximum limits of Dyke & Prest (1987) follow the western edge of the Jesse Moraine of Fyles (1962, 1965) and Vincent (1982, 1983), and then skirt the northern and southern coasts, leaving the majority of Banks Island unglaciated. Ice margins from Lakeman and England (2012, 2013) identifying complete Late Wisconsinan inundation of Banks Island by the Laurentide Ice Sheet, and retreat of cold-based (Beaufort phase) and polythermal and warm-based ice (Thomsen and Prince of Wales phases).



A
M'Clure Strait
Prince of Wales Strait
Banks Island
Victoria Island
Sachs Harbour
Amundsen Gulf
Kimberlite Indicator Minerals (KIM)
Present
Absent
Aulavik NP
Jesse moraine belt
0 25 50 100 Km
b
c
125°W
120°W
115°W
74°N
73°N
72°N
71°N
B
Nelson Head
G10D
Total KIMs
20
10
0
Garnet
Mg-ilmenite
Chromite
Olivine
Cr-diopside
Jesse moraine belt
0 5 10 20 Km
123°W
122°W
121°W
71°30'N



Banks Island
Polar Bear Cabin
16SUV023
G10D
River
Thomsen
M'Clure Strait
Prince of Wales Strait
Johnson Point
Victoria Island
(2)G10D
Total KIMs
20
10
Garnet
Mg-ilmenite
Chromite
Olivine
Cr-diopside
zero KIMs
Aulavik NP
Jesse moraine belt
0 12.5 25 50 Km
122°W
120°W
118°W
116°W
114°W
74°N
73°N
C

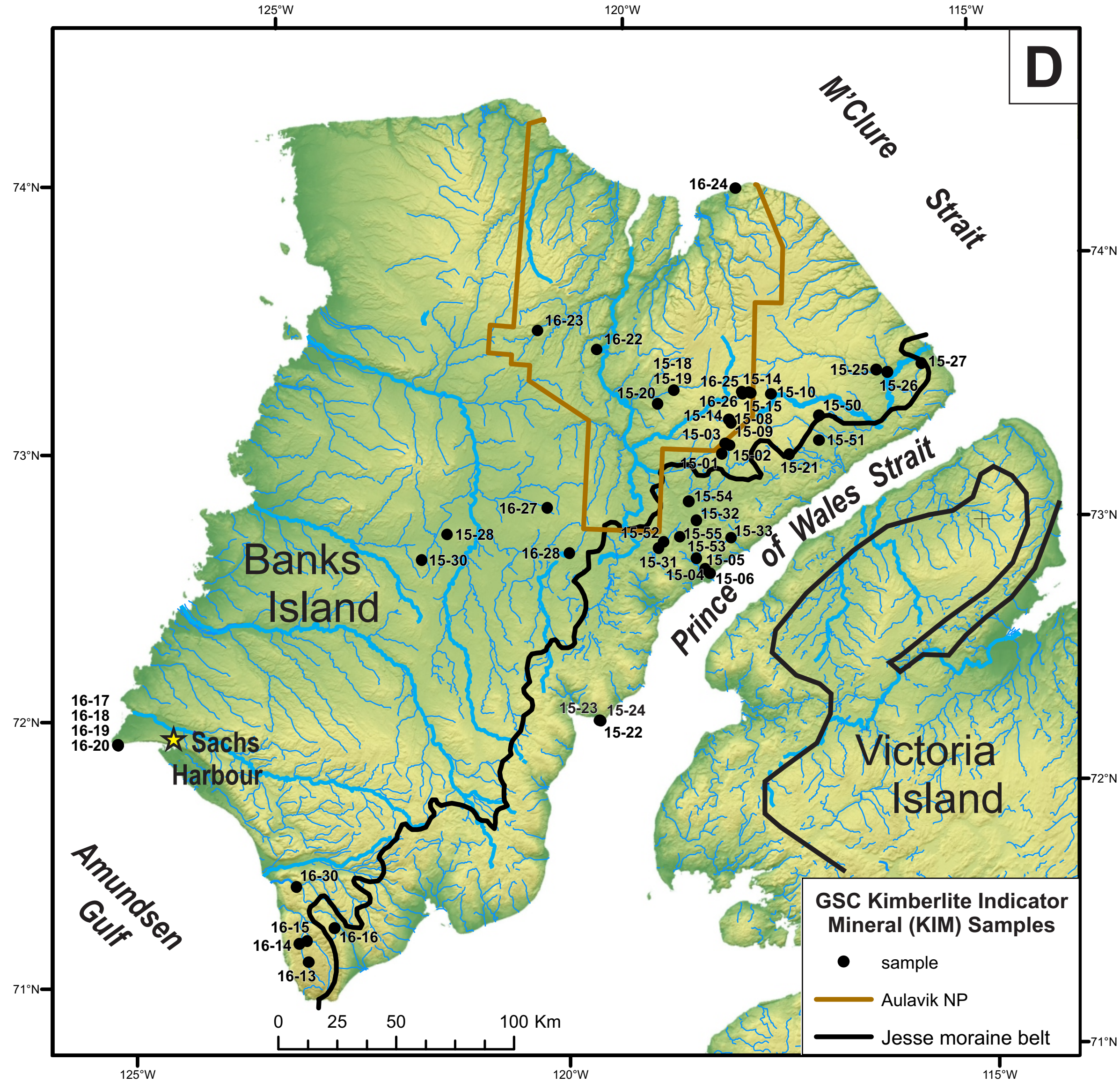


Figure 4. Distribution of kimberlite indicator mineral (KIM) samples collected by the GSC, Diamonds North and Rio Tinto (n = 48, 198, 260, respectively) on Banks Island and northwest Victoria Island, Canadian Arctic Archipelago. **4A** Simple presence (red circles) and absence (black circles) distribution of KIMs, undistinguished by collector. Lateral bounds of the Jesse moraine belt (delineating where glacier ice continued to occupy Prince of Wales Strait during late stages of deglaciation) is delineated by heavy black lines; **4B** Detail of KIMs recovered on southern Banks Island (Nelson Head area). Proportionally-sized pie charts are used to identify mineral types and total numbers of KIMs recovered from all size fractions picked. GSC-collected sample pie charts are outlined in red. KIM abundances have been corrected for all samples to a 20 kg table feed (<2 mm) weight, and have also been corrected based on microprobe geochemistry to include only those KIMs with strong or possible geochemical affinities to kimberlitic sources – or, where not reported – as indicated by Diamonds North/Rio Tinto as "kimberlitic/non-kimberlitic". In order to facilitate comparisons where possible, the geochemical discriminators used by Diamonds North and Rio Tinto have been employed with the GSC samples. These include: all G0 garnets (almandine, andradite and spessartine) have been excluded; GSC almandine grains that classify as G3 and G4 garnets are included; pyrope and eclogitic garnets were combined and reported under the "garnet" classification; kimberlitic/non-kimberlitic ilmenites have been classified according to Wyatt et al (2004), and only the kimberlitic Mg-ilmenites have been included; only chromite grains with TiO_2 >0.5 (wt%); only forsteritic olivines; and only grains identified as Cr-diopsides or CP5 (ultramafic mantle-derived cpx of Rio Tinto) – no low-Cr diopsides (CP4 of Rio Tinto); **4C** Detail of KIM samples collected on northern Banks Island and northwest Victoria Island. GSC-collected sample pie charts are outlined in red. KIM abundances have been similarly corrected as detailed in 4B; **4D** Location of each GSC KIM sample using a simplified year (15, 16) and sample number (e.g., _02, _33) designation.

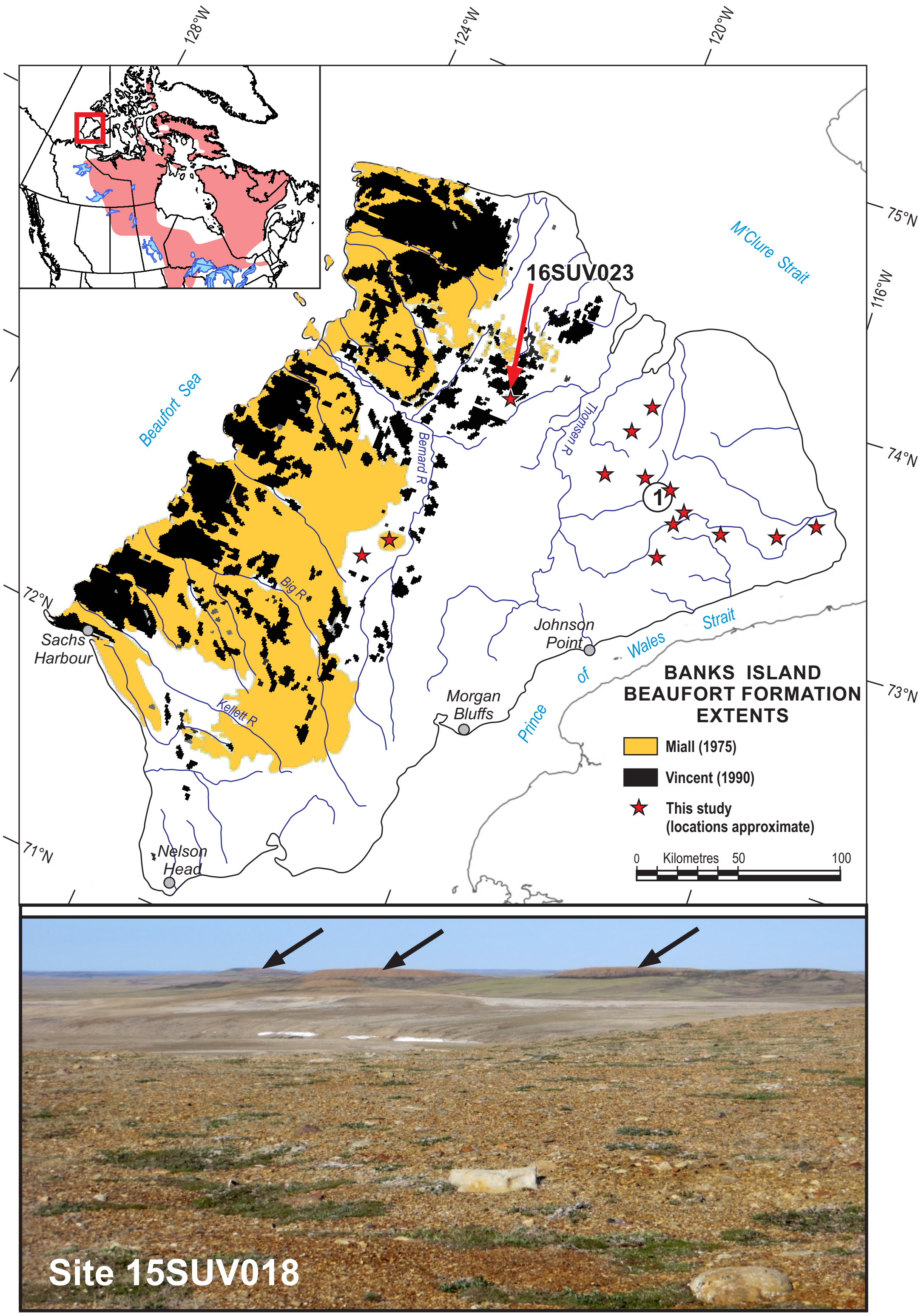


Figure 5. Historical distributions of Neogene Beaufort Formation fluvial deposits on Banks Island. Red stars identify areas of Beaufort Formation outliers identified by this study. Many of these outlier deposits on northeastern Banks Island occur within catchments where industry had recovered KIMs. Photo of Site 15SUV018 illustrates the typical flat surface morphology, dark orange staining, and the presence of accordant deposits on uplands stretching westward across central-northern Banks Island (black arrows). Samples 15SUV018 and 15SUV019 were collected in close proximity to each other from this site. Rare erratic boulders are considered glacially deposited, but there is no evidence of significant till deposited on these uplands (i.e., presumed cold-based ice cover). Location of Beaufort Formation sample 16SUV023 indicated. Pink shading on Canada index map identifies extents of the exposed Canadian Shield (granite source).

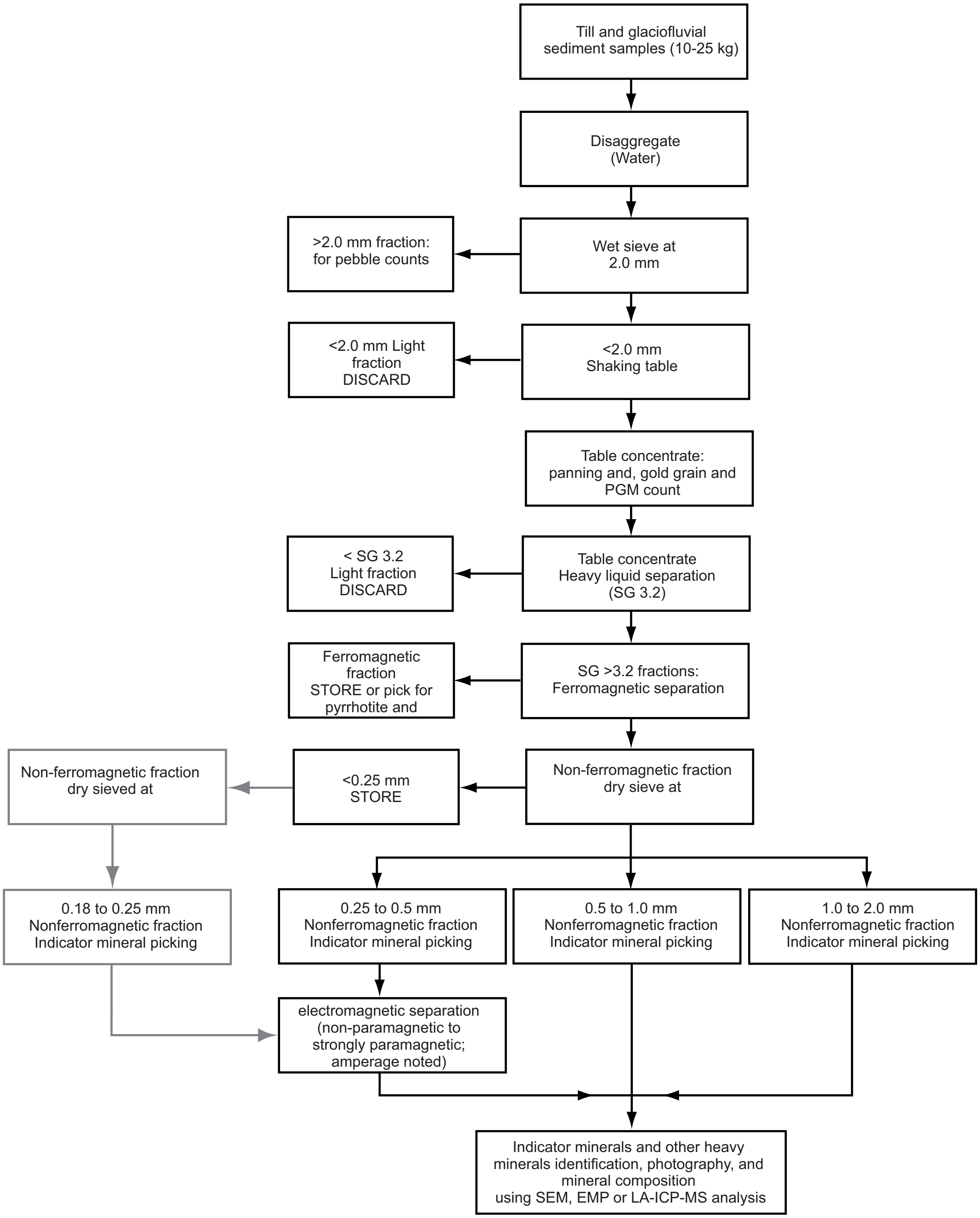


Figure 6. Flow chart illustrating the processing steps of glacial sediment samples for indicator minerals as per GSC protocols (adapted from Plouffe et al., 2013; McClenaghan et al. 2013, in press). Samples targeted for KIM recovery are passed twice across the shaking table. While the <0.25 mm sample is generally not picked for KIMs, several samples from Beaufort Formation deposits had this step added to capture more of the total KIM population.

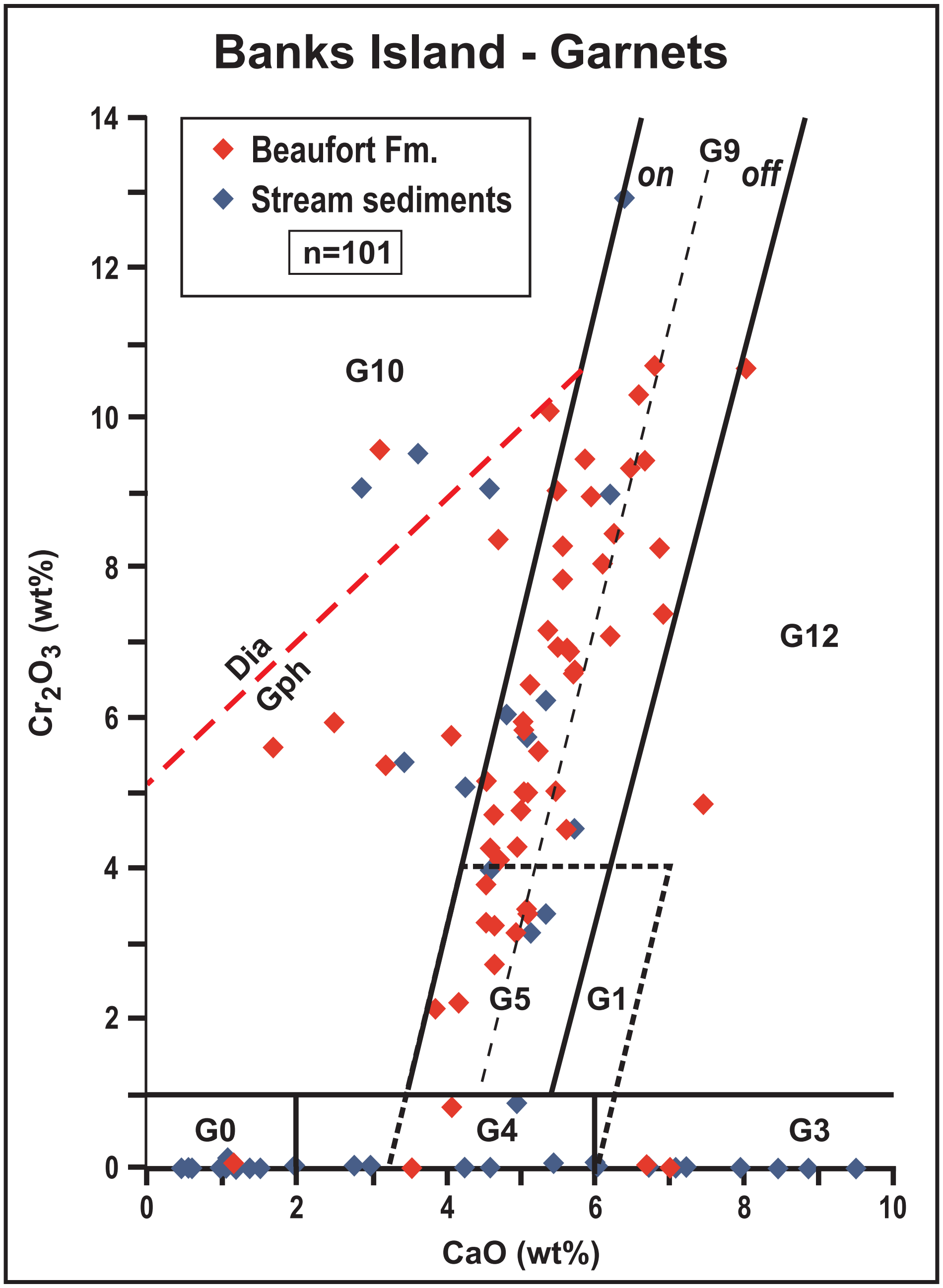


Figure 7. Cr_2O_3 vs CaO (wt%) composition for all GSC Banks Island garnets (Appendix 6B; minus analytical repeats and the Ca-member grossular and andradite grains). Garnet classification according to Grütter et al. (2004); dashed red line is the graphite-diamond constraint line.

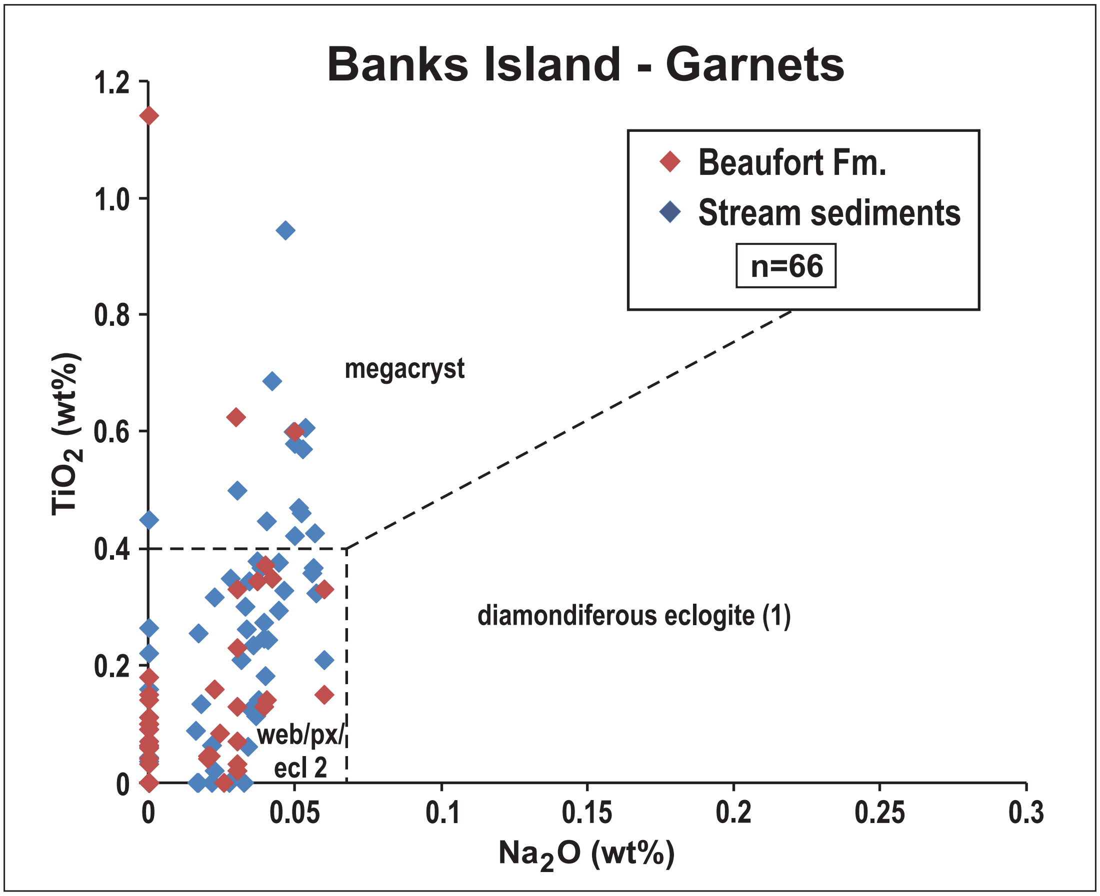


Figure 8. TiO_2 vs Na_2O (wt%) composition for GSC Banks Island garnets (Appendix 6B; only those grains with TiO_2<1.2 wt% are shown).

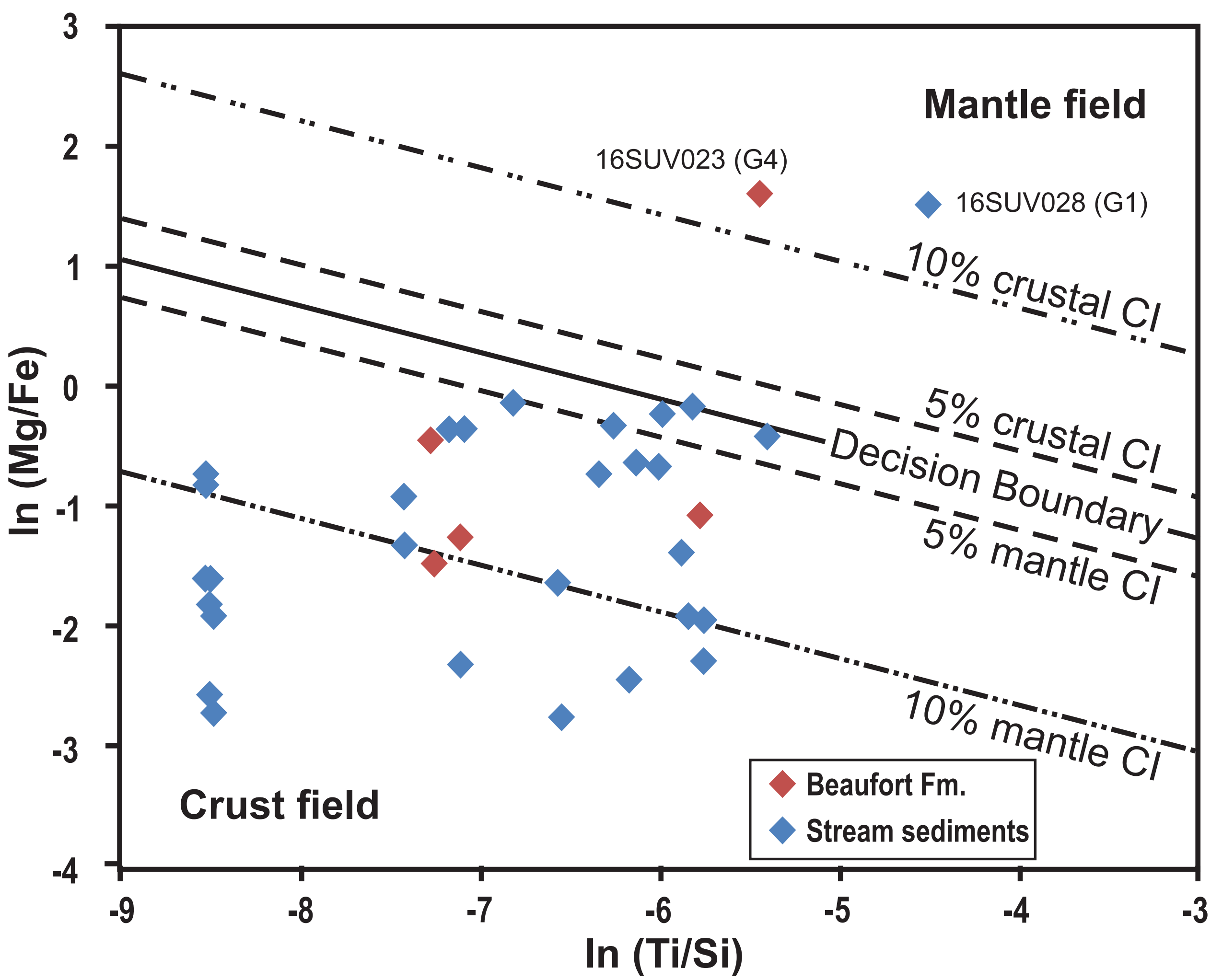


Figure 9. Classification schema of Hardman et al. (2018a) used to discriminate the GSC Banks Island low chrome garnets (Cr_2O_3 wt%<1.0) into possible mantle or crust origins.

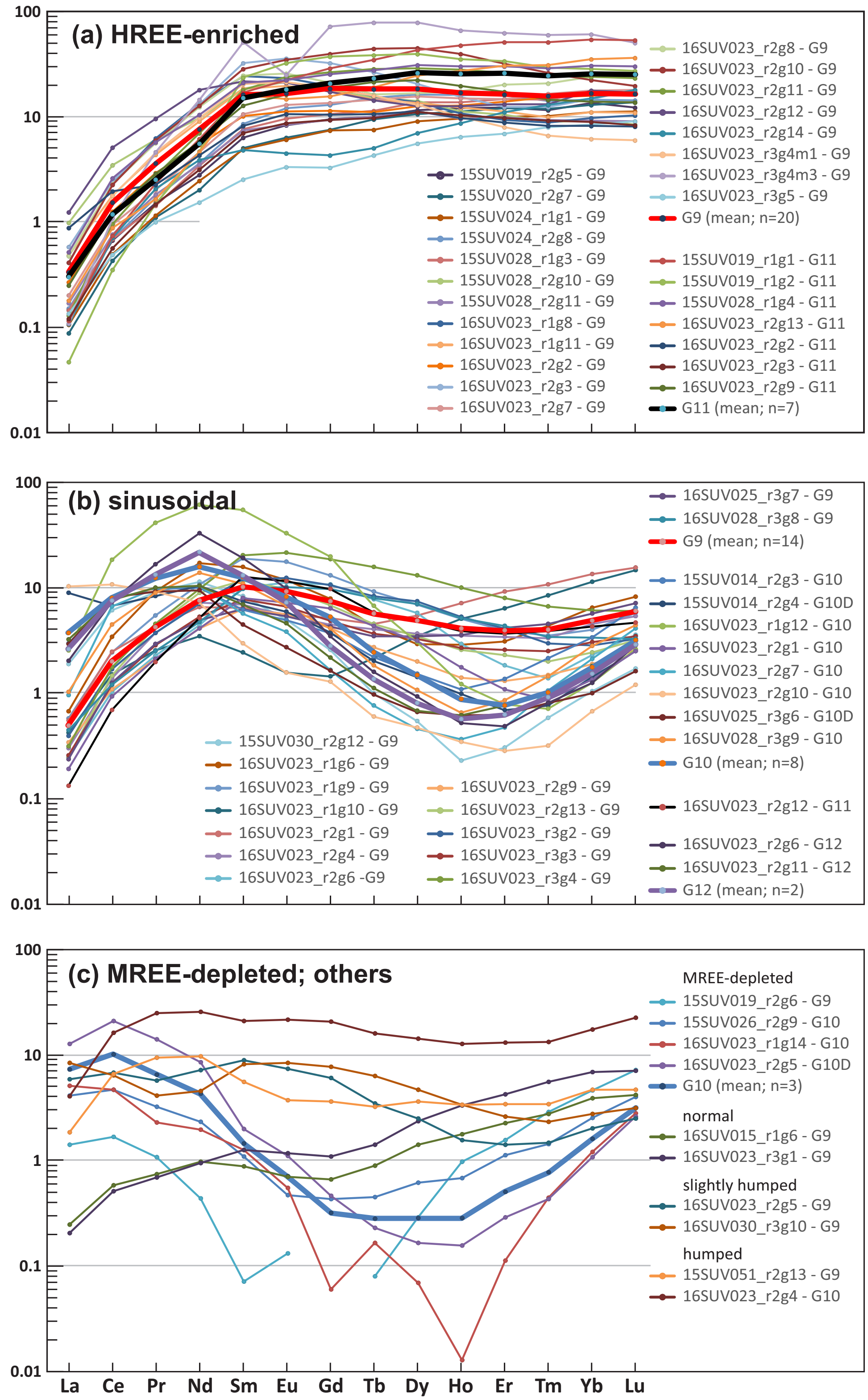


Figure 10. Plots of GSC Banks Island garnet, C1 chondrite-normalized (McDonough and Sun (1995)), rare earth element (REE) concentrations for those classified by Grütter et al. (2004) as G9, G10, G11 or G12 (Appendix 7A). **A)** Cr-pyrope garnets with C1 chondrite-normalized heavy-REE enriched profiles. Heavy red and black lines illustrate the average concentrations for the G9 and G11 garnets, respectively; **B)** Cr-pyrope garnets with C1 chondrite-normalized sinusoidal REE profiles. Heavy red, blue, and purple lines illustrate the average concentrations for the G9, G10 and G12 garnets, respectively; **C)** Cr-pyrope garnets with C1 chondrite-normalized middle-REE depleted profiles (n=4), along with other anomalous profiles of normal, slightly-humped, and humped (cf., Banas et al., 2009). Heavy blue line illustrates the average concentrations for the three G10 garnets.

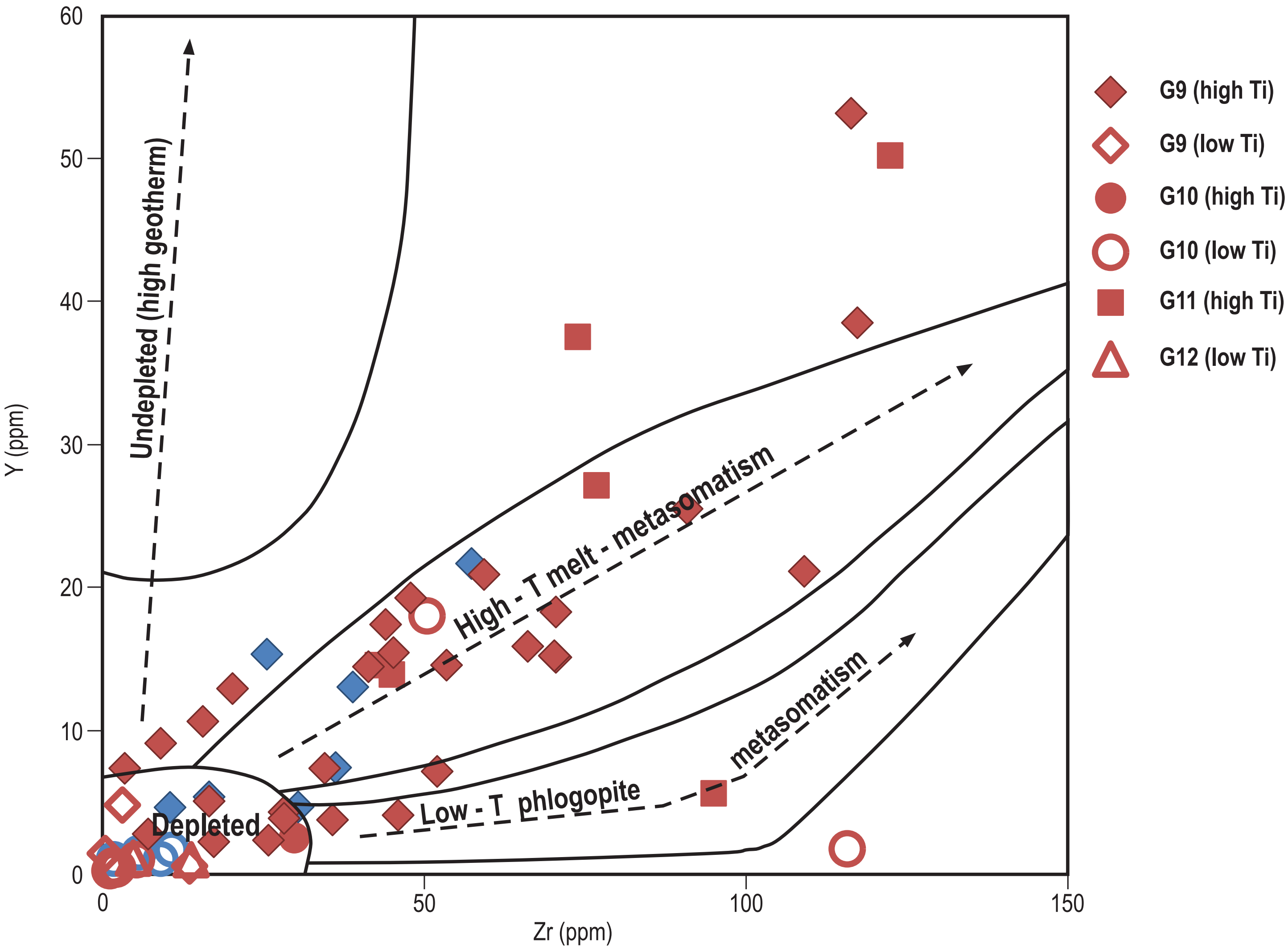


Figure 11. Yitrium (Y) versus Zirconium (Zr) (ppm) for Banks Island Cr-pyrope garnets. Points in red are Beaufort Formation samples, blue are stream sediment samples. Fields and metasomatic trends from Griffin et al. (1999). Low-Ti is $TiO_2 \leq 0.02$ wt%; high-Ti is $TiO_2 > 0.06$ wt%.

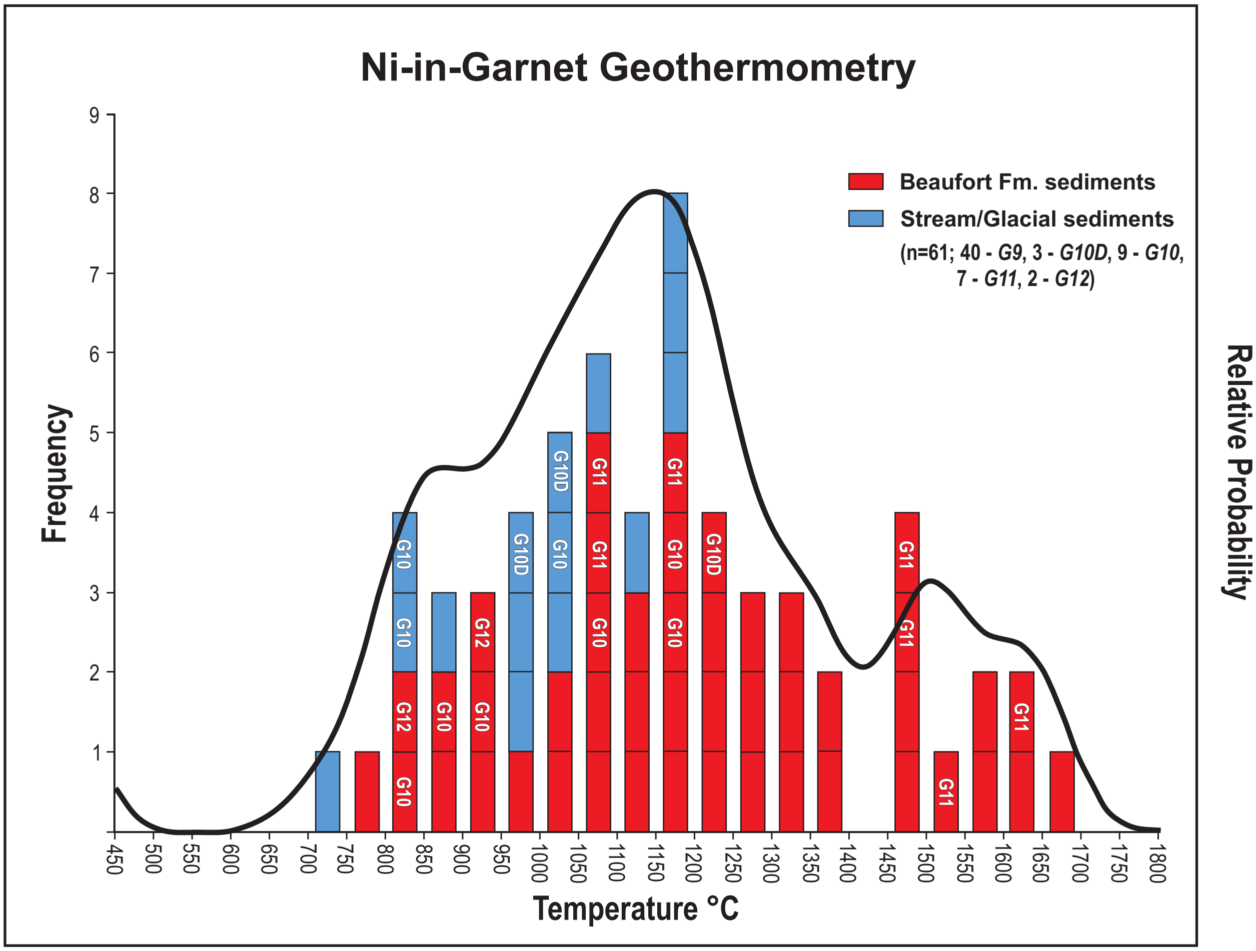
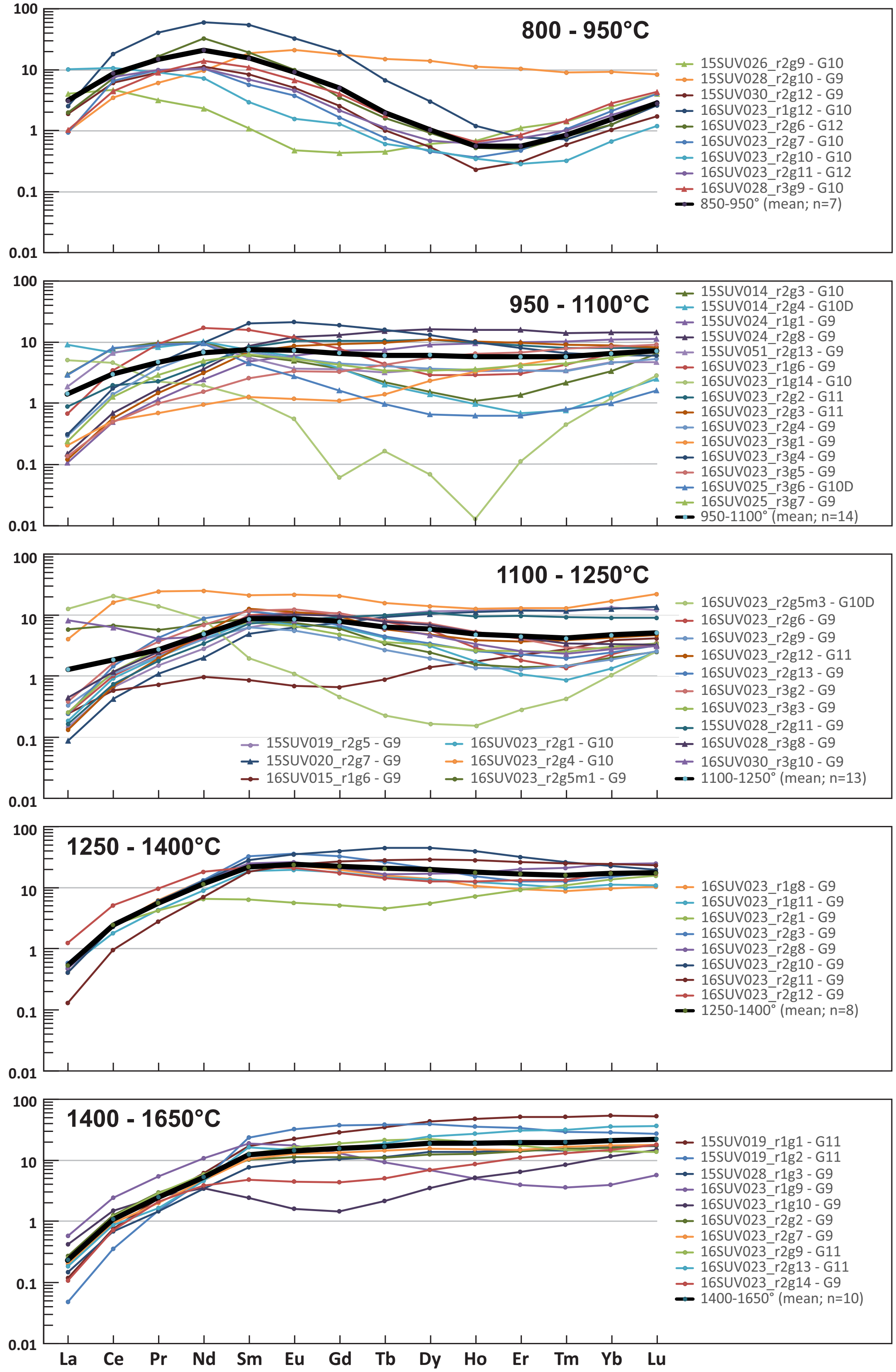


Figure 12. Ni-in-garnet geothermometry (Ryan et al., 1996) for GSC Banks Island Cr-pyrope garnets (n=61) between 450 and 1800°C. G9 garnets are unlabelled, all others are as indicated. Dark line is the relative probability curve of the distribution. Diamond stability window typically sits between 900 and 1200°C.



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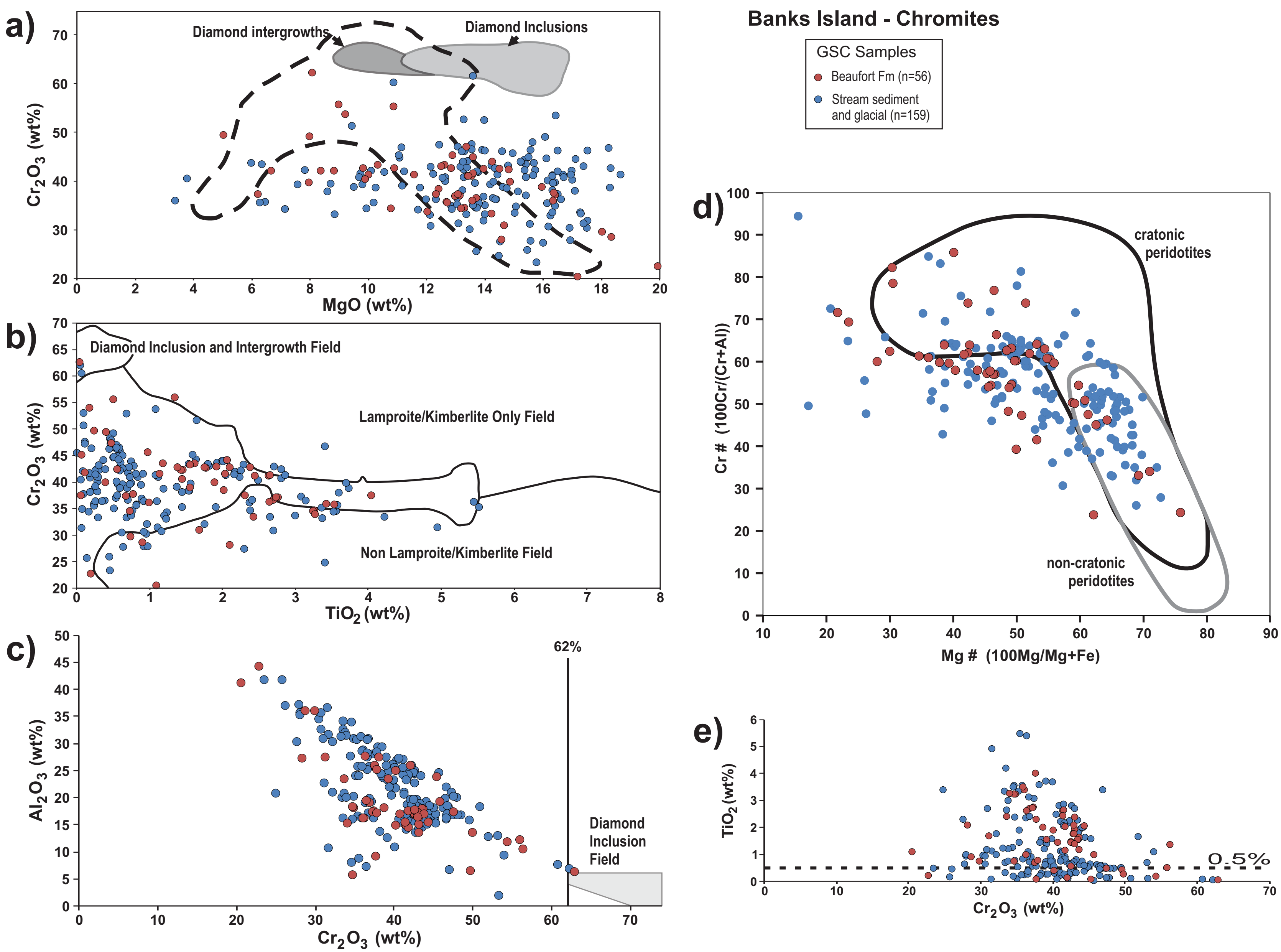

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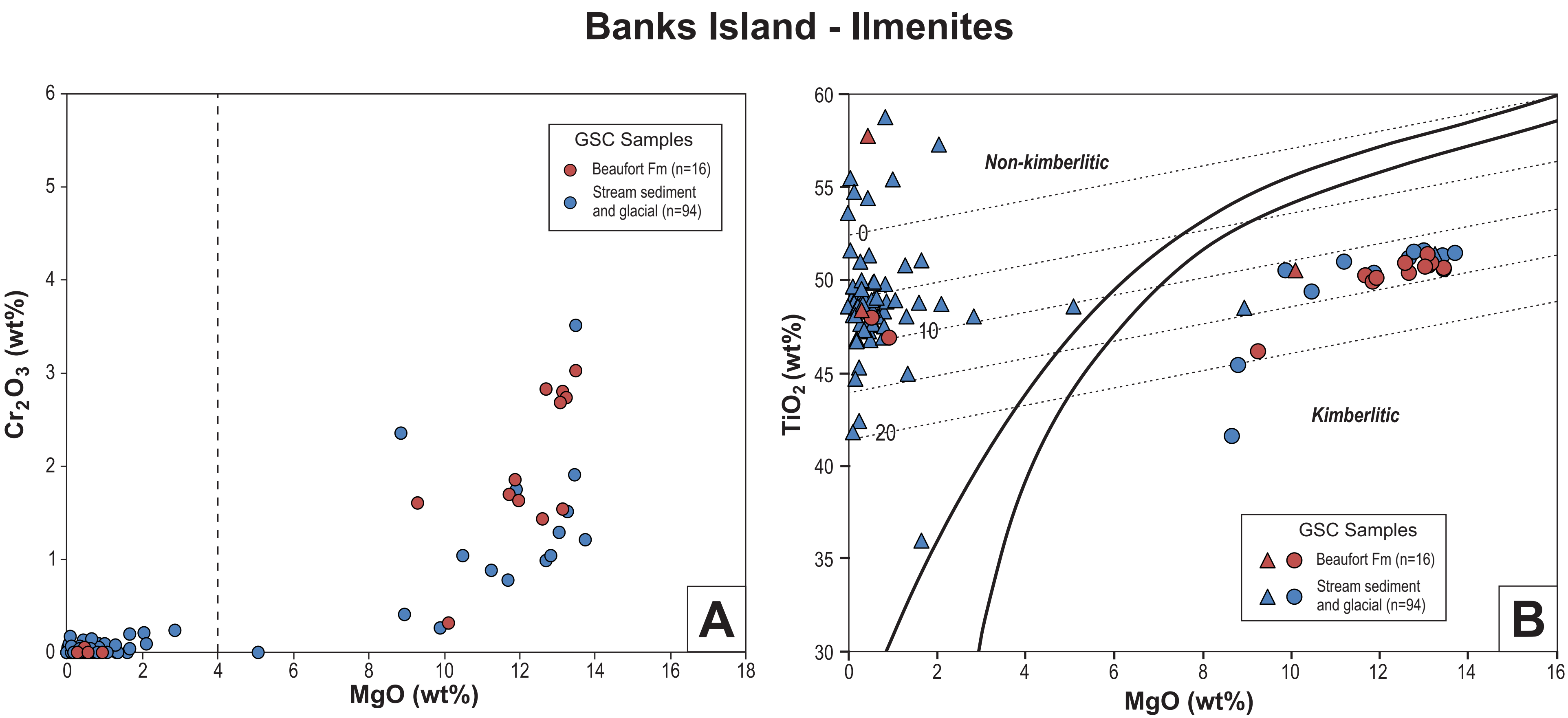

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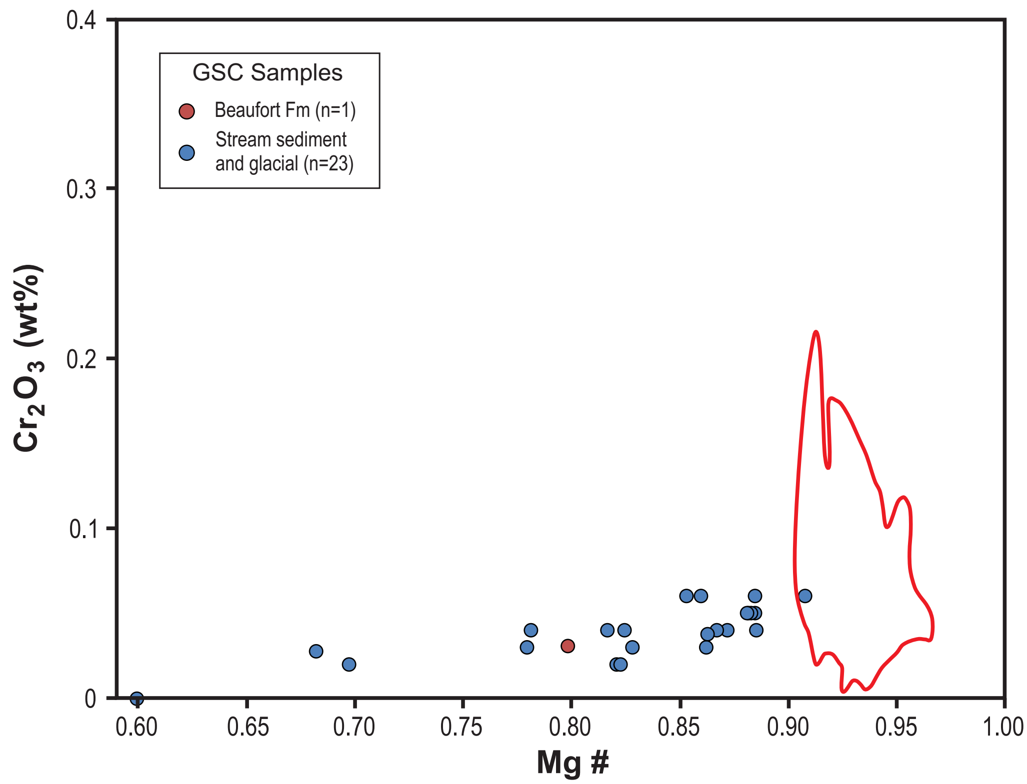

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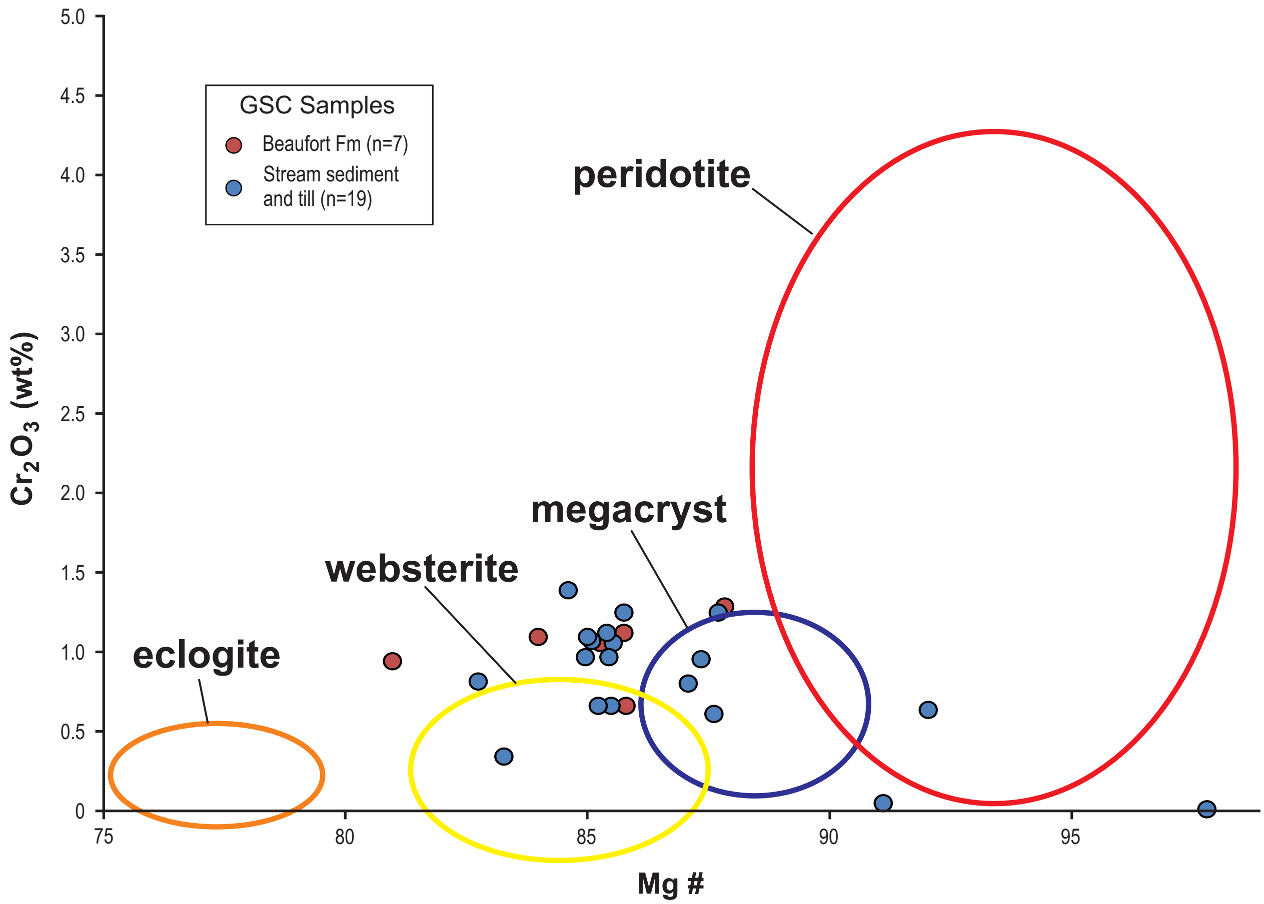

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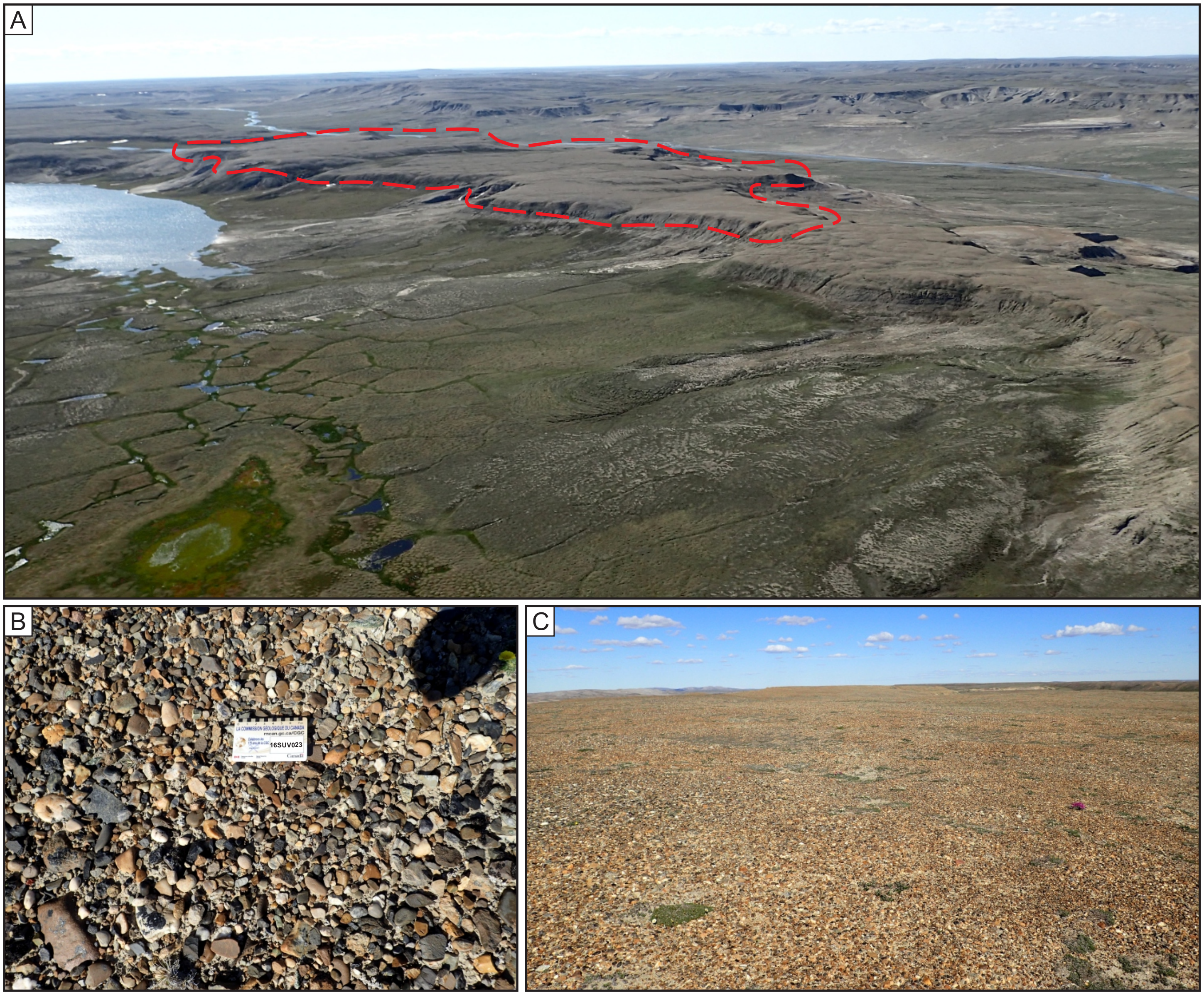

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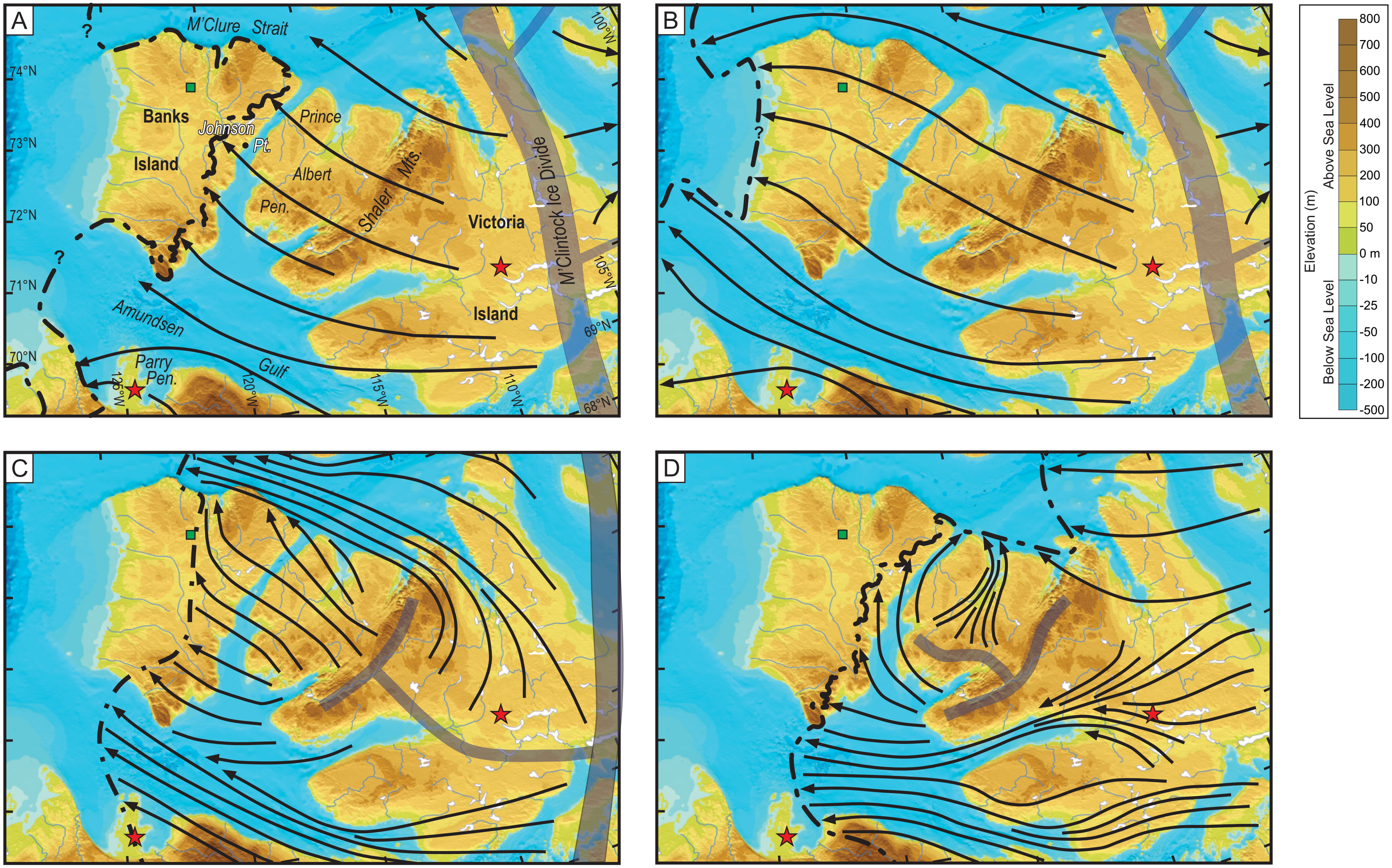

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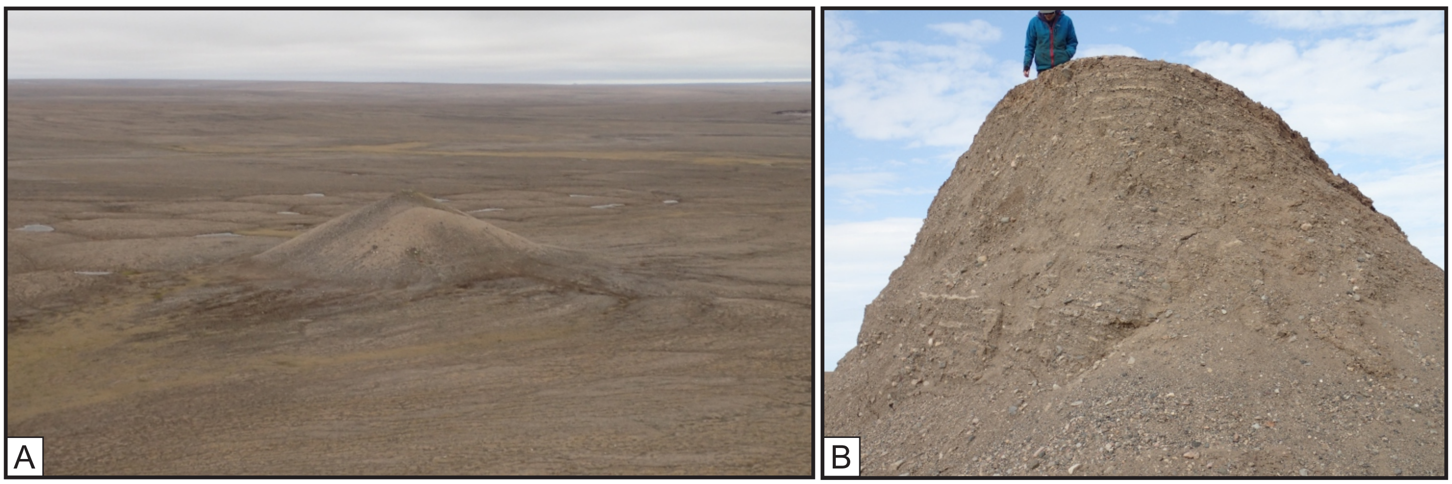

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9. List of Tables

Table 1. Kimberlite indicator and other heavy minerals picked by ODM from the Banks Island samples (or as determined by EPMA), and their chemical composition.

Picked Heavy Minerals Geochemistry

Garnet Group

Al -members

Pyrope $(Mg,Fe,Mn)_3Al_2Si_3O_{12}$

Cr-Pyrope $Mg_3(Al,Cr)_2Si_3O_{12}$

Almandine $Fe^{2+}_3Al_2Si_3O_{12}$

Spessartine $Mn_3Al_2Si_3O_{12}$

Ca -members

Grossular $Ca_3Al_2Si_3O_{12}$

Andradite $Ca_3Fe^{3+}_2Si_3O_{12}$

Clinopyroxene

Augite $(Ca,Na)(Mg,Fe,Al)(Al,Si)_2O_6$

Diopside $CaMgSi_2O_6$

Hedenbergite $CaFeSi_2O_6$

Chrome Diopside $Ca(Mg,Cr)Si_2O_6$

Bronzite (Enstatite) $Mg_2Si_2O_6$

Others

Barite BaSO4

Chalcopyrite $CuFeS_2$

Clinochlore (chlorite) $Mg_5Al(AlSi_3O_{10})(OH)_8$

Corundum Al_2O_3

Epidote $Ca_2(Al_2Fe^{3+})[Si_2O_7]O(OH)$

Fluorite CaF_2

Galena PbS

Hematite Fe_2O_3

Kyanite $Al_2(SiO_4)O$

Malachite $Cu_2(CO_3)(OH)_2$

Pseudorutile $Fe_2Ti_3O_9$

Pyrite FeS_2

Rutile TiO_2

Siderite $FeCO_3$

Sphalerite ZnS

Staurolite $Fe^{2+}Al_9Si_4O_{23}(OH)$

Titanite $CaTi(SiO_4)O$

Spinel Group

Aluminium Spinels

Spinel $MgAl_2O_4$

Gahnite $ZnAl_2O_4$

Hercynite $FeAl_2O_4$

Chromium Spinels

Chromite $FeCr_2O_4$

Olivine

Forsterite Mg_2SiO_4

Fayalite Fe_2SiO_4

Mg-ilmenite

$(Fe^{2+},Mg)TiO_3$

10. List of Appendices

Appendix 1A. Banks Island KIM samples – Field Sample Data

Appendix 1B. Metadata

Appendix 2. Kimberlite Indicator Mineral counts by ODM – Spiked blanks and duplicate samples

Appendix 3A. Overburden Drilling Management Report (2015)

Appendix 3B. Overburden Drilling Management Report (2016)

Appendix 4. Corrected GSC Banks Island KIM processing and picking data

Appendix 5. GSC Banks Island KIM photographs

Appendix 6. KIM Electron Probe Micro-analyser (EPMA) chemistry

Appendix 7. KIM LA-ICPMS rare earth element (REE) chemistry

Appendix 8. Ni-in-Garnet geothermometry

Appendix 1A

Geological Survey of Canada
Banks Island KIM samples - FIELD SAMPLE DATA

Site No.	Field Sample Weight (kg)	Material	Site Notes	Processing	Blanks and Duplicates	Geologist	Easting	Northing	Datum	UTM Zone	NTS Sheet	Latitude	Longitude	Territory
15SUV001	24.9	stream sediments	head of mid-channel bar	wet-sieved (<2.38 mm)		Rod Smith	454857.52	8128944.87	NAD 83	11	88C06	73.25042167	-118.40349032	NWT
15SUV002	22.4	stream sediments	boulder traps	wet-sieved (<2.38 mm)		Rod Smith	457959.94	8132504.44	NAD 83	11	88C06	73.28295165	-118.30949029	NWT
15SUV003	21.7	stream sediments	fan apex, boulder traps	wet-sieved (<2.38 mm)		Rod Smith	456241.55	8133225.38	NAD 83	11	88C06	73.28906833	-118.36350859	NWT
15SUV004	27.9	stream sediments	mid-channel bar; stream below RTS[1]	wet-sieved (<2.38 mm)		Rod Smith	447943.83	8080396.03	NAD 83	11	88B14	72.81381835	-118.57857278	NWT
15SUV005	23.0	stream sediments	fan apex, boulder traps	wet-sieved (<2.38 mm)		Rod Smith	444098.84	8084919.80	NAD 83	11	88B14	72.85341337	-118.69899266	NWT
15SUV006	22.4	stream sediments	boulder traps	wet-sieved (<2.38 mm)		Rod Smith	449771.18	8078516.82	NAD 83	11	88B14	72.79740167	-118.52173949	NWT
15SUV008	26.5	stream sediments	dry stream bed	bulk		Rod Smith	458685.61	8142048.90	NAD 83	11	88C06	73.36862832	-118.29332179	NWT
15SUV009	25.3	stream sediments	dry stream bed	bulk		Rod Smith	457837.63	8143428.04	NAD 83	11	88C06	73.38082165	-118.32081176	NWT
15SUV010	25.6	stream sediments	dry stream bed	wet-sieved (<2.38 mm)		Rod Smith	475603.60	8154097.05	NAD 83	11	88C07	73.47922657	-117.76864510	NWT
15SUV014	20.1	stream sediments	head of point bar at fan apex	wet-sieved (<2.38 mm)		Rod Smith	466238.53	8154831.07	NAD 83	11	88C06	73.48451828	-118.06406164	NWT
15SUV015	24.2	Beaufort Fm. (fluvial)	2+ m slump headwall exposure	bulk		Rod Smith	466865.00	8154422.00	NAD 83	11	88C06	73.48095108	-118.04409602	NWT
15SUV017	18.6	glaciofluvial		bulk	Bathurst blank #98									
15SUV018	21.9	Beaufort Fm. (fluvial)	dug pit; 0.7 m	bulk		Rod Smith	434707.70	8155675.96	NAD 83	11	88C05	73.48470678	-119.05811461	NWT
15SUV019	27.3	Beaufort Fm. (fluvial)	dug pit; 1 m; field duplicate sample of 15SUV018	bulk	duplicate of 15SUV018	Rod Smith	434688.84	8155700.05	NAD 83	11	88C05	73.48491678	-119.05873461	NWT
15SUV020	24.0	stream sediments	boulder traps	wet-sieved (<2.38 mm)		Rod Smith	427838.92	8149909.81	NAD 83	11	88C05	73.43082848	-119.26752965	NWT
15SUV021	23.2	stream sediments	boulder traps	wet-sieved (<2.38 mm)		Rod Smith	483399.39	8128795.81	NAD 83	11	88C07	73.25318985	-117.51616231	NWT
15SUV022	23.9	till	Morgan Bluff, lowermost pink till[2]	bulk		Rod Smith	403441.28	8016508.32	NAD 83	11	88B04	72.22682188	-119.83505177	NWT
15SUV023	21.9	till	Morgan Bluff, lowermost pink till[3]	bulk		Rod Smith	403886.47	8016404.92	NAD 83	11	88B04	72.22608355	-119.82185844	NWT
15SUV024	16.6	fluvial	Morgan Bluff; preglacial gravel[4]	dry-sieved (<2.38 mm)		Rod Smith	403266.93	8016636.24	NAD 83	11	88B04	72.22789355	-119.84034010	NWT
15SUV025	19.6	stream sediments	head of point bar; boulder traps	wet-sieved (<2.38 mm)		Rod Smith	519970.13	8164310.57	NAD 83	11	88C09	73.57123800	-116.36739211	NWT
15SUV026	19.9	stream sediments	head of point bar; boulder traps	wet-sieved (<2.38 mm)		Rod Smith	524684.22	8163444.27	NAD 83	11	88C09	73.56297298	-116.21843552	NWT
15SUV027	22.0	stream sediments	head of point bar; boulder traps	wet-sieved (<2.38 mm)		Rod Smith	539064.70	8167008.20	NAD 83	11	88D12	73.59273457	-115.76088398	NWT
15SUV028	25.4	Beaufort Fm. (fluvial)	dug pit; 0.7 m	bulk		Rod Smith	338951.33	8094936.39	NAD 83	10	98A15	72.89114725	-121.90956009	NWT
15SUV029	16.6	till		bulk	Linton blank #4									
15SUV030	24.7	Beaufort Fm. (fluvial)	dug pit; 0.5 m	bulk		Rod Smith	328245.00	8084207.27	NAD 83	10	98A14	72.78725563	-122.20594700	NWT
15SUV031	15.3	stream sediments	head of mid-channel bar	wet-sieved (<2.38 mm)		Rod Smith	430320.87	8091658.60	NAD 83	11	88B13	72.90985178	-119.12466907	NWT
15SUV032	19.6	stream sediments	mid-channel boulder traps	wet-sieved (<2.38 mm)		Rod Smith	444117.96	8100794.57	NAD 83	11	88B14	72.99566338	-118.71219071	NWT
15SUV033	22.1	stream sediments	boulder traps below stream confluence	wet-sieved (<2.38 mm)		Rod Smith	458769.83	8093461.24	NAD 83	11	88B14	72.93320163	-118.25871100	NWT
15SUV050	22.0	stream sediments	mid-channel boulder traps	wet-sieved (<2.38 mm)		Landen Powell	495777.75	8145017.61	NAD 83	11	88C07	73.39920300	-117.13240210	NWT
15SUV051	20.1	stream sediments	mid-channel boulder traps	dry-sieved (<2.38 mm)		Landen Powell	495772.54	8134535.16	NAD 83	11	88C07	73.30523800	-117.13184080	NWT
15SUV052	30.2	stream sediments	mid-channel bar; stream below RTS[1]	wet-sieved (<2.38 mm)		Landen Powell	428187.09	8089267.22	NAD 83	11	88B13	72.88774100	-119.18701410	NWT
15SUV053	25.0	stream sediments	dry stream bed	wet-sieved (<2.38 mm)		Landen Powell	437108.81	8093873.99	NAD 83	11	88B14	72.93175100	-118.92000925	NWT
15SUV054	18.7	till	dug pit; 0.5 m	dry-sieved (<2.38 mm)		Landen Powell	440878.11	8108920.91	NAD 83	11	88C03	73.06762000	-118.81895377	NWT
15SUV055	13.1	stream sediments	duplicate sample of 15SUV031	wet-sieved (<2.38 mm)	split of 15SUV031	Rod Smith	430320.87	8091658.60	NAD 83	11	88B13	72.90985178	-119.12466907	NWT
16SUV013	22.9	glaciofluvial	dug 2.5 below bluff face of GF terrace[5]	bulk		Rod Smith	280578.27	7914804.06	NAD 83	10	97H04	71.23578240	-123.12088863	NWT
16SUV014	21.3	stream sediments	mid-channel bar; boulder traps	wet-sieved (<2.38 mm)		Rod Smith	276658.25	7922431.42	NAD 83	10	97H05	71.30018409	-123.25133534	NWT
16SUV015	25.1	stream sediments	apex of tributary fan	wet-sieved (<2.38 mm)		Rod Smith	279999.43	7923737.74	NAD 83	10	97H05	71.31489574	-123.16221521	NWT
16SUV016	21.4	stream sediments	mid-channel boulder traps	wet-sieved (<2.38 mm)		Rod Smith	291585.58	7929184.59	NAD 83	10	97H06	71.37376570	-122.85460483	NWT
16SUV017	26.6	glaciofluvial	Duck Hawk Bluffs; lowermost glaciofluvial[6]	bulk		Rod Smith	200433.72	8006147.38	NAD 83	10	97G15	71.96014768	-125.69395117	NWT
16SUV018	23.3	glaciofluvial	Duck Hawk Bluffs; uppermost glaciofluvial[7]	bulk		Rod Smith	200433.91	8006154.31	NAD 83	10	97G15	71.96020935	-125.69397451	NWT
16SUV019	15.1	till	Duck Hawk Bluffs; lower till[8]	bulk		Rod Smith	200156.60	8006180.55	NAD 83	10	97G15	71.96008435	-125.70201460	NWT
16SUV020	16.5	till	Duck Hawk Bluffs; lower till[9]	bulk		Rod Smith	200433.14	8006082.02	NAD 83	10	97G15	71.95956768	-125.69369617	NWT
16SUV021	16.6	till		bulk	Linton blank #22									
16SUV022	23.2	sandstone	planar cross-bed, unconsolidated Isachsen Fm	bulk		Rod Smith	402147.87	8172799.58	NAD 83	10	98D09	73.62542696	-120.11093395	NWT
16SUV023	26.2	Beaufort Fm. (fluvial)	dug pit; 0.5 m; peneplain 150 m x >1 km	bulk		Rod Smith	377188.23	8180819.82	NAD 83	10	98D09	73.68402210	-120.91904192	NWT
16SUV024	23.4	sandstone	Isachsen Fm; cross-bed and pebble-boulder conglomerate	dry-sieved (<2.38 mm)		Rod Smith	460531.75	8240666.22	NAD 83	11	88F06	74.25273334	-118.30295822	NWT
16SUV025	23.7	stream sediments	mid-channel bar, scour fill	wet-sieved (<2.38 mm)		Rod Smith	463295.66	8155067.82	NAD 83	11	88C06	73.48614996	-118.15693327	NWT
16SUV026	23.1	Beaufort Fm. (fluvial)	Beaufort Fm terrace; bluff face 3 m below top	bulk		Rod Smith	463571.72	8154100.11	NAD 83	11	88C06	73.47752496	-118.14764829	NWT
16SUV027	20.5	stream sediments	gravel-armoured channel; numerous kames around	wet-sieved (<2.38 mm)		Rod Smith	381197.27	8106088.64	NAD 83	10	98D01	73.01785704	-120.64624670	NWT
16SUV028	29.6	stream sediments	mid-channel bar, boulder traps; gravel-armoured channel	wet-sieved (<2.38 mm)		Rod Smith	390652.11	8087084.01	NAD 83	10	98A16	72.85273198	-120.32439878	NWT
16SUV029	17.2	glaciofluvial		bulk	Bathurst blank #103									
16SUV030	18.3	stream sediments	mid-channel boulder traps	wet-sieved (<2.38 mm)		Barrett Elliott	487544.60	7934701.80	NAD 83	10	97H12	71.51347000	-123.35195000	NWT

[1]Sample collected in stream draining an active Retrogressive Thaw Slide (RTS)
[2]Morgan Bluff section; ~30 m above base; 75 cm thick till; Lithofacies 4.3 of Lakeman and England (2014)
[3]Morgan Bluff section; ~30 m above base; 70 cm thick till; Lithofacies 4.3 of Lakeman and England (2014); 200 m east of site 15SUV022
[4]Morgan Bluff section; preglacial/interglacial fluvial deposits; Section 3, Lithofacies 3 of Lakeman and England (2014) and the Morgan Bluff's Fm of Vincent (1982, 1983)
[5]Ice-contact glaciofluvial terrace that Vincent (1983) had previously identied a Beaufort Fm deposit
[6]Duck Hawk Bluffs; lowermost glaciofluvial outwash; West Cliff, lithofacies LFA 1 of Evans et al. (2014); 5 m above sea level; near base of LFA 1 section
[7]Duck Hawk Bluffs; lowermost glaciofluvial outwash; West Cliff, lithofacies LFA 1 of Evans et al. (2014); 20 m above sea level; near top of LFA 1 section
[8]Duck Hawk Bluffs; West Cliff, lower till, lithofacies LFA 3 of Evans et al. (2014); 26 m above sea level (base of LFA 3 section)
[9]Duck Hawk Bluffs; West Cliff, lower till, lithofacies LFA 3 of Evans et al. (2014); 30 m above sea level (mid-upper part of LFA 3 section)

Appendix 1B Metadata

Project and Sample Metadata

Metadata Category	OF 8726
Project Lead Name	Rod Smith
	Northwest Territories
Project or Activity Name	Banks Island activity in Western Arctic Margins Project
Funding Source	GEM-2
Datum for sample location coordinates	NAD83
Context of current work as it relates to earlier or ongoing work	Compilation and dissemination of all 2015 and 2016 sample analytical results. No prior release of data.
Supporting Publications	Report of Activities – GSC Open File 7972 and 8150
Sampling Access Method	helicopter
Sampling Design/Pattern	Focussed on retrieval of samples from areas industry had reported higher KIM recoveries (enabling more detailed chemical analysis of KIMs); collections in areas beyond those sampled by industry (e.g., Aulavik NP); collections to test new models of glacial history; collections to test for potential bedrock inheritance of KIMs from areas of known and previously unidentified Beaufort Formation strata.
Sampling Method	Stream sediment samples (wet sieved in field at 2.38 mm) and hand dug pits (bulk samples)
Sample Medium/Media Number of samples for each medium	17 bulk samples (7 Beaufort Fm., 4 till, 3 glaciofluvial, 2 stream sediments (dry stream beds), 1 bedrock (unconsolidated) 31 sieved samples (28 stream sediments, 1 glaciofluvial, 1 till, 1 bedrock)
Sample Density	n/a
Sample Collection Date Range	July 1-18, 2015 July 4-24, 2016

Sample Preparation Metadata

Lab Name	Screening – mesh size	Screening – Wentworth scale grain size	Methodology	Number of Samples Prepared	Published Reference(s) for the Preparation Techniques Used	Commercial Lab Preparation Package Code
ODM Ltd, Ottawa, Canada	-10 mesh for heavy minerals	< 2mm	<2 mm: ~15-30 kg disaggregated in water and screened at 2 mm	all collected samples prepared	McClenaghan et al., 2013; Plouffe et al., 2013	

Geochemical Analysis Metadata

Part 1 of 2

Lab Name	Work Order# or Certificate Name (usually a number)	Date Samples Submitted to Lab	Date Sample Data Reported to GSC	Size Fraction Analysed	Analytical Digestion (if applicable): list each digestion on a separate line	Analytical Method / Aliquot Mass	Name and Abbreviation of Laboratory's Analytical Package
Arctic Resources Laboratory, U. Alberta, Edmonton, AB, Canada	130833, 130865 136524	11/01/2016 12/12/2016	16/02/2016 03/02/2017	KIM grains (1.0-0.5 mm; 0.5-0.25 mm; 0.25-0.18 mm)	n/a	EPMA LA-ICPMS	

Part 2 of 2

Upper and Lower Detection Limits (for each element)	PDF of Price Brochure	Deviations from Methods Described in Lab Brochure	List Different Types of QA/QC Samples Inserted
	http://www.eas.ualberta.ca/eml/?page=rates http://www.eas.ualberta.ca/ccim/files/MTI-Lab_Costs_2014.pdf		Lab standards used to test and calibrate machines ahead of all batch analyses

Indicator Mineral Metadata

Part 1 of 4

Sample Medium/Media	Number of Samples of Each Medium	Processing Laboratory Name	Mineral Picking Laboratory Name	Work Order Number	Date Samples Submitted to Lab for Processing	Date Sample Data Reported to GSC
Stream sediments, Beaufort Fm. fluvial bedrock, till, glaciofluvial	34: 23 stream seds, (1 duplicate); 5 Beaufort Fm. (1 duplicate), 3 till, 1 glaciofluvial, 2 GSC blanks	Overburden Drilling Management Ltd.	Overburden Drilling Management Ltd.	20157051	08/09/2015	02/12/2015
Beaufort Fm. fluvial bedrock	5 Beaufort Fm.	Overburden Drilling Management Ltd.	Overburden Drilling Management Ltd.	20157051	07/01/2016	05/02/2016
Stream sediments, glaciofluvial, Beaufort Fm. fluvial bedrock, Isachsen sandstone bedrock, till	18: 7 stream seds, 3 glaciofluvial, 2 Beaufort Fm., 2 sandstone bedrock, 2 till, 2 GSC blanks	Overburden Drilling Management Ltd.	Overburden Drilling Management Ltd.	20167295	12/09/2016	25/11/2016

Part 2 of 4

Flow Chart (PDF)	Initial Sample Mass Before Processing (Range)	Grain Size Range Used for Sample Processing	Pre-Concentration Method(s)	Rock Disaggregation Method	Rock Disaggregation Laboratory Name	Name and Density of Heavy Liquid(s)	Ferromagnetic Separation Method
Figure 6	15-30 kg	<2.0 mm	Sieving, panning, tabling			Dilute methylene iodide at SG 3.2	Frantz magnetic separator
Figure 6	HMC fraction; 4-28 g	0.18-0.25 mm	Sieving, panning, tabling			Dilute methylene iodide at SG 3.2	Frantz magnetic separator
Figure 6	15-30 kg	<2.0 mm	Sieving, panning, tabling			Dilute methylene iodide at SG 3.2	Frantz magnetic separator

Part 3 of 4

Size Fractions Prepared	Size Fraction(s) Examined and Picked for Indicator Minerals	% of Heavy Mineral Concentrate Examined for Each Sample	Mineral Identification Method	Mineral Grain Picking Criteria	Mineral Chemistry Determination Method	Mineral Chemistry Lab Name
<0.25 mm, 0.25-0.5 mm, 0.5-1.0 mm, 1.0-2.0 mm	0.25-0.5 mm, 0.5-1.0 mm, 1.0-2.0 mm	100	Binocular microscope, SEM	KIM, MMSIM, gold grains	EPMA, LA-ICPMS	Arctic Resources Laboratory, U. Alberta, Edmonton, Canada
0.18-0.25 mm	0.18 – 0.25 mm	100	Binocular microscope, SEM	KIM	EPMA, LA-ICPMS	Arctic Resources Laboratory, U. Alberta, Edmonton, Canada
. <0.25 mm, 0.25-0.5 mm, 0.5-1.0 mm, 1.0-2.0 mm	0.25-0.5 mm, 0.5-1.0 mm, 1.0-2.0 mm (all samples); 0.18-0.25 mm (1 sample)	100	Binocular microscope, SEM	KIM, MMSIM, gold grains	EPMA, LA-ICPMS	Arctic Resources Laboratory, U. Alberta, Edmonton, Canada

Part 4 of 4

Report Mineral Count Data as Raw Data Reported by the Picking Laboratory	Report mineral count data corrected for minerals as confirmed by EMP, SEM or other methods	Report mineral count data as values normalized to total mass of sediment processed: (e.g. number of grains per 10 kg table feed)
Appendix_3A_ODM_2015.xls	Appendix_4.xls; Tab 4C	Appendix_4.xls; Tab 4D
Appendix_3A_ODM_2015.xls	Appendix_4.xls; Tab 4C	Appendix_4.xls; Tab 4D
Appendix_3B_ODM_2016.xls	Appendix_4.xls; Tab 4C	Appendix_4.xls; Tab 4D

Appendix 2

Geological Survey of Canada
Banks Island KIM samples - KIMBERLITE INDICATOR MINERAL COUNTS BY ODM - SPIKED BLANKS AND DUPLICATE SAMPLES

Sample Number	Sample Material[1]	Sample Type	Base Material	Result Types	Number of Grains																											
					Selected MMSIMs[2]									KIMs[3]																		
					1.0 to 2.0 mm			0.5 to 1.0 mm			0.25 to 0.5 mm			1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						Total (KIMs)
					Low-Cr diopside	Cpy	Gh	Low-Cr diopside	Cpy	Gh	Low-Cr diopside	Cpy	Gh	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	
15SUV017	R	Spiked sample	Bathurst blank #98	Lab results	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	6	0	0	0	6	0	0	0	0	0	0	0	17
				Expected counts										2	0	0	0	2	3	6	0	0	0	6	0	0	0	0	0	0	0	19
				%'age recovered										100				0	100	100				100								89.5
15SUV018	BFm	Primary KIM Sample		Lab results	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
				Expected counts																												
15SUV019	BFm	Duplicate KIM Sample		Lab results	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
				Expected counts																												
15SUV029	T	Spiked sample	Linton blank #4	Lab results	0	0	0	0	0	0	4	0	0	3	0	0	0	1	2	3	0	0	0	4	0	0	0	0	0	0	0	13
				Expected counts										2	0	0	0	2	2	5	0	0	0	5	0	0	0	0	0	0	0	16
				%'age recovered										*150				50	100	60				80								81.3
15SUV031	SS	Primary KIM Sample		Lab results	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
				Expected counts																												
15SUV055	SS	Duplicate KIM Sample		Lab results	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				Expected counts																												
16SUV021	T	Spiked sample	Linton blank #22	Lab results	0	0	0	3	1	0	3	6	0	0	0	0	0	0	0	3	0	0	1	0	0	0	1	0	0	2	20	27
				Expected counts										0	0	0	0	0	0	3	0	0	2	0	0	0	0	4	2	4	5	20
				%'age recovered																100			50				*	0	0	50	*400	55
16SUV029	R	Spiked sample	Bathurst blank #103	Lab results	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	5	3	12
				Expected counts										0	0	0	0	0	0	4	0	0	1	0	0	0	0	1	5	5	5	21
				%'age recovered																100			0					0	0	100	60	57.1

[1]Sample Material: BFm=Beaufort Formation, R=bedrock (grus), SS=stream sediment, T=till

[2]Metamorphosed/Magmatic Massive Sulphide Indicator Minerals; Cpy=Chalcopyrite, Gh=Gahnite

[3]Kimberlite Indicator Minerals: CR=Chromite, DC=Cr-diopside, FO=forsterite, GO=Eclogitic garnet, GP=Peridotitic garnet, IM=Mg-ilmenite

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)

OVERBURDEN DRILLING MANAGEMENT LIMITED
107-15 CAPELLA COURT, NEPEAN, ONTARIO, K2E 7X1
TELEPHONE: (613) 226-1771
FAX NO.: (613) 226-8753
EMAIL: odm@storm.ca

D A T A T R A N S M I T T A L R E P O R T

DATE: **42405.66813**

ATTENTION: **Mr. Rod Smith**

CLIENT: **Geological Survey of Canada**
Rm 166 - 3303-33 Street N.W.
Calgary, AB
T2L 2A7

E-mail **rod.smith@nrcan.gc.ca**

NO. OF PAGES:

PROJECT: **Banks Island**

FILE NAME: **20157051 - GSC - Smith - (15SUV) - October 2015**

SAMPLE NUMBERS: **15SUV-001 to 055**

BATCH NUMBER: **see list at right**

NO. OF SAMPLES: **see list at right**

THESE SAMPLES WERE PROCESSED FOR: **KIMBERLITE INDICATORS**
Selected MMSIMs

SPECIFICATIONS:

1. 0.18 to 0.25 mm fraction from selected samples processed and picked for additional KIM and selected MMSIM indicator mineral grains.

REMARKS: ____________________

____

Remy Huneault, P.Geo.
President

Page #	Batch #	Sent	Sample Numbers
1	**7051**	**12 Jan 16**	**15SUV001 to 006, 008 to 010, 014, 015 and 017 to 025**
2	**7052**	**12 Jan 16**	**15SUV026 to 033 and 050 to 055**
1	**7127**	**03 Feb 16**	**15SUV-015, 018, 019, 028 and 030. (0.18 to 0.25 mm extra grain picking)**

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
GOLD GRAIN SUMMARY SHEET
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine	(g)	Total	Reshaped	Modified	Pristine
15SUV001	1	1	0	0	96.4	10	10	0	0
15SUV002	0	0	0	0	72.4	0	0	0	0
15SUV003	0	0	0	0	70.8	0	0	0	0
15SUV004	0	0	0	0	101.6	0	0	0	0
15SUV005	1	0	1	0	80.0	1	0	1	0
15SUV006	0	0	0	0	80.8	0	0	0	0
15SUV008	0	0	0	0	36.0	0	0	0	0
15SUV009	1	1	0	0	45.6	1	1	0	0
15SUV010	0	0	0	0	92.8	0	0	0	0
15SUV014	0	0	0	0	74.0	0	0	0	0
15SUV015	0	0	0	0	32.8	0	0	0	0
15SUV017	1	0	0	1	71.6	<1	0	0	<1
15SUV018	0	0	0	0	43.6	0	0	0	0
15SUV019	1	1	0	0	52.8	28	28	0	0
15SUV020	1	1	0	0	86.4	133	133	0	0
15SUV021	1	1	0	0	84.8	<1	<1	0	0
15SUV022	0	0	0	0	80.4	0	0	0	0
15SUV023	0	0	0	0	75.2	0	0	0	0
15SUV024	0	0	0	0	62.0	0	0	0	0
15SUV025	0	0	0	0	72.4	0	0	0	0
15SUV026	1	1	0	0	72.4	52	52	0	0
15SUV027	0	0	0	0	78.0	0	0	0	0
15SUV028	0	0	0	0	31.6	0	0	0	0
15SUV029	0	0	0	0	55.2	0	0	0	0
15SUV030	0	0	0	0	53.6	0	0	0	0
15SUV031	0	0	0	0	57.6	0	0	0	0
15SUV032	0	0	0	0	73.2	0	0	0	0
15SUV033	0	0	0	0	88.0	0	0	0	0
15SUV050	0	0	0	0	76.8	0	0	0	0
15SUV051	0	0	0	0	66.4	0	0	0	0
15SUV052	1	0	1	0	107.2	13	0	13	0
15SUV053	2	1	1	0	92.0	127	125	2	0
15SUV054	0	0	0	0	64.0	0	0	0	0
15SUV055	1	1	0	0	48.8	8	8	0	0

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
DETAILED GOLD GRAIN SHEET
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight*	Calculated V.G. Assay in HMC	Metallic Minerals in Pan Concentrate
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total	(g)	(ppb)	
15SUV001	Yes	18 C	75	100	1			1		10	~10 grains pyrite (25-50µm).
								1	96.4	10	
15SUV002	Yes	NO VISIBLE GOLD									~200 grains pyrite (25-100µm).
15SUV003	Yes	NO VISIBLE GOLD									1 grain galena (75µm). ~100 grains pyrite (25-100µm).
15SUV004	Yes	NO VISIBLE GOLD									~10 grains galena (75-100µm). ~2000 grains pyrite (25-250µm). ~5000 grains marcasite (25-100µm).
15SUV005	Yes	8 C	25	50		1		1		1	~0.5% pyrite (25-1000µm).
								1	80.0	1	~200 grains marcasite (25-75µm).
15SUV006	Yes	NO VISIBLE GOLD									~2000 grains pyrite (25-1000µm). ~200 grains marcasite (25-75µm).
15SUV008	Yes	NO VISIBLE GOLD									~10 grains pyrite (25-50µm).
15SUV009	Yes	5 C	25	25	1			1		1	~10 grains pyrite (25-50µm).
								1	45.6	1	
15SUV010	Yes	NO VISIBLE GOLD									~10 grains pyrite (25-50µm).
15SUV014	Yes	NO VISIBLE GOLD									~500 grains pyrite (25-100µm). ~500 grains marcasite (25-50µm).
15SUV015	Yes	NO VISIBLE GOLD									~1% pyrite (25-1000µm). ~1% marcasite (25-100µm).
15SUV017	Yes	5 C	25	25			1	1		<1	No Sulphides.
								1	71.6	<1	
15SUV018	Yes	NO VISIBLE GOLD									~30 grains galena (25-500µm). ~20 grains pyrite (25-100µm).
15SUV019	Yes	20 C	75	125	1			1		28	~5000 grains pyrite (25-250µm).
								1	52.8	28	Gold grain vialed.
15SUV020	Yes	50 M	150	200	1			1		133	~100 grains pyrite (25-100µm).
								1	86.4	133	
15SUV021	Yes	5 C	25	25	1			1		<1	~2000 grains pyrite (25-250µm).
								1	84.8	<1	~200 grains marcasite (25-75µm).
15SUV022	Yes	NO VISIBLE GOLD									~0.5% pyrite (25-1000µm).
15SUV023	Yes	NO VISIBLE GOLD									~5000 grains pyrite (25-1000µm).
15SUV024	Yes	NO VISIBLE GOLD									~1000 grains pyrite (25-250µm). ~1000 grains marcasite (25-50µm).
15SUV025	Yes	NO VISIBLE GOLD									~2000 grains pyrite (25-250µm).
15SUV026	Yes	50 M	75	125	1			1		52	~20 grains pyrite (25-50µm).
								1	72.4	52	
15SUV027	Yes	NO VISIBLE GOLD									~0.5% pyrite (25-1000µm). ~0.5% marcasite (25-75µm).
15SUV028	Yes	NO VISIBLE GOLD									~20 grains pyrite (25-100µm). 5 grains marcasite (50-75µm).

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
DETAILED GOLD GRAIN SHEET
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight*	Calculated V.G. Assay in HMC	Metallic Minerals in Pan Concentrate
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total	(g)	(ppb)	
15SUV029	Yes	NO VISIBLE GOLD									No Sulphides.
15SUV030	Yes	NO VISIBLE GOLD									~20 grains pyrite (25-75µm).
15SUV031	Yes	NO VISIBLE GOLD									~1000 grains pyrite (25-250µm).
15SUV032	Yes	NO VISIBLE GOLD									~5000 grains pyrite (25-1000µm). ~50 grains marcasite (25-75µm).
15SUV033	Yes	NO VISIBLE GOLD									5 grains galena (50-75µm). ~0.5% pyrite (25-1000µm). ~0.5% marcasite (25-100µm).
15SUV050	Yes	NO VISIBLE GOLD									~50 grains pyrite (25-100µm).
15SUV051	Yes	NO VISIBLE GOLD									~100 grains pyrite (25-100µm).
15SUV052	Yes	25 M	50	125		1		1		13	~2000 grains pyrite (25-1000µm).
								1	107.2	13	~2000 grains marcasite (25-100µm).
15SUV053	Yes	10 C	25	75		1		1		2	~2000 grains pyrite (25-1000µm).
		50 M	125	225	1			1		125	~500 grains marcasite (25-100µm).
								2	92.0	127	
15SUV054	Yes	NO VISIBLE GOLD									No Sulphides.
15SUV055	Yes	13 C	50	75	1			1		8	~1000 grains pyrite (25-250µm).
								1	48.8	8	~50 grains marcasite (25-75µm).

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
LABORATORY SAMPLE LOG
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Weight (kg wet)					Sample Description												CLASS
						Clasts (> 2.0 mm)*					Matrix (<2.0 mm)							
							Percentage				Distribution					Colour		
	Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	ORG	SD	CY	
15SUV001	24.9	0.0	24.9	0.8	24.1	G	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
15SUV002	22.4	0.0	22.4	4.3	18.1	P	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
15SUV003	21.7	0.0	21.7	4.0	17.7	G	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
15SUV004	27.9	0.0	27.9	2.5	25.4	G	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
15SUV005	23.0	0.0	23.0	3.0	20.0	G	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
15SUV006	22.4	0.0	22.4	2.2	20.2	G	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
15SUV008	26.5	0.0	26.5	17.5	9.0	C	100	Tr	0	0	S	FMC	Y	N	N	OC	NA	SAND + GRAVEL
15SUV009	25.3	0.0	25.3	13.9	11.4	C	100	Tr	0	0	S	FMC	Y	N	N	OC	NA	SAND + GRAVEL
15SUV010	25.6	0.0	25.6	2.4	23.2	G	100	Tr	0	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
15SUV014	20.1	0.0	20.1	1.6	18.5	G	100	Tr	0	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
15SUV015	24.2	0.0	24.2	16.0	8.2	C	100	Tr	0	0	S	FMC	Y	N	N	DOC	NA	SAND + GRAVEL
15SUV017	18.6	0.0	18.6	0.7	17.9	G	0	100	0	0	S	FM	-	N	N	OC	NA	SAND + GRAVEL
15SUV018	21.9	0.0	21.9	11.0	10.9	P	100	Tr	0	0	S	FMC	Y	N	N	DOC	NA	SAND + GRAVEL
15SUV019	27.3	0.0	27.3	14.1	13.2	P	95	Tr	5	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
15SUV020	24.0	0.0	24.0	2.4	21.6	G	95	5	0	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
15SUV021	23.2	0.0	23.2	2.0	21.2	G	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
15SUV022	23.9	0.0	23.9	3.8	20.1	P	100	Tr	0	0	U	-	+	+	N	LOC	LOC	TILL
15SUV023	21.9	0.0	21.9	3.1	18.8	P	100	Tr	0	0	U	-	+	+	N	LOC	LOC	TILL
15SUV024	16.6	0.0	16.6	1.1	15.5	G	100	Tr	0	0	S	MC	-	N	N	DOC	NA	SAND + GRAVEL
15SUV025	19.6	0.0	19.6	1.5	18.1	G	100	Tr	0	0	S	MC	-	N	N	GY	NA	SAND + GRAVEL
15SUV026	19.9	0.0	19.9	1.8	18.1	G	100	Tr	0	0	S	MC	-	N	N	GY	NA	SAND + GRAVEL
15SUV027	22.0	0.0	22.0	2.5	19.5	G	100	Tr	0	0	S	C	-	N	N	GY	NA	SAND + GRAVEL
15SUV028	25.4	0.0	25.4	17.5	7.9	C	100	Tr	0	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
15SUV029	16.6	0.0	16.6	2.8	13.8	P	10	90	Tr	0	U	+	Y	-	N	LOC	LOC	TILL
15SUV030	24.7	0.0	24.7	11.3	13.4	C	100	Tr	0	0	S	FMC	Y	N	N	OC	NA	SAND + GRAVEL
15SUV031	15.3	0.0	15.3	0.9	14.4	G	100	Tr	0	0	S	MC	N	N	N	LOC	NA	SAND + GRAVEL
15SUV032	19.6	0.0	19.6	1.3	18.3	G	100	Tr	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
15SUV033	22.1	0.0	22.1	0.1	22.0	G	100	Tr	0	0	S	FM	Y	N	N	LOC	NA	SAND + SILT
15SUV050	22.0	0.0	22.0	2.8	19.2	G	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
15SUV051	20.1	0.0	20.1	3.5	16.6	G	100	Tr	Tr	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
15SUV052	30.2	0.0	30.2	3.4	26.8	G	100	Tr	Tr	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
15SUV053	25.0	0.0	25.0	2.0	23.0	G	60	0	40	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
15SUV054	18.7	0.0	18.7	2.7	16.0	C	30	Tr	70	0	U	Y	Y	Y	N	OC	OC	TILL
15SUV055	13.1	0.0	13.1	0.9	12.2	G	30	Tr	70	0	S	MC	N	N	N	LOC	NA	SAND + GRAVEL

APPPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
LABORATORY SAMPLE LOG
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

	Weight (g)													
	<2.0 mm Table Concentrate													
			0.18 to 2.0 mm Heavy Liquid Separation S.G 3.20											
						0.25-2.0 mm HMC S.G.>3.2								
									Nonferromagnetic HMC					
										Processed Split				
										Total				
Sample Number	Total	-0.18 mm	Total	Lights <3.2 S.G.	Total 0.18 to 0.25 mm HMC	Total	<0.25 mm (wash)	Mag HMC	Total	%	Weight	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
15SUV001	1,763.8	512.0	1,251.8	939.5	61.9	250.4	16.7	93.1	140.6	100	140.6	81.2	37.5	21.9
15SUV002	1,453.2	302.0	1,151.2	858.2	32.6	260.4	9.6	105.7	145.1	100	145.1	65.6	45.2	34.3
15SUV003	1,408.2	247.8	1,160.4	853.2	29.8	277.4	11.4	88.5	177.5	100	177.5	77.8	66.2	33.5
15SUV004	2,715.3	1,019.3	1,696.0	1,313.7	106.2	276.1	14.2	120.8	141.1	100	141.1	84.3	33.7	23.1
15SUV005	2,263.7	723.6	1,540.1	1,360.5	29.9	149.7	3.5	58.9	87.3	100	87.3	47.5	27.0	12.8
15SUV006	1,291.9	379.6	912.3	786.0	39.0	87.3	2.8	27.1	57.4	100	57.4	42.1	11.0	4.3
15SUV008	1,112.7	506.2	606.5	574.9	8.9	22.7	2.6	2.5	17.6	100	17.6	11.5	4.4	1.7
15SUV009	1,655.3	530.5	1,124.8	917.2	13.0	194.6	7.3	45.9	141.4	100	141.4	32.0	63.5	45.9
15SUV010	1,764.3	649.9	1,114.4	911.4	23.3	179.7	11.1	23.8	144.8	100	144.8	57.9	61.8	25.1
15SUV014	1,792.4	365.2	1,427.2	1,162.5	20.5	244.2	13.9	43.8	186.5	100	186.5	53.9	78.6	54.0
15SUV015	1,391.1	487.1	904.0	722.6	28.1	153.3	23.5	2.4	127.4	100	127.4	58.1	49.0	20.3
15SUV017	1,367.8	669.3	698.5	481.2	96.6	120.7	14.6	26.0	80.1	100	80.1	72.4	7.5	0.2
15SUV018	961.7	239.5	722.2	683.2	4.3	34.7	0.7	0.6	33.4	100	33.4	7.6	13.4	12.4
15SUV019	1,339.1	362.2	976.9	855.3	25.1	96.5	4.2	0.5	91.8	100	91.8	60.7	22.5	8.6
15SUV020	1,288.3	323.6	964.7	652.9	27.8	284.0	5.9	115.1	163.0	100	163.0	42.9	66.4	53.7
15SUV021	1,021.3	312.7	708.6	582.9	26.0	99.7	2.5	34.7	62.5	100	62.5	35.3	20.5	6.7
15SUV022	930.2	380.8	549.4	546.2	1.1	2.1	0.2	0.4	1.5	100	1.5	0.9	0.4	0.2
15SUV023	958.8	322.9	635.9	633.5	0.9	1.5	0.0	0.4	1.1	100	1.1	0.7	0.3	0.1
15SUV024	1,793.4	460.1	1,333.3	1,312.5	9.8	11.0	0.8	2.4	7.8	100	7.8	6.7	0.8	0.3
15SUV025	1,778.6	788.6	990.0	884.8	17.3	87.9	2.1	12.5	73.3	100	73.3	27.1	15.5	30.7
15SUV026	1,686.1	561.1	1,125.0	949.7	33.4	141.9	2.1	25.5	114.3	100	114.3	48.2	36.2	29.9
15SUV027	1,375.6	290.2	1,085.4	1,013.3	9.3	62.8	3.3	8.1	51.4	100	51.4	18.6	20.0	12.8
15SUV028	1,109.2	245.0	864.2	844.1	4.6	15.5	0.6	1.9	13.0	100	13.0	8.6	2.5	1.9
15SUV029	951.7	511.3	440.4	283.8	68.5	88.1	5.0	8.3	74.8	100	74.8	56.9	15.2	2.7
15SUV030	1,152.7	321.9	830.8	763.8	22.1	44.9	1.8	12.9	30.2	100	30.2	18.4	7.4	4.4
15SUV031	1,502.0	499.1	1,002.9	858.1	47.0	97.8	3.5	38.7	55.6	100	55.6	41.1	10.0	4.5
15SUV032	1,002.4	411.4	591.0	501.1	20.7	69.2	1.4	24.0	43.8	100	43.8	27.6	13.8	2.4
15SUV033	1,085.2	731.8	353.4	322.3	14.8	16.3	0.8	4.7	10.8	100	10.8	7.1	2.8	0.9
15SUV050	1,538.3	499.7	1,038.6	927.7	25.1	85.8	3.0	17.5	65.3	100	65.3	38.4	19.3	7.6
15SUV051	1,294.7	340.5	954.2	792.4	24.6	137.2	3.4	50.4	83.4	100	83.4	47.6	29.2	6.6
15SUV052	1,479.0	584.9	894.1	674.7	58.7	160.7	8.1	74.9	77.7	100	77.7	49.6	20.2	7.9
15SUV053	1,197.0	465.6	731.4	579.7	47.3	104.4	5.4	45.5	53.5	100	53.5	34.7	14.9	3.9
15SUV054	725.9	311.3	414.6	395.9	7.3	11.4	1.2	3.4	6.8	100	6.8	4.7	1.7	0.4
15SUV055	1,417.0	429.0	988.0	860.3	37.8	89.9	4.2	32.9	52.8	100	52.8	38.4	10.3	4.1

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
KIMBERLITE INDICATOR MINERAL COUNTS
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Number of Grains — Selected MMSIMs

Sample Number	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm					
	Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh	
	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
15SUV001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	14	0	0
15SUV002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0
15SUV003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	14	0	0
15SUV004	0	0	0	0	0	0	1	1	7	7	0	0	2	2	100	20	0	0
15SUV005	0	0	0	0	0	0	0	0	1	1	0	0	0	0	15	15	0	0
15SUV006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0
15SUV008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0
15SUV010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0
15SUV014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	0	0
15SUV015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV017	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV018	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9	0	0
15SUV021	0	0	0	0	0	0	1	1	0	0	0	0	1	1	4	4	0	0
15SUV022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0
15SUV026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
15SUV027	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	3	0	0
15SUV028	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	1	1
15SUV029	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0
15SUV030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	13	0	0
15SUV032	0	0	0	0	0	0	0	0	0	0	0	0	9	9	6	6	0	0
15SUV033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
15SUV050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0
15SUV051	0	0	1	1	0	0	0	0	5	5	0	0	0	0	19	19	0	0
15SUV052	0	0	1	1	0	0	0	0	5	5	0	0	1	1	50	20	0	0
15SUV053	0	0	0	0	0	0	0	0	1	1	0	0	0	0	40	20	0	0
15SUV054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
15SUV055	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	13	0	0

Number of Grains — KIMs

Sample Number	1.0 to 2.0 mm												0.5 to 1.0 mm												0.25 to 0.5 mm												Total (KIMs)	
	GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO			
	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
15SUV001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	3	3	21	21	2	2	28	28
15SUV002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	15	0	0	15	15
15SUV003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	1	1	16	16	0	0	19	19
15SUV004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	2	0	0	3	3
15SUV005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1
15SUV006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1
15SUV008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	7	7	8	8
15SUV009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	40	20	1	1	43	23
15SUV010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	2	2
15SUV014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	1	1	1	1	5	5	0	0	9	9
15SUV015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV017	2	2	0	0	0	0	0	0	0	0	3	3	6	6	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17
15SUV018	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	3	3
15SUV019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	2	2
15SUV020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	1	1	0	0	0	0	4	4	35	35	4	4	46	46
15SUV021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	1	1	0	0	1	1	0	0	5	5
15SUV025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1
15SUV026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	1	1	0	0	0	0	0	0	7	7	3	3	13	13
15SUV027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV028	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	2
15SUV029	3	3	0	0	0	0	0	0	1	1	2	2	3	3	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	13
15SUV030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	6	6	0	0	7	7
15SUV031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1
15SUV032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	1	1	4	4
15SUV051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	1	1	3	3	4	4	10	10
15SUV052	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	2	2
15SUV055	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
KIMBERLITE INDICATOR MINERAL PICKING FOOTNOTES
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

SAMPLE NO.	REMARKS:	INPUT ASSEMBLAGE	INPUT REMARKS
15SUV001	Augite/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.	Augite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.
15SUV002	Augite-goethite/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 andradite candidates = 3 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 9 CR candidates = 9 CR; 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; and 3 barite candidates = 3 barite.	Augite-goethite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 andradite candidates = 3 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 9 CR candidates = 9 CR; 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; and 3 barite candidates = 3 barite.
15SUV003	Goethite-orthopyroxene/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 4 CR candidates = 2 CR and 2 hercynite. SEM checks from 0.25-0.5 mm fraction: 2 GO versus almandine candidates = 2 almandine; 14 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 11 CR; 5 FO versus diopside candidates = 5 vesuvianite; and 1 blue-green gahnite versus spinel candidate = 1 hercynite.	Goethite-orthopyroxene/diopside	SEM checks from 0.5-1.0 mm fraction: 4 CR candidates = 2 CR and 2 hercynite. SEM checks from 0.25-0.5 mm fraction: 2 GO versus almandine candidates = 2 almandine; 14 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 11 CR; 5 FO versus diopside candidates = 5 vesuvianite; and 1 blue-green gahnite versus spinel candidate = 1 hercynite.
15SUV004	Augite-goethite/diopside-marcasite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus zircon candidate = 1 GP; 1 blue-green gahnite versus spinel candidate = 1 spinel; 3 sphalerite versus rutile candidates = 3 sphalerite; 1 galena candidate = 1 galena; 5 barite versus diopside candidates = 5 barite; and 5 augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite. Also picked an additional 6 of ~20 sphalerite from 0.25-0.5 mm fraction.	Augite-goethite/diopside-marcasite	SEM checks from 0.25-0.5 mm fraction: 1 GP versus zircon candidate = 1 GP; 1 blue-green gahnite versus spinel candidate = 1 spinel; 3 sphalerite versus rutile candidates = 3 sphalerite; 1 galena candidate = 1 galena; 5 barite versus diopside candidates = 5 barite; and 5 augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite. Also picked an additional 6 of ~20 sphalerite from 0.25-0.5 mm fraction.
15SUV005	Augite/diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 almandine; 1 CR versus tourmaline candidate = 1 CR; and 5 FO versus diopside candidates = 4 fayalite and 1 vesuvianite.	Augite/diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 almandine; 1 CR versus tourmaline candidate = 1 CR; and 5 FO versus diopside candidates = 4 fayalite and 1 vesuvianite.
15SUV006	Augite/diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 orange GO versus almandine candidates = 2 almandine; 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; 5 FO versus diopside candidates = 3 fayalite, 1 diopside and 1 bronzite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.	Augite/diopside	SEM checks from 0.25-0.5 mm fraction: 2 orange GO versus almandine candidates = 2 almandine; 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; 5 FO versus diopside candidates = 3 fayalite, 1 diopside and 1 bronzite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.
15SUV008	Augite/diopside assemblage.	Augite/diopside	
15SUV009	Augite-goethite/diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 CR candidate = 1 CR. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus almandine candidate = 1 almandine; and 1 FO versus diopside candidate = 1 FO.	Augite-goethite/diopside	SEM check from 0.5-1.0 mm fraction: 1 CR candidate = 1 CR. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus almandine candidate = 1 almandine; and 1 FO versus diopside candidate = 1 FO.
15SUV010	Goethite-almandine/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 5 FO versus titanite candidates = 5 vesuvianite; and 1 malachite candidate = 1 malachite. SEM checks from 0.25-0.5 mm fraction: 3 CR versus tourmaline candidates = 2 CR and 1 tourmaline; and 5 FO versus fayalite candidates = 3 fayalite and 2 vesuvianite.	Goethite-almandine/diopside	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 5 FO versus titanite candidates = 5 vesuvianite; and 1 malachite candidate = 1 malachite. SEM checks from 0.25-0.5 mm fraction: 3 CR versus tourmaline candidates = 2 CR and 1 tourmaline; and 5 FO versus fayalite candidates = 3 fayalite and 2 vesuvianite.
15SUV014	Goethite-augite/diopside-marcasite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus ruby corundum candidate = 1 GP; 3 IM versus crustal ilmenite candidates = 1 IM, 1 CR and 1 hercynite; 5 CR versus tourmaline candidates = 3 CR, 1 hercynite and 1 tourmaline; 1 FO versus vesuvianite candidate = 1 vesuvianite. Also picked 1 sphalerite from 0.5-1.0 mm fraction and 4 from 0.25-0.5 mm fraction.	Goethite-augite/diopside-marcasite	SEM checks from 0.25-0.5 mm fraction: 1 GP versus ruby corundum candidate = 1 GP; 3 IM versus crustal ilmenite candidates = 1 IM, 1 CR and 1 hercynite; 5 CR versus tourmaline candidates = 3 CR, 1 hercynite and 1 tourmaline; 1 FO versus vesuvianite candidate = 1 vesuvianite. Also picked 1 sphalerite from 0.5-1.0 mm fraction and 4 from 0.25-0.5 mm fraction.
15SUV015	No KIM remarks.		

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
KIMBERLITE INDICATOR MINERAL PICKING FOOTNOTES
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

SAMPLE NO.	REMARKS:	INPUT ASSEMBLAGE	INPUT REMARKS
15SUV001	Augite/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.	Augite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.
15SUV017	Hornblende/titanite-zircon assemblage. SEM checks from 0.5-1.0 mm fraction: 4 IM versus CR candidates = 4 CR; 1 CR versus Cr-magnetite candidate = 1 CR; and 2 FO versus diopside candidates = 2 FO.	Hornblende/titanite-zircon	SEM checks from 0.5-1.0 mm fraction: 4 IM versus CR candidates = 4 CR; 1 CR versus Cr-magnetite candidate = 1 CR; and 2 FO versus diopside candidates = 2 FO.
15SUV018	SEM checks from 0.25-0.5 mm fraction: 4 CR versus crustal ilmenite candidates = 3 CR and 1 crustal ilmenite.		SEM checks from 0.25-0.5 mm fraction: 4 CR versus crustal ilmenite candidates = 3 CR and 1 crustal ilmenite.
15SUV019	No KIM remarks.		
15SUV020	Augite-goethite-almandine/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 hercynite; and 3 CR versus tourmaline candidates = 1 CR, 1 tourmaline and 1 hercynite. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 spessartine; 15 IM versus crustal ilmenite candidates = 4 IM, 8 crustal ilmenite and 3 CR; 14 CR versus hercynite candidates = 14 CR; and 7 FO versus fayalite candidates = 4 FO and 3 fayalite. Also picked 1 malachite from 0.25-0.5 mm fraction.	Augite-goethite-almandine/diopside	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 hercynite; and 3 CR versus tourmaline candidates = 1 CR, 1 tourmaline and 1 hercynite. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 spessartine; 15 IM versus crustal ilmenite candidates = 4 IM, 8 crustal ilmenite and 3 CR; 14 CR versus hercynite candidates = 14 CR; and 7 FO versus fayalite candidates = 4 FO and 3 fayalite. Also picked 1 malachite from 0.25-0.5 mm fraction.
15SUV021	SEM checks from 0.5-1.0 mm fraction: 2 FO versus fayalite candidates = 1 fayalite and 1 hedenbergite; and 1 barite candidate = 1 barite. SEM checks from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 vesuvianite; 1 sphalerite candidate = 1 sphalerite; and 4 anglesite candidates = 4 pyrite + calcite.		SEM checks from 0.5-1.0 mm fraction: 2 FO versus fayalite candidates = 1 fayalite and 1 hedenbergite; and 1 barite candidate = 1 barite. SEM checks from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 vesuvianite; 1 sphalerite candidate = 1 sphalerite; and 4 anglesite candidates = 4 pyrite + calcite.
15SUV022	No KIM remarks.		
15SUV023	SEM checks from 0.25-0.5 mm fraction: 4 FO versus fayalite candidates = 4 fayalite.		SEM checks from 0.25-0.5 mm fraction: 4 FO versus fayalite candidates = 4 fayalite.
15SUV024	SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 almandine; 11 GO versus almandine candidates = 2 GO (Cr-poor pyrope), 6 almandine, 2 staurolite and 1 zircon; 10 CR versus crustal ilmenite candidates = 1 CR and 9 crustal ilmenite; and 4 FO versus vesuvianite candidates = 4 vesuvianite.		SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 almandine; 11 GO versus almandine candidates = 2 GO (Cr-poor pyrope), 6 almandine, 2 staurolite and 1 zircon; 10 CR versus crustal ilmenite candidates = 1 CR and 9 crustal ilmenite; and 4 FO versus vesuvianite candidates = 4 vesuvianite.
15SUV025	Goethite/diopside-marcasite assemblage. SEM checks from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; 1 galena candidate = 1 galena. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 4 crustal ilmenite and 1 CR; 3 CR versus hercynite candidates = 1 hercynite and 2 andradite; and 1 FO versus diopside candidate = 1 FO. Also picked 1 sphalerite from 1.0-2.0 mm fraction; 3 sphalerite from 0.5-1.0 mm fraction; and 8 sphalerite and 3 galena from 0.25-0.5 mm fraction.	Goethite/diopside-marcasite	SEM checks from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; 1 galena candidate = 1 galena. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 4 crustal ilmenite and 1 CR; 3 CR versus hercynite candidates = 1 hercynite and 2 andradite; and 1 FO versus diopside candidate = 1 FO. Also picked 1 sphalerite from 1.0-2.0 mm fraction; 3 sphalerite from 0.5-1.0 mm fraction; and 8 sphalerite and 3 galena from 0.25-0.5 mm fraction.
15SUV026	Goethite-augite/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 IM versus crustal ilmenite candidates = 1 crustal ilmenite, 1 CR and 1 hercynite; and 1 FO versus diopside candidate = 1 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 crustal ilmenite and 4 CR; and 6 FO versus diopside candidates = 3 FO, 2 diopside and 1 vesuvianite. Also picked 1 sphalerite from 0.5-1.0 mm fraction and 2 from 0.25-0.5 mm fraction.	Goethite-augite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 IM versus crustal ilmenite candidates = 1 crustal ilmenite, 1 CR and 1 hercynite; and 1 FO versus diopside candidate = 1 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 crustal ilmenite and 4 CR; and 6 FO versus diopside candidates = 3 FO, 2 diopside and 1 vesuvianite. Also picked 1 sphalerite from 0.5-1.0 mm fraction and 2 from 0.25-0.5 mm fraction.
15SUV027	Goethite-siderite/marcasite-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 1 sphalerite candidate = 1 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 5 sphalerite versus vesuvianite candidates = 5 vesuvianite.	Goethite-siderite/marcasite-diopside	SEM checks from 0.5-1.0 mm fraction: 1 sphalerite candidate = 1 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 5 sphalerite versus vesuvianite candidates = 5 vesuvianite.
15SUV028	SEM check from 0.25-0.5 mm fraction: 1 CR versus hematite candidate = 1 hematite.		SEM check from 0.25-0.5 mm fraction: 1 CR versus hematite candidate = 1 hematite.
15SUV029	Hornblende-almandine/diopside-titanite-apatite assemblage. SEM checks from 0.5-1.0 mm fraction: 4 GO versus almandine candidates = 4 almandine; 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 3 FO versus diopside candidates = 3 diopside; and 1 blue-green gahnite versus spinel candidate = 1 spinel.	Hornblende-almandine/diopside-titanite-apatite	SEM checks from 0.5-1.0 mm fraction: 4 GO versus almandine candidates = 4 almandine; 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 3 FO versus diopside candidates = 3 diopside; and 1 blue-green gahnite versus spinel candidate = 1 spinel.
15SUV030	SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite.		SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite.
15SUV031	Augite/diopside assemblage.	Augite/diopside	
15SUV032	Augite/diopside assemblage.	Augite/diopside	
15SUV033	Augite/diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 IM versus rutile candidate = 1 crustal ilmenite.	Augite/diopside	SEM check from 0.25-0.5 mm fraction: 1 IM versus rutile candidate = 1 crustal ilmenite.

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
KIMBERLITE INDICATOR MINERAL PICKING FOOTNOTES
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

SAMPLE NO.	REMARKS:	INPUT ASSEMBLAGE	INPUT REMARKS
15SUV001	Augite/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.	Augite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.
15SUV050	Augite/diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 CR versus crustal ilmenite andidate = 1 CR; 1 FO versus diopside candidate = 1 FO; and 5 sphalerite candidates = 1 sphalerite and 4 vesuvianite. Also picked 5 sphalerite from 0.5-1.0 mm fraction and 2 additional sphalerite from 0.25-0.5 mm fraction.	Augite/diopside	SEM checks from 0.25-0.5 mm fraction: 1 CR versus crustal ilmenite andidate = 1 CR; 1 FO versus diopside candidate = 1 FO; and 5 sphalerite candidates = 1 sphalerite and 4 vesuvianite. Also picked 5 sphalerite from 0.5-1.0 mm fraction and 2 additional sphalerite from 0.25-0.5 mm fraction.
15SUV051	Augite/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 CR versus hercynite candidates = 1 CR and 1 hercynite. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 andradite; 3 CR versus rutile candidates = 2 CR and 1 andradite; and 4 FO versus diopside candidates = 4 FO.	Augite/diopside	SEM checks from 0.5-1.0 mm fraction: 2 CR versus hercynite candidates = 1 CR and 1 hercynite. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 andradite; 3 CR versus rutile candidates = 2 CR and 1 andradite; and 4 FO versus diopside candidates = 4 FO.
15SUV052	Augite-hematite/diopside-macasite assemblage. SEM checks from 0.5-1.0 mm fraction: 3 GP versus almandine candidates = 3 almandine. Also picked 1 galena from 0.5-1.0 mm fraction and 1 from 0.25-0.5 mm fraction.	Augite-hematite/diopside-macasite	SEM checks from 0.5-1.0 mm fraction: 3 GP versus almandine candidates = 3 almandine. Also picked 1 galena from 0.5-1.0 mm fraction and 1 from 0.25-0.5 mm fraction.
15SUV053	Augite/diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GP versus almandine candidates = 2 almandine.	Augite/diopside	SEM checks from 0.25-0.5 mm fraction: 2 GP versus almandine candidates = 2 almandine.
15SUV054	Augite-hematite-almandine/diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 CR versus rutile candidates = 2 CR; and 1 FO versus diopside candidate = 1 zoisite.	Augite-hematite-almandine/diopside	SEM checks from 0.25-0.5 mm fraction: 2 CR versus rutile candidates = 2 CR; and 1 FO versus diopside candidate = 1 zoisite.
15SUV055	Augite/diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 grossular (lost in transfer to vial).	Augite/diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 grossular (lost in transfer to vial).

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
MMS INDICATOR MINERAL DATA
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates					
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp				>1.0 amp					
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
15SUV015	0	Tr sphalerite (2 gr) Tr barite (1 gr)	99 (~300,000 gr)	25	0	0	0	Tr	Tr	0	0	0	0	0	0	0	0	Siderite-goethite/marcasite assemblage. SEM checks from 0.5-1.0 mm faction: 2 sphalerite versus monazite candidates = 2 sphalerite. SEM check from 0.25-0.5 mm fraction: 4 sphalerite versus vesuvianite candidates = 2 sphalerite and 2 vesuvianite; and 2 barite candidates = 1 barite and 1 dolomite.	0.5-1.0 mm fraction: 2 sphalerite 0.25-0.5 mm fraction: 2 sphalerite 2 vesuvianite resembling sphalerite 1 barite 1 dolomite resembling barite	Siderite-goethite/marcasite	SEM checks from 0.5-1.0 mm faction: 2 sphalerite versus monazite candidates = 2 sphalerite. SEM check from 0.25-0.5 mm fraction: 4 sphalerite versus vesuvianite candidates = 2 sphalerite and 2 vesuvianite; and 2 barite candidates = 1 barite and 1 dolomite.
15SUV018	0	0.4% galena (10 gr) Tr barite (1 gr)	0.1 (3 gr)	95	0	0	Tr (1 gr)	15	Tr	0	0	0	0	0	Tr (3 gr; see KIM data)	0	0	Goethite/diopside-kyanite assemblage. SEM checks from 0.25-0.5 mm fraction: 5 barite versus kyanite candidates = 1 barite, 3 kyanite and 1 diopside.	0.25-0.5 mm fraction: 10 galena 1 barite 1 diopside resembling barite 3 kyanite 1 red rutile 3 chromite (picked as KIMs)	Goethite/diopside-kyanite	SEM checks from 0.25-0.5 mm fraction: 5 barite versus kyanite candidates = 1 barite, 3 kyanite and 1 diopside.
15SUV019	0	0	Tr (10 gr)	99	0	0	0	40	0	0	0	0	0	0	0	0	15	Goethite/diopside-kyanite-monazite assemblage.		Goethite/diopside-kyanite-monazite	
15SUV022	Tr (2 gr)	0	70 (~3000 gr)	Tr	0	0	0	Tr	Tr	0	0	Tr	0	0	0	Tr	Tr	Almandine-augite/marcasite-diopside assemblage.	0.25-0.5 mm fraction: 2 chalcopyrite	Almandine-augite/marcasite-diopside	
15SUV023	0.5 (10 gr)	Tr sphalerite (1 gr)	50 (~1000 gr)	0	0	0	0	0	Tr	Tr	0	Tr	Tr	0	0	Tr	0	Almandine-augite-hematite/marcasite-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 sphalerite versus titanite candidate = 1 barite. SEM checks from 0.25.0.5 mm fraction: 1 yellow sphalerite candidate = 1 sphalerite; 2 barite versus apatite candidates = 2 apatite; and 1 hercynite versus tourmaline candidate = 1 tourmaline.	0.5-1.0 mm fraction: 1 chalcopyrite 1 barite 0.25-0.5 mm fraction: 10 chalcopyrite 1 sphalerite 2 apatite resembling barite 1 tourmaline resembling hercynite	Almandine-augite-hematite/marcasite-diopside	SEM check from 0.5-1.0 mm fraction: 1 sphalerite versus titanite candidate = 1 barite. SEM checks from 0.25.0.5 mm fraction: 1 yellow sphalerite candidate = 1 sphalerite; 2 barite versus apatite candidates = 2 apatite; and 1 hercynite versus tourmaline candidate = 1 tourmaline.
15SUV024	0	0	Tr (1 gr)	1	0	0	0	Tr	0	0	0	Tr	0	0	Tr (1 gr; see KIM data)	0	Tr	Almandine-augite/diopside assemblage.	0.25-0.5 mm fraction: 1 chromite (picked as KIM)	Almandine-augite/diopside	
15SUV028	0	Tr barite (5 gr)	Tr (10 gr)	90	1 blue-green gahnite; 1 blue-green spinel	Tr low-Cr diopside (2 gr)	Tr (2 gr)	1	Tr	0	Tr	Tr	0	0	0	Tr	0	Goethite/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 barite candidates = 2 barite. SEM checks from 0.25-0.5 mm fraction: 3 barite versus diopside candidates = 1 barite and 2 diopside; and 2 blue-green gahnite versus spinel candidates = 1 gahnite and 1 spinel.	0.5-1.0 mm fraction: 2 barite 0.25-0.5 mm fraction: 5 barite 2 diopside resembling barite 1 gahnite 1 spinel 2 low-Cr diopside 2 red rutile	Goethite/diopside	SEM checks from 0.5-1.0 mm fraction: 2 barite candidates = 2 barite. SEM checks from 0.25-0.5 mm fraction: 3 barite versus diopside candidates = 1 barite and 2 diopside; and 2 blue-green gahnite versus spinel candidates = 1 gahnite and 1 spinel.
15SUV030	0	Tr barite (2 gr)	0	60	0	0	Tr (10 gr)	Tr	Tr	0	0	1	0	0	Tr (6 gr; see KIM data)	0	0	Goethite-almandine-augite/diopside assemblage.	0.25-0.5 mm fraction: 2 barite 10 red rutile 6 chromite (picked as KIMs)	Goethite-almandine-augite/diopside	

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
PARAMAGNETIC/NONPARAMAGNETIC FRACTION WEIGHTS
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

	Weight 0.25-0.5 mm Nonferromagnetic Heavy Mineral Fractions (g)				
		Paramagnetic			Nonparamagnetic
Sample Number	Total	Strongly (<0.6 amp)	Moderately (0.6-0.8 amp)	Weakly (0.8-1.0 amp)	>1.0 amp
15SUV015	58.1	19.54	3.70	4.14	30.73
15SUV018	7.6	0.09	0.91	5.87	0.75
15SUV019	60.7	0.95	19.31	33.31	7.13
15SUV022	0.9	0.07	0.17	0.27	0.40
15SUV023	0.7	0.06	0.18	0.21	0.25
15SUV024	6.7	0.52	1.90	2.03	2.25
15SUV028	8.6	0.29	0.96	4.82	2.54
15SUV030	18.4	1.39	6.67	6.54	3.80

	Weight 0.18 to 0.25 mm Nonferromagnetic Heavy Mineral Fractions (g)				
		Paramagnetic			Nonparamagnetic
Sample Number	Total	Strongly (<0.6 amp)	Moderately (0.6-0.8 amp)	Weakly (0.8-1.0 amp)	>1.0 amp
15SUV015	19.5	4.39	1.25	1.21	12.65
15SUV018	4.1	0.08	2.66	1.16	0.20
15SUV019	22.7	3.32	11.35	4.38	3.65
15SUV028	3.5	0.20	1.19	1.31	0.80
15SUV030	16.5	3.85	7.12	3.14	2.39

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
-0.18 mm HEAVY MINERAL PROCESSING
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Weight (g)				
	-0.18 mm Table Concentrate				
		Heavy Liquid Separation S.G. 3.2			
			-0.18 mm HMC		
	Total	Lights	Total	Mag	Non Mag
15SUV015	423.5	455.0	31.5	0.6	30.9
15SUV018	218.0	228.4	10.4	0.2	10.2
15SUV019	321.0	341.4	20.4	0.4	20.0
15SUV024	442.1	450.7	8.6	1.6	7.0
15SUV028	239.1	241.7	2.6	0.4	2.2
15SUV030	280.7	291.0	10.3	7.2	3.1

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
0.18 to 0.25 mm HEAVY MINERAL PROCESSING WEIGHTS
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

	Weights (g)		
	0.18 to 0.25 mm		
			Non Mag
Sample Number	Total	Mag	Total
15SUV001	61.9	19.0	42.9
15SUV002	32.6	9.4	23.2
15SUV003	29.8	10.3	19.5
15SUV004	106.2	34.4	71.8
15SUV005	29.9	7.0	22.9
15SUV006	39.0	10.5	28.5
15SUV008	8.9	1.6	7.3
15SUV009	13.0	3.6	9.4
15SUV010	23.3	4.3	19.0
15SUV014	20.5	5.2	15.3
15SUV015	28.1	0.6	27.5
15SUV017	96.6	8.4	88.2
15SUV018	4.3	0.1	4.2
15SUV019	25.1	0.3	24.8
15SUV020	27.8	8.8	19.0
15SUV021	26.0	6.3	19.7
15SUV022	1.1	0.2	0.9
15SUV023	0.9	0.2	0.7
15SUV024	9.8	1.7	8.1
15SUV025	17.3	2.6	14.7
15SUV026	33.4	7.5	25.9
15SUV027	9.3	1.4	7.9
15SUV028	4.6	0.6	4.0
15SUV029	68.5	5.9	62.6
15SUV030	22.1	5.4	16.7
15SUV031	47.0	14.3	32.7
15SUV032	20.7	5.7	15.0
15SUV033	14.8	1.6	13.2
15SUV050	25.1	5.1	20.0
15SUV051	25.6	6.6	19.0
15SUV052	58.7	19.7	39.0
15SUV053	47.3	19.0	28.3
15SUV054	7.3	2.0	5.3
15SUV055	37.8	12.5	25.3

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
KIMBERLITE INDICATOR MINERAL COUNTS (0.18 to 0.25 mm)
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015
Total Number of Samples in this Report = 5

	Number of Grains																			
	Selected MMSIMs						KIM Count 0.18 to 0.25 mm													
Sample Number	Low-Cr diopside		Cpy		Gh		GP		GO		DC		IM		CR		FO		Total (KIMs)	
	T	P	T	P	T	P	**T**	P	**T**	P	**T**	P	**T**	P	**T**	P	**T**	P	**T**	P
15-SUV-015	0	0	1	1	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	**1**	1
15-SUV-018	0	0	1	1	0	0	0	0	0	0	0	0	0	0	**4**	4	0	0	**4**	4
15-SUV-019	3	3	2	2	0	0	**2**	2	0	0	0	0	0	0	**4**	4	0	0	**6**	6
15-SUV-028	2	2	0	0	0	0	**2**	2	0	0	0	0	0	0	**3**	3	0	0	**5**	5
15-SUV-030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	**1**	1	**3**	3

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
KIMBERLITE INDICATOR MINERAL PICKING FOOTNOTES (0.18 to 0.25 mm)
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

SAMPLE NO.	REMARKS:	INPUT ASSEMBLAGE	INPUT REMARKS
15-SUV-015	Siderite-goethite/marcasite assemblage.	Siderite-goethite/marcasite	
15-SUV-018	Goethite/diopside-kyanite assemblage. SEM checks from 0.18-0.25 mm fraction: 4 CR versus rutile candidates = 4 CR; and 2 green gahnite versus spinel candidates = 2 hercynite (1 with minor Zn).	Goethite/diopside-kyanite	SEM checks from 0.18-0.25 mm fraction: 4 CR versus rutile candidates = 4 CR; and 2 green gahnite versus spinel candidates = 2 hercynite (1 with minor Zn).
15-SUV-019	Goethite/marcasite assemblage. SEM checks from 0.18-0.25 mm fraction: 3 GP versus almandine candidates = 2 GP and 1 almandine; 2 CR versus tourmaline candiates = 1 CR and 1 hematite; and 2 FO versus diopside candidates = 1 diopside and 1 apatite.	Goethite/marcasite	SEM checks from 0.18-0.25 mm fraction: 3 GP versus almandine candidates = 2 GP and 1 almandine; 2 CR versus tourmaline candiates = 1 CR and 1 hematite; and 2 FO versus diopside candidates = 1 diopside and 1 apatite.
15-SUV-028	Goethite-almandine/diopside assemblage.	Goethite-almandine/diopside	
15-SUV-030	Almandine-goethite/diopside assemblage. SEM check from 0.18-0.25 mm fraction: 1 FO versus diopside candidate= 1 FO .	Almandine-goethite/diopside	SEM check from 0.18-0.25 mm fraction: 1 FO versus diopside candidate= 1 FO .

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
LABORATORY ABBREVIATIONS
SEDIMENT LOG

Largest Clasts Present:
- G: Granules
- P: Pebbles
- C: Cobbles

Clast Composition:
- V/S: Volcanics and/or sediments
- GR: Granitics
- LS: Limestone, carbonates
- OT: Other Lithologies (refer to footnotes)
- TR: Only trace present
- NA: Not applicable
- OX: Very oxidized, undifferentiated

Matrix Grain Size Distribution:
- S/U: Sorted or Unsorted
- SD: Sand (F: Fine; M: Medium; C: Coarse)
- ST: Silt
- CY: Clay
- Y: Fraction present
- +: Fraction more abundant than normal
- -: Fraction less abundant than normal
- N: Fraction not present

Matrix Organics:
- ORG: Y: Organics present in matrix
- N: Organics absent or negligible in matrix
- +: Matrix is mainly organic

Matrix Colour:

Primary:

BE:	Beige	PP:	Purple
BR:	Brick Red	PK:	Pink
GY:	Grey	PB:	Pink-Beige
GB:	Grey-beige		
GN:	Green		
GG:	Grey-green		
MN:	Maroon		

Secondary (soil):
- OC: Ochre
- BN: Brown
- BK: Black

Secondary Colour Modifier:
- L: Light
- M: Medium
- D: Dark

GOLD GRAIN LOG

Thickness:
- VG: Visible gold grains
- M: Actual measured thickness of grain (microns)
- C: Thickness of grain (microns) calculated from measured width and length

KIM (kimberlite indicator mineral) LOG

- GP: Purple to red peridotitic garnet (G9/10 Cr-pyrope)
- GO: Orange mantle garnet; includes both eclogitic pyrope-almandine (G3) and Cr-poor megacrystic pyrope (G1/G2) varieties; may include unchecked (by SEM) grains of common crustal garnet (G5) lacking diagnostic inclusions or crystal faces
- DC: Cr-diopside; distinctly emerald green (paler emerald green low-Cr diopside picked separately)
- IM: Mg-ilmenite; may include unchecked (by SEM) grains of common crustal ilmenite lacking diagnostic inclusions or crystal faces
- CR: Chromite
- FO: Forsterite

MMSIM (metamorphosed or magmatic massive sulphide indicator mineral) and PCIM (porphyry Cu indicator mineral) LOGS

Adr:	Andradite	Cpy:	Chalcopyrite	Gth:	Goethite	Opx:	Orthopyroxene	St:	Staurolite
Ap:	Apatite	Cr:	Chromite	Ilm:	Ilmenite	Py:	Pyrite	Tm:	Tourmaline
Ase:	Anatase	Fay:	Fayalite	Ky:	Kyanite	Sil:	Sillimanite	Ttn:	Titanite
Aspy:	Arsenopyrite	Gh:	Gahnite	Mz:	Monazite	Spi:	Spinel	Zir:	Zircon
Ax:	Axinite	Gr:	Grossular	Ol:	Olivine	Sps:	Spessartine		

APPENDIX 3B

Overburden Drilling Management (2016)

ODM
Exploring Heavy Minerals

Overburden Drilling Management Limited
Unit 107, 15 Capella Court
Nepean, Ontario, Canada, K2E 7X1
Tel: (613) 226-1771 Fax: (613) 226-8753
odm@storm.ca www.odm.ca

Date Transmitted	ODM Lab Page No.	ODM Batch No.	Sample Numbers	No. of Samples	PDF File	Excel File	Preliminary	Final	Revised
November 16, 2016	1	7295	16SUV-013 to 030	18	X	X		X	
November 25, 2016	1	7327	1`6SUV-021, 023 and 029	3		X			X

Laboratory Data Report

Client Information

Geological Survey of Canada
Rm 166, 3303-33 Street N.W.
Calgary, AB
T2L 2A7

rod.smith@canada.ca

Attention: Mr. Rod Smith

Data-File Information

Date:	November 25, 2016
Project name:	16SUV
ODM batch number:	7295 and 7327
Sample numbers:	16SUV-013 to 030
Data file:	20167295 - GSC-NRCAN - Smith - KIMs-MMSIMs - October 2016
Number of samples in this report:	18
Number of samples processed to date:	18
Total number of samples in project:	18
Preliminary data:	
Final data:	X
Revised data:	x

Sample Processing Specifications: Kimberlite Indicator Minerals & Gold Grains.

1. Submitted by client: Glacial till and alluvial sand and gravel samples.
2. No archival split taken.
3. All samples panned for gold, PGMs and fine-grained metallic indicator minerals.
4. Heavy liquid separation specific gravity: 3.20.
5. 0.25-2.0 mm nonferromagnetic heavy mineral fraction picked for KIMs and selected samples picked for MMSIMs.

Notes

Samples 16SUV-013, 017 to 020, 022 to 024 and 026 were also picked for MMSIMs.

0.18 to 0.25 mm fraction from sample 16SUV-023 processed and picked for additional KIMs.

Samples 16SUV-021 and 029 repicked for additional chromite grains.

Remy Huneault, P.Geo.
President

APPENDIX 3B

Gold Grain Summary

Client: Geological Survey of Canada
File Name: 20167295 - GSC-NRCAN - Smith - KIMs-MMSIMs - October 2016
Total Number of Samples in this Report: 18
ODM Batch Number(s): 7295 and 7327

	Number of Visible Gold Grains				Nonmag HMC Weight (g)*	Calculated PPB Visible Gold in HMC			
Sample Number	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
16SUV-013	0	0	0	0	39.2	0	0	0	0
16SUV-014	1	1	0	0	76.0	178	178	0	0
16SUV-015	1	1	0	0	93.2	2	2	0	0
16SUV-016	0	0	0	0	79.2	0	0	0	0
16SUV-017	0	0	0	0	24.8	0	0	0	0
16SUV-018	0	0	0	0	44.0	0	0	0	0
16SUV-019	0	0	0	0	56.4	0	0	0	0
16SUV-020	0	0	0	0	62.8	0	0	0	0
16SUV-021	0	0	0	0	57.2	0	0	0	0
16SUV-022	0	0	0	0	92.4	0	0	0	0
16SUV-023	9	4	5	0	44.8	300	289	11	0
16SUV-024	0	0	0	0	91.6	0	0	0	0
16SUV-025	1	1	0	0	86.8	2	2	0	0
16SUV-026	0	0	0	0	64.0	0	0	0	0
16SUV-027	1	1	0	0	70.8	1	1	0	0
16SUV-028	0	0	0	0	110.0	0	0	0	0
16SUV-029	0	0	0	0	65.6	0	0	0	0
16SUV-030	0	0	0	0	63.2	0	0	0	0

*calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed

APPENDIX 3B

Detailed Gold Grain Data

Client: Geological Survey of Canada
File Name: 20167295 - GSC-NRCAN - Smith - KIMs-MMSIMs - October 2016
Total Number of Samples in this Report: 18
ODM Batch Number(s): 7295 and 7327

Sample Number	Dimensions (µm) Thickness		Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
16SUV-013	No Visible Gold										Tr (~2000 grains) pyrite (25-250µm).
											Tr (~500 grains) marcasite (25-50µm).
16SUV-014	40	C	200	225	1			1		178	Tr (~1000 grains) pyrite (25-250µm).
								1	76.0	178	Tr (~1000 grains) marcasite (25-100µm).
16SUV-015	10	C	25	75	1			1		2	Tr (~500 grains) pyrite (25-250µm).
								1	93.2	2	~0.5% (~1,000,000 grains) marcasite (25-50µm).
16SUV-016	No Visible Gold										Tr (~2000 grains) pyrite (25-250µm).
											~0.5% (~1,000,000 grains) marcasite (25-50µm).
16SUV-017	No Visible Gold										Tr (~200 grains) pyrite (25-75µm).
											Tr (~2000 grains) marcasite (25-50µm).
16SUV-018	No Visible Gold										Tr (~50 grains) pyrite (25-75µm).
											Tr (~300 grains) marcasite (25-50µm).
16SUV-019	No Visible Gold										~80% undifferentiated pyrite/marcasite grains (25-1000µm).
16SUV-020	No Visible Gold										~0.5% marcasite grains (25µm).
16SUV-021	No Visible Gold										No sulphides.
16SUV-022	No Visible Gold										Tr (~5000 grains) marcasite (25-200µm).
16SUV-023	3	C	15	15		1		1		<1	1 grain cinnabar (25µm).
	5	C	25	25	1	1		2		1	
	8	C	25	50	1	1		2		3	
	10	C	50	50		2		2		9	
	27	C	125	150	1			1		85	
	36	C	150	225	1			1		203	
								9	44.8	300	
16SUV-024	No Visible Gold										No sulphides.
16SUV-025	10	C	50	50	1			1		2	Tr (~200 grains) pyrite (25-75µm).
								1	86.8	2	~0.5% marcasite (25µm).
16SUV-026	No Visible Gold										Tr (~2000 grains) pyrite (25-200µm).
											~2% marcasite (25µm).
16SUV-027	8	C	25	50	1			1		1	Tr (~100 grains) pyrite (25-75µm).
								1	70.8	1	
16SUV-028	No Visible Gold										Tr (~200 grains) pyrite (25-75µm).
											Tr (~100 grains) marcasite (25µm).
16SUV-029	No Visible Gold										No sulphides.
16SUV-030	No Visible Gold										Tr (~300 grains) marcasite (15-50µm).

*calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed

APPENDIX 3B

Primary Sample Processing Weights and Descriptions

Client: Geological Survey of Canada
File Name: 20167295 - GSC-NRCAN - Smith - KIMs-MMSIMs - October 2016
Total Number of Samples in this Report: 18
ODM Batch Number(s): 7295 and 7327

	Weight (kg wet)					Screening and Shaking Table Sample Descriptions													
						Clasts (+2.0 mm)					Matrix (-2.0 mm)								
							Percentage				Distribution					Colour			
Sample Number	Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	Table Feed	Size	V/S	GR	LS	OT*	S/U	SD	ST	CY	ORG	SD	CY	Class
16SUV-013	22.9	0.0	22.9	13.1	9.8	P	20	0	80	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
16SUV-014	21.3	0.0	21.3	2.3	19.0	G	30	0	70	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
16SUV-015	25.1	0.0	25.1	1.8	23.3	P	10	0	90	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
16SUV-016	21.4	0.0	21.4	1.6	19.8	P	20	0	80	0	S	FM	-	N	N	LOC	NA	SAND + GRAVEL
16SUV-017	26.6	0.0	26.6	20.4	6.2	P	80	0	Tr	20	S	MC	-	N	N	GB	NA	SAND + GRAVEL
16SUV-018	23.3	0.0	23.3	12.3	11.0	P	80	0	Tr	20	S	MC	-	N	N	GB	NA	SAND + GRAVEL
16SUV-019	15.1	0.0	15.1	1.0	14.1	P	30	Tr	40	30	S	-	+	Y	N	GB	GB	TILL
16SUV-020	16.5	0.0	16.5	0.8	15.7	P	60	Tr	20	20	S	-	Y	+	N	GB	GB	TILL
16SUV-021	16.6	0.0	16.6	2.3	14.3	P	0	50	20	20	S	Y	Y	-	N	OC	OC	TILL
16SUV-022	23.2	0.0	23.2	0.1	23.1	P	100**	0	0	0	S	FM	-	N	N	GB	NA	SAND
16SUV-023	26.2	0.0	26.2	15.0	11.2	P	40	0	10	50	S	FMC	-	N	N	OC	NA	SAND + GRAVEL
16SUV-024	23.4	0.0	23.4	0.5	22.9	G	10	90	0	0	S	FM	-	N	N	GB	NA	SAND + GRAVEL
16SUV-025	23.7	0.0	23.7	2.0	21.7	G	10	Tr	20	70	S	MC	-	N	N	OC	NA	SAND + GRAVEL
16SUV-026	23.1	0.0	23.1	7.1	16.0	P	Tr	0	10	90	S	MC	-	N	N	OC	NA	SAND + GRAVEL
16SUV-027	20.5	0.0	20.5	2.8	17.7	G	10	Tr	20	70	S	MC	-	N	N	OC	NA	SAND + GRAVEL
16SUV-028	29.6	0.0	29.6	2.1	27.5	G	10	Tr	10	80	S	MC	-	N	N	OC	NA	SAND + GRAVEL
16SUV-029	17.2	0.0	17.2	0.8	16.4	G	0	100	0	0	S	MC	-	N	N	OC	NA	SAND
16SUV-030	18.3	0.0	18.3	2.5	15.8	G	20	Tr	Tr	80	S	MC	-	N	N	OC	NA	SAND + GRAVEL

*Clasts listed as "other" are red & buff Proterozoic sediments.
**Limonite cemented silica sand.

APPENDIX 3B

Laboratory Processing Weights

Client: Geological Survey of Canada
File Name: 20167295 - GSC-NRCAN - Smith - KIMs-MMSIMs - October 2016
Total Number of Samples in this Report: 18
ODM Batch Number(s): 7295 and 7327

	Weight of -2.0 mm Table Concentrate (g)*												
			0.25 to 2.0 mm Heavy Liquid Separation S.G. 3.20										
					HMC S.G.>3.2								
								Nonferromagnetic HMC					
									Processed Split				
									Total				
Sample Number	Total	-0.25 mm	Total	Lights S.G. <3.2	Total	-0.25 mm (wash)	Mag	Total	%	Weight	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
16SUV-013	1734.2	814.7	919.5	870.5	49.0	4.6	13.00	31.4	100.0	31.4	18.1	6.30	7.00
16SUV-014	1096.0	503.8	592.2	341.8	250.4	13.0	141.30	96.1	100.0	96.1	36.1	23.00	37.00
16SUV-015	1655.0	850.8	804.2	764.2	40.0	4.4	6.20	29.4	100.0	29.4	14.2	8.30	6.90
16SUV-016	1409.5	740.8	668.7	611.3	57.4	4.7	8.90	43.8	100.0	43.8	19.9	14.10	9.80
16SUV-017	1670.1	769.8	900.3	899.4	0.9	0.0	0.01	0.8	100.0	0.8	0.8	0.01	0.03
16SUV-018	1603.1	649.6	953.5	951.6	1.9	0.2	0.01	1.7	100.0	1.7	1.5	0.10	0.08
16SUV-019	1033.0	838.7	194.3	181.2	13.1	3.6	0.50	9.0	100.0	9.0	3.5	3.20	2.30
16SUV-020	781.1	611.8	169.3	151.9	17.4	5.1	0.40	11.9	100.0	11.9	4.7	4.10	3.10
16SUV-021	1114.9	813.1	301.8	216.6	85.2	9.3	8.10	67.8	100.0	67.8	49.1	14.30	4.40
16SUV-022	861.5	811.0	50.5	49.4	1.1	0.1	0.01	1.0	100.0	1.0	0.7	0.10	0.20
16SUV-023	1095.2	678.6	416.6	410.0	6.6	0.5	0.40	5.7	100.0	5.7	2.6	1.60	1.50
16SUV-024	1941.1	1035.5	905.6	895.0	10.6	1.2	0.01	9.4	100.0	9.4	6.5	2.40	0.50
16SUV-025	2080.6	794.8	1285.8	1121.5	164.3	18.5	14.20	131.6	100.0	131.6	69.9	45.40	16.30
16SUV-026	1715.4	824.7	890.7	849.2	41.5	8.3	1.20	32.0	100.0	32.0	23.6	6.20	2.20
16SUV-027	1872.5	446.2	1426.3	1268.1	158.2	13.1	44.90	100.2	100.0	100.2	45.9	29.70	24.60
16SUV-028	1373.4	504.9	868.5	714.5	154.0	8.3	48.50	97.2	100.0	97.2	45.3	30.70	21.20
16SUV-029	1539.8	881.8	658.0	504.2	153.8	38.3	22.60	92.9	100.0	92.9	78.6	13.70	0.60
16SUV-030	960.3	315.8	644.5	572.7	71.8	6.2	24.20	41.4	100.0	41.4	18.8	10.70	11.90

* Values greater than 0.1 g were weighed only to one decimal place; the zero was added in the second decimal position to facilitate column alignment.

APPENDIX 3B

Kimberlite Indicator Mineral Counts

Client: Geological Survey of Canada
File Name: 20167295 - GSC-NRCAN - Smith - KIMs-MMSIMs - October 2016
Total Number of Samples in this Report: 18
ODM Batch Number(s): 7295 and 7327

Number of Grains — Selected MMSIMs

Sample Number	1.0 to 2.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.5 to 1.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.25 to 0.5 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P
16SUV-013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-014	0	0	0	0	0	0	0	0	3	3	0	0	0	0	5	5	0	0
16SUV-015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0
16SUV-016	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
16SUV-017	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-018	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-021	0	0	0	0	0	0	3	3	1	1	0	0	3	3	6	6	0	0
16SUV-022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11	0	0
16SUV-026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0
16SUV-028	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
16SUV-029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-030	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0

Number of Grains — KIMs (1.0 to 2.0 mm and 0.5 to 1.0 mm)

Sample Number	1.0 to 2.0 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	0.5 to 1.0 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P
16SUV-013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
16SUV-015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-016	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-017	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-018	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-021	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	1	1	0	0	0	0
16SUV-022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	3	0	0
16SUV-028	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	2	2	0	0
16SUV-029	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
16SUV-030	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0

Number of Grains — KIMs (0.25 to 0.5 mm) and Total (KIMs)

Sample Number	0.25 to 0.5 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	Total (KIMs) T	P
16SUV-013	0	0	0	0	0	0	0	0	2	2	0	0	2	2
16SUV-014	0	0	0	0	0	0	2	2	3	3	1	1	7	7
16SUV-015	1	1	0	0	0	0	1	1	0	0	0	0	2	2
16SUV-016	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-017	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-018	0	0	0	0	0	0	0	0	4	4	0	0	4	4
16SUV-019	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-020	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-021	0	0	1	1	0	0	0	0	2	2	20	15	27	22
16SUV-022	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-023	18	18	1	1	0	0	9	9	10	10	0	0	38	38
16SUV-024	0	0	0	0	0	0	0	0	3	3	0	0	3	3
16SUV-025	2	2	0	0	0	0	0	0	0	0	0	0	2	2
16SUV-026	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV-027	0	0	0	0	0	0	2	2	40	18	0	0	46	24
16SUV-028	1	1	1	1	0	0	0	0	17	17	1	1	24	24
16SUV-029	0	0	0	0	0	0	0	0	5	5	3	3	12	12
16SUV-030	0	0	0	0	0	0	0	0	1	1	0	0	2	2

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

APPENDIX 3B

Kimberlite Indicator Mineral Remarks
Client: Geological Survey of Canada
File Name: 20167295 - GSC-NRCAN - Smith - KIMs-MMSIMs - October 2016
Total Number of Samples in this Report: 18
ODM Batch Number(s): 7295 and 7327

Sample Number	Remarks	Sample Number	INPUT ASSEMBLAGE	INPUT REMARKS
16SUV-013	SEM checks from 0.25-0.5 mm fraction: 2 CR candidates = 2 CR; and 2 FO versus vesuvianite candidates = 2 vesuvianite.	16SUV-013		SEM checks from 0.25-0.5 mm fraction: 2 CR candidates = 2 CR; and 2 FO versus vesuvianite candidates = 2 vesuvianite.
16SUV-014	Augite-goethite-almandine/diopside-marcasite assemblage. SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite; 1 CR versus tourmaline candidate = 1 tourmaline; and 1 sphalerite versus titanite candidate = 1 sphalerite. SEM checks from 0.25-0.5 mm fraction: 10 IM versus crustal ilmenite candidates = 1 IM and 9 crustal ilmenite; 4 CR versus crustal ilmenite candidates = 2 CR and 2 crustal ilmenite; and 6 FO versus fayalite candidates = 1 FO and 5 fayalite	16SUV-014	Augite-goethite-almandine/diopside-marcasite	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite; 1 CR versus tourmaline candidate = 1 tourmaline; and 1 sphalerite versus titanite candidate = 1 sphalerite. SEM checks from 0.25-0.5 mm fraction: 10 IM versus crustal ilmenite candidates = 1 IM and 9 crustal ilmenite; 4 CR versus crustal ilmenite candidates = 2 CR and 2 crustal ilmenite; and 6 FO versus fayalite candidates = 1 FO and 5 fayalite
16SUV-015	Almandine-goethite-augite/marcasite assemblage. SEM check from 0.25-0.5 mm fraction: 1 GP versus zircon candidate = 1 zircon; and 1 IM versus crustal ilmenite candidate = 1 IM.	16SUV-015	Almandine-goethite-augite/marcasite	SEM check from 0.25-0.5 mm fraction: 1 GP versus zircon candidate = 1 zircon; and 1 IM versus crustal ilmenite candidate = 1 IM.
16SUV-016	Augite-goethite/marcasite assemblage. SEM checks from 0.25-0.5 mm fraction: 7 FO versus fayalite candidates = 7 fayalite.	16SUV-016	Augite-goethite/marcasite	SEM checks from 0.25-0.5 mm fraction: 7 FO versus fayalite candidates = 7 fayalite.
16SUV-017	No KIM remarks.	16SUV-017		
16SUV-018	SEM checks from 0.25-0.5 mm fraction: 5 CR candidates = 3 CR and 2 hercynite.	16SUV-018		SEM checks from 0.25-0.5 mm fraction: 5 CR candidates = 3 CR and 2 hercynite.
16SUV-019	No KIM remarks.	16SUV-019		
16SUV-020	No KIM remarks.	16SUV-020		
16SUV-021	Hornblende-almandine/diopside-titanite-apatite assemblage. SEM checks from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP; 3 GO versus almandine candidates = 3 almandine; and 4 IM versus crustal ilmenite candidates = 4 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 6 GO versus almandine candidates = 1 GO (pyrope almandine), 4 almandine and 1 grossular; 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 2 CR candidates = 2 CR; and 6 FO versus diopside candidates = 5 FO and 1 diopside. Sole IM from 0.5-1.0 mm fraction has partial alteration mantle.	16SUV-021	Hornblende-almandine/diopside-titanite-apatite	SEM checks from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP; 3 GO versus almandine candidates = 3 almandine; and 4 IM versus crustal ilmenite candidates = 4 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 6 GO versus almandine candidates = 1 GO (pyrope almandine), 4 almandine and 1 grossular; 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 2 CR candidates = 2 CR; and 6 FO versus diopside candidates = 5 FO and 1 diopside. Sole IM from 0.5-1.0 mm fraction has partial alteration mantle.
16SUV-022	No KIM remarks.	16SUV-022		
16SUV-023	SEM checks from 0.25-0.5 mm fraction: 2 GO versus almandine candidates = 2 almandine; 5 GO versus staurolite candidates = 5 staurolite; 15 IM versus crustal ilmenite candidates = 9 IM, 2 crustal ilmenite and 4 tourmaline; and 12 CR versus tourmaline candidates = 7 CR, 1 tourmaline and 4 hercynite.	16SUV-023		SEM checks from 0.25-0.5 mm fraction: 2 GO versus almandine candidates = 2 almandine; 5 GO versus staurolite candidates = 5 staurolite; 15 IM versus crustal ilmenite candidates = 9 IM, 2 crustal ilmenite and 4 tourmaline; and 12 CR versus tourmaline candidates = 7 CR, 1 tourmaline and 4 hercynite.
16SUV-024	SEM checks from 1.0-2.0 mm fraction: 3 CR versus tourmaline candidates = 3 tourmaline. SEM checks from 0.25-0.5 mm fraction: 1 worn GP versus zircon candidate = 1 zircon; 1 CR versus tourmaline candidate = 1 CR.	16SUV-024		SEM checks from 1.0-2.0 mm fraction: 3 CR versus tourmaline candidates = 3 tourmaline. SEM checks from 0.25-0.5 mm fraction: 1 worn GP versus zircon candidate = 1 zircon; 1 CR versus tourmaline candidate = 1 CR.
16SUV-025	Goethite/marcasite-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 3 GP versus zircon candidates = 1 GP, 1 zircon and 1 fluorite.	16SUV-025	Goethite/marcasite-diopside	SEM checks from 0.25-0.5 mm fraction: 3 GP versus zircon candidates = 1 GP, 1 zircon and 1 fluorite.
16SUV-026	No KIM remarks.	16SUV-026		
16SUV-027	Augite-almandine/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM; 6 CR versus tourmaline candidates = 3 CR, 1 tourmaline, 1 hercynite and 1 andradite; and 1 sphalerite versus titanite candidate = 1 sphalerite. SEM checks from 0.25-0.5 mm fraction: 10 IM versus crustal ilmenite candidates = 1 IM and 9 crustal ilmenite; and 10 CR versus hercynite candidates = 8 CR, 1 hercynite and 1 andradite.	16SUV-027	Augite-almandine/diopside	SEM checks from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM; 6 CR versus tourmaline candidates = 3 CR, 1 tourmaline, 1 hercynite and 1 andradite; and 1 sphalerite versus titanite candidate = 1 sphalerite. SEM checks from 0.25-0.5 mm fraction: 10 IM versus crustal ilmenite candidates = 1 IM and 9 crustal ilmenite; and 10 CR versus hercynite candidates = 8 CR, 1 hercynite and 1 andradite.
16SUV-028	Augite-almandine-goethite/diopside-marcasite assemblage. SEM checks from 0.5-1.0 mm fraction: 4 GO versus almandine candidates = 1 GO (Cr-poor pyrope) and 3 almandine; and 1 IM versus CR candidate = 1 CR. SEM checks from 0.25-0.5 mm fraction: 2 GP versus almandine candidates = 1 ruby corundum and 1 spinel; 2 GO versus almandine candidates = 1 GO (Cr-poor pyrope) and 1 almandine; 5 IM versus crustal ilmenite candidates = 4 crustal ilmenite and 1 perovskite; 6 CR candidates = 5 CR and 1 crustal ilmenite; and 3 FO versus diopside candidates = 1 FO, 1 diopside and 1 andradite.	16SUV-028	Augite-almandine-goethite/diopside-marcasite	SEM checks from 0.5-1.0 mm fraction: 4 GO versus almandine candidates = 1 GO (Cr-poor pyrope) and 3 almandine; and 1 IM versus CR candidate = 1 CR. SEM checks from 0.25-0.5 mm fraction: 2 GP versus almandine candidates = 1 ruby corundum and 1 spinel; 2 GO versus almandine candidates = 1 GO (Cr-poor pyrope) and 1 almandine; 5 IM versus crustal ilmenite candidates = 4 crustal ilmenite and 1 perovskite; 6 CR candidates = 5 CR and 1 crustal ilmenite; and 3 FO versus diopside candidates = 1 FO, 1 diopside and 1 andradite.
16SUV-029	Hornblende/titanite-zircon assemblage. SEM checks from 0.25-0.5 mm fraction: 1 CR candidate = 1 CR; and 3 FO versus diopside candidates = 3 FO.	16SUV-029	Hornblende/titanite-zircon	SEM checks from 0.25-0.5 mm fraction: 1 CR candidate = 1 CR; and 3 FO versus diopside candidates = 3 FO.
16SUV-030	Goethite-augite/diopside-marcasite assemblage. SEM checks from 1.0-2.0 mm fraction: 1 CR versus hercynite candidate = 1 hercynite. SEM check from 0.25-0.5 mm fraction: 1 CR versus hercynite candidate = 1 CR.	16SUV-030	Goethite-augite/diopside-marcasite	SEM checks from 1.0-2.0 mm fraction: 1 CR versus hercynite candidate = 1 hercynite. SEM check from 0.25-0.5 mm fraction: 1 CR versus hercynite candidate = 1 CR.

APPENDIX 3B

Metamorphosed/Magmatic Massive Sulphide Indicator Mineral (MMSIM) Counts

Client: Geological Survey of Canada
File Name: 20167295 - GSC-NRCAN - Smith - KIMs-MMSIMs - October 2016
Total Number of Samples in this Report: 18
ODM Batch Number(s): 7295 and 7327

	0.25 to 0.5 mm Nonferromagnetic Heavy Mineral Fraction																					
	Sulphide/Arsenide + Related Minerals				Mg/Mn/Al/Cr Minerals												Phosphates					
	>1.0 amp			<1.0 amp	>1.0 amp							<1.0 amp					>1.0 amp					
													Olivine									
Sample Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs*	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fo*	% Fay	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains	INPUT ASSEMBLAGE	INPUT REMARKS
16SUV-013	Tr (7 gr)	0	0.5 (~200 gr)	30	1 blue green	0	Tr (8 gr)	0	Tr	1	Tr	Tr	0	0	0	Tr (2 gr)	0	0	Augite-goethite-almandine/diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 sphalerite versus titanite candidate = 1 titanite; and 1 blue-green gahnite versus spinel candidate = 1 spinel.	0.25-0.5 mm fraction: 7 chalcopyrite 1 titanite resembling sphalerite 1 spinel 8 red rutile 2 chromite	Augite-goethite-almandine/diopside	SEM checks from 0.25-0.5 mm fraction: 1 sphalerite versus titanite candidate = 1 titanite; and 1 blue-green gahnite versus spinel candidate = 1 spinel.
16SUV-017	0	0	0	0	0	Tr sapphire corundum (2 gr)	0	15	2	3	60	0	0	0	0	0	0	0	Almandine/staurolite-epidote-kyanite assemblage. SEM checks from 0.25-0.5 mm fraction: 5 white diopside versus epidote (major nonparamagnetic assemblage mineral) candidates = 5 epidote.	0.25-0.5 mm fraction: 2 sapphire corundum 5 representative epidote	Almandine/staurolite-epidote-kyanite	SEM checks from 0.25-0.5 mm fraction: 5 white diopside versus epidote (major nonparamagnetic assemblage mineral) candidates = 5 epidote.
16SUV-018	0	0	3 (~200 gr)	0	2 black hercynite	Tr sapphire corundum (16 gr)	0	15	4	1	60	0	0	0	0	Tr (4 gr)	0	0	Almandine-siderite/staurolite-kyanite-epidote assemblage. "Pyrite" is mostly marcasite.	0.25-0.5 mm fraction: 2 hercynite (see KIM notes) 16 sapphire corundum 4 chromite	Almandine-siderite/staurolite-kyanite-epidote	"Pyrite" is mostly marcasite.
16SUV-019	0	Tr sphalerite (1 gr) Tr barite (1 gr)	99 (~20,000 gr)	15	0	0	0	0	Tr	Tr	Tr	0	0	0	0	0	0	0	Siderite-almandine-hematite-goethite/ marcasite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 brown sphalerite versus rutile candidate = 1 sphalerite; and 3 barite candidates = 1 barite and 2 diopside.	0.25-0.5 mm fraction: 1 sphalerite 1 barite 2 diopside resembling barite	Siderite-almandine-hematite-goethite/ marcasite	SEM checks from 0.25-0.5 mm fraction: 1 brown sphalerite versus rutile candidate = 1 sphalerite; and 3 barite candidates = 1 barite and 2 diopside.
16SUV-020	0	Tr barite (3 gr)	99 (~40,000 gr)	10	0	0	0	0	0	Tr	Tr	0	0	0	0	0	Tr	0	Siderite/marcasite assemblage.	0.25-0.5 mm fraction: 3 barite	Siderite/marcasite	
16SUV-022	0	0	30 (~150 gr)	0	0	0	0	30	0	6	6	0	0	0	0	0	0	0	Almandine-ilmenite/marcasite-kyanite-leucoxene-rutile assemblage. SEM checks from 0.25-0.5 mm fraction: 5 tourmaline candidates = 5 tourmaline; and 5 black rutile (major nonparamagnetic assemblage mineral) candidates = 5 rutile.	0.25-0.5 mm fraction: 5 representative tourmaline 5 representative rutile	Almandine-ilmenite/marcasite-kyanite- leucoxene-rutile	SEM checks from 0.25-0.5 mm fraction: 5 tourmaline candidates = 5 tourmaline; and 5 black rutile (major nonparamagnetic assemblage mineral) candidates = 5 rutile.
16SUV-023	0	0	Tr (3 gr)	50	4 black hercynite; 1 blue-green spinel	Tr sapphire corundum (4 gr) Tr corundum (1 gr)	Tr (5 gr)	15	1	1	2	0	0	0	0	Tr (10 gr)	0	0	Goethite-almandine/diopside-kyanite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 spinel; 1 sapphire corundum versus kyanite candidate = 1 sapphire corundum; and 1 corundum candidate = 1 corundum.	0.25-0.5 mm fraction: 4 hercynite (see KIM notes) 1 spinel 4 sapphire corundum 1 corundum 5 red rutile 5 tourmaline (see KIM notes) 10 chromite	Goethite-almandine/diopside-kyanite	SEM checks from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 spinel; 1 sapphire corundum versus kyanite candidate = 1 sapphire corundum; and 1 corundum candidate = 1 corundum.
16SUV-024	0	0	0	0	5 blue-green gahnite	0	Tr (5 gr)	2	0	5	2	0	0	0	0	Tr (3 gr)	Tr	0	Almandine-ilmenite/zircon-rutile- leucoxene assemblage. SEM checks from 0.25-0.5 mm fraction: 5 blue-green gahnite versus spinel candidates = 5 gahnite.	0.25-0.5 mm fraction: 5 gahnite 5 red rutile 3 chromite	Almandine-ilmenite/zircon-rutile-leucoxene	SEM checks from 0.25-0.5 mm fraction: 5 blue-green gahnite versus spinel candidates = 5 gahnite.
16SUV-026	Tr (9 gr)	Tr sphalerite (9 gr)	90 (~40,000 gr)	40	0	0	0	Tr	0	Tr	Tr	0	0	0	0	0	Tr	0	Siderite-goethite/marcasite assemblage. SEM check from 0.25-0.5 mm fraction: 1 sphalerite versus rutile candidate = 1 sphalerite. 2 chalcopyrite from 0.25-0.5 mm fraction lost in transfer to vial.	0.5-1.0 mm fraction: 1 chalcopyrite 0.25-0.5 mm fraction: 9 chalcopyrite 9 sphalerite	Siderite-goethite/marcasite	SEM check from 0.25-0.5 mm fraction: 1 sphalerite versus rutile candidate = 1 sphalerite. 2 chalcopyrite from 0.25-0.5 mm fraction lost in transfer to vial.

*Low-Cr diopside, forsterite olivine and chromite also referenced on KIM data

APPENDIX 3B

Paramagnetic/Non-Paramagnetic Fraction Weights

Client: Geological Survey of Canada
File Name: 20167295 - GSC-NRCAN - Smith - KIMs-MMSIMs - October 2016
Total Number of Samples in this Report: 18
ODM Batch Number(s): 7295 and 7327

Sample Number	Weight of 0.25-0.5 mm Nonferromagnetic Heavy Mineral Fractions (g)					
		Paramagnetic			Nonparamagnetic	
	Total	Strongly (<0.6 amp)	Moderately (0.6-0.8 amp)	Weakly (0.8-1.0 amp)	>1.0 amp	>1.0 amp Lights*
16SUV-013	18.12	2.37	7.19	4.92	3.13	0.51
16SUV-017	0.82	0.02	0.19	0.19	0.39	0.03
16SUV-018	1.45	0.14	0.37	0.30	0.60	0.04
16SUV-019	3.54	0.10	0.18	0.08	3.09	0.09
16SUV-020	4.74	0.15	0.19	0.06	4.26	0.08
16SUV-022	0.68	0.08	0.45	0.07	0.06	0.02
16SUV-023	2.57	0.10	0.56	1.30	0.57	0.04
16SUV-024	6.54	1.76	4.08	0.23	0.43	0.04
16SUV-026	23.61	13.66	2.40	1.74	5.74	0.07

*SG <3.20 heavy liquid separation clean up of >1.0 amp fraction.

APPENDIX 3B

-0.25 mm HEAVY MINERAL PROCESSING

File Name: 20167295 - GSC-NRCAN - Smith - KIMs-MMSIMs - October 2016
Total Number of Samples in this Report: 18
ODM Batch Number(s): 7295 and 7327

Sample Number	Weight (g)					
	-0.25 mm Table Concentrate					
		Heavy Liquid Separation S.G. 3.2				
					0.18 to 0.25 mm HMC	
	Total	Lights	Total	-0.18 mm HMC	MAG	Non MAG
16SUV-023	678.6	668.9	9.7	7.7	0.1	1.9

APPENDIX 3B

KIMBERLITE INDICATOR MINERAL COUNTS (0.18 to 0.25 mm)

File Name: 20157051 - GSC - Smith - (15SUV) - October 2015
Total Number of Samples in this Report = 18

Sample Number	Number of Grains																			
	Selected MMSIMs						KIM Count												Total (KIMs)	
	0.18 to 0.25 mm																			
	Low-Cr diopside		Cpy		Gh		GP		GO		DC		IM		CR		FO			
	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
16SUV-023	0	0	0	0	0	0	**25**	25	**2**	2	0	0	**21***	21	**15***	15	0	0	**63**	63

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.
*IM and CR not picked to completion.

APPENDIX 3B

Kimberlite Indicator Mineral Remarks
Client: Geological Survey of Canada
File Name: 20167295 - GSC-NRCAN - Smith - KIMs-MMSIMs - October 2016
Total Number of Samples in this Report: 18
ODM Batch Number(s): 7295 and 7327

Sample Number	Remarks	INPUT ASSEMBLAGE	INPUT REMARKS
16SUV-023	SEM checks from 0.18-0.25 mm fraction: 4 GO candidates = 2 GO (Cr-poor pyrope), 1 almandine and 1 grossular; and 6 IM candidates = 6 IM. Also picked 18 sapphire corundum.		SEM checks from 0.18-0.25 mm fraction: 4 GO candidates = 2 GO (Cr-poor pyrope), 1 almandine and 1 grossular; and 6 IM candidates = 6 IM.

APPENDIX 3B

Abbreviations Table

Raw Sample Weights and Descriptions Log

Largest Clast Size Present:
- G: Granules
- P: Pebbles
- C: Cobbles

Clast Composition:
- V/S: Volcanics and/or sediments
- GR: Granitics
- LS: Limestone, carbonates
- OT: Other lithologies (refer to footnotes)
- TR: Only trace present
- NA: Not applicable
- OX: Very oxidized, undifferentiated

Matrix Grain Size Distribution:
- S/U: Sorted or unsorted
- SD: Sand (F: Fine; M: Medium; C: Coarse)
- ST: Silt
- CY: Clay
- Y: Fraction present
- +: Fraction more abundant than normal
- -: Fraction less abundant than normal
- N: Fraction not present

Matrix Organics:

ORG: Y: Organics present in matrix
N: Organics absent or negligible in matrix
+: Matrix is mainly organic

Matrix Colour:

Primary:

BE:	Beige	GG:	Grey-green
BR:	Brick Red	PP:	Purple
GY:	Grey	PK:	Pink
GB:	Grey-beige	PB:	Pink-beige
GN:	Green	MN:	Maroon

Secondary (soil):
- OC: Ochre
- BN: Brown
- BK: Black

Secondary Colour Modifier:
- L: Light
- M: Medium
- D: Dark

Detailed Gold Grain Log

VG: Visible gold grains

Thickness:
- M: Actual measured thickness of grain (µm)
- C: Thickness of grain (µm) calculated from measured width and length

Kimberlite Indicator Mineral (KIM) Log

- GP: Purple to red peridotitic garnet (G9/10 Cr-pyrope)
- GO: Orange mantle garnet; includes both eclogitic pyrope-almandine (G3) and Cr-poor megacrystic pyrope (G1/G2) varieties; may include unchecked (by SEM) grains of common crustal garnet (G5) lacking diagnostic inclusions or crystal faces
- DC: Cr-diopside; distinctly emerald green (paler emerald green low-Cr diopside picked separately)
- IM: Mg-ilmenite; may include unchecked (by SEM) grains of common crustal ilmenite lacking diagnostic inclusions or crystal faces
- CR: Chromite
- FO: Forsterite

Metamorphosed/Magmatic Massive Sulphide Indicator Mineral (MMSIM) and Porphyry Cu Indicator Mineral (PCIM) Logs

Adr:	Andradite	Cpx:	Clinopyroxene	Gth:	Goethite	PGM:	Platinum group-bearing mineral	Spi:	Spinel
Ap:	Apatite	Cpy:	Chalcopyrite	Ilm:	Ilmenite	Py:	Pyrite	Sps:	Spessartine
Ase:	Anatase	Cr:	Chromite	Ky:	Kyanite	REM:	Rare earth-bearing mineral	St:	Staurolite
Aspy:	Arsenopyrite	Fay:	Fayalite	Mz:	Monazite	Sil:	Sillimanite	Tm:	Tourmaline
Ax:	Axinite	Gh:	Gahnite	Ol:	Olivine			Ttn:	Titanite
		Gr:	Grossular	Opx:	Orthopyroxene			Zir:	Zircon

Other

- HMC: Heavy mineral concentrate
- UV: Ultra-violet
- EPD: Electric-pulse disaggregation
- PGE: Platinum group element

Appendix 4A

Geological Survey of Canada
Banks Island KIM samples - TABLING DATA

Sample Number	Field Processing	Overburden Drilling Management Limited – Laboratory Sample Log: Weight (kg wet)			Sample Description: Clasts (> 2.0 mm)[1]					Matrix (<2.0 mm)						CLASS	Sample Material[2]
						Percentage				Distribution				Colour			
		Bulk Rec'd	+2.0 mm Clasts	Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	SD	CY		
15SUV001	wet sieved (<2.38 mm)	24.9	0.8	24.1	G	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV002	wet sieved (<2.38 mm)	22.4	4.3	18.1	P	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV003	wet sieved (<2.38 mm)	21.7	4.0	17.7	G	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV004	wet sieved (<2.38 mm)	27.9	2.5	25.4	G	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV005	wet sieved (<2.38 mm)	23.0	3.0	20.0	G	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV006	wet sieved (<2.38 mm)	22.4	2.2	20.2	G	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV008	bulk	26.5	17.5	9.0	C	100	Tr	0	0	S	FMC	Y	N	OC	NA	SAND + GRAVEL	SS
15SUV009	bulk	25.3	13.9	11.4	C	100	Tr	0	0	S	FMC	Y	N	OC	NA	SAND + GRAVEL	SS
15SUV010	wet sieved (<2.38 mm)	25.6	2.4	23.2	G	100	Tr	0	0	S	MC	-	N	OC	NA	SAND + GRAVEL	SS
15SUV014	wet sieved (<2.38 mm)	20.1	1.6	18.5	G	100	Tr	0	0	S	MC	-	N	OC	NA	SAND + GRAVEL	SS
15SUV015	bulk	24.2	16.0	8.2	C	100	Tr	0	0	S	FMC	Y	N	DOC	NA	SAND + GRAVEL	BF
15SUV018	bulk	21.9	11.0	10.9	P	100	Tr	0	0	S	FMC	Y	N	DOC	NA	SAND + GRAVEL	BF
15SUV019	bulk	27.3	14.1	13.2	P	95	Tr	5	0	S	MC	-	N	OC	NA	SAND + GRAVEL	BF
15SUV020	wet sieved (<2.38 mm)	24.0	2.4	21.6	G	95	5	0	0	S	MC	-	N	OC	NA	SAND + GRAVEL	SS
15SUV021	wet sieved (<2.38 mm)	23.2	2.0	21.2	G	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV022	bulk	23.9	3.8	20.1	P	100	Tr	0	0	U	-	+	+	LOC	LOC	TILL	T
15SUV023	bulk	21.9	3.1	18.8	P	100	Tr	0	0	U	-	+	+	LOC	LOC	TILL	T
15SUV024	dry sieved (<2.38 mm)	16.6	1.1	15.5	G	100	Tr	0	0	S	MC	-	N	DOC	NA	SAND + GRAVEL	GF
15SUV025	wet sieved (<2.38 mm)	19.6	1.5	18.1	G	100	Tr	0	0	S	MC	-	N	GY	NA	SAND + GRAVEL	SS
15SUV026	wet sieved (<2.38 mm)	19.9	1.8	18.1	G	100	Tr	0	0	S	MC	-	N	GY	NA	SAND + GRAVEL	SS
15SUV027	wet sieved (<2.38 mm)	22.0	2.5	19.5	G	100	Tr	0	0	S	C	-	N	GY	NA	SAND + GRAVEL	SS
15SUV028	bulk	25.4	17.5	7.9	C	100	Tr	0	0	S	MC	-	N	OC	NA	SAND + GRAVEL	BF
15SUV030	bulk	24.7	11.3	13.4	C	100	Tr	0	0	S	FMC	Y	N	OC	NA	SAND + GRAVEL	BF
15SUV031	wet sieved (<2.38 mm)	15.3	0.9	14.4	G	100	Tr	0	0	S	MC	N	N	LOC	NA	SAND + GRAVEL	SS
15SUV032	wet sieved (<2.38 mm)	19.6	1.3	18.3	G	100	Tr	0	0	U	Y	Y	Y	LOC	LOC	TILL	SS
15SUV033	wet sieved (<2.38 mm)	22.1	0.1	22.0	G	100	Tr	0	0	S	FM	Y	N	LOC	NA	SAND + SILT	SS
15SUV050	wet sieved (<2.38 mm)	22.0	2.8	19.2	G	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV051	dry sieved (<2.38 mm)	20.1	3.5	16.6	G	100	Tr	Tr	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV052	wet sieved (<2.38 mm)	30.2	3.4	26.8	G	100	Tr	Tr	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV053	wet sieved (<2.38 mm)	25.0	2.0	23.0	G	60	0	40	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV054	dry sieved (<2.38 mm)	18.7	2.7	16.0	C	30	Tr	70	0	U	Y	Y	Y	OC	OC	TILL	T
15SUV055*	wet sieved (<2.38 mm)	13.1	0.9	12.2	G	30	Tr	70	0	S	MC	N	N	LOC	NA	SAND + GRAVEL	SS
16SUV013	bulk	22.9	13.1	9.8	P	20	0	80	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	GF
16SUV014	wet sieved (<2.38 mm)	21.3	2.3	19.0	G	30	0	70	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
16SUV015	wet sieved (<2.38 mm)	25.1	1.8	23.3	P	10	0	90	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
16SUV016	wet sieved (<2.38 mm)	21.4	1.6	19.8	P	20	0	80	0	S	FM	-	N	LOC	NA	SAND + GRAVEL	SS
16SUV017	bulk	26.6	20.4	6.2	P	80	0	Tr	20	S	MC	-	N	GB	NA	SAND + GRAVEL	GF
16SUV018	bulk	23.3	12.3	11.0	P	80	0	Tr	20	S	MC	-	N	GB	NA	SAND + GRAVEL	GF
16SUV019	bulk	15.1	1.0	14.1	P	30	Tr	40	30	S	-	+	Y	GB	GB	TILL	T
16SUV020	bulk	16.5	0.8	15.7	P	60	Tr	20	20	S	-	Y	+	GB	GB	TILL	T
16SUV022	bulk	23.2	0.1	23.1	P	100**	0	0	0	S	FM	-	N	GB	NA	SAND	R
16SUV023	bulk	26.2	15.0	11.2	P	40	0	10	50	S	FMC	-	N	OC	NA	SAND + GRAVEL	BF
16SUV024	dry sieved (<2.38 mm)	23.4	0.5	22.9	G	10	90	0	0	S	FM	-	N	GB	NA	SAND + GRAVEL	R
16SUV025	wet sieved (<2.38 mm)	23.7	2.0	21.7	G	10	Tr	20	70	S	MC	-	N	OC	NA	SAND + GRAVEL	SS
16SUV026	bulk	23.1	7.1	16.0	P	Tr	0	10	90	S	MC	-	N	OC	NA	SAND + GRAVEL	BF
16SUV027	wet sieved (<2.38 mm)	20.5	2.8	17.7	G	10	Tr	20	70	S	MC	-	N	OC	NA	SAND + GRAVEL	SS
16SUV028	wet sieved (<2.38 mm)	29.6	2.1	27.5	G	10	Tr	10	80	S	MC	-	N	OC	NA	SAND + GRAVEL	SS
16SUV030	wet sieved (<2.38 mm)	18.3	2.5	15.8	G	20	Tr	Tr	80	S	MC	-	N	OC	NA	SAND + GRAVEL	SS
Blanks																	
15SUV017	bulk	18.6	0.7	17.9	G	0	100	0	0	S	FM	-	N	OC	NA	SAND + GRAVEL	GF
15SUV029	bulk	16.6	2.8	13.8	P	10	90	Tr	0	U	+	Y	-	LOC	LOC	TILL	T
16SUV021	bulk	16.6	2.3	14.3	P	0	50	20	20	S	Y	Y	-	OC	OC	TILL	T
16SUV029	bulk	17.2	0.8	16.4	G	0	100	0	0	S	MC	-	N	OC	NA	SAND	GF

Note, abbreviations used in the table are defined in the final data table tab; shading identifies Beaufort Fm. samples
[1]V/S=volcanics and/or sediments, GR=granite, LS=limestone and carbonates, OT=red & buff Proterozoic sediments.
[2]Sample Material: BF=Beaufort Formation, GF=glaciofluvial, R=bedrock, SS=stream sediment, T=till
*sample 15SUV055 is a field duplicate of 15SUV031
**Limonite cemented silica sand.
Shading identifies Beaufort Formation samples.

Appendix 4B

Geological Survey of Canada
Banks Island KIM samples - HEAVY MINERAL CONCENTRATE PROCESSING WEIGHTS

	Mass (g)												Normalized Picking Fraction Mass Determination						
	<2.0 mm Table Concentrate																		
			0.18 to 2.0 mm Heavy Liquid Separation S.G 3.20																
						0.25-2.0 mm HMC SG>3.2													
									Nonferromagnetic HMC Processed Split[1]										
Sample Number	Total	-0.18 mm	Total	Lights <3.2 S.G.	Total 0.18 to 0.25 mm HMC	Total	<0.25 mm (wash)	Mag HMC	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm	Table Feed (<2 mm) (g)	Total (0.18 to 2.0 mm) HMC S.G.>3.2 (g)	Total HMC (0.18 - 2.0 mm) / Table Feed (<2 mm)	Total HMC (0.25 - 2.0 mm) SG>3.2 (g)	Total HMC (0.25 - 2.0 mm) SG>3.2 normalized to 10 kg Table Feed (<2 mm)	Nonferromagnetic HMC 0.25 - 0.5 mm picking fraction (g)	normalization to 50 g of 0.25 - 0.5 mm picking fraction
15SUV001	1,763.8	512.0	1,251.8	939.5	61.9	250.4	16.7	93.1	140.6	81.2	37.5	21.9	24,100	312.3	0.01296	250.4	103.9	81.2	0.616
15SUV002	1,453.2	302.0	1,151.2	858.2	32.6	260.4	9.6	105.7	145.1	65.6	45.2	34.3	18,100	293.0	0.01619	260.4	143.9	65.6	0.762
15SUV003	1,408.2	247.8	1,160.4	853.2	29.8	277.4	11.4	88.5	177.5	77.8	66.2	33.5	17,700	307.2	0.01736	277.4	156.7	77.8	0.643
15SUV004	2,715.3	1,019.3	1,696.0	1,313.7	106.2	276.1	14.2	120.8	141.1	84.3	33.7	23.1	25,400	382.3	0.01505	276.1	108.7	84.3	0.593
15SUV005	2,263.7	723.6	1,540.1	1,360.5	29.9	149.7	3.5	58.9	87.3	47.5	27.0	12.8	20,000	179.6	0.00898	149.7	74.9	47.5	1.053
15SUV006	1,291.9	379.6	912.3	786.0	39.0	87.3	2.8	27.1	57.4	42.1	11.0	4.3	20,200	126.3	0.00625	87.3	43.2	42.1	1.188
15SUV008	1,112.7	506.2	606.5	574.9	8.9	22.7	2.6	2.5	17.6	11.5	4.4	1.7	9,000	31.6	0.00351	22.7	25.2	11.5	4.348
15SUV009	1,655.3	530.5	1,124.8	917.2	13.0	194.6	7.3	45.9	141.4	32.0	63.5	45.9	11,400	207.6	0.01821	194.6	170.7	32.0	1.563
15SUV010	1,764.3	649.9	1,114.4	911.4	23.3	179.7	11.1	23.8	144.8	57.9	61.8	25.1	23,200	203.0	0.00875	179.7	77.5	57.9	0.864
15SUV014	1,792.4	365.2	1,427.2	1,162.5	20.5	244.2	13.9	43.8	186.5	53.9	78.6	54.0	18,500	264.7	0.01431	244.2	132.0	53.9	0.928
15SUV015	1,391.1	487.1	904.0	722.6	28.1	153.3	23.5	2.4	127.4	58.1	49.0	20.3	8,200	181.4	0.02212	153.3	187.0	58.1	0.861
15SUV018	961.7	239.5	722.2	683.2	4.3	34.7	0.7	0.6	33.4	7.6	13.4	12.4	10,900	39.0	0.00358	34.7	31.8	7.6	6.579
15SUV019	1,339.1	362.2	976.9	855.3	25.1	96.5	4.2	0.5	91.8	60.7	22.5	8.6	13,200	121.6	0.00921	96.5	73.1	60.7	0.824
15SUV020	1,288.3	323.6	964.7	652.9	27.8	284.0	5.9	115.1	163.0	42.9	66.4	53.7	21,600	311.8	0.01444	284.0	131.5	42.9	1.166
15SUV021	1,021.3	312.7	708.6	582.9	26.0	99.7	2.5	34.7	62.5	35.3	20.5	6.7	21,200	125.7	0.00593	99.7	47.0	35.3	1.416
15SUV022	930.2	380.8	549.4	546.2	1.1	2.1	0.2	0.4	1.5	0.9	0.4	0.2	20,100	3.2	0.00016	2.1	1.0	0.9	55.556
15SUV023	958.8	322.9	635.9	633.5	0.9	1.5	0.0	0.4	1.1	0.7	0.3	0.1	18,800	2.4	0.00013	1.5	0.8	0.7	71.429
15SUV024	1,793.4	460.1	1,333.3	1,312.5	9.8	11.0	0.8	2.4	7.8	6.7	0.8	0.3	15,500	20.8	0.00134	11.0	7.1	6.7	7.463
15SUV025	1,778.6	788.6	990.0	884.8	17.3	87.9	2.1	12.5	73.3	27.1	15.5	30.7	18,100	105.2	0.00581	87.9	48.6	27.1	1.845
15SUV026	1,686.1	561.1	1,125.0	949.7	33.4	141.9	2.1	25.5	114.3	48.2	36.2	29.9	18,100	175.3	0.00969	141.9	78.4	48.2	1.037
15SUV027	1,375.6	290.2	1,085.4	1,013.3	9.3	62.8	3.3	8.1	51.4	18.6	20.0	12.8	19,500	72.1	0.00370	62.8	32.2	18.6	2.688
15SUV028	1,109.2	245.0	864.2	844.1	4.6	15.5	0.6	1.9	13.0	8.6	2.5	1.9	7,900	20.1	0.00254	15.5	19.6	8.6	5.814
15SUV030	1,152.7	321.9	830.8	763.8	22.1	44.9	1.8	12.9	30.2	18.4	7.4	4.4	13,400	67.0	0.00500	44.9	33.5	18.4	2.717
15SUV031	1,502.0	499.1	1,002.9	858.1	47.0	97.8	3.5	38.7	55.6	41.1	10.0	4.5	14,400	144.8	0.01006	97.8	67.9	41.1	1.217
15SUV032	1,002.4	411.4	591.0	501.1	20.7	69.2	1.4	24.0	43.8	27.6	13.8	2.4	18,300	89.9	0.00491	69.2	37.8	27.6	1.812
15SUV033	1,085.2	731.8	353.4	322.3	14.8	16.3	0.8	4.7	10.8	7.1	2.8	0.9	22,000	31.1	0.00141	16.3	7.4	7.1	7.042
15SUV050	1,538.3	499.7	1,038.6	927.7	25.1	85.8	3.0	17.5	65.3	38.4	19.3	7.6	19,200	110.9	0.00578	85.8	44.7	38.4	1.302
15SUV051	1,294.7	340.5	954.2	792.4	24.6	137.2	3.4	50.4	83.4	47.6	29.2	6.6	16,600	161.8	0.00975	137.2	82.7	47.6	1.050
15SUV052	1,479.0	584.9	894.1	674.7	58.7	160.7	8.1	74.9	77.7	49.6	20.2	7.9	26,800	219.4	0.00819	160.7	60.0	49.6	1.008
15SUV053	1,197.0	465.6	731.4	579.7	47.3	104.4	5.4	45.5	53.5	34.7	14.9	3.9	23,000	151.7	0.00660	104.4	45.4	34.7	1.441
15SUV054	725.9	311.3	414.6	395.9	7.3	11.4	1.2	3.4	6.8	4.7	1.7	0.4	16,000	18.7	0.00117	11.4	7.1	4.7	10.638
15SUV055*	1,417.0	429.0	988.0	860.3	37.8	89.9	4.2	32.9	52.8	38.4	10.3	4.1	12,200	127.7	0.01047	89.9	73.7	38.4	1.302
16SUV-013	1734.2	814.7	919.5	870.5		49.0	4.6	13.00	31.4	18.1	6.3	7.0	9,800	49.0	0.00500	49.0	50.0	18.1	2.762
16SUV-014	1096.0	503.8	592.2	341.8		250.4	13.0	141.30	96.1	36.1	23.0	37.0	19,000	250.4	0.01318	250.4	131.8	36.1	1.385
16SUV-015	1655.0	850.8	804.2	764.2		40.0	4.4	6.20	29.4	14.2	8.3	6.9	23,300	40.0	0.00172	40.0	17.2	14.2	3.521
16SUV-016	1409.5	740.8	668.7	611.3		57.4	4.7	8.90	43.8	19.9	14.1	9.8	19,800	57.4	0.00290	57.4	29.0	19.9	2.513
16SUV-017	1670.1	769.8	900.3	899.4		0.9	0.0	0.01	0.8	0.8	0.01	0.03	6,200	0.9	0.00015	0.9	1.5	0.8	62.500
16SUV-018	1603.1	649.6	953.5	951.6		1.9	0.2	0.01	1.7	1.5	0.1	0.08	11,000	1.9	0.00017	1.9	1.7	1.5	33.333
16SUV-019	1033.0	838.7	194.3	181.2		13.1	3.6	0.50	9.0	3.5	3.2	2.3	14,100	13.1	0.00093	13.1	9.3	3.5	14.286
16SUV-020	781.1	611.8	169.3	151.9		17.4	5.1	0.40	11.9	4.7	4.1	3.1	15,700	17.4	0.00111	17.4	11.1	4.7	10.638
16SUV-022	861.5	811.0	50.5	49.4		1.1	0.1	0.01	1.0	0.7	0.1	0.2	23,100	1.1	0.00005	1.1	0.5	0.7	71.429
16SUV-023	1095.2	678.6	416.6	410.0		6.6	0.5	0.40	5.7	2.6	1.6	1.5	11,200	6.6	0.00059	6.6	5.9	2.6	19.231
16SUV-024	1941.1	1035.5	905.6	895.0		10.6	1.2	0.01	9.4	6.5	2.4	0.5	22,900	10.6	0.00046	10.6	4.6	6.5	7.692
16SUV-025	2080.6	794.8	1285.8	1121.5		164.3	18.5	14.20	131.6	69.9	45.4	16.3	21,700	164.3	0.00757	164.3	75.7	69.9	0.715
16SUV-026	1715.4	824.7	890.7	849.2		41.5	8.3	1.20	32.0	23.6	6.2	2.2	16,000	41.5	0.00259	41.5	25.9	23.6	2.119
16SUV-027	1872.5	446.2	1426.3	1268.1		158.2	13.1	44.90	100.2	45.9	29.7	24.6	17,700	158.2	0.00894	158.2	89.4	45.9	1.089
16SUV-028	1373.4	504.9	868.5	714.5		154.0	8.3	48.50	97.2	45.3	30.7	21.2	27,500	154.0	0.00560	154.0	56.0	45.3	1.104
16SUV-030	960.3	315.8	644.5	572.7		71.8	6.2	24.20	41.4	18.8	10.7	11.9	15,800	71.8	0.00454	71.8	45.4	18.8	2.660
Blanks																			
15SUV017	1,367.8	669.3	698.5	481.2	96.6	120.7	14.6	26.0	80.1	72.4	7.5	0.2	17,900	217.3	0.01214	120.7	67.4	72.4	0.691
15SUV029	951.7	511.3	440.4	283.8	68.5	88.1	5.0	8.3	74.8	56.9	15.2	2.7	13,800	156.6	0.01135	88.1	63.8	56.9	0.879
16SUV-021	1114.9	813.1	301.8	216.6		85.2	9.3	8.10	67.8	49.1	14.3	4.4	14,300	85.2	0.00596	85.2	59.6	49.1	1.018
16SUV-029	1539.8	881.8	658.0	504.2		153.8	38.3	22.60	92.9	78.6	13.7	0.6	16,400	153.8	0.00938	153.8	93.8	78.6	0.636

[1]Values greater than 0.1 g were only weighed to one decimal place
*sample 15SUV055 is a field duplicate of 15SUV031
**Shading identifies Beaufort Formation samples.

Sediment Type	Average Total HMC (0.25 - 0.5 mm) SG>3.2 Mass (g) Normalized to 10 kg Table Feed (<2 mm)
Stream Sediments	74.6
Beaufort Fm.	53.8*
Till	5.9
Glaciofluvial	17.7
Bedrock	2.6

*Note, if sample 15SUV015 is excluded (187 g), the average total HMC mass for Beaufort Fm. samples is 31.6 g / 10 kg Table Feed (<2 mm)

Appendix 4C

Geological Survey of Canada
Banks Island KIM samples - KIMBERLITE INDICATOR MINERAL COUNTS BY ODM - CORRECTED BY EPMA GEOCHEMISTRY DETERMINATIONS

Sample Number	Sample Material[1]	Number of Grains																																		
		Selected MMSIMs[2]									KIMs[3, 4]																									
		1.0 to 2.0 mm			0.5 to 1.0 mm			0.25 to 0.5 mm			1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm							0.18 to 0.25 mm						
		Low-Cr diopside	Cpy	Gh	Low-Cr diopside	Cpy	Gh	Low-Cr diopside	Cpy	Gh	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total (KIMs)	GP	GO	DC	IM	CR	FO	Total (KIMs)
15SUV001	SS	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	**3**	**21**	**2**	**28**							
15SUV002	SS	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**14** (15)	0	**14** (15)							
15SUV003	SS	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	**2**	0	0	0	0	**1**	**15** (16)	0	**18** (19)							
15SUV004	SS	0	0	0	1	7	0	2	100	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**[5]	0	0	0	**2**	0	**3**							
15SUV005	SS	0	0	0	0	1	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**							
15SUV006	SS	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**							
15SUV008	SS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**6** (7)	**7** (8)							
15SUV009	SS	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	**39** (40)	**1**	**42** (43)							
15SUV010	SS	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	**2**							
15SUV014	SS	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	**1**	**1**	**5**	0	**9**							
15SUV015	BF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**
15SUV018	BF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	0	**3**	0	0	0	0	**4**	0	**4**
15SUV019*	BF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	**2**	**2**	0	0	0	**4**	0	**6**
15SUV020	SS	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	**1**	**1**	0	**1**	0	0	**4**	**35**	**2** (4)	**44** (46)							
15SUV021	SS	0	0	0	1	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV022	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV023	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV024	GF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2** (1)	**1** (2)	**1**	0	**1**	0	**5**							
15SUV025	SS	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**1**	**2**							
15SUV026	SS	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**	0	**1**	0	0	0	**7**	**3**	**13**							
15SUV027	SS	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV028	BF	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	**1**	0	0	0	0	0	**1**	0	0	0	0	0	**2**	**2**	0	0	0	**3**	0	**5**
15SUV030	BF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	**5** (6)	0	**6** (7)	0	0	0	0	**2**	**1**	**3**
15SUV031	SS	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**							
15SUV032	SS	0	0	0	0	0	0	9	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV033	SS	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV050	SS	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	**1**	**4**							
15SUV051	SS	0	1	0	0	5	0	0	19	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	**1**	**3**	**4**	**10**							
15SUV052	SS	0	1	0	0	5	0	1	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV053	SS	0	0	0	0	1	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV054	T	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	**2**							
15SUV055*	SS	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV013	GF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	**2**							
16SUV014	SS	0	0	0	0	3	0	0	5	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	**2**	**3**	**0** (1)	**6** (7)							
16SUV015	SS	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	**2**							
16SUV016	SS	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV017	GF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV018	GF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**	0	**4**							
16SUV019	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV020	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV022	R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV023	BF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**19** (18)	**0** (1)	0	**9**	**9** (10)	0	**37** (38)	**24** (25)	**2**	0	**19** (21**)	**17** (15**)	0	**62** (63)
16SUV024	R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	0	**3**							
16SUV025	SS	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	**2**							
16SUV026	BF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV027	SS	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	**1**	**3**	0	0	0	0	**2**	**40**	0	**46**							
16SUV028	SS	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**	**1**	0	0	**2**	0	**1**	**1**	0	**1** (0)	**12** (17)	**1**	**19** (24)							
16SUV030	SS	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	**1**	0	**2**							

[1]Sample Material: BF=Beaufort Formation, GF=glaciofluvial, R=bedrock, SS=stream sediment, T=till

[2]Metamorphosed/Magmatic Massive Sulphide Indicator Minerals; Cpy=Chalcopyrite, Gh=Gahnite

[3]Kimberlite Indicator Minerals: CR=Chromite, DC=Cr-diopside, FO=forsterite, GO=Eclogitic garnet, GP=Peridotitic garnet, IM=Mg-ilmenite

[4]Numbers in bold, black are EPMA-corrected numbers of recovered grains; numbers in red are number of grains originally picked by ODM where different

[5]Grain lost

*sample 15SUV019 is a field duplicate of 15SUV018; 15SUV055 is a field duplicate of 15SUV031

**IM and CR not picked to completion

***Shading identifies Beaufort Formation samples

KIM Percentage Compositions

	GP	GO	DC	IM	CR	FO
% of all KIMs 0.25-1.00 mm (n=342)	11.4	0.9	0.6	8.8	72.5	6.1
% of 0.5-1.0 mm KIMs (n=21; 6.1%)	14.3	4.8	0.0	23.8	57.1	0.0
% of 0.25-0.5 mm KIMs (n=321; 93.9%)	11.2	0.6	0.6	7.8	73.5	6.5
6 Beaufort Fm Samples With The 0.18-0.25 mm Fraction Picked						
% of all KIMs 0.25-1.00 mm (n=50)	48.0	0.0	0.0	18.0	34.0	0.0
% of KIMs 0.18-0.25 mm (n=81)	34.6	2.5	0.0	23.5	38.3	1.2

Appendix 4D

Geological Survey of Canada
Banks Island KIM samples - KIMBERLITE INDICATOR MINERAL COUNTS by ODM - CORRECTED FOR EPMA GEOCHEMISTRY DETERMINATIONS - THEN NORMALIZED TO A 10 KG TABLE FEED (<2 mm) SAMPLE WEIGHT

Sample Number	Sample Material[1]	Table Feed kg	per 10 kg Table Feed Conversion	Number of Grains: Selected MMSIMs[2] 1.0 to 2.0 mm			0.5 to 1.0 mm			0.25 to 0.5 mm			KIMs[3] 1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						Total (KIMs)	0.18 to 0.25 mm						Total (KIMs)
				Low-Cr diopside	Cpy	Gh	Low-Cr diopside	Cpy	Gh	Low-Cr diopside	Cpy	Gh	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO		GP	GO	DC	IM	CR	FO	
15SUV001	SS	24.1	0.41	0	0	0	0	0	0	0	5.8	0	0	0	0	0	0	0	0	0	0	**0.8**	0	0	0	0	0	**1.2**	**8.7**	**0.8**	**11.6**							
15SUV002	SS	18.1	0.55	0	0	0	0	0	0	0	2.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7.7**	0	**7.7**							
15SUV003	SS	17.7	0.56	0	0	0	0	0	0	0	7.9	0	0	0	0	0	0	0	0	0	0	0	**1.1**	0	0	0	0	**0.6**	**8.5**	0	**10.2**							
15SUV004	SS	25.4	0.39	0	0	0	0.4	2.8	0	0.8	39.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.8**	0	**1.2**							
15SUV005	SS	20.0	0.50	0	0	0	0	0.5	0	0	7.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.5**	0	**0.5**							
15SUV006	SS	20.2	0.50	0	0	0	0	0	0	0	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.5**	0	**0.5**							
15SUV008	SS	9.0	1.11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.1**	**6.7**	**7.8**							
15SUV009	SS	11.4	0.88	0	0	0	0	0	0	0	2.6	0	0	0	0	0	0	0	0	0	0	0	**0.9**	0	**0.9**	0	0	0	**34.2**	**0.9**	**36.8**							
15SUV010	SS	23.2	0.43	0	0	0	0	0	0	0	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.9**	0	**0.9**							
15SUV014	SS	18.5	0.54	0	0	0	0	0	0	0	5.4	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.1**	0	**0.5**	**0.5**	**2.7**	0	**4.9**							
15SUV015	BF	8.2	1.22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.2**	0	**1.2**
15SUV018	BF	10.9	0.92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2.8**	0	**2.8**	0	0	0	0	**3.7**	0	**3.7**
15SUV019*	BF	13.2	0.76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.5**	0	0	0	0	0	**1.5**	**1.5**	0	0	0	**3.0**	0	**4.5**
15SUV020	SS	21.6	0.46	0	0	0	0	0	0	0	4.2	0	0	0	0	0	0	0	0	0	0	**0.5**	**0.5**	0	**0.5**	0	0	**1.9**	**16.2**	**0.9**	**20.4**							
15SUV021	SS	21.2	0.47	0	0	0	0.5	0	0	0.5	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV022	T	20.1	0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV023	T	18.8	0.53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV024	GF	15.5	0.65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.3**	**0.6**	**0.6**	0	**0.6**	0	**3.2**							
15SUV025	SS	18.1	0.55	0	0	0	0	0	0	0	2.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.6**	**0.6**	**1.1**							
15SUV026	SS	18.1	0.55	0	0	0	0	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0	**1.1**	0	**0.6**	0	0	0	**3.9**	**1.7**	**7.2**							
15SUV027	SS	19.5	0.51	0	0	0	0	0	0	0.5	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV028	BF	7.9	1.27	0	0	0	0	0	0	2.5	0	1.3	0	0	0	0	0	0	**1.3**	0	0	0	0	0	**1.3**	0	0	0	0	0	**2.5**	**2.5**	0	0	0	**3.8**	0	**6.3**
15SUV030	BF	13.4	0.75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.7**	0	0	0	**3.7**	0	**4.5**	0	0	0	0	**1.5**	**0.7**	**2.2**
15SUV031	SS	14.4	0.69	0	0	0	0	0	0	0	9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.7**	0	**0.7**							
15SUV032	SS	18.3	0.55	0	0	0	0	0	0	4.9	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV033	SS	22.0	0.45	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV050	SS	19.2	0.52	0	0	0	0	0	0	0	3.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.6**	**0.5**	**2.1**							
15SUV051	SS	16.6	0.60	0	0.6	0	0	3.0	0	0	11.4	0	0	0	0	0	0	0	0	0	0	0	**0.6**	0	**0.6**	0	0	**0.6**	**1.8**	**2.4**	**6.0**							
15SUV052	SS	26.8	0.37	0	0	0	0	1.9	0	0.4	18.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV053	SS	23.0	0.43	0	0	0	0	0.4	0	0	17.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV054	T	16.0	0.63	0	0	0	0	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.3**	0	**1.3**							
15SUV055*	SS	12.2	0.82	0	0	0	0	0	0	0	10.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV013	GF	9.8	1.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2.0**	0	**2.0**							
16SUV014	SS	19.0	0.53	0	0	0	0	1.6	0	0	2.6	0	0	0	0	0	0	0	0	0	0	**0.5**	0	0	0	0	0	**1.1**	**1.6**	**0.0**	**3.2**							
16SUV015	SS	23.3	0.43	0	0	0	0	0	0	0	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.4**	0	0	**0.4**	0	0	**0.9**							
16SUV016	SS	19.8	0.51	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV017	GF	6.2	1.61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV018	GF	11.0	0.91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3.6**	0	**3.6**							
16SUV019	T	14.1	0.71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV020	T	15.7	0.64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV022	R	23.1	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV023	BF	11.2	0.89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**17.0**	**0.0**	0	**8.0**	**8.0**	0	**33.0**	**21.4**	**1.8**	0	**17.0**	**15.2**	0	**55.4**
16SUV024	R	22.9	0.44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.3**	0	**1.3**							
16SUV025	SS	21.7	0.46	0	0	0	0	0	0	0	5.1	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.9**	0	0	0	0	0	**0.9**							
16SUV026	BF	16.0	0.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV027	SS	17.7	0.56	0	0	0	0	0	0	0	4.0	0	0	0	0	0	0	0	0	0	0	**0.6**	**1.7**	0	0	0	0	**1.1**	**22.6**	0	**26.0**							
16SUV028	SS	27.5	0.36	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0	**0.4**	**0.4**	0	0	**0.7**	0	**0.4**	**0.4**	0	0	**4.4**	**0.4**	**6.9**							
16SUV030	SS	15.8	0.63	0	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0	**0.6**	0	0	0	0	0	0	0	0	0	**0.6**	0	**1.3**							

[1]Sample Material: BF=Beaufort Formation, GF=glaciofluvial, R=bedrock, SS=stream sediment, T=till
[2]Metamorphosed/Magmatic Massive Sulphide Indicator Minerals; Cpy=Chalcopyrite, Gh=Gahnite
[3]Kimberlite Indicator Minerals: CR=Chromite, DC=Cr-diopside, FO=forsterite, GO=Eclogitic garnet, GP=Peridotitic garnet, IM=Mg-ilmenite
*sample 15SUV019 is a field duplicate of 15SUV018; 15SUV055 is a field duplicate of 15SUV031
**IM and CR not picked to completion
***Shading identifies Beaufort Formation samples

KIM Percentage Compositions[4]

	GP	GO	DC	IM	CR	FO
% of all KIMs 0.25-1.00 mm (n=214.4)	13.9	0.6	0.6	8.5	69.7	6.9
% of 0.5-1.0 mm KIMs (n=11.6; 5.4%)	19.5	3.1	0.0	20.6	56.9	0.0
% of 0.25-0.5 mm KIMs (n=202.8; 94.6%)	13.5	0.5	0.6	7.8	70.4	7.3
6 Beaufort Fm Samples With Finer Fraction Picked						
% of all KIMs 0.25-1.00 mm (n=44.3)	49.1	0.0	0.0	18.1	32.8	0.0
% of 0.18-0.25 mm KIMs (n=73.4)	34.7	2.4	0.0	23.2	38.7	1.0

[4]Calculations exclude Blank samples that were spiked with known KIMs

Appendix 4E

Geological Survey of Canada
Banks Island KIM samples - KIMBERLITE INDICATOR MINERAL COUNTS - CORRECTED FOR EPMA GEOCHEMISTRY DETERMINATIONS and then NORMALIZED TO 50 g OF THE NONFERROMAGNETIC HMC 0.25-0.50 mm PICKING FRACTION

			Selected MMSIMs[2]			KIMs[3]						
		normalization conversion to 50 g of 0.25-0.5 mm picking fraction	0.25 to 0.5 mm			0.25 to 0.5 mm						
Sample Number	Sample Material[1]		Low-Cr diopside	Cpy	Gh	GP	GO	DC	IM	CR	FO	Total (KIMs)
15SUV001	SS	0.616	0	8.6	0	0	0	0	1.8	12.9	1.2	16.0
15SUV002	SS	0.762	0	3.8	0	0	0	0	0	10.7	0	10.7
15SUV003	SS	0.643	0	9.0	0	0	0	0	0.6	9.6	0	10.3
15SUV004	SS	0.593	1.2	59.3	0	0.6	0	0	0	1.2	0	1.8
15SUV005	SS	1.053	0	15.8	0	0	0	0	0	1.1	0	1.1
15SUV006	SS	1.188	0	4.8	0	0	0	0	0	1.2	0	1.2
15SUV008	SS	4.348	0	0	0	0	0	0	0	4.3	26.1	30.4
15SUV009	SS	1.563	0	4.7	0	1.6	0	0	0	60.9	1.6	64.1
15SUV010	SS	0.864	0	1.7	0	0	0	0	0	1.7	0	1.7
15SUV014	SS	0.928	0	9.3	0	1.9	0	0.9	0.9	4.6	0	8.3
15SUV015	BF	0.861	0	0	0	0	0	0	0	0	0	0
15SUV018	BF	6.579	0	0	0	0	0	0	0	19.7	0	19.7
15SUV019*	BF	0.824	0	0	0	1.6	0	0	0	0	0	1.6
15SUV020	SS	1.166	0	10.5	0	1.2	0	0	4.7	40.8	2.3	49.0
15SUV021	SS	1.416	1.4	5.7	0	0	0	0	0	0	0	0
15SUV022	T	55.556	0	0	0	0	0	0	0	0	0	0
15SUV023	T	71.429	0	0	0	0	0	0	0	0	0	0
15SUV024	GF	7.463	0	0	0	14.9	7.5	7.5	0	7.5	0	37.3
15SUV025	SS	1.845	0	9.2	0	0	0	0	0	1.8	1.8	3.7
15SUV026	SS	1.037	0	1.0	0	1.0	0	0	0	7.3	3.1	11.4
15SUV027	SS	2.688	2.7	8.1	0	0	0	0	0	0	0	0
15SUV028	BF	5.814	11.6	0	5.8	5.8	0	0	0	0	0	5.8
15SUV030	BF	2.717	0	0	0	2.7	0	0	0	13.6	0	16.3
15SUV031	SS	1.217	0	15.8	0	0	0	0	0	1.2	0	1.2
15SUV032	SS	1.812	16.3	10.9	0	0	0	0	0	0	0	0
15SUV033	SS	7.042	0	7.0	0	0	0	0	0	0	0	0
15SUV050	SS	1.302	0	9.1	0	0	0	0	0	3.9	1.3	5.2
15SUV051	SS	1.050	0	20.0	0	1.1	0	0	1.1	3.2	4.2	9.5
15SUV052	SS	1.008	1.0	50.4	0	0	0	0	0	0	0	0
15SUV053	SS	1.441	0	57.6	0	0	0	0	0	0	0	0
15SUV054	T	10.638	0	10.6	0	0	0	0	0	21.3	0	21.3
15SUV055*	SS	1.302	0	16.9	0	0	0	0	0	0	0	0
						0	0	0	0	0	0	0
16SUV013	GF	2.762	0	0	0	0	0	0	0	5.5	0	5.5
16SUV014	SS	1.385	0	6.9	0	0	0	0	2.8	4.2	0.0	6.9
16SUV015	SS	3.521	0	14.1	0	3.5	0	0	3.5	0	0	7.0
16SUV016	SS	2.513	0	2.5	0	0	0	0	0	0	0	0
16SUV017	GF	62.500	0	0	0	0	0	0	0	0	0	0
16SUV018	GF	33.333	0	0	0	0	0	0	0	133.3	0	133.3
16SUV019	T	14.286	0	0	0	0	0	0	0	0	0	0
16SUV020	T	10.638	0	0	0	0	0	0	0	0	0	0
16SUV022	R	71.429	0	0	0	0	0	0	0	0	0	0
16SUV023	BF	19.231	0	0	0	365.4	0.0	0	173.1	173.1	0	711.5
16SUV024	R	7.692	0	0	0	0	0	0	0	23.1	0	23.1
16SUV025	SS	0.715	0	7.9	0	1.4	0	0	0	0	0	1.4
16SUV026	BF	2.119	0	0	0	0	0	0	0	0	0	0
16SUV027	SS	1.089	0	7.6	0	0	0	0	2.2	43.6	0	45.8
16SUV028	SS	1.104	0	1.1	0	1.1	1.1	0	1	13.2	1.1	17.7
16SUV030	SS	2.660	0	0	0	0	0	0	0	2.7	0	2.7

KIM Percentage Compositions

	GP	GO	DC	IM	CR	FO
# of 0.25-0.5 mm KIMs (n=1282.5)	403.8	8.6	8.4	191.8	627.2	42.8
% of 0.25-0.5 mm KIMs	31.5	0.7	0.7	15.0	48.9	3.3

[1]Sample Material: BF=Beaufort Formation, GF=glaciofluvial, R=bedrock, SS=stream sediment, T=till

[2]Metamorphosed/Magmatic Massive Sulphide Indicator Minerals; Cpy=Chalcopyrite, Gh=Gahnite

[3]Kimberlite Indicator Minerals: CR=Chromite, DC=Cr-diopside, FO=forsterite, GO=Eclogitic garnet, GP=Peridotitic garnet, IM=Mg-ilmenite

*sample 15SUV019 is a field duplicate of 15SUV018; 15SUV055 is a field duplicate of 15SUV031

**Shading identifies Beaufort Formation samples

Appendix 4F

Geological Survey of Canada
Banks Island KIM samples - KIMBERLITE INDICATOR MINERAL ODM PICKING FOOTNOTES

SAMPLE NO.	INPUT ASSEMBLAGE	INPUT REMARKS
15SUV001	Augite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.
15SUV002	Augite-goethite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 andradite candidates = 3 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 9 CR candidates = 9 CR; 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; and 3 barite candidates = 3 barite.
15SUV003	Goethite-orthopyroxene/diopside	SEM checks from 0.5-1.0 mm fraction: 4 CR candidates = 2 CR and 2 hercynite. SEM checks from 0.25-0.5 mm fraction: 2 GO versus almandine candidates = 2 almandine; 14 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 11 CR; 5 FO versus diopside candidates = 5 vesuvianite; and 1 blue-green gahnite versus spinel candidate = 1 hercynite.
15SUV004	Augite-goethite/diopside-marcasite	SEM checks from 0.25-0.5 mm fraction: 1 GP versus zircon candidate = 1 GP; 1 blue-green gahnite versus spinel candidate = 1 spinel; 3 sphalerite versus rutile candidates = 3 sphalerite; 1 galena candidate = 1 galena; 5 barite versus diopside candidates = 5 barite; and 5 augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite. Also picked an additional 6 of ~20 sphalerite from 0.25-0.5 mm fraction. (*Note, 3 of the 9 total sphalerite grains picked were subsequently identified by EPMA as vesuvianite).
15SUV005	Augite/diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 almandine; 1 CR versus tourmaline candidate = 1 CR; and 5 FO versus diopside candidates = 4 fayalite and 1 vesuvianite.
15SUV006	Augite/diopside	SEM checks from 0.25-0.5 mm fraction: 2 orange GO versus almandine candidates = 2 almandine; 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; 5 FO versus diopside candidates = 3 fayalite, 1 diopside and 1 bronzite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.
15SUV008	Augite/diopside	No KIM remarks.
15SUV009	Augite-goethite/diopside	SEM check from 0.5-1.0 mm fraction: 1 CR candidate = 1 CR. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus almandine candidate = 1 almandine; and 1 FO versus diopside candidate = 1 FO.
15SUV010	Goethite-almandine/diopside	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 5 FO versus titanite candidates = 5 vesuvianite; and 1 malachite candidate = 1 malachite. SEM checks from 0.25-0.5 mm fraction: 3 CR versus tourmaline candidates = 2 CR and 1 tourmaline; and 5 FO versus fayalite candidates = 3 fayalite and 2 vesuvianite.
15SUV014	Goethite-augite/diopside-marcasite	SEM checks from 0.25-0.5 mm fraction: 1 GP versus ruby corundum candidate = 1 GP; 3 IM versus crustal ilmenite candidates = 1 IM, 1 CR and 1 hercynite; 5 CR versus tourmaline candidates = 3 CR, 1 hercynite and 1 tourmaline; 1 FO versus vesuvianite candidate = 1 vesuvianite. Also picked 1 sphalerite from 0.5-1.0 mm fraction and 4 from 0.25-0.5 mm fraction. (*Note, sphalerite grains later confirmed by EPMA; vial with 4 sphalerite grains also contained a monazite grain)
15SUV015		No KIM remarks.
15SUV018		SEM checks from 0.25-0.5 mm fraction: 4 CR versus crustal ilmenite candidates = 3 CR and 1 crustal ilmenite. SEM checks from 0.18-0.25 mm fraction: 4 CR versus rutile candidates = 4 CR; and 2 greengahnite versus spinel candidates = 2 hercynite (1 with minor Zn)
15SUV019		SEM checks form 0.18-0.25 mm fraction: 3 GP versus almandine candidates = 2 GP and 1 almandine; 2 CR versus tournaline candidates = 1 CR and 1 hematitie; and 2 FO versus diopside candidates = 1 diopside and 1 apatite.
15SUV020	Augite-goethite-almandine/diopside	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 hercynite; and 3 CR versus tourmaline candidates = 1 CR, 1 tourmaline and 1 hercynite. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 spessartine; 15 IM versus crustal ilmenite candidates = 4 IM, 8 crustal ilmenite and 3 CR; 14 CR versus hercynite candidates = 14 CR; and 7 FO versus fayalite candidates = 4 FO and 3 fayalite. Also picked 1 malachite from 0.25-0.5 mm fraction.
15SUV021		SEM checks from 0.5-1.0 mm fraction: 2 FO versus fayalite candidates = 1 fayalite and 1 hedenbergite; and 1 barite candidate = 1 barite. SEM checks from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 vesuvianite; 1 sphalerite candidate = 1 sphalerite; and 4 anglesite candidates = 4 pyrite + calcite. (*Note, 2 sphalerite grains were returned in vials; 1 was later confirmed by EPMA as sphalerite, the other was rejected as clinopyroxene)
15SUV022		No KIM remarks.
15SUV023		SEM checks from 0.25-0.5 mm fraction: 4 FO versus fayalite candidates = 4 fayalite.
15SUV024		SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 almandine; 11 GO versus almandine candidates = 2 GO (Cr-poor pyrope), 6 almandine, 2 staurolite and 1 zircon; 10 CR versus crustal ilmenite candidates = 1 CR and 9 crustal ilmenite; and 4 FO versus vesuvianite candidates = 4 vesuvianite.
15SUV025	Goethite/diopside-marcasite	SEM checks from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; 1 galena candidate = 1 galena. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 4 crustal ilmenite and 1 CR; 3 CR versus hercynite candidates = 1 hercynite and 2 andradite; and 1 FO versus diopside candidate = 1 FO. Also picked 1 sphalerite from 1.0-2.0 mm fraction; 3 sphalerite from 0.5-1.0 mm fraction; and 8 sphalerite and 3 galena from 0.25-0.5 mm fraction.
15SUV026	Goethite-augite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 IM versus crustal ilmenite candidates = 1 crustal ilmenite, 1 CR and 1 hercynite; and 1 FO versus diopside candidate = 1 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 crustal ilmenite and 4 CR; and 6 FO versus diopside candidates = 3 FO, 2 diopside and 1 vesuvianite. Also picked 1 sphalerite from 0.5-1.0 mm fraction and 2 from 0.25-0.5 mm fraction.
15SUV027	Goethite-siderite/marcasite-diopside	SEM checks from 0.5-1.0 mm fraction: 1 sphalerite candidate = 1 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 5 sphalerite versus vesuvianite candidates = 5 vesuvianite.
15SUV028		SEM check from 0.25-0.5 mm fraction: 1 CR versus hematite candidate = 1 hematite.
15SUV030		SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM checks from 0.18-0.25 mm fraction: 1 FO versus diopside candidate = 1 FO.

Geological Survey of Canada
Banks Island KIM samples - KIMBERLITE INDICATOR MINERAL ODM PICKING FOOTNOTES

SAMPLE NO.	INPUT ASSEMBLAGE	INPUT REMARKS
15SUV001	Augite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.
SAMPLE NO.	INPUT ASSEMBLAGE	INPUT REMARKS
15SUV031	Augite/diopside	No KIM remarks.
15SUV032	Augite/diopside	No KIM remarks.
15SUV033	Augite/diopside	SEM check from 0.25-0.5 mm fraction: 1 IM versus rutile candidate = 1 crustal ilmenite.
15SUV050	Augite/diopside	SEM checks from 0.25-0.5 mm fraction: 1 CR versus crustal ilmenite andidate = 1 CR; 1 FO versus diopside candidate = 1 FO; and 5 sphalerite candidates = 1 sphalerite and 4 vesuvianite. Also picked 5 sphalerite from 0.5-1.0 mm fraction and 2 additional sphalerite from 0.25-0.5 mm fraction.
15SUV051	Augite/diopside	SEM checks from 0.5-1.0 mm fraction: 2 CR versus hercynite candidates = 1 CR and 1 hercynite. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 andradite; 3 CR versus rutile candidates = 2 CR and 1 andradite; and 4 FO versus diopside candidates = 4 FO.
15SUV052	Augite-hematite/diopside-macasite	SEM checks from 0.5-1.0 mm fraction: 3 GP versus almandine candidates = 3 almandine. Also picked 1 galena from 0.5-1.0 mm fraction and 1 from 0.25-0.5 mm fraction.
15SUV053	Augite/diopside	SEM checks from 0.25-0.5 mm fraction: 2 GP versus almandine candidates = 2 almandine.
15SUV054	Augite-hematite-almandine/diopside	SEM checks from 0.25-0.5 mm fraction: 2 CR versus rutile candidates = 2 CR; and 1 FO versus diopside candidate = 1 zoisite.
15SUV055*	Augite/diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 grossular (lost in transfer to vial).
16SUV-013		SEM checks from 0.25-0.5 mm fraction: 2 CR candidates = 2 CR; and 2 FO versus vesuvianite candidates = 2 vesuvianite.
16SUV-014	Augite-goethite-almandine/diopside-marcasite	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite; 1 CR versus tourmaline candidate = 1 tourmaline; and 1 sphalerite versus titanite candidate = 1 sphalerite. SEM checks from 0.25-0.5 mm fraction: 10 IM versus crustal ilmenite candidates = 1 IM and 9 crustal ilmenite; 4 CR versus crustal ilmenite candidates = 2 CR and 2 crustal ilmenite; and 6 FO versus fayalite candidates = 1 FO and 5 fayalite
16SUV-015	Almandine-goethite-augite/marcasite	SEM check from 0.25-0.5 mm fraction: 1 GP versus zircon candidate = 1 zircon; and 1 IM versus crustal ilmenite candidate = 1 IM.
16SUV-016	Augite-goethite/marcasite	SEM checks from 0.25-0.5 mm fraction: 7 FO versus fayalite candidates = 7 fayalite.
16SUV-017		No KIM remarks.
16SUV-018		SEM checks from 0.25-0.5 mm fraction: 5 CR candidates = 3 CR and 2 hercynite.
16SUV-019		No KIM remarks.
16SUV-020		No KIM remarks.
16SUV-022		No KIM remarks.
16SUV-023		SEM checks from 0.25-0.5 mm fraction: 2 GO versus almandine candidates = 2 almandine; 5 GO versus staurolite candidates = 5 staurolite; 15 IM versus crustal ilmenite candidates = 9 IM, 2 crustal ilmenite and 4 tourmaline; and 12 CR versus tourmaline candidates = 7 CR, 1 tourmaline and 4 hercynite. SEM checks from 0.18-0.25 mm fraction: 4 GO candidates = 2 GO (Cr-poor pyrope), 1 almandine and 1 grossular; and 6 IM candidates = 6 IM.
16SUV-024		SEM checks from 1.0-2.0 mm fraction: 3 CR versus tourmaline candidates = 3 tourmaline. SEM checks from 0.25-0.5 mm fraction: 1 worn GP versus zircon candidate = 1 zircon; 1 CR versus tourmaline candidate = 1 CR.
16SUV-025	Goethite/marcasite-diopside	SEM checks from 0.25-0.5 mm fraction: 3 GP versus zircon candidates = 1 GP, 1 zircon and 1 fluorite.
16SUV-026		No KIM remarks.
16SUV-027	Augite-almandine/diopside	SEM checks from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM; 6 CR versus tourmaline candidates = 3 CR, 1 tourmaline, 1 hercynite and 1 andradite; and 1 sphalerite versus titanite candidate = 1 sphalerite. SEM checks from 0.25-0.5 mm fraction: 10 IM versus crustal ilmenite candidates = 1 IM and 9 crustal ilmenite; and 10 CR versus hercynite candidates = 8 CR, 1 hercynite and 1 andradite.
16SUV-028	Augite-almandine-goethite/diopside-marcasite	SEM checks from 0.5-1.0 mm fraction: 4 GO versus almandine candidates = 1 GO (Cr-poor pyrope) and 3 almandine; and 1 IM versus CR candidate = 1 CR. SEM checks from 0.25-0.5 mm fraction: 2 GP versus almandine candidates = 1 ruby corundum and 1 spinel; 2 GO versus almandine candidates = 1 GO (Cr-poor pyrope) and 1 almandine; 5 IM versus crustal ilmenite candidates = 4 crustal ilmenite and 1 perovskite; 6 CR candidates = 5 CR and 1 crustal ilmenite; and 3 FO versus diopside candidates = 1 FO, 1 diopside and 1 andradite.
16SUV-030	Goethite-augite/diopside-marcasite	SEM checks from 1.0-2.0 mm fraction: 1 CR versus hercynite candidate = 1 hercynite. SEM check from 0.25-0.5 mm fraction: 1 CR versus hercynite candidate = 1 CR.
BLANKS		
15SUV017	Hornblende/titanite-zircon	SEM checks from 0.5-1.0 mm fraction: 4 IM versus CR candidates = 4 CR; 1 CR versus Cr-magnetite candidate = 1 CR; and 2 FO versus diopside candidates = 2 FO.
15SUV029	Hornblende-almandine/diopside-titanite-apatite	SEM checks from 0.5-1.0 mm fraction: 4 GO versus almandine candidates = 4 almandine; 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 3 FO versus diopside candidates = 3 diopside; and 1 blue-green gahnite versus spinel candidate = 1 spinel.
16SUV-021	Hornblende-almandine/diopside-titanite-apatite	SEM checks from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP; 3 GO versus almandine candidates = 3 almandine; and 4 IM versus crustal ilmenite candidates = 4 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 6 GO versus almandine candidates = 1 GO (pyrope almandine), 4 almandine and 1 grossular; 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 2 CR candidates = 2 CR; and 6 FO versus diopside candidates = 5 FO and 1 diopside. Sole IM from 0.5-1.0 mm fraction has partial alteration mantle.
16SUV-029	Hornblende/titanite-zircon	SEM checks from 0.25-0.5 mm fraction: 1 CR candidate = 1 CR; and 3 FO versus diopside candidates = 3 FO.

*sample 15SUV019 is a field duplicate of 15SUV018; 15SUV055 is a field duplicate of 15SUV031
**Shading identifies Beaufort Formation samples

Appendix 4G

Geological Survey of Canada
Banks Island KIM Samples - METAMORPHOSED or MAGMATIC MASSIVE SULPHIDE INDICATOR MINERALS (MMSIM) - 0.25-0.5 mm

Sample Number	Sulphide/Arsenide + Related Minerals				Mg/Mn/Al/Cr Minerals											Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp								<0.8 amp			>1.0 amp			
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz		
15SUV015	0	Tr sphalerite (2 gr) Tr barite (1 gr)	99 (~300,000 gr)	25	0	0	0	Tr	Tr	0	0	0	0	0	0	0	0	Siderite-goethite/marcasite assemblage. SEM checks: 4 sphalerite versus vesuvianite candidates = 2 sphalerite and 2 vesuvianite; and 2 barite candidates = 1 barite and 1 dolomite.	0.25-0.5 mm fraction: 2 sphalerite 2 vesuvianite resembling sphalerite 1 barite 1 dolomite resembling barite
15SUV018	0	0.4% galena (10 gr) Tr barite (1 gr)	0.1 (3 gr)	95	0	0	Tr (1 gr)	15	Tr	0	0	0	0	0	Tr (3 gr; see KIM data)	0	0	Goethite/diopside-kyanite assemblage. SEM checks: 5 barite versus kyanite candidates = 1 barite, 3 kyanite and 1 diopside.	0.25-0.5 mm fraction: 10* galena 1 barite 1 diopside resembling barite 3 kyanite 1 red rutile 3 chromite (picked as KIMs) *(1 of 10 galena revealed by EPMA to be goethite)
15SUV019	0	0	Tr (10 gr)	99	0	0	0	40	0	0	0	0	0	0	0	0	15	Goethite/diopside-kyanite-monazite assemblage.	
15SUV022	Tr (2 gr)	0	70 (~3000 gr)	Tr	0	0	0	Tr	Tr	0	0	Tr	0	0	0	Tr	Tr	Almandine-augite/marcasite-diopside assemblage.	0.25-0.5 mm fraction: 2 chalcopyrite
15SUV023	0.5 (10 gr)	Tr sphalerite (1 gr)	50 (~1000 gr)	0	0	0	0	0	Tr	Tr	0	Tr	Tr	0	0	Tr	0	Almandine-augite-hematite/marcasite-diopside assemblage. SEM checks: 1 yellow sphalerite candidate = 1 sphalerite; 2 barite versus apatite candidates = 2 apatite; and 1 hercynite versus tourmaline candidate = 1 tourmaline.	0.25-0.5 mm fraction: 10 chalcopyrite 1 sphalerite 2 apatite resembling barite 1 tourmaline resembling hercynite
15SUV024	0	0	Tr (1 gr)	1	0	0	0	Tr	0	0	0	Tr	0	0	Tr (1 gr; see KIM data)	0	Tr	Almandine-augite/diopside assemblage.	0.25-0.5 mm fraction: 1 chromite (picked as KIM)
15SUV028	0	Tr barite (5 gr)	Tr (10 gr)	90	1 blue-green gahnite; 1 blue-green spinel	Tr low-Cr diopside (2 gr)	Tr (2 gr)	1	Tr	0	Tr	Tr	0	0	0	Tr	0	Goethite/diopside assemblage. SEM checks: 3 barite versus diopside candidates = 1 barite and 2 diopside; and 2 blue-green gahnite versus spinel candidates = 1 gahnite and 1 spinel.	0.25-0.5 mm fraction: 5 barite 2 diopside resembling barite 1 gahnite 1 spinel 2 low-Cr diopside 2 red rutile
15SUV030	0	Tr barite (2 gr)	0	60	0	0	Tr (10 gr)	Tr	Tr	0	0	1	0	0	Tr (6 gr; see KIM data)	0	0	Goethite-almandine-augite/diopside assemblage.	0.25-0.5 mm fraction: 2 barite 10 red rutile 6 chromite (picked as KIMs)
16SUV-013	Tr (7 gr)	0	0.5 (~200 gr)	30	1 blue green	0	Tr (8 gr)	0	Tr	1	Tr	Tr	0	0	Tr (2 gr)	0	0	Augite-goethite-almandine/diopside assemblage. SEM checks: 1 sphalerite versus titanite candidate = 1 titanite; and 1 blue-green gahnite versus spinel candidate = 1 spinel.	0.25-0.5 mm fraction: 7 chalcopyrite 1 titanite resembling sphalerite 1 spinel 8 red rutile 2 chromite
16SUV-017	0	0	0	0	0	Tr sapphire corundum (2 gr)	0	15	2	3	60	0	0	0	0	0	0	Almandine/staurolite-epidote-kyanite assemblage. SEM checks: 5 white diopside versus epidote (major nonparamagnetic assemblage mineral) candidates = 5 epidote.	0.25-0.5 mm fraction: 2 sapphire corundum 5 representative epidote
16SUV-018	0	0	3 (~200 gr)	0	2 black hercynite	Tr sapphire corundum (16 gr)	0	15	4	1	60	0	0	0	Tr (4 gr)	0	0	Almandine-siderite/staurolite-kyanite-epidote assemblage. "Pyrite" is mostly marcasite.	0.25-0.5 mm fraction: 2 hercynite (see KIM notes) 16 sapphire corundum 4 chromite
16SUV-019	0	Tr sphalerite (1 gr) Tr barite (1 gr)	99 (~20,000 gr)	15	0	0	0	0	Tr	Tr	Tr	0	0	0	0	0	0	Siderite-almandine-hematite-goethite/marcasite assemblage. SEM checks: 1 brown sphalerite versus rutile candidate = 1 sphalerite; and 3 barite candidates = 1 barite and 2 diopside.	0.25-0.5 mm fraction: 1 sphalerite 1 barite 2 diopside resembling barite
16SUV-020	0	Tr barite (3 gr)	99 (~40,000 gr)	10	0	0	0	0	0	Tr	Tr	0	0	0	0	Tr	0	Siderite/marcasite assemblage.	0.25-0.5 mm fraction: 3 barite
16SUV-022	0	0	30 (~150 gr)	0	0	0	0	30	0	6	6	0	0	0	0	0	0	Almandine-ilmenite/marcasite-kyanite-leucoxene-rutile assemblage. SEM checks: 5 tourmaline candidates = 5 tourmaline; and 5 black rutile (major nonparamagnetic assemblage mineral) candidates = 5 rutile.	0.25-0.5 mm fraction: 5 representative tourmaline 5 representative rutile
16SUV-023	0	0	Tr (3 gr)	50	4 black hercynite; 1 blue-green spinel	Tr sapphire corundum (4 gr) Tr corundum (1 gr)	Tr (5 gr)	15	1	1	2	0	0	0	Tr (10 gr)	0	0	Goethite-almandine/diopside-kyanite assemblage. SEM checks: 1 blue-green gahnite versus spinel candidate = 1 spinel; 1 sapphire corundum versus kyanite candidate = 1 sapphire corundum; and 1 corundum candidate = 1 corundum.	0.25-0.5 mm fraction: 4 hercynite (see KIM notes) 1 spinel 4 sapphire corundum 1 corundum 5 red rutile 5 tourmaline (see KIM notes) 10 chromite
16SUV-024	0	0	0	0	5 blue-green gahnite	0	Tr (5 gr)	2	0	5	2	0	0	0	Tr (3 gr)	Tr	0	Almandine-ilmenite/zircon-rutile- leucoxene assemblage. SEM checks: 5 blue-green gahnite versus spinel candidates = 5 gahnite.	0.25-0.5 mm fraction: 5 gahnite 5 red rutile 3 chromite
16SUV-026	Tr (9 gr)	Tr sphalerite (9 gr)	90 (~40,000 gr)	40	0	0	0	Tr	0	Tr	Tr	0	0	0	0	Tr	0	Siderite-goethite/marcasite assemblage. SEM checks: 1 sphalerite versus rutile candidate = 1 sphalerite. 2 chalcopyrite from 0.25-0.5 mm fraction lost in transfer to vial.	0.5-1.0 mm fraction: 1 chalcopyrite 0.25-0.5 mm fraction: 9 chalcopyrite 9 sphalerite

*Shading identifies Beaufort Formation samples

Appendix 4H

Geological Survey of Canada
Banks Island KIM samples - ODM PICKED HEAVY MINERALS

Sample Number	Picked Heavy Minerals: 0.5 - 1.0 mm													0.25 - 0.5 mm																														
	almandine	andradite	barite	chalcopyrite	galena	hedenbergite	hercynite	low Cr-diopside	malachite	spessartine	sphalerite	tourmaline	vesuvianite	almandine	andradite	apatite	augite	barite	bronzite	chalcopyrite	corundum, ruby	corundum, sapphire	diopside	dolomite	epidote	fayalite	fluorite	gahnite	galena	grossular	hematite	hercynite	kyanite	low Cr-diopside	malachite	red rutile	spessartine	sphalerite	spinel	staurolite	tourmaline	vesuvianite	zircon	zoisite
15SUV001	1	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	5	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0
15SUV002	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV003	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5	0	0
15SUV004	0	0	0	7	0	0	0	1	0	0	0	0	0	0	0	0	5	5	0	20	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	3	1	0	0	0	0	0
15SUV005	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	15	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
15SUV006	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	5	0	1	4	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV009	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV010	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0
15SUV014	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	4	0	0	1	1	0	0
15SUV015*	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
15SUV018*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	10	0	0	2	3	0	0	1	0	0	0	0	0	0	0	0
15SUV019*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV020	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	9	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
15SUV021	0	0	1	0	0	1	0	1	0	0	0	0	2	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
15SUV022*	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV023*	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	10	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
15SUV024*	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	4	1	0
15SUV025	0	0	0	0	1	0	0	0	0	0	4	0	0	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	8	0	0	0	0	0	0
15SUV026	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0
15SUV027	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6	0	0
15SUV028*	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	2	0	0	0	0	1	0	0	1	0	0	2	0	2	0	0	1	0	0	0	0	0
15SUV030*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
15SUV031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0
15SUV033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV050	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3	0	0	0	4	0	0
15SUV051	0	0	0	6	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV052	3	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
15SUV053	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
15SUV054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV013*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	1	0	0	2	0	0
16SUV014	0	0	0	3	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	5	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV016	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV017*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV018*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
16SUV019*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
16SUV020*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV022*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	0
16SUV023*	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	1	0	4	0	0	0	5	0	0	1	5	5	0	0	0
16SUV024*	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
16SUV025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV026*	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0
16SUV027	0	1	0	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
16SUV028	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
16SUV030	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

*samples which were processed for MMSIMs in the 0.25-0.5 mm size fracation (see Appendix 4F)
Shading identifies Beaufort Fm samples

Appendix 4I

GEOLOGICAL SURVEY OF CANADA
Banks Island Samples - GOLD GRAIN SUMMARY AND METALLIC MINERALS IN PAN CONCENTRATE

Sample Number	Number of Visible Gold Grains				Dimensions (microns)			Nonmag HMC Weight	Calculated PPB Visible Gold in HMC				Metallic Minerals in Pan Concentrate
	Total	Reshaped	Modified	Pristine	Thickness	Width	Length	(g)	Total	Reshaped	Modified	Pristine	
15SUV001	1	1	0	0	18C	75	100	96.4	10	10	0	0	~10 grains pyrite (25-50µm).
15SUV002	0	0	0	0	No Visible Gold			72.4	0				~200 grains pyrite (25-100µm).
15SUV003	0	0	0	0	No Visible Gold			70.8	0				1 grain galena (75µm). ~100 grains pyrite (25-100µm).
15SUV004	0	0	0	0	No Visible Gold			101.6	0				~10 grains galena (75-100µm). ~2000 grains pyrite (25-250µm). ~5000 grains marcasite (25-100µm).
15SUV005	1	0	1	0	8C	25	50	80.0	1	0	1	0	~0.5% pyrite (25-1000µm). ~200 grains marcasite (25-75µm).
15SUV006	0	0	0	0	No Visible Gold			80.8	0				~2000 grains pyrite (25-1000µm). ~200 grains marcasite (25-75µm).
15SUV008	0	0	0	0	No Visible Gold			36.0	0				~10 grains pyrite (25-50µm).
15SUV009	1	1	0	0	5C	25	25	45.6	1	1	0	0	~10 grains pyrite (25-50µm).
15SUV010	0	0	0	0	No Visible Gold			92.8	0				~10 grains pyrite (25-50µm).
15SUV014	0	0	0	0	No Visible Gold			74.0	0				~500 grains pyrite (25-100µm). ~500 grains marcasite (25-50µm).
15SUV015	0	0	0	0	No Visible Gold			32.8	0				~1% pyrite (25-1000µm). ~1% marcasite (25-100µm).
15SUV018	0	0	0	0	No Visible Gold			43.6	0				~30 grains galena (25-500µm). ~20 grains pyrite (25-100µm).
15SUV019*	1	1	0	0	20C	75	125	52.8	28	28	0	0	~5000 grains pyrite (25-250µm). Gold grain vialed.
15SUV020	1	1	0	0	50M	150	200	86.4	133	133	0	0	~100 grains pyrite (25-100µm).
15SUV021	1	1	0	0	5C	25	25	84.8	<1	<1	0	0	~2000 grains pyrite (25-250µm). ~200 grains marcasite (25-75µm).
15SUV022	0	0	0	0	No Visible Gold			80.4	0				~0.5% pyrite (25-1000µm).
15SUV023	0	0	0	0	No Visible Gold			75.2	0				~5000 grains pyrite (25-1000µm).
15SUV024	0	0	0	0	No Visible Gold			62.0	0				~1000 grains pyrite (25-250µm). ~1000 grains marcasite (25-50µm).
15SUV025	0	0	0	0	No Visible Gold			72.4	0				~2000 grains pyrite (25-250µm).
15SUV026	1	1	0	0	50M	75	125	72.4	52	52	0	0	~20 grains pyrite (25-50µm).
15SUV027	0	0	0	0	No Visible Gold			78.0	0				~0.5% pyrite (25-1000µm). ~0.5% marcasite (25-75µm).
15SUV028	0	0	0	0	No Visible Gold			31.6	0				~20 grains pyrite (25-100µm). 5 grains marcasite (50-75µm).
15SUV030	0	0	0	0	No Visible Gold			53.6	0				~20 grains pyrite (25-75µm).
15SUV031	0	0	0	0	No Visible Gold			57.6	0				~1000 grains pyrite (25-250µm).
15SUV032	0	0	0	0	No Visible Gold			73.2	0				~5000 grains pyrite (25-1000µm). ~50 grains marcasite (25-75µm).
15SUV033	0	0	0	0	No Visible Gold			88.0	0				5 grains galena (50-75µm). ~0.5% pyrite (25-1000µm). ~0.5% marcasite (25-100µm).
15SUV050	0	0	0	0	No Visible Gold			76.8	0				~50 grains pyrite (25-100µm).
15SUV051	0	0	0	0	No Visible Gold			66.4	0				~100 grains pyrite (25-100µm).
15SUV052	1	0	1	0	25M	50	125	107.2	13	0	13	0	~2000 grains pyrite (25-1000µm). ~2000 grains marcasite (25-100µm).
15SUV053	2	1	1	0	10C 50M	25 125	75 225	92.0	127	125	2	0	~2000 grains pyrite (25-1000µm). ~500 grains marcasite (25-100µm).
15SUV054	0	0	0	0	No Visible Gold			64.0	0				No Sulphides.
15SUV055*	1	1	0	0	13C	50	75	48.8	8	8	0	0	~1000 grains pyrite (25-250µm). ~50 grains marcasite (25-75µm).

Sample Number	Number of Visible Gold Grains				Dimensions (microns)			Nonmag HMC Weight (g)	Calculated PPB Visible Gold in HMC				Metallic Minerals in Pan Concentrate
	Total	Reshaped	Modified	Pristine	Thickness	Width	Length		Total	Reshaped	Modified	Pristine	
16SUV013	0	0	0	0	No Visible Gold			39.2	0				Tr (~2000 grains) pyrite (25-250µm). Tr (~500 grains) marcasite (25-50µm).
16SUV014	1	1	0	0	40C	200	225	76.0	178	178	0	0	Tr (~1000 grains) pyrite (25-250µm). Tr (~1000 grains) marcasite (25-100µm).
16SUV015	1	1	0	0	10C	25	75	93.2	2	2	0	0	Tr (~500 grains) pyrite (25-250µm). ~0.5% (~1,000,000 grains) marcasite (25-50µm).
16SUV016	0	0	0	0	No Visible Gold			79.2	0				Tr (~2000 grains) pyrite (25-250µm). ~0.5% (~1,000,000 grains) marcasite (25-50µm).
16SUV017	0	0	0	0	No Visible Gold			24.8	0				Tr (~200 grains) pyrite (25-75µm). Tr (~2000 grains) marcasite (25-50µm).
16SUV018	0	0	0	0	No Visible Gold			44.0	0				Tr (~50 grains) pyrite (25-75µm). Tr (~300 grains) marcasite (25-50µm).
16SUV019	0	0	0	0	No Visible Gold			56.4	0				~80% undifferentiated pyrite/marcasite grains (25-1000µm).
16SUV020	0	0	0	0	No Visible Gold			62.8	0				~0.5% marcasite grains (25µm).
16SUV022	0	0	0	0	No Visible Gold			92.4	0				Tr (~5000 grains) marcasite (25-200µm).
16SUV023	9	4	5	0	3C	15	15	44.8	300	289	11	0	1 grain cinnabar (25µm).
					5C	25	25						
					8C	25	50						
					10C	50	50						
					27C	125	150						
					36C	150	225						
16SUV024	0	0	0	0	No Visible Gold			91.6	0				No sulphides.
16SUV025	1	1	0	0	10C	50	50	86.8	2	2	0	0	Tr (~200 grains) pyrite (25-75µm). ~0.5% marcasite (25µm).
16SUV026	0	0	0	0	No Visible Gold			64.0	0				Tr (~2000 grains) pyrite (25-200µm). ~2% marcasite (25µm).
16SUV027	1	1	0	0	8C	25	50	70.8	1	1	0	0	Tr (~100 grains) pyrite (25-75µm).
16SUV028	0	0	0	0	No Visible Gold			110.0	0				Tr (~200 grains) pyrite (25-75µm). Tr (~100 grains) marcasite (25µm).
16SUV030	0	0	0	0	No Visible Gold			63.2	0				Tr (~300 grains) marcasite (15-50µm).

*sample 15SUV019 is a field duplicate of 15SUV018; 15SUV055 is a field duplicate of 15SUV031
**Shading depicts Beaufort Formation samples

Appendix 4J

GEOLOGICAL SURVEY OF CANADA
Banks Island Samples - Overburden Drilling Management LABORATORY ABBREVIATIONS

SEDIMENT LOG

Largest Clasts Present:
G: Granules
P: Pebbles
C: Cobbles

Clast Composition:
V/S: Volcanics and/or sediments
GR: Granitics
LS: Limestone, carbonates
OT: Other Lithologies (refer to footnotes)
TR: Only trace present
NA: Not applicable
OX: Very oxidized, undifferentiated

Matrix Grain Size Distribution:
S/U: Sorted or Unsorted
SD: Sand (F: Fine; M: Medium; C: Coarse)
ST: Silt
CY: Clay
Y: Fraction present
+: Fraction more abundant than normal
-: Fraction less abundant than normal
N: Fraction not present

Matrix Organics:
ORG: Y: Organics present in matrix
N: Organics absent or negligible in matrix
+: Matrix is mainly organic

Matrix Colour:
Primary:
BE: Beige
BR: Brick Red
GY: Grey
GB: Grey-beige
GN: Green
GG: Grey-green
MN: Maroon
PP: Purple
PK: Pink
PB: Pink-Beige

Secondary (soil):
OC: Ochre
BN: Brown
BK: Black

Secondary Colour Modifier:
L: Light
M: Medium
D: Dark

GOLD GRAIN LOG

Thickness:
VG: Visible gold grains
M: Actual measured thickness of grain (microns)
C: Thickness of grain (microns) calculated from measured width and length

KIM (kimberlite indicator mineral) LOG

GP: Purple to red peridotitic garnet (G9/10 Cr-pyrope)
GO: Orange mantle garnet; includes both eclogitic pyrope-almandine (G3) and Cr-poor megacrystic pyrope (G1/G2) varieties; may include unchecked (by SEM) grains of common crustal garnet (G5) lacking diagnostic inclusions or crystal faces
DC: Cr-diopside; distinctly emerald green (paler emerald green low-Cr diopside picked separately)
IM: Mg-ilmenite; may include unchecked (by SEM) grains of common crustal ilmenite lacking diagnostic inclusions or crystal faces
CR: Chromite
FO: Forsterite

MMSIM (metamorphosed or magmatic massive sulphide indicator mineral) and PCIM (porphyry Cu indicator mineral) LOGS

Adr: Andradite	Cpy: Chalcopyrite	Gth: Goethite	Opx: Orthopyroxene	St: Staurolite
Ap: Apatite	Cr: Chromite	Ilm: Ilmenite	Py: Pyrite	Tm: Tourmaline
Ase: Anatase	Fay: Fayalite	Ky: Kyanite	Sil: Sillimanite	Ttn: Titanite
Aspy: Arsenopyrite	Gh: Gahnite	Mz: Monazite	Spi: Spinel	Zir: Zircon
Ax: Axinite	Gr: Grossular	Ol: Olivine	Sps: Spessartine	

Appendix 4A

Geological Survey of Canada
Banks Island KIM samples - TABLING DATA

		Overburden Drilling Management Limited – Laboratory Sample Log															
					Sample Description												
		Weight (kg wet)			Clasts (> 2.0 mm)[1]					Matrix (<2.0 mm)							
						Percentage				Distribution				Colour			
Sample Number	Field Processing	Bulk Rec'd	+2.0 mm Clasts	Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	SD	CY	CLASS	Sample Material[2]
15SUV001	wet sieved (<2.38 mm)	24.9	0.8	24.1	G	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV002	wet sieved (<2.38 mm)	22.4	4.3	18.1	P	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV003	wet sieved (<2.38 mm)	21.7	4.0	17.7	G	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV004	wet sieved (<2.38 mm)	27.9	2.5	25.4	G	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV005	wet sieved (<2.38 mm)	23.0	3.0	20.0	G	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV006	wet sieved (<2.38 mm)	22.4	2.2	20.2	G	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV008	bulk	26.5	17.5	9.0	C	100	Tr	0	0	S	FMC	Y	N	OC	NA	SAND + GRAVEL	SS
15SUV009	bulk	25.3	13.9	11.4	C	100	Tr	0	0	S	FMC	Y	N	OC	NA	SAND + GRAVEL	SS
15SUV010	wet sieved (<2.38 mm)	25.6	2.4	23.2	G	100	Tr	0	0	S	MC	-	N	OC	NA	SAND + GRAVEL	SS
15SUV014	wet sieved (<2.38 mm)	20.1	1.6	18.5	G	100	Tr	0	0	S	MC	-	N	OC	NA	SAND + GRAVEL	SS
15SUV015	bulk	24.2	16.0	8.2	C	100	Tr	0	0	S	FMC	Y	N	DOC	NA	SAND + GRAVEL	BF
15SUV018	bulk	21.9	11.0	10.9	P	100	Tr	0	0	S	FMC	Y	N	DOC	NA	SAND + GRAVEL	BF
15SUV019	bulk	27.3	14.1	13.2	P	95	Tr	5	0	S	MC	-	N	OC	NA	SAND + GRAVEL	BF
15SUV020	wet sieved (<2.38 mm)	24.0	2.4	21.6	G	95	5	0	0	S	MC	-	N	OC	NA	SAND + GRAVEL	SS
15SUV021	wet sieved (<2.38 mm)	23.2	2.0	21.2	G	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV022	bulk	23.9	3.8	20.1	P	100	Tr	0	0	U	-	+	+	LOC	LOC	TILL	T
15SUV023	bulk	21.9	3.1	18.8	P	100	Tr	0	0	U	-	+	+	LOC	LOC	TILL	T
15SUV024	dry sieved (<2.38 mm)	16.6	1.1	15.5	G	100	Tr	0	0	S	MC	-	N	DOC	NA	SAND + GRAVEL	GF
15SUV025	wet sieved (<2.38 mm)	19.6	1.5	18.1	G	100	Tr	0	0	S	MC	-	N	GY	NA	SAND + GRAVEL	SS
15SUV026	wet sieved (<2.38 mm)	19.9	1.8	18.1	G	100	Tr	0	0	S	MC	-	N	GY	NA	SAND + GRAVEL	SS
15SUV027	wet sieved (<2.38 mm)	22.0	2.5	19.5	G	100	Tr	0	0	S	C	-	N	GY	NA	SAND + GRAVEL	SS
15SUV028	bulk	25.4	17.5	7.9	C	100	Tr	0	0	S	MC	-	N	OC	NA	SAND + GRAVEL	BF
15SUV030	bulk	24.7	11.3	13.4	C	100	Tr	0	0	S	FMC	Y	N	OC	NA	SAND + GRAVEL	BF
15SUV031	wet sieved (<2.38 mm)	15.3	0.9	14.4	G	100	Tr	0	0	S	MC	N	N	LOC	NA	SAND + GRAVEL	SS
15SUV032	wet sieved (<2.38 mm)	19.6	1.3	18.3	G	100	Tr	0	0	U	Y	Y	Y	LOC	LOC	TILL	SS
15SUV033	wet sieved (<2.38 mm)	22.1	0.1	22.0	G	100	Tr	0	0	S	FM	Y	N	LOC	NA	SAND + SILT	SS
15SUV050	wet sieved (<2.38 mm)	22.0	2.8	19.2	G	100	Tr	0	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV051	dry sieved (<2.38 mm)	20.1	3.5	16.6	G	100	Tr	Tr	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV052	wet sieved (<2.38 mm)	30.2	3.4	26.8	G	100	Tr	Tr	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV053	wet sieved (<2.38 mm)	25.0	2.0	23.0	G	60	0	40	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
15SUV054	dry sieved (<2.38 mm)	18.7	2.7	16.0	C	30	Tr	70	0	U	Y	Y	Y	OC	OC	TILL	T
15SUV055*	wet sieved (<2.38 mm)	13.1	0.9	12.2	G	30	Tr	70	0	S	MC	N	N	LOC	NA	SAND + GRAVEL	SS
16SUV013	bulk	22.9	13.1	9.8	P	20	0	80	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	GF
16SUV014	wet sieved (<2.38 mm)	21.3	2.3	19.0	G	30	0	70	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
16SUV015	wet sieved (<2.38 mm)	25.1	1.8	23.3	P	10	0	90	0	S	MC	-	N	LOC	NA	SAND + GRAVEL	SS
16SUV016	wet sieved (<2.38 mm)	21.4	1.6	19.8	P	20	0	80	0	S	FM	-	N	LOC	NA	SAND + GRAVEL	SS
16SUV017	bulk	26.6	20.4	6.2	P	80	0	Tr	20	S	MC	-	N	GB	NA	SAND + GRAVEL	GF
16SUV018	bulk	23.3	12.3	11.0	P	80	0	Tr	20	S	MC	-	N	GB	NA	SAND + GRAVEL	GF
16SUV019	bulk	15.1	1.0	14.1	P	30	Tr	40	30	S	-	+	Y	GB	GB	TILL	T
16SUV020	bulk	16.5	0.8	15.7	P	60	Tr	20	20	S	-	Y	+	GB	GB	TILL	T
16SUV022	bulk	23.2	0.1	23.1	P	100**	0	0	0	S	FM	-	N	GB	NA	SAND	R
16SUV023	bulk	26.2	15.0	11.2	P	40	0	10	50	S	FMC	-	N	OC	NA	SAND + GRAVEL	BF
16SUV024	dry sieved (<2.38 mm)	23.4	0.5	22.9	G	10	90	0	0	S	FM	-	N	GB	NA	SAND + GRAVEL	R
16SUV025	wet sieved (<2.38 mm)	23.7	2.0	21.7	G	10	Tr	20	70	S	MC	-	N	OC	NA	SAND + GRAVEL	SS
16SUV026	bulk	23.1	7.1	16.0	P	Tr	0	10	90	S	MC	-	N	OC	NA	SAND + GRAVEL	BF
16SUV027	wet sieved (<2.38 mm)	20.5	2.8	17.7	G	10	Tr	20	70	S	MC	-	N	OC	NA	SAND + GRAVEL	SS
16SUV028	wet sieved (<2.38 mm)	29.6	2.1	27.5	G	10	Tr	10	80	S	MC	-	N	OC	NA	SAND + GRAVEL	SS
16SUV030	wet sieved (<2.38 mm)	18.3	2.5	15.8	G	20	Tr	Tr	80	S	MC	-	N	OC	NA	SAND + GRAVEL	SS
Blanks																	
15SUV017	bulk	18.6	0.7	17.9	G	0	100	0	0	S	FM	-	N	OC	NA	SAND + GRAVEL	GF
15SUV029	bulk	16.6	2.8	13.8	P	10	90	Tr	0	U	+	Y	-	LOC	LOC	TILL	T
16SUV021	bulk	16.6	2.3	14.3	P	0	50	20	20	S	Y	Y	-	OC	OC	TILL	T
16SUV029	bulk	17.2	0.8	16.4	G	0	100	0	0	S	MC	-	N	OC	NA	SAND	GF

Note, abbreviations used in the table are defined in the final data table tab; shading identifies Beaufort Fm. samples

[1]V/S=volcanics and/or sediments, GR=granite, LS=limestone and carbonates, OT=red & buff Proterozoic sediments.

[2]Sample Material: BF=Beaufort Formation, GF=glaciofluvial, R=bedrock, SS=stream sediment, T=till

*sample 15SUV055 is a field duplicate of 15SUV031

**Limonite cemented silica sand.

Shading identifies Beaufort Formation samples.

Appendix 4B

Geological Survey of Canada
Banks Island KIM samples - HEAVY MINERAL CONCENTRATE PROCESSING WEIGHTS

Sample Number	Mass (g)												
	<2.0 mm Table Concentrate												
			0.18 to 2.0 mm Heavy Liquid Separation S.G 3.20										
						0.25-2.0 mm HMC SG>3.2							
									Nonferromagnetic HMC Processed Split[1]				
	Total	-0.18 mm	Total	Lights <3.2 S.G.	Total 0.18 to 0.25 mm HMC	Total	<0.25 mm (wash)	Mag HMC	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
15SUV001	1,763.8	512.0	1,251.8	939.5	61.9	250.4	16.7	93.1	140.6	81.2	37.5	21.9
15SUV002	1,453.2	302.0	1,151.2	858.2	32.6	260.4	9.6	105.7	145.1	65.6	45.2	34.3
15SUV003	1,408.2	247.8	1,160.4	853.2	29.8	277.4	11.4	88.5	177.5	77.8	66.2	33.5
15SUV004	2,715.3	1,019.3	1,696.0	1,313.7	106.2	276.1	14.2	120.8	141.1	84.3	33.7	23.1
15SUV005	2,263.7	723.6	1,540.1	1,360.5	29.9	149.7	3.5	58.9	87.3	47.5	27.0	12.8
15SUV006	1,291.9	379.6	912.3	786.0	39.0	87.3	2.8	27.1	57.4	42.1	11.0	4.3
15SUV008	1,112.7	506.2	606.5	574.9	8.9	22.7	2.6	2.5	17.6	11.5	4.4	1.7
15SUV009	1,655.3	530.5	1,124.8	917.2	13.0	194.6	7.3	45.9	141.4	32.0	63.5	45.9
15SUV010	1,764.3	649.9	1,114.4	911.4	23.3	179.7	11.1	23.8	144.8	57.9	61.8	25.1
15SUV014	1,792.4	365.2	1,427.2	1,162.5	20.5	244.2	13.9	43.8	186.5	53.9	78.6	54.0
15SUV015	1,391.1	487.1	904.0	722.6	28.1	153.3	23.5	2.4	127.4	58.1	49.0	20.3
15SUV018	961.7	239.5	722.2	683.2	4.3	34.7	0.7	0.6	33.4	7.6	13.4	12.4
15SUV019	1,339.1	362.2	976.9	855.3	25.1	96.5	4.2	0.5	91.8	60.7	22.5	8.6
15SUV020	1,288.3	323.6	964.7	652.9	27.8	284.0	5.9	115.1	163.0	42.9	66.4	53.7
15SUV021	1,021.3	312.7	708.6	582.9	26.0	99.7	2.5	34.7	62.5	35.3	20.5	6.7
15SUV022	930.2	380.8	549.4	546.2	1.1	2.1	0.2	0.4	1.5	0.9	0.4	0.2
15SUV023	958.8	322.9	635.9	633.5	0.9	1.5	0.0	0.4	1.1	0.7	0.3	0.1
15SUV024	1,793.4	460.1	1,333.3	1,312.5	9.8	11.0	0.8	2.4	7.8	6.7	0.8	0.3
15SUV025	1,778.6	788.6	990.0	884.8	17.3	87.9	2.1	12.5	73.3	27.1	15.5	30.7
15SUV026	1,686.1	561.1	1,125.0	949.7	33.4	141.9	2.1	25.5	114.3	48.2	36.2	29.9
15SUV027	1,375.6	290.2	1,085.4	1,013.3	9.3	62.8	3.3	8.1	51.4	18.6	20.0	12.8
15SUV028	1,109.2	245.0	864.2	844.1	4.6	15.5	0.6	1.9	13.0	8.6	2.5	1.9
15SUV030	1,152.7	321.9	830.8	763.8	22.1	44.9	1.8	12.9	30.2	18.4	7.4	4.4
15SUV031	1,502.0	499.1	1,002.9	858.1	47.0	97.8	3.5	38.7	55.6	41.1	10.0	4.5
15SUV032	1,002.4	411.4	591.0	501.1	20.7	69.2	1.4	24.0	43.8	27.6	13.8	2.4
15SUV033	1,085.2	731.8	353.4	322.3	14.8	16.3	0.8	4.7	10.8	7.1	2.8	0.9
15SUV050	1,538.3	499.7	1,038.6	927.7	25.1	85.8	3.0	17.5	65.3	38.4	19.3	7.6
15SUV051	1,294.7	340.5	954.2	792.4	24.6	137.2	3.4	50.4	83.4	47.6	29.2	6.6
15SUV052	1,479.0	584.9	894.1	674.7	58.7	160.7	8.1	74.9	77.7	49.6	20.2	7.9
15SUV053	1,197.0	465.6	731.4	579.7	47.3	104.4	5.4	45.5	53.5	34.7	14.9	3.9
15SUV054	725.9	311.3	414.6	395.9	7.3	11.4	1.2	3.4	6.8	4.7	1.7	0.4
15SUV055*	1,417.0	429.0	988.0	860.3	37.8	89.9	4.2	32.9	52.8	38.4	10.3	4.1
16SUV-013	1734.2	814.7	919.5	870.5		49.0	4.6	13.00	31.4	18.1	6.3	7.0
16SUV-014	1096.0	503.8	592.2	341.8		250.4	13.0	141.30	96.1	36.1	23.0	37.0
16SUV-015	1655.0	850.8	804.2	764.2		40.0	4.4	6.20	29.4	14.2	8.3	6.9
16SUV-016	1409.5	740.8	668.7	611.3		57.4	4.7	8.90	43.8	19.9	14.1	9.8
16SUV-017	1670.1	769.8	900.3	899.4		0.9	0.0	0.01	0.8	0.8	0.01	0.03
16SUV-018	1603.1	649.6	953.5	951.6		1.9	0.2	0.01	1.7	1.5	0.1	0.08
16SUV-019	1033.0	838.7	194.3	181.2		13.1	3.6	0.50	9.0	3.5	3.2	2.3
16SUV-020	781.1	611.8	169.3	151.9		17.4	5.1	0.40	11.9	4.7	4.1	3.1
16SUV-022	861.5	811.0	50.5	49.4		1.1	0.1	0.01	1.0	0.7	0.1	0.2
16SUV-023	1095.2	678.6	416.6	410.0		6.6	0.5	0.40	5.7	2.6	1.6	1.5
16SUV-024	1941.1	1035.5	905.6	895.0		10.6	1.2	0.01	9.4	6.5	2.4	0.5
16SUV-025	2080.6	794.8	1285.8	1121.5		164.3	18.5	14.20	131.6	69.9	45.4	16.3
16SUV-026	1715.4	824.7	890.7	849.2		41.5	8.3	1.20	32.0	23.6	6.2	2.2
16SUV-027	1872.5	446.2	1426.3	1268.1		158.2	13.1	44.90	100.2	45.9	29.7	24.6
16SUV-028	1373.4	504.9	868.5	714.5		154.0	8.3	48.50	97.2	45.3	30.7	21.2
16SUV-030	960.3	315.8	644.5	572.7		71.8	6.2	24.20	41.4	18.8	10.7	11.9
Blanks												
15SUV017	1,367.8	669.3	698.5	481.2	96.6	120.7	14.6	26.0	80.1	72.4	7.5	0.2
15SUV029	951.7	511.3	440.4	283.8	68.5	88.1	5.0	8.3	74.8	56.9	15.2	2.7
16SUV-021	1114.9	813.1	301.8	216.6		85.2	9.3	8.10	67.8	49.1	14.3	4.4
16SUV-029	1539.8	881.8	658.0	504.2		153.8	38.3	22.60	92.9	78.6	13.7	0.6

Sample Number	Normalized Picking Fraction Mass Determination						
	Table Feed (<2 mm) (g)	Total (0.18 to 2.0 mm) HMC S.G.>3.2 (g)	Total HMC (0.18 - 2.0 mm) / Table Feed (<2 mm)	Total HMC (0.25 - 2.0 mm) SG>3.2 (g)	Total HMC (0.25 - 2.0 mm) SG>3.2 normalized to 10 kg Table Feed (<2 mm)	Nonferromagnetic HMC 0.25 - 0.5 mm picking fraction (g)	normalization to 50 g of 0.25 - 0.5 mm picking fraction
15SUV001	24,100	312.3	0.01296	250.4	103.9	81.2	0.616
15SUV002	18,100	293.0	0.01619	260.4	143.9	65.6	0.762
15SUV003	17,700	307.2	0.01736	277.4	156.7	77.8	0.643
15SUV004	25,400	382.3	0.01505	276.1	108.7	84.3	0.593
15SUV005	20,000	179.6	0.00898	149.7	74.9	47.5	1.053
15SUV006	20,200	126.3	0.00625	87.3	43.2	42.1	1.188
15SUV008	9,000	31.6	0.00351	22.7	25.2	11.5	4.348
15SUV009	11,400	207.6	0.01821	194.6	170.7	32.0	1.563
15SUV010	23,200	203.0	0.00875	179.7	77.5	57.9	0.864
15SUV014	18,500	264.7	0.01431	244.2	132.0	53.9	0.928
15SUV015	8,200	181.4	0.02212	153.3	187.0	58.1	0.861
15SUV018	10,900	39.0	0.00358	34.7	31.8	7.6	6.579
15SUV019	13,200	121.6	0.00921	96.5	73.1	60.7	0.824
15SUV020	21,600	311.8	0.01444	284.0	131.5	42.9	1.166
15SUV021	21,200	125.7	0.00593	99.7	47.0	35.3	1.416
15SUV022	20,100	3.2	0.00016	2.1	1.0	0.9	55.556
15SUV023	18,800	2.4	0.00013	1.5	0.8	0.7	71.429
15SUV024	15,500	20.8	0.00134	11.0	7.1	6.7	7.463
15SUV025	18,100	105.2	0.00581	87.9	48.6	27.1	1.845
15SUV026	18,100	175.3	0.00969	141.9	78.4	48.2	1.037
15SUV027	19,500	72.1	0.00370	62.8	32.2	18.6	2.688
15SUV028	7,900	20.1	0.00254	15.5	19.6	8.6	5.814
15SUV030	13,400	67.0	0.00500	44.9	33.5	18.4	2.717
15SUV031	14,400	144.8	0.01006	97.8	67.9	41.1	1.217
15SUV032	18,300	89.9	0.00491	69.2	37.8	27.6	1.812
15SUV033	22,000	31.1	0.00141	16.3	7.4	7.1	7.042
15SUV050	19,200	110.9	0.00578	85.8	44.7	38.4	1.302
15SUV051	16,600	161.8	0.00975	137.2	82.7	47.6	1.050
15SUV052	26,800	219.4	0.00819	160.7	60.0	49.6	1.008
15SUV053	23,000	151.7	0.00660	104.4	45.4	34.7	1.441
15SUV054	16,000	18.7	0.00117	11.4	7.1	4.7	10.638
15SUV055*	12,200	127.7	0.01047	89.9	73.7	38.4	1.302
16SUV-013	9,800	49.0	0.00500	49.0	50.0	18.1	2.762
16SUV-014	19,000	250.4	0.01318	250.4	131.8	36.1	1.385
16SUV-015	23,300	40.0	0.00172	40.0	17.2	14.2	3.521
16SUV-016	19,800	57.4	0.00290	57.4	29.0	19.9	2.513
16SUV-017	6,200	0.9	0.00015	0.9	1.5	0.8	62.500
16SUV-018	11,000	1.9	0.00017	1.9	1.7	1.5	33.333
16SUV-019	14,100	13.1	0.00093	13.1	9.3	3.5	14.286
16SUV-020	15,700	17.4	0.00111	17.4	11.1	4.7	10.638
16SUV-022	23,100	1.1	0.00005	1.1	0.5	0.7	71.429
16SUV-023	11,200	6.6	0.00059	6.6	5.9	2.6	19.231
16SUV-024	22,900	10.6	0.00046	10.6	4.6	6.5	7.692
16SUV-025	21,700	164.3	0.00757	164.3	75.7	69.9	0.715
16SUV-026	16,000	41.5	0.00259	41.5	25.9	23.6	2.119
16SUV-027	17,700	158.2	0.00894	158.2	89.4	45.9	1.089
16SUV-028	27,500	154.0	0.00560	154.0	56.0	45.3	1.104
16SUV-030	15,800	71.8	0.00454	71.8	45.4	18.8	2.660
Blanks							
15SUV017	17,900	217.3	0.01214	120.7	67.4	72.4	0.691
15SUV029	13,800	156.6	0.01135	88.1	63.8	56.9	0.879
16SUV-021	14,300	85.2	0.00596	85.2	59.6	49.1	1.018
16SUV-029	16,400	153.8	0.00938	153.8	93.8	78.6	0.636

[1]Values greater than 0.1 g were only weighed to one decimal place
*sample 15SUV055 is a field duplicate of 15SUV031
**Shading identifies Beaufort Formation samples.

Sediment Type	Average Total HMC (0.25 - 0.5 mm) SG>3.2 Mass (g) Normalized to 10 kg Table Feed (<2 mm)
Stream Sediments	74.6
Beaufort Fm.	53.8*
Till	5.9
Glaciofluvial	17.7
Bedrock	2.6

*Note, if sample 15SUV015 is excluded (187 g), the average total HMC mass for Beaufort Fm. samples is 31.6 g / 10 kg Table Feed (<2 mm)

Appendix 4C

Geological Survey of Canada
Banks Island KIM samples - KIMBERLITE INDICATOR MINERAL COUNTS BY ODM - CORRECTED BY EPMA GEOCHEMISTRY DETERMINATIONS

Number of Grains

Sample Number	Sample Material[1]	Selected MMSIMs[2] 1.0 to 2.0 mm			Selected MMSIMs 0.5 to 1.0 mm			Selected MMSIMs 0.25 to 0.5 mm			KIMs[3,4] 1.0 to 2.0 mm						KIMs 0.5 to 1.0 mm						KIMs 0.25 to 0.5 mm						Total (KIMs)	KIMs 0.18 to 0.25 mm						
		Low-Cr diopside	Cpy	Gh	Low-Cr diopside	Cpy	Gh	Low-Cr diopside	Cpy	Gh	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO		GP	GO	DC	IM	CR	FO	Total (KIMs)
15SUV001	SS	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3	21	2	28							
15SUV002	SS	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14 (15)	0	14 (15)							
15SUV003	SS	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	15 (16)	0	18 (19)							
15SUV004	SS	0	0	0	1	7	0	2	100	0	0	0	0	0	0	0	0	0	0	0	0	0	1[5]	0	0	0	2	0	3							
15SUV005	SS	0	0	0	0	1	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1							
15SUV006	SS	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1							
15SUV008	SS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6 (7)	7 (8)							
15SUV009	SS	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	39 (40)	1	42 (43)							
15SUV010	SS	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2							
15SUV014	SS	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	5	0	9							
15SUV015	BF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
15SUV018	BF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	4	0	4
15SUV019*	BF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	4	0	6
15SUV020	SS	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	4	35	2 (4)	44 (46)							
15SUV021	SS	0	0	0	1	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV022	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV023	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV024	GF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2 (1)	1 (2)	1	0	1	0	5							
15SUV025	SS	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2							
15SUV026	SS	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	7	3	13							
15SUV027	SS	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV028	BF	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2	2	0	0	0	3	0	5
15SUV030	BF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5 (6)	0	6 (7)	0	0	0	0	2	1	3
15SUV031	SS	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1							
15SUV032	SS	0	0	0	0	0	0	9	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV033	SS	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV050	SS	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4							
15SUV051	SS	0	1	0	0	5	0	0	19	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	3	4	10							
15SUV052	SS	0	1	0	0	5	0	1	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV053	SS	0	0	0	0	1	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV054	T	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2							
15SUV055*	SS	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV013	GF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2							
16SUV014	SS	0	0	0	0	3	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	3	0 (1)	6 (7)							
16SUV015	SS	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2							
16SUV016	SS	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV017	GF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV018	GF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4							
16SUV019	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV020	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV022	R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV023	BF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19 (18)	0 (1)	0	9	9 (10)	0	37 (38)	24 (25)	2	0	19 (21**)	17 (15**)	0	62 (63)
16SUV024	R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3							
16SUV025	SS	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2							
16SUV026	BF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV027	SS	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	2	40	0	46							
16SUV028	SS	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	2	0	1	1	0	1 (0)	12 (17)	1	19 (24)							
16SUV030	SS	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2							

[1]Sample Material: BF=Beaufort Formation, GF=glaciofluvial, R=bedrock, SS=stream sediment, T=till

[2]Metamorphosed/Magmatic Massive Sulphide Indicator Minerals; Cpy=Chalcopyrite, Gh=Gahnite

[3]Kimberlite Indicator Minerals: CR=Chromite, DC=Cr-diopside, FO=forsterite, GO=Eclogitic garnet, GP=Peridotitic garnet, IM=Mg-ilmenite

[4]Numbers in bold, black are EPMA-corrected numbers of recovered grains; numbers in red are number of grains originally picked by ODM where different

[5]Grain lost

*sample 15SUV019 is a field duplicate of 15SUV018; 15SUV055 is a field duplicate of 15SUV031

**IM and CR not picked to completion

***Shading identifies Beaufort Formation samples

KIM Percentage Compositions

	GP	GO	DC	IM	CR	FO
% of all KIMs 0.25-1.00 mm (n=342)	11.4	0.9	0.6	8.8	72.5	6.1
% of 0.5-1.0 mm KIMs (n=21; 6.1%)	14.3	4.8	0.0	23.8	57.1	0.0
% of 0.25-0.5 mm KIMs (n=321; 93.9%)	11.2	0.6	0.6	7.8	73.5	6.5
6 Beaufort Fm Samples With The 0.18-0.25 mm Fraction Picked						
% of all KIMs 0.25-1.00 mm (n=50)	48.0	0.0	0.0	18.0	34.0	0.0
% of KIMs 0.18-0.25 mm (n=81)	34.6	2.5	0.0	23.5	38.3	1.2

Appendix 4D

Geological Survey of Canada
Banks Island KIM samples - KIMBERLITE INDICATOR MINERAL COUNTS by ODM - CORRECTED FOR EPMA GEOCHEMISTRY DETERMINATIONS - THEN NORMALIZED TO A 10 KG TABLE FEED (<2 mm) SAMPLE WEIGHT

				Number of Grains																																		
				Selected MMSIMs[2]									KIMs[3]																									
		Table	per 10 kg Table	1.0 to 2.0 mm			0.5 to 1.0 mm			0.25 to 0.5 mm			1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm							0.18 to 0.25 mm						
Sample Number	Sample Material[1]	Feed kg	Feed Conversion	Low-Cr diopside	Cpy	Gh	Low-Cr diopside	Cpy	Gh	Low-Cr diopside	Cpy	Gh	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total (KIMs)	GP	GO	DC	IM	CR	FO	Total (KIMs)
15SUV001	SS	24.1	0.41	0	0	0	0	0	0	0	5.8	0	0	0	0	0	0	0	0	0	0	**0.8**	0	0	0	0	0	**1.2**	**8.7**	**0.8**	**11.6**							
15SUV002	SS	18.1	0.55	0	0	0	0	0	0	0	2.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7.7**	0	**7.7**							
15SUV003	SS	17.7	0.56	0	0	0	0	0	0	0	7.9	0	0	0	0	0	0	0	0	0	0	0	**1.1**	0	0	0	0	**0.6**	**8.5**	0	**10.2**							
15SUV004	SS	25.4	0.39	0	0	0	0.4	2.8	0	0.8	39.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.8**	0	**1.2**							
15SUV005	SS	20.0	0.50	0	0	0	0	0.5	0	0	7.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.5**	0	**0.5**							
15SUV006	SS	20.2	0.50	0	0	0	0	0	0	0	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.5**	0	**0.5**							
15SUV008	SS	9.0	1.11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.1**	**6.7**	**7.8**							
15SUV009	SS	11.4	0.88	0	0	0	0	0	0	0	2.6	0	0	0	0	0	0	0	0	0	0	0	**0.9**	0	**0.9**	0	0	0	**34.2**	**0.9**	**36.8**							
15SUV010	SS	23.2	0.43	0	0	0	0	0	0	0	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.9**	0	**0.9**							
15SUV014	SS	18.5	0.54	0	0	0	0	0	0	0	5.4	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.1**	0	**0.5**	**0.5**	**2.7**	0	**4.9**							
15SUV015	BF	8.2	1.22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.2**	0	**1.2**
15SUV018	BF	10.9	0.92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2.8**	0	**2.8**	0	0	0	0	**3.7**	0	**3.7**
15SUV019*	BF	13.2	0.76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.5**	0	0	0	0	0	**1.5**	**1.5**	0	0	0	**3.0**	0	**4.5**
15SUV020	SS	21.6	0.46	0	0	0	0	0	0	0	4.2	0	0	0	0	0	0	0	0	0	0	**0.5**	**0.5**	0	**0.5**	0	0	**1.9**	**16.2**	**0.9**	**20.4**							
15SUV021	SS	21.2	0.47	0	0	0	0.5	0	0	0.5	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV022	T	20.1	0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV023	T	18.8	0.53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV024	GF	15.5	0.65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.3**	**0.6**	**0.6**	0	**0.6**	0	**3.2**							
15SUV025	SS	18.1	0.55	0	0	0	0	0	0	0	2.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.6**	**0.6**	**1.1**							
15SUV026	SS	18.1	0.55	0	0	0	0	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0	**1.1**	0	**0.6**	0	0	0	**3.9**	**1.7**	**7.2**							
15SUV027	SS	19.5	0.51	0	0	0	0	0	0	0.5	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV028	BF	7.9	1.27	0	0	0	0	0	0	2.5	0	1.3	0	0	0	0	0	0	**1.3**	0	0	0	0	0	**1.3**	0	0	0	0	0	**2.5**	**2.5**	0	0	0	**3.8**	0	**6.3**
15SUV030	BF	13.4	0.75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.7**	0	0	0	**3.7**	0	**4.5**	0	0	0	0	**1.5**	**0.7**	**2.2**
15SUV031	SS	14.4	0.69	0	0	0	0	0	0	0	9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.7**	0	**0.7**							
15SUV032	SS	18.3	0.55	0	0	0	0	0	0	4.9	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV033	SS	22.0	0.45	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV050	SS	19.2	0.52	0	0	0	0	0	0	0	3.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.6**	**0.5**	**2.1**							
15SUV051	SS	16.6	0.60	0	0.6	0	0	3.0	0	0	11.4	0	0	0	0	0	0	0	0	0	0	0	**0.6**	0	**0.6**	0	0	**0.6**	**1.8**	**2.4**	**6.0**							
15SUV052	SS	26.8	0.37	0	0	0	0	1.9	0	0.4	18.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV053	SS	23.0	0.43	0	0	0	0	0.4	0	0	17.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15SUV054	T	16.0	0.63	0	0	0	0	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.3**	0	**1.3**							
15SUV055*	SS	12.2	0.82	0	0	0	0	0	0	0	10.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV013	GF	9.8	1.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2.0**	0	**2.0**							
16SUV014	SS	19.0	0.53	0	0	0	0	1.6	0	0	2.6	0	0	0	0	0	0	0	0	0	0	**0.5**	0	0	0	0	0	**1.1**	**1.6**	**0.0**	**3.2**							
16SUV015	SS	23.3	0.43	0	0	0	0	0	0	0	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.4**	0	0	**0.4**	0	0	**0.9**							
16SUV016	SS	19.8	0.51	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV017	GF	6.2	1.61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV018	GF	11.0	0.91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3.6**	0	**3.6**							
16SUV019	T	14.1	0.71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV020	T	15.7	0.64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV022	R	23.1	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV023	BF	11.2	0.89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**17.0**	**0.0**	0	**8.0**	**8.0**	0	**33.0**	**21.4**	**1.8**	0	**17.0**	**15.2**	0	**55.4**
16SUV024	R	22.9	0.44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.3**	0	**1.3**							
16SUV025	SS	21.7	0.46	0	0	0	0	0	0	0	5.1	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.9**	0	0	0	0	0	**0.9**							
16SUV026	BF	16.0	0.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16SUV027	SS	17.7	0.56	0	0	0	0	0	0	0	4.0	0	0	0	0	0	0	0	0	0	0	**0.6**	**1.7**	0	0	0	0	**1.1**	**22.6**	0	**26.0**							
16SUV028	SS	27.5	0.36	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0	**0.4**	**0.4**	0	0	**0.7**	0	**0.4**	**0.4**	0	0	**4.4**	**0.4**	**6.9**							
16SUV030	SS	15.8	0.63	0	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0	**0.6**	0	0	0	0	0	0	0	0	0	**0.6**	0	**1.3**							

[1]Sample Material: BF=Beaufort Formation, GF=glaciofluvial, R=bedrock, SS=stream sediment, T=till
[2]Metamorphosed/Magmatic Massive Sulphide Indicator Minerals; Cpy=Chalcopyrite, Gh=Gahnite
[3]Kimberlite Indicator Minerals: CR=Chromite, DC=Cr-diopside, FO=forsterite, GO=Eclogitic garnet, GP=Peridotitic garnet, IM=Mg-ilmenite
*sample 15SUV019 is a field duplicate of 15SUV018; 15SUV055 is a field duplicate of 15SUV031
**IM and CR not picked to completion
***Shading identifies Beaufort Formation samples

KIM Percentage Compositions[4]

	GP	GO	DC	IM	CR	FO
% of all KIMs 0.25-1.00 mm (n=214.4)	13.9	0.6	0.6	8.5	69.7	6.9
% of 0.5-1.0 mm KIMs (n=11.6; 5.4%)	19.5	3.1	0.0	20.6	56.9	0.0
% of 0.25-0.5 mm KIMs (n=202.8; 94.6%)	13.5	0.5	0.6	7.8	70.4	7.3
6 Beaufort Fm Samples With Finer Fraction Picked						
% of all KIMs 0.25-1.00 mm (n=44.3)	49.1	0.0	0.0	18.1	32.8	0.0
% of 0.18-0.25 mm KIMs (n=73.4)	34.7	2.4	0.0	23.2	38.7	1.0

[4]Calculations exclude Blank samples that were spiked with known KIMs

Appendix 4E

Geological Survey of Canada
Banks Island KIM samples - KIMBERLITE INDICATOR MINERAL COUNTS - CORRECTED FOR EPMA GEOCHEMISTRY DETERMINATIONS and then NORMALIZED TO 50 g OF THE NONFERROMAGNETIC HMC 0.25-0.50 mm PICKING FRACTION

			Selected MMSIMs[2]			KIMs[3]						
			0.25 to 0.5 mm			0.25 to 0.5 mm						
Sample Number	Sample Material[1]	normalization conversion to 50 g of 0.25-0.5 mm picking fraction	Low-Cr diopside	Cpy	Gh	GP	GO	DC	IM	CR	FO	Total (KIMs)
15SUV001	SS	0.616	0	8.6	0	0	0	0	**1.8**	**12.9**	**1.2**	**16.0**
15SUV002	SS	0.762	0	3.8	0	0	0	0	0	**10.7**	0	**10.7**
15SUV003	SS	0.643	0	9.0	0	0	0	0	**0.6**	**9.6**	0	**10.3**
15SUV004	SS	0.593	1.2	59.3	0	**0.6**	0	0	0	**1.2**	0	**1.8**
15SUV005	SS	1.053	0	15.8	0	0	0	0	0	**1.1**	0	**1.1**
15SUV006	SS	1.188	0	4.8	0	0	0	0	0	**1.2**	0	**1.2**
15SUV008	SS	4.348	0	0	0	0	0	0	0	**4.3**	**26.1**	**30.4**
15SUV009	SS	1.563	0	4.7	0	**1.6**	0	0	0	**60.9**	**1.6**	**64.1**
15SUV010	SS	0.864	0	1.7	0	0	0	0	0	**1.7**	0	**1.7**
15SUV014	SS	0.928	0	9.3	0	**1.9**	0	**0.9**	**0.9**	**4.6**	0	**8.3**
15SUV015	BF	0.861	0	0	0	0	0	0	0	0	0	**0**
15SUV018	BF	6.579	0	0	0	0	0	0	0	**19.7**	0	**19.7**
15SUV019*	BF	0.824	0	0	0	**1.6**	0	0	0	0	0	**1.6**
15SUV020	SS	1.166	0	10.5	0	**1.2**	0	0	**4.7**	**40.8**	**2.3**	**49.0**
15SUV021	SS	1.416	1.4	5.7	0	0	0	0	0	0	0	**0**
15SUV022	T	55.556	0	0	0	0	0	0	0	0	0	**0**
15SUV023	T	71.429	0	0	0	0	0	0	0	0	0	**0**
15SUV024	GF	7.463	0	0	0	**14.9**	**7.5**	**7.5**	0	**7.5**	0	**37.3**
15SUV025	SS	1.845	0	9.2	0	0	0	0	0	**1.8**	**1.8**	**3.7**
15SUV026	SS	1.037	0	1.0	0	**1.0**	0	0	0	**7.3**	**3.1**	**11.4**
15SUV027	SS	2.688	2.7	8.1	0	0	0	0	0	0	0	**0**
15SUV028	BF	5.814	11.6	0	5.8	**5.8**	0	0	0	0	0	**5.8**
15SUV030	BF	2.717	0	0	0	**2.7**	0	0	0	**13.6**	0	**16.3**
15SUV031	SS	1.217	0	15.8	0	0	0	0	0	**1.2**	0	**1.2**
15SUV032	SS	1.812	16.3	10.9	0	0	0	0	0	0	0	**0**
15SUV033	SS	7.042	0	7.0	0	0	0	0	0	0	0	**0**
15SUV050	SS	1.302	0	9.1	0	0	0	0	0	**3.9**	**1.3**	**5.2**
15SUV051	SS	1.050	0	20.0	0	**1.1**	0	0	**1.1**	**3.2**	**4.2**	**9.5**
15SUV052	SS	1.008	1.0	50.4	0	0	0	0	0	0	0	**0**
15SUV053	SS	1.441	0	57.6	0	0	0	0	0	0	0	**0**
15SUV054	T	10.638	0	10.6	0	0	0	0	0	**21.3**	0	**21.3**
15SUV055*	SS	1.302	0	16.9	0	0	0	0	0	0	0	**0**
						0	0	0	0	0	0	**0**
16SUV013	GF	2.762	0	0	0	0	0	0	0	**5.5**	0	**5.5**
16SUV014	SS	1.385	0	6.9	0	0	0	0	**2.8**	**4.2**	**0.0**	**6.9**
16SUV015	SS	3.521	0	14.1	0	**3.5**	0	0	**3.5**	0	0	**7.0**
16SUV016	SS	2.513	0	2.5	0	0	0	0	0	0	0	**0**
16SUV017	GF	62.500	0	0	0	0	0	0	0	0	0	**0**
16SUV018	GF	33.333	0	0	0	0	0	0	0	**133.3**	0	**133.3**
16SUV019	T	14.286	0	0	0	0	0	0	0	0	0	**0**
16SUV020	T	10.638	0	0	0	0	0	0	0	0	0	**0**
16SUV022	R	71.429	0	0	0	0	0	0	0	0	0	**0**
16SUV023	BF	19.231	0	0	0	**365.4**	**0.0**	0	**173.1**	**173.1**	0	**711.5**
16SUV024	R	7.692	0	0	0	0	0	0	0	**23.1**	0	**23.1**
16SUV025	SS	0.715	0	7.9	0	**1.4**	0	0	0	0	0	**1.4**
16SUV026	BF	2.119	0	0	0	0	0	0	0	0	0	**0**
16SUV027	SS	1.089	0	7.6	0	0	0	0	**2.2**	**43.6**	0	**45.8**
16SUV028	SS	1.104	0	1.1	0	**1.1**	**1.1**	0	1	**13.2**	**1.1**	**17.7**
16SUV030	SS	2.660	0	0	0	0	0	0	0	**2.7**	0	**2.7**

KIM Percentage Compositions						
	GP	**GO**	**DC**	**IM**	**CR**	**FO**
# of 0.25-0.5 mm KIMs (n=1282.5)	403.8	8.6	8.4	191.8	627.2	42.8
% of 0.25-0.5 mm KIMs	31.5	0.7	0.7	15.0	48.9	3.3

[1]Sample Material: BF=Beaufort Formation, GF=glaciofluvial, R=bedrock, SS=stream sediment, T=till

[2]Metamorphosed/Magmatic Massive Sulphide Indicator Minerals; Cpy=Chalcopyrite, Gh=Gahnite

[3]Kimberlite Indicator Minerals: CR=Chromite, DC=Cr-diopside, FO=forsterite, GO=Eclogitic garnet, GP=Peridotitic garnet, IM=Mg-ilmenite

*sample 15SUV019 is a field duplicate of 15SUV018; 15SUV055 is a field duplicate of 15SUV031

**Shading identifies Beaufort Formation samples

Appendix 4F

Geological Survey of Canada
Banks Island KIM samples - KIMBERLITE INDICATOR MINERAL ODM PICKING FOOTNOTES

SAMPLE NO.	INPUT ASSEMBLAGE	INPUT REMARKS
15SUV001	Augite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.
15SUV002	Augite-goethite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 andradite candidates = 3 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 9 CR candidates = 9 CR; 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; and 3 barite candidates = 3 barite.
15SUV003	Goethite-orthopyroxene/diopside	SEM checks from 0.5-1.0 mm fraction: 4 CR candidates = 2 CR and 2 hercynite. SEM checks from 0.25-0.5 mm fraction: 2 GO versus almandine candidates = 2 almandine; 14 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 11 CR; 5 FO versus diopside candidates = 5 vesuvianite; and 1 blue-green gahnite versus spinel candidate = 1 hercynite.
15SUV004	Augite-goethite/diopside-marcasite	SEM checks from 0.25-0.5 mm fraction: 1 GP versus zircon candidate = 1 GP; 1 blue-green gahnite versus spinel candidate = 1 spinel; 3 sphalerite versus rutile candidates = 3 sphalerite; 1 galena candidate = 1 galena; 5 barite versus diopside candidates = 5 barite; and 5 augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite. Also picked an additional 6 of ~20 sphalerite from 0.25-0.5 mm fraction. (*Note, 3 of the 9 total sphalerite grains picked were subsequently identified by EPMA as vesuvianite).
15SUV005	Augite/diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 almandine; 1 CR versus tourmaline candidate = 1 CR; and 5 FO versus diopside candidates = 4 fayalite and 1 vesuvianite.
15SUV006	Augite/diopside	SEM checks from 0.25-0.5 mm fraction: 2 orange GO versus almandine candidates = 2 almandine; 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; 5 FO versus diopside candidates = 3 fayalite, 1 diopside and 1 bronzite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.
15SUV008	Augite/diopside	No KIM remarks.
15SUV009	Augite-goethite/diopside	SEM check from 0.5-1.0 mm fraction: 1 CR candidate = 1 CR. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus almandine candidate = 1 almandine; and 1 FO versus diopside candidate = 1 FO.
15SUV010	Goethite-almandine/diopside	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 5 FO versus titanite candidates = 5 vesuvianite; and 1 malachite candidate = 1 malachite. SEM checks from 0.25-0.5 mm fraction: 3 CR versus tourmaline candidates = 2 CR and 1 tourmaline; and 5 FO versus fayalite candidates = 3 fayalite and 2 vesuvianite.
15SUV014	Goethite-augite/diopside-marcasite	SEM checks from 0.25-0.5 mm fraction: 1 GP versus ruby corundum candidate = 1 GP; 3 IM versus crustal ilmenite candidates = 1 IM, 1 CR and 1 hercynite; 5 CR versus tourmaline candidates = 3 CR, 1 hercynite and 1 tourmaline; 1 FO versus vesuvianite candidate = 1 vesuvianite. Also picked 1 sphalerite from 0.5-1.0 mm fraction and 4 from 0.25-0.5 mm fraction. (*Note, sphalerite grains later confirmed by EPMA; vial with 4 sphalerite grains also contained a monazite grain)
15SUV015		No KIM remarks.
15SUV018		SEM checks from 0.25-0.5 mm fraction: 4 CR versus crustal ilmenite candidates = 3 CR and 1 crustal ilmenite. SEM checks from 0.18-0.25 mm fraction: 4 CR versus rutile candidates = 4 CR; and 2 greengahnite versus spinel candidates = 2 hercynite (1 with minor Zn)
15SUV019		SEM checks form 0.18-0.25 mm fraction: 3 GP versus almandine candidates = 2 GP and 1 almandine; 2 CR versus tournaline candidates = 1 CR and 1 hematitie; and 2 FO versus diopside candidates = 1 diopside and 1 apatite.
15SUV020	Augite-goethite-almandine/diopside	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 hercynite; and 3 CR versus tourmaline candidates = 1 CR, 1 tourmaline and 1 hercynite. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 spessartine; 15 IM versus crustal ilmenite candidates = 4 IM, 8 crustal ilmenite and 3 CR; 14 CR versus hercynite candidates = 14 CR; and 7 FO versus fayalite candidates = 4 FO and 3 fayalite. Also picked 1 malachite from 0.25-0.5 mm fraction.
15SUV021		SEM checks from 0.5-1.0 mm fraction: 2 FO versus fayalite candidates = 1 fayalite and 1 hedenbergite; and 1 barite candidate = 1 barite. SEM checks from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 vesuvianite; 1 sphalerite candidate = 1 sphalerite; and 4 anglesite candidates = 4 pyrite + calcite. (*Note, 2 sphalerite grains were returned in vials; 1 was later confirmed by EPMA as sphalerite, the other was rejected as clinopyroxene)
15SUV022		No KIM remarks.
15SUV023		SEM checks from 0.25-0.5 mm fraction: 4 FO versus fayalite candidates = 4 fayalite.
15SUV024		SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 almandine; 11 GO versus almandine candidates = 2 GO (Cr-poor pyrope), 6 almandine, 2 staurolite and 1 zircon; 10 CR versus crustal ilmenite candidates = 1 CR and 9 crustal ilmenite; and 4 FO versus vesuvianite candidates = 4 vesuvianite.
15SUV025	Goethite/diopside-marcasite	SEM checks from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; 1 galena candidate = 1 galena. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 4 crustal ilmenite and 1 CR; 3 CR versus hercynite candidates = 1 hercynite and 2 andradite; and 1 FO versus diopside candidate = 1 FO. Also picked 1 sphalerite from 1.0-2.0 mm fraction; 3 sphalerite from 0.5-1.0 mm fraction; and 8 sphalerite and 3 galena from 0.25-0.5 mm fraction.
15SUV026	Goethite-augite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 IM versus crustal ilmenite candidates = 1 crustal ilmenite, 1 CR and 1 hercynite; and 1 FO versus diopside candidate = 1 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 crustal ilmenite and 4 CR; and 6 FO versus diopside candidates = 3 FO, 2 diopside and 1 vesuvianite. Also picked 1 sphalerite from 0.5-1.0 mm fraction and 2 from 0.25-0.5 mm fraction.
15SUV027	Goethite-siderite/marcasite-diopside	SEM checks from 0.5-1.0 mm fraction: 1 sphalerite candidate = 1 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 5 sphalerite versus vesuvianite candidates = 5 vesuvianite.
15SUV028		SEM check from 0.25-0.5 mm fraction: 1 CR versus hematite candidate = 1 hematite.
15SUV030		SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM checks from 0.18-0.25 mm fraction: 1 FO versus diopside candidate = 1 FO.

Geological Survey of Canada
Banks Island KIM samples - KIMBERLITE INDICATOR MINERAL ODM PICKING FOOTNOTES

SAMPLE NO.	INPUT ASSEMBLAGE	INPUT REMARKS
15SUV001	Augite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.
SAMPLE NO.	INPUT ASSEMBLAGE	INPUT REMARKS
15SUV031	Augite/diopside	No KIM remarks.
15SUV032	Augite/diopside	No KIM remarks.
15SUV033	Augite/diopside	SEM check from 0.25-0.5 mm fraction: 1 IM versus rutile candidate = 1 crustal ilmenite.
15SUV050	Augite/diopside	SEM checks from 0.25-0.5 mm fraction: 1 CR versus crustal ilmenite andidate = 1 CR; 1 FO versus diopside candidate = 1 FO; and 5 sphalerite candidates = 1 sphalerite and 4 vesuvianite. Also picked 5 sphalerite from 0.5-1.0 mm fraction and 2 additional sphalerite from 0.25-0.5 mm fraction.
15SUV051	Augite/diopside	SEM checks from 0.5-1.0 mm fraction: 2 CR versus hercynite candidates = 1 CR and 1 hercynite. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 andradite; 3 CR versus rutile candidates = 2 CR and 1 andradite; and 4 FO versus diopside candidates = 4 FO.
15SUV052	Augite-hematite/diopside-macasite	SEM checks from 0.5-1.0 mm fraction: 3 GP versus almandine candidates = 3 almandine. Also picked 1 galena from 0.5-1.0 mm fraction and 1 from 0.25-0.5 mm fraction.
15SUV053	Augite/diopside	SEM checks from 0.25-0.5 mm fraction: 2 GP versus almandine candidates = 2 almandine.
15SUV054	Augite-hematite-almandine/diopside	SEM checks from 0.25-0.5 mm fraction: 2 CR versus rutile candidates = 2 CR; and 1 FO versus diopside candidate = 1 zoisite.
15SUV055*	Augite/diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 grossular (lost in transfer to vial).
16SUV-013		SEM checks from 0.25-0.5 mm fraction: 2 CR candidates = 2 CR; and 2 FO versus vesuvianite candidates = 2 vesuvianite.
16SUV-014	Augite-goethite-almandine/diopside-marcasite	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite; 1 CR versus tourmaline candidate = 1 tourmaline; and 1 sphalerite versus titanite candidate = 1 sphalerite. SEM checks from 0.25-0.5 mm fraction: 10 IM versus crustal ilmenite candidates = 1 IM and 9 crustal ilmenite; 4 CR versus crustal ilmenite candidates = 2 CR and 2 crustal ilmenite; and 6 FO versus fayalite candidates = 1 FO and 5 fayalite.
16SUV-015	Almandine-goethite-augite/marcasite	SEM check from 0.25-0.5 mm fraction: 1 GP versus zircon candidate = 1 zircon; and 1 IM versus crustal ilmenite candidate = 1 IM.
16SUV-016	Augite-goethite/marcasite	SEM checks from 0.25-0.5 mm fraction: 7 FO versus fayalite candidates = 7 fayalite.
16SUV-017		No KIM remarks.
16SUV-018		SEM checks from 0.25-0.5 mm fraction: 5 CR candidates = 3 CR and 2 hercynite.
16SUV-019		No KIM remarks.
16SUV-020		No KIM remarks.
16SUV-022		No KIM remarks.
16SUV-023		SEM checks from 0.25-0.5 mm fraction: 2 GO versus almandine candidates = 2 almandine; 5 GO versus staurolite candidates = 5 staurolite; 15 IM versus crustal ilmenite candidates = 9 IM, 2 crustal ilmenite and 4 tourmaline; and 12 CR versus tourmaline candidates = 7 CR, 1 tourmaline and 4 hercynite. SEM checks from 0.18-0.25 mm fraction: 4 GO candidates = 2 GO (Cr-poor pyrope), 1 almandine and 1 grossular; and 6 IM candidates = 6 IM.
16SUV-024		SEM checks from 1.0-2.0 mm fraction: 3 CR versus tourmaline candidates = 3 tourmaline. SEM checks from 0.25-0.5 mm fraction: 1 worn GP versus zircon candidate = 1 zircon; 1 CR versus tourmaline candidate = 1 CR.
16SUV-025	Goethite/marcasite-diopside	SEM checks from 0.25-0.5 mm fraction: 3 GP versus zircon candidates = 1 GP, 1 zircon and 1 fluorite.
16SUV-026		No KIM remarks.
16SUV-027	Augite-almandine/diopside	SEM checks from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM; 6 CR versus tourmaline candidates = 3 CR, 1 tourmaline, 1 hercynite and 1 andradite; and 1 sphalerite versus titanite candidate = 1 sphalerite. SEM checks from 0.25-0.5 mm fraction: 10 IM versus crustal ilmenite candidates = 1 IM and 9 crustal ilmenite; and 10 CR versus hercynite candidates = 8 CR, 1 hercynite and 1 andradite.
16SUV-028	Augite-almandine-goethite/diopside-marcasite	SEM checks from 0.5-1.0 mm fraction: 4 GO versus almandine candidates = 1 GO (Cr-poor pyrope) and 3 almandine; and 1 IM versus CR candidate = 1 CR. SEM checks from 0.25-0.5 mm fraction: 2 GP versus almandine candidates = 1 ruby corundum and 1 spinel; 2 GO versus almandine candidates = 1 GO (Cr-poor pyrope) and 1 almandine; 5 IM versus crustal ilmenite candidates = 4 crustal ilmenite and 1 perovskite; 6 CR candidates = 5 CR and 1 crustal ilmenite; and 3 FO versus diopside candidates = 1 FO, 1 diopside and 1 andradite.
16SUV-030	Goethite-augite/diopside-marcasite	SEM checks from 1.0-2.0 mm fraction: 1 CR versus hercynite candidate = 1 hercynite. SEM check from 0.25-0.5 mm fraction: 1 CR versus hercynite candidate = 1 CR.
BLANKS		
15SUV017	Hornblende/titanite-zircon	SEM checks from 0.5-1.0 mm fraction: 4 IM versus CR candidates = 4 CR; 1 CR versus Cr-magnetite candidate = 1 CR; and 2 FO versus diopside candidates = 2 FO.
15SUV029	Hornblende-almandine/diopside-titanite-apatite	SEM checks from 0.5-1.0 mm fraction: 4 GO versus almandine candidates = 4 almandine; 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 3 FO versus diopside candidates = 3 diopside; and 1 blue-green gahnite versus spinel candidate = 1 spinel.
16SUV-021	Hornblende-almandine/diopside-titanite-apatite	SEM checks from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP; 3 GO versus almandine candidates = 3 almandine; and 4 IM versus crustal ilmenite candidates = 4 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 6 GO versus almandine candidates = 1 GO (pyrope almandine), 4 almandine and 1 grossular; 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 2 CR candidates = 2 CR; and 6 FO versus diopside candidates = 5 FO and 1 diopside. Sole IM from 0.5-1.0 mm fraction has partial alteration mantle.
16SUV-029	Hornblende/titanite-zircon	SEM checks from 0.25-0.5 mm fraction: 1 CR candidate = 1 CR; and 3 FO versus diopside candidates = 3 FO.

*sample 15SUV019 is a field duplicate of 15SUV018; 15SUV055 is a field duplicate of 15SUV031
**Shading identifies Beaufort Formation samples

Appendix 4G

Geological Survey of Canada
Banks Island KIM Samples - METAMORPHOSED or MAGMATIC MASSIVE SULPHIDE INDICATOR MINERALS (MMSIM) - 0.25-0.5 mm

Sample Number	Sulphide/Arsenide + Related Minerals				Mg/Mn/Al/Cr Minerals											Phosphates			
	>1 amp			<1.0 amp	>1.0 amp								<0.8 amp			>1.0 amp			
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
15SUV015	0	Tr sphalerite (2 gr) Tr barite (1 gr)	99 (~300,000 gr)	25	0	0	0	Tr	Tr	0	0	0	0	0	0	0	0	Siderite-goethite/marcasite assemblage. SEM checks: 4 sphalerite versus vesuvianite candidates = 2 sphalerite and 2 vesuvianite; and 2 barite candidates = 1 barite and 1 dolomite.	0.25-0.5 mm fraction: 2 sphalerite 2 vesuvianite resembling sphalerite 1 barite 1 dolomite resembling barite
15SUV018	0	0.4% galena (10 gr) Tr barite (1 gr)	0.1 (3 gr)	95	0	0	Tr (1 gr)	15	Tr	0	0	0	0	0	Tr (3 gr; see KIM data)	0	0	Goethite/diopside-kyanite assemblage. SEM checks: 5 barite versus kyanite candidates = 1 barite, 3 kyanite and 1 diopside.	0.25-0.5 mm fraction: 10* galena 1 barite 1 diopside resembling barite 3 kyanite 1 red rutile 3 chromite (picked as KIMs) *(1 of 10 galena revealed by EPMA to be goethite)
15SUV019	0	0	Tr (10 gr)	99	0	0	0	40	0	0	0	0	0	0	0	0	15	Goethite/diopside-kyanite-monazite assemblage.	
15SUV022	Tr (2 gr)	0	70 (~3000 gr)	Tr	0	0	0	Tr	Tr	0	0	Tr	0	0	0	Tr	Tr	Almandine-augite/marcasite-diopside assemblage.	0.25-0.5 mm fraction: 2 chalcopyrite
15SUV023	0.5 (10 gr)	Tr sphalerite (1 gr)	50 (~1000 gr)	0	0	0	0	0	Tr	Tr	0	Tr	Tr	0	0	Tr	0	Almandine-augite-hematite/marcasite-diopside assemblage. SEM checks: 1 yellow sphalerite candidate = 1 sphalerite; 2 barite versus apatite candidates = 2 apatite; and 1 hercynite versus tourmaline candidate = 1 tourmaline.	0.25-0.5 mm fraction: 10 chalcopyrite 1 sphalerite 2 apatite resembling barite 1 tourmaline resembling hercynite
15SUV024	0	0	Tr (1 gr)	1	0	0	0	Tr	0	0	0	Tr	0	0	Tr (1 gr; see KIM data)	0	Tr	Almandine-augite/diopside assemblage.	0.25-0.5 mm fraction: 1 chromite (picked as KIM)
15SUV028	0	Tr barite (5 gr)	Tr (10 gr)	90	1 blue-green gahnite; 1 blue-green spinel	Tr low-Cr diopside (2 gr)	Tr (2 gr)	1	Tr	0	Tr	Tr	0	0	0	Tr	0	Goethite/diopside assemblage. SEM checks: 3 barite versus diopside candidates = 1 barite and 2 diopside; and 2 blue-green gahnite versus spinel candidates = 1 gahnite and 1 spinel.	0.25-0.5 mm fraction: 5 barite 2 diopside resembling barite 1 gahnite 1 spinel 2 low-Cr diopside 2 red rutile
15SUV030	0	Tr barite (2 gr)	0	60	0	0	Tr (10 gr)	Tr	Tr	0	0	1	0	0	Tr (6 gr; see KIM data)	0	0	Goethite-almandine-augite/diopside assemblage.	0.25-0.5 mm fraction: 2 barite 10 red rutile 6 chromite (picked as KIMs)
16SUV-013	Tr (7 gr)	0	0.5 (~200 gr)	30	1 blue green	0	Tr (8 gr)	0	Tr	1	Tr	Tr	0	0	Tr (2 gr)	0	0	Augite-goethite-almandine/diopside assemblage. SEM checks: 1 sphalerite versus titanite candidate = 1 titanite; and 1 blue-green gahnite versus spinel candidate = 1 spinel.	0.25-0.5 mm fraction: 7 chalcopyrite 1 titanite resembling sphalerite 1 spinel 8 red rutile 2 chromite
16SUV-017	0	0	0	0	0	Tr sapphire corundum (2 gr)	0	15	2	3	60	0	0	0	0	0	0	Almandine/staurolite-epidote-kyanite assemblage. SEM checks: 5 white diopside versus epidote (major nonparamagnetic assemblage mineral) candidates = 5 epidote.	0.25-0.5 mm fraction: 2 sapphire corundum 5 representative epidote
16SUV-018	0	0	3 (~200 gr)	0	2 black hercynite	Tr sapphire corundum (16 gr)	0	15	4	1	60	0	0	0	Tr (4 gr)	0	0	Almandine-siderite/staurolite-kyanite-epidote assemblage. "Pyrite" is mostly marcasite.	0.25-0.5 mm fraction: 2 hercynite (see KIM notes) 16 sapphire corundum 4 chromite
16SUV-019	0	Tr sphalerite (1 gr) Tr barite (1 gr)	99 (~20,000 gr)	15	0	0	0	0	Tr	Tr	Tr	0	0	0	0	0	0	Siderite-almandine-hematite-goethite/ marcasite assemblage. SEM checks: 1 brown sphalerite versus rutile candidate = 1 sphalerite; and 3 barite candidates = 1 barite and 2 diopside.	0.25-0.5 mm fraction: 1 sphalerite 1 barite 2 diopside resembling barite
16SUV-020	0	Tr barite (3 gr)	99 (~40,000 gr)	10	0	0	0	0	0	Tr	Tr	0	0	0	0	Tr	0	Siderite/marcasite assemblage.	0.25-0.5 mm fraction: 3 barite
16SUV-022	0	0	30 (~150 gr)	0	0	0	0	30	0	6	6	0	0	0	0	0	0	Almandine-ilmenite/marcasite-kyanite-leucoxene-rutile assemblage. SEM checks: 5 tourmaline candidates = 5 tourmaline; and 5 black rutile (major nonparamagnetic assemblage mineral) candidates = 5 rutile.	0.25-0.5 mm fraction: 5 representative tourmaline 5 representative rutile
16SUV-023	0	0	Tr (3 gr)	50	4 black hercynite; 1 blue-green spinel	Tr sapphire corundum (4 gr) Tr corundum (1 gr)	Tr (5 gr)	15	1	1	2	0	0	0	Tr (10 gr)	0	0	Goethite-almandine/diopside-kyanite assemblage. SEM checks: 1 blue-green gahnite versus spinel candidate = 1 spinel; 1 sapphire corundum versus kyanite candidate = 1 sapphire corundum; and 1 corundum candidate = 1 corundum.	0.25-0.5 mm fraction: 4 hercynite (see KIM notes) 1 spinel 4 sapphire corundum 1 corundum 5 red rutile 5 tourmaline (see KIM notes) 10 chromite
16SUV-024	0	0	0	0	5 blue-green gahnite	0	Tr (5 gr)	2	0	5	2	0	0	0	Tr (3 gr)	Tr	0	Almandine-ilmenite/zircon-rutile- leucoxene assemblage. SEM checks: 5 blue-green gahnite versus spinel candidates = 5 gahnite.	0.25-0.5 mm fraction: 5 gahnite 5 red rutile 3 chromite
16SUV-026	Tr (9 gr)	Tr sphalerite (9 gr)	90 (~40,000 gr)	40	0	0	0	Tr	0	Tr	Tr	0	0	0	0	Tr	0	Siderite-goethite/marcasite assemblage. SEM checks: 1 sphalerite versus rutile candidate = 1 sphalerite. 2 chalcopyrite from 0.25-0.5 mm fraction lost in transfer to vial.	0.5-1.0 mm fraction: 1 chalcopyrite 0.25-0.5 mm fraction: 9 chalcopyrite 9 sphalerite

*Shading identifies Beaufort Formation samples

Appendix 4H

Geological Survey of Canada
Banks Island KIM samples - ODM PICKED HEAVY MINERALS

Sample Number	Picked Heavy Minerals																																											
	0.5 - 1.0 mm													0.25 - 0.5 mm																														
	almandine	andradite	barite	chalcopyrite	galena	hedenbergite	hercynite	low Cr-diopside	malachite	spessartine	sphalerite	tourmaline	vesuvianite	almandine	andradite	apatite	augite	barite	bronzite	chalcopyrite	corundum, ruby	corundum, sapphire	diopside	dolomite	epidote	fayalite	fluorite	gahnite	galena	grossular	hematite	hercynite	kyanite	low Cr-diopside	malachite	red rutile	spessartine	sphalerite	spinel	staurolite	tourmaline	vesuvianite	zircon	zoisite
15SUV001	1	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	5	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0
15SUV002	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV003	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5	0	0
15SUV004	0	0	0	7	0	0	0	1	0	0	0	0	0	0	0	0	5	5	0	20	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	3	1	0	0	0	0	0
15SUV005	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	15	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
15SUV006	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	5	0	1	4	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV009	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV010	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0
15SUV014	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	4	0	0	1	1	0	0
15SUV015*	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
15SUV018*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	10	0	0	2	3	0	0	1	0	0	0	0	0	0	0	0
15SUV019*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV020	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	9	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
15SUV021	0	0	1	0	0	1	0	1	0	0	0	0	2	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
15SUV022*	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV023*	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	10	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
15SUV024*	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	4	1	0
15SUV025	0	0	0	0	1	0	0	0	0	0	4	0	0	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	8	0	0	0	0	0	0
15SUV026	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0
15SUV027	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6	0	0
15SUV028*	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	2	0	0	0	0	1	0	0	1	0	0	2	0	2	0	0	1	0	0	0	0	0
15SUV030*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
15SUV031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0
15SUV033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV050	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3	0	0	0	4	0	0
15SUV051	0	0	0	6	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15SUV052	3	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
15SUV053	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
15SUV054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV013*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	1	0	0	2	0	0
16SUV014	0	0	0	3	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	5	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV016	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV017*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV018*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
16SUV019*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
16SUV020*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV022*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	0
16SUV023*	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	1	0	4	0	0	0	5	0	0	1	5	5	0	0	0
16SUV024*	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
16SUV025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16SUV026*	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0
16SUV027	0	1	0	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
16SUV028	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
16SUV030	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

*samples which were processed for MMSIMs in the 0.25-0.5 mm size fracation (see Appendix 4F)
Shading identifies Beaufort Fm samples

Appendix 4I

GEOLOGICAL SURVEY OF CANADA
Banks Island Samples - GOLD GRAIN SUMMARY AND METALLIC MINERALS IN PAN CONCENTRATE

Sample Number	Number of Visible Gold Grains				Dimensions (microns)			Nonmag HMC Weight	Calculated PPB Visible Gold in HMC				Metallic Minerals in Pan Concentrate
	Total	Reshaped	Modified	Pristine	Thickness	Width	Length	(g)	Total	Reshaped	Modified	Pristine	
15SUV001	1	1	0	0	18C	75	100	96.4	10	10	0	0	~10 grains pyrite (25-50µm).
15SUV002	0	0	0	0	No Visible Gold			72.4	0				~200 grains pyrite (25-100µm).
15SUV003	0	0	0	0	No Visible Gold			70.8	0				1 grain galena (75µm). ~100 grains pyrite (25-100µm).
15SUV004	0	0	0	0	No Visible Gold			101.6	0				~10 grains galena (75-100µm). ~2000 grains pyrite (25-250µm). ~5000 grains marcasite (25-100µm).
15SUV005	1	0	1	0	8C	25	50	80.0	1	0	1	0	~0.5% pyrite (25-1000µm). ~200 grains marcasite (25-75µm).
15SUV006	0	0	0	0	No Visible Gold			80.8	0				~2000 grains pyrite (25-1000µm). ~200 grains marcasite (25-75µm).
15SUV008	0	0	0	0	No Visible Gold			36.0	0				~10 grains pyrite (25-50µm).
15SUV009	1	1	0	0	5C	25	25	45.6	1	1	0	0	~10 grains pyrite (25-50µm).
15SUV010	0	0	0	0	No Visible Gold			92.8	0				~10 grains pyrite (25-50µm).
15SUV014	0	0	0	0	No Visible Gold			74.0	0				~500 grains pyrite (25-100µm). ~500 grains marcasite (25-50µm).
15SUV015	0	0	0	0	No Visible Gold			32.8	0				~1% pyrite (25-1000µm). ~1% marcasite (25-100µm).
15SUV018	0	0	0	0	No Visible Gold			43.6	0				~30 grains galena (25-500µm). ~20 grains pyrite (25-100µm).
15SUV019*	1	1	0	0	20C	75	125	52.8	28	28	0	0	~5000 grains pyrite (25-250µm). Gold grain vialed.
15SUV020	1	1	0	0	50M	150	200	86.4	133	133	0	0	~100 grains pyrite (25-100µm).
15SUV021	1	1	0	0	5C	25	25	84.8	<1	<1	0	0	~2000 grains pyrite (25-250µm). ~200 grains marcasite (25-75µm).
15SUV022	0	0	0	0	No Visible Gold			80.4	0				~0.5% pyrite (25-1000µm).
15SUV023	0	0	0	0	No Visible Gold			75.2	0				~5000 grains pyrite (25-1000µm).
15SUV024	0	0	0	0	No Visible Gold			62.0	0				~1000 grains pyrite (25-250µm). ~1000 grains marcasite (25-50µm).
15SUV025	0	0	0	0	No Visible Gold			72.4	0				~2000 grains pyrite (25-250µm).
15SUV026	1	1	0	0	50M	75	125	72.4	52	52	0	0	~20 grains pyrite (25-50µm).
15SUV027	0	0	0	0	No Visible Gold			78.0	0				~0.5% pyrite (25-1000µm). ~0.5% marcasite (25-75µm).
15SUV028	0	0	0	0	No Visible Gold			31.6	0				~20 grains pyrite (25-100µm). 5 grains marcasite (50-75µm).
15SUV030	0	0	0	0	No Visible Gold			53.6	0				~20 grains pyrite (25-75µm).
15SUV031	0	0	0	0	No Visible Gold			57.6	0				~1000 grains pyrite (25-250µm).
15SUV032	0	0	0	0	No Visible Gold			73.2	0				~5000 grains pyrite (25-1000µm). ~50 grains marcasite (25-75µm).
15SUV033	0	0	0	0	No Visible Gold			88.0	0				5 grains galena (50-75µm). ~0.5% pyrite (25-1000µm). ~0.5% marcasite (25-100µm).
15SUV050	0	0	0	0	No Visible Gold			76.8	0				~50 grains pyrite (25-100µm).
15SUV051	0	0	0	0	No Visible Gold			66.4	0				~100 grains pyrite (25-100µm).
15SUV052	1	0	1	0	25M	50	125	107.2	13	0	13	0	~2000 grains pyrite (25-1000µm). ~2000 grains marcasite (25-100µm).
15SUV053	2	1	1	0	10C 50M	25 125	75 225	92.0	127	125	2	0	~2000 grains pyrite (25-1000µm). ~500 grains marcasite (25-100µm).
15SUV054	0	0	0	0	No Visible Gold			64.0	0				No Sulphides.
15SUV055*	1	1	0	0	13C	50	75	48.8	8	8	0	0	~1000 grains pyrite (25-250µm). ~50 grains marcasite (25-75µm).

Sample Number	Number of Visible Gold Grains				Dimensions (microns)			Nonmag HMC Weight (g)	Calculated PPB Visible Gold in HMC				Metallic Minerals in Pan Concentrate
	Total	Reshaped	Modified	Pristine	Thickness	Width	Length		Total	Reshaped	Modified	Pristine	
16SUV013	0	0	0	0	No Visible Gold			39.2	0				Tr (~2000 grains) pyrite (25-250µm). Tr (~500 grains) marcasite (25-50µm).
16SUV014	1	1	0	0	40C	200	225	76.0	178	178	0	0	Tr (~1000 grains) pyrite (25-250µm). Tr (~1000 grains) marcasite (25-100µm).
16SUV015	1	1	0	0	10C	25	75	93.2	2	2	0	0	Tr (~500 grains) pyrite (25-250µm). ~0.5% (~1,000,000 grains) marcasite (25-50µm).
16SUV016	0	0	0	0	No Visible Gold			79.2	0				Tr (~2000 grains) pyrite (25-250µm). ~0.5% (~1,000,000 grains) marcasite (25-50µm).
16SUV017	0	0	0	0	No Visible Gold			24.8	0				Tr (~200 grains) pyrite (25-75µm). Tr (~2000 grains) marcasite (25-50µm).
16SUV018	0	0	0	0	No Visible Gold			44.0	0				Tr (~50 grains) pyrite (25-75µm). Tr (~300 grains) marcasite (25-50µm).
16SUV019	0	0	0	0	No Visible Gold			56.4	0				~80% undifferentiated pyrite/marcasite grains (25-1000µm).
16SUV020	0	0	0	0	No Visible Gold			62.8	0				~0.5% marcasite grains (25µm).
16SUV022	0	0	0	0	No Visible Gold			92.4	0				Tr (~5000 grains) marcasite (25-200µm).
16SUV023	9	4	5	0	3C 5C 8C 10C 27C 36C	15 25 25 50 125 150	15 25 50 50 150 225	44.8	300	289	11	0	1 grain cinnabar (25µm).
16SUV024	0	0	0	0	No Visible Gold			91.6	0				No sulphides.
16SUV025	1	1	0	0	10C	50	50	86.8	2	2	0	0	Tr (~200 grains) pyrite (25-75µm). ~0.5% marcasite (25µm).
16SUV026	0	0	0	0	No Visible Gold			64.0	0				Tr (~2000 grains) pyrite (25-200µm). ~2% marcasite (25µm).
16SUV027	1	1	0	0	8C	25	50	70.8	1	1	0	0	Tr (~100 grains) pyrite (25-75µm).
16SUV028	0	0	0	0	No Visible Gold			110.0	0				Tr (~200 grains) pyrite (25-75µm). Tr (~100 grains) marcasite (25µm).
16SUV030	0	0	0	0	No Visible Gold			63.2	0				Tr (~300 grains) marcasite (15-50µm).

*sample 15SUV019 is a field duplicate of 15SUV018; 15SUV055 is a field duplicate of 15SUV031
**Shading depicts Beaufort Formation samples

Appendix 4J

GEOLOGICAL SURVEY OF CANADA
Banks Island Samples - Overburden Drilling Management LABORATORY ABBREVIATIONS

SEDIMENT LOG

Largest Clasts Present:
- G: Granules
- P: Pebbles
- C: Cobbles

Clast Composition:
- V/S: Volcanics and/or sediments
- GR: Granitics
- LS: Limestone, carbonates
- OT: Other Lithologies (refer to footnotes)
- TR: Only trace present
- NA: Not applicable
- OX: Very oxidized, undifferentiated

Matrix Grain Size Distribution:
- S/U: Sorted or Unsorted
- SD: Sand (F: Fine; M: Medium; C: Coarse)
- ST: Silt
- CY: Clay
- Y: Fraction present
- +: Fraction more abundant than normal
- -: Fraction less abundant than normal
- N: Fraction not present

Matrix Organics:
ORG:
- Y: Organics present in matrix
- N: Organics absent or negligible in matrix
- +: Matrix is mainly organic

Matrix Colour:
Primary:
- BE: Beige
- BR: Brick Red
- GY: Grey
- GB: Grey-beige
- GN: Green
- GG: Grey-green
- MN: Maroon
- PP: Purple
- PK: Pink
- PB: Pink-Beige

Secondary (soil):
- OC: Ochre
- BN: Brown
- BK: Black

Secondary Colour Modifier:
- L: Light
- M: Medium
- D: Dark

GOLD GRAIN LOG

Thickness:
- VG: Visible gold grains
- M: Actual measured thickness of grain (microns)
- C: Thickness of grain (microns) calculated from measured width and length

KIM (kimberlite indicator mineral) LOG

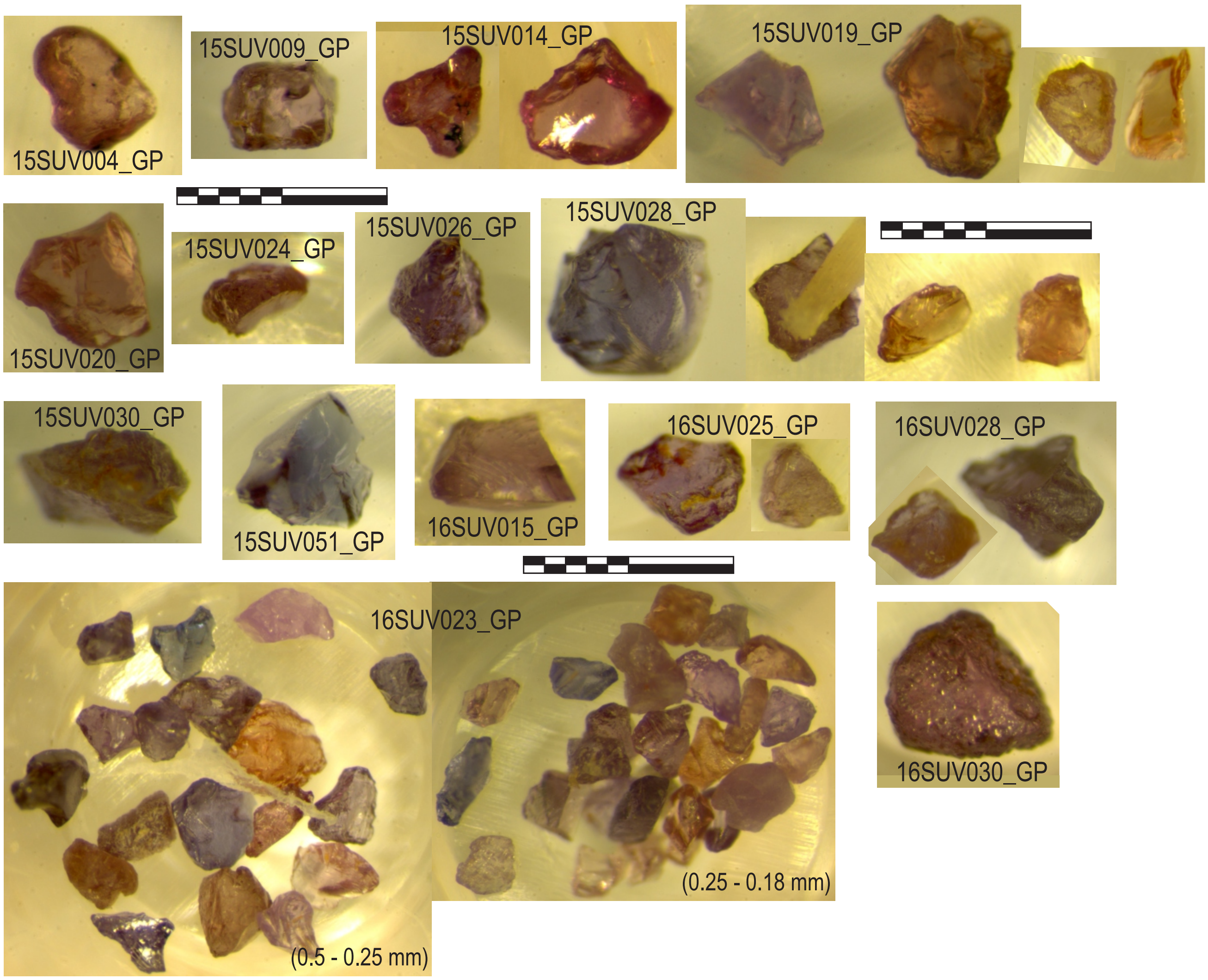
- GP: Purple to red peridotitic garnet (G9/10 Cr-pyrope)
- GO: Orange mantle garnet; includes both eclogitic pyrope-almandine (G3) and Cr-poor megacrystic pyrope (G1/G2) varieties; may include unchecked (by SEM) grains of common crustal garnet (G5) lacking diagnostic inclusions or crystal faces
- DC: Cr-diopside; distinctly emerald green (paler emerald green low-Cr diopside picked separately)
- IM: Mg-ilmenite; may include unchecked (by SEM) grains of common crustal ilmenite lacking diagnostic inclusions or crystal faces
- CR: Chromite
- FO: Forsterite

MMSIM (metamorphosed or magmatic massive sulphide indicator mineral) and PCIM (porphyry Cu indicator mineral) LOGS

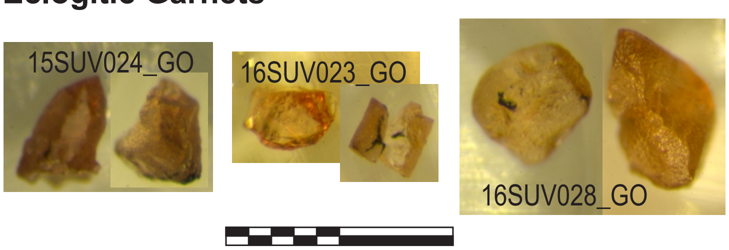
Adr: Andradite	Cpy: Chalcopyrite	Gth: Goethite	Opx: Orthopyroxene	St: Staurolite
Ap: Apatite	Cr: Chromite	Ilm: Ilmenite	Py: Pyrite	Tm: Tourmaline
Ase: Anatase	Fay: Fayalite	Ky: Kyanite	Sil: Sillimanite	Ttn: Titanite
Aspy: Arsenopyrite	Gh: Gahnite	Mz: Monazite	Spi: Spinel	Zir: Zircon
Ax: Axinite	Gr: Grossular	Ol: Olivine	Sps: Spessartine	

APPENDIX 5. GSC Banks Island KIM photographs

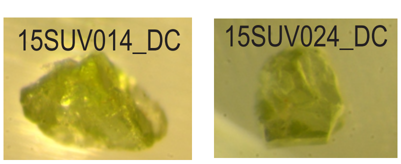
Garnets



Eclogitic Garnets

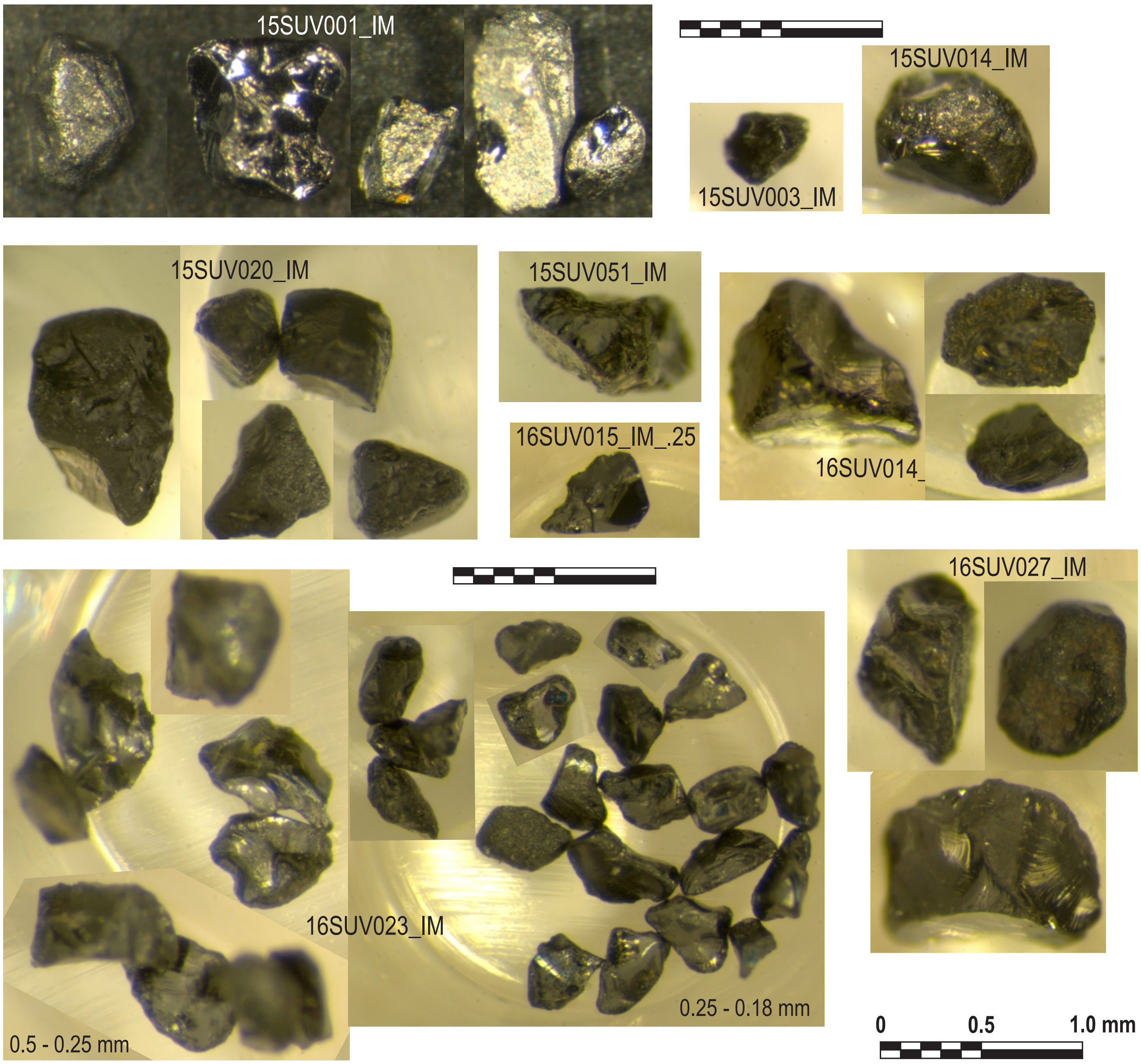


Chrome Diopsides



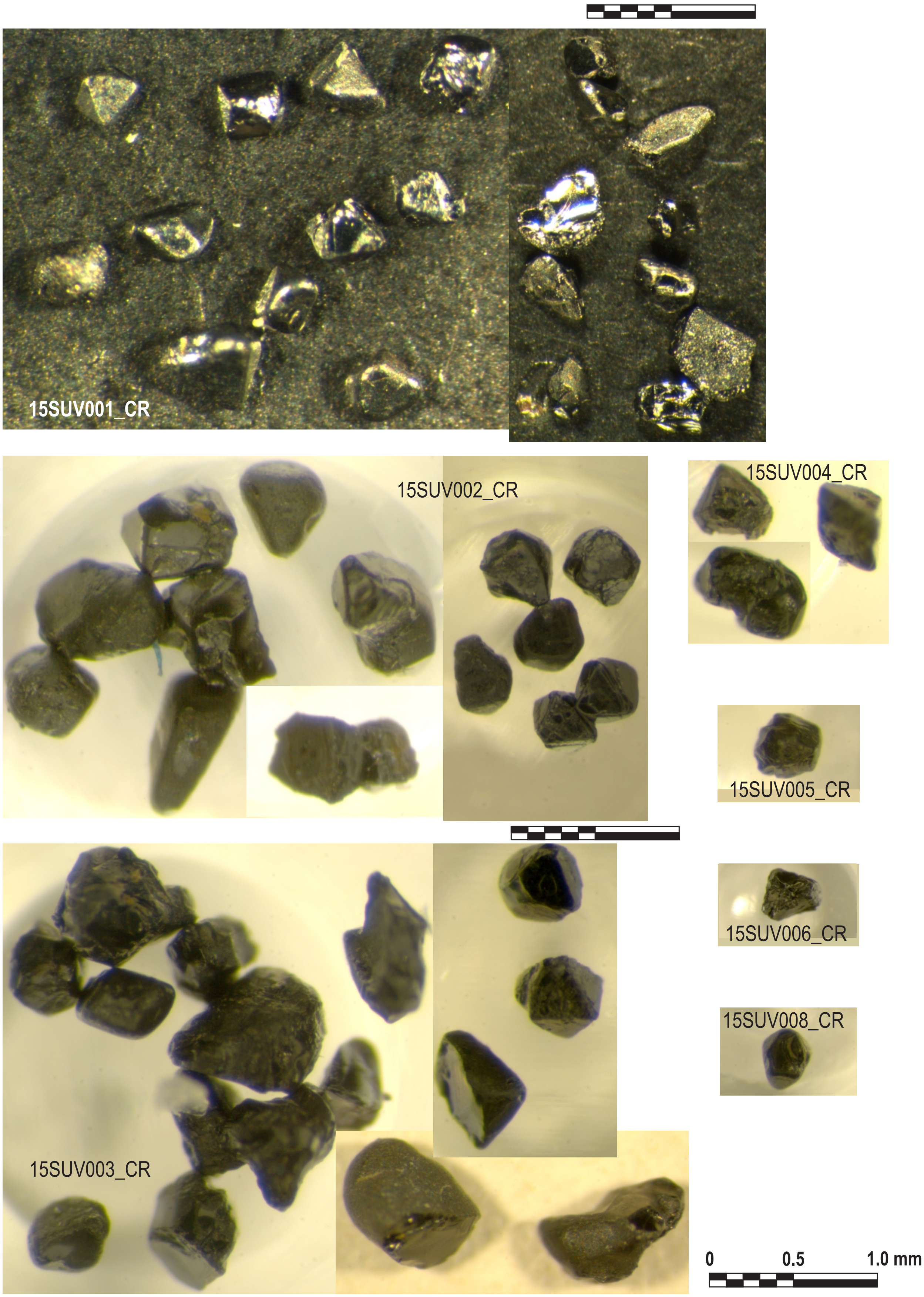
0 0.5 1.0 mm

Ilmenites

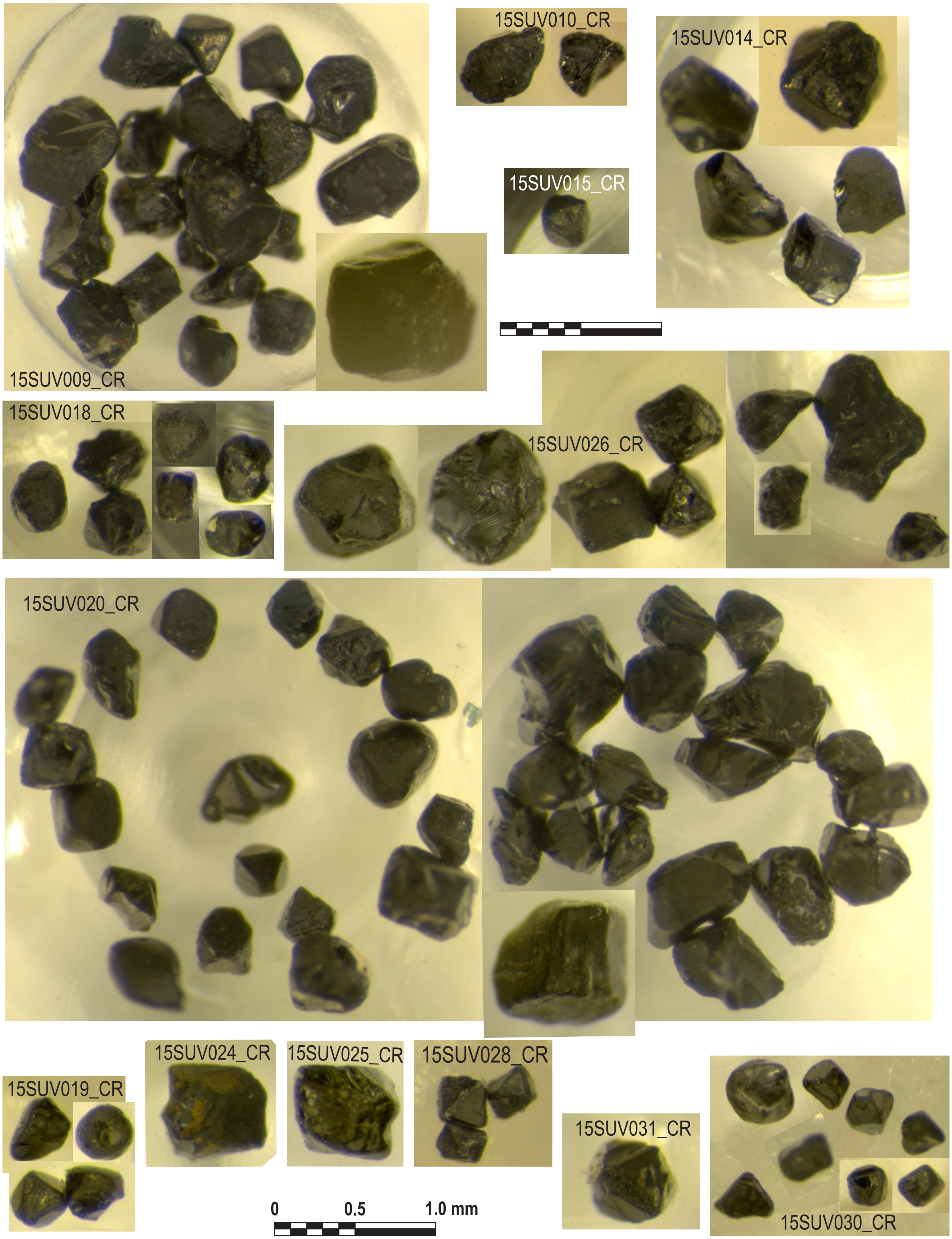


15SUV001_IM
15SUV003_IM
15SUV014_IM
15SUV020_IM
15SUV051_IM
16SUV015_IM_.25
16SUV014_
16SUV027_IM
16SUV023_IM
0.5 - 0.25 mm
0.25 - 0.18 mm
0
0.5
1.0 mm

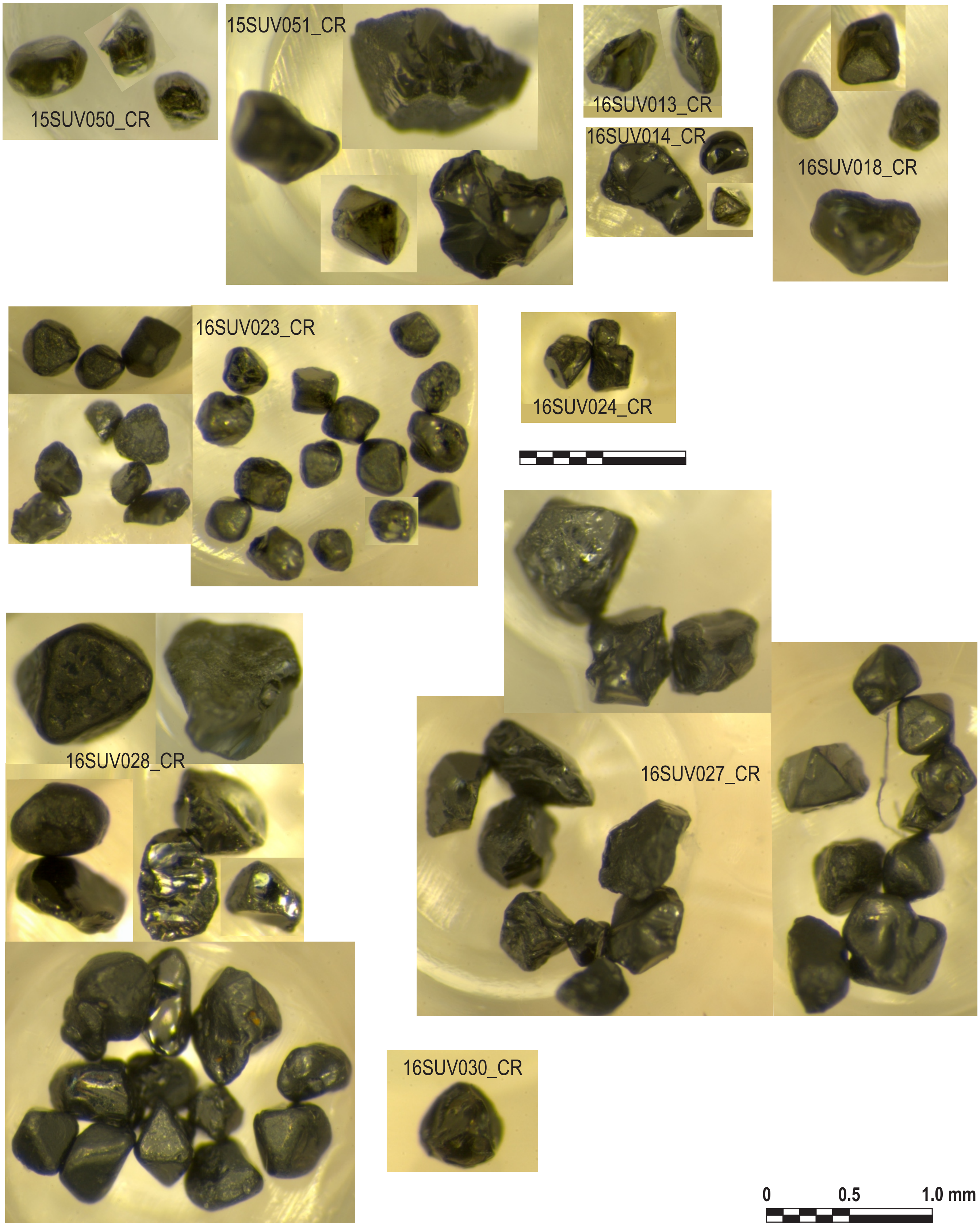
Chromites (1 of 3)



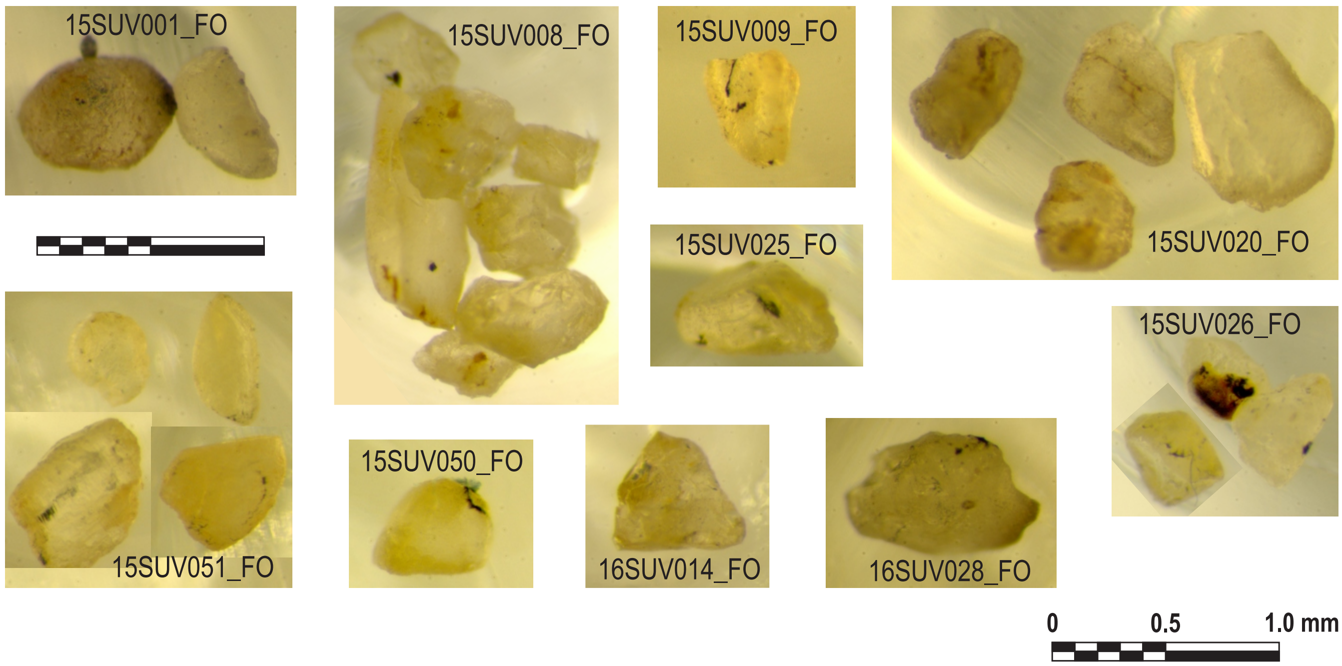
Chromites (2 of 3)



Chromites (3 of 3)



Forsterites



APPENDIX 6A

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - Kimberlite Indicator Mineral (KIM) - ELECTRON PROBE MICRO-ANALYZER (EPMA; U. Alberta) - CHEMISTRY (WT%)

Count	GSC Sample #	Mount	Grain #	EPMA #	Sample Material	ODM Min ID	EPMA Min ID	Grain Size	Ti WT%	Na WT%	K WT%	Si WT%	Fe WT%	Cr WT%	Mg WT%	Ca WT%	Al WT%	Mn WT%	O WT%	TOTAL	SiO2	TiO2	Al2O3	Cr2O3	MnO	FeO	MgO	CaO	Na2O	K2O	Nb2O5	NiO	ZnO	V2O3	P2O5	Total
1	15SUV024	2015_1	1_1	1-1-1	fluvial	GO[1]	garnet	0.25-0.5	0.3618	0.0353	0	19.4029	6.6768	2.3423	11.5723	4.0161	10.4672	0.2935	43.9720	99.1401	41.51	0.60	19.78	3.42	0.38	8.59	19.19	5.62	0.05	0.00						99.14
2	15SUV024	2015_1	1_2	1-1-2	fluvial	GO	garnet	0.25-0.5	0.0264	0.0011	0.0005	18.1606	20.1530	0.0031	6.0709	0.8159	11.6030	0.3973	41.2434	98.4752	38.85	0.04	21.92	0.00	0.51	25.93	10.07	1.14	0.00	0.00						98.46
4	15SUV009	2015_1	2_2	1-2-2	stream sediments	GP[2]	garnet	0.25-0.5	0.0576	0.0046	0.0003	19.6209	5.9444	2.1743	11.8210	3.8697	11.2082	0.3426	44.4978	99.5412	41.98	0.10	21.18	3.18	0.44	7.65	19.60	5.41	0.00	0.00						99.54
5	15SUV014	2015_1	2_3	1-2-3	stream sediments	GP	garnet	0.25-0.5	0.0128	0.0187	0	19.6119	5.0821	3.7085	13.0659	2.5993	10.3726	0.2746	44.4730	99.2195	41.96	0.02	19.60	5.42	0.35	6.54	21.67	3.64	0.03	0.00						99.23
6	15SUV014	2015_1	2_4	1-2-4	stream sediments	GP	garnet	0.25-0.5	0.0043	0.0000	0.0023	19.2239	4.8944	6.2217	13.2981	2.1683	8.9329	0.3321	43.8423	98.9202	41.13	0.00	16.88	9.09	0.43	6.30	22.05	3.03	0.00	0.00						98.91
7	15SUV019	2015_1	2_5	1-2_005	Beaufort Fm	GP	garnet	0.25-0.5	0.3460	0.0387	0.0054	19.3257	5.6838	3.4526	12.3179	3.7983	9.8600	0.2526	43.9557	99.0367	41.34	0.58	18.63	5.05	0.33	7.31	20.43	5.31	0.05	0.01						99.04
8	15SUV019	2015_1	2_6	1-2_006	Beaufort Fm	GP	garnet	0.25-0.5	0	0	0	19.5801	5.9242	3.2279	12.0378	3.4967	10.8403	0.3455	44.5591	100.0110	41.89	0.00	20.48	4.72	0.45	7.62	19.96	4.89	0.00	0.00						100.01
9	15SUV020	2015_1	2_7	1-2_007	stream sediments	GP	garnet	0.25-0.5	0.1974	0.0195	0.0077	19.5916	5.4073	2.7274	12.5458	3.4689	10.6401	0.2650	44.4551	99.3257	41.91	0.33	20.10	3.99	0.34	6.96	20.80	4.85	0.03	0.01						99.32
10	15SUV024	2015_1	2_8	1-2_008	fluvial	GP	garnet	0.25-0.5	0.1978	0.0467	0	19.3724	5.2299	4.1253	12.4344	3.6187	9.9045	0.2877	44.1468	99.3641	41.44	0.33	18.71	6.03	0.37	6.73	20.62	5.06	0.06	0.00						99.35
11	15SUV026	2015_1	2_9	1-2_009	stream sediments	GP	garnet	0.25-0.5	0.0223	0.0185	0	19.1167	5.4621	6.2127	12.1303	3.4556	8.9496	0.3828	43.6714	99.4219	40.90	0.04	16.91	9.08	0.49	7.03	20.12	4.84	0.02	0.00						99.43
12	15SUV028	2015_1	2_10	1-2_010A	Beaufort Fm	GP	garnet	0.5-1.0	0.1229	0.0426	0	18.9450	5.2203	6.4721	11.1504	5.0202	8.5741	0.3801	43.2466	99.1742	40.53	0.21	16.20	9.46	0.49	6.72	18.49	7.02	0.06	0.00						99.18
13	15SUV028_rpt	2015_1	2_10_r	1-2-10B	Beaufort Fm	GP	garnet	0.5-1.0	0.1086	0.0402	0.0018	19.0626	5.2091	6.7601	10.9510	5.2861	8.3962	0.3904	43.3198	99.5258	40.78	0.18	15.86	9.88	0.50	6.70	18.16	7.40	0.05	0.00						99.51
14	15SUV028_rpt	2015_1	2_11_r	1-2-11A on fracture	Beaufort Fm	GP	garnet	0.25-0.5	0.2982	0.0331	0.0077	18.3282	4.9136	4.4004	10.5787	3.9174	8.0028	0.2424	40.2503	90.9727	39.21	0.50	15.12	6.43	0.31	6.32	17.54	5.48	0.04	0.01						90.96
15	15SUV028	2015_1	2_11	1-2-11B	Beaufort Fm	GP	garnet	0.25-0.5	0.2998	0.0238	0	19.2758	5.0127	4.7393	12.2431	4.2223	9.3807	0.2534	43.9572	99.4081	41.24	0.50	17.72	6.93	0.33	6.45	20.30	5.91	0.03	0.00						99.41
16	15SUV030	2015_1	2_12	1-2-12A	Beaufort Fm	GP	garnet	0.25-0.5	0	0.0012	0.0035	19.2381	5.6717	4.8671	11.2731	4.6660	9.6052	0.3605	43.7241	99.4104	41.16	0.00	18.15	7.11	0.47	7.30	18.69	6.53	0.00	0.00						99.41
17	15SUV030_rpt	2015_1	2_12_r	1-2-12B	Beaufort Fm	GP	garnet	0.25-0.5	0.0013	0	0	19.0681	5.6466	4.9146	11.2813	4.6889	9.4447	0.3550	43.4150	98.8154	40.79	0.00	17.85	7.18	0.46	7.26	18.71	6.56	0.00	0.00						98.81
18	15SUV051	2015_1	2_13	1-2-13	stream sediments	GP	garnet	0.25-0.5	0.0538	0.0013	0	18.8802	5.4505	8.8693	11.0321	4.8011	6.9986	0.3211	42.7008	99.1088	40.39	0.09	13.22	12.96	0.41	7.01	18.29	6.72	0.00	0.00						99.09
19	15SUV028_rpt	2015_1	2_11_r	1-2-11A-repeat	Beaufort Fm	GP	garnet	0.25-0.5	0.2965	0.0232	0	19.2591	5.0365	4.7364	12.2412	4.2477	9.2774	0.2576	43.8596	99.2353	41.20	0.49	17.53	6.92	0.33	6.48	20.30	5.94	0.03	0.00						99.22
20	15SUV001	2015_1	3_1	1-3_001	stream sediments	andradite	garnet	0.25-0.5	1.9657	0.0184	0	16.1210	18.0792	0	0.2680	23.3015	0.7951	0.1637	35.1001	95.8127	34.49	3.28	1.50	0.00	0.21	23.26	0.44	32.60	0.00	0.00						95.78
21	15SUV001	2015_1	3_2	1-3_002	stream sediments	andradite	garnet	0.25-0.5	5.4704	0.0044	0	14.3470	14.9855	0.0315	0.4850	23.3725	1.8245	0.0465	35.5963	96.1636	30.69	9.12	3.45	0.05	0.06	19.28	0.80	32.70	0.00	0.00						96.15
22	15SUV025	2015_1	3_3	1-3_003	stream sediments	andradite	garnet	0.25-0.5	7.1380	0.0125	0.0001	12.8670	15.3821	0	0.2534	23.0549	1.9934	0.0652	35.0025	95.7691	27.53	11.91	3.77	0.00	0.08	19.79	0.42	32.26	0.00	0.00						95.76
23	15SUV025	2015_1	3_4	1-3_004	stream sediments	andradite	garnet	0.25-0.5	1.8845	0.0679	0	16.2493	18.8907	0.0041	0.0238	22.4953	0.7508	0.5837	35.0441	95.9944	34.76	3.14	1.42	0.00	0.75	24.30	0.04	31.48	0.09	0.00						95.98
24	15SUV051	2015_1	3_5	1-3_005-FeAlSi	stream sediments	andradite	tourmaline	0.25-0.5	0.2045	1.3496	0.0342	16.0330	9.8919	0	0.9994	0.0637	18.1496	0.1851	38.5956	85.5067	34.30	0.34	34.29	0.00	0.24	12.73	1.66	0.09	1.82	0.04						85.51
25	15SUV051	2015_1	3_6	1-3_006	stream sediments	andradite	garnet	0.25-0.5	2.7698	0.0078	0	15.7805	18.1086	0	0.1272	22.6406	1.2680	0.1950	35.3273	96.2246	33.76	4.62	2.40	0.00	0.25	23.30	0.21	31.68	0.00	0.00						96.22
26	15SUV051	2015_1	3_7	1-3_007	stream sediments	andradite	garnet	0.25-0.5	7.7053	0.0214	0	14.0316	13.9956	0.0240	0.7733	23.3082	0.7436	0.1082	35.6695	96.3807	30.02	12.85	1.41	0.04	0.14	18.01	1.28	32.61	0.03	0.00						96.39
27	15SUV001	2015_1	4_1	1-4_001	stream sediments	almandine	garnet	0.5-1.0	0.0605	0.0081	0	16.9501	14.6998	0	0.5421	1.1522	10.5329	16.2557	38.4868	98.6882	36.26	0.10	19.90	0.00	20.99	18.91	0.90	1.61	0.00	0.00						98.67
28	15SUV003	2015_1	4_2	1-4_002	stream sediments	almandine	garnet	0.25-0.5	0.0787	0.0206	0.0029	18.2798	15.6833	0.0089	5.2771	5.9755	11.5797	0.3756	41.6536	98.9357	39.11	0.13	21.88	0.00	0.49	20.18	8.75	8.36	0.03	0.00						98.93
29	15SUV003	2015_1	4_3	1-4_003	stream sediments	almandine	garnet	0.25-0.5	0.0424	0.0093	0.0017	17.1618	23.5938	0	0.6421	5.0531	10.7497	1.7497	38.8561	97.8597	36.72	0.07	20.31	0.00	2.26	30.35	1.06	7.07	0.00	0.00						97.84
30	15SUV005	2015_1	4_4	1-4_004	stream sediments	almandine	garnet	0.5-1.0	0	0.0068	0	17.1563	26.6009	0	1.7998	0.4674	11.0374	2.0266	38.9498	98.0450	36.70	0.00	20.85	0.00	2.62	34.22	2.98	0.65	0.00	0.00						98.02
31	15SUV005	2015_1	4_5	1-4_005	stream sediments	almandine	garnet	0.25-0.5	0.0602	0	0	18.1507	17.2120	0.0294	5.2586	4.5338	11.5140	0.4756	41.3167	98.5509	38.83	0.10	21.76	0.04	0.61	22.14	8.72	6.34	0.00	0.00						98.54
32	15SUV006	2015_1	4_6	1-4_006	stream sediments	almandine	garnet	0.25-0.5	0.0122	0.0067	0	17.2498	24.6018	0.0216	2.1037	2.2586	10.8209	1.7664	39.1484	97.9899	36.90	0.00	20.45	0.03	2.28	31.65	3.49	3.16	0.00	0.00						97.96
33	15SUV006	2015_1	4_7	1-4_007	stream sediments	almandine	garnet	0.25-0.5	0.0204	0.0213	0	17.4862	21.7900	0.0241	2.4559	2.0889	10.9234	4.3344	39.6271	98.7718	37.41	0.03	20.64	0.04	5.60	28.03	4.07	2.92	0.03	0.00						98.77
34	15SUV009	2015_1	4_8	1-4_008	stream sediments	almandine	garnet	0.25-0.5	0.0541	0.0079	0	17.8266	22.0268	0.0209	4.4959	1.4915	11.2772	0.7107	40.4629	98.3745	38.14	0.09	21.31	0.03	0.92	28.34	7.46	2.09	0.00	0.00						98.38
35	15SUV024	2015_1	5_1`	1-5_001	fluvial	almandine	garnet	0.25-0.5	0.0031	0.0047	0.0029	17.3156	23.3889	0.0081	0.7549	5.4105	10.7424	1.8359	39.1842	98.6513	37.04	0.00	20.30	0.00	2.37	30.09	1.25	7.57	0.00	0.00						98.62
36	15SUV024	2015_1	5_2	1-5_002	fluvial	almandine	garnet	0.25-0.5	0.0862	0.0086	0	17.6888	20.4076	0	2.1973	6.3408	10.8104	1.1541	39.9908	98.6847	37.84	0.14	20.43	0.00	1.49	26.25	3.64	8.87	0.00	0.00						98.66
37	15SUV024	2015_1	5_3	1-5_003	fluvial	almandine	garnet	0.25-0.5	0.0032	0	0.0007	17.8361	22.5999	0.0800	4.6735	0.8255	11.3726	0.5142	40.5073	98.4131	38.16	0.00	21.49	0.12	0.66	29.07	7.75	1.15	0.00	0.00						98.40
38	15SUV024	2015_1	5_4	1-5_004	fluvial	almandine	garnet	0.25-0.5	0.0688	0	0	17.7749	18.6754	0.0062	4.1515	5.2965	11.1847	0.4422	40.5760	98.1763	38.03	0.11	21.13	0.00	0.57	24.03	6.88	7.41	0.00	0.00						98.16
39	15SUV024	2015_1	5_5	1-5_005	fluvial	almandine	garnet	0.25-0.5	0.1364	0.0221	0	18.0985	16.2993	0.0086	4.5719	6.6571	11.3924	0.2642	41.2706	98.7211	38.72	0.23	21.53	0.00	0.34	20.97	7.58	9.31	0.03	0.00						98.71
40	15SUV024	2015_1	5_6	1-5_006	fluvial	almandine	garnet	0.25-0.5	0.0187	0.0000	0	17.5624	23.6336	0	4.0127	0.8946	11.3309	0.6035	40.0464	98.1028	37.57	0.03	21.41	0.00	0.78	30.40	6.65	1.25	0.00	0.00						98.09
41	15SUV052	2015_1	5_7	1-5_007	stream sediments	almandine	garnet	0.5-1.0	0.0053	0.0125	0.0021	17.0579	25.3845	0	1.6067	0.7810	11.0185	3.2861	38.8432	97.9978	36.49	0.00	20.82	0.00	4.24	32.66	2.66	1.09	0.00	0.00						97.96
42	15SUV052	2015_1	5_8	1-5_008	stream sediments	almandine	garnet	0.5-1.0	0.0398	0.0207	0.0029	17.3473	22.6901	0	1.8934	3.2047	11.0191	2.5184	39.3602	98.0966	37.11	0.07	20.82	0.00	3.25	29.19	3.14	4.48	0.03	0.00						98.09
43	15SUV052	2015_1	5_9	1-5_009	stream sediments	almandine	garnet	0.5-1.0	0	0.0143	0.0003	17.7119	23.3572	0.0108	4.3732	0.7478	11.4010	0.2982	40.2872	98.2019	37.89	0.00	21.54	0.00	0.39	30.05	7.25	1.05	0.00	0.00						98.17
44	15SUV053	2015_1	5_10	1-5_010	stream sediments	almandine	garnet	0.25-0.5	0.0210	0.0095	0.0011	17.2684	23.5718	0.0021	0.9736	5.2630	10.8555	1.0972	39.1639	98.2271	36.94	0.04	20.51	0.00	1.42	30.33	1.61	7.36	0.00	0.00						98.21
45	15SUV053	2015_1	5_11	1-5_011	stream sediments	almandine	garnet	0.25-0.5	0.0055	0.0186	0	17.0492	28.7646	0.0151	0.7930	1.0514	10.9030	0.8671	38.5754	98.0428	36.47	0.00	20.60	0.00	1.12	37.01	1.31	1.47	0.00	0.00						97.98
46	15SUV001	2015_1	6_1	1-6_001	stream sediments	spessartine	garnet	0.25-0.5	0.0814	0.0318	0	16.8302	11.2730	0	0.6931	0.3615	10.4347	20.2911	38.2624	98.2593	36.01	0.14	19.72	0.00	26.20	14.50	1.15	0.51	0.04	0.00						98.27
47	15SUV001	2015_1	6_2	1-6_002	stream sediments	spessartine	garnet	0.25-0.5	0.0869	0.0462	0.0003	16.6058	13.7585	0	0.8373	0.4044	10.6191	16.7402	37.9694	97.0681	35.53	0.15	20.06	0.00	21.62	17.70	1.39	0.57	0.06	0.00						97.08
48	15SUV020	2015_1	6_3	1-6_003	stream sediments	spessartine	garnet	0.25-0.5	0.0913	0.0142	0	16.8268	14.7848	0	0.6385	0.7952	10.3523	16.4770	38.2181	98.1982	36.00	0.15	19.56	0.00	21.28	19.02	1.06	1.11	0.00	0.00						98.18
49	15SUV001	2015_2	1_1	2-1_001	stream sediments	forsterite	olivine	0.25-0.5	0.0067	0	0	18.5913	10.0761	0.0158	27.3656	0.1401	0.0183	0.1591	42.2140	98.5870	39.77	0.00	0.03	0.00	0.21	12.96	45.38	0.20	0.00	0.00						98.55
50	15SUV001	2015_2	1_2	2-1_002	stream sediments	forsterite	olivine	0.25-0.5	0.0059	0.0067	0	18.8424	8.5354	0.0523	28.4393	0.1611	0.0250	0.1175	42.7863	98.9719	40.31	0.00	0.05	0.08	0.15	10.98	47.16	0.23	0.00	0.00						98.96
51	15SUV008	2015_2	1_3	2-1_003	stream sediments	forsterite	olivine	0.25-0.5	0.0071	0	0.0035	18.3737	12.9118	0	25.7219	0.2179	0.0128	0.2272	41.7361	99.2120	39.31	0.00	0.02	0.00	0.29	16.61	42.65	0.30	0.00	0.00						99.18
52	15SUV008	2015_2	1_4	2-1_004	stream sediments	forsterite	olivine	0.25-0.5	0.0035	0.0109	0	18.1904	15.5181	0.0082	24.0934	0.2186	0.0198	0.2371	41.2158	99.5158	38.92	0.00	0.04	0.00	0.31	19.96	39.95	0.31	0.00	0.00						99.49
53	15SUV008	2015_2	1_5	2-1_005	stream sediments	forsterite	olivine	0.25-0.5	0.0063	0	0	18.4119	13.2028	0	25.4831	0.2247	0.0232	0.2395	41.7201	99.3115	39.39	0.00	0.04	0.00	0.31	16.99	42.26	0.31	0.00	0.00						99.30
54	15SUV008	2015_2	1_6	2-1_006	stream sediments	forsterite	olivine	0.25-0.5	0.0076	0	0	18.1306	15.6990	0.0285	24.0642	0.2177	0.0149	0.2319	41.1823	99.5767	38.79	0.00	0.03	0.04	0.30	20.20	39.91	0.30	0.00	0.00						99.57
55	15SUV008	2015_2	1_7	2-1_007	stream sediments	forsterite	olivine	0.25-0.5	0	0.0085	0	18.9998	9.4008	0.0257	27.7912	0.2746	0.0213	0.1597	42.8257	99.5073	40.65	0.00	0.04	0.04	0.21	12.09	46.09	0.38	0.00	0.00						99.50
56	15SUV008	2015_2	1_8	2-1_008	stream sediments	forsterite	garnet	0.25-0.5	0.1069	0.0120	0	18.3672	4.7413	0	0.5474	25.4112	9.0861	0.1210	40.9824	99.3754	39.29	0.18	17.17	0.00	0.16	6.10	0.91	35.56	0.00	0.00						99.37
57	15SUV008	2015_2	1_9	2-1_009	stream sediments	forsterite	olivine	0.25-0.5	0	0	0	18.3817	12.8065	0.0212	25.8359	0.2093	0.0118	0.1806	41.7766	99.2237	39.33	0.00	0.02	0.03	0.23	16.48	42.84	0.29	0.00	0.00						99.22
58	15SUV009	2015_2	1_10	2-1_010	stream sediments	forsterite	olivine	0.25-0.5	0.0040	0.0069	0.0029	18.8119	8.5418	0.0514	28.4574	0.1928	0.0294	0.1203	42.7818	99.0007	40.25	0.00	0.06	0.08	0.16	10.99	47.19	0.27	0.00	0.00						99.00
59	15SUV020	2015_2	2_1	2-2_001	stream sediments	forsterite	olivine	0.25-0.5	0.0081	0	0.0014	17.5881	20.7666	0.0081	20.7597	0.1455	0.0084	0.2721	39.8091	99.3671	37.63	0.00	0.02	0.00	0.35	26.72	34.43	0.20	0.00	0.00						99.35
60	15SUV020	2015_2	2_2	2-2_002	stream sediments	forsterite	olivine	0.25-0.5	0	0.0127	0.0016	16.9625	26.6471	0	17.3133	0.1739	0.0039	0.3452	38.5362	99.9964	36.29	0.00	0.00	0.00	0.45	34.28	28.71	0.24	0.00	0.00						99.97
61	15SUV020	2015_2	2_3	2-2_003	stream sediments	forsterite	olivine	0.25-0.5	0.0036	0.0059	0.0021	19.0997	6.9488	0.0396	29.5409	0.1016	0.0308	0.0962	43.3181	99.1872	40.86	0.00	0.06	0.06	0.12	8.94	48.99	0.14	0.00	0.00						99.17
62	15SUV020	2015_2	2_4	2-2_004	stream sediments	forsterite	olivine	0.25-0.5	0.0021	0	0	18.6297	9.7313	0.0533	27.5821	0.2052	0.0210	0.1544	42.3428	98.7219	39.86	0.00	0.04	0.08	0.20	12.52	45.74	0.29	0.00	0.00						98.73
63	15SUV025	2015_2	2_5	2-2_005	stream sediments	forsterite	olivine	0.25-0.5	0.0048	0.0108	0	18.4637	12.5217	0.0058	26.1539	0.1169	0.0171	0.2186	41.9765	99.4897	39.50	0.00	0.03	0.00	0.28	16.11	43.37	0.16	0.00	0.00						99.45
64	15SUV026	2015_2	2_6	2-2_006A	stream sediments	forsterite	olivine	0.25-0.5	0.0037	0.0052	0.0013	18.7708	8.7428	0.0204	28.2945	0.1986	0.0260	0.1281	42.6715	98.8631	40.16	0.00	0.05	0.03	0.17	11.25	46.92	0.28	0.00	0.00						98.86
65	15SUV026_rpt	2015_2	2_6_r	2-2-6B	stream sediments	forsterite	olivine	0.25-0.5	0	0	0.0048	18.5921	9.7346	0.0472	27.5378	0.1961	0.0231	0.1456	42.2642	98.5454	39.78	0.00	0.04	0.07	0.19	12.52	45.67	0.27	0.00	0.00						98.54
66	15SUV026	2015_2	2_7	2-2_007	stream sediments	forsterite	olivine	0.25-0.5	0.0070	0.0164	0	18.4122	12.6620	0.0097	25.8471	0.1821	0.0219	0.1656	41.7762	99.1002	39.39	0.00	0.04	0.01	0.21	16.29	42.86	0.25	0.02	0.00						99.06
67	15SUV050	2015_2	2_8	2-2_008	stream sediments	forsterite	olivine	0.25-0.5	0.0011	0	0	18.7296	8.6627	0.0519	28.2250	0.1951	0.0286	0.1239	42.5661	98.5838	40.07	0.00	0.05	0.08	0.16	11.14	46.81	0.27	0.00	0.00						98.58
68	15SUV051	2015_2	2_9	2-2_009	stream sediments	forsterite	olivine	0.25-0.5	0.0040	0	0	18.7437	10.7214	0	27.0168	0.2433	0.0334	0.1631	42.3895	99.3151	40.10	0.00	0.06	0.00	0.21	13.79	44.80	0.34	0.00	0.00						99.30
69	15SUV051	2015_2	2_10	2-2_010	stream sediments	forsterite	olivine	0.25-0.5	0.0095	0.0008	0	18.7222	8.8336	0.0578	28.0554	0.1816	0.0278	0.1305	42.4994	98.5186	40.05	0.00	0.05	0.08	0.17	11.36	46.52	0.25	0.00	0.00						98.48
70	15SUV051_rpt	2015_2	2_10_r	2-2_010	stream sediments	forsterite	olivine	0.25-0.5	0	0.0048	0.0022	18.7582	8.7982	0.0502	28.1995	0.1747	0.0286	0.1352	42.6165	98.7680	40.13	0.00	0.05	0.07	0.17	11.32	46.76	0.24	0.00	0.00						98.74
71	15SUV051	2015_2	2_11	2-2_011	stream sediments	forsterite	olivine	0.25-0.5	0	0.0105	0.0017	18.9229	8.5405	0.0358	28.5677	0.1490	0.0219	0.1252	42.9489	99.3242	40.48	0.00	0.04	0.05	0.16	10.99	47.37	0.21	0.00	0.00						99.30
72	15SUV051_rpt	2015_2	2_11_r	2-2_011	stream sediments	forsterite	olivine	0.25-0.5	0.0026	0	0.0005	18.9339	8.5160	0.0541	28.3772	0.1461	0.0243	0.1248	42.8361	99.0154	40.51	0.00	0.05	0.08	0.16	10.96	47.06	0.20	0.00	0.00						99.02
73	15SUV051	2015_2	2_12	2-2_012	stream sediments	forsterite	olivine	0.25-0.5	0.0080	0.0081	0.0016	18.7154	10.2365	0.0670	27.1676	0.1868	0.0298	0.1401	42.3220	98.8829	40.04	0.00	0.06	0.10	0.18	13.17	45.05	0.26	0.00	0.00						98.86
74	15SUV001	2015_2	3_1	2-3_001	stream sediments	fayalite	olivine	0.25-0.5	0.0340	0	0.0036	17.4584	21.7790	0.0093	20.3487	0.1977	0.0170	0.3232	39.7424	99.9132	37.35	0.06	0.03	0.00	0.42	28.02	33.74	0.28	0.00	0.00						99.90
75	15SUV005	2015_2	3_2	2-3_002	stream sediments	fayalite	olivine	0.25-0.5	0.0018	0	0	16.9105	26.3739	0.0062	17.5945	0.2164	0.0115	0.3628	38.6120	100.0900	36.18	0.00	0.02	0.00	0.47	33.93	29.18	0.30	0.00	0.00						100.08
76	15SUV005	2015_2	3_3	2-3_003	stream sediments	fayalite	olivine	0.25-0.5	0.0041	0	0	16.0772	33.4650	0	12.9660	0.1513	0.0076	0.4616	36.6451	99.7778	34.39	0.00	0.00	0.00	0.60	43.05	21.50	0.21	0.00	0.00						99.75
77	15SUV005	2015_2	3_4	2-3_004	stream sediments	fayalite	olivine	0.25-0.5	0.0172	0.0065	0	16.9043	26.3781	0.0013	17.4708	0.1851	0.0127	0.3717	38.5260	99.8736	36.16	0.03	0.02	0.00	0.48	33.94	28.97	0.26	0.00	0.00						99.86
78	15SUV005	2015_2	3_5	2-3_005	stream sediments	fayalite	olivine	0.25-0.5	0	0	0	18.3892	12.0887	0.0340	26.2350	0.1916	0.0123	0.1791	41.8411	98.9710	39.34	0.00	0.02	0.05	0.23	15.55	43.51	0.27	0.00	0.00						98.97
79	15SUV006	2015_2	3_6	2-3_006	stream sediments	fayalite	olivine	0.25-0.5	0.0052	0	0.0020	17.6297	19.9654	0	21.4903	0.2228	0.0058	0.2667	40.1293	99.7172	37.72	0.00	0.00	0.00	0.34	25.69	35.64	0.31	0.00	0.00						99.70
80	15SUV006	2015_2	3_7	2-3_007	stream sediments	fayalite	olivine	0.25-0.5	0.0001	0.0057	0	16.7328	27.9159	0	16.4202	0.2046	0.0162	0.3804	38.0809	99.7569	35.80	0.00	0.03	0.00	0.49	35.91	27.23	0.29	0.00	0.00						99.75
81	15SUV006	2015_2	3_8	2-3_008	stream sediments	fayalite	olivine	0.25-0.5	0.0113	0.0081	0	17.2578	23.0929	0	19.4092	0.2023	0	0.3187	39.2398	99.5401	36.92	0.00	0.00	0.00	0.41	29.71	32.19	0.28	0.00	0.00						99.51
82	15SUV010	2015_2	4_1	2-4_001	stream sediments	fayalite	olivine	0.25-0.5	0.0082	0	0	16.4801	29.3746	0.0202	15.5863	0.1679	0.0086	0.3915	37.6564	99.6937	35.26	0.00	0.02	0.03	0.51	37.79	25.85	0.23	0.00	0.00						99.69
83	15SUV010	2015_2	4_2	2-4_002	stream sediments	fayalite	olivine	0.25-0.5	0.0049	0	0	16.4245	31.0068	0	14.5894	0.1874	0.0034	0.4099	37.4014	100.0280	35.14	0.00	0.00	0.00	0.53	39.89	24.19	0.26	0.00	0.00						100.01
84	15SUV010	2015_2	4_3	2-4_003	stream sediments	fayalite	olivine	0.25-0.5	0.0146	0.0009	0.0003	16.3518	31.6383	0	14.2077	0.1760	0.0023	0.4258	37.2541	100.0720	34.98	0.02	0.00	0.00	0.55	40.70	23.56	0.25	0.00	0.00						100.06
85	15SUV020	2015_2	4_4	2-4_004_siderite	stream sediments	fayalite	siderite	0.25-0.5	0	0.0163	0.0039	0.0166	36.2450	0.0027	5.2424	0.9618	0.0199	0.9576	14.5424	58.0087	0.04	0.00	0.04	0.00	1.24	46.63	8.69	1.35	0.00	0.00						57.99
86	15SUV020	2015_2	4_5	2-4_005	stream sediments	fayalite	olivine	0.25-0.5	0.0223	0.0060	0	16.8201	26.7306	0	17.3218	0.1017	0	0.3436	38.3830	99.7291	35.98	0.04	0.00	0.00	0.44	34.39	28.72	0.14	0.00	0.00						99.71
87	15SUV020	2015_2	4_6	2-4_006	stream sediments	fayalite	olivine	0.25-0.5	0.0145	0	0.0031	16.4950	29.9130	0	15.3355	0.1747	0.0024	0.3871	37.6540	99.9793	35.29	0.02	0.00	0.00	0.50	38.48	25.43	0.24	0.00	0.00						99.96
88	15SUV023	2015_2	4_7	2-4_007	till	fayalite	olivine	0.25-0.5	0.0134	0	0	16.9061	27.1666	0.0069	16.8888	0.1955	0.0077	0.3625	38.3657	99.9130	36.17	0.02	0.00	0.00	0.47	34.95	28.01	0.27	0.00	0.00						99.89
89	15SUV023	2015_2	4_8	2-4_008	till	fayalite	olivine	0.25-0.5	0.0127	0	0	16.7592	28.1954	0.0015	16.2825	0.1904	0.0057	0.3701	38.0894	99.9070	35.85	0.00	0.00	0.00	0.48	36.27	27.00	0.27	0.00	0.00						99.87
90	15SUV023	2015_2	4_9	2-4_009	till	fayalite	olivine	0.25-0.5	0.0142	0.0134	0	16.7107	27.9352	0	16.4019	0.1919	0.0039	0.4046	38.0522	99.7279	35.75	0.02	0.00	0.00	0.52	35.94	27.20	0.27	0.00	0.00						99.70
91	15SUV023	2015_2	4_10	2-4_010	till	fayalite	olivine	0.25-0.5	0.0136	0.0006	0	16.2036	32.9214	0	13.5171	0.1853	0.0067	0.4448	37.0106	100.3040	34.67	0.02	0.00	0.00	0.57	42.35	22.42	0.26	0.00	0.00						100.29
92	15SUV014	2015_3	1_1	3-1_001	stream sediments	Cr-diopside	clinopyroxene	0.25-0.5	0.0809	0.7236	0	24.7323	1.9645	0.4227	9.9613	15.1761	1.7292	0.0560	43.4130	98.2595	52.91	0.13	3.27	0.62	0.07	2.53	16.52	21.23	0.98	0.00						98.26
93	15SUV024	2015_3	1_2	3-1_002	fluvial	Cr-diopside	clinopyroxene	0.25-0.5	0.0529	0.3900	0.0001	24.8166	3.0327	0.4077	9.3844	16.3719	0.8487	0.1239	43.0075	98.4364	53.09	0.09	1.60	0.60	0.16	3.90	15.56	22.91	0.53	0.00						98.44
94	15SUV004	2015_3	1_3	3-1_003	stream sediments	low-Cr_DC	clinopyroxene	0.5-1.0	0.3457	0.5876	0.0007	24.5510	3.8164	0.4421	9.8402	14.9522	0.7370	0.0676	42.8274	98.1680	52.52	0.58	1.39	0.65	0.09	4.91	16.32	20.92	0.79	0.00						98.17

95	15SUV004	2015_3	1_4	3-1_004	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.2363	0.5124	0.0065	24.7472	3.2126	0.8506	10.0273	15.0042	0.3777	0.0603	42.7905	97.8256	52.94	0.39	0.71	1.24	0.08	4.13	16.63	20.99	0.69	0.01	97.81
96	15SUV021	2015_3	1_5	3-1_005	stream sediments	low-Cr_DC	clinopyroxene	0.5-1.0	0.1595	0.1224	0.0003	24.5556	4.2685	0.4356	10.7583	13.6572	1.1544	0.1207	43.1469	98.3794	52.53	0.27	2.18	0.64	0.16	5.49	17.84	19.11	0.16	0.00	98.38
97	15SUV021	2015_3	1_6	3-1_006	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.1270	0.1326	0.0001	24.6489	3.6944	0.5427	10.8687	13.8627	0.9783	0.1067	43.1140	98.0762	52.73	0.21	1.85	0.79	0.14	4.75	18.02	19.40	0.18	0.00	98.07
98	15SUV027	2015_3	1_7	3-1_007	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.0204	0.3397	0.0001	24.8145	4.2478	0.2279	9.2379	15.6126	0.6843	0.1613	42.6961	98.0426	53.09	0.03	1.29	0.33	0.21	5.46	15.32	21.85	0.46	0.00	98.04
99	15SUV028	2015_3	1_8	3-1_008	Beaufort Fm	low-Cr_DC	clinopyroxene	0.25-0.5	0.1661	0.1082	0.0028	24.6310	4.2185	0.4464	11.1244	13.1412	1.0033	0.1283	43.1263	98.0964	52.69	0.28	1.90	0.65	0.17	5.43	18.45	18.39	0.15	0.00	98.11
100	15SUV028	2015_3	1_9	3-1_009	Beaufort Fm	low-Cr_DC	clinopyroxene	0.25-0.5	0.2555	0.1523	0	23.5845	4.1436	0.7410	10.1259	13.6884	1.9380	0.1294	42.5932	97.6218	50.46	0.43	3.66	1.08	0.17	5.68	16.79	19.15	0.21	0.00	97.63
101	15SUV032	2015_3	2_1	3-2_001	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.2238	0.1474	0.0011	23.3411	4.5588	0.5461	9.5262	14.1929	2.3687	0.1097	42.4288	97.4445	49.93	0.37	4.48	0.80	0.14	5.86	15.80	19.86	0.20	0.00	97.44
102	15SUV032	2015_3	2_2	3-2_002	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.2028	0.1425	0	23.8407	3.8240	0.8457	10.0783	14.3458	1.8527	0.0995	42.8724	98.1043	51.00	0.34	3.50	1.24	0.13	4.92	16.71	20.07	0.19	0.00	98.10
103	15SUV032	2015_3	2_3	3-2_003	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.2123	0.1505	0.0022	23.6434	4.0556	0.7261	10.1238	13.9342	1.8621	0.1114	42.5458	97.3673	50.58	0.35	3.52	1.06	0.14	5.22	16.79	19.50	0.20	0.00	97.36
104	15SUV032	2015_3	2_4	3-2_004	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.1772	0.1462	0.0003	24.0167	4.0419	0.7140	10.4484	13.7789	1.4901	0.1183	42.7591	97.6909	51.38	0.30	2.82	1.04	0.15	5.20	17.33	19.28	0.20	0.00	97.70
105	15SUV032	2015_3	2_5	3-2_005	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.1375	0.1249	0	24.4012	3.5008	0.6411	10.5449	14.4867	1.1376	0.0988	43.0013	98.0747	52.20	0.23	2.15	0.94	0.13	4.50	17.49	20.27	0.17	0.00	98.08
106	15SUV032	2015_3	2_6	3-2_006	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.1834	0.1357	0	24.0799	3.9970	0.7513	10.2227	14.0846	1.5361	0.1044	42.8462	97.9412	51.52	0.31	2.90	1.10	0.13	5.14	16.95	19.71	0.18	0.00	97.94
107	15SUV032	2015_3	2_7	3-2_007	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.2462	0.1347	0.0001	23.6788	4.0031	0.6514	9.8878	14.3524	1.9432	0.1078	42.6360	97.6413	50.66	0.41	3.67	0.95	0.14	5.15	16.40	20.08	0.18	0.00	97.64
108	15SUV032	2015_3	2_8	3-2_008	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.2248	0.1331	0.0014	23.9500	4.0860	0.6517	10.5068	13.5778	1.8149	0.1083	42.9387	97.9935	51.24	0.37	3.43	0.95	0.14	5.26	17.42	19.00	0.18	0.00	97.99
109	15SUV032	2015_3	2_9	3-2_009	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.2235	0.1465	0.0009	23.8487	4.0319	0.7387	10.0043	14.1371	1.8655	0.1115	42.7899	97.8984	51.02	0.37	3.52	1.08	0.14	5.19	16.59	19.78	0.20	0.00	97.89
110	15SUV052	2015_3	2_10	3-2_010	stream sediments	diopside	clinopyroxene	0.25-0.5	0.3075	0.1406	0	23.5204	4.1407	0.9445	9.9490	13.6138	2.2397	0.1115	42.6835	97.6514	50.32	0.51	4.23	1.38	0.14	5.33	16.50	19.05	0.19	0.00	97.65
111	15SUV006	2015_3	3_1	3-3_001	stream sediments	diopside	olivine	0.25-0.5	0.0080	0	0	17.9080	17.4960	0.0078	22.7812	0.1820	0.0134	0.2514	40.5798	99.2275	38.31	0.00	0.03	0.00	0.32	22.51	37.78	0.25	0.00	0.00	99.20
112	15SUV018	2015_3	3_2	3-3_002	Beaufort Fm	diopside	clinopyroxene	0.25-0.5	0.0205	0.0147	0	25.3014	0.4214	0.0148	10.6631	18.1776	0.7790	0.1145	43.9760	99.4831	54.13	0.03	1.47	0.00	0.15	0.54	17.68	25.43	0.00	0.00	99.43
113	15SUV026	2015_3	3_3	3-3_003	stream sediments	diopside	garnet	0.25-0.5	0.6808	0	0	18.0983	5.5406	0.0075	0.4849	25.2395	8.3009	0.0381	40.4556	98.8462	38.72	1.14	15.68	0.00	0.05	7.13	0.80	35.32	0.00	0.00	98.84
114	15SUV026	2015_3	3_4	3-3_004	stream sediments	diopside	garnet	0.25-0.5	0.0029	0.0086	0.0013	16.7485	20.4594	0	0.0701	23.6334	0.1433	0.0171	34.5624	95.6469	35.83	0.00	0.27	0.00	0.02	26.32	0.12	33.07	0.00	0.00	95.63
115	15SUV028	2015_3	3_5	3-3_005	Beaufort Fm	diopside	garnet	0.25-0.5	0.0665	0	0	18.1501	0.8672	0.0181	0.2974	26.0709	11.4246	0.0389	41.7572	98.6907	38.83	0.11	21.59	0.00	0.05	1.12	0.49	36.48	0.00	0.00	98.67
116	15SUV028	2015_3	3_6	3-3_006	Beaufort Fm	diopside	garnet	0.25-0.5	0.1339	0.0085	0	17.2871	0.9666	0	2.0033	25.4659	9.6200	0.0086	40.1096	95.6035	36.98	0.22	18.18	0.00	0.00	1.24	3.32	35.63	0.00	0.00	95.57
117	15SUV006	2015_3	3_7	3-3_007	stream sediments	bronzite	olivine	0.25-0.5	0.0061	0	0.0038	16.9667	27.4527	0	16.6376	0.1223	0.0071	0.3562	38.3125	99.8649	36.30	0.00	0.00	0.00	0.46	35.32	27.59	0.17	0.00	0.00	99.84
118	15SUV021	2015_3	3_8	3-3_008	stream sediments	hedenbergite	garnet	0.5-1.0	0.0010	0	0	16.6792	20.7727	0	0.0047	23.5651	0.0023	0.0043	34.3692	95.3984	35.68	0.00	0.00	0.00	0.00	26.72	0.00	32.97	0.00	0.00	95.37
119	15SUV004	2015_3	3_9	3-3_009	stream sediments	spinel	spinel	0.25-0.5	0.0193	0.0067	0.0027	0	3.7890	0	14.9172	0.0020	36.5467	0.0384	43.4409	98.7628	0.00	0.03	69.05	0.00	0.05	4.87	24.74	0.00	0.00	0.00	98.74
120	15SUV028	2015_3	3_10	3-3_010	Beaufort Fm	spinel	spinel	0.25-0.5	0.0065	0.0028	0	0.0059	4.8881	0.0564	14.7582	0.0023	36.7387	0.0534	43.8487	100.3610	0.00	0.00	69.42	0.08	0.07	6.29	24.47	0.00	0.00	0.00	100.33
121	15SUV003	2015_3	4_1	3-4_001	stream sediments	hercynite	spinel	0.5-1.0	0.3796	0	0.0025	0.0418	16.9342	0.0722	10.5907	0	31.4210	0.1080	40.1384	99.6883	0.09	0.63	59.37	0.11	0.14	21.79	17.56	0.00	0.00	0.00	99.69
122	15SUV003	2015_3	4_2	3-4_002	stream sediments	hercynite	spinel	0.5-1.0	0.3294	0	0	0.0361	15.1259	0.7459	11.1410	0.0028	31.9025	0.0898	40.6770	100.0500	0.08	0.55	60.28	1.09	0.12	19.46	18.48	0.00	0.00	0.00	100.06
124	15SUV014	2015_3	4_4	3-4_004	stream sediments	hercynite	spinel	0.25-0.5	0.0711	0	0.0010	0.0033	8.9105	3.3724	12.6084	0.0009	32.6156	0.0733	41.4938	99.1503	0.00	0.12	61.63	4.93	0.09	11.46	20.91	0.00	0.00	0.00	99.14
125	15SUV014	2015_3	4_5	3-4_005	stream sediments	hercynite	spinel	0.25-0.5	0.4375	0	0	0.0328	18.9682	0.0765	10.2234	0	30.2200	0.1284	39.4470	99.5338	0.07	0.73	57.10	0.11	0.17	24.40	16.95	0.00	0.00	0.00	99.53
126	15SUV020	2015_3	4_6	3-4_006	stream sediments	hercynite	spinel	0.5-1.0	0.2592	0	0	0.0250	15.6548	0.2292	11.0986	0.0002	31.9817	0.1125	40.5786	99.9398	0.05	0.43	60.43	0.33	0.15	20.14	18.40	0.00	0.00	0.00	99.93
127	15SUV020	2015_3	4_7	3-4_007	stream sediments	hercynite	spinel	0.5-1.0	0.2034	0	0.0013	0.0089	14.9283	1.6726	10.9637	0.0049	31.2670	0.1069	40.2571	99.4140	0.00	0.34	59.08	2.44	0.14	19.21	18.18	0.00	0.00	0.00	99.39
128	15SUV025	2015_3	4_8	3-4_008	stream sediments	hercynite	spinel	0.25-0.5	0.3511	0.0026	0	0.0380	15.5743	0.4061	11.0808	0.0013	31.7171	0.0871	40.4603	99.7186	0.08	0.59	59.93	0.59	0.11	20.04	18.38	0.00	0.00	0.00	99.72
129	15SUV026	2015_3	4_9	3-4_009	stream sediments	hercynite	spinel	0.5-1.0	0.1276	0	0.0027	0.0208	7.9597	5.2397	12.9920	0	31.4045	0.0716	41.3157	99.1344	0.04	0.21	59.34	7.66	0.09	10.24	21.54	0.00	0.00	0.00	99.12
130	15SUV051	2015_3	4_10	3-4_010	stream sediments	hercynite	spinel	0.5-1.0	0.3093	0	0	0.0509	16.5284	0.0832	10.9379	0.0006	31.4668	0.1136	40.2612	99.7518	0.11	0.52	59.46	0.12	0.15	21.26	18.14	0.00	0.00	0.00	99.76
131	15SUV001	2015_4	1_1	4-1_001	stream sediments	ilmenite	ilmenite	0.5-1.0	30.6389	0.0076	0.0039	0.0147	24.1748	0.6764	7.6607	0.0124	0.2836	0.2285	33.0938	96.7952	0.03	51.11	0.54	0.99	0.30	31.10	12.70	0.02	0.00	0.00	96.79
132	15SUV001	2015_4	1_2	4-1_002	stream sediments	ilmenite	ilmenite	0.5-1.0	30.2583	0.0089	0.0011	0.0141	28.0501	0.1815	5.9685	0.0120	0.1454	0.1921	32.4729	97.3048	0.03	50.47	0.27	0.27	0.25	36.09	9.90	0.02	0.00	0.00	97.30
133	15SUV001	2015_4	1_3	4-1_003	stream sediments	ilmenite	ilmenite	0.25-0.5	30.7025	0.0290	0	0.0203	23.1102	1.3040	8.1156	0.0156	0.3121	0.2049	33.4532	97.2673	0.04	51.21	0.59	1.91	0.26	29.73	13.46	0.02	0.04	0.00	97.26
134	15SUV001	2015_4	1_4	4-1_004	stream sediments	ilmenite	ilmenite	0.25-0.5	30.8771	0.0046	0.0012	0.0082	23.9970	0.8806	7.8714	0.0124	0.2950	0.2071	33.4298	97.5843	0.00	51.50	0.56	1.29	0.27	30.87	13.05	0.02	0.00	0.00	97.56
135	15SUV001	2015_4	1_5	4-1_005	stream sediments	ilmenite	ilmenite	0.25-0.5	29.5688	0	0	0.0073	27.6577	0.7101	6.3227	0.0134	0.2301	0.2298	32.4528	97.1926	0.00	49.32	0.43	1.04	0.30	35.58	10.49	0.02	0.00	0.00	97.18
136	15SUV003	2015_4	1_6	4-1_006	stream sediments	ilmenite	ilmenite	0.25-0.5	30.5082	0.0509	0.0025	0.1066	24.8005	0.6015	6.7808	0.0551	0.5315	0.1829	32.9157	96.5362	0.23	50.89	1.00	0.88	0.24	31.91	11.24	0.08	0.07	0.00	96.54
137	15SUV014	2015_4	2_1	4-2_001	stream sediments	ilmenite	ilmenite	0.25-0.5	30.7860	0	0	0.0072	22.9877	0.8257	8.2791	0.0113	0.3986	0.1703	33.4009	96.8670	0.00	51.35	0.75	1.21	0.22	29.57	13.73	0.02	0.00	0.00	96.85
138	15SUV020	2015_4	2_2	4-2_002	stream sediments	ilmenite	ilmenite	0.5-1.0	30.8460	0.0014	0.0051	0.0077	24.3200	0.7089	7.7236	0.0169	0.2899	0.2158	33.3239	97.4592	0.00	51.45	0.55	1.04	0.28	31.29	12.81	0.02	0.00	0.00	97.44
139	15SUV020	2015_4	2_3	4-2_003	stream sediments	ilmenite	ilmenite	0.25-0.5	27.1872	0.0234	0.0014	0	30.4447	1.6159	5.3282	0.0076	0.1476	0.2360	31.3498	96.3415	0.00	45.35	0.28	2.36	0.30	39.17	8.84	0.01	0.00	0.00	96.31
140	15SUV020	2015_4	2_4	4-2_004	stream sediments	ilmenite	ilmenite	0.25-0.5	30.1680	0.0019	0.0003	0.0051	25.0783	1.1985	7.1865	0.0187	0.3029	0.2270	32.9724	97.1596	0.00	50.32	0.57	1.75	0.29	32.26	11.92	0.03	0.00	0.00	97.14
141	15SUV020	2015_4	2_5	4-2_005	stream sediments	ilmenite	ilmenite	0.25-0.5	24.9384	0.0046	0.0029	0	29.8107	4.4660	5.2463	0.0038	0.1347	0.2076	30.9000	95.7150	0.00	41.60	0.25	6.53	0.27	38.35	8.70	0.00	0.00	0.00	95.70
142	15SUV020	2015_4	2_6	4-2_006	stream sediments	ilmenite	ilmenite	0.25-0.5	30.2742	0.0046	0	0.0054	22.2919	2.3992	8.1364	0.0194	0.3453	0.1804	33.4504	97.1073	0.00	50.50	0.65	3.51	0.23	28.68	13.49	0.03	0.00	0.00	97.09
143	15SUV051	2015_4	2_7	4-2_007	stream sediments	ilmenite	ilmenite	0.25-0.5	29.9773	0.0296	0.0043	0.0090	26.0581	0.5342	7.0467	0.0132	0.3028	0.1952	32.7305	96.9009	0.00	50.00	0.57	0.78	0.25	33.52	11.69	0.02	0.04	0.00	96.87
144	15SUV001	2015_4	3_1	4-3_001	stream sediments	crustal ilmenite	ilmenite	0.5-1.0	27.1608	0.0065	0.0008	0.0097	38.8646	0	0.1497	0.0027	0.0171	1.3934	29.8137	97.4189	0.02	45.31	0.03	0.00	1.80	50.00	0.25	0.00	0.00	0.00	97.41
145	15SUV001	2015_4	3_2	4-3_002	stream sediments	crustal ilmenite	ilmenite	0.5-1.0	29.3759	0	0.0007	0.0031	36.7912	0.0231	0.3565	0.0061	0.0416	0.3037	30.5422	97.4440	0.00	49.00	0.08	0.03	0.39	47.33	0.59	0.01	0.00	0.00	97.43
146	15SUV001	2015_4	3_3	4-3_003	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.8203	0.0232	0	0.0018	35.8523	0.1634	1.7178	0.0025	0.0169	0.2303	30.8248	97.6535	0.00	48.07	0.03	0.24	0.30	46.12	2.85	0.00	0.00	0.00	97.61
147	15SUV001	2015_4	3_4	4-3_004	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	30.7522	0	0	0.0004	35.9683	0.0101	0.2850	0.0027	0.0000	0.2615	31.1190	98.3991	0.00	51.30	0.00	0.00	0.34	46.27	0.47	0.00	0.00	0.00	98.38
148	15SUV001	2015_4	3_5	4-3_005	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.5366	0.0019	0	0	37.8464	0	0.3592	0	0.0345	0.3122	30.2657	97.3564	0.00	47.60	0.07	0.00	0.40	48.69	0.60	0.00	0.00	0.00	97.36
149	15SUV001	2015_4	3_6	4-3_006	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.2525	0	0.0039	0	37.3959	0.0123	0.2628	0.0050	0.0373	0.3420	30.5705	97.8822	0.00	48.79	0.07	0.00	0.44	48.11	0.44	0.00	0.00	0.00	97.85
150	15SUV001	2015_4	3_7	4-3_007	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.5314	0	0.0003	0.0327	36.9886	0	0.2599	0.0086	0.0266	0.7016	30.0976	96.6472	0.07	47.59	0.05	0.00	0.91	47.59	0.43	0.01	0.00	0.00	96.65
151	15SUV001	2015_4	3_8	4-3_008	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	25.4550	0.0165	0.0024	0.0071	41.2858	0	0.1598	0.0012	0.0382	0.4299	29.1129	96.5089	0.00	42.46	0.07	0.00	0.56	53.11	0.26	0.00	0.00	0.00	96.46
152	15SUV001	2015_4	3_9	4-3_009	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.2359	0.0040	0.0037	0.0091	36.3226	0	0.9704	0.0047	0.0497	0.3255	30.7298	97.6554	0.00	48.77	0.09	0.00	0.42	46.73	1.61	0.00	0.00	0.00	97.62
153	15SUV001	2015_4	3_10	4-3_010	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.3529	0	0.0041	0	36.9393	0	0.0517	0.0031	0.0086	0.9962	30.5263	97.8823	0.00	48.96	0.00	0.00	1.29	47.52	0.09	0.00	0.00	0.00	97.86
154	15SUV002	2015_4	4_1	4-4_001	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.4601	0	0.0053	0.0021	37.0195	0	0.2006	0.0086	0.0096	0.2666	30.5122	97.4845	0.00	49.14	0.00	0.00	0.34	47.63	0.33	0.01	0.00	0.00	97.45
155	15SUV003	2015_4	4_2	4-4_002	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.8389	0	0	0	36.1739	0.0654	0.5128	0	0.0097	0.5330	30.8295	97.9633	0.00	49.77	0.02	0.10	0.69	46.54	0.85	0.00	0.00	0.00	97.97
156	15SUV003	2015_4	4_3	4-4_003	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.3206	0	0.0006	0.0013	38.0070	0.0482	0.2914	0.0027	0.0257	0.2784	30.1294	97.1052	0.00	47.24	0.05	0.07	0.36	48.90	0.48	0.00	0.00	0.00	97.10
157	15SUV006	2015_4	4_4	4-4_004	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.3590	0	0.0020	0.0040	36.9744	0.0185	0.1545	0.0025	0.0085	0.8120	30.5669	97.9025	0.00	48.97	0.00	0.00	1.05	47.57	0.26	0.00	0.00	0.00	97.85
158	15SUV006	2015_4	4_5	4-4_005	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.4381	0.0249	0.0011	0	37.4870	0.0143	0.2090	0.0010	0.0093	0.3396	30.6669	98.1912	0.00	49.10	0.00	0.00	0.44	48.23	0.35	0.00	0.00	0.00	98.12
159	15SUV010	2015_4	4_6	4-4_006	stream sediments	crustal ilmenite	ilmenite	0.5-1.0	29.2242	0.0190	0	0	36.9668	0.0164	0.2330	0.0041	0.0270	0.4071	30.4261	97.3236	0.00	48.75	0.05	0.00	0.53	47.56	0.39	0.00	0.00	0.00	97.28
160	15SUV010	2015_4	4_7	4-4_007	stream sediments	crustal ilmenite	ilmenite	0.5-1.0	29.2967	0.0076	0.0010	0	36.6476	0.0084	0.5306	0.0039	0.0189	0.4043	30.5635	97.4826	0.00	48.87	0.04	0.00	0.52	47.15	0.88	0.00	0.00	0.00	97.46
161	15SUV018	2015_4	4_8	4-4_008A	Beaufort Fm	crustal ilmenite	ilmenite	0.25-0.5	34.6050	0.0270	0.0033	0.0616	25.6331	0.0375	0.2770	0.0501	0.0907	0.4043	30.9602	92.1497	0.13	57.72	0.17	0.05	0.52	32.98	0.46	0.07	0.00	0.00	92.10
162	15SUV018_rpt	2015_4	4_8_r	4-4-008B	Beaufort Fm	crustal ilmenite	ilmenite	0.25-0.5	34.6450	0.0525	0.0029	0.0652	25.0972	0.0257	0.2645	0.0409	0.1272	0.4142	30.8644	91.5995	0.14	57.79	0.24	0.04	0.53	32.29	0.44	0.06	0.07	0.00	91.60
163	15SUV020	2015_4	5_1	4-5_001	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.2906	0	0	0	37.1377	0.0119	0.2753	0.0054	0.0350	0.2984	30.5147	97.5691	0.00	48.86	0.07	0.00	0.39	47.78	0.46	0.00	0.00	0.00	97.56
164	15SUV020	2015_4	5_2	4-5_002	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.8467	0.0032	0	0	37.5976	0.0004	0.0657	0.0053	0.0045	0.6436	30.2810	97.4479	0.00	48.12	0.00	0.00	0.83	48.37	0.11	0.00	0.00	0.00	97.43
165	15SUV020	2015_4	5_3	4-5_003	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.8993	0.0231	0.0035	0.0097	36.6556	0.0043	0.3385	0.0067	0.0287	0.3769	30.8587	98.2049	0.02	49.87	0.05	0.00	0.49	47.16	0.56	0.01	0.00	0.00	98.16
166	15SUV020	2015_4	5_4	4-5_004	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.5497	0.0260	0.0030	0.0024	38.1485	0.0216	0.1725	0.0060	0.0152	0.3699	30.2620	97.5769	0.00	47.62	0.03	0.00	0.48	49.08	0.29	0.01	0.00	0.00	97.51
167	15SUV020	2015_4	5_5	4-5_005	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.3140	0.0178	0.0031	0.0031	37.2425	0.0128	0.1746	0.0020	0.0177	0.3405	30.5003	97.6284	0.00	48.90	0.03	0.00	0.44	47.91	0.29	0.00	0.00	0.00	97.57
168	15SUV020	2015_4	5_6	4-5_006	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.1123	0.0151	0	0.0064	38.4565	0.0123	0.4712	0	0.0259	0.3497	30.2517	97.7012	0.00	46.89	0.05	0.00	0.45	49.47	0.78	0.00	0.00	0.00	97.64
169	15SUV020	2015_4	5_7	4-5_007	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.9676	0	0	0.0062	37.5473	0.0370	0.3174	0.0039	0.0264	0.4396	30.4954	97.8407	0.00	48.32	0.05	0.05	0.57	48.30	0.53	0.00	0.00	0.00	97.82
170	15SUV020	2015_4	5_8	4-5_008	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.3766	0.0019	0.0028	0	36.2549	0.0016	0.2155	0.0046	0.0073	2.6393	30.2650	97.7695	0.00	47.33	0.00	0.00	3.41	46.64	0.36	0.00	0.00	0.00	97.74
171	15SUV024	2015_4	6_1	4-6_001	fluvial	crustal ilmenite	ilmenite	0.25-0.5	34.3128	0	0	0.0552	23.2839	0.1457	1.2350	0.0187	0.1198	0.2945	30.7367	90.2023	0.12	57.24	0.23	0.21	0.38	29.95	2.05	0.03	0.00	0.00	90.21
172	15SUV024	2015_4	6_2	4-6_002	fluvial	crustal ilmenite	ilmenite	0.25-0.5	32.5900	0	0.0069	0.0105	28.0725	0.0866	0.2727	0.0123	0.0275	0.3627	30.1827	91.6245	0.02	54.36	0.05	0.13	0.47	36.12	0.45	0.02	0.00	0.01	91.63
173	15SUV024	2015_4	6_3	4-6_003	fluvial	crustal ilmenite	ilmenite	0.25-0.5	30.5941	0	0	0	34.6560	0.1335	1.0055	0.0037	0.0069	0.4871	31.2405	98.1272	0.00	51.03	0.00	0.20	0.63	44.58	1.67	0.00	0.00	0.00	98.11
174	15SUV024	2015_4	6_4	4-6_004	fluvial	crustal ilmenite	ilmenite	0.25-0.5	37.3640	0.0542	0.0068	0.1327	19.6692	0.1212	0.0503	0.0616	0.2750	0.5578	31.2886	89.5813	0.28	62.33	0.52	0.18	0.72	25.30	0.08	0.09	0.07	0.01	89.58
175	15SUV024	2015_4	6_5	4-6_005	fluvial	crustal ilmenite	ilmenite	0.25-0.5	29.7688	0	0.0026	0.0025	36.7544	0.0170	0.1604	0.0067	0.0017	0.4395	30.6664	97.8200	0.00	49.66	0.00	0.00	0.57	47.28	0.27	0.01	0.00	0.00	97.79
176	15SUV024	2015_4	6_6	4-6_006	fluvial	crustal ilmenite	ilmenite	0.25-0.5	32.1041	0.0130	0.0039	0.0337	25.8931	0.0085	0.0017	0.0173	0.0583	2.2913	29.6405	90.0652	0.07	53.55	0.11	0.00	2.96	33.31	0.00	0.02	0.00	0.00	90.02
177	15SUV024	2015_4	6_7	4-6_007	fluvial	crustal ilmenite	ilmenite	0.25-0.5	35.1853	0.0212	0.0073	0.0598	23.7984	0.0438	0.5118	0.0134	0.0864	0.2320	30.9079	90.8673	0.13	58.69	0.16	0.06	0.30	30.62	0.85	0.02	0.00	0.01	90.84
178	15SUV024	2015_4	6_8	4-6_008	fluvial	crustal ilmenite	ilmenite	0.25-0.5	32.7884	0.0336	0.0077	0.0467	27.1080	0.0000	0.0856	0.0274	0.0810	1.0861	30.1931	91.4576	0.10	54.69	0.15	0.00	1.40	34.87	0.14	0.04	0.05	0.01	91.45
179	15SVU025	2015_4	7_1	4-7_001	stream sediments	crustal ilmenite	ilmenite	0.5-1.0	28.7965	0	0.0039	0	37.6389	0.1004	0.3980	0.0018	0.0098	0.4023	30.4570	97.8087	0.00	48.03	0.02	0.15	0.52	48.42	0.66	0.00	0.00	0.00	97.80
180	15SVU025	2015_4	7_2	4-7_002	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.3323	0	0	0	35.9649	0.0123	0.6539	0.0032	0.0105	1.4995	30.7830	98.2596	0.00	48.93	0.02	0.00	1.94	46.27	1.08	0.00	0.00	0.00	98.24
181	15SVU025	2015_4	7_3	4-7_003	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.1314	0.0010	0	0.0012	34.3325	0	0.0125	0	0.0082	3.9639	30.4693	97.9199	0.00	48.59	0.00	0.00	5.12	44.17	0.00	0.00	0.00	0.00	97.88
182	15SVU025	2015_4	7_4	4-7_004	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.7650	0.0184	0	0.0040	36.3414	0.0123	0.0687	0.0024	0.0075	1.1175	30.6914	98.0285	0.00	49.65	0.00	0.00	1.44	46.75	0.11	0.00	0.00	0.00	97.95
183	15SVU025	2015_4	7_5	4-7_005	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.9326	0.0173	0	0.0037	35.1687	0.0143	0.3575	0.0006	0.0707	0.3836	30.4994	96.4484	0.00	49.93	0.13	0.00	0.50	45.24	0.59	0.00	0.00	0.00	96.39
184	15SUV026	2015_4	7_6	4-7_006	stream sediments	crustal ilmenite	ilmenite	0.5-1.0	30.4260	0	0.0001	0	35.4786	0.0538	0.7787	0.0072	0.0016	0.2462	31.1043	98.0964	0.00	50.75	0.00	0.08	0.32	45.64	1.29	0.01	0.00	0.00	98.09
185	15SUV026	2015_4	7_7	4-7_007	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	26.8044	0.0207	0.0009	0.0039	39.9586	0.0010	0.1006	0.0013	0.0017	0.3729	29.5442	96.8103	0.00	44.71	0.00	0.00	0.48	51.41	0.17	0.00	0.00	0.00	96.77
186	15SUV030	2015_4	7_8	4-7_008A	Beaufort Fm	crustal ilmenite	ilmenite	0.5-1.0	30.2736	0.0206	0.0055	0.0080	27.6143	0.2253	6.0165	0.0105	0.2505	0.2253	32.5106	97.1606	0.00	50.50	0.47	0.33	0.29	35.53	9.98	0.01	0.00	0.00	97.11
187	15SUV030_rpt	2015_4	7_8_r	4-7-008B	Beaufort Fm	crustal ilmenite	ilmenite	0.5-1.0	30.2728	0	0.0012	0.0131	27.6614	0.2205	6.1006	0.0120	0.2468	0.2234	32.5714	97.3233	0.03	50.50	0.47	0.32	0.29	35.59	10.12	0.02	0.00	0.00	97.34
188	15SUV033	2015_4	7_9	4-7-9	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.9992	0	0	0	37.3609	0.0499	0.2162	0.0048	0.0288	0.2910	30.3546	97.3053	0.00	48.37	0.05	0.07	0.38	48.06	0.36	0.00	0.00	0.00	97.29
189	15SUV018	2015_4	8_1	4-8-A_001	Beaufort Fm	red rutile	rutile	0.25-0.5	58.5067	0	0.0002	0	0.2782	0.6340	0.0052	0.0057	0.0067	0	39.4698	98.9064	0.00	97.59	0.00	0.93	0.00	0.36	0.00	0.01	0.00	0.00	98.89
190	15SUV018_rpt	2015_4	8_1_r	4-8-B_001	Beaufort Fm	red rutile	rutile	0.25-0.5	58.5083	0	0	0.0045	0.2480	0.6002	0	0.0035	0.0032	0	39.4444	98.8122	0.00	97.60	0.00	0.88	0.00	0.32	0.00	0.00	0.00	0.00	98.80
191	15SUV028	2015_4	8_2	4-8-A_002	Beaufort Fm	red rutile	rutile	0.25-0.5	58.8721	0	0.0019	0.0041	0.5423	0	0	0.0036	0.0287	0	39.5174	98.9700	0.00	98.20	0.05	0.00	0.00	0.70	0.00	0.00	0.00	0.00	98.95
192	15SUV028_rpt	2015_4	8_2_r	4-8-B_002	Beaufort Fm	red rutile	rutile	0.25-0.5	59.0441	0.0133	0.0031	0	0.5354	0	0.0052	0.0035	0.0095	0.0002	39.6169	99.2314	0.00	98.49	0.02	0.00	0.00	0.69	0.00	0.00	0.00	0.00	99.20
193	15SUV028	2015_4	8_3	4-8-A_003	Beaufort Fm	red rutile	rutile	0.25-0.5	58.4977	0	0.0020	0.0061	0.1418	0.1423	0.0052	0.0099	0.0175	0	39.2165	98.0390	0.00	97.58	0.03	0.21	0.00	0.18	0.00	0.01	0.00	0.00	98.01
194	15SUV028_rpt	2015_4	8_3_r	4-8-B_003	Beaufort Fm	red rutile	rutile	0.25-0.5	58.8274	0	0.0038	0	0.1358	0.1525	0.0066	0.0053	0.0178	0	39.4325	98.5816	0.00	98.13	0.03	0.22	0.00	0.17	0.00	0.01	0.00	0.00	98.56
195	15SUV030	2015_4	8_4	4-8-A_004	Beaufort Fm	red rutile	rutile	0.25-0.5	59.2102	0	0	0.0014	0.2277	0.0740	0	0.0054	0.0081	0	39.6662	99.1931	0.00	98.77	0.02	0.11	0.00	0.29	0.00	0.01	0.00	0.00	99.20
196	15SUV030_rpt	2015_4	8_4_r	4-8-B_004	Beaufort Fm	red rutile	rutile	0.25-0.5	59.1891	0	0	0	0.1800	0.1768	0	0.0024	0.0071	0	39.6822	99.2376	0.00	98.73	0.00	0.26	0.00	0.23	0.00	0.00	0.00	0.00	99.22
197	15SUV030	2015_4	8_5	4-8-A_005	Beaufort Fm	red rutile	rutile	0.25-0.5	59.1434	0	0	0.0067	0.1127	0.0885	0	0.0051	0.0112	0	39.6040	98.9716	0.00	98.65	0.02	0.13	0.00	0.15	0.00	0.01	0.00	0.00	98.96
198	15SUV030_rpt	2015_4	8_5_r	4-8-B_005	Beaufort Fm	red rutile	rutile	0.25-0.5	59.2872	0	0	0	0.1102	0.0863	0.0017	0.0006	0.0210	0	39.6987	99.2057	0.00	98.89	0.04	0.13	0.00	0.14	0.00	0.00	0.00	0.00	99.20
199	15SUV030	2015_4	8_6	4-8-A_006	Beaufort Fm	red rutile	rutile	0.25-0.5	58.9838	0	0	0	0.2313	0.0687	0	0	0.0158	0	39.5167	98.8163	0.00	98.39	0.03	0.10	0.00	0.30	0.00	0.00	0.00	0.00	98.82

200	15SUV030_rpt	2015_4	8_6_r	4-8-B_006	Beaufort Fm	red rutile	rutile	0.25-0.5	59.0195	0.0037	0.0018	0.0019	0.2398	0.1027	0.0025	0.0024	0.0118	0	39.5615	98.9476	0.00	98.45	0.02	0.15	0.00	0.31	0.00	0.00	0.00	0.00	98.93
201	15SUV030	2015_4	8_7	4-8-A_007	Beaufort Fm	red rutile	rutile	0.25-0.5	58.8038	0	0.0041	0.0031	0.2654	0.0451	0.0054	0.0036	0.0137	0	39.4027	98.5467	0.00	98.09	0.03	0.07	0.00	0.34	0.00	0.00	0.00	0.00	98.53
202	15SUV030_rpt	2015_4	8_7_r	4-8-B_007	Beaufort Fm	red rutile	rutile	0.25-0.5	58.8865	0.0087	0.0010	0.0000	0.3249	0.0568	0	0.0004	0.0039	0.0099	39.4686	98.7605	0.00	98.23	0.00	0.08	0.00	0.42	0.00	0.00	0.00	0.00	98.73
203	15SUV030	2015_4	8_8	4-8-A_008	Beaufort Fm	red rutile	rutile	0.25-0.5	58.6710	0	0.0043	0.0053	0.0199	0.3743	0.0063	0.0033	0	0.0059	39.3882	98.4783	0.00	97.87	0.00	0.55	0.00	0.03	0.00	0.00	0.00	0.00	98.45
204	15SUV030_rpt	2015_4	8_8_rpt	4-8-B_008	Beaufort Fm	red rutile	rutile	0.25-0.5	58.7158	0	0.0018	0	0.0137	0.3850	0	0.0039	0.0035	0.0049	39.4137	98.5425	0.00	97.94	0.00	0.56	0.00	0.02	0.00	0.00	0.00	0.00	98.52
205	15SUV030	2015_4	8_9	4-8-A_009	Beaufort Fm	red rutile	rutile	0.25-0.5	59.1185	0.0007	0	0	0.0512	0.1023	0.0013	0.0017	0.0155	0	39.5720	98.8631	0.00	98.61	0.03	0.15	0.00	0.07	0.00	0.00	0.00	0.00	98.86
206	15SUV030_rpt	2015_4	8_9_r	4-8-B_009	Beaufort Fm	red rutile	rutile	0.25-0.5	59.1086	0	0	0.0003	0.0451	0.1070	0.0048	0.0030	0.0062	0.0057	39.5622	98.8429	0.00	98.60	0.00	0.16	0.00	0.06	0.00	0.00	0.00	0.00	98.82
207	15SUV030	2015_4	8_10	4-8-A_010	Beaufort Fm	red rutile	rutile	0.25-0.5	59.2402	0	0.0020	0.0040	0.2273	0.0382	0.0027	0.0016	0.0255	0	39.6887	99.2302	0.00	98.82	0.05	0.06	0.00	0.29	0.00	0.00	0.00	0.00	99.22
208	15SUV030_rpt	2015_4	8_10_r	4-8-B_010	Beaufort Fm	red rutile	rutile	0.25-0.5	59.1375	0	0.0003	0.0056	0.2172	0.0196	0.0055	0.0030	0.0066	0.0007	39.5958	98.9917	0.00	98.64	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	98.92
209	15SUV030	2015_4	8_11	4-8-A_011	Beaufort Fm	red rutile	rutile	0.25-0.5	58.1513	0	0	0.0077	0.5565	0.1603	0	0	0	0.0060	39.0924	97.9741	0.00	97.00	0.00	0.23	0.00	0.72	0.00	0.00	0.00	0.00	97.95
210	15SUV030_rpt	2015_4	8_11_r	4-8-B_011	Beaufort Fm	red rutile	rutile	0.25-0.5	58.1220	0.0021	0	0	0.5495	0.1525	0	0.0047	0.0115	0	39.0695	97.9118	0.00	96.95	0.02	0.22	0.00	0.71	0.00	0.00	0.00	0.00	97.90
211	15SUV030	2015_4	8_12	4-8-A_012	Beaufort Fm	red rutile	rutile	0.25-0.5	58.8011	0	0.0051	0.0058	0.0309	0.2610	0	0.0051	0.0054	0.0037	39.4275	98.5456	0.00	98.08	0.00	0.38	0.00	0.04	0.00	0.01	0.00	0.01	98.52
212	15SUV030_rpt	2015_4	8_12_r	4-8-B_012	Beaufort Fm	red rutile	rutile	0.25-0.5	58.6809	0.0004	0.0020	0	0.0437	0.2584	0	0.0013	0.0073	0	39.3416	98.3356	0.00	97.88	0.00	0.38	0.00	0.06	0.00	0.00	0.00	0.00	98.32
213	15SUV030	2015_4	8_13	4-8-A_013	Beaufort Fm	red rutile	rutile	0.25-0.5	58.8659	0	0	0.0077	0.4862	0.0346	0.0067	0.0026	0.0022	0	39.4974	98.9034	0.00	98.19	0.00	0.05	0.00	0.63	0.00	0.00	0.00	0.00	98.87
214	15SUV030_rpt	2015_4	8_13_r	4-8-B_013	Beaufort Fm	red rutile	rutile	0.25-0.5	58.8867	0	0.0009	0.0070	0.5187	0.0531	0	0.0024	0.0048	0	39.5262	98.9998	0.00	98.23	0.00	0.08	0.00	0.67	0.00	0.00	0.00	0.00	98.98
217	15SUV001	2015_5	1_1	5-1_001	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.2724	0	0.0005	0	13.2825	33.0601	9.2739	0.0009	8.9588	0.1445	33.3633	98.3569	0.00	0.45	16.93	48.32	0.19	17.09	15.38	0.00	0.00	0.00	98.36
218	15SUV001	2015_5	1_2	5-1_002	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.2686	0	0	0	19.9915	31.7623	5.7149	0	8.5877	0.2272	32.0345	98.5868	0.00	0.45	16.23	46.42	0.29	25.72	9.48	0.00	0.00	0.00	98.59
219	15SUV001	2015_5	1_3	5-1_003	stream sediments	chromite, euhedral	chromite	0.25-0.5	2.1459	0.0212	0	0	22.6930	26.0186	7.6012	0.0015	7.3811	0.1877	31.5765	97.6267	0.00	3.58	13.95	38.03	0.24	29.19	12.61	0.00	0.00	0.00	97.60
220	15SUV001	2015_5	1_4	5-1_004	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.6759	0	0	0	19.6057	29.1009	7.9816	0.0061	7.2756	0.1739	31.9477	97.7673	0.00	2.80	13.75	42.53	0.22	25.22	13.24	0.01	0.00	0.00	97.77
221	15SUV001	2015_5	1_5	5-1_005	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.2739	0.0083	0.0069	0	16.7882	31.9473	7.2916	0.0038	9.0830	0.1928	32.6800	98.2758	0.00	0.46	17.16	46.69	0.25	21.60	12.09	0.00	0.00	0.01	98.26
222	15SUV001	2015_5	1_6	5-1_006	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.6758	0.0029	0	0	19.6585	27.8781	7.9530	0.0037	8.2458	0.1830	32.2452	97.8460	0.00	2.80	15.58	40.75	0.24	25.29	13.19	0.00	0.00	0.00	97.85
223	15SUV001	2015_5	1_7	5-1_007	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.8425	0	0	0	21.6228	25.5155	7.7308	0.0027	8.5975	0.1713	31.9905	97.4736	0.00	3.07	16.24	37.29	0.22	27.82	12.82	0.00	0.00	0.00	97.46
224	15SUV001	2015_5	1_8	5-1_008	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.1459	0	0	0	20.7726	26.6574	5.1682	0.0052	12.5360	0.2067	32.9682	98.4602	0.00	0.24	23.69	38.96	0.27	26.72	8.57	0.00	0.00	0.00	98.45
225	15SUV001	2015_5	1_9	5-1_009	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.4988	0.0079	0	0	17.6354	28.0942	7.4823	0.0007	11.1934	0.1734	33.2887	98.3747	0.00	0.83	21.15	41.06	0.22	22.69	12.41	0.00	0.00	0.00	98.36
226	15SUV001	2015_5	1_10	5-1_010	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3943	0.0055	0.0048	0	18.0103	29.1766	7.0472	0.0025	10.4208	0.1832	32.8560	98.1012	0.00	0.66	19.69	42.64	0.24	23.17	11.69	0.00	0.00	0.00	98.09
227	15SUV001	2015_5	1_11	5-1_011	stream sediments	chromite, euhedral	chromite	0.25-0.5	2.0148	0.0096	0.0046	0	21.2967	22.7404	8.1124	0	10.6399	0.1522	32.7969	97.7675	0.00	3.36	20.10	33.24	0.20	27.40	13.45	0.00	0.00	0.00	97.75
228	15SUV002	2015_5	2_1	5-2_001	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3552	0.0020	0	0	15.4196	31.4583	8.2313	0	9.6662	0.1676	33.2414	98.5416	0.00	0.59	18.26	45.98	0.22	19.84	13.65	0.00	0.00	0.00	98.54
229	15SUV002	2015_5	2_2	5-2_002	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.2919	0	0.0032	0	13.4345	31.9389	9.2504	0.0058	9.7531	0.1447	33.5960	98.4186	0.00	0.49	18.43	46.68	0.19	17.28	15.34	0.01	0.00	0.00	98.42
230	15SUV002	2015_5	2_3	5-2_003	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.0501	0.0082	0	0	24.5681	21.9366	6.7008	0	11.1682	0.1957	32.2705	97.8983	0.00	1.75	21.10	32.06	0.25	31.61	11.11	0.00	0.00	0.00	97.88
231	15SUV002	2015_5	2_4	5-2_004	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3283	0.0065	0.0038	0	16.1840	31.8109	8.1757	0	8.8269	0.1772	32.8272	98.3405	0.00	0.55	16.68	46.49	0.23	20.82	13.56	0.00	0.00	0.00	98.33
232	15SUV002	2015_5	2_5	5-2_005	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3413	0	0	0	20.4868	30.7294	5.9696	0.0011	8.5555	0.1976	31.8791	98.1604	0.00	0.57	16.17	44.91	0.26	26.36	9.90	0.00	0.00	0.00	98.17
233	15SUV002	2015_5	2_6	5-2_006	stream sediments	chromite, euhedral	garnet	0.25-0.5	4.2099	0.0077	0	16.0235	9.2074	0.0000	0.6789	24.2947	4.7050	0.0733	38.0612	97.2615	34.28	7.02	8.89	0.00	0.09	11.85	1.13	33.99	0.00	0.00	97.25
234	15SUV003	2015_5	2_7	5-2_007	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.5392	0.0089	0.0017	0	21.5839	28.4372	5.3150	0.0014	9.9763	0.2277	32.1127	98.2040	0.00	0.90	18.85	41.56	0.29	27.77	8.81	0.00	0.00	0.00	98.18
235	15SUV003	2015_5	2_8	5-2_008	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.1858	0.0135	0	0	10.4384	28.9533	10.4610	0.0002	13.2021	0.1222	35.1486	98.5250	0.00	0.31	24.95	42.32	0.16	13.43	17.35	0.00	0.00	0.00	98.52
236	15SUV003	2015_5	2_9	5-2_009	stream sediments	chromite, euhedral	spinel	0.25-0.5	0.4876	0	0.0035	0	12.3953	18.2921	10.8189	0.0006	19.8507	0.1394	37.1406	99.1287	0.00	0.81	37.51	26.74	0.18	15.95	17.94	0.00	0.00	0.00	99.13
237	15SUV003	2015_5	2_10	5-2_010	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.6154	0	0.0045	0	21.5739	21.1427	8.0090	0	12.0812	0.1975	33.0957	97.7199	0.00	2.69	22.83	30.90	0.26	27.75	13.28	0.00	0.00	0.00	97.71
238	15SUV003	2015_5	2_11	5-2_011	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3572	0	0	0	17.3553	29.8827	7.8795	0.0022	9.6972	0.1801	32.8699	98.2241	0.00	0.60	18.32	43.68	0.23	22.33	13.07	0.00	0.00	0.00	98.23
239	15SUV008	2015_5	3_1	5-3_001	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.2877	0.0193	0	0	18.7778	28.4841	8.0680	0	8.7388	0.1747	32.5293	98.0797	0.00	2.15	16.51	41.63	0.23	24.16	13.38	0.00	0.00	0.00	98.06
240	15SUV020	2015_5	3_2	5-3_002	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.5359	0	0.0055	0	22.2500	25.2742	7.0786	0	10.2751	0.2021	32.2578	97.8792	0.00	0.89	19.41	36.94	0.26	28.62	11.74	0.00	0.00	0.00	97.86
241	15SUV020	2015_5	3_3	5-3_003	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.4218	0	0	0	16.9400	28.6240	8.4013	0.0012	10.4089	0.1487	33.1800	98.1259	0.00	0.70	19.67	41.84	0.19	21.79	13.93	0.00	0.00	0.00	98.12
242	15SUV020	2015_5	3_4	5-3_004	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.8197	0.0003	0.0008	0	13.0142	26.7451	9.7264	0.0026	13.1542	0.1489	34.7689	98.3811	0.00	1.37	24.85	39.09	0.19	16.74	16.13	0.00	0.00	0.00	98.37
243	15SUV020	2015_5	3_5	5-3_005	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3251	0	0.0054	0	13.5460	31.8301	9.1857	0.0020	9.8633	0.1493	33.6555	98.5623	0.00	0.54	18.64	46.52	0.19	17.43	15.23	0.00	0.00	0.00	98.55
244	15SUV020	2015_5	3_6	5-3_006	stream sediments	chromite, euhedral	chromite	0.25-0.5	2.5266	0.0030	0.0016	0	23.4635	22.8631	7.8523	0.0057	8.6418	0.1882	31.8775	97.4233	0.00	4.21	16.33	33.42	0.24	30.19	13.02	0.01	0.00	0.00	97.42
245	15SUV020	2015_5	3_7	5-3_007	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.1494	0.0064	0.0019	0	17.6406	29.8805	8.2946	0.0032	8.2668	0.1706	32.4809	97.8948	0.00	1.92	15.62	43.67	0.22	22.69	13.75	0.00	0.00	0.00	97.87
246	15SUV020	2015_5	3_8	5-3_008	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.4150	0.0053	0.0008	0	16.1815	26.6375	8.7052	0.0032	12.3710	0.1560	33.9915	98.4671	0.00	0.69	23.37	38.93	0.20	20.82	14.44	0.00	0.00	0.00	98.45
247	15SUV020	2015_5	3_9	5-3_009	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.5754	0	0.0008	0	14.6720	21.9476	9.4391	0.0051	16.1471	0.1360	35.3364	98.2594	0.00	0.96	30.51	32.08	0.18	18.88	15.65	0.00	0.00	0.00	98.26
248	15SUV020	2015_5	3_10	5-3_010	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.4850	0.0035	0	0	19.4363	27.6582	8.1525	0.0052	8.5191	0.1856	32.3285	97.7737	0.00	2.48	16.10	40.42	0.24	25.00	13.52	0.00	0.00	0.00	97.76
249	15SUV020	2015_5	4_1	5-4_001	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.1919	0.0301	0.0008	0	17.1360	30.1988	8.5843	0.0016	8.3844	0.1593	32.8112	98.4984	0.00	1.99	15.84	44.14	0.21	22.05	14.24	0.00	0.04	0.00	98.51
250	15SUV020	2015_5	4_2	5-4_002	stream sediments	chromite, euhedral	chromite	0.25-0.5	3.2943	0.0163	0	0	28.1681	24.2002	6.6576	0.0061	4.7294	0.2547	30.1127	97.4394	0.00	5.50	8.94	35.37	0.33	36.24	11.04	0.01	0.00	0.00	97.43
251	15SUV020	2015_5	4_3	5-4_003	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.4174	0.0186	0.0042	0	20.6219	24.7819	7.9190	0.0044	10.1254	0.1821	32.5752	97.6500	0.00	2.36	19.13	36.22	0.24	26.53	13.13	0.00	0.00	0.00	97.61
252	15SUV020	2015_5	4_4	5-4_004	stream sediments	chromite, euhedral	chromite	0.25-0.5	2.0340	0	0	0	27.4541	16.9453	7.4117	0.0015	11.0427	0.2204	31.8120	96.9216	0.00	3.39	20.87	24.77	0.28	35.32	12.29	0.00	0.00	0.00	96.92
253	15SUV020	2015_5	4_5	5-4_005	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.1977	0	0.0004	0	18.0825	30.1129	8.0414	0.0002	8.0754	0.1843	32.4104	98.1051	0.00	2.00	15.26	44.01	0.24	23.26	13.34	0.00	0.00	0.00	98.11
254	15SUV020	2015_5	4_6	5-4_006	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.2823	0.0027	0	0	14.7003	32.7493	8.2926	0.0027	8.9558	0.1609	32.9903	98.1369	0.00	0.47	16.92	47.87	0.21	18.91	13.75	0.00	0.00	0.00	98.13
255	15SUV020	2015_5	4_7	5-4_007	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.4414	0.0018	0	0	19.3569	25.1294	8.4305	0.0003	10.5388	0.1754	33.0834	98.1578	0.00	2.40	19.91	36.73	0.23	24.90	13.98	0.00	0.00	0.00	98.15
256	15SUV020	2015_5	4_8	5-4_008	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3721	0.0166	0	0	17.7139	30.8731	7.3579	0.0007	9.0895	0.1885	32.5634	98.1758	0.00	0.62	17.17	45.12	0.24	22.79	12.20	0.00	0.00	0.00	98.14
257	15SUV020	2015_5	4_9	5-4_009	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.4698	0.0055	0.0048	0	17.1166	29.5222	7.8624	0.0006	10.0715	0.1662	33.0301	98.2495	0.00	0.78	19.03	43.15	0.21	22.02	13.04	0.00	0.00	0.00	98.23
258	15SUV026	2015_5	5_1	5-5_001	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3063	0	0.0042	0	18.3683	30.6690	6.6449	0	9.6484	0.2083	32.6410	98.4903	0.00	0.51	18.23	44.83	0.27	23.63	11.02	0.00	0.00	0.00	98.49
259	15SUV026	2015_5	5_2	5-5_002	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.4066	0	0	0	16.6706	36.2170	6.1253	0	6.9006	0.2935	32.0203	98.6340	0.00	0.68	13.04	52.93	0.38	21.45	10.16	0.00	0.00	0.00	98.64
260	15SUV026	2015_5	5_3	5-5_003	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.4314	0.0335	0.0050	0	16.8753	27.1117	8.2994	0	11.6852	0.1519	33.5511	98.1445	0.00	0.72	22.08	39.63	0.20	21.71	13.76	0.00	0.05	0.00	98.15
261	15SUV030	2015_5	5_4	5-5_004A	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.6139	0.0057	0.0021	0	19.6702	25.1227	8.2435	0	10.1323	0.1456	32.7936	97.7296	0.00	2.69	19.14	36.72	0.19	25.31	13.67	0.00	0.00	0.00	97.72
262	15SUV030_rpt	2015_5	5_4_r	5-5_004B	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.5756	0.0124	0	0	19.8468	24.8101	8.1672	0.0007	10.3581	0.1773	32.8364	97.7847	0.00	2.63	19.57	36.26	0.23	25.53	13.54	0.00	0.00	0.00	97.76
263	15SUV030	2015_5	5_5	5-5_005A	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	2.0436	0	0.0010	0	22.5831	24.6253	7.6284	0.0059	8.6720	0.1702	31.9891	97.7184	0.00	3.41	16.39	35.99	0.22	29.05	12.65	0.01	0.00	0.00	97.72
264	15SUV030_rpt	2015_5	5_5_r	5-5_005B	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	2.1111	0.0199	0.0023	0	22.6775	24.5131	7.6478	0	8.6303	0.1819	31.9933	97.7771	0.00	3.52	16.31	35.83	0.23	29.17	12.68	0.00	0.00	0.00	97.74
265	15SUV030	2015_5	5_6	5-5_006A	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.0573	0	0	0	16.6628	29.2102	8.9225	0.0036	9.2084	0.1609	33.0755	98.3011	0.00	1.76	17.40	42.69	0.21	21.44	14.80	0.00	0.00	0.00	98.30
266	15SUV030_rpt	2015_5	5_6_r	5-5_006B	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.0486	0.0169	0	0	16.6122	29.3015	8.7255	0.0038	9.1644	0.1657	32.9359	97.9744	0.00	1.75	17.32	42.83	0.21	21.37	14.47	0.00	0.00	0.00	97.95
267	15SUV030	2015_5	5_7	5-5_007A	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.9492	0	0.0005	0	21.8305	23.7511	8.0079	0.0030	9.6930	0.1651	32.4622	97.8624	0.00	3.25	18.31	34.71	0.21	28.08	13.28	0.00	0.00	0.00	97.84
268	15SUV030_rpt	2015_5	5_7_r	5-5_007B	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.9384	0.0085	0.0066	0	21.8881	23.6276	7.9287	0.0056	9.7816	0.1656	32.4465	97.7972	0.00	3.23	18.48	34.53	0.21	28.16	13.15	0.01	0.00	0.01	97.78
269	15SUV030	2015_5	5_8	5-5_008A	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.6308	0	0.0016	0	20.8942	25.4004	7.8135	0.0055	9.2950	0.1649	32.2617	97.4676	0.00	2.72	17.56	37.12	0.21	26.88	12.96	0.00	0.00	0.00	97.45
270	15SUV030_rpt	2015_5	5_8_r	5-5_008B	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.6500	0	0.0054	0	20.9563	25.4637	7.9083	0.0000	9.3369	0.1783	32.4237	97.9227	0.00	2.75	17.64	37.22	0.23	26.96	13.11	0.00	0.00	0.00	97.91
271	15SUV030	2015_5	5_9	5-5_009A	Beaufort Fm	chromite, euhedral	tourmaline	0.25-0.5	0.4621	1.4600	0.0578	16.1218	8.7589	0	3.0686	0.6059	16.4413	0.0489	38.6068	85.6320	34.49	0.77	31.07	0.00	0.06	11.27	5.09	0.85	1.97	0.07	85.64
272	15SUV030_rpt	2015_5	5_9_r	5-5_009B	Beaufort Fm	chromite, euhedral	tourmaline	0.25-0.5	0.5305	1.4378	0.0607	16.0770	8.6317	0.0036	2.9871	0.5923	16.4396	0.0562	38.5011	85.3175	34.39	0.88	31.06	0.00	0.07	11.10	4.95	0.83	1.94	0.07	85.29
273	15SUV031	2015_5	5_10	5-5_010	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.4269	0	0.0024	0	19.6836	29.3343	6.3499	0	9.7667	0.2012	32.3909	98.1558	0.00	0.71	18.45	42.87	0.26	25.32	10.53	0.00	0.00	0.00	98.14
274	15SUV051	2015_5	5_11	5-5_011	stream sediments	chromite, euhedral	chromite	0.5-1.0	0.5816	0	0.0022	0	13.0141	19.0883	10.3951	0.0045	18.7350	0.1218	36.4730	98.4155	0.00	0.97	35.40	27.90	0.16	16.74	17.24	0.00	0.00	0.00	98.41
275	15SUV001	2015_6	1_1	6-1_001	stream sediments	chromite	chromite	0.25-0.5	0.1706	0.0004	0.0044	0	10.9097	26.2210	10.1723	0.0025	15.5762	0.1333	35.9346	99.1251	0.00	0.28	29.43	38.32	0.17	14.04	16.87	0.00	0.00	0.00	99.11
276	15SUV001	2015_6	1_2	6-1_002	stream sediments	chromite	chromite	0.25-0.5	2.0064	0	0.0011	0	22.8742	24.0620	7.5966	0.0031	8.8419	0.1730	31.9175	97.4758	0.00	3.35	16.71	35.17	0.22	29.43	12.60	0.00	0.00	0.00	97.48
277	15SUV001	2015_6	1_3	6-1_003	stream sediments	chromite	chromite	0.25-0.5	0.1082	0.0499	0.0064	0	22.4614	26.0725	2.0179	0.0060	12.9361	0.2989	31.4847	95.4420	0.00	0.18	24.44	38.11	0.39	28.90	3.35	0.01	0.07	0.01	95.46
278	15SUV001	2015_6	1_4	6-1_004	stream sediments	chromite	chromite	0.25-0.5	0.0688	0	0	0	12.1029	32.6419	9.0058	0	10.6393	0.1485	34.0153	98.6226	0.00	0.11	20.10	47.71	0.19	15.57	14.93	0.00	0.00	0.00	98.61
279	15SUV001	2015_6	1_5	6-1_005	stream sediments	chromite	chromite	0.25-0.5	0.7358	0	0	0	15.3088	23.5071	9.3757	0.0063	14.7115	0.1345	35.0271	98.8067	0.00	1.23	27.80	34.36	0.17	19.69	15.55	0.01	0.00	0.00	98.81
280	15SUV001	2015_6	1_6	6-1_006	stream sediments	chromite	spinel	0.25-0.5	0.1229	0	0	0	8.7202	11.2768	12.2418	0.0056	26.8714	0.0853	39.7730	99.0970	0.00	0.21	50.77	16.48	0.11	11.22	20.30	0.01	0.00	0.00	99.10
281	15SUV001	2015_6	1_7	6-1_007	stream sediments	chromite	spinel	0.25-0.5	0.2132	0	0	0	12.1093	16.4135	10.9609	0.0018	21.5739	0.1074	37.6249	99.0049	0.00	0.36	40.76	23.99	0.14	15.58	18.18	0.00	0.00	0.00	99.01
282	15SUV001	2015_6	1_8	6-1_008	stream sediments	chromite	chromite	0.25-0.5	0.5670	0	0.0019	0	11.9417	20.7306	10.5518	0.0030	18.3531	0.1216	36.6768	98.9475	0.00	0.95	34.68	30.30	0.16	15.36	17.50	0.00	0.00	0.00	98.95
283	15SUV001	2015_6	1_9	6-1_009	stream sediments	chromite	chromite	0.25-0.5	0.3680	0.0026	0.0028	0	11.1286	20.8920	10.5560	0	18.9220	0.1241	36.8947	98.8908	0.00	0.61	35.75	30.54	0.16	14.32	17.50	0.00	0.00	0.00	98.88
284	15SUV001	2015_6	1_10	6-1_010	stream sediments	chromite	chromite	0.25-0.5	0.1694	0.0030	0	0	11.8466	27.4877	9.6992	0	14.3216	0.1479	35.3628	99.0383	0.00	0.28	27.06	40.18	0.19	15.24	16.08	0.00	0.00	0.00	99.03
285	15SUV001	2015_6	1_11	6-1_011	stream sediments	chromite	chromite	0.25-0.5	3.2579	0	0.0020	0	26.5111	24.8027	8.0649	0.0036	3.9088	0.2427	30.0785	96.8721	0.00	5.43	7.39	36.25	0.31	34.11	13.37	0.00	0.00	0.00	96.86
286	15SUV002	2015_6	2_1	6-2_001	stream sediments	chromite	chromite	0.25-0.5	1.0876	0	0.0001	0	17.0856	29.5046	8.5704	0.0024	8.8627	0.1581	32.8123	98.0838	0.00	1.81	16.75	43.12	0.20	21.98	14.21	0.00	0.00	0.00	98.07
287	15SUV002	2015_6	2_2	6-2_002	stream sediments	chromite	chromite	0.25-0.5	0.4548	0.0047	0	0	12.2113	23.7322	10.0393	0.0037	16.4019	0.1447	35.9998	98.9922	0.00	0.76	30.99	34.69	0.19	15.71	16.65	0.00	0.00	0.00	98.99
288	15SUV002	2015_6	2_3	6-2_003	stream sediments	chromite	chromite	0.25-0.5	0.3027	0	0.0024	0	19.6045	30.5755	6.0674	0.0030	9.4617	0.2201	32.4076	98.6449	0.00	0.50	17.88	44.69	0.28	25.22	10.06	0.00	0.00	0.00	98.63
289	15SUV002	2015_6	2_4	6-2_004	stream sediments	chromite	spinel	0.25-0.5	0.1331	0	0.0026	0	8.8267	13.2616	12.0024	0	25.3864	0.0838	39.2458	98.9424	0.00	0.22	47.97	19.38	0.11	11.36	19.90	0.00	0.00	0.00	98.94
290	15SUV002	2015_6	2_5	6-2_005	stream sediments	chromite	chromite	0.25-0.5	0.2730	0.0016	0	0	16.3272	32.3442	7.3015	0.0052	8.9912	0.2053	32.6559	98.1051	0.00	0.46	16.99	47.27	0.27	21.00	12.11	0.00	0.00	0.00	98.10
291	15SUV002	2015_6	2_6	6-2_006	stream sediments	chromite	chromite	0.25-0.5	0.0230	0.0269	0.0014	0	15.5843	42.4648	3.8110	0.0009	3.6770	0.5271	30.0237	96.1400	0.00	0.04	6.95	62.07	0.68	20.05	6.32	0.00	0.00	0.00	96.11
292	15SUV002	2015_6	2_7	6-2_007	stream sediments	chromite	chromite	0.25-0.5	2.1264	0	0.0008	0	23.7191	23.6498	7.5417	0.0043	8.5155	0.1992	31.7312	97.4881	0.00	3.55	16.09	34.57	0.26	30.51	12.51	0.00	0.00	0.00	97.49
293	15SUV002	2015_6	2_8	6-2_008	stream sediments	chromite	chromite	0.25-0.5	0.9164	0.0143	0.0032	0	21.6212	29.7002	5.8935	0.0051	8.0147	0.2810	31.6136	98.0632	0.00	1.53	15.14	43.41	0.36	27.82	9.77	0.00	0.00	0.00	98.03
294	15SUV003	2015_6	2_9	6-2_009	stream sediments	chromite	chromite	0.5-1.0	0.1090	0.0088	0.0010	0	10.9536	27.9847	9.9403	0.0020	14.3585	0.1364	35.4872	98.9816	0.00	0.18	27.13	40.90	0.18	14.09	16.48	0.00	0.00	0.00	98.96
295	15SUV003	2015_6	2_10	6-2_010	stream sediments	chromite	spinel	0.5-1.0	0.0318	0	0.0022	0	8.7011	6.6190	12.3320	0	30.4979	0.0874	40.8406	99.1119	0.00	0.05	57.63	9.67	0.11	11.19	20.45	0.00	0.00	0.00	99.10
296	15SUV003	2015_6	3_1	6-3_001	stream sediments	chromite	chromite	0.25-0.5	0.3332	0	0	0	12.8132	27.0881	9.3050	0	13.9059	0.1465	34.9339	98.5258	0.00	0.56	26.27	39.59	0.19	16.48	15.43	0.00	0.00	0.00	98.52
297	15SUV003	2015_6	3_2	6-3_002	stream sediments	chromite	chromite	0.25-0.5	0.1716	0.0012	0	0	10.5310	22.8109	10.5393	0.0024	18.1089	0.1175	36.7418	99.0246	0.00	0.29	34.22	33.34	0.15	13.55	17.48	0.00	0.00	0.00	99.03
298	15SUV003	2015_6	3_3	6-3_003	stream sediments	chromite	chromite	0.25-0.5	1.3670	0	0	0	18.5628	29.6779	8.2523	0.0053	7.7839	0.1719	32.3383	98.1594	0.00	2.28	14.71	43.38	0.22	23.88	13.68	0.00	0.00	0.00	98.15
299	15SUV003	2015_6	3_4	6-3_004	stream sediments	chromite	chromite	0.25-0.5	0.3221	0.0114	0	0	12.2003	31.7118	9.4627	0.0004	10.5585	0.1401	34.0137	98.4210	0.00	0.54	19.95	46.35	0.18	15.70	15.69	0.00	0.00	0.00	98.41

300	15SUV003	2015_6	3_5	6-3_005	stream sediments	chromite	chromite	0.25-0.5	0.6617	0.0111	0.0028	0	13.5339	21.5719	10.0501	0.0047	16.7615	0.1379	35.8480	98.5836	0.00	1.10	31.67	31.53	0.18	17.41	16.67	0.00	0.00	0.00						98.56
301	15SUV003	2015_6	3_6	6-3_006	stream sediments	chromite	spinel	0.25-0.5	0.0111	0.0079	0	0	8.6866	11.5919	12.1693	0.0015	26.9054	0.0916	39.8195	99.2846	0.00	0.00	50.84	16.94	0.12	11.18	20.18	0.00	0.00	0.00						99.26
302	15SUV003	2015_6	3_7	6-3_007	stream sediments	chromite	chromite	0.25-0.5	0.3310	0	0	0	12.2551	25.7175	9.9304	0	15.0974	0.1381	35.6090	99.0785	0.00	0.55	28.53	37.59	0.18	15.77	16.47	0.00	0.00	0.00						99.09
303	15SUV003	2015_6	3_8	6-3_008	stream sediments	chromite	chromite	0.25-0.5	0.2626	0.0024	0	0	15.6326	17.7804	9.0730	0.0013	19.5985	0.1807	36.3203	98.8518	0.00	0.44	37.03	25.99	0.23	20.11	15.05	0.00	0.00	0.00						98.85
304	15SUV003	2015_6	3_9	6-3_009	stream sediments	chromite	chromite	0.25-0.5	0.5471	0	0.0011	0	14.0486	20.9451	9.8686	0.0060	17.2937	0.1301	35.9775	98.8178	0.00	0.91	32.68	30.61	0.17	18.07	16.37	0.01	0.00	0.00						98.82
305	15SUV003	2015_6	3_10	6-3_010	stream sediments	chromite	chromite	0.25-0.5	0.0800	0	0	0	9.7183	17.5518	11.2356	0.0016	22.1886	0.1026	38.1025	98.9811	0.00	0.13	41.93	25.65	0.13	12.50	18.63	0.00	0.00	0.00						98.97
306	15SUV003	2015_6	3_11	6-3_011	stream sediments	chromite	chromite	0.25-0.5	0.2321	0	0	0	11.4614	29.0572	9.7467	0.0065	13.2951	0.1512	35.1394	99.0896	0.00	0.39	25.12	42.47	0.20	14.75	16.16	0.01	0.00	0.00						99.10
307	15SUV004	2015_6	4_1	6-4_001	stream sediments	chromite	chromite	0.25-0.5	0.1722	0	0	0	23.5842	28.0759	3.5936	0.0030	10.9674	0.2418	32.0236	98.6617	0.00	0.29	20.72	41.04	0.31	30.34	5.96	0.00	0.00	0.00						98.66
308	15SUV004	2015_6	4_2	6-4_002	stream sediments	chromite	chromite	0.25-0.5	0.3467	0.0006	0	0	17.7767	31.8616	6.5345	0.0063	9.0692	0.2247	32.4677	98.2879	0.00	0.58	17.14	46.57	0.29	22.87	10.84	0.01	0.00	0.00						98.30
309	15SUV004	2015_6	4_3	6-4_003	stream sediments	chromite	ilmenite	0.25-0.5	28.5804	0.0141	0.0051	0.0033	37.8181	0.0096	0.3457	0.0036	0.0292	0.2445	30.2684	97.3219	0.00	47.67	0.06	0.00	0.32	48.65	0.57	0.00	0.00	0.00						97.27
310	15SUV005	2015_6	4_4	6-4_004	stream sediments	chromite	chromite	0.25-0.5	0.0393	0.0206	0	0	25.0965	23.9423	3.8782	0.0024	12.8113	0.2722	32.3033	98.3662	0.00	0.07	24.21	34.99	0.35	32.29	6.43	0.00	0.00	0.00						98.34
311	15SUV006	2015_6	4_5	6-4_005	stream sediments	chromite	chromite	0.25-0.5	0.4447	0.0011	0	0	12.0716	27.3011	10.0019	0.0019	13.6250	0.1436	35.1034	98.6942	0.00	0.74	25.74	39.90	0.19	15.53	16.59	0.00	0.00	0.00						98.69
312	15SUV009	2015_6	4_6	6-4_006	stream sediments	chromite	chromite	0.5-1.0	0.6931	0.0081	0.0007	0	15.5332	21.0488	9.3578	0.0017	16.3915	0.1413	35.4138	98.5901	0.00	1.16	30.97	30.76	0.18	19.98	15.52	0.00	0.00	0.00						98.57
313	15SUV009	2015_6	5_1	6-5_001	stream sediments	chromite	ilmenite	0.25-0.5	29.3794	0	0	0	37.2021	0.0072	0.1410	0	0.0050	0.4297	30.5112	97.6755	0.00	49.01	0.00	0.00	0.55	47.86	0.23	0.00	0.00	0.00						97.65
314	15SUV009	2015_6	5_2	6-5_002	stream sediments	chromite	ilmenite	0.25-0.5	29.5114	0	0	0.0025	37.2020	0.0000	0.1285	0.0053	0	0.5626	30.6270	98.0394	0.00	49.23	0.00	0.00	0.73	47.86	0.21	0.00	0.00	0.00						98.03
315	15SUV009	2015_6	5_3	6-5_003	stream sediments	chromite	ilmenite	0.25-0.5	29.2232	0	0.0011	0.0059	37.5479	0.0058	0.0778	0	0.0107	0.5253	30.5035	97.9011	0.00	48.75	0.02	0.00	0.68	48.31	0.13	0.00	0.00	0.00						97.89
316	15SUV009	2015_6	5_4	6-5_004	stream sediments	chromite	ilmenite	0.25-0.5	21.5905	0.0027	0	0.0088	44.2926	0.0264	1.0096	0.0028	0.0674	0.2458	27.9338	95.1803	0.00	36.01	0.13	0.04	0.32	56.98	1.67	0.00	0.00	0.00						95.15
317	15SUV009	2015_6	5_5	6-5_005	stream sediments	chromite	ilmenite	0.25-0.5	33.2265	0.0238	0.0174	0.1150	24.7790	0.0418	0.0231	0.0187	0.0864	2.4471	30.2707	91.0495	0.25	55.42	0.16	0.06	3.16	31.88	0.04	0.03	0.00	0.02						91.02
318	15SUV009	2015_6	5_6	6-5_006	stream sediments	chromite	ilmenite	0.25-0.5	28.8106	0	0.0013	0.0055	37.1967	0.0032	0.8020	0.0023	0.0463	0.3411	30.5812	97.7902	0.00	48.06	0.09	0.00	0.44	47.85	1.33	0.00	0.00	0.00						97.77
319	15SUV009	2015_6	5_7	6-5_007	stream sediments	chromite	ilmenite	0.25-0.5	28.8188	0.0103	0.0022	0	36.8873	0.0136	0.4159	0.0024	0.0555	0.2525	30.2287	96.6871	0.00	48.07	0.10	0.00	0.33	47.46	0.69	0.00	0.00	0.00						96.65
320	15SUV009	2015_6	5_8	6-5_008	stream sediments	chromite	ilmenite	0.25-0.5	30.8045	0.0157	0.0027	0.0156	23.4235	1.0362	7.9914	0.0191	0.3031	0.2207	33.3943	97.2268	0.03	51.38	0.57	1.51	0.29	30.13	13.25	0.03	0.00	0.00						97.19
321	15SUV009	2015_6	5_9	6-5_009	stream sediments	chromite	ilmenite	0.25-0.5	26.9529	0.0108	0.0036	0.0020	39.0767	0.0072	0.8169	0.0009	0.0282	0.3943	29.8897	97.1832	0.00	44.96	0.05	0.00	0.51	50.27	1.35	0.00	0.00	0.00						97.14
322	15SUV009	2015_6	5_10	6-5_010	stream sediments	chromite	chromite	0.25-0.5	0.4456	0.0007	0	0	16.5752	30.0719	7.7432	0.0053	10.2321	0.1689	33.1770	98.4198	0.00	0.74	19.33	43.95	0.22	21.32	12.84	0.00	0.00	0.00						98.40
323	15SUV009	2015_6	6_1a_?	6-6-1A_titanite	stream sediments	chromite	titanite	0.25-0.5	22.4072	0.0115	0.0018	14.4153	0.7293	0.0098	0.0000	19.9041	0.2557	0.0017	39.7850	97.5213	30.84	37.38	0.48	0.00	0.00	0.94	0.00	27.85	0.00	0.00						97.49
324	15SUV009	2015_6	6_1b_?	6-6-1B_ilmenite	stream sediments	chromite	ilmenite	0.25-0.5	29.1600	0.0216	0.0009	0.0049	37.3062	0.0180	0.1751	0.0069	0.0285	0.5566	30.4957	97.7741	0.00	48.64	0.05	0.00	0.72	47.99	0.29	0.01	0.00	0.00						97.70
325	15SUV009	2015_6	6_2	6-6_002	stream sediments	chromite	ilmenite	0.25-0.5	28.0417	0	0.0017	0	38.5776	0	0.2968	0.0007	0.0050	0.6187	30.1664	97.7085	0.00	46.78	0.00	0.00	0.80	49.63	0.49	0.00	0.00	0.00						97.70
326	15SUV009	2015_6	6_3	6-6_003	stream sediments	chromite	chromite	0.25-0.5	0.0340	0.0099	0.0017	0	17.1781	41.4687	4.5524	0	4.0893	0.3021	30.8110	98.4472	0.00	0.06	7.73	60.61	0.39	22.10	7.55	0.00	0.00	0.00						98.44
327	15SUV009	2015_6	6_4	6-6_004	stream sediments	chromite	chromite	0.25-0.5	0.1363	0.0043	0.0003	0	16.0873	24.5919	7.8501	0.0087	15.2500	0.1754	34.8395	98.9438	0.00	0.23	28.81	35.94	0.23	20.70	13.02	0.01	0.00	0.00						98.94
328	15SUV009	2015_6	6_5	6-6_005	stream sediments	chromite	ilmenite	0.25-0.5	30.9186	0	0.0019	0.0051	34.6387	0.0621	0.0320	0.0036	0.0223	0.4657	30.7922	96.9422	0.00	51.57	0.04	0.09	0.60	44.56	0.05	0.00	0.00	0.00						96.91
329	15SUV009	2015_6	6_6	6-6_006	stream sediments	chromite	ilmenite	0.25-0.5	29.1019	0	0.0021	0.0094	37.4949	0.0005	0.1505	0.0079	0.0056	0.6409	30.4893	97.9030	0.00	48.54	0.00	0.00	0.83	48.24	0.25	0.01	0.00	0.00						97.87
330	15SUV009	2015_6	6_7	6-6_007	stream sediments	chromite	chromite	0.25-0.5	0.2257	0	0.0011	0	10.9218	24.9768	10.2159	0.0000	16.4374	0.1352	36.1940	99.1079	0.00	0.38	31.06	36.51	0.17	14.05	16.94	0.00	0.00	0.00						99.11
331	15SUV009	2015_6	6_8	6-6_008	stream sediments	chromite	ilmenite	0.25-0.5	28.9755	0	0.0012	0	37.5715	0.0219	0.4882	0.0024	0.0232	0.2267	30.5408	97.8513	0.00	48.33	0.04	0.00	0.29	48.34	0.81	0.00	0.00	0.00						97.81
332	15SUV009	2015_6	6_9	6-6_009	stream sediments	chromite	chromite	0.25-0.5	0.9795	0.0114	0	0	16.7324	30.3551	8.5415	0.0034	8.6250	0.1688	32.8084	98.2255	0.00	1.63	16.30	44.37	0.22	21.53	14.16	0.00	0.00	0.00						98.21
333	15SUV009	2015_6	6_10	6-6_010	stream sediments	chromite	ilmenite	0.25-0.5	33.1971	0.0296	0.0086	0.1283	23.6653	0.0593	0.6085	0.0370	0.2225	0.2301	29.8235	88.0097	0.27	55.37	0.42	0.09	0.30	30.45	1.01	0.05	0.04	0.01						88.01
334	15SUV010	2015_7	1_1	7-1_001	stream sediments	chromite	chromite	0.25-0.5	0.0357	0.0012	0.0015	0	9.7852	21.4431	10.9819	0.0026	19.4515	0.1088	37.2895	99.1010	0.00	0.06	36.75	31.34	0.14	12.59	18.21	0.00	0.00	0.00						99.09
335	15SUV010	2015_7	1_2	7-1_002	stream sediments	chromite	chromite	0.25-0.5	0.0943	0.0032	0	0	12.3904	23.5995	8.4023	0.0011	18.0254	0.2210	36.1361	98.8733	0.00	0.16	34.06	34.49	0.29	15.94	13.93	0.00	0.00	0.00						98.87
336	15SUV014	2015_7	1_3	7-1_003	stream sediments	chromite	chromite	0.25-0.5	0.5282	0	0	0	21.3573	27.0619	5.8535	0.0053	10.8182	0.2107	32.5021	98.3370	0.00	0.88	20.44	39.55	0.27	27.48	9.71	0.00	0.00	0.00						98.33
337	15SUV014	2015_7	1_4	7-1_004	stream sediments	chromite	chromite	0.25-0.5	0.4198	0.0135	0	0	15.8044	25.1218	8.7904	0.0014	13.6696	0.1690	34.4039	98.3936	0.00	0.70	25.83	36.72	0.22	20.33	14.58	0.00	0.00	0.00						98.38
338	15SUV014	2015_7	1_5	7-1_005	stream sediments	chromite	chromite	0.25-0.5	0.3307	0	0.0002	0	12.2552	29.0281	8.4250	0.0174	12.9446	0.1243	34.2340	97.3595	0.00	0.55	24.46	42.43	0.16	15.77	13.97	0.02	0.00	0.00						97.36
339	15SUV014	2015_7	1_6	7-1_006	stream sediments	chromite	chromite	0.25-0.5	0.3692	0	0.0010	0	16.2562	27.0997	8.4249	0.0041	12.0397	0.1757	33.7207	98.0913	0.00	0.62	22.75	39.61	0.23	20.91	13.97	0.00	0.00	0.00						98.09
340	15SUV014	2015_7	1_7	7-1_007	stream sediments	chromite	chromite	0.25-0.5	0.3232	0	0	0	11.3875	32.2151	9.2807	0.0013	11.1229	0.1683	34.4007	98.8998	0.00	0.54	21.02	47.08	0.22	14.65	15.39	0.00	0.00	0.00						98.90
341	15SUV018	2015_7	1_8	7-1_008A	Beaufort Fm	chromite	chromite	0.25-0.5	0.9647	0	0.0006	0	17.6328	29.7883	7.5853	0.0023	9.5446	0.2050	32.9896	98.7131	0.00	1.61	18.03	43.54	0.26	22.68	12.58	0.00	0.00	0.00						98.70
342	15SUV018_rpt	2015_7	1_8_r	7-1-008B	Beaufort Fm	chromite	chromite	0.25-0.5	0.9308	0.0099	0	0	17.6040	29.6903	7.5203	0.0029	9.5392	0.1849	32.8636	98.3459	0.00	1.55	18.02	43.39	0.24	22.65	12.47	0.00	0.00	0.00						98.32
343	15SUV018	2015_7	1_9	7-1_009A	Beaufort Fm	chromite	chromite	0.25-0.5	0.8695	0	0.0009	0	21.9983	29.0219	5.0280	0.0039	8.9129	0.2589	31.5941	97.6884	0.00	1.45	16.84	42.42	0.33	28.30	8.34	0.00	0.00	0.00						97.68
344	15SUV018_rpt	2015_7	1_9_r	7-1-009B	Beaufort Fm	chromite	chromite	0.25-0.5	0.8487	0.0151	0.0026	0	21.6855	29.0177	5.3013	0.0012	9.0506	0.2502	31.7929	97.9657	0.00	1.42	17.10	42.41	0.32	27.90	8.79	0.00	0.00	0.00						97.94
345	15SUV018	2015_7	1_10	7-1_010A	Beaufort Fm	chromite	chromite	0.25-0.5	1.5707	0.0131	0	0	19.4910	28.2472	8.0749	0.0031	8.0286	0.1691	32.1836	97.7812	0.00	2.62	15.17	41.29	0.22	25.08	13.39	0.00	0.00	0.00						97.77
346	15SUV018_rpt	2015_7	1_10_r	7-1-010B	Beaufort Fm	chromite	chromite	0.25-0.5	1.5835	0.0075	0.0031	0	19.5118	28.3044	8.1519	0.0053	7.9855	0.1695	32.2365	97.9589	0.00	2.64	15.09	41.37	0.22	25.10	13.52	0.00	0.00	0.00						97.94
347	15SUV020	2015_7	1_11	7-1_011	stream sediments	chromite	chromite	0.5-1.0	0.6546	0	0	0	13.2796	24.9646	9.8835	0.0028	14.5985	0.1390	35.2979	98.8206	0.00	1.09	27.58	36.49	0.18	17.08	16.39	0.00	0.00	0.00						98.81
348	15SUV020	2015_7	2_1	7-2_001	stream sediments	chromite	chromite	0.25-0.5	0.4070	0	0.0006	0	11.6870	22.8093	10.1838	0	17.2831	0.1269	36.2624	98.7601	0.00	0.68	32.66	33.34	0.16	15.04	16.89	0.00	0.00	0.00						98.77
349	15SUV020	2015_7	2_2	7-2_002	stream sediments	chromite	chromite	0.25-0.5	0.0457	0.0061	0	0	11.0350	28.7805	9.8202	0.0040	13.7720	0.1355	35.2341	98.8330	0.00	0.08	26.02	42.06	0.18	14.20	16.28	0.00	0.00	0.00						98.82
350	15SUV020	2015_7	2_3	7-2_003	stream sediments	chromite	chromite	0.25-0.5	0.8646	0.0017	0.0031	0	15.8807	24.1362	9.0391	0	13.7195	0.1351	34.4622	98.2422	0.00	1.44	25.92	35.28	0.17	20.43	14.99	0.00	0.00	0.00						98.23
351	15SUV020	2015_7	2_4	7-2_004	stream sediments	chromite	chromite	0.25-0.5	0.1045	0	0	0	12.4046	28.5492	9.3222	0.0025	13.3955	0.1556	34.8994	98.8335	0.00	0.17	25.31	41.73	0.20	15.96	15.46	0.00	0.00	0.00						98.83
352	15SUV020	2015_7	2_5	7-2_005	stream sediments	chromite	chromite	0.25-0.5	0.0631	0	0.0007	0	12.0208	32.3992	9.1653	0	10.8071	0.1703	34.1366	98.7630	0.00	0.11	20.42	47.35	0.22	15.46	15.20	0.00	0.00	0.00						98.76
353	15SUV020	2015_7	2_6	7-2_006	stream sediments	chromite	spinel	0.25-0.5	0.1899	0	0	0.0300	8.5815	6.8583	12.6860	0.0060	29.9030	0.0714	40.7578	99.0839	0.06	0.32	56.50	10.02	0.09	11.04	21.04	0.01	0.00	0.00						99.08
354	15SUV020	2015_7	2_7	7-2_007	stream sediments	chromite	chromite	0.25-0.5	0.3064	0	0	0	12.3801	23.9871	9.8946	0	16.2697	0.1562	35.8541	98.8480	0.00	0.51	30.74	35.06	0.20	15.93	16.41	0.00	0.00	0.00						98.85
355	15SUV020	2015_7	2_8	7-2_008	stream sediments	chromite	chromite	0.25-0.5	0.5465	0	0	0	12.9357	19.1221	10.4607	0	18.9651	0.1334	36.6917	98.8552	0.00	0.91	35.83	27.95	0.17	16.64	17.35	0.00	0.00	0.00						98.85
356	15SUV020	2015_7	2_9	7-2_009	stream sediments	chromite	chromite	0.25-0.5	1.7085	0	0.0016	0	19.5890	28.3409	8.2515	0.0047	7.5268	0.1826	32.0173	97.6229	0.00	2.85	14.22	41.42	0.24	25.20	13.68	0.00	0.00	0.00						97.61
357	15SUV020	2015_7	3_1	7-3_001	stream sediments	chromite	spinel	0.25-0.5	0.0830	0.0146	0.0007	0	10.0212	17.0786	11.1228	0.0021	22.4444	0.1115	38.1341	99.0129	0.00	0.14	42.41	24.96	0.14	12.89	18.45	0.00	0.00	0.00						98.99
358	15SUV020	2015_7	3_2	7-3_002	stream sediments	chromite	spinel	0.25-0.5	0.0502	0.0056	0.0014	0	9.1313	11.2080	11.9726	0.0007	26.8404	0.0928	39.6080	98.9109	0.00	0.08	50.71	16.38	0.12	11.75	19.85	0.00	0.00	0.00						98.89
359	15SUV020	2015_7	3_3	7-3_003	stream sediments	chromite	chromite	0.25-0.5	0.4438	0.0071	0.0012	0	11.7423	23.0524	10.3085	0.0050	17.0012	0.1381	36.2543	98.9538	0.00	0.74	32.12	33.69	0.18	15.11	17.09	0.00	0.00	0.00						98.93
360	15SUV020	2015_7	3_4	7-3_004	stream sediments	chromite	chromite	0.25-0.5	0.9454	0	0.0007	0	16.8948	30.8911	8.4036	0.0035	8.1433	0.1878	32.5621	98.0322	0.00	1.58	15.39	45.15	0.24	21.74	13.94	0.00	0.00	0.00						98.04
361	15SUV020	2015_7	3_5	7-3_005	stream sediments	chromite	spinel	0.25-0.5	0.2303	0.0051	0	0	14.4131	11.1179	10.3853	0.0087	24.4311	0.1214	38.0232	98.7361	0.00	0.38	46.16	16.25	0.16	18.54	17.22	0.01	0.00	0.00						98.72
362	15SUV020	2015_7	3_6	7-3_006	stream sediments	chromite	chromite	0.25-0.5	0.2151	0.0038	0.0056	0	20.9875	30.2625	5.2363	0.0036	9.3110	0.2437	31.9289	98.1980	0.00	0.36	17.59	44.23	0.31	27.00	8.68	0.00	0.00	0.00						98.17
363	15SUV020	2015_7	3_7	7-3_007	stream sediments	chromite	chromite	0.25-0.5	0.6501	0.0149	0.0012	0	16.5512	36.8299	7.2045	0.0071	5.0472	0.2223	31.4810	98.0093	0.00	1.08	9.54	53.83	0.29	21.29	11.95	0.01	0.00	0.00						97.99
364	15SUV020	2015_7	3_8	7-3_008	stream sediments	chromite	chromite	0.25-0.5	2.9561	0.0062	0.0031	0	32.4758	21.5391	4.2906	0.0013	5.6793	0.2028	29.1594	96.3134	0.00	4.93	10.73	31.48	0.26	41.78	7.12	0.00	0.00	0.00						96.30
365	15SUV024	2015_7	4_1	7-4_001	fluvial	chromite	spinel	0.25-0.5	0.5535	0.0066	0.0024	0	14.6266	19.5141	9.7339	0.0042	17.9403	0.1402	35.9781	98.4999	0.00	0.92	33.90	28.52	0.18	18.82	16.14	0.00	0.00	0.00						98.48
366	15SUV025	2015_7	4_2	7-4_002	stream sediments	chromite	chromite	0.25-0.5	1.8783	0.0001	0	0	20.7217	25.0359	8.2689	0.0010	9.1413	0.1732	32.3728	97.5933	0.00	3.13	17.27	36.59	0.22	26.66	13.71	0.00	0.00	0.00						97.58
367	15SUV026	2015_7	4_3	7-4_003	stream sediments	chromite	chromite	0.5-1.0	0.5463	0.0140	0	0	16.3810	24.9277	8.6313	0.0036	13.4035	0.1734	34.2250	98.3059	0.00	0.91	25.33	36.43	0.22	21.07	14.31	0.00	0.00	0.00						98.27
368	15SUV026	2015_7	4_4	7-4_004	stream sediments	chromite	chromite	0.5-1.0	2.1030	0.0236	0.0032	0	33.5211	23.5703	3.7709	0.0026	4.3557	0.2102	28.3159	95.8765	0.00	3.51	8.23	34.45	0.27	43.12	6.25	0.00	0.00	0.00						95.83
369	15SUV026	2015_7	4_5	7-4_005	stream sediments	chromite	chromite	0.25-0.5	0.1519	0.0069	0.0020	0.0000	12.2415	28.9179	9.2480	0.0000	13.1261	0.1751	34.7736	98.6430	0.00	0.25	24.80	42.27	0.23	15.75	15.34	0.00	0.00	0.00						98.64
370	15SUV026	2015_7	4_6	7-4_006	stream sediments	chromite	chromite	0.25-0.5	0.0090	0.0000	0.0024	0.0000	11.5222	31.1643	8.1726	0.0000	13.0509	0.2020	34.7396	98.8630	0.00	0.00	24.66	45.55	0.26	14.82	13.55	0.00	0.00	0.00						98.84
371	15SUV026	2015_7	4_7	7-4_007	stream sediments	chromite	chromite	0.25-0.5	0.4878	0.0002	0.0023	0.0000	13.7910	24.4822	9.3758	0.0000	15.1546	0.1658	35.2779	98.7376	0.00	0.81	28.63	35.78	0.21	17.74	15.55	0.00	0.00	0.00						98.72
372	15SUV026	2015_7	4_8	7-4_008	stream sediments	chromite	chromite	0.25-0.5	0.1397	0.0112	0.0029	0.0000	13.3752	24.3663	8.6675	0.0000	16.5772	0.2889	35.7117	99.1407	0.00	0.23	31.32	35.61	0.37	17.21	14.37	0.00	0.00	0.00						99.11
373	15SUV050	2015_7	5_1	7-5_001	stream sediments	chromite	chromite	0.25-0.5	0.4867	0.0083	0.0000	0.0000	16.8517	24.4509	8.5967	0.0021	13.6706	0.1800	34.3142	98.5612	0.00	0.81	25.83	35.74	0.23	21.68	14.26	0.00	0.00	0.00						98.55
374	15SUV050	2015_7	5_2	7-5_002	stream sediments	chromite	chromite	0.25-0.5	0.3699	0.0000	0.0024	0.0000	20.6505	29.1267	5.6713	0.0071	9.8766	0.2292	32.1961	98.1298	0.00	0.62	18.66	42.57	0.30	26.57	9.40	0.01	0.00	0.00						98.13
375	15SUV050	2015_7	5_3	7-5_003	stream sediments	chromite	chromite	0.25-0.5	0.1493	0.0000	0.0042	0.0000	14.9221	28.4227	8.1479	0.0038	12.5807	0.1686	34.0996	98.4989	0.00	0.25	23.77	41.54	0.22	19.20	13.51	0.00	0.00	0.00						98.49
376	15SUV051	2015_7	5_4	7-5_004	stream sediments	chromite	chromite	0.25-0.5	0.1514	0.0025	0.0000	0.0000	11.0788	24.9690	10.2376	0.0044	16.3074	0.1372	36.0874	98.9758	0.00	0.25	30.81	36.49	0.18	14.25	16.98	0.00	0.00	0.00						98.96
377	15SUV051	2015_7	5_5	7-5_005	stream sediments	chromite	chromite	0.25-0.5	1.2950	0.0144	0.0031	0.0000	15.9953	28.7733	8.6460	0.0000	9.8194	0.1823	33.2133	97.9421	0.00	2.16	18.55	42.05	0.24	20.58	14.34	0.00	0.00	0.00						97.92
378	15SUV051	2015_7	5_6	7-5_006	stream sediments	chromite	chromite	0.25-0.5	0.3214	0.0060	0.0019	0.0000	18.9719	27.4246	6.7537	0.0033	11.6093	0.1908	33.1402	98.4230	0.00	0.54	21.94	40.08	0.25	24.41	11.20	0.00	0.00	0.00						98.42
379	15SUV054	2015_7	5_7	7-5_007	till	chromite	chromite	0.25-0.5	0.3437	0.0019	0.0007	0.0000	16.0958	30.2931	8.2798	0.0000	9.8506	0.1578	33.0828	98.1061	0.00	0.57	18.61	44.28	0.20	20.71	13.73	0.00	0.00	0.00						98.10
380	15SUV054	2015_7	5_8	7-5_008	till	chromite	chromite	0.25-0.5	1.2226	0.0218	0.0000	0.0000	18.1355	28.3233	8.3592	0.0022	9.0853	0.1754	32.7295	98.0549	0.00	2.04	17.17	41.40	0.23	23.33	13.86	0.00	0.00	0.00						98.03
382	16SUV023	2016_1	1_1_2	222	Beaufort Fm	GO	garnet	0.25-0.5	0.4113	0.0312	0.0037	19.5851	6.5500	2.3342	11.9732	3.8279	10.0192	0.2324	44.4308	99.9697	41.90	0.69	19.88	3.41	0.30	8.43	19.86	5.36	0.04	0.00	0.00	0.02	0.00	0.06	0.03	99.97
383	16SUV023	2016_1	1_1_3	223	Beaufort Fm	GO	garnet	0.25-0.5	0.1461	0.0301	0.0025	19.8596	6.0466	0.5586	12.7679	3.0824	12.0891	0.2164	45.2017	100.0480	42.49	0.24	21.24	0.82	0.28	7.78	21.17	4.31	0.04	0.00	0.00	0.02	0.00	0.02	0.00	100.02
384	16SUV028	2016_1	1_1_4	224	stream sediments	GO	garnet	0.5-1.0	0.0947	0.0165	0.0016	18.5789	16.6202	0.0575	5.9139	4.5115	11.9448	0.4685	42.5075	100.7600	39.75	0.16	22.57	0.08	0.60	21.38	9.81	6.31	0.02	0.00	0.00	0.00	0.00	0.05	0.00	100.74
385	16SUV028	2016_1	1_1_5	225	stream sediments	GO	garnet	0.25-0.5	0.3744	0.0219	0.0015	19.8642	6.3873	0.5880	12.2924	3.7140	12.0557	0.2265	45.3839	100.9580	42.50	0.62	22.78	0.86	0.29	8.22	20.38	5.20	0.03	0.00	0.00	0.00	0.00	0.03	0.00	100.91
386	16SUV015	2016_1	1_1_6	226	stream sediments	GP	garnet	0.25-0.5	0.0497	0.0180	0.0066	19.7933	5.5203	3.9544	12.1538	3.8204	10.2679	0.2840	44.7591	100.6720	42.35	0.08	19.40	5.78	0.37	7.10	20.15	5.35	0.02	0.01	0.00	0.02	0.00	0.04	0.00	100.67
387	16SUV023	2016_1	1_2_1	227	Beaufort Fm	GP	garnet	0.25-0.5	0.0744	0.0259	0.0064	19.4529	5.1280	5.7453	12.3772	3.5449	9.0864	0.2732	44.1065	99.8802	41.62	0.12	17.17	8.40	0.35	6.60	20.53	4.96	0.03	0.01	0.00	0.00	0.00	0.05	0.03	99.87
388	16SUV023	2016_1	1_2_2	228	Beaufort Fm	GP	garnet	0.25-0.5	0.2522	0.0368	0.0032	19.5284	6.1201	4.5459	11.5442	4.3053	9.5790	0.3144	44.2609	100.5540	41.78	0.42	18.10	6.64	0.41	7.87	19.14	6.02	0.05	0.00	0.00	0.00	0.00	0.05	0.05	100.54
389	16SUV023	2016_1	1_2_3	229	Beaufort Fm	GP	garnet	0.25-0.5	0.3641	0.0396	0.0014	19.4963	5.5011	3.3220	11.1311	5.5990	10.2242	0.2924	44.3425	100.3540	41.71	0.61	19.32	4.86	0.38	7.08	18.46	7.83	0.05	0.00	0.00	0.00	0.00	0.05	0.00	100.34
390	16SUV023	2016_1	1_2_4	230	Beaufort Fm	GP	garnet	0.25-0.5	0.1800	0.0244	0.0000	19.2375	5.1485	7.0669	11.5176	4.9537	8.1538	0.2725	43.7108	100.3250	41.16	0.30	15.41	10.33	0.35	6.62	19.10	6.93	0.03	0.00	0.00	0.00	0.00	0.06	0.00	100.29
391	16SUV023	2016_1	1_2_5	231	Beaufort Fm	GP	garnet	0.25-0.5	0.1575	0.0246	0.0034	19.5197	5.1568	5.6851	12.0093	4.1903	9.1370	0.2813	44.3002	100.5590	41.76	0.26	17.26	8.31	0.36	6.63	19.92	5.86	0.03	0.00	0.00	0.02	0.00	0.06	0.05	100.54
392	16SUV023	2016_1	1_2_6	232	Beaufort Fm	GP	garnet	0.25-0.5	0.1965	0.0343	0.0016	19.4217	5.0970	6.1997	12.1572	4.1286	8.7946	0.2999	44.1921	100.5730	41.55	0.33	16.62	9.06	0.39	6.56	20.16	5.78	0.05	0.00	0.00	0.00	0.00	0.04	0.04	100.56
393	16SUV023	2016_1	1_2_7	233	Beaufort Fm	GP	garnet	0.25-0.5	0.0103	0.0055	0.0086	19.6845	6.0125	3.8416	13.6772	1.2725	10.5943	0.3722	45.0009	100.5200	42.11	0.00	20.02	5.61	0.48	7.74	22.68	1.78	0.00	0.01	0.00	0.00	0.00	0.03	0.00	100.46
394	16SUV023	2016_1	1_2_8	234	Beaufort Fm	GP	garnet	0.25-0.5	0.3417	0.0389	0.0165	19.9023	5.6181	1.8600	12.8714	3.5016	10.9823	0.2391	45.1339	100.5590	42.58	0.57	20.75	2.72	0.31	7.23	21.34	4.90	0.05	0.02	0.00	0.00	0.00	0.04	0.03	100.55
395	16SUV023	2016_1	1_2_9	235	Beaufort Fm	GP	garnet	0.25-0.5	0.1476	0.0291	0.0029	19.4607	5.4580	5.8039	11.6102	4.6923	8.9520	0.2570	44.1171	100.5860	41.63	0.25	16.91	8.48	0.33	7.02	19.25	6.57	0.04	0.00	0.00	0.00	0.00	0.05	0.04	100.57
396	16SUV023	2016_1	1_2_10	236	Beaufort Fm	GP	garnet	0.25-0.5	0.0106	0.0066	0.0028	19.2236	5.8397	6.9347	11.4092	4.0503	8.6479	0.3812	43.7350	100.2810	41.13	0.00	16.34	10.14	0.49	7.51	18.92	5.67	0.00	0.00	0.00	0.00	0.00	0.03	0.00	100.23
397	16SUV023	2016_1	1_2_11	237	Beaufort Fm	GP	garnet	0.25-0.5	0.0051	0.0202	0.0070	19.0744	5.8388	7.3079	10.0262	6.0271	8.2249	0.4322	43.2742	100.2890	40.81	0.00	15.54	10.68	0.56	7.51	16.63	8.43	0.03	0.01	0.00	0.02	0.00	0.03	0.04	100.28
398	16SUV023	2016_1	1_2_12	238	Beaufort Fm	GP	garnet	0.25-0.5	0.2759	0.0386	0.0017	19.6103	5.5588	3.8234	12.1777	3.9397	10.0208	0.2951	44.5307	100.3490	41.95	0.46	18.93	5.59	0.38	7.15	20.19	5.51	0.05	0.00	0.00	0.00	0.00	0.06	0.03	100.31
399	16SUV023	2016_1	1_2_13	239	Beaufort Fm	GP	garnet	0.25-0.5	0.1897	0.0166	0.0028	19.2950	4.9632	5.5365	12.0129	4.5908	9.1237	0.2721	44.0710	100.1440	41.28	0.32	17.24	8.09	0.35	6.39	19.92	6.42	0.02	0.00	0.00	0.00	0.00	0.04	0.03	100.10

400	16SUV023	2016_1	1_3_1	240	Beaufort Fm	GP	garnet	0.25-0.5	0.0121	0.0167	0.0015	19.6744	5.6272	3.0914	11.8688	4.2204	10.9736	0.3032	44.8400	100.6830	42.09	0.02	20.73	4.52	0.39	7.24	19.68	5.91	0.02	0.00	0.00	0.00	0.00	0.00	0.04	0.00	100.65
401	16SUV023	2016_1	1_3_2	241	Beaufort Fm	GP	garnet	0.25-0.5	0.2249	0.0327	0.0017	19.1743	5.4437	7.3365	11.2279	5.1056	7.8072	0.2680	43.4514	100.1350	41.02	0.38	14.75	10.72	0.35	7.00	18.62	7.14	0.04	0.00	0.00	0.00	0.00	0.00	0.06	0.05	100.13
402	16SUV023	2016_1	1_3_3	242	Beaufort Fm	GP	garnet	0.25-0.5	0.1260	0.0234	0.0000	19.5032	4.7122	6.4822	11.9379	4.4069	8.6819	0.2644	44.1144	100.3240	41.72	0.21	16.40	9.47	0.34	6.06	19.80	6.17	0.03	0.00	0.00	0.00	0.00	0.00	0.06	0.03	100.30
403	16SUV023	2016_1	1_3_4	243	Beaufort Fm	GP	garnet	0.25-0.5	0.1764	0.0330	0.0047	19.3374	5.3483	6.1475	11.6082	4.4638	8.7673	0.3194	43.8951	100.1650	41.37	0.29	16.57	8.99	0.41	6.88	19.25	6.25	0.04	0.00	0.00	0.00	0.00	0.00	0.06	0.05	100.16
404	16SUV023	2016_1	1_3_5	244	Beaufort Fm	GP	garnet	0.25-0.5	0.0801	0.0131	0.0078	19.7110	5.8188	2.8152	12.3328	3.5379	10.9677	0.2888	44.8881	100.5170	42.17	0.13	20.72	4.11	0.37	7.49	20.45	4.95	0.02	0.01	0.00	0.00	0.00	0.00	0.05	0.03	100.50
405	16SUV025	2016_1	1_3_6	245	stream sediments	GP	garnet	0.25-0.5	0.0000	0.0086	0.0004	19.6205	5.2996	6.5367	12.6313	2.7436	8.7965	0.3099	44.2514	100.2560	41.98	0.00	16.62	9.55	0.40	6.82	20.95	3.84	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	100.23
406	16SUV025	2016_1	1_3_7	246	stream sediments	GP	garnet	0.25-0.5	0.0273	0.0155	0.0035	19.5449	5.8068	3.1066	11.7069	4.2905	10.8846	0.3438	44.6145	100.3770	41.81	0.05	20.57	4.54	0.44	7.47	19.41	6.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	100.34
407	16SUV028_rpt	2016_1	1_3_8_r	247	stream sediments	GP	garnet	0.5-1.0	0.2059	0.0276	0.0036	19.3921	5.3044	6.0947	11.6392	4.6967	8.6741	0.2680	43.9466	100.3140	41.49	0.34	16.39	8.91	0.35	6.82	19.30	6.57	0.04	0.00	0.00	0.00	0.00	0.00	0.05	0.04	100.30
408	16SUV028	2016_1	1_3_8	248	stream sediments	GP	garnet	0.5-1.0	0.2224	0.0296	0.0046	19.4472	5.3164	6.1680	11.6639	4.6569	8.6694	0.2835	44.0547	100.5740	41.60	0.37	16.38	9.02	0.37	6.84	19.34	6.52	0.04	0.00	0.00	0.00	0.00	0.00	0.06	0.03	100.56
409	16SUV028	2016_1	1_3_9	249	stream sediments	GP	garnet	0.25-0.5	0.0030	0.0059	0.0046	19.7447	5.9224	3.4676	12.3012	3.2033	10.7369	0.3800	44.8678	100.6900	42.24	0.00	20.29	5.07	0.49	7.62	20.40	4.48	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	100.65
410	16SUV030	2016_1	1_3_10	250	stream sediments	GP	garnet	0.5-1.0	0.2092	0.0313	0.0032	19.7302	5.2668	4.2818	12.1170	4.0094	9.9724	0.2798	44.6818	100.6370	42.21	0.35	18.84	6.26	0.36	6.78	20.09	5.61	0.04	0.00	0.00	0.00	0.00	0.00	0.04	0.04	100.62
411	16SUV027	2016_1	1_3_11	251	stream sediments	andradite	andradite	0.5-1.0	1.5629	0.0213	0.0023	16.3010	17.1834	0.0041	0.2217	23.4476	2.5169	0.1217	36.4061	97.9258	34.87	2.61	4.76	0.00	0.16	22.11	0.37	32.81	0.03	0.00	0.00	0.00	0.00	0.00	0.16	0.04	97.90
412	16SUV027	2016_1	1_3_12	252	stream sediments	andradite	andradite	0.25-0.5	3.0185	0.0447	0.0040	16.1952	14.9484	0.0140	0.2218	23.9409	2.7257	0.0953	37.0913	98.6249	34.65	5.04	5.15	0.00	0.12	19.23	0.37	33.50	0.06	0.00	0.00	0.00	0.00	0.00	0.42	0.03	98.57
413	16SUV028	2016_1	1_3_13	253	stream sediments	andradite	andradite	0.25-0.5	0.0032	0.0190	0.0066	16.5970	21.8584	0.0061	0.0482	24.0323	0.0000	0.0127	34.8347	97.4342	35.51	0.00	0.00	0.00	0.02	28.12	0.08	33.63	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.04	97.42
414	16SUV023	2016_1	1_4_1	254	Beaufort Fm	almandine	garnet	0.25-0.5	0.0954	0.0016	0.0040	18.0544	20.7730	0.0098	3.0335	5.2647	11.4273	0.7784	41.1085	100.5950	38.62	0.16	21.59	0.00	1.01	26.72	5.03	7.37	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	100.54
415	16SUV023	2016_1	1_4_2	255	Beaufort Fm	almandine	garnet	0.25-0.5	0.0248	0.0026	0.0047	17.8851	21.8073	0.0243	2.6355	5.0206	11.3143	1.0102	40.7841	100.5700	38.26	0.04	21.38	0.04	1.30	28.06	4.37	7.02	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	100.54
416	16SUV028	2016_1	1_4_3	256	stream sediments	almandine	garnet	0.5-1.0	0.0346	0.0024	0.0017	18.5894	19.1640	0.0161	7.0218	0.8910	11.9047	0.2821	42.3719	100.3240	39.77	0.06	22.49	0.00	0.36	24.65	11.64	1.25	0.00	0.00	0.00	0.00	0.02	0.03	0.00	0.00	100.28
417	16SUV028	2016_1	1_4_4	257	stream sediments	almandine	garnet	0.5-1.0	0.0095	0.0009	0.0062	17.8155	25.1175	0.0137	2.1261	3.4504	11.2273	0.5678	40.4489	100.8110	38.11	0.00	21.21	0.00	0.73	32.31	3.53	4.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.73
418	16SUV028	2016_1	1_4_5	258	stream sediments	almandine	garnet	0.5-1.0	0.0773	0.0293	0.0017	18.3983	17.3772	0.0000	3.7782	7.1208	11.4227	0.5770	41.6895	100.5170	39.36	0.13	21.58	0.00	0.74	22.36	6.27	9.96	0.04	0.00	0.00	0.00	0.00	0.00	0.03	0.03	100.50
419	16SUV028	2016_1	1_4_6	259	stream sediments	almandine	garnet	0.25-0.5	0.0263	0.0148	0.0050	18.5306	17.9775	0.0421	5.4388	4.0878	11.8351	0.3562	42.1851	100.5610	39.64	0.04	22.36	0.06	0.46	23.13	9.02	5.72	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	100.49
420	16SUV014	2016_1	1_4_7	260	stream sediments	forsterite	olivine	0.25-0.5	0.0027	0.0135	0.0030	17.6015	21.8293	0.0000	20.3680	0.2171	0.0145	0.3109	39.9452	100.4220	37.66	0.00	0.03	0.00	0.40	28.08	33.78	0.30	0.02	0.00	0.00	0.12	0.03	0.00	0.00	0.00	100.41
421	16SUV028	2016_1	1_4_8	261	stream sediments	forsterite	olivine	0.25-0.5	0.0071	0.0044	0.0055	18.8214	10.1583	0.0000	27.7356	0.1499	0.0201	0.1521	42.8099	100.0950	40.27	0.00	0.04	0.00	0.20	13.07	45.99	0.21	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	100.06
422	16SUV014	2016_1	1_5_1	262	stream sediments	fayalite	olivine	0.25-0.5	0.0086	0.0016	0.0000	16.7562	29.8793	0.0000	15.2845	0.1444	0.0033	0.4055	37.9290	100.5190	35.85	0.00	0.00	0.00	0.52	38.44	25.35	0.20	0.00	0.00	0.00	0.10	0.03	0.00	0.00	0.00	100.49
423	16SUV014	2016_1	1_5_2	263	stream sediments	fayalite	olivine	0.25-0.5	0.0210	0.0071	0.0000	16.3693	32.6369	0.0042	13.6614	0.1612	0.0106	0.4875	37.2587	100.6820	35.02	0.04	0.02	0.00	0.63	41.99	22.65	0.23	0.00	0.00	0.00	0.03	0.03	0.00	0.00	0.03	100.65
424	16SUV014	2016_1	1_5_3	264	stream sediments	fayalite	olivine	0.25-0.5	0.0155	0.0118	0.0000	16.8354	28.0485	0.0019	16.3882	0.1970	0.0137	0.4160	38.2719	100.3040	36.02	0.03	0.03	0.00	0.54	36.08	27.18	0.28	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	100.23
425	16SUV014	2016_1	1_5_4	265	stream sediments	fayalite	olivine	0.25-0.5	0.0098	0.0049	0.0000	16.6955	30.1157	0.0030	15.2596	0.1607	0.0018	0.4330	37.9221	100.6770	35.72	0.00	0.00	0.00	0.56	38.74	25.31	0.22	0.00	0.00	0.00	0.04	0.03	0.00	0.00	0.00	100.63
426	16SUV014	2016_1	1_5_5	266	stream sediments	fayalite	olivine	0.25-0.5	0.0120	0.0089	0.0000	16.6600	29.8977	0.0059	15.2607	0.1927	0.0073	0.4483	37.8531	100.4200	35.64	0.00	0.00	0.00	0.58	38.46	25.31	0.27	0.00	0.00	0.00	0.05	0.03	0.00	0.00	0.03	100.37
427	16SUV016	2016_1	1_5_6	267	stream sediments	fayalite	olivine	0.25-0.5	0.0061	0.0048	0.0000	17.1326	26.1223	0.0062	17.7342	0.2114	0.0109	0.3564	38.9268	100.6280	36.65	0.00	0.02	0.00	0.46	33.61	29.41	0.30	0.00	0.00	0.00	0.09	0.04	0.00	0.00	0.02	100.60
428	16SUV016	2016_1	1_5_7	268	stream sediments	fayalite	olivine	0.25-0.5	0.0022	0.0000	0.0034	17.6090	21.0048	0.0027	20.8555	0.2143	0.0050	0.3074	40.0281	100.1480	37.67	0.00	0.00	0.00	0.40	27.02	34.58	0.30	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	100.10
429	16SUV016	2016_1	1_5_8	269	stream sediments	fayalite	olivine	0.25-0.5	0.0010	0.0000	0.0036	16.6342	30.4647	0.0018	15.0727	0.1772	0.0031	0.4353	37.8328	100.7250	35.59	0.00	0.00	0.00	0.56	39.19	25.00	0.25	0.00	0.00	0.00	0.08	0.04	0.00	0.00	0.00	100.70
430	16SUV016	2016_1	1_5_9	270	stream sediments	fayalite	olivine	0.25-0.5	0.0133	0.0062	0.0000	17.1073	26.1242	0.0086	17.6279	0.2041	0.0027	0.3856	38.8230	100.4010	36.60	0.02	0.00	0.00	0.50	33.61	29.23	0.29	0.00	0.00	0.00	0.08	0.03	0.00	0.00	0.00	100.35
431	16SUV016	2016_1	1_5_10	271	stream sediments	fayalite	olivine	0.25-0.5	0.0179	0.0121	0.0033	17.2205	25.1662	0.0045	18.3425	0.0930	0.0052	0.3052	39.1036	100.4350	36.84	0.03	0.00	0.00	0.39	32.38	30.42	0.13	0.00	0.00	0.00	0.14	0.03	0.00	0.00	0.00	100.36
432	16SUV016	2016_1	1_5_11	272	stream sediments	fayalite	olivine	0.25-0.5	0.0100	0.0055	0.0020	16.9638	26.9969	0.0000	17.1728	0.2055	0.0080	0.3759	38.6049	100.4290	36.29	0.00	0.00	0.00	0.49	34.73	28.48	0.29	0.00	0.00	0.00	0.07	0.03	0.00	0.00	0.00	100.37
433	16SUV016	2016_1	1_5_12	273	stream sediments	fayalite	olivine	0.25-0.5	0.0128	0.0333	0.0030	16.7057	29.7317	0.0000	15.4438	0.1698	0.0120	0.4245	37.9729	100.5960	35.74	0.02	0.02	0.00	0.55	38.25	25.61	0.24	0.04	0.00	0.00	0.05	0.03	0.00	0.00	0.00	100.56
434	16SUV019	2016_1	1_6_1	274	till	diopside	clinopyroxene	0.25-0.5	0.0183	0.0349	0.0044	25.8898	0.5460	0.0000	10.7406	18.5164	0.3234	0.0215	44.4498	100.5810	55.39	0.03	0.61	0.00	0.03	0.70	17.81	25.91	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.53
435	16SUV019	2016_1	1_6_2	275	till	diopside	clinopyroxene	0.25-0.5	0.0156	0.1181	0.0020	25.5267	2.2233	0.0207	9.9643	18.2707	0.2108	0.0546	43.8482	100.2720	54.61	0.03	0.40	0.03	0.07	2.86	16.52	25.56	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.24
436	16SUV028	2016_1	1_6_3	276	stream sediments	diopside	garnet	0.25-0.5	0.0378	0.0031	0.0052	17.9433	10.0217	0.0000	0.2931	25.5783	6.4243	0.0999	39.5355	100.0240	38.39	0.06	12.14	0.00	0.13	12.89	0.49	35.79	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.03	99.98
437	16SUV024	2016_1	1_6_4	277	bedrock	gahnite	gahnite	0.25-0.5	0.0000	0.0000	0.0019	0.0000	9.2433	0.0000	2.5928	0.0000	31.6472	0.3431	37.5630	101.6350	0.00	0.00	59.80	0.00	0.44	11.89	4.30	0.00	0.00	0.00	0.00	0.00	0.00	25.18	0.00	0.00	101.61
438	16SUV024	2016_1	1_6_5	278	bedrock	gahnite	gahnite	0.25-0.5	0.0078	0.0000	0.0030	0.0023	5.0713	0.0208	2.1828	0.0000	31.0166	0.2109	36.9614	101.6390	0.00	0.00	58.61	0.00	0.27	6.52	3.62	0.00	0.00	0.00	0.00	0.00	0.00	32.56	0.00	0.00	101.59
439	16SUV024	2016_1	1_6_6	279	bedrock	gahnite	gahnite	0.25-0.5	0.0000	0.0000	0.0010	0.0002	6.0382	0.0615	1.5737	0.0043	30.6179	0.2337	36.6130	101.6780	0.00	0.00	57.85	0.09	0.30	7.77	2.61	0.00	0.00	0.00	0.00	0.00	0.00	32.91	0.11	0.00	101.64
440	16SUV024	2016_1	1_6_7	280	bedrock	gahnite	gahnite	0.25-0.5	0.0000	0.0000	0.0006	0.0056	12.7710	0.0058	2.3960	0.0000	31.3015	0.0272	37.2961	100.9440	0.00	0.00	59.14	0.00	0.04	16.43	3.97	0.00	0.00	0.00	0.00	0.00	0.03	21.28	0.03	0.00	100.92
441	16SUV024	2016_1	1_6_8	281	bedrock	gahnite	gahnite	0.25-0.5	0.0078	0.0000	0.0082	0.0162	13.1480	0.0707	1.6378	0.0061	28.4834	0.1010	34.4812	95.1071	0.03	0.00	53.82	0.10	0.13	16.91	2.72	0.01	0.00	0.01	0.00	0.00	0.00	21.30	0.03	0.00	95.06
442	16SUV013	2016_1	1_6_9	282	glaciofluvial	spinel	spinel	0.25-0.5	0.0033	0.0055	0.0022	0.0029	5.3850	0.0460	14.5352	0.0021	36.3311	0.0951	43.5088	100.0030	0.00	0.00	68.65	0.07	0.12	6.93	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	99.96
443	16SUV023	2016_1	1_6_10	283	Beaufort Fm	spinel	spinel	0.25-0.5	0.0300	0.0019	0.0000	0.0048	3.3398	0.0279	15.5814	0.0023	36.9301	0.0720	44.1896	100.4210	0.00	0.05	69.78	0.04	0.09	4.30	25.84	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.03	0.00	100.40
444	16SUV028	2016_1	1_6_11	284	stream sediments	spinel	spinel	0.25-0.5	0.0241	0.0034	0.0013	0.0000	2.6518	0.0205	15.6799	0.0086	37.2559	0.0195	44.2818	100.0050	0.00	0.04	70.39	0.03	0.03	3.41	26.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.04	0.00	99.98
446	16SUV018	2016_1	1_7_1	286	glaciofluvial	hercynite	chlorite?	0.25-0.5	0.0976	1.3523	0.0321	15.9886	9.7218	0.0000	1.2210	0.0875	18.1124	0.1316	38.5744	85.3862	34.21	0.16	34.22	0.00	0.17	12.51	2.02	0.12	1.82	0.04	0.00	0.00	0.00	0.05	0.00	0.06	85.39
447	16SUV018	2016_1	1_7_2	287	glaciofluvial	hercynite	gahnite	0.25-0.5	0.0059	0.0000	0.0014	0.0022	12.4727	0.0000	4.7491	0.0000	32.6121	0.1250	38.7578	101.0050	0.00	0.00	61.62	0.00	0.16	16.05	7.88	0.00	0.00	0.00	0.00	0.00	0.00	15.28	0.00	0.00	100.98
448	16SUV018	2016_1	1_7_3	288	glaciofluvial	hercynite	spinel/hercynite	0.25-0.5	0.3216	0.0038	0.0016	0.0411	16.6804	0.0294	11.0936	0.0000	31.3869	0.1098	40.3779	100.2450	0.09	0.54	59.31	0.04	0.14	21.46	18.40	0.00	0.00	0.00	0.00	0.00	0.10	0.07	0.08	0.00	100.23
449	16SUV018	2016_1	1_7_4	289	glaciofluvial	hercynite	spinel/hercynite	0.25-0.5	0.1703	0.0000	0.0015	0.0125	22.3522	0.0072	7.4482	0.0000	30.7619	0.1797	38.9288	100.0880	0.03	0.28	58.12	0.00	0.23	28.76	12.35	0.00	0.00	0.00	0.00	0.00	0.02	0.17	0.08	0.00	100.05
450	16SUV023	2016_1	1_7_5	290	Beaufort Fm	hercynite	andradite	0.25-0.5	1.8923	0.0484	0.0019	16.1133	19.1479	0.0017	0.2639	23.4338	0.7523	0.1501	35.4262	97.3453	34.47	3.16	1.42	0.00	0.19	24.63	0.44	32.79	0.07	0.00	0.05	0.00	0.00	0.00	0.08	0.03	97.32
451	16SUV023	2016_1	1_7_6	291	Beaufort Fm	hercynite	spinel/hercynite	0.25-0.5	0.1060	0.0063	0.0033	0.0554	14.9144	0.0024	10.9570	0.0061	32.6855	0.0984	40.8235	99.9759	0.12	0.18	61.76	0.00	0.13	19.19	18.17	0.01	0.00	0.00	0.00	0.00	0.24	0.09	0.07	0.00	99.95
452	16SUV023	2016_1	1_7_7	292	Beaufort Fm	hercynite	spinel/hercynite	0.25-0.5	0.2017	0.0000	0.0000	0.0250	17.8686	0.1218	9.5952	0.0013	31.9917	0.1248	40.2158	100.3290	0.05	0.34	60.45	0.18	0.16	22.99	15.91	0.00	0.00	0.00	0.00	0.00	0.05	0.09	0.08	0.00	100.31
453	16SUV023	2016_1	1_7_8	293	Beaufort Fm	hercynite	spinel/hercynite	0.25-0.5	0.5553	0.0000	0.0007	0.0600	17.8732	0.0054	10.3845	0.0000	30.7066	0.1076	39.8458	99.8379	0.13	0.93	58.02	0.00	0.14	22.99	17.22	0.00	0.00	0.00	0.00	0.00	0.11	0.15	0.13	0.00	99.81
454	16SUV027	2016_1	1_7_9	294	stream sediments	hercynite	spinel/hercynite	0.5-1.0	0.4116	0.0013	0.0000	0.0379	16.2643	0.3460	10.9067	0.0000	31.2084	0.0928	40.1885	99.7170	0.08	0.69	58.97	0.51	0.12	20.92	18.09	0.00	0.00	0.00	0.00	0.00	0.13	0.10	0.12	0.00	99.72
455	16SUV027	2016_1	1_7_10	295	stream sediments	hercynite	spinel/hercynite	0.25-0.5	0.1923	0.0017	0.0000	0.0318	15.0893	0.7279	11.3066	0.0042	31.7712	0.1142	40.6307	100.1070	0.07	0.32	60.03	1.06	0.15	19.41	18.75	0.00	0.00	0.00	0.00	0.00	0.15	0.11	0.05	0.00	100.10
456	16SUV014	2016_1	1_8_1	296	stream sediments	ilmenite, crustal	ilmenite	0.5-1.0	28.9545	0.0000	0.0016	0.0179	37.5856	0.0000	0.3006	0.0032	0.0286	0.3718	30.5282	97.9405	0.04	48.30	0.05	0.00	0.48	48.35	0.50	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.12	0.00	97.91
457	16SUV014	2016_1	1_8_2	297	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.0839	0.0000	0.0007	0.0050	37.1603	0.0000	0.1651	0.0008	0.0157	0.6685	30.4955	97.8086	0.00	48.51	0.03	0.00	0.86	47.81	0.27	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.22	0.00	97.77
458	16SUV014	2016_1	1_8_3	298	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.1381	0.0037	0.0029	0.0017	37.5394	0.0000	0.1686	0.0002	0.0326	0.4064	30.6265	98.2221	0.00	48.60	0.06	0.00	0.52	48.29	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	98.17
459	16SUV014	2016_1	1_8_4	299	stream sediments	ilmenite, crustal	pseudorutile	0.25-0.5	34.2457	0.0224	0.0066	0.2800	23.5801	0.0835	1.0770	0.0109	0.2794	0.5358	31.3812	92.0421	0.60	57.12	0.53	0.12	0.69	30.34	1.79	0.02	0.03	0.01	0.00	0.00	0.00	0.00	0.74	0.04	92.01
460	16SUV014	2016_1	1_8_5	300	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.0937	0.0222	0.0029	0.0000	37.4162	0.0230	0.1830	0.0040	0.0357	0.3328	30.4953	97.7660	0.00	48.53	0.07	0.03	0.43	48.14	0.30	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.19	0.00	97.72
461	16SUV014	2016_1	1_8_6	301	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.2458	0.0000	0.0000	0.0000	37.6106	0.0000	0.2177	0.0002	0.0202	0.3976	30.6822	98.3770	0.00	48.78	0.04	0.00	0.51	48.39	0.36	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.22	0.00	98.37
462	16SUV014	2016_1	1_8_7	302	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.0887	0.0000	0.0015	0.0000	37.5055	0.0028	0.1145	0.0000	0.0175	0.5703	30.6622	98.4506	0.00	48.52	0.03	0.00	0.74	48.25	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00	98.42
463	16SUV014	2016_1	1_8_8	303	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.4173	0.0058	0.0003	0.0004	37.1675	0.0105	0.2220	0.0003	0.0070	0.7292	30.7360	98.4342	0.00	49.07	0.00	0.00	0.94	47.82	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	98.34
464	16SUV014	2016_1	1_8_9	304	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.1124	0.0096	0.0000	0.0011	37.1433	0.0148	0.1371	0.0043	0.0169	0.7288	30.6248	98.2287	0.00	48.56	0.03	0.00	0.94	47.78	0.23	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.59	0.00	98.19
465	16SUV014	2016_1	1_8_10	305	stream sediments	ilmenite, crustal	pseudorutile	0.25-0.5	34.6003	0.0152	0.0275	0.1836	24.0875	0.0184	0.2762	0.0463	0.1547	0.4762	30.8175	90.8583	0.39	57.72	0.29	0.00	0.61	30.99	0.46	0.06	0.00	0.03	0.06	0.00	0.00	0.00	0.11	0.08	90.80
466	16SUV014	2016_1	1_8_11	306	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	28.0892	0.0154	0.0000	0.0089	38.5532	0.0052	0.1159	0.0055	0.0081	0.6144	30.1321	97.6409	0.00	46.85	0.00	0.00	0.79	49.60	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	97.54
467	16SUV014	2016_1	1_8_12	307	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	30.5530	0.0021	0.0000	0.0047	35.5086	0.0000	0.1694	0.0000	0.0020	1.2702	31.1383	98.7884	0.00	50.96	0.00	0.00	1.64	45.68	0.28	0.00	0.00	0.00	0.00	0.07	0.00	0.04	0.06	0.03	98.77
468	16SUV023	2016_1	1_8_13	308	Beaufort Fm	ilmenite, crustal	ilmenite	0.25-0.5	28.9887	0.0154	0.0019	0.0002	36.0736	0.0052	0.1786	0.0000	0.0047	2.4011	30.5677	98.3215	0.00	48.35	0.00	0.00	3.10	46.41	0.30	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.07	0.00	98.27
469	16SUV023	2016_1	1_8_14	309	Beaufort Fm	ilmenite, crustal	pseudorutile	0.25-0.5	36.4837	0.0229	0.0047	0.1640	20.1513	0.1585	1.8016	0.0311	0.1772	0.3213	32.1588	92.0938	0.35	60.86	0.33	0.23	0.41	25.92	2.99	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.85	0.00	92.02
471	16SUV027	2016_1	1_9_1	427	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.9489	0.0000	0.0000	0.0163	35.9923	0.0099	0.3296	0.0042	0.0052	0.4393	30.7742	97.7095	0.03	49.96	0.00	0.00	0.57	46.30	0.55	0.00	0.00	0.00	0.00	0.04	0.03	0.03	0.16	0.00	97.67
472	16SUV027	2016_1	1_9_2	311	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.1868	0.0000	0.0000	0.0070	36.9129	0.0182	0.1913	0.0000	0.0204	0.7305	30.6114	98.0401	0.00	48.69	0.04	0.00	0.94	47.49	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	97.93
473	16SUV027	2016_1	1_9_3	312	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.6969	0.0000	0.0000	0.0037	35.2888	0.0628	1.2725	0.0043	0.0058	0.3077	31.0509	97.9903	0.00	49.54	0.00	0.09	0.40	45.40	2.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	97.91
474	16SUV027	2016_1	1_9_4	313	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.3356	0.0000	0.0000	0.0110	37.7048	0.0000	0.1838	0.0024	0.0152	0.4419	30.7856	98.7327	0.02	48.93	0.03	0.00	0.57	48.51	0.30	0.00	0.00	0.00	0.00	0.13	0.00	0.04	0.19	0.00	98.73
475	16SUV027	2016_1	1_9_5	314	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.1096	0.0000	0.0000	0.0043	37.4894	0.0071	0.3131	0.0018	0.0193	0.3371	30.5969	98.0557	0.00	48.56	0.04	0.00	0.44	48.23	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	98.00
476	16SUV027	2016_1	1_9_6	315	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	25.0751	0.0044	0.0000	0.0000	37.1486	0.0000	3.0641	0.0065	0.2150	0.9101	29.9695	96.6183	0.00	41.83	0.41	0.00	1.18	47.79	5.08	0.01	0.00	0.00	0.00	0.13	0.00	0.05	0.14	0.00	96.60
477	16SUV027	2016_1	1_9_7	316	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	28.0086	0.0000	0.0009	0.0010	38.5295	0.0488	0.0691	0.0000	0.0413	0.7008	30.1506	97.7398	0.00	46.72	0.08	0.07	0.90	49.57	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	97.70
478	16SUV027	2016_1	1_9_8	317	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.0767	0.0000	0.0035	0.0014	37.8076	0.0117	0.1120	0.0048	0.0127	0.4061	30.5577	98.1911	0.00	48.50	0.02	0.00	0.52	48.64	0.19	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.20	0.00	98.14
479	16SUV027	2016_1	1_9_9	318	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	28.8397	0.0088	0.0047	0.0140	30.4194	0.2799	5.3993	0.0125	0.2092	0.2202	32.0999	97.8763	0.03	48.11	0.40	0.41	0.28	39.13	8.95	0.02	0.00	0.00	0.00	0.18	0.06	0.00	0.28	0.00	97.84
480	16SUV028	2016_1	1_9_10	319	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.1128	0.0017	0.0008	0.0000	37.0318	0.0000	0.1070	0.0059	0.0173	0.7797	30.6212	98.2082	0.00	48.56	0.03	0.00	1.01	47.64	0.18	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.00	98.16
481	16SUV028	2016_1	1_9_11	320	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.4000	0.0000	0.0000	0.0000	37.3879	0.0030	0.2020	0.0010	0.0157	0.3489	30.6914	98.2310	0.00	49.04	0.03	0.00	0.45	48.10	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	98.16
482	16SUV028	2016_1	1_9_12	321	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	28.4913	0.0034	0.0051	0.0039	37.9841	0.0303	0.3852	0.0000	0.0181	0.3924	30.4241	97.9753	0.00	47.53	0.03	0.04	0.51	48.87	0.64	0.00	0.00	0.00	0.00	0.07	0.00	0.04	0.22	0.00	97.94
483	16SUV028	2016_1	1_9_13	322	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.2069	0.0000	0.0000	0.0028	37.2976	0.0038	0.4834	0.0009	0.0172	0.7618	30.8054	98.6954	0.00	48.72	0.03	0.00	0.98	47.98	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.09	0.00	98.63
484	16SUV028	2016_1	1_9_14	323	stream sediments	ilmenite, crustal	pseudorutile	0.25-0.5	35.8486	0.0167	0.0361	0.0647	23.1594	0.0175	0.2560	0.0130	0.0685	0.2926	31.0901	91.0604	0.14	59.80	0.13	0.00	0.38	29.79	0.42	0.02	0.00	0.00	0.04	0.11	0.00	0.00	0.14	0.00	90.97
485	16SUV013	2016_2	2_1_1	327	glaciofluvial	red rutile	rutile	0.25-0.5	59.2599	0.0000	0.0000	0.0203	0.8172	0.2039	0.0011	0.0001	0.0114	0.0000	40.0390	100.5630	0.04	98.85	0.02	0.30	0.00	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.22	0.00	100.56
486	16SUV013	2016_2	2_1_2	328	glaciofluvial	red rutile	rutile	0.25-0.5	59.9221	0.0109	0.0104	0.0000	0.0365	0.0685	0.0000	0.0000	0.0073	0.0000	40.1642	100.3950	0.00	99.95	0.00	0.10	0.00	0.05	0.00	0.00	0.00	0.00	0.01	0.04	0.02	0.00	0.19	0.00	100.37
487	16SUV013	2016_2	2_1_3	329	glaciofluvial	red rutile	rutile	0.25-0.5	59.9223	0.0144	0.0019	0.0029	0.1354	0.1264	0.0000	0.0029	0.0118	0.0031	40.3004	100.8530	0.00	99.95	0.02	0.18	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.28	0.00	100.81
488	16SUV013	2016_2	2_1_4	330	glaciofluvial	red rutile	rutile	0.25-0.5	59.9462	0.0003	0.0032	0.0008	0.1374	0.0319	0.0000	0.0048	0.0178	0.0000	40.2816	100.7750	0.00	99.99	0.03	0.05	0.00	0.18	0.00	0.01	0.00	0.00	0.00	0.18	0.00	0.00	0.33	0.00	100.77
489	16SUV013	2016_2	2_1_5	331	glaciofluvial	red rutile	rutile	0.25-0.5	60.1490	0.0000	0.0000	0.0053	0.0861	0.0896	0.0000	0.0000	0.0122	0.0000	40.3944	101.0130	0.00	100.33	0.02	0.13	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.34	0.00	101.00
490	16SUV013	2016_2	2_1_6	332	glaciofluvial	red rutile	rutile	0.25-0.5	59.8953	0.0000	0.0016	0.0000	0.0195	0.1608	0.0000	0.0019	0.0125	0.0092	40.2849	100.7660	0.00	99.91	0.02	0.24	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.36	0.00	100.74
491	16SUV013	2016_2	2_1_7	333	glaciofluvial	red rutile	rutile	0.25-0.5	59.9959	0.0103	0.0000	0.0000	0.1151	0.0220	0.0119	0.0037	0.0211	0.0004	40.2920	100.7740	0.00	100.08	0.04	0.00	0.00	0.15	0.02	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.19	0.00	100.71
492	16SUV013	2016_2	2_1_8	334	glaciofluvial	red rutile	rutile	0.25-0.5	59.8368	0.0010	0.0009	0.0000	0.1293	0.1028	0.0000	0.0000	0.0261	0.0059	40.2663	100.7790	0.00	99.81	0.05	0.15	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.21	0.00	100.75
493	16SUV022	2016_2	2_1_9	335	bedrock	red rutile	rutile	0.25-0.5	59.5083	0.0334	0.0138	0.0083	0.1173	0.0466	0.0055	0.0029	0.0253	0.0000	40.1441	100.5400	0.02	99.26	0.05	0.07	0.00	0.15	0.00	0.00	0.00	0.05	0.02	0.54	0.00	0.00	0.37	0.00	100.52
494	16SUV022	2016_2	2_1_10	336	bedrock	red rutile	rutile	0.25-0.5	59.2341	0.0038	0.0051	0.0041	0.0586	0.1428	0.0071	0.0018	0.0000	0.0083	39.9559	100.0350	0.00	98.81	0.00	0.21	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.61	0.00	99.98
495	16SUV022	2016_2	2_1_11	337	bedrock	red rutile	rutile	0.25-0.5	59.4555	0.0046	0.0046	0.0000	0.1965	0.0715	0.0000	0.0028	0.0215	0.0087	40.0614	100.3250	0.00	99.18	0.04	0.10	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.47	0.00	100.29
496	16SUV022	2016_2	2_1_12	338	bedrock	red rutile	rutile	0.25-0.5	59.3532	0.0000	0.0049	0.0008	0.0197	0.1103	0.0000	0.0119	0.0000	0.0023	40.0316	100.2140	0.00	99.00	0.00	0.16	0.00	0.03	0.00	0.02	0.00	0.00	0.00	0.17	0.00	0.00	0.82	0.00	100.20
497	16SUV023	2016_2	2_2_1	339	Beaufort Fm	red rutile	rutile	0.25-0.5	59.8123	0.0194	0.0052	0.0062	0.1810	0.0651	0.0015	0.0051	0.0098	0.0034	40.2095	100.6240	0.00	99.77	0.02	0.10	0.00	0.23	0.00	0.01	0.03	0.00	0.00	0.16	0.00	0.00	0.25	0.00	100.57
498	16SUV023	2016_2	2_2_2	340	Beaufort Fm	red rutile	rutile	0.25-0.5	59.6627	0.0007	0.0027	0.0043	0.0364	0.3189	0.0000	0.0016	0.0054	0.0059	40.2026	100.6240	0.00	99.52	0.00	0.47	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.33	0.00	100.58
499	16SUV023	2016_2	2_2_3	341	Beaufort Fm	red rutile	rutile	0.25-0.5	59.4771	0.0145	0.0025	0.0082	0.2784	0.0804	0.0000	0.0000	0.0239	0.0004	40.1017	100.4710	0.02	99.21	0.05	0.12	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.32	0.00	100.43

500	16SUV023	2016_2	2_2_4	342	Beaufort Fm	red rutile	rutile	0.25-0.5	59.5313	0.0066	0.0028	0.0027	0.2481	0.0552	0.0004	0.0040	0.0193	0.0031	40.1099	100.4670	0.00	99.30	0.04	0.08	0.00	0.32	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.40	0.00	100.43
501	16SUV023	2016_2	2_2_5	343	Beaufort Fm	red rutile	rutile	0.25-0.5	59.8564	0.0000	0.0029	0.0010	0.1445	0.0535	0.0000	0.0701	0.0105	0.0038	40.2827	100.8320	0.00	99.84	0.02	0.08	0.00	0.19	0.00	0.10	0.00	0.00	0.15	0.00	0.00	0.43	0.00	100.81
502	16SUV024	2016_2	2_2_6	344	bedrock	red rutile	rutile	0.25-0.5	58.9205	0.0015	0.0059	0.0000	0.1237	0.8629	0.0000	0.0046	0.0005	0.0000	39.9536	100.2160	0.00	98.28	0.00	1.26	0.00	0.16	0.00	0.00	0.00	0.01	0.30	0.00	0.00	0.20	0.00	100.20
503	16SUV024	2016_2	2_2_7	345	bedrock	red rutile	rutile	0.25-0.5	59.4977	0.0060	0.0022	0.0011	0.1292	0.4707	0.0000	0.0024	0.0089	0.0026	40.0919	100.3760	0.00	99.25	0.02	0.69	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	100.33
504	16SUV024	2016_2	2_2_8	346	bedrock	red rutile	rutile	0.25-0.5	59.9246	0.0111	0.0050	0.0046	0.0238	0.3147	0.0000	0.0008	0.0000	0.0000	40.3176	100.8690	0.00	99.96	0.00	0.46	0.00	0.03	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.26	0.00	100.84
505	16SUV024	2016_2	2_2_9	347	bedrock	red rutile	rutile	0.25-0.5	59.4186	0.0094	0.0000	0.0034	0.1003	0.1849	0.0067	0.0031	0.0152	0.0001	39.9635	99.9836	0.00	99.11	0.03	0.27	0.00	0.13	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.30	0.00	99.95
506	16SUV024	2016_2	2_2_10	348	bedrock	red rutile	rutile	0.25-0.5	59.6001	0.0064	0.0031	0.0000	0.2540	0.0000	0.0065	0.0040	0.0067	0.0000	39.9748	100.0040	0.00	99.42	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.11	0.00	99.94
507	16SUV013	2016_2	2_3_1	127	glaciofluvial	chromite	chromite	0.25-0.5	0.0531	0.0000	0.0023	0.0000	15.5729	34.7047	6.1719	0.0036	9.7128	0.1587	33.3619	100.0780	0.00	0.09	18.35	50.72	0.20	20.03	10.23	0.00	0.00	0.00	0.00	0.02	0.32	0.07	0.00	100.05
508	16SUV013	2016_2	2_3_2	128	glaciofluvial	chromite	chromite	0.25-0.5	0.9232	0.0000	0.0022	0.0000	14.4680	26.2809	9.6712	0.0033	12.6113	0.1193	34.6306	99.0482	0.00	1.54	23.83	38.41	0.15	18.61	16.04	0.00	0.00	0.00	0.00	0.19	0.07	0.19	0.00	99.04
509	16SUV014	2016_2	2_3_3	129	stream sediments	chromite	chromite	0.25-0.5	0.9819	0.0000	0.0000	0.0000	13.8766	35.3843	8.7407	0.0000	6.8459	0.1487	32.9446	99.2069	0.00	1.64	12.94	51.72	0.19	17.85	14.49	0.00	0.00	0.00	0.00	0.16	0.08	0.14	0.00	99.21
510	16SUV014	2016_2	2_3_4	130	stream sediments	chromite	chromite	0.25-0.5	2.0329	0.0123	0.0010	0.0000	20.0272	32.0508	8.9028	0.0032	3.5871	0.1630	31.0852	98.1564	0.00	3.39	6.78	46.84	0.21	25.76	14.76	0.00	0.00	0.00	0.00	0.25	0.04	0.09	0.00	98.13
511	16SUV018	2016_2	2_3_6	131	glaciofluvial	chromite	chromite	0.25-0.5	0.1168	0.0000	0.0053	0.0000	11.4149	31.7378	9.4049	0.0060	11.7176	0.1356	34.7613	99.6017	0.00	0.19	22.14	46.39	0.18	14.69	15.60	0.01	0.00	0.00	0.00	0.22	0.04	0.10	0.00	99.55
512	16SUV018	2016_2	2_3_8	132	glaciofluvial	chromite	chromite	0.25-0.5	0.3180	0.0076	0.0000	0.0000	14.0824	25.3860	8.7754	0.0009	14.8891	0.1447	35.1428	99.0841	0.00	0.53	28.13	37.10	0.19	18.12	14.55	0.00	0.00	0.00	0.00	0.18	0.10	0.16	0.00	99.06
513	16SUV018	2016_2	2_3_9	133	glaciofluvial	chromite	chromite	0.25-0.5	0.0530	0.0000	0.0008	0.0000	12.4678	25.8439	9.1054	0.0028	15.6326	0.1486	35.5791	99.1487	0.00	0.09	29.54	37.77	0.19	16.04	15.10	0.00	0.00	0.00	0.00	0.15	0.15	0.11	0.00	99.14
514	16SUV023	2016_2	2_3_10	134	Beaufort Fm	chromite	chromite	0.25-0.5	1.4233	0.0193	0.0022	0.0000	20.2808	29.3618	7.7308	0.0074	7.2045	0.1622	31.9673	98.4309	0.00	2.37	13.61	42.91	0.21	26.09	12.82	0.01	0.03	0.00	0.00	0.14	0.06	0.16	0.00	98.42
515	16SUV023	2016_2	2_3_11	135	Beaufort Fm	chromite	chromite	0.25-0.5	1.9511	0.0080	0.0055	0.0000	24.7480	23.2224	7.2309	0.0021	8.1873	0.3121	31.3586	97.3431	0.00	3.25	15.47	33.94	0.40	31.84	11.99	0.00	0.00	0.00	0.00	0.16	0.10	0.15	0.00	97.31
516	16SUV023	2016_2	2_3_12	136	Beaufort Fm	chromite	chromite	0.25-0.5	1.0022	0.0064	0.0111	0.0000	17.9882	21.2449	8.8230	0.0015	14.5675	0.1417	34.5504	98.6703	0.00	1.67	27.53	31.05	0.18	23.14	14.63	0.00	0.00	0.01	0.00	0.21	0.08	0.15	0.00	98.66
517	16SUV023	2016_2	2_4_1	137	Beaufort Fm	chromite	chromite	0.25-0.5	0.0296	0.0011	0.0036	0.0000	18.0557	25.7168	7.4086	0.0060	13.3519	0.1940	33.9995	99.2315	0.00	0.05	25.23	37.59	0.25	23.23	12.29	0.01	0.00	0.00	0.00	0.13	0.41	0.04	0.00	99.23
518	16SUV023	2016_2	2_4_2	138	Beaufort Fm	chromite	chromite	0.25-0.5	0.5888	0.0009	0.0000	0.0000	13.6477	24.7749	9.8420	0.0022	14.6564	0.1090	35.3866	99.3191	0.00	0.98	27.69	36.21	0.14	17.56	16.32	0.00	0.00	0.00	0.00	0.24	0.06	0.12	0.00	99.31
519	16SUV023	2016_2	2_4_3	139	Beaufort Fm	chromite	chromite	0.25-0.5	0.7027	0.0105	0.0034	0.0000	20.1147	29.8084	6.2140	0.0065	9.0064	0.1945	32.2948	98.7380	0.00	1.17	17.02	43.57	0.25	25.88	10.30	0.01	0.00	0.00	0.00	0.16	0.09	0.26	0.00	98.71
520	16SUV023	2016_2	2_4_4	140	Beaufort Fm	chromite	chromite	0.25-0.5	0.4615	0.0008	0.0025	0.0000	12.6743	25.8910	9.8480	0.0000	14.5947	0.1180	35.5103	99.4400	0.00	0.77	27.58	37.84	0.15	16.31	16.33	0.00	0.00	0.00	0.00	0.21	0.06	0.17	0.00	99.42
521	16SUV023	2016_2	2_4_5	141	Beaufort Fm	chromite	chlorite?	0.25-0.5	0.6772	0.8643	0.0324	15.8235	14.3021	0.0000	2.1715	2.1155	13.3918	0.1200	37.1274	86.6893	33.85	1.13	25.30	0.00	0.15	18.40	3.60	2.96	1.17	0.04	0.00	0.00	0.05	0.00	0.00	86.65
522	16SUV023	2016_2	2_4_6	142	Beaufort Fm	chromite	chromite	0.25-0.5	0.0631	0.0000	0.0045	0.0000	13.2507	28.6546	8.1727	0.0000	13.7595	0.1606	34.8694	99.3442	0.00	0.11	26.00	41.88	0.21	17.05	13.55	0.00	0.00	0.00	0.00	0.09	0.22	0.23	0.00	99.34
523	16SUV023	2016_2	2_4_7	143	Beaufort Fm	chromite	chromite	0.25-0.5	0.4389	0.0000	0.0068	0.0000	10.3052	20.3499	10.8549	0.0041	19.1444	0.0912	36.9664	98.5525	0.00	0.73	36.17	29.74	0.12	13.26	18.00	0.00	0.00	0.01	0.00	0.28	0.09	0.11	0.00	98.52
524	16SUV024	2016_2	2_4_8	144	bedrock	chromite	chromite	0.25-0.5	2.2310	0.0016	0.0025	0.0000	26.2735	26.6321	4.7067	0.0000	6.7551	0.2433	30.6947	98.0827	0.00	3.72	12.76	38.92	0.31	33.80	7.81	0.00	0.00	0.00	0.00	0.13	0.16	0.45	0.00	98.07
525	16SUV024	2016_2	2_4_9	145	bedrock	chromite	chromite	0.25-0.5	0.2972	0.0000	0.0021	0.0000	14.2181	33.7547	8.3669	0.0024	8.4048	0.1196	32.9694	98.4218	0.00	0.50	15.88	49.34	0.15	18.29	13.87	0.00	0.00	0.00	0.00	0.19	0.05	0.15	0.00	98.41
526	16SUV024	2016_2	2_4_10	146	bedrock	chromite	chromite	0.25-0.5	0.0514	0.0000	0.0019	0.0000	28.5184	36.2931	2.2659	0.0079	1.0430	0.2723	27.5880	96.4668	0.00	0.09	1.97	53.05	0.35	36.69	3.76	0.01	0.00	0.00	0.00	0.09	0.33	0.13	0.00	96.46
527	16SUV027	2016_2	2_5_1	147	stream sediments	chromite	chromite	0.5-1.0	0.7161	0.0000	0.0000	0.0000	11.2115	23.0690	10.4085	0.0017	16.6696	0.1030	36.1637	98.6983	0.00	1.19	31.50	33.72	0.13	14.42	17.26	0.00	0.00	0.00	0.00	0.26	0.06	0.15	0.00	98.70
528	16SUV027	2016_2	2_5_2	148	stream sediments	chromite	chromite	0.5-1.0	0.0325	0.0000	0.0000	0.0000	11.2725	27.6951	9.9374	0.0013	14.4886	0.1101	35.5949	99.4305	0.00	0.05	27.38	40.48	0.14	14.50	16.48	0.00	0.00	0.00	0.00	0.20	0.06	0.14	0.00	99.43
529	16SUV027	2016_2	2_5_3	149	stream sediments	chromite	chromite	0.5-1.0	0.2065	0.0011	0.0119	0.0000	15.5537	24.9538	7.9498	0.0008	14.9811	0.2039	34.8446	99.0475	0.00	0.34	28.31	36.47	0.26	20.01	13.18	0.00	0.00	0.01	0.00	0.20	0.09	0.15	0.00	99.04
530	16SUV027	2016_2	2_5_4	150	stream sediments	chromite	chromite	0.25-0.5	1.3449	0.0000	0.0014	0.0000	18.6124	28.8660	8.2562	0.0030	8.3710	0.1514	32.5778	98.4623	0.00	2.24	15.82	42.19	0.20	23.94	13.69	0.00	0.00	0.00	0.00	0.16	0.06	0.16	0.00	98.46
531	16SUV027	2016_2	2_5_6	151	stream sediments	chromite	chromite	0.25-0.5	0.3781	0.0102	0.0022	0.0000	11.4752	18.9714	11.0176	0.0018	19.7253	0.1020	37.2387	99.2485	0.00	0.63	37.27	27.73	0.13	14.76	18.27	0.00	0.00	0.00	0.04	0.24	0.05	0.09	0.00	99.22
532	16SUV027	2016_2	2_5_7	152	stream sediments	chromite	chromite	0.25-0.5	1.0734	0.0022	0.0000	0.0000	16.9355	29.7446	8.6853	0.0073	8.6027	0.1376	32.8156	98.3111	0.00	1.79	16.25	43.47	0.18	21.79	14.40	0.01	0.00	0.00	0.00	0.22	0.04	0.15	0.00	98.30
533	16SUV027	2016_2	2_5_8	153	stream sediments	chromite	chromite	0.25-0.5	1.5829	0.0084	0.0034	0.0000	21.1174	22.9389	7.9902	0.0047	11.0926	0.1600	32.9917	98.2410	0.00	2.64	20.96	33.53	0.21	27.17	13.25	0.00	0.00	0.00	0.00	0.20	0.09	0.18	0.00	98.22
534	16SUV027	2016_2	2_5_9	154	stream sediments	chromite	chromite	0.25-0.5	0.3509	0.0000	0.0002	0.0000	18.4858	28.9053	7.3076	0.0028	10.5052	0.1501	33.1603	99.1116	0.00	0.59	19.85	42.25	0.19	23.78	12.12	0.00	0.00	0.00	0.00	0.12	0.05	0.16	0.00	99.11
535	16SUV027	2016_2	2_5_10	155	stream sediments	chromite	andradite	0.25-0.5	3.3389	0.0511	0.0063	15.3434	18.1646	0.0000	0.3985	23.7469	0.8248	0.1310	35.5028	97.6025	32.83	5.57	1.56	0.00	0.17	23.37	0.66	33.23	0.07	0.01	0.00	0.00	0.00	0.10	0.03	97.59
536	16SUV027	2016_2	2_5_11	156	stream sediments	chromite	chromite	0.25-0.5	0.2627	0.0152	0.0017	0.0000	19.6957	31.7254	5.8184	0.0068	8.6717	0.1823	32.1572	98.8294	0.00	0.44	16.38	46.37	0.24	25.34	9.65	0.01	0.00	0.00	0.00	0.21	0.08	0.09	0.00	98.81
537	16SUV027	2016_2	2_5_12	157	stream sediments	chromite	chromite	0.25-0.5	1.4237	0.0133	0.0042	0.0000	20.6441	23.7291	8.1756	0.0025	10.7546	0.1378	32.9083	98.0687	0.00	2.37	20.32	34.68	0.18	26.56	13.56	0.00	0.00	0.00	0.00	0.15	0.06	0.16	0.00	98.04
538	16SUV028	2016_2	2_6_1	158	stream sediments	chromite	chromite	0.25-0.5	0.3532	0.0000	0.0000	0.0000	11.8114	26.6009	9.8340	0.0009	14.6047	0.1222	35.5127	99.1765	0.00	0.59	27.60	38.88	0.16	15.20	16.31	0.00	0.00	0.00	0.00	0.22	0.09	0.13	0.00	99.16
539	16SUV028	2016_2	2_6_2	159	stream sediments	chromite	chromite	0.25-0.5	0.4843	0.0157	0.0000	0.0000	11.9993	28.4531	9.7819	0.0024	12.8662	0.1277	34.9425	99.0237	0.00	0.81	24.31	41.59	0.16	15.44	16.22	0.00	0.02	0.00	0.00	0.21	0.07	0.16	0.00	98.99
540	16SUV028	2016_2	2_6_3	160	stream sediments	chromite	chromite	0.25-0.5	0.6696	0.0097	0.0000	0.0000	13.0753	28.0369	9.2763	0.0031	12.8672	0.1330	34.8372	99.2263	0.00	1.12	24.31	40.98	0.17	16.82	15.38	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	99.21
541	16SUV028	2016_2	2_6_4	161	stream sediments	chromite	chromite	0.25-0.5	0.1793	0.0108	0.0033	0.0000	12.0749	29.5386	9.4890	0.0029	12.8031	0.1185	35.0092	99.5692	0.00	0.30	24.19	43.17	0.15	15.53	15.74	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	99.52
542	16SUV028	2016_2	2_6_5	162	stream sediments	chromite	chromite	0.25-0.5	0.4347	0.0091	0.0015	0.0000	11.7211	28.0501	9.8156	0.0009	13.6031	0.1240	35.2925	99.3445	0.00	0.73	25.70	41.00	0.16	15.08	16.28	0.00	0.00	0.00	0.00	0.21	0.06	0.09	0.00	99.30
543	16SUV028	2016_2	2_6_6	163	stream sediments	chromite	chromite	0.25-0.5	1.1381	0.0104	0.0052	0.0000	17.1707	24.1626	8.8746	0.0013	12.7597	0.1260	34.1732	98.7564	0.00	1.90	24.11	35.32	0.16	22.09	14.72	0.00	0.00	0.00	0.00	0.22	0.09	0.13	0.00	98.73
544	16SUV028	2016_2	2_6_7	164	stream sediments	chromite	chromite	0.25-0.5	0.9353	0.0050	0.0041	0.0000	13.6285	27.2364	9.8208	0.0059	12.3531	0.1213	34.7106	99.1606	0.00	1.56	23.34	39.81	0.16	17.53	16.29	0.01	0.00	0.00	0.00	0.21	0.06	0.19	0.00	99.15
545	16SUV028	2016_2	2_6_8	165	stream sediments	chromite	chromite	0.25-0.5	0.7345	0.0080	0.0000	0.0000	12.3179	22.6094	10.2850	0.0003	16.6506	0.1030	36.1815	99.2151	0.00	1.23	31.46	33.05	0.13	15.85	17.06	0.00	0.00	0.00	0.00	0.23	0.07	0.12	0.00	99.18
546	16SUV028	2016_2	2_6_9	166	stream sediments	chromite	chromite	0.5-1.0	1.3344	0.0130	0.0016	0.0000	18.9572	28.0833	8.2151	0.0021	8.7349	0.1578	32.6206	98.4250	0.00	2.23	16.50	41.05	0.20	24.39	13.62	0.00	0.00	0.00	0.00	0.17	0.06	0.18	0.00	98.40
547	16SUV028	2016_2	2_6_10	167	stream sediments	chromite	chromite	0.5-1.0	0.2724	0.0000	0.0000	0.0000	11.4853	15.9903	11.0236	0.0005	22.1760	0.1064	37.9709	99.3551	0.00	0.45	41.90	23.37	0.14	14.78	18.28	0.00	0.00	0.00	0.00	0.26	0.05	0.09	0.00	99.33
548	16SUV028	2016_2	2_6_11	168	stream sediments	chromite	chromite	0.25-0.5	0.9171	0.0000	0.0025	0.0000	14.3856	26.2385	9.6256	0.0027	12.7692	0.1192	34.6817	99.0554	0.00	1.53	24.13	38.35	0.15	18.51	15.96	0.00	0.00	0.00	0.00	0.20	0.05	0.16	0.00	99.05
549	16SUV028	2016_2	2_6_12	169	stream sediments	chromite	chromite	0.25-0.5	0.7077	0.0027	0.0000	0.0000	12.3491	26.5286	10.1999	0.0018	13.7619	0.0944	35.3565	99.3500	0.00	1.18	26.00	38.77	0.12	15.89	16.91	0.00	0.00	0.00	0.00	0.23	0.06	0.15	0.00	99.32
550	16SUV028	2016_2	2_6_13	170	stream sediments	chromite	chromite	0.25-0.5	0.6440	0.0126	0.0000	0.0000	12.9912	28.2739	9.7158	0.0033	12.3568	0.1313	34.7326	99.1583	0.00	1.07	23.35	41.32	0.17	16.71	16.11	0.00	0.00	0.00	0.00	0.19	0.06	0.14	0.00	99.13
551	16SUV028	2016_2	2_6_14	171	stream sediments	chromite	chromite	0.25-0.5	0.8645	0.0036	0.0046	0.0000	13.7723	26.1242	9.8196	0.0006	12.9412	0.1240	34.7200	98.7256	0.00	1.44	24.45	38.18	0.16	17.72	16.28	0.00	0.00	0.00	0.00	0.22	0.06	0.17	0.00	98.70
552	16SUV028	2016_2	2_6_15	172	stream sediments	chromite	chromite	0.25-0.5	2.2109	0.0181	0.0000	0.0000	24.4361	27.2582	6.7108	0.0045	5.8048	0.2035	30.8020	97.7034	0.00	3.69	10.97	39.84	0.26	31.44	11.13	0.00	0.00	0.00	0.00	0.08	0.07	0.19	0.00	97.67
553	16SUV028	2016_2	2_7_1	173	stream sediments	chromite	pseudorutile	0.25-0.5	33.5064	0.0312	0.0063	0.0447	25.8063	0.0092	0.0514	0.0268	0.0802	1.3927	30.4272	91.5001	0.10	55.89	0.15	0.00	1.80	33.20	0.09	0.04	0.04	0.01	0.04	0.00	0.05	0.00	0.05	91.46
554	16SUV028	2016_2	2_7_2	174	stream sediments	chromite	pseudorutile	0.25-0.5	33.7940	0.0228	0.0013	0.2081	23.7791	0.2311	1.3482	0.0146	0.2102	0.2975	31.1017	91.4117	0.45	56.37	0.40	0.34	0.38	30.59	2.24	0.02	0.03	0.00	0.00	0.00	0.05	0.48	0.04	91.38
555	16SUV028	2016_2	2_7_4	175	stream sediments	chromite	chromite	0.25-0.5	1.6165	0.0031	0.0021	0.0000	19.0319	29.3915	7.9706	0.0031	7.6251	0.1487	32.2960	98.4282	0.00	2.70	14.41	42.96	0.19	24.48	13.22	0.00	0.00	0.00	0.00	0.20	0.06	0.18	0.00	98.40
556	16SUV028	2016_2	2_7_5	176	stream sediments	chromite	chlorite?	0.25-0.5	0.3603	1.5423	0.0457	15.8393	10.9782	0.0000	0.8512	0.1427	17.4588	0.0774	38.1673	85.5159	33.89	0.60	32.99	0.00	0.10	14.12	1.41	0.20	2.08	0.06	0.00	0.00	0.05	0.00	0.00	85.49
557	16SUV028	2016_2	2_7_6	177	stream sediments	chromite	chromite	0.25-0.5	1.3714	0.0000	0.0035	0.0000	17.3399	18.7843	9.4278	0.0084	16.1450	0.1303	35.2818	98.8393	0.00	2.29	30.51	27.45	0.17	22.31	15.63	0.01	0.00	0.00	0.00	0.22	0.07	0.14	0.00	98.81
558	16SUV028	2016_2	2_7_7	178	stream sediments	chromite	ilmenite	0.25-0.5	29.2953	0.0000	0.0000	0.0031	37.3155	0.0253	0.2050	0.0043	0.0169	0.4317	30.5762	97.9237	0.00	48.87	0.03	0.04	0.56	48.01	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	97.89
559	16SUV028	2016_2	2_7_8	179	stream sediments	chromite	chromite	0.25-0.5	1.2937	0.0000	0.0006	0.0000	19.3565	28.4330	8.0442	0.0049	8.4622	0.1535	32.5178	98.6025	0.00	2.16	15.99	41.56	0.20	24.90	13.34	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	98.58
560	16SUV028	2016_2	2_7_9	180	stream sediments	chromite	pseudorutile	0.25-0.5	33.4056	0.0147	0.0168	0.0565	25.9532	0.1239	0.8974	0.0884	0.1486	0.2991	30.8867	92.2277	0.12	55.72	0.28	0.18	0.39	33.39	1.49	0.12	0.00	0.02	0.05	0.04	0.03	0.35	0.03	92.21
561	16SUV028	2016_2	2_7_10	181	stream sediments	chromite	chromite	0.25-0.5	2.1378	0.0000	0.0026	0.0000	22.0005	24.4370	7.9494	0.0129	8.6923	0.1508	32.1231	97.7821	0.00	3.57	16.42	35.72	0.19	28.30	13.18	0.02	0.00	0.00	0.00	0.17	0.03	0.17	0.00	97.78
562	16SUV028	2016_2	2_7_11	182	stream sediments	chromite	chromite	0.25-0.5	1.7891	0.0016	0.0036	0.0000	21.0259	23.1026	8.3165	0.0041	10.6413	0.1237	32.9970	98.3901	0.00	2.98	20.11	33.77	0.16	27.05	13.79	0.00	0.00	0.00	0.00	0.24	0.09	0.16	0.02	98.38
563	16SUV028	2016_2	2_7_12	183	stream sediments	chromite	chromite	0.25-0.5	0.1533	0.0153	0.0103	0.0000	21.5383	26.8714	5.4247	0.0003	11.6493	0.1771	32.7496	98.8554	0.00	0.26	22.01	39.27	0.23	27.71	9.00	0.00	0.00	0.01	0.00	0.10	0.16	0.09	0.00	98.83
564	16SUV013	2016_2	2_7_13	184	glaciofluvial	chromite	chromite	0.25-0.5	0.1645	0.0052	0.0028	0.0000	15.3625	29.0602	7.9815	0.0000	12.0913	0.1377	34.0758	99.1921	0.00	0.27	22.85	42.47	0.18	19.76	13.24	0.00	0.00	0.00	0.00	0.22	0.07	0.12	0.00	99.18
565	15SUV001	2016_2	2_8_1	185	stream sediments	vesuvianite	garnet	0.25-0.5	0.1728	0.0035	0.0000	18.5730	3.2410	0.0024	0.5040	26.2731	10.0233	0.1076	42.0041	100.9410	39.73	0.29	18.94	0.00	0.14	4.17	0.84	36.76	0.00	0.00	0.00	0.00	0.00	0.00	0.04	100.91
566	15SUV001	2016_2	2_8_2	186	stream sediments	vesuvianite	garnet	0.25-0.5	0.3130	0.0000	0.0040	18.5089	3.9227	0.0095	0.4642	26.1256	9.5590	0.1519	41.7237	100.8080	39.60	0.52	18.06	0.00	0.20	5.05	0.77	36.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.75
567	15SUV001	2016_2	2_8_3	187	stream sediments	vesuvianite	vesuvianite	0.25-0.5	0.4190	0.0093	0.0056	17.3530	1.1760	0.0066	2.4041	26.0764	9.0684	0.0122	40.4703	97.0283	37.12	0.70	17.13	0.00	0.02	1.51	3.99	36.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96.96
568	15SUV001	2016_2	2_8_4	188	stream sediments	vesuvianite	garnet	0.25-0.5	0.2030	0.0069	0.0048	18.2657	5.6533	0.0000	0.3461	25.7849	8.7421	0.0795	40.9170	100.0490	39.08	0.34	16.52	0.00	0.10	7.27	0.57	36.08	0.00	0.00	0.00	0.00	0.00	0.04	0.00	100.00
569	15SUV001	2016_2	2_8_5	189	stream sediments	vesuvianite	garnet	0.25-0.5	0.2071	0.0062	0.0029	18.5103	3.3170	0.0068	0.3784	26.0738	9.9763	0.0623	41.7578	100.3370	39.60	0.35	18.85	0.00	0.08	4.27	0.63	36.48	0.00	0.00	0.00	0.00	0.00	0.03	0.00	100.28
570	15SUV001	2016_2	2_8_6	190	stream sediments	vesuvianite	garnet	0.25-0.5	0.0236	0.0166	0.0042	18.3872	4.6871	0.0079	0.4261	25.6869	9.4192	0.2062	41.3172	100.2180	39.34	0.04	17.80	0.00	0.27	6.03	0.71	35.94	0.02	0.00	0.00	0.00	0.00	0.00	0.03	100.17
571	15SUV002	2016_2	2_8_8	191	stream sediments	vesuvianite	garnet	0.5-1.0	0.1412	0.0136	0.0083	18.1191	7.7710	0.0146	0.3614	25.6844	7.3925	0.0899	40.1323	99.8196	38.76	0.24	13.97	0.00	0.12	10.00	0.60	35.94	0.02	0.01	0.00	0.00	0.00	0.09	0.05	99.79
572	15SUV002	2016_2	2_8_9	192	stream sediments	vesuvianite	garnet	0.5-1.0	1.2808	0.0128	0.0054	17.8102	5.7664	0.0315	0.4831	25.9566	7.9657	0.0435	40.6201	100.0160	38.10	2.14	15.05	0.05	0.06	7.42	0.80	36.32	0.02	0.00	0.00	0.00	0.00	0.04	0.00	99.98
573	15SUV002	2016_2	2_8_10	193	stream sediments	vesuvianite	garnet	0.5-1.0	0.4679	0.0000	0.0058	18.3755	4.3119	0.0131	0.5013	26.0330	9.1710	0.0364	41.4169	100.3830	39.31	0.78	17.33	0.00	0.05	5.55	0.83	36.43	0.00	0.01	0.00	0.00	0.00	0.04	0.04	100.35
574	15SUV002	2016_2	2_8_11	194	stream sediments	vesuvianite	garnet	0.5-1.0	0.4014	0.0159	0.0094	18.3443	4.7430	0.0000	0.4904	26.3041	8.8277	0.0259	41.2544	100.4690	39.25	0.67	16.68	0.00	0.03	6.10	0.81	36.80	0.02	0.01	0.00	0.00	0.00	0.00	0.04	100.42
575	15SUV002_rpt	2016_2	2_8_11_r	195	stream sediments	vesuvianite	andradite	0.5-1.0	0.0408	0.0082	0.0024	16.4506	18.4927	0.0038	0.3614	24.7383	1.3978	0.0572	35.4780	97.0698	35.19	0.07	2.64	0.00	0.07	23.79	0.60	34.61	0.00	0.00	0.00	0.00	0.00	0.00	0.04	97.02
576	15SUV003	2016_2	2_9_1	196	stream sediments	vesuvianite	garnet	0.25-0.5	0.1309	0.0045	0.0000	18.4213	4.7899	0.0113	0.3895	26.3323	9.0687	0.0479	41.3434	100.6000	39.41	0.22	17.14	0.00	0.06	6.16	0.65	36.84	0.00	0.00	0.00	0.00	0.00	0.03	0.04	100.54
577	15SUV003_rpt	2016_2	2_9_1_r	197	stream sediments	vesuvianite	garnet	0.25-0.5	0.0530	0.0025	0.0023	18.2992	4.7125	0.0000	0.3720	26.1013	9.1715	0.0279	41.0944	99.8805	39.15	0.09	17.33	0.00	0.04	6.06	0.62	36.52	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.83
578	15SUV003	2016_2	2_9_2	198	stream sediments	vesuvianite	garnet	0.25-0.5	0.1121	0.0008	0.0045	18.5660	3.0278	0.0076	0.4860	26.0488	10.1543	0.0854	41.8869	100.3930	39.72	0.19	19.19	0.00	0.11	3.90	0.81	36.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.35
579	15SUV003	2016_2	2_9_3	199	stream sediments	vesuvianite	garnet	0.25-0.5	0.8372	0.0213	0.0018	18.0944	5.3642	0.0000	0.4195	25.9101	8.4250	0.1100	40.8981	100.1440	38.71	1.40	15.92	0.00	0.14	6.90	0.70	36.25	0.03	0.00	0.00	0.00	0.00	0.00	0.00	100.09
580	15SUV003	2016_2	2_9_4	200	stream sediments	vesuvianite	garnet	0.25-0.5	0.0769	0.0006	0.0076	18.3170	5.1758	0.0000	0.4448	25.7295	9.0800	0.0967	41.0953	100.0610	39.19	0.13	17.16	0.00	0.12	6.66	0.74	36.00	0.00	0.01	0.00	0.00	0.00	0.04	0.00	100.04
581	15SUV003	2016_2	2_9_5	201	stream sediments	vesuvianite	garnet	0.25-0.5	0.4320	0.0000	0.0068	18.2299	4.7958	0.0000	0.3800	26.1586	8.8224	0.0382	41.0170	99.9211	39.00	0.72	16.67	0.00	0.05	6.17	0.63	36.60	0.00	0.01	0.00	0.00	0.00	0.04	0.00	99.92
582	15SUV005	2016_2	2_9_6	202	stream sediments	vesuvianite	garnet	0.25-0.5	0.1992	0.0142	0.0020	18.6991	0.4203	0.0105	0.3375	26.5466	11.5475	0.0653	42.8611	101.0910	40.00	0.33	21.82	0.00	0.08	0.54	0.56	37.14	0.02	0.00	0.00	0.00	0.00	0.53	0.00	101.03
583	15SUV010	2016_2	2_9_7	203	stream sediments	vesuvianite	garnet	0.5-1.0	0.1119	0.0122	0.0082	18.5873	1.9609	0.0000	0.1143	26.4355	10.9266	0.0707	42.2054	100.4620	39.76	0.19	20.65	0.00	0.09	2.52	0.19	36.99	0.02	0.01	0.00	0.00	0.00	0.00	0.00	100.42
584	15SUV010	2016_2	2_9_8	204	stream sediments	vesuvianite	garnet	0.5-1.0	0.1913	0.0053	0.0089	18.2480	5.3723	0.0046	0.3475	25.9223	8.8350	0.0837	40.9412	99.9774	39.04	0.32	16.69	0.00	0.11	6.91	0.58	36.27	0.00	0.01	0.00	0.00	0.00	0.00	0.03	99.96
585	15SUV010_rpt	2016_2	2_9_8_r	205	stream sediments	vesuvianite	andradite	0.5-1.0	0.4505	0.0000	0.0043	17.5544	11.9079	0.0239	0.2668	25.2548	5.0283	0.0394	38.5016	99.0818	37.56	0.75	9.50	0.03	0.05	15.32	0.44	35.34	0.00	0.00	0.00	0.00	0.00	0.04	0.04	99.07
586	15SUV010	2016_2	2_9_9	206	stream sediments	vesuvianite	garnet	0.5-1.0	0.1487	0.0038	0.0063	18.6402	2.2417	0.0220	0.4391	26.5055	10.6038	0.0564	42.3418	101.0630	39.88	0.25	20.04	0.03	0.07	2.88	0.73	37.09	0.00	0.01	0.00	0.00	0.00	0.04	0.00	101.01
587	15SUV010	2016_2	2_9_10	207	stream sediments	vesuvianite	garnet	0.5-1.0	0.2944	0.0047	0.0054	18.1770	5.9562	0.0274	0.4267	25.8804	8.4442	0.0783	40.8063	100.1600	38.89	0.49	15.95	0.04	0.10	7.66	0.71	36.21	0.00	0.00	0.00	0.00	0.00	0.07	0.00	100.13
588	15SUV010	2016_2	2_9_11	208	stream sediments	vesuvianite	garnet	0.5-1.0	0.7039	0.0028	0.0000	18.1520	4.6464	0.0035	0.5211	25.9287	8.7841	0.0954	41.0568	99.9571	38.83	1.17	16.60	0.00	0.12	5.98	0.86	36.28	0.00	0.00	0.00	0.00	0.00	0.07	0.00	99.91
589	15SUV010	2016_2	2_9_12	209	stream sediments	vesuvianite	garnet	0.25-0.5	0.0371	0.0093	0.0062	18.2262	6.9786	0.0000	0.2710	26.0674	8.0185	0.0231	40.5362	100.2030	38.99	0.06	15.15	0.00	0.03	8.98	0.45	36.47	0.00	0.01	0.00	0.00	0.00	0.03	0.00	100.17
590	15SUV010	2016_2	2_9_13	210	stream sediments	vesuvianite	andradite	0.25-0.5	0.0052	0.0085	0.0016	16.8248	19.1282	0.0263	0.1442	24.6940	1.4128	0.0059	35.8987	98.1736	35.99	0.00	2.67	0.04	0.00	24.61	0.24	34.55	0.00	0.00	0.00	0.00	0.00	0.00	0.03	98.13
591	15SUV014	2016_2	2_9_14	211	stream sediments	vesuvianite	garnet	0.25-0.5	0.1448	0.0140	0.0028	18.4598	4.2131	0.0164	0.3637	26.1953	9.5246	0.0481	41.5534	100.5750	39.49	0.24	18.00	0.00	0.06	5.42	0.60	36.65	0.02	0.00	0.00	0.00	0.00	0.04	0.00	100.49
592	15SUV015	2016_2	2_10_1	212	Beaufort Fm	vesuvianite	vesuvianite	0.25-0.5	0.0000	0.0294	0.0060	17.3858	2.1889	0.0013	1.4374	25.9225	9.1737	0.0058	39.9554	96.2494	37.19	0.00	17.33	0.00	0.00	2.82	2.38	36.27	0.04	0.01	0.00	0.15	0.00	0.00	0.03	96.22
593	15SUV021	2016_2	2_10_2	213	stream sediments	vesuvianite	andradite	0.25-0.5	0.0000	0.0077	0.0043	16.3749	21.8660	0.0000	0.0488	24.2718	0.0000	0.0232	34.6804	97.3360	35.03	0.00	0.00	0.00	0.03	28.13	0.08	33.96	0.00	0.00	0.00	0.03	0.00	0.00	0.00	97.27
594	15SUV021_rpt	2016_2	2_10_2_r	214	stream sediments	vesuvianite	garnet	0.25-0.5	0.6523	0.0016	0.0018	17.3105	7.1084	0.0383	0.0848	25.8088	7.6361	0.1395	39.4278	98.2545	37.03	1.09	14.43	0.06	0.18	9.14	0.14	36.11	0.00	0.00	0.00	0.02	0.00	0.00	0.00	98.20
595	15SUV024	2016_2	2_10_3	215	fluvial	vesuvianite	garnet	0.25-0.5	0.2358	0.0034	0.0041	18.0666	7.8051	0.0000	0.3362	25.8047	7.3633	0.0526	40.0962	99.8108	38.65	0.39	13.91	0.00	0.07	10.04	0.56	36.11	0.00	0.00	0.00	0.00	0.00	0.03	0.03	99.78
596	15SUV024	2016_2	2_10_4	216	fluvial	vesuvianite	andradite	0.25-0.5	0.0127	0.0134	0.0040	17.1210	13.7644	0.0000	0.0650	25.5209	4.4564	0.0307	37.7009	98.7553	36.63	0.00	8.42	0.00	0.04	17.71	0.11	35.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	98.67
597	15SUV024_rpt	2016_2	2_10_4_r	217	fluvial	vesuvianite	garnet	0.25-0.5	0.0157	0.0141	0.0087	18.1983	6.0994	0.0000	0.0552	26.0651	8.6662	0.0476	40.6982	99.9317	38.93	0.03	16.37	0.00	0.06	7.85	0.09	36.47	0.02	0.01	0.00	0.00	0.00	0.08	0.00	99.92
598	15SUV024	2016_2	2_10_5	218	fluvial	vesuvianite	garnet	0.25-0.5	0.3605	0.0177	0.0039	18.7594	5.2922	0.0000	1.1342	25.4017	8.1920	0.0721	41.3627	100.6450	40.13	0.60	15.48	0.00	0.09	6.81	1.88	35.54	0.02	0.00	0.00	0.00	0.00	0.04	0.03	100.63
599	15SUV024	2016_2	2_10_6	219	fluvial	vesuvianite	talc?	0.25-0.5	0.0138	0.0438	0.0353	18.7542	1.4800	0.0153	15.5617	0.0382	0.2071	0.0747	32.3253	68.5736	40.12	0.02	0.39	0.00	0.10	1.90	25.81	0.05	0.06	0.04	0.00	0.00	0.00	0.00	0.05	68.55

600	15SUV024_rpt	2016_2	2_10_6_r	220	fluvial	vesuvianite	vesuvianite	0.25-0.5	0.0478	0.0156	0.0077	17.2611	1.8788	0.0015	2.4148	25.9404	8.8655	0.0132	40.0916	96.5609	36.93	0.08	16.75	0.00	0.02	2.42	4.00	36.30	0.02	0.01	0.00	0.00	0.00	0.00	0.00	96.52
601	15SUV026	2016_2	2_10_7	221	stream sediments	vesuvianite	garnet	0.5-1.0	0.1295	0.0000	0.0026	18.3463	4.8205	0.0075	0.6309	25.6808	9.1275	0.1976	41.2528	100.2520	39.25	0.22	17.25	0.00	0.26	6.20	1.05	35.93	0.00	0.00	0.00	0.00	0.00	0.05	0.03	100.23
602	15SUV027	2016_2	2_10_8	222	stream sediments	vesuvianite	garnet	0.5-1.0	0.6528	0.0000	0.0045	17.6560	8.7958	0.0000	0.3875	25.7221	6.6542	0.0770	39.5685	99.5642	37.77	1.09	12.57	0.00	0.10	11.32	0.64	35.99	0.00	0.00	0.00	0.00	0.00	0.04	0.03	99.55
603	15SUV050	2016_2	2_10_9	223	stream sediments	vesuvianite	garnet	0.25-0.5	0.0583	0.0045	0.0016	18.5629	3.1835	0.0253	0.1534	26.0761	10.4699	0.0288	41.9607	100.5530	39.71	0.10	19.78	0.04	0.04	4.10	0.25	36.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.50
604	15SUV050	2016_2	2_10_10	224	stream sediments	vesuvianite	vesuvianite	0.25-0.5	0.0639	0.0038	0.0000	15.1339	1.7337	0.0052	0.2169	27.5923	11.1733	0.0925	38.9247	94.9633	32.38	0.11	21.11	0.00	0.12	2.23	0.36	38.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94.91
605	15SUV050_rpt	2016_2	2_10_10_r	225	stream sediments	vesuvianite	vesuvianite	0.25-0.5	0.0103	0.0066	0.1609	14.8800	1.2611	0.0069	0.3832	27.2224	11.3260	0.1429	38.6074	94.0247	31.83	0.00	21.40	0.00	0.18	1.62	0.64	38.09	0.00	0.19	0.00	0.00	0.00	0.00	0.00	93.96
606	15SUV050	2016_2	2_10_11	226	stream sediments	vesuvianite	garnet	0.25-0.5	0.2374	0.0071	0.0124	17.9757	1.8262	0.0000	0.0620	26.8039	11.0243	0.2174	41.7989	99.9972	38.46	0.40	20.83	0.00	0.28	2.35	0.10	37.50	0.00	0.01	0.00	0.00	0.00	0.00	0.02	99.96
607	15SUV050_rpt	2016_2	2_10_11_r	227	stream sediments	vesuvianite	garnet	0.25-0.5	0.4909	0.0170	0.0105	18.0207	4.4323	0.0000	0.1022	26.2202	9.1766	0.0518	40.8735	99.4377	38.55	0.82	17.34	0.00	0.07	5.70	0.17	36.69	0.02	0.01	0.00	0.00	0.00	0.05	0.00	99.43
608	15SUV050_rpt	2016_2	2_10_11_r	228	stream sediments	vesuvianite	K-feldspar	0.25-0.5	0.0000	0.1244	14.4760	29.4690	0.0282	0.0000	0.0012	0.4927	9.7783	0.0000	45.4864	99.8664	63.04	0.00	18.48	0.00	0.00	0.04	0.00	0.69	0.17	17.44	0.00	0.00	0.00	0.00	0.00	99.85
609	15SUV050	2016_2	2_10_12	229	stream sediments	vesuvianite	garnet	0.25-0.5	0.2222	0.0000	0.0005	18.2646	5.3219	0.0039	0.4010	26.0034	8.6302	0.0407	40.8579	99.8079	39.07	0.37	16.31	0.00	0.05	6.85	0.66	36.38	0.00	0.00	0.00	0.00	0.00	0.04	0.04	99.78
610	16SUV013	2016_2	2_10_13	230	glaciofluvial	vesuvianite	garnet	0.25-0.5	0.2024	0.0156	0.0077	18.4324	3.2904	0.0000	0.3790	26.0798	9.9537	0.1333	41.6842	100.2520	39.43	0.34	18.81	0.00	0.17	4.23	0.63	36.49	0.02	0.01	0.00	0.00	0.00	0.06	0.04	100.23
611	16SUV013_rpt	2016_2	2_10_13_r	231	glaciofluvial	vesuvianite	clinopyroxene	0.25-0.5	0.1268	0.1653	0.0118	24.8239	2.9877	0.0000	9.4690	18.7725	0.5534	0.0524	43.3923	99.9240	53.11	0.21	1.05	0.00	0.07	3.84	15.70	25.57	0.22	0.01	0.00	0.00	0.00	0.00	0.12	99.90
612	16SUV013	2016_2	2_10_14	232	glaciofluvial	vesuvianite	garnet	0.25-0.5	0.3585	0.0139	0.0099	17.0104	0.1519	0.0000	2.3455	26.5109	9.3567	0.0000	40.1475	95.9426	36.39	0.60	17.68	0.00	0.00	0.20	3.89	37.09	0.02	0.01	0.00	0.00	0.00	0.04	0.03	95.94
613	15SUV019	2016_3	3_1_1	127	Beaufort Fm	GP	garnet	0.18-0.25	0.2142	0.0413	0.0022	19.6634	5.2453	1.4525	12.8714	2.9067	11.4936	0.2278	44.6854	98.8331	42.07	0.36	21.72	2.12	0.29	6.75	21.34	4.07	0.06	0.00	0.00	0.00	0.00	0.00	0.04	98.82
614	15SUV019	2016_3	3_1_2	128	Beaufort Fm	GP	garnet	0.18-0.25	0.2066	0.0254	0.0017	19.4204	5.1623	2.1598	12.7537	3.7197	11.1529	0.2371	44.6462	99.5254	41.55	0.34	21.07	3.16	0.31	6.64	21.15	5.20	0.03	0.00	0.00	0.00	0.00	0.00	0.03	99.48
615	15SUV028	2016_3	3_1_3	129	Beaufort Fm	GP	garnet	0.18-0.25	0.1643	0.0291	0.0018	19.6425	5.5814	2.2081	12.7121	3.4981	10.9934	0.2526	44.7480	99.8554	42.02	0.27	20.77	3.23	0.33	7.18	21.08	4.89	0.04	0.00	0.00	0.00	0.00	0.00	0.03	99.84
616	15SUV028	2016_3	3_1_4	130	Beaufort Fm	GP	garnet	0.18-0.25	0.5662	0.0346	0.0000	19.2983	5.6856	3.4554	12.3393	4.1102	9.6390	0.2474	44.0437	99.4718	41.29	0.94	18.21	5.05	0.32	7.31	20.46	5.75	0.05	0.00	0.00	0.02	0.00	0.03	0.03	99.46
617	16SUV023	2016_3	3_1_5	131	Beaufort Fm	GP	garnet	0.18-0.25	0.2675	0.0300	0.0000	19.3019	5.0958	4.7732	12.1971	4.1381	9.4117	0.2815	44.0106	99.5552	41.29	0.45	17.78	6.98	0.36	6.56	20.23	5.79	0.04	0.00	0.00	0.00	0.00	0.04	0.03	99.55
618	16SUV023	2016_3	3_1_6	132	Beaufort Fm	GP	garnet	0.18-0.25	0.0375	0.0020	0.0053	19.0386	6.0431	5.6792	10.7006	5.1545	9.0293	0.4224	43.3588	99.5222	40.73	0.06	17.06	8.30	0.55	7.77	17.74	7.21	0.00	0.00	0.00	0.00	0.00	0.05	0.00	99.48
619	16SUV023	2016_3	3_1_7	133	Beaufort Fm	GP	garnet	0.18-0.25	0.2814	0.0378	0.0021	19.3095	6.2221	2.5884	12.3908	3.4082	10.7295	0.2778	44.3568	99.6658	41.31	0.47	20.27	3.78	0.36	8.00	20.55	4.77	0.05	0.00	0.00	0.00	0.00	0.04	0.03	99.64
620	16SUV023	2016_3	3_1_8	134	Beaufort Fm	GP	garnet	0.18-0.25	0.1083	0.0296	0.0013	19.3218	5.3184	4.9201	12.1040	4.0384	9.5205	0.2767	44.0650	99.7601	41.34	0.18	17.99	7.19	0.36	6.84	20.07	5.65	0.04	0.00	0.00	0.00	0.00	0.04	0.05	99.75
621	16SUV023	2016_3	3_1_9	135	Beaufort Fm	GP	garnet	0.18-0.25	0.1529	0.0126	0.0037	19.1050	5.0912	6.4062	11.7010	4.8566	8.5323	0.2636	43.6327	99.8187	40.87	0.25	16.12	9.36	0.34	6.55	19.40	6.80	0.02	0.00	0.00	0.03	0.00	0.04	0.03	99.81
622	16SUV023	2016_3	3_1_10	136	Beaufort Fm	GP	garnet	0.18-0.25	0.0534	0.0119	0.0000	19.5043	6.1474	3.4330	12.1319	3.8333	10.1451	0.2691	44.2513	99.8380	41.73	0.09	19.17	5.02	0.35	7.91	20.12	5.36	0.02	0.00	0.00	0.00	0.00	0.07	0.00	99.82
623	16SUV023	2016_3	3_1_11	137	Beaufort Fm	GP	garnet	0.18-0.25	0.1399	0.0263	0.0000	19.5053	5.2266	4.0853	12.3514	3.7790	10.0191	0.2810	44.3679	99.8146	41.73	0.23	18.93	5.97	0.36	6.72	20.48	5.29	0.04	0.00	0.00	0.00	0.00	0.00	0.03	99.79
624	16SUV023	2016_3	3_1_12	138	Beaufort Fm	GP	garnet	0.18-0.25	0.0000	0.0159	0.0059	19.3234	6.1036	3.9550	12.2523	3.0667	10.3695	0.3928	44.2349	99.7402	41.34	0.00	19.59	5.78	0.51	7.85	20.32	4.29	0.02	0.01	0.00	0.00	0.00	0.00	0.00	99.71
625	16SUV023	2016_3	3_1_13	139	Beaufort Fm	GP	garnet	0.18-0.25	0.3592	0.0365	0.0062	19.3475	6.6283	2.3610	11.9126	3.8121	10.5592	0.2751	44.1610	99.5287	41.39	0.60	19.95	3.45	0.36	8.53	19.75	5.33	0.05	0.01	0.00	0.00	0.00	0.06	0.02	99.51
626	16SUV023	2016_3	3_1_14	140	Beaufort Fm	GP	garnet	0.18-0.25	0.0000	0.0000	0.0041	19.5310	4.9393	4.0703	13.7103	1.8939	10.3875	0.2731	44.6657	99.5101	41.78	0.00	19.63	5.95	0.35	6.35	22.74	2.65	0.00	0.00	0.00	0.00	0.00	0.04	0.00	99.49
627	16SUV023	2016_3	3_2_1	141	Beaufort Fm	GP	garnet	0.18-0.25	0.0368	0.0111	0.0000	19.5160	5.9981	2.2452	12.4173	3.4122	11.1773	0.3000	44.5987	99.7431	41.75	0.06	21.12	3.28	0.39	7.72	20.59	4.77	0.00	0.00	0.00	0.00	0.00	0.03	0.00	99.71
628	16SUV023	2016_3	3_2_2	142	Beaufort Fm	GP	garnet	0.18-0.25	0.2090	0.0208	0.0017	19.4736	6.0960	2.9354	12.1346	3.7440	10.4882	0.2563	44.3426	99.7351	41.66	0.35	19.82	4.29	0.33	7.84	20.12	5.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	99.68
629	16SUV023	2016_3	3_2_3	143	Beaufort Fm	GP	garnet	0.18-0.25	0.0361	0.0252	0.0014	19.3417	5.7411	3.5447	12.5823	3.4191	10.4477	0.3185	44.4262	99.9373	41.38	0.06	19.74	5.18	0.41	7.39	20.87	4.78	0.03	0.00	0.00	0.00	0.00	0.03	0.05	99.92
630	16SUV023	2016_3	3_2_4	144	Beaufort Fm	GP	garnet	0.18-0.25	0.0002	0.0239	0.0017	19.6335	5.2933	3.6742	13.2617	2.4149	10.5747	0.2984	44.8498	100.1080	42.00	0.00	19.98	5.37	0.39	6.81	21.99	3.38	0.03	0.00	0.00	0.00	0.00	0.00	0.10	100.05
631	16SUV023	2016_3	3_2_5	145	Beaufort Fm	GP	garnet	0.18-0.25	0.0000	0.0124	0.0064	19.3298	5.1606	6.5588	13.1424	2.3444	8.8688	0.3326	44.1218	99.9070	41.35	0.00	16.76	9.59	0.43	6.64	21.79	3.28	0.02	0.01	0.00	0.00	0.00	0.04	0.00	99.91
632	16SUV023	2016_3	3_2_6	146	Beaufort Fm	GP	garnet	0.18-0.25	0.0000	0.0120	0.0077	19.0760	6.0470	5.0704	10.8191	5.1912	9.4669	0.4111	43.5813	99.7527	40.81	0.00	17.89	7.41	0.53	7.78	17.94	7.26	0.02	0.01	0.00	0.00	0.00	0.06	0.00	99.71
633	16SUV023	2016_3	3_2_7	147	Beaufort Fm	GP	garnet	0.18-0.25	0.2265	0.0276	0.0022	19.4361	5.7973	3.2748	12.3037	3.7661	10.0221	0.2659	44.2725	99.6338	41.58	0.38	19.31	4.79	0.34	7.46	20.40	5.27	0.04	0.00	0.00	0.00	0.00	0.03	0.00	99.60
634	16SUV023	2016_3	3_2_8	148	Beaufort Fm	GP	garnet	0.18-0.25	0.0683	0.0269	0.0000	19.3099	5.3295	4.0105	12.4257	3.7789	10.1096	0.3096	44.2628	99.7191	41.31	0.11	19.10	5.86	0.40	6.86	20.61	5.29	0.04	0.00	0.00	0.02	0.00	0.04	0.06	99.69
635	16SUV023	2016_3	3_2_9	149	Beaufort Fm	GP	garnet	0.18-0.25	0.2549	0.0421	0.0031	19.3025	5.0814	4.4127	12.5012	3.8501	9.6827	0.2519	44.1492	99.5774	41.29	0.43	18.30	6.45	0.33	6.54	20.73	5.39	0.06	0.00	0.00	0.00	0.00	0.04	0.00	99.54
636	16SUV023	2016_3	3_2_10	150	Beaufort Fm	GP	garnet	0.18-0.25	0.2199	0.0417	0.0000	19.2336	5.4710	5.3909	11.8733	4.1903	9.1015	0.2934	43.8242	99.6691	41.15	0.37	17.20	7.88	0.38	7.04	19.69	5.86	0.06	0.00	0.00	0.00	0.00	0.03	0.03	99.67
637	16SUV023	2016_3	3_2_11	151	Beaufort Fm	GP	garnet	0.18-0.25	0.1944	0.0425	0.0000	19.4682	5.6350	2.9253	12.6220	3.4501	10.6951	0.2876	44.6063	99.9766	41.65	0.32	20.21	4.28	0.37	7.25	20.93	4.83	0.06	0.00	0.00	0.00	0.00	0.03	0.03	99.96
638	16SUV023	2016_3	3_2_12	152	Beaufort Fm	GP	garnet	0.18-0.25	0.0848	0.0277	0.0000	19.2402	5.7774	4.5059	11.6806	4.2908	9.7894	0.3298	43.9854	99.8014	41.16	0.14	18.50	6.59	0.43	7.43	19.37	6.00	0.04	0.00	0.00	0.00	0.00	0.06	0.05	99.77
639	16SUV023	2016_3	3_2_13	153	Beaufort Fm	GP	garnet	0.18-0.25	0.2200	0.0284	0.0024	19.5312	5.1359	2.5874	12.7977	3.4116	10.8500	0.2590	44.6277	99.5043	41.78	0.37	20.50	3.78	0.33	6.61	21.22	4.77	0.04	0.00	0.00	0.00	0.00	0.05	0.04	99.50
640	16SUV023	2016_3	3_2_14	154	Beaufort Fm	GP	garnet	0.18-0.25	0.0375	0.0160	0.0065	19.7486	5.8339	1.5059	12.8229	3.1364	11.6300	0.2576	45.0427	100.0820	42.25	0.06	21.97	2.20	0.33	7.51	21.26	4.39	0.02	0.01	0.00	0.00	0.00	0.03	0.03	100.07
641	16SUV023	2016_3	3_2_15	155	Beaufort Fm	GP	spinel	0.18-0.25	0.0411	0.0085	0.0018	0.0208	2.8506	0.0566	15.7505	0.0009	36.8250	0.0085	44.0385	99.6412	0.04	0.07	69.58	0.08	0.00	3.67	26.12	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	99.60
642	15SUV019	2016_3	3_3_1	156	Beaufort Fm	almandine	garnet	0.18-0.25	0.0216	0.0000	0.0000	18.1518	21.2621	0.0489	5.7821	0.8735	11.5640	0.3515	41.3795	99.4669	38.83	0.04	21.85	0.07	0.45	27.35	9.59	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.44
643	16SUV023	2016_3	3_3_2	157	Beaufort Fm	almandine	garnet	0.18-0.25	0.0211	0.0037	0.0018	17.4129	24.1996	0.0000	2.3520	2.6763	11.1382	1.6258	39.7891	99.2274	37.25	0.04	21.05	0.00	2.10	31.13	3.90	3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.21
644	15SUV019	2016_3	3_3_3	158	Beaufort Fm	apatite	apatite	0.18-0.25	0.0000	0.0190	0.0001	0.1315	0.0449	0.0000	0.0012	40.0065	0.0000	0.0302	39.3444	97.5468	0.28	0.00	0.00	0.00	0.04	0.06	0.00	55.98	0.03	0.00	0.00	0.00	0.00	0.00	41.15	97.53
645	16SUV023	2016_3	3_3_4	159	Beaufort Fm	grossular	garnet	0.18-0.25	0.1581	0.0025	0.0037	18.1765	5.3614	0.0000	0.0297	23.8164	10.6350	0.5030	41.4974	100.1930	38.89	0.26	20.09	0.00	0.65	6.90	0.05	33.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16
646	15SUV030	2016_3	3_3_5	160	Beaufort Fm	forsterite	olivine	0.18-0.25	0.0029	0.0061	0.0022	18.0107	14.5434	0.0159	25.0290	0.1598	0.0161	0.1957	41.4002	99.6185	38.53	0.00	0.03	0.00	0.25	18.71	41.51	0.22	0.00	0.00	0.00	0.00	0.25	0.00	0.06	99.56
647	15SUV019	2016_3	3_3_6	161	Beaufort Fm	diopside	garnet	0.18-0.25	0.2697	0.0056	0.0043	18.0206	7.8903	0.0105	0.3425	25.8160	7.3353	0.0409	40.0703	99.8338	38.55	0.45	13.86	0.00	0.05	10.15	0.57	36.12	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.78
648	15SUV019	2016_3	3_3_7	162	Beaufort Fm	low-Cr diop	clinopyroxene	0.18-0.25	0.0672	0.3347	0.0007	24.4159	4.7255	0.6376	8.7728	16.2950	1.2222	0.1606	43.0724	99.7724	52.23	0.11	2.31	0.93	0.21	6.08	14.55	22.80	0.45	0.00	0.00	0.00	0.05	0.00	0.00	99.72
649	15SUV019	2016_3	3_3_9	163	Beaufort Fm	low-Cr diop	clinopyroxene	0.18-0.25	0.2340	0.1445	0.0047	23.7147	3.9616	0.7557	10.4180	14.3310	1.9507	0.1048	43.0803	98.7637	50.73	0.39	3.69	1.10	0.14	5.10	17.28	20.05	0.19	0.00	0.00	0.04	0.00	0.04	0.00	98.75
650	15SUV028	2016_3	3_3_10	164	Beaufort Fm	low-Cr diop	clinopyroxene	0.18-0.25	0.2644	0.1494	0.0011	23.7109	4.0876	0.7158	10.3224	14.5141	2.0583	0.1003	43.2366	99.2425	50.73	0.44	3.89	1.05	0.13	5.26	17.12	20.31	0.20	0.00	0.00	0.04	0.00	0.03	0.00	99.23
651	15SUV028	2016_3	3_3_11	165	Beaufort Fm	low-Cr diop	clinopyroxene	0.18-0.25	0.1061	0.1269	0.0000	23.7962	3.2507	0.8734	10.2494	15.1848	1.9065	0.0932	43.1205	98.7605	50.91	0.18	3.60	1.28	0.12	4.18	17.00	21.25	0.17	0.00	0.00	0.03	0.00	0.00	0.00	98.71
652	16SUV023	2016_3	3_4_1	166	Beaufort Fm	ilmenite	chromite	0.18-0.25	0.9268	0.0092	0.0031	0.0000	14.3488	26.7173	9.6073	0.0038	12.5170	0.1291	34.6702	99.2501	0.00	1.55	23.65	39.05	0.17	18.46	15.93	0.00	0.00	0.00	0.00	0.21	0.06	0.16	0.00	99.22
653	16SUV023	2016_3	3_4_2	167	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.3217	0.0163	0.0009	0.0131	22.9349	2.0674	8.1279	0.0116	0.4052	0.1747	33.7361	98.2413	0.03	50.58	0.77	3.02	0.23	29.51	13.48	0.02	0.00	0.00	0.20	0.19	0.00	0.20	0.00	98.21
654	16SUV023	2016_3	3_4_3	168	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.3961	0.0004	0.0012	0.0023	23.5452	1.9205	7.9266	0.0150	0.3048	0.2166	33.6755	98.4308	0.00	50.70	0.58	2.81	0.28	30.29	13.14	0.02	0.00	0.00	0.20	0.13	0.00	0.25	0.00	98.41
655	16SUV023	2016_3	3_4_4	169	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.1691	0.0044	0.0044	0.0007	24.2635	1.9334	7.6555	0.0138	0.2323	0.2293	33.4975	98.4469	0.00	50.32	0.44	2.83	0.30	31.21	12.70	0.02	0.00	0.00	0.26	0.14	0.00	0.21	0.00	98.42
656	16SUV023	2016_3	3_4_5	170	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.0985	0.0085	0.0001	0.0147	25.9423	1.1634	7.0687	0.0137	0.3113	0.2070	33.2754	98.5325	0.03	50.21	0.59	1.70	0.27	33.37	11.72	0.02	0.00	0.00	0.25	0.11	0.00	0.23	0.00	98.49
657	16SUV023	2016_3	3_4_6	171	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.4927	0.0162	0.0034	0.0096	23.4504	1.8756	7.9698	0.0136	0.3018	0.2091	33.7258	98.5017	0.02	50.86	0.57	2.74	0.27	30.17	13.22	0.02	0.00	0.00	0.17	0.16	0.03	0.25	0.00	98.47
658	16SUV023	2016_3	3_4_7	172	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	29.8641	0.0058	0.0000	0.0115	25.6530	1.2726	7.1647	0.0121	0.3214	0.2088	33.1130	97.9831	0.02	49.82	0.61	1.86	0.27	33.00	11.88	0.02	0.00	0.00	0.21	0.10	0.00	0.16	0.00	97.95
659	16SUV023	2016_3	3_4_8	173	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	28.7263	0.0052	0.0019	0.0037	37.7635	0.0059	0.3440	0.0003	0.0230	0.4924	30.4621	97.9448	0.00	47.92	0.04	0.00	0.64	48.58	0.57	0.00	0.00	0.00	0.06	0.00	0.00	0.10	0.00	97.92
660	16SUV023	2016_3	3_4_9	174	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.7764	0.0098	0.0000	0.0140	23.7700	1.0568	7.9194	0.0136	0.2818	0.2321	33.5880	98.0860	0.03	51.34	0.53	1.54	0.30	30.58	13.13	0.02	0.00	0.00	0.21	0.11	0.00	0.26	0.00	98.05
661	16SUV023	2016_3	3_4_10	175	Beaufort Fm	ilmenite	chromite	0.18-0.25	1.4472	0.0000	0.0034	0.0000	19.1916	22.9219	8.5689	0.0027	12.4307	0.1410	33.8940	98.9336	0.00	2.41	23.49	33.50	0.18	24.69	14.21	0.00	0.00	0.00	0.00	0.20	0.09	0.15	0.00	98.93
662	16SUV023	2016_3	3_4_11	176	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.3517	0.0000	0.0010	0.0113	23.6113	1.8393	7.8860	0.0170	0.2972	0.2241	33.6258	98.3495	0.02	50.63	0.56	2.69	0.29	30.38	13.08	0.02	0.00	0.00	0.21	0.15	0.00	0.29	0.00	98.33
663	16SUV023	2016_3	3_4_12	177	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	28.0943	0.0111	0.0031	0.0037	38.1084	0.0049	0.5695	0.0070	0.0382	0.3251	30.2942	97.6771	0.00	46.86	0.07	0.00	0.42	49.03	0.94	0.01	0.00	0.00	0.00	0.06	0.00	0.22	0.00	97.61
664	16SUV023	2016_3	3_4_13	178	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.0114	0.0064	0.0000	0.0093	25.7258	1.1146	7.2090	0.0160	0.3188	0.2107	33.2040	98.2159	0.02	50.06	0.60	1.63	0.27	33.10	11.95	0.02	0.00	0.00	0.17	0.11	0.00	0.26	0.00	98.20
665	16SUV023	2016_3	3_4_14	179	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.4939	0.0118	0.0039	0.0072	24.9582	0.9792	7.6028	0.0111	0.3066	0.2216	33.4913	98.4643	0.00	50.87	0.58	1.43	0.29	32.11	12.61	0.02	0.00	0.00	0.21	0.08	0.00	0.23	0.00	98.41
666	16SUV023	2016_3	3_4_15	180	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	27.6288	0.0036	0.0021	0.0061	30.6783	1.1011	5.6035	0.0113	0.1383	0.2211	31.8896	97.8687	0.00	46.09	0.26	1.61	0.29	39.47	9.29	0.02	0.00	0.00	0.45	0.07	0.04	0.27	0.00	97.85
667	15SUV015	2016_3	3_5_1	181	Beaufort Fm	chromite	chromite	0.18-0.25	2.4147	0.0125	0.0023	0.0000	30.9301	25.6987	3.7263	0.0000	4.9189	0.2641	29.4228	97.8500	0.00	4.03	9.29	37.56	0.34	39.79	6.18	0.00	0.00	0.00	0.00	0.08	0.15	0.40	0.00	97.82
668	15SUV018	2016_3	3_5_2	182	Beaufort Fm	chromite	chromite	0.18-0.25	0.2953	0.0000	0.0043	0.0000	14.2709	38.1212	6.5423	0.0000	6.5680	0.1342	32.1992	98.4752	0.00	0.49	12.41	55.72	0.17	18.36	10.85	0.00	0.00	0.00	0.00	0.14	0.08	0.22	0.00	98.44
669	15SUV018	2016_3	3_5_3	183	Beaufort Fm	chromite	chromite	0.18-0.25	0.6499	0.0000	0.0027	0.0028	14.5671	14.0097	10.3482	0.0000	21.8061	0.1115	37.4300	99.2661	0.00	1.08	41.20	20.48	0.14	18.74	17.16	0.00	0.00	0.00	0.00	0.22	0.08	0.13	0.00	99.24
670	15SUV018	2016_3	3_5_4	184	Beaufort Fm	chromite	chromite	0.18-0.25	0.1120	0.0036	0.0039	0.0192	8.8436	15.5167	11.9966	0.0015	23.5005	0.0835	38.7265	99.1552	0.04	0.19	44.40	22.68	0.11	11.38	19.89	0.00	0.00	0.00	0.00	0.31	0.05	0.09	0.00	99.14
671	15SUV018	2016_3	3_5_5	185	Beaufort Fm	chromite	chromite	0.18-0.25	0.6800	0.0000	0.0043	0.0000	21.4256	28.4461	6.0202	0.0003	9.3131	0.1890	32.2121	98.7791	0.00	1.13	17.60	41.58	0.24	27.56	9.98	0.00	0.00	0.00	0.00	0.15	0.11	0.41	0.00	98.77
672	15SUV019	2016_3	3_5_6	186	Beaufort Fm	chromite	chromite	0.18-0.25	1.2149	0.0165	0.0020	0.0000	21.6553	28.4398	6.9605	0.0061	7.7581	0.1997	31.8555	98.5549	0.00	2.03	14.66	41.57	0.26	27.86	11.54	0.01	0.00	0.00	0.00	0.22	0.07	0.32	0.00	98.53
673	15SUV019	2016_3	3_5_7	187	Beaufort Fm	chromite	chromite	0.18-0.25	1.1261	0.0129	0.0009	0.0000	25.7423	27.3818	4.7817	0.0055	7.9859	0.2365	31.2231	98.8576	0.00	1.88	15.09	40.02	0.31	33.12	7.93	0.00	0.00	0.00	0.00	0.12	0.11	0.25	0.00	98.82
674	15SUV019	2016_3	3_5_8	188	Beaufort Fm	chromite	chromite	0.18-0.25	0.0220	0.0000	0.0063	0.0000	16.7706	42.9251	4.8507	0.0042	3.3956	0.2456	31.0029	99.4840	0.00	0.04	6.42	62.74	0.32	21.58	8.04	0.00	0.00	0.01	0.00	0.00	0.22	0.12	0.00	99.47
675	15SUV019	2016_3	3_5_9	189	Beaufort Fm	chromite	chromite	0.18-0.25	1.2057	0.0000	0.0002	0.0000	20.8396	26.4034	7.4638	0.0007	9.6101	0.1795	32.5839	98.5951	0.00	2.01	18.16	38.59	0.23	26.81	12.38	0.00	0.00	0.00	0.00	0.17	0.07	0.18	0.00	98.59
676	15SUV028	2016_3	3_5_10	190	Beaufort Fm	chromite	chromite	0.18-0.25	0.3985	0.0000	0.0000	0.0000	14.4479	25.5678	9.8778	0.0041	13.7490	0.1354	35.0509	99.4525	0.00	0.66	25.98	37.37	0.17	18.59	16.38	0.00	0.00	0.00	0.00	0.18	0.03	0.08	0.00	99.45
677	15SUV028	2016_3	3_5_11	191	Beaufort Fm	chromite	chromite	0.18-0.25	1.1436	0.0074	0.0000	0.0000	21.6544	29.3983	5.9006	0.0000	8.0677	0.2089	31.8174	98.6339	0.00	1.91	15.24	42.97	0.27	27.86	9.78	0.00	0.00	0.00	0.00	0.19	0.11	0.28	0.00	98.62
678	15SUV028	2016_3	3_5_12	192	Beaufort Fm	chromite	chromite	0.18-0.25	0.2805	0.0000	0.0018	0.0000	15.6228	32.4160	8.0480	0.0049	9.2529	0.1487	33.2998	99.3779	0.00	0.47	17.48	47.38	0.19	20.10	13.35	0.00	0.00	0.00	0.00	0.26	0.00	0.12	0.00	99.34
679	15SUV030	2016_3	3_5_13	193	Beaufort Fm	chromite	chromite	0.18-0.25	0.8607	0.0062	0.0007	0.0000	22.5476	27.7837	5.9520	0.0004	9.0595	0.1730	32.0702	98.9498	0.00	1.44	17.12	40.61	0.22	29.01	9.87	0.00	0.00	0.00	0.00	0.18	0.13	0.37	0.00	98.94
680	15SUV030	2016_3	3_5_14	194	Beaufort Fm	chromite	chromite	0.18-0.25	0.8258	0.0092	0.0029	0.0000	20.6551	29.3534	6.5444	0.0038	8.7340	0.1889	32.2967	98.9936	0.00	1.38	16.50	42.90	0.24	26.57	10.85	0.00	0.00	0.00	0.00	0.17	0.09	0.25	0.00	98.96
681	16SUV023	2016_3	3_6_1	195	Beaufort Fm	chromite	chromite	0.18-0.25	0.1031	0.0000	0.0002	0.0000	17.5028	37.0438	5.5439	0.0030	6.3545	0.1782	31.6210	98.6131	0.00	0.17	12.01	54.14	0.23	22.52	9.19	0.00	0.00	0.00	0.00	0.08	0.16	0.10	0.00	98.60
682	16SUV023	2016_3	3_6_2	196	Beaufort Fm	chromite	chromite	0.18-0.25	1.4574	0.0007	0.0000	0.0000	19.9020	28.2384	8.0866	0.0025	8.2001	0.1388	32.4795	98.8321	0.00	2.43	15.49	41.27	0.18	25.60	13.41	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	98.82
683	16SUV023	2016_3	3_6_3	197	Beaufort Fm	chromite	chromite	0.18-0.25	0.4356	0.0106	0.0000	0.0000	34.1039	23.6667	6.4870	0.0102	3.1235	0.2133	28.1739	96.4491	0.00	0.73	5.90	34.59	0.28	43.87	10.76	0.01	0.00	0.00	0.00	0.18	0.05	0.07	0.00	96.43
684	16SUV023	2016_3	3_6_4	198	Beaufort Fm	chromite	chromite	0.18-0.25	0.2362	0.0074	0.0000	0.0000	25.4182	33.8539	4.7979	0.0075	3.5026	0.3037	29.5240	97.9290	0.00	0.39	6.62	49.48	0.39	32.70	7.96	0.01	0.00	0.00	0.00	0.11	0.17	0.06	0.00	97.90
685	16SUV023	2016_3	3_6_5	199	Beaufort Fm	chromite	chromite	0.18-0.25	1.3756	0.0000	0.0000	0.0000	21.4429	25.7232	7.8606	0.0005	9.0996	0.1536	32.3621	98.3218	0.00	2.29	17.19	37.60	0.20	27.59	13.04	0.00	0.00	0.00	0.00	0.17	0.03	0.18	0.00	98.29
686	16SUV023	2016_3	3_6_6	200	Beaufort Fm	chromite	chromite	0.18-0.25	0.3283	0.0000	0.0020	0.0000	23.8462	29.0405	4.0065	0.0056	9.4045	0.2286	31.6372	98.8287	0.00	0.55	17.77	42.44	0.30	30.68	6.64	0.00	0.00	0.00	0.00	0.08	0.18	0.18	0.00	98.82
687	16SUV023	2016_3	3_6_7	201	Beaufort Fm	chromite	chromite	0.18-0.25	0.1420	0.0133	0.0020	0.0000	22.7847	34.0238	3.0168	0.0097	7.2797	0.2600	30.9695	98.7890	0.00	0.24	13.75	49.73	0.34	29.31	5.00	0.01	0.00	0.00	0.00	0.16	0.09	0.10	0.00	98.73
688	16SUV023	2016_3	3_6_8	202	Beaufort Fm	chromite	chromite	0.18-0.25	0.2308	0.0000	0.0013	0.0000	14.2833	27.4110	8.9455	0.0054	13.2558	0.1596	34.7370	99.3171	0.00	0.39	25.05	40.06	0.21	18.38	14.83	0.00	0.00	0.00	0.00	0.10	0.05	0.24	0.00	99.31
689	16SUV023	2016_3	3_6_9	203	Beaufort Fm	chromite	chromite	0.18-0.25	0.5366	0.0000	0.0018	0.0000	11.3433	19.5788	11.0471	0.0066	19.1722	0.1001	37.1031	99.2000	0.00	0.90	36.23	28.62	0.13	14.59	18.32	0.01	0.00	0.00	0.00	0.22	0.07	0.12	0.00	99.19
690	16SUV023	2016_3	3_6_10	204	Beaufort Fm	chromite	chromite	0.18-0.25	1.2538	0.0000	0.0048	0.0000	17.8538	29.2848	8.3999	0.0000	8.7345	0.1407	32.9116	98.8771	0.00	2.09	16.50	42.80	0.18	22.97	13.93	0.00	0.00	0.00	0.00	0.18	0.08	0.13	0.00	98.86
691	16SUV023	2016_3	3_6_11	205	Beaufort Fm	chromite	chromite	0.18-0.25	0.5781	0.0056	0.0000	0.0000	14.1214	31.2230	7.7517	0.0034	10.2175	0.1158	33.1779	97.4849	0.00	0.96	19.31	45.63	0.15	18.17	12.85	0.00	0.00	0.00	0.00	0.18	0.06	0.14	0.00	97.45
692	16SUV023	2016_3	3_6_12	206	Beaufort Fm	chromite	chromite	0.18-0.25	0.8030	0.0183	0.0000	0.0000	14.4360	38.3925	5.4052	0.0095	5.6185	0.1409	31.1604	96.4170	0.00	1.34	10.62	56.11	0.18	18.57	8.96	0.01	0.02	0.00	0.00	0.14	0.16	0.28	0.00	96.40
693	16SUV023	2016_3	3_6_13	207	Beaufort Fm	chromite	chromite	0.18-0.25	0.0373	0.0000	0.0036	0.0000	12.7347	30.9495	8.1788	0.0011	12.6275	0.1495	34.7269	99.7285	0.00	0.06	23.86	45.24	0.19	16.38	13.56	0.00	0.00	0.00	0.00	0.08	0.16	0.17	0.00	99.72
694	16SUV023	2016_3	3_6_14	208	Beaufort Fm	chromite	chromite	0.18-0.25	1.2513	0.0000	0.0000	0.0000	20.2894	19.2625	8.7641	0.0013	14.4564	0.1587	34.3462	98.8826	0.00	2.09	27.32	28.15	0.20	26.10	14.53	0.00	0.00	0.00	0.00	0.19	0.05	0.22	0.00	98.85
695	16SUV023	2016_3	3_6_15	209	Beaufort Fm	chromite	chromite	0.18-0.25	1.2298	0.0043	0.0058	0.0000	17.4789	30.2634	8.5796	0.0026	8.2322	0.1472	32.9126	99.1433	0.00	2.05	15.55	44.23	0.19	22.49	14.23	0.00	0.00	0.00	0.00	0.19	0.05	0.12	0.00	99.11

[1]GO - mantle garnets incluidng eclogitic pyrope-almandine and Cr-poor megacrystic pyropes

[2]GP - purple to red peridotitic garnet (Cr-pyrope)

shading depicts duplicate analysis of single grains

APPENDIX 6B

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - EPMA chemistry: GARNET

								WT %																Grütter et al. (2004) garnet classification Calculations						Hardman et al. (2018) ecologitic garnet classification calculations					
																								If CaO (WT %) is <	Then	Else					Factor			Factor	
GSC Sample #	Mount	Grain #	EPMA #	ODM Min ID	EPMA Min ID	Garnet Class[1]	Grain Size	SiO2	TiO2	Al2O3	Cr2O3	MnO	FeO	MgO	CaO	Na2O	K2O	Nb2O5	NiO	ZnO	V2O3	P2O5	Total	3.375+0.25*Cr2O3	CA_INT[2]	CA_INT[3]	MGNUM[4]	5.0+0.94*CaO	2.13-2.1*MGNUM	MgO/FeO	1.782	ln Mg/Fe	TiO2/SiO2	0.752	ln Ti/Si
15SUV001	2015_1	3_1	1-3_001	andradite	garnet	G0	0.25-0.5	34.49	3.28	1.50	0.00	0.21	23.26	0.44	32.60	0.00	0.00						95.78	3.375		32.600	0.033		2.061						
15SUV001	2015_1	3_2	1-3_002	andradite	garnet	G0	0.25-0.5	30.69	9.12	3.45	0.05	0.06	19.28	0.80	32.70	0.00	0.00						96.15	3.388		32.688	0.069		1.985						
15SUV001	2015_1	4_1	1-4_001	almandine	garnet	G0	0.5-1.0	36.26	0.10	19.90	0.00	20.99	18.91	0.90	1.61	0.00	0.00						98.67	3.375	1.610		0.078		1.966	0.04759	0.08481	-2.46732	0.00276	0.00207	-6.17832
15SUV001	2015_1	6_1	1-6_001	spessartine	garnet	G0	0.25-0.5	36.01	0.14	19.72	0.00	26.20	14.50	1.15	0.51	0.04	0.00						98.27	3.375	0.510		0.124		1.870	0.07931	0.14133	-1.95665	0.00389	0.00292	-5.83493
15SUV001	2015_1	6_2	1-6_002	spessartine	garnet	G0	0.25-0.5	35.53	0.15	20.06	0.00	21.62	17.70	1.39	0.57	0.06	0.00						97.08	3.375	0.570		0.123		1.872	0.07853	0.13994	-1.96652	0.00422	0.00317	-5.75252
15SUV002	2015_5	2_6	5-2_006	chromite, euhedral	garnet	G0	0.25-0.5	34.28	7.02	8.89	0.00	0.09	11.85	1.13	33.99	0.00	0.00						97.25	3.375		33.990	0.145		1.825						
15SUV003	2015_1	4_2	1-4_002	almandine	garnet	G3	0.25-0.5	39.11	0.13	21.88	0.00	0.49	20.18	8.75	8.36	0.03	0.00						98.93	3.375		8.360	0.436		1.214	0.43360	0.77267	-0.25790	0.00332	0.00250	-5.99162
15SUV003	2015_1	4_3	1-4_003	almandine	garnet	G0	0.25-0.5	36.72	0.07	20.31	0.00	2.26	30.35	1.06	7.07	0.00	0.00						97.84	3.375		7.070	0.059		2.007	0.03493	0.06224	-2.77679	0.00191	0.00143	-6.54760
15SUV005	2015_1	4_4	1-4_004	almandine	garnet	G0	0.5-1.0	36.70	0.00	20.85	0.00	2.62	34.22	2.98	0.65	0.00	0.00						98.02	3.375	0.650		0.134		1.848	0.08708	0.15518	-1.86315	0.00027	0.00020	-8.49297
15SUV005	2015_1	4_5	1-4_005	almandine	garnet	G3	0.25-0.5	38.83	0.10	21.76	0.04	0.61	22.14	8.72	6.34	0.00	0.00						98.54	3.385		6.330	0.413		1.264	0.39386	0.70185	-0.35403	0.00258	0.00194	-6.24680
15SUV006	2015_1	4_6	1-4_006	almandine	garnet	G0	0.25-0.5	36.90	0.00	20.45	0.03	2.28	31.65	3.49	3.16	0.00	0.00						97.96	3.383	3.153		0.164		1.785	0.11027	0.19650	-1.62710	0.00027	0.00020	-8.49840
15SUV006	2015_1	4_7	1-4_007	almandine	garnet	G0	0.25-0.5	37.41	0.03	20.64	0.04	5.60	28.03	4.07	2.92	0.03	0.00						98.77	3.385	2.911		0.206		1.698	0.14520	0.25875	-1.35190	0.00080	0.00060	-7.41351
15SUV008	2015_2	1_8	2-1_008	forsterite	garnet	G0	0.25-0.5	39.29	0.18	17.17	0.00	0.16	6.10	0.91	35.56	0.00	0.00						99.37	3.375		35.560	0.210		1.689						
15SUV009	2015_1	2_2	1-2-2	GP[5]	garnet	G9	0.25-0.5	41.98	0.10	21.18	3.18	0.44	7.65	19.60	5.41	0.00	0.00						99.54	4.170		4.615	0.820								
15SUV009	2015_1	4_8	1-4_008	almandine	garnet	G4	0.25-0.5	38.14	0.09	21.31	0.03	0.92	28.34	7.46	2.09	0.00	0.00						98.38	3.383	2.085		0.319		1.459	0.26323	0.46908	-0.75698	0.00236	0.00177	-6.33423
15SUV014	2015_1	2_3	1-2-3	GP	garnet	G10	0.25-0.5	41.96	0.02	19.60	5.42	0.35	6.54	21.67	3.64	0.03	0.00						99.23	4.730	2.597		0.855	8.422							
15SUV014	2015_1	2_4	1-2-4	GP	garnet	G10D	0.25-0.5	41.13	0.00	16.88	9.09	0.43	6.30	22.05	3.03	0.00	0.00						98.91	5.648	1.811		0.862	7.848							
15SUV019	2015_1	2_5	1-2_005	GP	garnet	G9	0.25-0.5	41.34	0.58	18.63	5.05	0.33	7.31	20.43	5.31	0.05	0.01						99.04	4.638		4.048	0.833								
15SUV019	2015_1	2_6	1-2_006	GP	garnet	G9	0.25-0.5	41.89	0.00	20.48	4.72	0.45	7.62	19.96	4.89	0.00	0.00						100.01	4.555		3.710	0.824								
15SUV019	Mount3_001	3_1_1	127	GP	garnet	G11	0.18-0.25	42.07	0.36	21.72	2.12	0.29	6.75	21.34	4.07	0.06	0.00	0.00	0.00	0.00	0.00	0.04	98.82	3.906		3.536	0.849								
15SUV019	Mount3_002	3_1_2	128	GP	garnet	G11	0.18-0.25	41.55	0.34	21.07	3.16	0.31	6.64	21.15	5.20	0.03	0.00	0.00	0.00	0.00	0.00	0.03	99.48	4.164		4.415	0.850								
15SUV019	Mount3_030	3_3_1	156	almandine	garnet	G0	0.18-0.25	38.83	0.04	21.85	0.07	0.45	27.35	9.59	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.44	3.393	1.216		0.385			0.35054	0.62466	-0.47055	0.00093	0.00070	-7.26970
15SUV019	Mount3_035	3_3_6	161	diopside	garnet	G0	0.18-0.25	38.55	0.45	13.86	0.00	0.05	10.15	0.57	36.12	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.78	3.375		36.122	0.091		1.940						
15SUV020	2015_1	2_7	1-2_007	GP	garnet	G9	0.25-0.5	41.91	0.33	20.10	3.99	0.34	6.96	20.80	4.85	0.03	0.01						99.32	4.373		3.853	0.842								
15SUV020	2015_1	6_3	1-6_003	spessartine	garnet	G0	0.25-0.5	36.00	0.15	19.56	0.00	21.28	19.02	1.06	1.11	0.00	0.00						98.18	3.375	1.110		0.090		1.940	0.05573	0.09931	-2.30949	0.00417	0.00313	-5.76566
15SUV021	2015_3	3_8	3-3_008	hedenbergite	garnet	G0	0.5-1.0	35.68	0.00	0.00	0.00	0.00	26.72	0.00	32.97	0.00	0.00						95.37	3.375		32.970	0.000		2.130						
15SUV024	2015_1	1_1	1-1-1	GO[6]	garnet	G9	0.25-0.5	41.51	0.60	19.78	3.42	0.38	8.59	19.19	5.62	0.05	0.00						99.14	4.230		4.765	0.799								
15SUV024	2015_1	1_2	1-1-2	GO	garnet	G0	0.25-0.5	38.85	0.04	21.92	0.00	0.51	25.93	10.07	1.14	0.00	0.00						98.46	3.375	1.140		0.409		1.271	0.38835	0.69205	-0.36810	0.00103	0.00077	-7.16360
15SUV024	2015_1	2_8	1-2_008	GP	garnet	G9	0.25-0.5	41.44	0.33	18.71	6.03	0.37	6.73	20.62	5.06	0.06	0.00						99.35	4.883		3.553	0.845								
15SUV024	2015_1	5_1`	1-5_001	almandine	garnet	G0	0.25-0.5	37.04	0.00	20.30	0.00	2.37	30.09	1.25	7.57	0.00	0.00						98.62	3.375		7.570	0.069		1.985	0.04154	0.07403	-2.60331	0.00027	0.00020	-8.50219
15SUV024	2015_1	5_2	1-5_002	almandine	garnet	G3	0.25-0.5	37.84	0.14	20.43	0.00	1.49	26.25	3.64	8.87	0.00	0.00						98.66	3.375		8.870	0.198		1.714	0.13867	0.24710	-1.39795	0.00370	0.00278	-5.88450
15SUV024	2015_1	5_3	1-5_003	almandine	garnet	G0	0.25-0.5	38.16	0.00	21.49	0.12	0.66	29.07	7.75	1.15	0.00	0.00						98.40	3.405	1.140		0.322		1.453	0.26660	0.47508	-0.74428	0.00026	0.00020	-8.53198
15SUV024	2015_1	5_4	1-5_004	almandine	garnet	G3	0.25-0.5	38.03	0.11	21.13	0.00	0.57	24.03	6.88	7.41	0.00	0.00						98.16	3.375		7.410	0.338		1.420	0.28631	0.51020	-0.67295	0.00289	0.00218	-6.13067
15SUV024	2015_1	5_5	1-5_005	almandine	garnet	G3	0.25-0.5	38.72	0.23	21.53	0.00	0.34	20.97	7.58	9.31	0.03	0.00						98.71	3.375		9.310	0.392		1.307	0.36147	0.64414	-0.43984	0.00594	0.00447	-5.41105
15SUV024	2015_1	5_6	1-5_006	almandine	garnet	G0	0.25-0.5	37.57	0.03	21.41	0.00	0.78	30.40	6.65	1.25	0.00	0.00						98.09	3.375	1.250		0.281		1.541	0.21875	0.38981	-0.94209	0.00080	0.00060	-7.41778
15SUV025	2015_1	3_3	1-3_003	andradite	garnet	G0	0.25-0.5	27.53	11.91	3.77	0.00	0.08	19.79	0.42	32.26	0.00	0.00						95.76	3.375		32.260	0.036		2.053						
15SUV025	2015_1	3_4	1-3_004	andradite	garnet	G0	0.25-0.5	34.76	3.14	1.42	0.00	0.75	24.30	0.04	31.48	0.09	0.00						95.98	3.375		31.480	0.003		2.124						
15SUV026	2015_1	2_9	1-2_009	GP	garnet	G10	0.25-0.5	40.90	0.04	16.91	9.08	0.49	7.03	20.12	4.84	0.02	0.00						99.43	5.645	2.894		0.836	9.550							
15SUV026	2015_3	3_3	3-3_003	diopside	garnet	G0	0.25-0.5	38.72	1.14	15.68	0.00	0.05	7.13	0.80	35.32	0.00	0.00						98.84	3.375		35.320	0.167		1.780						
15SUV026	2015_3	3_4	3-3_004	diopside	garnet	G0	0.25-0.5	35.83	0.00	0.27	0.00	0.02	26.32	0.12	33.07	0.00	0.00						95.63	3.375		33.070	0.008		2.113						
15SUV028	2015_1	2_10	1-2_010A	GP	garnet	G9	0.5-1.0	40.53	0.21	16.20	9.46	0.49	6.72	18.49	7.02	0.06	0.00						99.18	5.740		4.655	0.831								
15SUV028_rpt	2015_1	2_10_rpt	1-2-10B	GP	garnet	G9	0.5-1.0	40.78	0.18	15.86	9.88	0.50	6.70	18.16	7.40	0.05	0.00						99.51	5.845		4.930	0.829								
15SUV028_rpt	2015_1	2_11_rpt	1-2-11A on fracture	GP	garnet	G9	0.25-0.5	39.21	0.50	15.12	6.43	0.31	6.32	17.54	5.48	0.04	0.01						90.96	4.983		3.873	0.832								
15SUV028_rpt	2015_1	2_11_rpt	1-2-11A-repeat	GP	garnet	G9	0.25-0.5	41.20	0.49	17.53	6.92	0.33	6.48	20.30	5.94	0.03	0.00						99.22	5.105		4.210	0.848								
15SUV028	2015_1	2_11	1-2-11B	GP	garnet	G9	0.25-0.5	41.24	0.50	17.72	6.93	0.33	6.45	20.30	5.91	0.03	0.00						99.41	5.108		4.178	0.849								
15SUV028	2015_3	3_5	3-3_005	diopside	garnet	G0	0.25-0.5	38.83	0.11	21.59	0.00	0.05	1.12	0.49	36.48	0.00	0.00						98.67	3.375		36.480	0.438		1.210						
15SUV028	2015_3	3_6	3-3_006	diopside	garnet	G0	0.25-0.5	36.98	0.22	18.18	0.00	0.00	1.24	3.32	35.63	0.00	0.00						95.57	3.375		35.630	0.827		0.394						
15SUV028	Mount3_003	3_1_3	129	GP	garnet	G9	0.18-0.25	42.02	0.27	20.77	3.23	0.33	7.18	21.08	4.89	0.04	0.00	0.00	0.00	0.00	0.03	0.00	99.84	4.182		4.088	0.840								
15SUV028	Mount3_004	3_1_4	130	GP	garnet	G11	0.18-0.25	41.29	0.94	18.21	5.05	0.32	7.31	20.46	5.75	0.05	0.00	0.00	0.02	0.00	0.03	0.03	99.46	4.638		4.488	0.833								
15SUV030	2015_1	2_12	1-2-12A	GP	garnet	G9	0.25-0.5	41.16	0.00	18.15	7.11	0.47	7.30	18.69	6.53	0.00	0.00						99.41	5.153		4.753	0.820								
15SUV030_rpt	2015_1	2_12_rpt	1-2-12B	GP	garnet	G9	0.25-0.5	40.79	0.00	17.85	7.18	0.46	7.26	18.71	6.56	0.00	0.00						98.81	5.170		4.765	0.821								
15SUV051	2015_1	2_13	1-2-13	GP	garnet	G9	0.25-0.5	40.39	0.09	13.22	12.96	0.41	7.01	18.29	6.72	0.00	0.00						99.09	6.615		3.480	0.823								
15SUV051	2015_1	3_6	1-3_006	andradite	garnet	G0	0.25-0.5	33.76	4.62	2.40	0.00	0.25	23.30	0.21	31.68	0.00	0.00						96.22	3.375		31.680	0.016		2.097						
15SUV051	2015_1	3_7	1-3_007	andradite	garnet	G0	0.25-0.5	30.02	12.85	1.41	0.04	0.14	18.01	1.28	32.61	0.03	0.00						96.39	3.385		32.600	0.112		1.894						
15SUV052	2015_1	5_7	1-5_007	almandine	garnet	G0	0.5-1.0	36.49	0.00	20.82	0.00	4.24	32.66	2.66	1.09	0.00	0.00						97.96	3.375	1.090		0.127		1.864	0.08145	0.14514	-1.93009	0.00027	0.00021	-8.48723
15SUV052	2015_1	5_8	1-5_008	almandine	garnet	G0	0.5-1.0	37.11	0.07	20.82	0.00	3.25	29.19	3.14	4.48	0.03	0.00						98.09	3.375		4.480	0.161		1.792	0.10757	0.19169	-1.65187	0.00189	0.00142	-6.55817
15SUV052	2015_1	5_9	1-5_009	almandine	garnet	G0	0.5-1.0	37.89	0.00	21.54	0.00	0.39	30.05	7.25	1.05	0.00	0.00						98.17	3.375	1.050		0.301		1.498	0.24126	0.42993	-0.84412	0.00026	0.00020	-8.52488
15SUV053	2015_1	5_10	1-5_010	almandine	garnet	G0	0.25-0.5	36.94	0.04	20.51	0.00	1.42	30.33	1.61	7.36	0.00	0.00						98.21	3.375		7.360	0.086		1.948	0.05308	0.09459	-2.35817	0.00108	0.00081	-7.11319
15SUV053	2015_1	5_11	1-5_011	almandine	garnet	G0	0.25-0.5	36.47	0.00	20.60	0.00	1.12	37.01	1.31	1.47	0.00	0.00						97.98	3.375	1.470		0.059		2.005	0.03540	0.06308	-2.76342	0.00027	0.00021	-8.48668

16SUV015	Mount1_006	1_1_6	226	GP	garnet	G9	0.25-0.5	42.35	0.08	19.40	5.78	0.37	7.10	20.15	5.35	0.02	0.01	0.00	0.02	0.00	0.04	0.00	100.67	4.820		3.901	0.835							
16SUV023	Mount1_002	1_1_2	222	GO	garnet	G1	0.25-0.5	41.90	0.69	19.88	3.41	0.30	8.43	19.86	5.36	0.04	0.00	0.00	0.02	0.00	0.06	0.03	99.97	4.228		4.503	0.808							
16SUV023	Mount1_003	1_1_3	223	GO	garnet	G4	0.25-0.5	42.49	0.24	22.84	0.82	0.28	7.78	21.17	4.31	0.04	0.00	0.00	0.02	0.00	0.02	0.00	100.02	3.579		4.109	0.829		2.72183	4.85029	1.57904	0.00574	0.00431	-5.44611
16SUV023	Mount1_007	1_2_1	227	GP	garnet	G10	0.25-0.5	41.62	0.12	17.17	8.40	0.35	6.60	20.53	4.96	0.03	0.01	0.00	0.00	0.00	0.05	0.03	99.87	5.474	3.058		0.847							
16SUV023	Mount1_008	1_2_2	228	GP	garnet	G11	0.25-0.5	41.78	0.42	18.10	6.64	0.41	7.87	19.14	6.02	0.05	0.00	0.00	0.00	0.00	0.05	0.05	100.54	5.036		4.363	0.813							
16SUV023	Mount1_009	1_2_3	229	GP	garnet	G11	0.25-0.5	41.71	0.61	19.32	4.86	0.38	7.08	18.46	7.83	0.05	0.00	0.00	0.00	0.00	0.05	0.00	100.34	4.589		6.620	0.823							
16SUV023	Mount1_010	1_2_4	230	GP	garnet	G9	0.25-0.5	41.16	0.30	15.41	10.33	0.35	6.62	19.10	6.93	0.03	0.00	0.00	0.00	0.00	0.06	0.00	100.29	5.957		4.349	0.837							
16SUV023	Mount1_011	1_2_5	231	GP	garnet	G9	0.25-0.5	41.76	0.26	17.26	8.31	0.36	6.63	19.92	5.86	0.03	0.00	0.00	0.02	0.00	0.06	0.05	100.54	5.452		3.786	0.843							
16SUV023	Mount1_012	1_2_6	232	GP	garnet	G9	0.25-0.5	41.55	0.33	16.62	9.06	0.39	6.56	20.16	5.78	0.05	0.00	0.00	0.00	0.00	0.04	0.04	100.56	5.640		3.511	0.846							
16SUV023	Mount1_013	1_2_7	233	GP	garnet	G10	0.25-0.5	42.11	0.00	20.02	5.61	0.48	7.74	22.68	1.78	0.00	0.01	0.00	0.00	0.00	0.03	0.00	100.46	4.779	1.257		0.839							
16SUV023	Mount1_014	1_2_8	234	GP	garnet	G1	0.25-0.5	42.58	0.57	20.75	2.72	0.31	7.23	21.34	4.90	0.05	0.02	0.00	0.00	0.00	0.04	0.03	100.55	4.055		4.220	0.840							
16SUV023	Mount1_015	1_2_9	235	GP	garnet	G9	0.25-0.5	41.63	0.25	16.91	8.48	0.33	7.02	19.25	6.57	0.04	0.00	0.00	0.00	0.00	0.05	0.04	100.57	5.496		4.445	0.830							
16SUV023	Mount1_016	1_2_10	236	GP	garnet	G10	0.25-0.5	41.13	0.00	16.34	10.14	0.49	7.51	18.92	5.67	0.00	0.00	0.00	0.00	0.00	0.03	0.00	100.23	5.909	3.237		0.818							
16SUV023	Mount1_017	1_2_11	237	GP	garnet	G12	0.25-0.5	40.81	0.00	15.54	10.68	0.56	7.51	16.63	8.43	0.03	0.01	0.00	0.02	0.00	0.03	0.04	100.28	6.045		5.763	0.798							
16SUV023	Mount1_018	1_2_12	238	GP	garnet	G11	0.25-0.5	41.95	0.46	18.93	5.59	0.38	7.15	20.19	5.51	0.05	0.00	0.00	0.00	0.00	0.06	0.03	100.31	4.772		4.115	0.834							
16SUV023	Mount1_019	1_2_13	239	GP	garnet	G9	0.25-0.5	41.28	0.32	17.24	8.09	0.35	6.39	19.92	6.42	0.02	0.00	0.00	0.00	0.00	0.04	0.03	100.10	5.398		4.400	0.848							
16SUV023	Mount1_020	1_3_1	240	GP	garnet	G9	0.25-0.5	42.09	0.02	20.73	4.52	0.39	7.24	19.68	5.91	0.02	0.00	0.00	0.00	0.00	0.04	0.00	100.65	4.505		4.776	0.829							
16SUV023	Mount1_021	1_3_2	241	GP	garnet	G9	0.25-0.5	41.02	0.38	14.75	10.72	0.35	7.00	18.62	7.14	0.04	0.00	0.00	0.00	0.00	0.06	0.05	100.13	6.056		4.463	0.826							
16SUV023	Mount1_022	1_3_3	242	GP	garnet	G9	0.25-0.5	41.72	0.21	16.40	9.47	0.34	6.06	19.80	6.17	0.03	0.00	0.00	0.00	0.00	0.06	0.03	100.30	5.744		3.798	0.853							
16SUV023	Mount1_023	1_3_4	243	GP	garnet	G9	0.25-0.5	41.37	0.29	16.57	8.99	0.41	6.88	19.25	6.25	0.04	0.00	0.00	0.00	0.00	0.06	0.05	100.16	5.621		4.000	0.833							
16SUV023	Mount1_024	1_3_5	244	GP	garnet	G9	0.25-0.5	42.17	0.13	20.72	4.11	0.37	7.49	20.45	4.95	0.02	0.01	0.00	0.00	0.00	0.05	0.03	100.50	4.404		3.922	0.830							
16SUV023	Mount1_034	1_4_1	254	almandine	garnet	G3	0.25-0.5	38.62	0.16	21.59	0.00	1.01	26.72	5.03	7.37	0.00	0.00	0.00	0.00	0.00	0.03	0.00	100.54	3.375		7.366	0.251		0.18824	0.33544	-1.09232	0.00412	0.00310	-5.77717
16SUV023	Mount1_035	1_4_2	255	almandine	garnet	G3	0.25-0.5	38.26	0.04	21.38	0.04	1.30	28.06	4.37	7.02	0.00	0.00	0.00	0.00	0.00	0.06	0.00	100.54	3.384		7.016	0.217		0.15578	0.27760	-1.28158	0.00108	0.00081	-7.11467
16SUV023	Mount1_070	1_7_5	290	hercynite	andradite	G0	0.25-0.5	34.47	3.16	1.42	0.00	0.19	24.63	0.44	32.79	0.07	0.00	0.05	0.00	0.00	0.08	0.03	97.32	3.375		32.789	0.031	2.066						
16SUV023	Mount3_005	3_1_5	131	GP	garnet	G11	0.18-0.25	41.29	0.45	17.78	6.98	0.36	6.56	20.23	5.79	0.04	0.00	0.00	0.00	0.00	0.04	0.03	99.55	5.119		4.046	0.846							
16SUV023	Mount3_006	3_1_6	132	GP	garnet	G9	0.18-0.25	40.73	0.06	17.06	8.30	0.55	7.77	17.74	7.21	0.00	0.00	0.00	0.00	0.00	0.05	0.00	99.48	5.450		5.137	0.803							
16SUV023	Mount3_007	3_1_7	133	GP	garnet	G1	0.18-0.25	41.31	0.47	20.27	3.78	0.36	8.00	20.55	4.77	0.05	0.00	0.00	0.00	0.00	0.04	0.03	99.64	4.321		3.823	0.821							
16SUV023	Mount3_008	3_1_8	134	GP	garnet	G9	0.18-0.25	41.34	0.18	17.99	7.19	0.36	6.84	20.07	5.65	0.04	0.00	0.00	0.00	0.00	0.04	0.05	99.75	5.173		3.853	0.839							
16SUV023	Mount3_009	3_1_9	135	GP	garnet	G9	0.18-0.25	40.87	0.25	16.12	9.36	0.34	6.55	19.40	6.80	0.02	0.00	0.00	0.03	0.00	0.04	0.03	99.81	5.716		4.455	0.841							
16SUV023	Mount3_010	3_1_10	136	GP	garnet	G9	0.18-0.25	41.73	0.09	19.17	5.02	0.35	7.91	20.12	5.36	0.02	0.00	0.00	0.00	0.00	0.07	0.00	99.82	4.629		4.109	0.819							
16SUV023	Mount3_011	3_1_11	137	GP	garnet	G9	0.18-0.25	41.73	0.23	18.93	5.97	0.36	6.72	20.48	5.29	0.04	0.00	0.00	0.00	0.00	0.00	0.03	99.79	4.868		3.795	0.845							
16SUV023	Mount3_012	3_1_12	138	GP	garnet	G10	0.18-0.25	41.34	0.00	19.59	5.78	0.51	7.85	20.32	4.29	0.02	0.01	0.00	0.00	0.00	0.00	0.00	99.71	4.820	3.004		0.822							
16SUV023	Mount3_013	3_1_13	139	GP	garnet	G1	0.18-0.25	41.39	0.60	19.95	3.45	0.36	8.53	19.75	5.33	0.05	0.01	0.00	0.00	0.00	0.06	0.02	99.51	4.238		4.471	0.805							
16SUV023	Mount3_014	3_1_14	140	GP	garnet	G10	0.18-0.25	41.78	0.00	19.63	5.95	0.35	6.35	22.74	2.65	0.00	0.00	0.00	0.00	0.00	0.04	0.00	99.49	4.862	1.839		0.864							
16SUV023	Mount3_015	3_2_1	141	GP	garnet	G9	0.18-0.25	41.75	0.06	21.12	3.28	0.39	7.72	20.59	4.77	0.00	0.00	0.00	0.00	0.00	0.03	0.00	99.71	4.195		3.954	0.826							
16SUV023	Mount3_016	3_2_2	142	GP	garnet	G9	0.18-0.25	41.66	0.35	19.82	4.29	0.33	7.84	20.12	5.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	99.68	4.448		4.166	0.821							
16SUV023	Mount3_017	3_2_3	143	GP	garnet	G9	0.18-0.25	41.38	0.06	19.74	5.18	0.41	7.39	20.87	4.78	0.03	0.00	0.00	0.00	0.00	0.03	0.05	99.92	4.670		3.489	0.834							
16SUV023	Mount3_018	3_2_4	144	GP	garnet	G10	0.18-0.25	42.00	0.00	19.98	5.37	0.39	6.81	21.99	3.38	0.03	0.00	0.00	0.00	0.00	0.00	0.10	100.05	4.718	2.417		0.852							
16SUV023	Mount3_019	3_2_5	145	GP	garnet	G10D	0.18-0.25	41.35	0.00	16.76	9.59	0.43	6.64	21.79	3.28	0.02	0.01	0.00	0.00	0.00	0.04	0.00	99.91	5.772	1.918		0.854							
16SUV023	Mount3_020	3_2_6	146	GP	garnet	G12	0.18-0.25	40.81	0.00	17.89	7.41	0.53	7.78	17.94	7.26	0.02	0.01	0.00	0.00	0.00	0.06	0.00	99.71	5.228		5.411	0.804							
16SUV023	Mount3_021	3_2_7	147	GP	garnet	G9	0.18-0.25	41.58	0.38	19.31	4.79	0.34	7.46	20.40	5.27	0.04	0.00	0.00	0.00	0.00	0.03	0.00	99.60	4.572		4.073	0.830							
16SUV023	Mount3_022	3_2_8	148	GP	garnet	G9	0.18-0.25	41.31	0.11	19.10	5.86	0.40	6.86	20.61	5.29	0.04	0.00	0.00	0.02	0.00	0.04	0.06	99.69	4.840		3.822	0.843							
16SUV023	Mount3_023	3_2_9	149	GP	garnet	G11	0.18-0.25	41.29	0.43	18.30	6.45	0.33	6.54	20.73	5.39	0.06	0.00	0.00	0.00	0.00	0.04	0.00	99.54	4.987		3.775	0.850							
16SUV023	Mount3_024	3_2_10	150	GP	garnet	G9	0.18-0.25	41.15	0.37	17.20	7.88	0.38	7.04	19.69	5.86	0.06	0.00	0.00	0.00	0.00	0.03	0.03	99.67	5.345		3.893	0.833							
16SUV023	Mount3_025	3_2_11	151	GP	garnet	G9	0.18-0.25	41.65	0.32	20.21	4.28	0.37	7.25	20.93	4.83	0.06	0.00	0.00	0.00	0.00	0.03	0.03	99.96	4.444		3.758	0.837							
16SUV023	Mount3_026	3_2_12	152	GP	garnet	G9	0.18-0.25	41.16	0.14	18.50	6.59	0.43	7.43	19.37	6.00	0.04	0.00	0.00	0.00	0.00	0.06	0.05	99.77	5.021		4.357	0.823							
16SUV023	Mount3_027	3_2_13	153	GP	garnet	G11	0.18-0.25	41.78	0.37	20.50	3.78	0.33	6.61	21.22	4.77	0.04	0.00	0.00	0.00	0.00	0.05	0.04	99.50	4.320		3.828	0.851							
16SUV023	Mount3_028	3_2_14	154	GP	garnet	G9	0.18-0.25	42.25	0.06	21.97	2.20	0.33	7.51	21.26	4.39	0.02	0.01	0.00	0.00	0.00	0.03	0.03	100.07	3.925		3.838	0.835							
16SUV023	Mount3_031	3_3_2	157	almandine	garnet	G4	0.18-0.25	37.25	0.04	21.05	0.00	2.10	31.13	3.90	3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.21	3.375		3.745	0.183		0.12528	0.22325	-1.49945	0.00094	0.00071	-7.25195
16SUV023	Mount3_033	3_3_4	159	grossular	garnet	G9	0.18-0.25	38.89	0.26	20.09	0.00	0.65	6.90	0.05	33.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	3.375		33.324	0.013							
16SUV025	Mount1_025	1_3_6	245	GP	garnet	G10D	0.25-0.5	41.98	0.00	16.62	9.55	0.40	6.82	20.95	3.84	0.00	0.00	0.00	0.00	0.00	0.05	0.02	100.23	5.763	2.248		0.846							
16SUV025	Mount1_026	1_3_7	246	GP	garnet	G9	0.25-0.5	41.81	0.05	20.57	4.54	0.44	7.47	19.41	6.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02	100.34	4.510		4.868	0.822							
16SUV027	Mount1_031	1_3_11	251	andradite	andradite	G0	0.5-1.0	34.87	2.61	4.76	0.00	0.16	22.11	0.37	32.81	0.03	0.00	0.00	0.00	0.00	0.16	0.04	97.90	3.375		32.808	0.029							
16SUV027	Mount1_032	1_3_12	252	andradite	andradite	G0	0.25-0.5	34.65	5.04	5.15	0.00	0.12	19.23	0.37	33.50	0.06	0.00	0.00	0.00	0.00	0.42	0.03	98.57	3.375		33.498	0.033							
16SUV027	Mount2_051	2_5_10	155	chromite	andradite	G0	0.25-0.5	32.83	5.57	1.56	0.00	0.17	23.37	0.66	33.23	0.07	0.01	0.00	0.00	0.00	0.10	0.03	97.59	3.375		33.227	0.048	2.029						
16SUV028	Mount1_004	1_1_4	224	GO	garnet	G3	0.5-1.0	39.75	0.16	22.57	0.08	0.60	21.38	9.81	6.31	0.02	0.00	0.00	0.00	0.00	0.05	0.00	100.74	3.396		6.291	0.450		0.45866	0.81733	-0.20171	0.00397	0.00299	-5.81327
16SUV028	Mount1_005	1_1_5	225	GO	garnet	G1	0.25-0.5	42.50	0.62	22.78	0.86	0.29	8.22	20.38	5.20	0.03	0.00	0.00	0.00	0.00	0.03	0.00	100.91	3.590		4.982	0.816		2.48071	4.42063	1.48628	0.01470	0.01105	-4.50509
16SUV028rpt	Mount1_027	1_3_8	247	GP	garnet	G9	0.5-1.0	41.49	0.34	16.39	8.91	0.35	6.82	19.30	6.57	0.04	0.00	0.00	0.00	0.00	0.05	0.04	100.30	5.602		4.345	0.835							
16SUV028	Mount1_028	1_3_8	248	GP	garnet	G9	0.5-1.0	41.60	0.37	16.38	9.02	0.37	6.84	19.34	6.52	0.04	0.00	0.00	0.00	0.00	0.06	0.03	100.56	5.629		4.262	0.834							
16SUV028	Mount1_029	1_3_9	249	GP	garnet	G10	0.25-0.5	42.24	0.00	20.29	5.07	0.49	7.62	20.40	4.48	0.00	0.00	0.00	0.00	0.00	0.03	0.03	100.65	4.642	3.259		0.827							
16SUV028	Mount1_033	1_3_13	253	andradite	andradite	G0	0.25-0.5	35.51	0.00	0.00	0.00	0.02	28.12	0.08	33.63	0.03	0.01	0.00	0.00	0.00	0.00	0.04	97.42	3.375		33.626	0.005							
16SUV028	Mount1_036	1_4_3	256	almandine	garnet	G0	0.5-1.0	39.77	0.06	22.49	0.00	0.36	24.65	11.64	1.25	0.00	0.00	0.00	0.02	0.03	0.00	0.00	100.28	3.375	1.247		0.457		0.47230	0.84163	-0.17241	0.00145	0.00109	-6.82049
16SUV028	Mount1_037	1_4_4	257	almandine	garnet	G0	0.5-1.0	38.11	0.00	21.21	0.00	0.73	32.31	3.53	4.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.73	3.375	4.828		0.163		0.10911	0.19443	-1.63768	0.00026	0.00020	-8.53077
16SUV028	Mount1_038	1_4_5	258	almandine	garnet	G3	0.5-1.0	39.36	0.13	21.58	0.00	0.74	22.36	6.27	9.96	0.04	0.00	0.00	0.00	0.00	0.03	0.03	100.50	3.375		9.963	0.333		0.28025	0.49941	-0.69432	0.00327	0.00246	-6.00662
16SUV028	Mount1_039	1_4_6	259	almandine	garnet	G4	0.25-0.5	39.64	0.04	22.36	0.06	0.46	23.13	9.02	5.72	0.02	0.00	0.00	0.00	0.00	0.00	0.03	100.49	3.390		5.704	0.410		0.38997	0.69493	-0.36395	0.00111	0.00083	-7.09250
16SUV028	Mount1_056	1_6_3	276	diopside	garnet	G0	0.25-0.5	38.39	0.06	12.14	0.00	0.13	12.89	0.49	35.79	0.00	0.00	0.00	0.00	0.00	0.07	0.03	99.98	3.375		35.789	0.063	1.998						
16SUV030	Mount1_030	1_3_10	250	GP	garnet	G9	0.5-1.0	42.21	0.35	18.84	6.26	0.36	6.78	20.09	5.61	0.04	0.00	0.00	0.00	0.00	0.04	0.04	100.62	4.940		4.045	0.841							

[1] Garnet Classification: Grütter et al. (2004)

[2] If CaO is < 3.375+0.25*Cr2O3 THEN **Ca INT** = 13.5*((CaO)/(Cr2O3+13.5))

[3] If CaO is > 3.375+0.25*Cr2O3 ELSE **Ca INT** = CaO-(0.25*Cr2O3)

[4] MAGNUM = (MgO/40.3)/((MgO/40.3)+(FeO/71.85))

[5] GP - purple to red peridotitic garnet (Cr-pyrope)

[6] GO - mantle garnets incluidng eclogitic pyrope-almandine and Cr-poor megacrystic pyropes

shading depicts duplicate analysis of single grains

APPENDIX 6C

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - EPMA chemistry: SPINEL - CHROMITE-SERIES

							WT %																	
GSC Sample #	Mount	Grain #	EPMA #	ODM Min ID	EPMA Min ID	Grain Size	SiO2	TiO2	Al2O3	Cr2O3	MnO	FeO	MgO	CaO	Na2O	K2O	Nb2O5	NiO	ZnO	V2O3	P2O5	Total	Mg #	CR #
15SUV001	2015_5	1_1	5-1_001	chromite, euhedral	chromite	0.25-0.5	0.00	0.45	16.93	48.32	0.19	17.09	15.38	0.00	0.00	0.00						98.36	0.62	0.64
15SUV001	2015_5	1_2	5-1_002	chromite, euhedral	chromite	0.25-0.5	0.00	0.45	16.23	46.42	0.29	25.72	9.48	0.00	0.00	0.00						98.59	0.40	0.64
15SUV001	2015_5	1_3	5-1_003	chromite, euhedral	chromite	0.25-0.5	0.00	3.58	13.95	38.03	0.24	29.19	12.61	0.00	0.00	0.00						97.60	0.44	0.63
15SUV001	2015_5	1_4	5-1_004	chromite, euhedral	chromite	0.25-0.5	0.00	2.80	13.75	42.53	0.22	25.22	13.24	0.01	0.00	0.00						97.77	0.48	0.66
15SUV001	2015_5	1_5	5-1_005	chromite, euhedral	chromite	0.25-0.5	0.00	0.46	17.16	46.69	0.25	21.60	12.09	0.00	0.00	0.01						98.26	0.50	0.63
15SUV001	2015_5	1_6	5-1_006	chromite, euhedral	chromite	0.25-0.5	0.00	2.80	15.58	40.75	0.24	25.29	13.19	0.00	0.00	0.00						97.85	0.48	0.62
15SUV001	2015_5	1_7	5-1_007	chromite, euhedral	chromite	0.25-0.5	0.00	3.07	16.24	37.29	0.22	27.82	12.82	0.00	0.00	0.00						97.46	0.45	0.59
15SUV001	2015_5	1_8	5-1_008	chromite, euhedral	chromite	0.25-0.5	0.00	0.24	23.69	38.96	0.27	26.72	8.57	0.00	0.00	0.00						98.45	0.36	0.51
15SUV001	2015_5	1_9	5-1_009	chromite, euhedral	chromite	0.25-0.5	0.00	0.83	21.15	41.06	0.22	22.69	12.41	0.00	0.00	0.00						98.36	0.49	0.55
15SUV001	2015_5	1_10	5-1_010	chromite, euhedral	chromite	0.25-0.5	0.00	0.66	19.69	42.64	0.24	23.17	11.69	0.00	0.00	0.00						98.09	0.47	0.58
15SUV001	2015_5	1_11	5-1_011	chromite, euhedral	chromite	0.25-0.5	0.00	3.36	20.10	33.24	0.20	27.40	13.45	0.00	0.00	0.00						97.75	0.47	0.51
15SUV002	2015_5	2_1	5-2_001	chromite, euhedral	chromite	0.25-0.5	0.00	0.59	18.26	45.98	0.22	19.84	13.65	0.00	0.00	0.00						98.54	0.55	0.61
15SUV002	2015_5	2_2	5-2_002	chromite, euhedral	chromite	0.25-0.5	0.00	0.49	18.43	46.68	0.19	17.28	15.34	0.01	0.00	0.00						98.42	0.61	0.62
15SUV002	2015_5	2_3	5-2_003	chromite, euhedral	chromite	0.25-0.5	0.00	1.75	21.10	32.06	0.25	31.61	11.11	0.00	0.00	0.00						97.88	0.39	0.49
15SUV002	2015_5	2_4	5-2_004	chromite, euhedral	chromite	0.25-0.5	0.00	0.55	16.68	46.49	0.23	20.82	13.56	0.00	0.00	0.00						98.33	0.54	0.64
15SUV002	2015_5	2_5	5-2_005	chromite, euhedral	chromite	0.25-0.5	0.00	0.57	16.17	44.91	0.26	26.36	9.90	0.00	0.00	0.00						98.17	0.40	0.64
15SUV003	2015_5	2_7	5-2_007	chromite, euhedral	chromite	0.25-0.5	0.00	0.90	18.85	41.56	0.29	27.77	8.81	0.00	0.00	0.00						98.18	0.36	0.58
15SUV003	2015_5	2_8	5-2_008	chromite, euhedral	chromite	0.25-0.5	0.00	0.31	24.95	42.32	0.16	13.43	17.35	0.00	0.00	0.00						98.52	0.70	0.52
15SUV003	2015_5	2_10	5-2_010	chromite, euhedral	chromite	0.25-0.5	0.00	2.69	22.83	30.90	0.26	27.75	13.28	0.00	0.00	0.00						97.71	0.46	0.46
15SUV003	2015_5	2_11	5-2_011	chromite, euhedral	chromite	0.25-0.5	0.00	0.60	18.32	43.68	0.23	22.33	13.07	0.00	0.00	0.00						98.23	0.51	0.60
15SUV008	2015_5	3_1	5-3_001	chromite, euhedral	chromite	0.25-0.5	0.00	2.15	16.51	41.63	0.23	24.16	13.38	0.00	0.00	0.00						98.06	0.50	0.61
15SUV020	2015_5	3_2	5-3_002	chromite, euhedral	chromite	0.25-0.5	0.00	0.89	19.41	36.94	0.26	28.62	11.74	0.00	0.00	0.00						97.86	0.42	0.55
15SUV020	2015_5	3_3	5-3_003	chromite, euhedral	chromite	0.25-0.5	0.00	0.70	19.67	41.84	0.19	21.79	13.93	0.00	0.00	0.00						98.12	0.53	0.57
15SUV020	2015_5	3_4	5-3_004	chromite, euhedral	chromite	0.25-0.5	0.00	1.37	24.85	39.09	0.19	16.74	16.13	0.00	0.00	0.00						98.37	0.63	0.50
15SUV020	2015_5	3_5	5-3_005	chromite, euhedral	chromite	0.25-0.5	0.00	0.54	18.64	46.52	0.19	17.43	15.23	0.00	0.00	0.00						98.55	0.61	0.61
15SUV020	2015_5	3_6	5-3_006	chromite, euhedral	chromite	0.25-0.5	0.00	4.21	16.33	33.42	0.24	30.19	13.02	0.01	0.00	0.00						97.42	0.43	0.56
15SUV020	2015_5	3_7	5-3_007	chromite, euhedral	chromite	0.25-0.5	0.00	1.92	15.62	43.67	0.22	22.69	13.75	0.00	0.00	0.00						97.87	0.52	0.64
15SUV020	2015_5	3_8	5-3_008	chromite, euhedral	chromite	0.25-0.5	0.00	0.69	23.37	38.93	0.20	20.82	14.44	0.00	0.00	0.00						98.45	0.55	0.51
15SUV020	2015_5	3_9	5-3_009	chromite, euhedral	chromite	0.25-0.5	0.00	0.96	30.51	32.08	0.18	18.88	15.65	0.00	0.00	0.00						98.26	0.60	0.40
15SUV020	2015_5	3_10	5-3_010	chromite, euhedral	chromite	0.25-0.5	0.00	2.48	16.10	40.42	0.24	25.00	13.52	0.00	0.00	0.00						97.76	0.49	0.61
15SUV020	2015_5	4_1	5-4_001	chromite, euhedral	chromite	0.25-0.5	0.00	1.99	15.84	44.14	0.21	22.05	14.24	0.00	0.04	0.00						98.51	0.54	0.64
15SUV020	2015_5	4_2	5-4_002	chromite, euhedral	chromite	0.25-0.5	0.00	5.50	8.94	35.37	0.33	36.24	11.04	0.01	0.00	0.00						97.43	0.35	0.71
15SUV020	2015_5	4_3	5-4_003	chromite, euhedral	chromite	0.25-0.5	0.00	2.36	19.13	36.22	0.24	26.53	13.13	0.00	0.00	0.00						97.61	0.47	0.54
15SUV020	2015_5	4_4	5-4_004	chromite, euhedral	chromite	0.25-0.5	0.00	3.39	20.87	24.77	0.28	35.32	12.29	0.00	0.00	0.00						96.92	0.38	0.43
15SUV020	2015_5	4_5	5-4_005	chromite, euhedral	chromite	0.25-0.5	0.00	2.00	15.26	44.01	0.24	23.26	13.34	0.00	0.00	0.00						98.11	0.51	0.65
15SUV020	2015_5	4_6	5-4_006	chromite, euhedral	chromite	0.25-0.5	0.00	0.47	16.92	47.87	0.21	18.91	13.75	0.00	0.00	0.00						98.13	0.56	0.64
15SUV020	2015_5	4_7	5-4_007	chromite, euhedral	chromite	0.25-0.5	0.00	2.40	19.91	36.73	0.23	24.90	13.98	0.00	0.00	0.00						98.15	0.50	0.54
15SUV020	2015_5	4_8	5-4_008	chromite, euhedral	chromite	0.25-0.5	0.00	0.62	17.17	45.12	0.24	22.79	12.20	0.00	0.00	0.00						98.14	0.49	0.62
15SUV020	2015_5	4_9	5-4_009	chromite, euhedral	chromite	0.25-0.5	0.00	0.78	19.03	43.15	0.21	22.02	13.04	0.00	0.00	0.00						98.23	0.51	0.59
15SUV026	2015_5	5_1	5-5_001	chromite, euhedral	chromite	0.25-0.5	0.00	0.51	18.23	44.83	0.27	23.63	11.02	0.00	0.00	0.00						98.49	0.45	0.61
15SUV026	2015_5	5_2	5-5_002	chromite, euhedral	chromite	0.25-0.5	0.00	0.68	13.04	52.93	0.38	21.45	10.16	0.00	0.00	0.00						98.64	0.46	0.72
15SUV026	2015_5	5_3	5-5_003	chromite, euhedral	chromite	0.25-0.5	0.00	0.72	22.08	39.63	0.20	21.71	13.76	0.00	0.05	0.00						98.15	0.53	0.53
15SUV030	2015_5	5_4	5-5_004A	chromite, euhedral	chromite	0.25-0.5	0.00	2.69	19.14	36.72	0.19	25.31	13.67	0.00	0.00	0.00						97.72	0.49	0.55
15SUV030_rpt	2015_5	5_4_rpt	5-5_004B	chromite, euhedral	chromite	0.25-0.5	0.00	2.63	19.57	36.26	0.23	25.53	13.54	0.00	0.00	0.00						97.76	0.49	0.54
15SUV030	2015_5	5_5	5-5_005A	chromite, euhedral	chromite	0.25-0.5	0.00	3.41	16.39	35.99	0.22	29.05	12.65	0.01	0.00	0.00						97.72	0.44	0.58
15SUV030_rpt	2015_5	5_5_rpt	5-5_005B	chromite, euhedral	chromite	0.25-0.5	0.00	3.52	16.31	35.83	0.23	29.17	12.68	0.00	0.00	0.00						97.74	0.44	0.58
15SUV030	2015_5	5_6	5-5_006A	chromite, euhedral	chromite	0.25-0.5	0.00	1.76	17.40	42.69	0.21	21.44	14.80	0.00	0.00	0.00						98.30	0.55	0.61
15SUV030_rpt	2015_5	5_6_rpt	5-5_006B	chromite, euhedral	chromite	0.25-0.5	0.00	1.75	17.32	42.83	0.21	21.37	14.47	0.00	0.00	0.00						97.95	0.55	0.61
15SUV030	2015_5	5_7	5-5_007A	chromite, euhedral	chromite	0.25-0.5	0.00	3.25	18.31	34.71	0.21	28.08	13.28	0.00	0.00	0.00						97.84	0.46	0.55
15SUV030_rpt	2015_5	5_7_rpt	5-5_007B	chromite, euhedral	chromite	0.25-0.5	0.00	3.23	18.48	34.53	0.21	28.16	13.15	0.01	0.00	0.01						97.78	0.45	0.54
15SUV030_rpt	2015_5	5_8_rpt	5-5_008A	chromite, euhedral	chromite	0.25-0.5	0.00	2.72	17.56	37.12	0.21	26.88	12.96	0.00	0.00	0.00						97.45	0.46	0.57
15SUV030	2015_5	5_8	5-5_008B	chromite, euhedral	chromite	0.25-0.5	0.00	2.75	17.64	37.22	0.23	26.96	13.11	0.00	0.00	0.00						97.91	0.46	0.57
15SUV031	2015_5	5_10	5-5_010	chromite, euhedral	chromite	0.25-0.5	0.00	0.71	18.45	42.87	0.26	25.32	10.53	0.00	0.00	0.00						98.14	0.43	0.60
15SUV051	2015_5	5_11	5-5_011	chromite, euhedral	chromite	0.5-1.0	0.00	0.97	35.40	27.90	0.16	16.74	17.24	0.00	0.00	0.00						98.41	0.65	0.33

15SUV001	2015_6	1_1	6-1_001	chromite	chromite	0.25-0.5	0.00	0.28	29.43	38.32	0.17	14.04	16.87	0.00	0.00	0.00	99.11	0.68	0.45
15SUV001	2015_6	1_2	6-1_002	chromite	chromite	0.25-0.5	0.00	3.35	16.71	35.17	0.22	29.43	12.60	0.00	0.00	0.00	97.48	0.43	0.57
15SUV001	2015_6	1_3	6-1_003	chromite	chromite	0.25-0.5	0.00	0.18	24.44	38.11	0.39	28.90	3.35	0.01	0.07	0.01	95.46	0.17	0.50
15SUV001	2015_6	1_4	6-1_004	chromite	chromite	0.25-0.5	0.00	0.11	20.10	47.71	0.19	15.57	14.93	0.00	0.00	0.00	98.61	0.63	0.60
15SUV001	2015_6	1_5	6-1_005	chromite	chromite	0.25-0.5	0.00	1.23	27.80	34.36	0.17	19.69	15.55	0.01	0.00	0.00	98.81	0.58	0.44
15SUV001	2015_6	1_8	6-1_008	chromite	chromite	0.25-0.5	0.00	0.95	34.68	30.30	0.16	15.36	17.50	0.00	0.00	0.00	98.95	0.67	0.36
15SUV001	2015_6	1_9	6-1_009	chromite	chromite	0.25-0.5	0.00	0.61	35.75	30.54	0.16	14.32	17.50	0.00	0.00	0.00	98.88	0.69	0.35
15SUV001	2015_6	1_10	6-1_010	chromite	chromite	0.25-0.5	0.00	0.28	27.06	40.18	0.19	15.24	16.08	0.00	0.00	0.00	99.03	0.65	0.48
15SUV001	2015_6	1_11	6-1_011	chromite	chromite	0.25-0.5	0.00	5.43	7.39	36.25	0.31	34.11	13.37	0.00	0.00	0.00	96.86	0.41	0.76
15SUV002	2015_6	2_1	6-2_001	chromite	chromite	0.25-0.5	0.00	1.81	16.75	43.12	0.20	21.98	14.21	0.00	0.00	0.00	98.07	0.54	0.62
15SUV002	2015_6	2_2	6-2_002	chromite	chromite	0.25-0.5	0.00	0.76	30.99	34.69	0.19	15.71	16.65	0.00	0.00	0.00	98.99	0.65	0.41
15SUV002	2015_6	2_3	6-2_003	chromite	chromite	0.25-0.5	0.00	0.50	17.88	44.69	0.28	25.22	10.06	0.00	0.00	0.00	98.63	0.42	0.61
15SUV002	2015_6	2_5	6-2_005	chromite	chromite	0.25-0.5	0.00	0.46	16.99	47.27	0.27	21.00	12.11	0.00	0.00	0.00	98.10	0.51	0.64
15SUV002	2015_6	2_6	6-2_006	chromite	chromite	0.25-0.5	0.00	0.04	6.95	62.07	0.68	20.05	6.32	0.00	0.00	0.00	96.11	0.36	0.85
15SUV002	2015_6	2_7	6-2_007	chromite	chromite	0.25-0.5	0.00	3.55	16.09	34.57	0.26	30.51	12.51	0.00	0.00	0.00	97.49	0.42	0.58
15SUV002	2015_6	2_8	6-2_008	chromite	chromite	0.25-0.5	0.00	1.53	15.14	43.41	0.36	27.82	9.77	0.00	0.00	0.00	98.03	0.39	0.64
15SUV003	2015_6	2_9	6-2_009	chromite	chromite	0.5-1.0	0.00	0.18	27.13	40.90	0.18	14.09	16.48	0.00	0.00	0.00	98.96	0.68	0.49
15SUV003	2015_6	3_1	6-3_001	chromite	chromite	0.25-0.5	0.00	0.56	26.27	39.59	0.19	16.48	15.43	0.00	0.00	0.00	98.52	0.63	0.49
15SUV003	2015_6	3_2	6-3_002	chromite	chromite	0.25-0.5	0.00	0.29	34.22	33.34	0.15	13.55	17.48	0.00	0.00	0.00	99.03	0.70	0.38
15SUV003	2015_6	3_3	6-3_003	chromite	chromite	0.25-0.5	0.00	2.28	14.71	43.38	0.22	23.88	13.68	0.00	0.00	0.00	98.15	0.51	0.65
15SUV003	2015_6	3_4	6-3_004	chromite	chromite	0.25-0.5	0.00	0.54	19.95	46.35	0.18	15.70	15.69	0.00	0.00	0.00	98.41	0.64	0.60
15SUV003	2015_6	3_5	6-3_005	chromite	chromite	0.25-0.5	0.00	1.10	31.67	31.53	0.18	17.41	16.67	0.00	0.00	0.00	98.56	0.63	0.39
15SUV003	2015_6	3_7	6-3_007	chromite	chromite	0.25-0.5	0.00	0.55	28.53	37.59	0.18	15.77	16.47	0.00	0.00	0.00	99.09	0.65	0.45
15SUV003	2015_6	3_8	6-3_008	chromite	chromite	0.25-0.5	0.00	0.44	37.03	25.99	0.23	20.11	15.05	0.00	0.00	0.00	98.85	0.57	0.31
15SUV003	2015_6	3_9	6-3_009	chromite	chromite	0.25-0.5	0.00	0.91	32.68	30.61	0.17	18.07	16.37	0.01	0.00	0.00	98.82	0.62	0.37
15SUV003	2015_6	3_10	6-3_010	chromite	chromite	0.25-0.5	0.00	0.13	41.93	25.65	0.13	12.50	18.63	0.00	0.00	0.00	98.97	0.73	0.28
15SUV003	2015_6	3_11	6-3_011	chromite	chromite	0.25-0.5	0.00	0.39	25.12	42.47	0.20	14.75	16.16	0.01	0.00	0.00	99.10	0.66	0.52
15SUV004	2015_6	4_1	6-4_001	chromite	chromite	0.25-0.5	0.00	0.29	20.72	41.04	0.31	30.34	5.96	0.00	0.00	0.00	98.66	0.26	0.56
15SUV004	2015_6	4_2	6-4_002	chromite	chromite	0.25-0.5	0.00	0.58	17.14	46.57	0.29	22.87	10.84	0.01	0.00	0.00	98.30	0.46	0.63
15SUV005	2015_6	4_4	6-4_004	chromite	chromite	0.25-0.5	0.00	0.07	24.21	34.99	0.35	32.29	6.43	0.00	0.00	0.00	98.34	0.26	0.48
15SUV006	2015_6	4_5	6-4_005	chromite	chromite	0.25-0.5	0.00	0.74	25.74	39.90	0.19	15.53	16.59	0.00	0.00	0.00	98.69	0.66	0.50
15SUV009	2015_6	4_6	6-4_006	chromite	chromite	0.5-1.0	0.00	1.16	30.97	30.76	0.18	19.98	15.52	0.00	0.00	0.00	98.57	0.58	0.39
15SUV009	2015_6	5_10	6-5_010	chromite	chromite	0.25-0.5	0.00	0.74	19.33	43.95	0.22	21.32	12.84	0.00	0.00	0.00	98.40	0.52	0.59
15SUV009	2015_6	6_3	6-6_003	chromite	chromite	0.25-0.5	0.00	0.06	7.73	60.61	0.39	22.10	7.55	0.00	0.00	0.00	98.44	0.38	0.83
15SUV009	2015_6	6_4	6-6_004	chromite	chromite	0.25-0.5	0.00	0.23	28.81	35.94	0.23	20.70	13.02	0.01	0.00	0.00	98.94	0.53	0.44
15SUV009	2015_6	6_7	6-6_007	chromite	chromite	0.25-0.5	0.00	0.38	31.06	36.51	0.17	14.05	16.94	0.00	0.00	0.00	99.11	0.68	0.43
15SUV009	2015_6	6_9	6-6_009	chromite	chromite	0.25-0.5	0.00	1.63	16.30	44.37	0.22	21.53	14.16	0.00	0.00	0.00	98.21	0.54	0.63
15SUV010	2015_7	1_1	7-1_001	chromite	chromite	0.25-0.5	0.00	0.06	36.75	31.34	0.14	12.59	18.21	0.00	0.00	0.00	99.09	0.72	0.35
15SUV010	2015_7	1_2	7-1_002	chromite	chromite	0.25-0.5	0.00	0.16	34.06	34.49	0.29	15.94	13.93	0.00	0.00	0.00	98.87	0.61	0.39
15SUV014	2015_7	1_3	7-1_003	chromite	chromite	0.25-0.5	0.00	0.88	20.44	39.55	0.27	27.48	9.71	0.00	0.00	0.00	98.33	0.39	0.55
15SUV014	2015_7	1_4	7-1_004	chromite	chromite	0.25-0.5	0.00	0.70	25.83	36.72	0.22	20.33	14.58	0.00	0.00	0.00	98.38	0.56	0.47
15SUV014	2015_7	1_5	7-1_005	chromite	chromite	0.25-0.5	0.00	0.55	24.46	42.43	0.16	15.77	13.97	0.02	0.00	0.00	97.36	0.61	0.52
15SUV014	2015_7	1_6	7-1_006	chromite	chromite	0.25-0.5	0.00	0.62	22.75	39.61	0.23	20.91	13.97	0.00	0.00	0.00	98.09	0.54	0.52
15SUV014	2015_7	1_7	7-1_007	chromite	chromite	0.25-0.5	0.00	0.54	21.02	47.08	0.22	14.65	15.39	0.00	0.00	0.00	98.90	0.65	0.59
15SUV018	2015_7	1_8_rpt	7-1_008A	chromite	chromite	0.25-0.5	0.00	1.61	18.03	43.54	0.26	22.68	12.58	0.00	0.00	0.00	98.70	0.50	0.60
15SUV018	2015_7	1_8	7-1-B_008	chromite	chromite	0.25-0.5	0.00	1.55	18.02	43.39	0.24	22.65	12.47	0.00	0.00	0.00	98.32	0.50	0.60
15SUV018	2015_7	1_9_rpt	7-1_009A	chromite	chromite	0.25-0.5	0.00	1.45	16.84	42.42	0.33	28.30	8.34	0.00	0.00	0.00	97.68	0.34	0.61
15SUV018	2015_7	1_9	7-1-B_009	chromite	chromite	0.25-0.5	0.00	1.42	17.10	42.41	0.32	27.90	8.79	0.00	0.00	0.00	97.94	0.36	0.61
15SUV018	2015_7	1_10_rpt	7-1_010A	chromite	chromite	0.25-0.5	0.00	2.62	15.17	41.29	0.22	25.08	13.39	0.00	0.00	0.00	97.77	0.49	0.63
15SUV018	2015_7	1_10	7-1-B_010	chromite	chromite	0.25-0.5	0.00	2.64	15.09	41.37	0.22	25.10	13.52	0.00	0.00	0.00	97.94	0.49	0.63
15SUV020	2015_7	1_11	7-1_011	chromite	chromite	0.5-1.0	0.00	1.09	27.58	36.49	0.18	17.08	16.39	0.00	0.00	0.00	98.81	0.63	0.46
15SUV020	2015_7	2_1	7-2_001	chromite	chromite	0.25-0.5	0.00	0.68	32.66	33.34	0.16	15.04	16.89	0.00	0.00	0.00	98.77	0.67	0.39
15SUV020	2015_7	2_2	7-2_002	chromite	chromite	0.25-0.5	0.00	0.08	26.02	42.06	0.18	14.20	16.28	0.00	0.00	0.00	98.82	0.67	0.51
15SUV020	2015_7	2_3	7-2_003	chromite	chromite	0.25-0.5	0.00	1.44	25.92	35.28	0.17	20.43	14.99	0.00	0.00	0.00	98.23	0.57	0.46
15SUV020	2015_7	2_4	7-2_004	chromite	chromite	0.25-0.5	0.00	0.17	25.31	41.73	0.20	15.96	15.46	0.00	0.00	0.00	98.83	0.63	0.51
15SUV020	2015_7	2_5	7-2_005	chromite	chromite	0.25-0.5	0.00	0.11	20.42	47.35	0.22	15.46	15.20	0.00	0.00	0.00	98.76	0.64	0.59
15SUV020	2015_7	2_7	7-2_007	chromite	chromite	0.25-0.5	0.00	0.51	30.74	35.06	0.20	15.93	16.41	0.00	0.00	0.00	98.85	0.65	0.42
15SUV020	2015_7	2_8	7-2_008	chromite	chromite	0.25-0.5	0.00	0.91	35.83	27.95	0.17	16.64	17.35	0.00	0.00	0.00	98.85	0.65	0.33
15SUV020	2015_7	2_9	7-2_009	chromite	chromite	0.25-0.5	0.00	2.85	14.22	41.42	0.24	25.20	13.68	0.00	0.00	0.00	97.61	0.49	0.65
15SUV020	2015_7	3_3	7-3_003	chromite	chromite	0.25-0.5	0.00	0.74	32.12	33.69	0.18	15.11	17.09	0.00	0.00	0.00	98.93	0.67	0.40
15SUV020	2015_7	3_4	7-3_004	chromite	chromite	0.25-0.5	0.00	1.58	15.39	45.15	0.24	21.74	13.94	0.00	0.00	0.00	98.04	0.53	0.65

15SUV020	2015_7	3_6	7-3_006	chromite	chromite	0.25-0.5	0.00	0.36	17.59	44.23	0.31	27.00	8.68	0.00	0.00	0.00						98.17	0.36	0.61
15SUV020	2015_7	3_7	7-3_007	chromite	chromite	0.25-0.5	0.00	1.08	9.54	53.83	0.29	21.29	11.95	0.01	0.00	0.00						97.99	0.50	0.78
15SUV020	2015_7	3_8	7-3_008	chromite	chromite	0.25-0.5	0.00	4.93	10.73	31.48	0.26	41.78	7.12	0.00	0.00	0.00						96.30	0.23	0.65
15SUV025	2015_7	4_2	7-4_002	chromite	chromite	0.25-0.5	0.00	3.13	17.27	36.59	0.22	26.66	13.71	0.00	0.00	0.00						97.58	0.48	0.57
15SUV026	2015_7	4_3	7-4_003	chromite	chromite	0.5-1.0	0.00	0.91	25.33	36.43	0.22	21.07	14.31	0.00	0.00	0.00						98.27	0.55	0.48
15SUV026	2015_7	4_4	7-4_004	chromite	chromite	0.5-1.0	0.00	3.51	8.23	34.45	0.27	43.12	6.25	0.00	0.00	0.00						95.83	0.21	0.73
15SUV026	2015_7	4_5	7-4_005	chromite	chromite	0.25-0.5	0.00	0.25	24.80	42.27	0.23	15.75	15.34	0.00	0.00	0.00						98.64	0.63	0.52
15SUV026	2015_7	4_6	7-4_006	chromite	chromite	0.25-0.5	0.00	0.00	24.66	45.55	0.26	14.82	13.55	0.00	0.00	0.00						98.84	0.62	0.54
15SUV026	2015_7	4_7	7-4_007	chromite	chromite	0.25-0.5	0.00	0.81	28.63	35.78	0.21	17.74	15.55	0.00	0.00	0.00						98.72	0.61	0.44
15SUV026	2015_7	4_8	7-4_008	chromite	chromite	0.25-0.5	0.00	0.23	31.32	35.61	0.37	17.21	14.37	0.00	0.00	0.00						99.11	0.60	0.42
15SUV050	2015_7	5_1	7-5_001	chromite	chromite	0.25-0.5	0.00	0.81	25.83	35.74	0.23	21.68	14.26	0.00	0.00	0.00						98.55	0.54	0.47
15SUV050	2015_7	5_2	7-5_002	chromite	chromite	0.25-0.5	0.00	0.62	18.66	42.57	0.30	26.57	9.40	0.01	0.00	0.00						98.13	0.39	0.59
15SUV050	2015_7	5_3	7-5_003	chromite	chromite	0.25-0.5	0.00	0.25	23.77	41.54	0.22	19.20	13.51	0.00	0.00	0.00						98.49	0.56	0.52
15SUV051	2015_7	5_4	7-5_004	chromite	chromite	0.25-0.5	0.00	0.25	30.81	36.49	0.18	14.25	16.98	0.00	0.00	0.00						98.96	0.68	0.43
15SUV051	2015_7	5_5	7-5_005	chromite	chromite	0.25-0.5	0.00	2.16	18.55	42.05	0.24	20.58	14.34	0.00	0.00	0.00						97.92	0.55	0.59
15SUV051	2015_7	5_6	7-5_006	chromite	chromite	0.25-0.5	0.00	0.54	21.94	40.08	0.25	24.41	11.20	0.00	0.00	0.00						98.42	0.45	0.54
15SUV054	2015_7	5_7	7-5_007	chromite	chromite	0.25-0.5	0.00	0.57	18.61	44.28	0.20	20.71	13.73	0.00	0.00	0.00						98.10	0.54	0.60
15SUV054	2015_7	5_8	7-5_008	chromite	chromite	0.25-0.5	0.00	2.04	17.17	41.40	0.23	23.33	13.86	0.00	0.00	0.00						98.03	0.51	0.60
16SUV013	Mount2_023	2_3_1	127	chromite	chromite	0.25-0.5	0.00	0.09	18.35	50.72	0.20	20.03	10.23	0.00	0.00	0.00	0.00	0.02	0.32	0.07	0.00	100.05	0.48	0.64
16SUV013	Mount2_024	2_3_2	128	chromite	chromite	0.25-0.5	0.00	1.54	23.83	38.41	0.15	18.61	16.04	0.00	0.00	0.00	0.00	0.19	0.07	0.19	0.00	99.04	0.61	0.50
16SUV014	Mount2_025	2_3_3	129	chromite	chromite	0.25-0.5	0.00	1.64	12.94	51.72	0.19	17.85	14.49	0.00	0.00	0.00	0.00	0.16	0.08	0.14	0.00	99.21	0.59	0.72
16SUV014	Mount2_026	2_3_4	130	chromite	chromite	0.25-0.5	0.00	3.39	6.78	46.84	0.21	25.76	14.76	0.00	0.00	0.00	0.00	0.25	0.04	0.09	0.00	98.13	0.51	0.81
16SUV018	Mount2_027	2_3_6	131	chromite	chromite	0.25-0.5	0.00	0.19	22.14	46.39	0.18	14.69	15.60	0.01	0.00	0.00	0.00	0.22	0.04	0.10	0.00	99.55	0.65	0.57
16SUV018	Mount2_028	2_3_8	132	chromite	chromite	0.25-0.5	0.00	0.53	28.13	37.10	0.19	18.12	14.55	0.00	0.00	0.00	0.00	0.18	0.10	0.16	0.00	99.06	0.59	0.45
16SUV018	Mount2_029	2_3_9	133	chromite	chromite	0.25-0.5	0.00	0.09	29.54	37.77	0.19	16.04	15.10	0.00	0.00	0.00	0.00	0.15	0.15	0.11	0.00	99.14	0.63	0.45
16SUV023	Mount2_030	2_3_10	134	chromite	chromite	0.25-0.5	0.00	2.37	13.61	42.91	0.21	26.09	12.82	0.01	0.03	0.00	0.00	0.14	0.06	0.16	0.00	98.42	0.47	0.67
16SUV023	Mount2_031	2_3_11	135	chromite	chromite	0.25-0.5	0.00	3.25	15.47	33.94	0.40	31.84	11.99	0.00	0.00	0.00	0.00	0.16	0.10	0.15	0.00	97.31	0.40	0.58
16SUV023	Mount2_032	2_3_12	136	chromite	chromite	0.25-0.5	0.00	1.67	27.53	31.05	0.18	23.14	14.63	0.00	0.00	0.01	0.00	0.21	0.08	0.15	0.00	98.66	0.53	0.42
16SUV023	Mount2_033	2_4_1	137	chromite	chromite	0.25-0.5	0.00	0.05	25.23	37.59	0.25	23.23	12.29	0.01	0.00	0.00	0.00	0.13	0.41	0.04	0.00	99.23	0.49	0.49
16SUV023	Mount2_034	2_4_2	138	chromite	chromite	0.25-0.5	0.00	0.98	27.69	36.21	0.14	17.56	16.32	0.00	0.00	0.00	0.00	0.24	0.06	0.12	0.00	99.31	0.62	0.45
16SUV023	Mount2_035	2_4_3	139	chromite	chromite	0.25-0.5	0.00	1.17	17.02	43.57	0.25	25.88	10.30	0.01	0.00	0.00	0.00	0.16	0.09	0.26	0.00	98.71	0.42	0.62
16SUV023	Mount2_036	2_4_4	140	chromite	chromite	0.25-0.5	0.00	0.77	27.58	37.84	0.15	16.31	16.33	0.00	0.00	0.00	0.00	0.21	0.06	0.17	0.00	99.42	0.64	0.46
16SUV023	Mount2_038	2_4_6	142	chromite	chromite	0.25-0.5	0.00	0.11	26.00	41.88	0.21	17.05	13.55	0.00	0.00	0.00	0.00	0.09	0.22	0.23	0.00	99.34	0.59	0.50
16SUV023	Mount2_039	2_4_7	143	chromite	chromite	0.25-0.5	0.00	0.73	36.17	29.74	0.12	13.26	18.00	0.00	0.00	0.01	0.00	0.28	0.09	0.11	0.00	98.52	0.71	0.34
16SUV024	Mount2_040	2_4_8	144	chromite	chromite	0.25-0.5	0.00	3.72	12.76	38.92	0.31	33.80	7.81	0.00	0.00	0.00	0.00	0.13	0.16	0.45	0.00	98.07	0.29	0.66
16SUV024	Mount2_041	2_4_9	145	chromite	chromite	0.25-0.5	0.00	0.50	15.88	49.34	0.15	18.29	13.87	0.00	0.00	0.00	0.00	0.19	0.05	0.15	0.00	98.41	0.57	0.66
16SUV024	Mount2_042	2_4_10	146	chromite	chromite	0.25-0.5	0.00	0.09	1.97	53.05	0.35	36.69	3.76	0.01	0.00	0.00	0.00	0.09	0.33	0.13	0.00	96.46	0.15	0.94
16SUV027	Mount2_043	2_5_1	147	chromite	chromite	0.5-1.0	0.00	1.19	31.50	33.72	0.13	14.42	17.26	0.00	0.00	0.00	0.00	0.26	0.06	0.15	0.00	98.70	0.68	0.40
16SUV027	Mount2_044	2_5_2	148	chromite	chromite	0.5-1.0	0.00	0.05	27.38	40.48	0.14	14.50	16.48	0.00	0.00	0.00	0.00	0.20	0.06	0.14	0.00	99.43	0.67	0.48
16SUV027	Mount2_045	2_5_3	149	chromite	chromite	0.5-1.0	0.00	0.34	28.31	36.47	0.26	20.01	13.18	0.00	0.00	0.01	0.00	0.20	0.09	0.15	0.00	99.04	0.54	0.45
16SUV027	Mount2_046	2_5_4	150	chromite	chromite	0.25-0.5	0.00	2.24	15.82	42.19	0.20	23.94	13.69	0.00	0.00	0.00	0.00	0.16	0.06	0.16	0.00	98.46	0.50	0.63
16SUV027	Mount2_047	2_5_6	151	chromite	chromite	0.25-0.5	0.00	0.63	37.27	27.73	0.13	14.76	18.27	0.00	0.00	0.00	0.04	0.24	0.05	0.09	0.00	99.22	0.69	0.32
16SUV027	Mount2_048	2_5_7	152	chromite	chromite	0.25-0.5	0.00	1.79	16.25	43.47	0.18	21.79	14.40	0.01	0.00	0.00	0.00	0.22	0.04	0.15	0.00	98.30	0.54	0.63
16SUV027	Mount2_049	2_5_8	153	chromite	chromite	0.25-0.5	0.00	2.64	20.96	33.53	0.21	27.17	13.25	0.00	0.00	0.00	0.00	0.20	0.09	0.18	0.00	98.22	0.47	0.50
16SUV027	Mount2_050	2_5_9	154	chromite	chromite	0.25-0.5	0.00	0.59	19.85	42.25	0.19	23.78	12.12	0.00	0.00	0.00	0.00	0.12	0.05	0.16	0.00	99.11	0.48	0.57
16SUV027	Mount2_052	2_5_11	156	chromite	chromite	0.25-0.5	0.00	0.44	16.38	46.37	0.24	25.34	9.65	0.01	0.00	0.00	0.00	0.21	0.08	0.09	0.00	98.81	0.40	0.64
16SUV027	Mount2_053	2_5_12	157	chromite	chromite	0.25-0.5	0.00	2.37	20.32	34.68	0.18	26.56	13.56	0.00	0.00	0.00	0.00	0.15	0.06	0.16	0.00	98.04	0.48	0.52
16SUV028	Mount2_054	2_6_1	158	chromite	chromite	0.25-0.5	0.00	0.59	27.60	38.88	0.16	15.20	16.31	0.00	0.00	0.00	0.00	0.22	0.09	0.13	0.00	99.16	0.66	0.47
16SUV028	Mount2_055	2_6_2	159	chromite	chromite	0.25-0.5	0.00	0.81	24.31	41.59	0.16	15.44	16.22	0.00	0.02	0.00	0.00	0.21	0.07	0.16	0.00	98.99	0.65	0.52
16SUV028	Mount2_056	2_6_3	160	chromite	chromite	0.25-0.5	0.00	1.12	24.31	40.98	0.17	16.82	15.38	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	99.21	0.62	0.52
16SUV028	Mount2_057	2_6_4	161	chromite	chromite	0.25-0.5	0.00	0.30	24.19	43.17	0.15	15.53	15.74	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	99.52	0.64	0.53
16SUV028	Mount2_058	2_6_5	162	chromite	chromite	0.25-0.5	0.00	0.73	25.70	41.00	0.16	15.08	16.28	0.00	0.00	0.00	0.00	0.21	0.06	0.09	0.00	99.30	0.66	0.50
16SUV028	Mount2_059	2_6_6	163	chromite	chromite	0.25-0.5	0.00	1.90	24.11	35.32	0.16	22.09	14.72	0.00	0.00	0.00	0.00	0.22	0.09	0.13	0.00	98.73	0.54	0.48
16SUV028	Mount2_060	2_6_7	164	chromite	chromite	0.25-0.5	0.00	1.56	23.34	39.81	0.16	17.53	16.29	0.01	0.00	0.00	0.00	0.21	0.06	0.19	0.00	99.15	0.62	0.52
16SUV028	Mount2_061	2_6_8	165	chromite	chromite	0.25-0.5	0.00	1.23	31.46	33.05	0.13	15.85	17.06	0.00	0.00	0.00	0.00	0.23	0.07	0.12	0.00	99.18	0.66	0.40
16SUV028	Mount2_062	2_6_9	166	chromite	chromite	0.5-1.0	0.00	2.23	16.50	41.05	0.20	24.39	13.62	0.00	0.00	0.00	0.00	0.17	0.06	0.18	0.00	98.40	0.50	0.61
16SUV028	Mount2_063	2_6_10	167	chromite	chromite	0.5-1.0	0.00	0.45	41.90	23.37	0.14	14.78	18.28	0.00	0.00	0.00	0.00	0.26	0.05	0.09	0.00	99.33	0.69	0.26
16SUV028	Mount2_064	2_6_11	168	chromite	chromite	0.25-0.5	0.00	1.53	24.13	38.35	0.15	18.51	15.96	0.00	0.00	0.00	0.00	0.20	0.05	0.16	0.00	99.05	0.61	0.50
16SUV028	Mount2_065	2_6_12	169	chromite	chromite	0.25-0.5	0.00	1.18	26.00	38.77	0.12	15.89	16.91	0.00	0.00	0.00	0.00	0.23	0.06	0.15	0.00	99.32	0.65	0.49
16SUV028	Mount2_066	2_6_13	170	chromite	chromite	0.25-0.5	0.00	1.07	23.35	41.32	0.17	16.71	16.11	0.00	0.00	0.00	0.00	0.19	0.06	0.14	0.00	99.13	0.63	0.53
16SUV028	Mount2_067	2_6_14	171	chromite	chromite	0.25-0.5	0.00	1.44	24.45	38.18	0.16	17.72	16.28	0.00	0.00	0.00	0.00	0.22	0.06	0.17	0.00	98.70	0.62	0.50

16SUV028	Mount2_068	2_6_15	172	chromite	chromite	0.25-0.5	0.00	3.69	10.97	39.84	0.26	31.44	11.13	0.00	0.00	0.00	0.00	0.08	0.07	0.19	0.00	97.67	0.39	0.70
16SUV028	Mount2_071	2_7_4	175	chromite	chromite	0.25-0.5	0.00	2.70	14.41	42.96	0.19	24.48	13.22	0.00	0.00	0.00	0.00	0.20	0.06	0.18	0.00	98.40	0.49	0.65
16SUV028	Mount2_073	2_7_6	177	chromite	chromite	0.25-0.5	0.00	2.29	30.51	27.45	0.17	22.31	15.63	0.01	0.00	0.00	0.00	0.22	0.07	0.14	0.00	98.81	0.56	0.36
16SUV028	Mount2_075	2_7_8	179	chromite	chromite	0.25-0.5	0.00	2.16	15.99	41.56	0.20	24.90	13.34	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	98.58	0.49	0.62
16SUV028	Mount2_077	2_7_10	181	chromite	chromite	0.25-0.5	0.00	3.57	16.42	35.72	0.19	28.30	13.18	0.02	0.00	0.00	0.00	0.17	0.03	0.17	0.00	97.78	0.45	0.58
16SUV028	Mount2_078	2_7_11	182	chromite	chromite	0.25-0.5	0.00	2.98	20.11	33.77	0.16	27.05	13.79	0.00	0.00	0.00	0.00	0.24	0.09	0.16	0.02	98.38	0.48	0.52
16SUV028	Mount2_079	2_7_12	183	chromite	chromite	0.25-0.5	0.00	0.26	22.01	39.27	0.23	27.71	9.00	0.00	0.00	0.01	0.00	0.10	0.16	0.09	0.00	98.83	0.37	0.53
16SUV013	Mount2_080	2_7_13	184	chromite	chromite	0.25-0.5	0.00	0.27	22.85	42.47	0.18	19.76	13.24	0.00	0.00	0.00	0.00	0.22	0.07	0.12	0.00	99.18	0.54	0.54
16SUV023	Mount3_040	3_4_1	166	ilmenite	chromite	0.18-0.25	0.00	1.55	23.65	39.05	0.17	18.46	15.93	0.00	0.00	0.00	0.00	0.21	0.06	0.16	0.00	99.22	0.61	0.51
16SUV023	Mount3_049	3_4_10	175	ilmenite	chromite	0.18-0.25	0.00	2.41	23.49	33.50	0.18	24.69	14.21	0.00	0.00	0.00	0.00	0.20	0.09	0.15	0.00	98.93	0.51	0.47
15SUV015	Mount3_055	3_5_1	181	chromite	chromite	0.18-0.25	0.00	4.03	9.29	37.56	0.34	39.79	6.18	0.00	0.00	0.00	0.00	0.08	0.15	0.40	0.00	97.82	0.22	0.72
15SUV018	Mount3_056	3_5_2	182	chromite	chromite	0.18-0.25	0.00	0.49	12.41	55.72	0.17	18.36	10.85	0.00	0.00	0.00	0.00	0.14	0.08	0.22	0.00	98.44	0.51	0.74
15SUV018	Mount3_057	3_5_3	183	chromite	chromite	0.18-0.25	0.00	1.08	41.20	20.48	0.14	18.74	17.16	0.00	0.00	0.00	0.00	0.22	0.08	0.13	0.00	99.24	0.62	0.24
15SUV018	Mount3_058	3_5_4	184	chromite	chromite	0.18-0.25	0.04	0.19	44.40	22.68	0.11	11.38	19.89	0.00	0.00	0.00	0.00	0.31	0.05	0.09	0.00	99.14	0.76	0.24
15SUV018	Mount3_059	3_5_5	185	chromite	chromite	0.18-0.25	0.00	1.13	17.60	41.58	0.24	27.56	9.98	0.00	0.00	0.00	0.00	0.15	0.11	0.41	0.00	98.77	0.39	0.60
15SUV019	Mount3_060	3_5_6	186	chromite	chromite	0.18-0.25	0.00	2.03	14.66	41.57	0.26	27.86	11.54	0.01	0.00	0.00	0.00	0.22	0.07	0.32	0.00	98.53	0.42	0.64
15SUV019	Mount3_061	3_5_7	187	chromite	chromite	0.18-0.25	0.00	1.88	15.09	40.02	0.31	33.12	7.93	0.00	0.00	0.00	0.00	0.12	0.11	0.25	0.00	98.82	0.30	0.63
15SUV019	Mount3_062	3_5_8	188	chromite	chromite	0.18-0.25	0.00	0.04	6.42	62.74	0.32	21.58	8.04	0.00	0.00	0.01	0.00	0.00	0.22	0.12	0.00	99.47	0.40	0.86
15SUV019	Mount3_063	3_5_9	189	chromite	chromite	0.18-0.25	0.00	2.01	18.16	38.59	0.23	26.81	12.38	0.00	0.00	0.00	0.00	0.17	0.07	0.18	0.00	98.59	0.45	0.57
15SUV028	Mount3_064	3_5_10	190	chromite	chromite	0.18-0.25	0.00	0.66	25.98	37.37	0.17	18.59	16.38	0.00	0.00	0.00	0.00	0.18	0.03	0.08	0.00	99.45	0.61	0.48
15SUV028	Mount3_065	3_5_11	191	chromite	chromite	0.18-0.25	0.00	1.91	15.24	42.97	0.27	27.86	9.78	0.00	0.00	0.00	0.00	0.19	0.11	0.28	0.00	98.62	0.39	0.64
15SUV028	Mount3_066	3_5_12	192	chromite	chromite	0.18-0.25	0.00	0.47	17.48	47.38	0.19	20.10	13.35	0.00	0.00	0.00	0.00	0.26	0.00	0.12	0.00	99.34	0.54	0.63
15SUV030	Mount3_067	3_5_13	193	chromite	chromite	0.18-0.25	0.00	1.44	17.12	40.61	0.22	29.01	9.87	0.00	0.00	0.00	0.00	0.18	0.13	0.37	0.00	98.94	0.38	0.60
15SUV030	Mount3_068	3_5_14	194	chromite	chromite	0.18-0.25	0.00	1.38	16.50	42.90	0.24	26.57	10.85	0.00	0.00	0.00	0.00	0.17	0.09	0.25	0.00	98.96	0.42	0.62
16SUV023	Mount3_069	3_6_1	195	chromite	chromite	0.18-0.25	0.00	0.17	12.01	54.14	0.23	22.52	9.19	0.00	0.00	0.00	0.00	0.08	0.16	0.10	0.00	98.60	0.42	0.74
16SUV023	Mount3_070	3_6_2	196	chromite	chromite	0.18-0.25	0.00	2.43	15.49	41.27	0.18	25.60	13.41	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	98.82	0.48	0.63
16SUV023	Mount3_071	3_6_3	197	chromite	chromite	0.18-0.25	0.00	0.73	5.90	34.59	0.28	43.87	10.76	0.01	0.00	0.00	0.00	0.18	0.05	0.07	0.00	96.43	0.30	0.79
16SUV023	Mount3_072	3_6_4	198	chromite	chromite	0.18-0.25	0.00	0.39	6.62	49.48	0.39	32.70	7.96	0.01	0.00	0.00	0.00	0.11	0.17	0.06	0.00	97.90	0.30	0.83
16SUV023	Mount3_073	3_6_5	199	chromite	chromite	0.18-0.25	0.00	2.29	17.19	37.60	0.20	27.59	13.04	0.00	0.00	0.00	0.00	0.17	0.03	0.18	0.00	98.29	0.46	0.58
16SUV023	Mount3_074	3_6_6	200	chromite	chromite	0.18-0.25	0.00	0.55	17.77	42.44	0.30	30.68	6.64	0.00	0.00	0.00	0.00	0.08	0.18	0.18	0.00	98.82	0.28	0.60
16SUV023	Mount3_075	3_6_7	201	chromite	chromite	0.18-0.25	0.00	0.24	13.75	49.73	0.34	29.31	5.00	0.01	0.00	0.00	0.00	0.16	0.09	0.10	0.00	98.73	0.23	0.70
16SUV023	Mount3_076	3_6_8	202	chromite	chromite	0.18-0.25	0.00	0.39	25.05	40.06	0.21	18.38	14.83	0.00	0.00	0.00	0.00	0.10	0.05	0.24	0.00	99.31	0.59	0.50
16SUV023	Mount3_077	3_6_9	203	chromite	chromite	0.18-0.25	0.00	0.90	36.23	28.62	0.13	14.59	18.32	0.01	0.00	0.00	0.00	0.22	0.07	0.12	0.00	99.19	0.69	0.33
16SUV023	Mount3_078	3_6_10	204	chromite	chromite	0.18-0.25	0.00	2.09	16.50	42.80	0.18	22.97	13.93	0.00	0.00	0.00	0.00	0.18	0.08	0.13	0.00	98.86	0.52	0.62
16SUV023	Mount3_079	3_6_11	205	chromite	chromite	0.18-0.25	0.00	0.96	19.31	45.63	0.15	18.17	12.85	0.00	0.00	0.00	0.00	0.18	0.06	0.14	0.00	97.45	0.56	0.60
16SUV023	Mount3_080	3_6_12	206	chromite	chromite	0.18-0.25	0.00	1.34	10.62	56.11	0.18	18.57	8.96	0.01	0.02	0.00	0.00	0.14	0.16	0.28	0.00	96.40	0.46	0.77
16SUV023	Mount3_081	3_6_13	207	chromite	chromite	0.18-0.25	0.00	0.06	23.86	45.24	0.19	16.38	13.56	0.00	0.00	0.00	0.00	0.08	0.16	0.17	0.00	99.72	0.60	0.55
16SUV023	Mount3_082	3_6_14	208	chromite	chromite	0.18-0.25	0.00	2.09	27.32	28.15	0.20	26.10	14.53	0.00	0.00	0.00	0.00	0.19	0.05	0.22	0.00	98.85	0.50	0.39
16SUV023	Mount3_083	3_6_15	209	chromite	chromite	0.18-0.25	0.00	2.05	15.55	44.23	0.19	22.49	14.23	0.00	0.00	0.00	0.00	0.19	0.05	0.12	0.00	99.11	0.53	0.64

shading depicts duplicate analysis of single grains

APPENDIX 6D

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - EPMA chemistry: SPINEL - ALUMINIUM-SERIES

							WT %														
GSC Sample #	**Mount**	**Grain #**	**EPMA #**	**ODM Min ID**	**EPMA Min ID**	**Grain Size**	**SiO2**	**TiO2**	**Al2O3**	**Cr2O3**	**MnO**	**FeO**	**MgO**	**CaO**	**Na2O**	**K2O**	**Nb2O5**	**NiO**	**ZnO**	**V2O3**	**P2O5**	**Total**
15SUV004	2015_3	3_9	3-3_009	spinel	spinel	0.25-0.5	0.00	0.03	69.05	0.00	0.05	4.87	24.74	0.00	0.00	0.00						98.74
15SUV028	2015_3	3_10	3-3_010	spinel	spinel	0.25-0.5	0.00	0.00	69.42	0.08	0.07	6.29	24.47	0.00	0.00	0.00						100.33
15SUV003	2015_3	4_1	3-4_001	hercynite	spinel	0.5-1.0	0.09	0.63	59.37	0.11	0.14	21.79	17.56	0.00	0.00	0.00						99.69
15SUV003	2015_3	4_2	3-4_002	hercynite	spinel	0.5-1.0	0.08	0.55	60.28	1.09	0.12	19.46	18.48	0.00	0.00	0.00						100.06
15SUV014	2015_3	4_4	3-4_004	hercynite	spinel	0.25-0.5	0.00	0.12	61.63	4.93	0.09	11.46	20.91	0.00	0.00	0.00						99.14
15SUV014	2015_3	4_5	3-4_005	hercynite	spinel	0.25-0.5	0.07	0.73	57.10	0.11	0.17	24.40	16.95	0.00	0.00	0.00						99.53
15SUV020	2015_3	4_6	3-4_006	hercynite	spinel	0.5-1.0	0.05	0.43	60.43	0.33	0.15	20.14	18.40	0.00	0.00	0.00						99.93
15SUV020	2015_3	4_7	3-4_007	hercynite	spinel	0.5-1.0	0.00	0.34	59.08	2.44	0.14	19.21	18.18	0.00	0.00	0.00						99.39
15SUV025	2015_3	4_8	3-4_008	hercynite	spinel	0.25-0.5	0.08	0.59	59.93	0.59	0.11	20.04	18.38	0.00	0.00	0.00						99.72
15SUV026	2015_3	4_9	3-4_009	hercynite	spinel	0.5-1.0	0.04	0.21	59.34	7.66	0.09	10.24	21.54	0.00	0.00	0.00						99.12
15SUV051	2015_3	4_10	3-4_010	hercynite	spinel	0.5-1.0	0.11	0.52	59.46	0.12	0.15	21.26	18.14	0.00	0.00	0.00						99.76
15SUV003	2015_5	2_9	5-2_009	chromite, euhedral	spinel	0.25-0.5	0.00	0.81	37.51	26.74	0.18	15.95	17.94	0.00	0.00	0.00						99.13
15SUV001	2015_6	1_6	6-1_006	chromite	spinel	0.25-0.5	0.00	0.21	50.77	16.48	0.11	11.22	20.30	0.01	0.00	0.00						99.10
15SUV001	2015_6	1_7	6-1_007	chromite	spinel	0.25-0.5	0.00	0.36	40.76	23.99	0.14	15.58	18.18	0.00	0.00	0.00						99.01
15SUV002	2015_6	2_4	6-2_004	chromite	spinel	0.25-0.5	0.00	0.22	47.97	19.38	0.11	11.36	19.90	0.00	0.00	0.00						98.94
15SUV002	2015_6	2_10	6-2_010	chromite	spinel	0.5-1.0	0.00	0.05	57.63	9.67	0.11	11.19	20.45	0.00	0.00	0.00						99.10
15SUV003	2015_6	3_6	6-3_006	chromite	spinel	0.25-0.5	0.00	0.00	50.84	16.94	0.12	11.18	20.18	0.00	0.00	0.00						99.26
15SUV020	2015_7	2_6	7-2_006	chromite	spinel	0.25-0.5	0.06	0.32	56.50	10.02	0.09	11.04	21.04	0.01	0.00	0.00						99.08
15SUV020	2015_7	3_1	7-3_001	chromite	spinel	0.25-0.5	0.00	0.14	42.41	24.96	0.14	12.89	18.45	0.00	0.00	0.00						98.99
15SUV020	2015_7	3_2	7-3_002	chromite	spinel	0.25-0.5	0.00	0.08	50.71	16.38	0.12	11.75	19.85	0.00	0.00	0.00						98.89
15SUV020	2015_7	3_5	7-3_005	chromite	spinel	0.25-0.5	0.00	0.38	46.16	16.25	0.16	18.54	17.22	0.01	0.00	0.00						98.72
15SUV024	2015_7	4_1	7-4_001	chromite	spinel	0.25-0.5	0.00	0.92	33.90	28.52	0.18	18.82	16.14	0.00	0.00	0.00						98.48
16SUV024	Mount1_057	1_6_4	277	gahnite	gahnite	0.25-0.5	0.00	0.00	59.80	0.00	0.44	11.89	4.30	0.00	0.00	0.00	0.00	0.00	25.18	0.00	0.00	101.61
16SUV024	Mount1_058	1_6_5	278	gahnite	gahnite	0.25-0.5	0.00	0.00	58.61	0.00	0.27	6.52	3.62	0.00	0.00	0.00	0.00	0.00	32.56	0.00	0.00	101.59
16SUV024	Mount1_059	1_6_6	279	gahnite	gahnite	0.25-0.5	0.00	0.00	57.85	0.09	0.30	7.77	2.61	0.00	0.00	0.00	0.00	0.00	32.91	0.11	0.00	101.64
16SUV024	Mount1_060	1_6_7	280	gahnite	gahnite	0.25-0.5	0.00	0.00	59.14	0.00	0.04	16.43	3.97	0.00	0.00	0.00	0.00	0.03	21.28	0.03	0.00	100.92
16SUV024	Mount1_061	1_6_8	281	gahnite	gahnite	0.25-0.5	0.03	0.00	53.82	0.10	0.13	16.91	2.72	0.01	0.00	0.01	0.00	0.00	21.30	0.03	0.00	95.06
16SUV013	Mount1_062	1_6_9	282	spinel	spinel	0.25-0.5	0.00	0.00	68.65	0.07	0.12	6.93	24.10	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	99.96
16SUV023	Mount1_063	1_6_10	283	spinel	spinel	0.25-0.5	0.00	0.05	69.78	0.04	0.09	4.30	25.84	0.00	0.00	0.00	0.00	0.00	0.27	0.03	0.00	100.40
16SUV028	Mount1_064	1_6_11	284	spinel	spinel	0.25-0.5	0.00	0.04	70.39	0.03	0.03	3.41	26.00	0.01	0.00	0.00	0.00	0.02	0.00	0.04	0.00	99.98
16SUV018	Mount1_067	1_7_2	287	hercynite	gahnite	0.25-0.5	0.00	0.00	61.62	0.00	0.16	16.05	7.88	0.00	0.00	0.00	0.00	0.00	15.28	0.00	0.00	100.98
16SUV018	Mount1_068	1_7_3	288	hercynite	spinel/hercynite	0.25-0.5	0.09	0.54	59.31	0.04	0.14	21.46	18.40	0.00	0.00	0.00	0.00	0.10	0.07	0.08	0.00	100.23
16SUV018	Mount1_069	1_7_4	289	hercynite	spinel/hercynite	0.25-0.5	0.03	0.28	58.12	0.00	0.23	28.76	12.35	0.00	0.00	0.00	0.00	0.02	0.17	0.08	0.00	100.05
16SUV023	Mount1_071	1_7_6	291	hercynite	spinel/hercynite	0.25-0.5	0.12	0.18	61.76	0.00	0.13	19.19	18.17	0.01	0.00	0.00	0.00	0.24	0.09	0.07	0.00	99.95
16SUV023	Mount1_072	1_7_7	292	hercynite	spinel/hercynite	0.25-0.5	0.05	0.34	60.45	0.18	0.16	22.99	15.91	0.00	0.00	0.00	0.00	0.05	0.09	0.08	0.00	100.31
16SUV023	Mount1_073	1_7_8	293	hercynite	spinel/hercynite	0.25-0.5	0.13	0.93	58.02	0.00	0.14	22.99	17.22	0.00	0.00	0.00	0.00	0.11	0.15	0.13	0.00	99.81
16SUV027	Mount1_074	1_7_9	294	hercynite	spinel/hercynite	0.5-1.0	0.08	0.69	58.97	0.51	0.12	20.92	18.09	0.00	0.00	0.00	0.00	0.13	0.10	0.12	0.00	99.72
16SUV027	Mount1_075	1_7_10	295	hercynite	spinel/hercynite	0.25-0.5	0.07	0.32	60.03	1.06	0.15	19.41	18.75	0.00	0.00	0.00	0.00	0.15	0.11	0.05	0.00	100.10
16SUV023	Mount3_029	3_2_15	155	GP	spinel	0.18-0.25	0.04	0.07	69.58	0.08	0.00	3.67	26.12	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	99.60

APPENDIX 6E

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - EPMA chemistry: Mg-ILMENITE

								WT %																
GSC Sample #	Sample Type	Mount	Grain #	EPMA #	ODM Min ID	EPMA Min ID	Grain Size	SiO2	TiO2	Al2O3	Cr2O3	MnO	FeO	MgO	CaO	Na2O	K2O	Nb2O5	NiO	ZnO	V2O3	P2O5	Total	Classification[1]
15SUV001	stream sediments	2015_4	1_1	4-1_001	ilmenite	ilmenite	0.5-1.0	0.03	51.11	0.54	0.99	0.30	31.10	12.70	0.02	0.00	0.00						96.79	kimberlitic
15SUV001	stream sediments	2015_4	1_2	4-1_002	ilmenite	ilmenite	0.5-1.0	0.03	50.47	0.27	0.27	0.25	36.09	9.90	0.02	0.00	0.00						97.30	kimberlitic
15SUV001	stream sediments	2015_4	1_3	4-1_003	ilmenite	ilmenite	0.25-0.5	0.04	51.21	0.59	1.91	0.26	29.73	13.46	0.02	0.04	0.00						97.26	kimberlitic
15SUV001	stream sediments	2015_4	1_4	4-1_004	ilmenite	ilmenite	0.25-0.5	0.00	51.50	0.56	1.29	0.27	30.87	13.05	0.02	0.00	0.00						97.56	kimberlitic
15SUV001	stream sediments	2015_4	1_5	4-1_005	ilmenite	ilmenite	0.25-0.5	0.00	49.32	0.43	1.04	0.30	35.58	10.49	0.02	0.00	0.00						97.18	kimberlitic
15SUV001	stream sediments	2015_4	3_1	4-3_001	ilmenite, crustal	ilmenite	0.5-1.0	0.02	45.31	0.03	0.00	1.80	50.00	0.25	0.00	0.00	0.00						97.41	non-kimberlitic
15SUV001	stream sediments	2015_4	3_2	4-3_002	ilmenite, crustal	ilmenite	0.5-1.0	0.00	49.00	0.08	0.03	0.39	47.33	0.59	0.01	0.00	0.00						97.43	non-kimberlitic
15SUV001	stream sediments	2015_4	3_3	4-3_003	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.07	0.03	0.24	0.30	46.12	2.85	0.00	0.00	0.00						97.61	non-kimberlitic
15SUV001	stream sediments	2015_4	3_4	4-3_004	ilmenite, crustal	ilmenite	0.25-0.5	0.00	51.30	0.00	0.00	0.34	46.27	0.47	0.00	0.00	0.00						98.38	non-kimberlitic
15SUV001	stream sediments	2015_4	3_5	4-3_005	ilmenite, crustal	ilmenite	0.25-0.5	0.00	47.60	0.07	0.00	0.40	48.69	0.60	0.00	0.00	0.00						97.36	non-kimberlitic
15SUV001	stream sediments	2015_4	3_6	4-3_006	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.79	0.07	0.00	0.44	48.11	0.44	0.00	0.00	0.00						97.85	non-kimberlitic
15SUV001	stream sediments	2015_4	3_7	4-3_007	ilmenite, crustal	ilmenite	0.25-0.5	0.07	47.59	0.05	0.00	0.91	47.59	0.43	0.01	0.00	0.00						96.65	non-kimberlitic
15SUV001	stream sediments	2015_4	3_8	4-3_008	ilmenite, crustal	ilmenite	0.25-0.5	0.00	42.46	0.07	0.00	0.56	53.11	0.26	0.00	0.00	0.00						96.46	non-kimberlitic
15SUV001	stream sediments	2015_4	3_9	4-3_009	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.77	0.09	0.00	0.42	46.73	1.61	0.00	0.00	0.00						97.62	non-kimberlitic
15SUV001	stream sediments	2015_4	3_10	4-3_010	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.96	0.00	0.00	1.29	47.52	0.09	0.00	0.00	0.00						97.86	non-kimberlitic
15SUV002	stream sediments	2015_4	4_1	4-4_001	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.14	0.00	0.00	0.34	47.63	0.33	0.01	0.00	0.00						97.45	non-kimberlitic
15SUV003	stream sediments	2015_4	1_6	4-1_006	ilmenite	ilmenite	0.25-0.5	0.23	50.89	1.00	0.88	0.24	31.91	11.24	0.08	0.07	0.00						96.54	kimberlitic
15SUV003	stream sediments	2015_4	4_2	4-4_002	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.77	0.02	0.10	0.69	46.54	0.85	0.00	0.00	0.00						97.97	non-kimberlitic
15SUV003	stream sediments	2015_4	4_3	4-4_003	ilmenite, crustal	ilmenite	0.25-0.5	0.00	47.24	0.05	0.07	0.36	48.90	0.48	0.00	0.00	0.00						97.10	non-kimberlitic
15SUV004	stream sediments	2015_6	4_3	6-4_003	chromite	ilmenite	0.25-0.5	0.00	47.67	0.06	0.00	0.32	48.65	0.57	0.00	0.00	0.00						97.27	non-kimberlitic
15SUV006	stream sediments	2015_4	4_4	4-4_004	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.97	0.00	0.00	1.05	47.57	0.26	0.00	0.00	0.00						97.85	non-kimberlitic
15SUV006	stream sediments	2015_4	4_5	4-4_005	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.10	0.00	0.00	0.44	48.23	0.35	0.00	0.00	0.00						98.12	non-kimberlitic
15SUV009	stream sediments	2015_6	5_1	6-5_001	chromite	ilmenite	0.25-0.5	0.00	49.01	0.00	0.00	0.55	47.86	0.23	0.00	0.00	0.00						97.65	non-kimberlitic
15SUV009	stream sediments	2015_6	5_2	6-5_002	chromite	ilmenite	0.25-0.5	0.00	49.23	0.00	0.00	0.73	47.86	0.21	0.00	0.00	0.00						98.03	non-kimberlitic
15SUV009	stream sediments	2015_6	5_3	6-5_003	chromite	ilmenite	0.25-0.5	0.00	48.75	0.02	0.00	0.68	48.31	0.13	0.00	0.00	0.00						97.89	non-kimberlitic
15SUV009	stream sediments	2015_6	5_4	6-5_004	chromite	ilmenite	0.25-0.5	0.00	36.01	0.13	0.04	0.32	56.98	1.67	0.00	0.00	0.00						95.15	non-kimberlitic
15SUV009	stream sediments	2015_6	5_5	6-5_005	chromite	ilmenite	0.25-0.5	0.25	55.42	0.16	0.06	3.16	31.88	0.04	0.03	0.00	0.02						91.02	non-kimberlitic
15SUV009	stream sediments	2015_6	5_6	6-5_006	chromite	ilmenite	0.25-0.5	0.00	48.06	0.09	0.00	0.44	47.85	1.33	0.00	0.00	0.00						97.77	non-kimberlitic
15SUV009	stream sediments	2015_6	5_7	6-5_007	chromite	ilmenite	0.25-0.5	0.00	48.07	0.10	0.00	0.33	47.46	0.69	0.00	0.00	0.00						96.65	non-kimberlitic
15SUV009	stream sediments	2015_6	5_8	6-5_008	chromite	ilmenite	0.25-0.5	0.03	51.38	0.57	1.51	0.29	30.13	13.25	0.03	0.00	0.00						97.19	kimberlitic
15SUV009	stream sediments	2015_6	5_9	6-5_009	chromite	ilmenite	0.25-0.5	0.00	44.96	0.05	0.00	0.51	50.27	1.35	0.00	0.00	0.00						97.14	non-kimberlitic
15SUV009	stream sediments	2015_6	6_1b_?	6-6-1B_ilmenite	chromite	ilmenite	0.25-0.5	0.00	48.64	0.05	0.00	0.72	47.99	0.29	0.01	0.00	0.00						97.70	non-kimberlitic
15SUV009	stream sediments	2015_6	6_2	6-6_002	chromite	ilmenite	0.25-0.5	0.00	46.78	0.00	0.00	0.80	49.63	0.49	0.00	0.00	0.00						97.70	non-kimberlitic
15SUV009	stream sediments	2015_6	6_5	6-6_005	chromite	ilmenite	0.25-0.5	0.00	51.57	0.04	0.09	0.60	44.56	0.05	0.00	0.00	0.00						96.91	non-kimberlitic
15SUV009	stream sediments	2015_6	6_6	6-6_006	chromite	ilmenite	0.25-0.5	0.00	48.54	0.00	0.00	0.83	48.24	0.25	0.01	0.00	0.00						97.87	non-kimberlitic
15SUV009	stream sediments	2015_6	6_8	6-6_008	chromite	ilmenite	0.25-0.5	0.00	48.33	0.04	0.00	0.29	48.34	0.81	0.00	0.00	0.00						97.81	non-kimberlitic
15SUV009	stream sediments	2015_6	6_10	6-6_010	chromite	ilmenite	0.25-0.5	0.27	55.37	0.42	0.09	0.30	30.45	1.01	0.05	0.04	0.01						88.01	non-kimberlitic
15SUV010	stream sediments	2015_4	4_6	4-4_006	ilmenite, crustal	ilmenite	0.5-1.0	0.00	48.75	0.05	0.00	0.53	47.56	0.39	0.00	0.00	0.00						97.28	non-kimberlitic
15SUV010	stream sediments	2015_4	4_7	4-4_007	ilmenite, crustal	ilmenite	0.5-1.0	0.00	48.87	0.04	0.00	0.52	47.15	0.88	0.00	0.00	0.00						97.46	non-kimberlitic
15SUV014	stream sediments	2015_4	2_1	4-2_001	ilmenite	ilmenite	0.25-0.5	0.00	51.35	0.75	1.21	0.22	29.57	13.73	0.02	0.00	0.00						96.85	kimberlitic
15SUV018	Beaufort Fm.	2015_4	4_8	4-4_008A	ilmenite, crustal	ilmenite	0.25-0.5	0.13	57.72	0.17	0.05	0.52	32.98	0.46	0.07	0.00	0.00						92.10	non-kimberlitic
15SUV018_rpt	Beaufort Fm.	2015_4	4_8_rpt	4-4-8B	ilmenite, crustal	ilmenite	0.25-0.5	0.14	57.79	0.24	0.04	0.53	32.29	0.44	0.06	0.07	0.00						91.60	non-kimberlitic
15SUV020	stream sediments	2015_4	2_2	4-2_002	ilmenite	ilmenite	0.5-1.0	0.00	51.45	0.55	1.04	0.28	31.29	12.81	0.02	0.00	0.00						97.44	kimberlitic
15SUV020	stream sediments	2015_4	2_3	4-2_003	ilmenite	ilmenite	0.25-0.5	0.00	45.35	0.28	2.36	0.30	39.17	8.84	0.01	0.00	0.00						96.31	kimberlitic
15SUV020	stream sediments	2015_4	2_4	4-2_004	ilmenite	ilmenite	0.25-0.5	0.00	50.32	0.57	1.75	0.29	32.26	11.92	0.03	0.00	0.00						97.14	kimberlitic
15SUV020	stream sediments	2015_4	2_5	4-2_005	ilmenite	ilmenite	0.25-0.5	0.00	41.60	0.25	6.53	0.27	38.35	8.70	0.00	0.00	0.00						95.70	kimberlitic
15SUV020	stream sediments	2015_4	2_6	4-2_006	ilmenite	ilmenite	0.25-0.5	0.00	50.50	0.65	3.51	0.23	28.68	13.49	0.03	0.00	0.00						97.09	kimberlitic
15SUV020	stream sediments	2015_4	5_1	4-5_001	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.86	0.07	0.00	0.39	47.78	0.46	0.00	0.00	0.00						97.56	non-kimberlitic
15SUV020	stream sediments	2015_4	5_2	4-5_002	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.12	0.00	0.00	0.83	48.37	0.11	0.00	0.00	0.00						97.43	non-kimberlitic
15SUV020	stream sediments	2015_4	5_3	4-5_003	ilmenite, crustal	ilmenite	0.25-0.5	0.02	49.87	0.05	0.00	0.49	47.16	0.56	0.01	0.00	0.00						98.16	non-kimberlitic
15SUV020	stream sediments	2015_4	5_4	4-5_004	ilmenite, crustal	ilmenite	0.25-0.5	0.00	47.62	0.03	0.00	0.48	49.08	0.29	0.01	0.00	0.00						97.51	non-kimberlitic
15SUV020	stream sediments	2015_4	5_5	4-5_005	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.90	0.03	0.00	0.44	47.91	0.29	0.00	0.00	0.00						97.57	non-kimberlitic
15SUV020	stream sediments	2015_4	5_6	4-5_006	ilmenite, crustal	ilmenite	0.25-0.5	0.00	46.89	0.05	0.00	0.45	49.47	0.78	0.00	0.00	0.00						97.64	non-kimberlitic
15SUV020	stream sediments	2015_4	5_7	4-5_007	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.32	0.05	0.05	0.57	48.30	0.53	0.00	0.00	0.00						97.82	non-kimberlitic
15SUV020	stream sediments	2015_4	5_8	4-5_008	ilmenite, crustal	ilmenite	0.25-0.5	0.00	47.33	0.00	0.00	3.41	46.64	0.36	0.00	0.00	0.00						97.74	non-kimberlitic
15SUV024	stream sediments	2015_4	6_1	4-6_001	ilmenite, crustal	ilmenite	0.25-0.5	0.12	57.24	0.23	0.21	0.38	29.95	2.05	0.03	0.00	0.00						90.21	non-kimberlitic
15SUV024	stream sediments	2015_4	6_2	4-6_002	ilmenite, crustal	ilmenite	0.25-0.5	0.02	54.36	0.05	0.13	0.47	36.12	0.45	0.02	0.00	0.01						91.63	non-kimberlitic
15SUV024	stream sediments	2015_4	6_3	4-6_003	ilmenite, crustal	ilmenite	0.25-0.5	0.00	51.03	0.00	0.20	0.63	44.58	1.67	0.00	0.00	0.00						98.11	non-kimberlitic
15SUV024	stream sediments	2015_4	6_4	4-6_004	ilmenite, crustal	ilmenite	0.25-0.5	0.28	62.33	0.52	0.18	0.72	25.30	0.08	0.09	0.07	0.01						89.58	non-kimberlitic

15SUV024	stream sediments	2015_4	6_5	4-6_005	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.66	0.00	0.00	0.57	47.28	0.27	0.01	0.00	0.00						97.79	non-kimberlitic
15SUV024	stream sediments	2015_4	6_6	4-6_006	ilmenite, crustal	ilmenite	0.25-0.5	0.07	53.55	0.11	0.00	2.96	33.31	0.00	0.02	0.00	0.00						90.02	non-kimberlitic
15SUV024	stream sediments	2015_4	6_7	4-6_007	ilmenite, crustal	ilmenite	0.25-0.5	0.13	58.69	0.16	0.06	0.30	30.62	0.85	0.02	0.00	0.01						90.84	non-kimberlitic
15SUV024	stream sediments	2015_4	6_8	4-6_008	ilmenite, crustal	ilmenite	0.25-0.5	0.10	54.69	0.15	0.00	1.40	34.87	0.14	0.04	0.05	0.01						91.45	non-kimberlitic
15SUV026	stream sediments	2015_4	7_6	4-7_006	ilmenite, crustal	ilmenite	0.5-1.0	0.00	50.75	0.00	0.08	0.32	45.64	1.29	0.01	0.00	0.00						98.09	non-kimberlitic
15SUV026	stream sediments	2015_4	7_7	4-7_007	ilmenite, crustal	ilmenite	0.25-0.5	0.00	44.71	0.00	0.00	0.48	51.41	0.17	0.00	0.00	0.00						96.77	non-kimberlitic
15SUV030	Beaufort Fm.	2015_4	7_8	4-7-8B	ilmenite, crustal	ilmenite	0.5-1.0	0.03	50.50	0.47	0.32	0.29	35.59	10.12	0.02	0.00	0.00						97.34	kimberlitic
15SUV030_rpt	Beaufort Fm.	2015_4	7_8_rpt	4-7_008A	ilmenite, crustal	ilmenite	0.5-1.0	0.00	50.50	0.47	0.33	0.29	35.53	9.98	0.01	0.00	0.00						97.11	kimberlitic
15SUV033	stream sediments	2015_4	7_9	4-7-9	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.37	0.05	0.07	0.38	48.06	0.36	0.00	0.00	0.00						97.29	non-kimberlitic
15SUV051	stream sediments	2015_4	2_7	4-2_007	ilmenite	ilmenite	0.25-0.5	0.00	50.00	0.57	0.78	0.25	33.52	11.69	0.02	0.04	0.00						96.87	kimberlitic
15SVU025	stream sediments	2015_4	7_1	4-7_001	ilmenite, crustal	ilmenite	0.5-1.0	0.00	48.03	0.02	0.15	0.52	48.42	0.66	0.00	0.00	0.00						97.80	non-kimberlitic
15SVU025	stream sediments	2015_4	7_2	4-7_002	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.93	0.02	0.00	1.94	46.27	1.08	0.00	0.00	0.00						98.24	non-kimberlitic
15SVU025	stream sediments	2015_4	7_3	4-7_003	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.59	0.00	0.00	5.12	44.17	0.00	0.00	0.00	0.00						97.88	non-kimberlitic
15SVU025	stream sediments	2015_4	7_4	4-7_004	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.65	0.00	0.00	1.44	46.75	0.11	0.00	0.00	0.00						97.95	non-kimberlitic
15SVU025	stream sediments	2015_4	7_5	4-7_005	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.93	0.13	0.00	0.50	45.24	0.59	0.00	0.00	0.00						96.39	non-kimberlitic
16SUV014	stream sediments	Mount1_076	1_8_1	296	ilmenite, crustal	ilmenite	0.5-1.0	0.04	48.30	0.05	0.00	0.48	48.35	0.50	0.00	0.00	0.00	0.06	0.00	0.00	0.12	0.00	97.91	non-kimberlitic
16SUV014	stream sediments	Mount1_077	1_8_2	297	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.51	0.03	0.00	0.86	47.81	0.27	0.00	0.00	0.00	0.07	0.00	0.00	0.22	0.00	97.77	non-kimberlitic
16SUV014	stream sediments	Mount1_078	1_8_3	298	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.60	0.06	0.00	0.52	48.29	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	98.17	non-kimberlitic
16SUV014	stream sediments	Mount1_080	1_8_5	300	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.53	0.07	0.03	0.43	48.14	0.30	0.00	0.03	0.00	0.00	0.00	0.00	0.19	0.00	97.72	non-kimberlitic
16SUV014	stream sediments	Mount1_081	1_8_6	301	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.78	0.04	0.00	0.51	48.39	0.36	0.00	0.00	0.00	0.07	0.00	0.00	0.22	0.00	98.37	non-kimberlitic
16SUV014	stream sediments	Mount1_082	1_8_7	302	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.52	0.03	0.00	0.74	48.25	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00	98.42	non-kimberlitic
16SUV014	stream sediments	Mount1_083	1_8_8	303	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.07	0.00	0.00	0.94	47.82	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	98.34	non-kimberlitic
16SUV014	stream sediments	Mount1_084	1_8_9	304	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.56	0.03	0.00	0.94	47.78	0.23	0.00	0.00	0.00	0.05	0.00	0.00	0.59	0.00	98.19	non-kimberlitic
16SUV014	stream sediments	Mount1_086	1_8_11	306	ilmenite, crustal	ilmenite	0.25-0.5	0.00	46.85	0.00	0.00	0.79	49.60	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	97.54	non-kimberlitic
16SUV014	stream sediments	Mount1_087	1_8_12	307	ilmenite, crustal	ilmenite	0.25-0.5	0.00	50.96	0.00	0.00	1.64	45.68	0.28	0.00	0.00	0.00	0.07	0.00	0.04	0.06	0.03	98.77	non-kimberlitic
16SUV023	Beaufort Fm.	Mount1_088	1_8_13	308	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.35	0.00	0.00	3.10	46.41	0.30	0.00	0.00	0.00	0.04	0.00	0.00	0.07	0.00	98.27	non-kimberlitic
16SUV023	Beaufort Fm.	Mount3_041	3_4_2	167	ilmenite	ilmenite	0.18-0.25	0.03	50.58	0.77	3.02	0.23	29.51	13.48	0.02	0.00	0.00	0.20	0.19	0.00	0.20	0.00	98.21	kimberlitic
16SUV023	Beaufort Fm.	Mount3_042	3_4_3	168	ilmenite	ilmenite	0.18-0.25	0.00	50.70	0.58	2.81	0.28	30.29	13.14	0.02	0.00	0.00	0.20	0.13	0.00	0.25	0.00	98.41	kimberlitic
16SUV023	Beaufort Fm.	Mount3_043	3_4_4	169	ilmenite	ilmenite	0.18-0.25	0.00	50.32	0.44	2.83	0.30	31.21	12.70	0.02	0.00	0.00	0.26	0.14	0.00	0.21	0.00	98.42	kimberlitic
16SUV023	Beaufort Fm.	Mount3_044	3_4_5	170	ilmenite	ilmenite	0.18-0.25	0.03	50.21	0.59	1.70	0.27	33.37	11.72	0.02	0.00	0.00	0.25	0.11	0.00	0.23	0.00	98.49	kimberlitic
16SUV023	Beaufort Fm.	Mount3_045	3_4_6	171	ilmenite	ilmenite	0.18-0.25	0.02	50.86	0.57	2.74	0.27	30.17	13.22	0.02	0.00	0.00	0.17	0.16	0.03	0.25	0.00	98.47	kimberlitic
16SUV023	Beaufort Fm.	Mount3_046	3_4_7	172	ilmenite	ilmenite	0.18-0.25	0.02	49.82	0.61	1.86	0.27	33.00	11.88	0.02	0.00	0.00	0.21	0.10	0.00	0.16	0.00	97.95	kimberlitic
16SUV023	Beaufort Fm.	Mount3_047	3_4_8	173	ilmenite	ilmenite	0.18-0.25	0.00	47.92	0.04	0.00	0.64	48.58	0.57	0.00	0.00	0.00	0.06	0.00	0.00	0.10	0.00	97.92	non-kimberlitic
16SUV023	Beaufort Fm.	Mount3_048	3_4_9	174	ilmenite	ilmenite	0.18-0.25	0.03	51.34	0.53	1.54	0.30	30.58	13.13	0.02	0.00	0.00	0.21	0.11	0.00	0.26	0.00	98.05	kimberlitic
16SUV023	Beaufort Fm.	Mount3_050	3_4_11	176	ilmenite	ilmenite	0.18-0.25	0.02	50.63	0.56	2.69	0.29	30.38	13.08	0.02	0.00	0.00	0.21	0.15	0.00	0.29	0.00	98.33	kimberlitic
16SUV023	Beaufort Fm.	Mount3_051	3_4_12	177	ilmenite	ilmenite	0.18-0.25	0.00	46.86	0.07	0.00	0.42	49.03	0.94	0.01	0.00	0.00	0.00	0.06	0.00	0.22	0.00	97.61	non-kimberlitic
16SUV023	Beaufort Fm.	Mount3_052	3_4_13	178	ilmenite	ilmenite	0.18-0.25	0.02	50.06	0.60	1.63	0.27	33.10	11.95	0.02	0.00	0.00	0.17	0.11	0.00	0.26	0.00	98.20	kimberlitic
16SUV023	Beaufort Fm.	Mount3_053	3_4_14	179	ilmenite	ilmenite	0.18-0.25	0.00	50.87	0.58	1.43	0.29	32.11	12.61	0.02	0.00	0.00	0.21	0.08	0.00	0.23	0.00	98.41	kimberlitic
16SUV023	Beaufort Fm.	Mount3_054	3_4_15	180	ilmenite	ilmenite	0.18-0.25	0.00	46.09	0.26	1.61	0.29	39.47	9.29	0.02	0.00	0.00	0.45	0.07	0.04	0.27	0.00	97.85	kimberlitic
16SUV027	stream sediments	Mount1_090r	1_9_1	427	ilmenite, crustal	ilmenite	0.25-0.5	0.03	49.96	0.00	0.00	0.57	46.30	0.55	0.00	0.00	0.00	0.04	0.03	0.03	0.16	0.00	97.67	non-kimberlitic
16SUV027	stream sediments	Mount1_091	1_9_2	311	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.69	0.04	0.00	0.94	47.49	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	97.93	non-kimberlitic
16SUV027	stream sediments	Mount1_092	1_9_3	312	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.54	0.00	0.09	0.40	45.40	2.11	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	97.91	non-kimberlitic
16SUV027	stream sediments	Mount1_093	1_9_4	313	ilmenite, crustal	ilmenite	0.25-0.5	0.02	48.93	0.03	0.00	0.57	48.51	0.30	0.00	0.00	0.00	0.13	0.00	0.04	0.19	0.00	98.73	non-kimberlitic
16SUV027	stream sediments	Mount1_094	1_9_5	314	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.56	0.04	0.00	0.44	48.23	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	98.00	non-kimberlitic
16SUV027	stream sediments	Mount1_095	1_9_6	315	ilmenite, crustal	ilmenite	0.25-0.5	0.00	41.83	0.41	0.00	1.18	47.79	5.08	0.01	0.00	0.00	0.13	0.00	0.05	0.14	0.00	96.60	kimberlitic
16SUV027	stream sediments	Mount1_096	1_9_7	316	ilmenite, crustal	ilmenite	0.25-0.5	0.00	46.72	0.08	0.07	0.90	49.57	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	97.70	non-kimberlitic
16SUV027	stream sediments	Mount1_097	1_9_8	317	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.50	0.02	0.00	0.52	48.64	0.19	0.00	0.00	0.00	0.07	0.00	0.00	0.20	0.00	98.14	non-kimberlitic
16SUV027	stream sediments	Mount1_098	1_9_9	318	ilmenite, crustal	ilmenite	0.25-0.5	0.03	48.11	0.40	0.41	0.28	39.13	8.95	0.02	0.00	0.00	0.18	0.06	0.00	0.28	0.00	97.84	kimberlitic
16SUV028	stream sediments	Mount1_099	1_9_10	319	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.56	0.03	0.00	1.01	47.64	0.18	0.01	0.00	0.00	0.00	0.00	0.00	0.73	0.00	98.16	non-kimberlitic
16SUV028	stream sediments	Mount1_100	1_9_11	320	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.04	0.03	0.00	0.45	48.10	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	98.16	non-kimberlitic
16SUV028	stream sediments	Mount1_101	1_9_12	321	ilmenite, crustal	ilmenite	0.25-0.5	0.00	47.53	0.03	0.04	0.51	48.87	0.64	0.00	0.00	0.00	0.07	0.00	0.04	0.22	0.00	97.94	non-kimberlitic
16SUV028	stream sediments	Mount1_102	1_9_13	322	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.72	0.03	0.00	0.98	47.98	0.80	0.00	0.00	0.00	0.00	0.00	0.03	0.09	0.00	98.63	non-kimberlitic
16SUV028	stream sediments	Mount2_074	2_7_7	178	chromite	ilmenite	0.25-0.5	0.00	48.87	0.03	0.04	0.56	48.01	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	97.89	non-kimberlitic

[1]Ilmenite classification according to Wyatt et al.'s (2004) "non-kimberlitic/kimberlitic" bounding reference line on a TiO2 - MgO (wt%) plot (Fig. 15B)

shading depicts duplicate analysis of single grains

APPENDIX 6F

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - EPMA chemistry: OLIVINE

								WT %																
GSC Sample #	Mount	Grain #	EPMA #	Sample Material	ODM Min ID	EPMA Min ID	Grain Size	SiO2	TiO2	Al2O3	Cr2O3	MnO	FeO	MgO	CaO	Na2O	K2O	Nb2O5	NiO	ZnO	V2O3	P2O5	Total	MAGNUM[1]
15SUV006	2015_3	3_7	3-3_007	stream sediments	bronzite	olivine	0.25-0.5	36.30	0.00	0.00	0.00	0.46	35.32	27.59	0.17	0.00	0.00						99.84	0.58
15SUV006	2015_3	3_1	3-3_001	stream sediments	diopside	olivine	0.25-0.5	38.31	0.00	0.03	0.00	0.32	22.51	37.78	0.25	0.00	0.00						99.20	0.75
15SUV001	2015_2	3_1	2-3_001	stream sediments	fayalite	olivine	0.25-0.5	37.35	0.06	0.03	0.00	0.42	28.02	33.74	0.28	0.00	0.00						99.90	0.68
15SUV005	2015_2	3_2	2-3_002	stream sediments	fayalite	olivine	0.25-0.5	36.18	0.00	0.02	0.00	0.47	33.93	29.18	0.30	0.00	0.00						100.08	0.61
15SUV005	2015_2	3_3	2-3_003	stream sediments	fayalite	olivine	0.25-0.5	34.39	0.00	0.00	0.00	0.60	43.05	21.50	0.21	0.00	0.00						99.75	0.47
15SUV005	2015_2	3_4	2-3_004	stream sediments	fayalite	olivine	0.25-0.5	36.16	0.03	0.02	0.00	0.48	33.94	28.97	0.26	0.00	0.00						99.86	0.60
15SUV005	2015_2	3_5	2-3_005	stream sediments	fayalite	olivine	0.25-0.5	39.34	0.00	0.02	0.05	0.23	15.55	43.51	0.27	0.00	0.00						98.97	0.83
15SUV006	2015_2	3_6	2-3_006	stream sediments	fayalite	olivine	0.25-0.5	37.72	0.00	0.00	0.00	0.34	25.69	35.64	0.31	0.00	0.00						99.70	0.71
15SUV006	2015_2	3_7	2-3_007	stream sediments	fayalite	olivine	0.25-0.5	35.80	0.00	0.03	0.00	0.49	35.91	27.23	0.29	0.00	0.00						99.75	0.57
15SUV006	2015_2	3_8	2-3_008	stream sediments	fayalite	olivine	0.25-0.5	36.92	0.00	0.00	0.00	0.41	29.71	32.19	0.28	0.00	0.00						99.51	0.66
15SUV010	2015_2	4_1	2-4_001	stream sediments	fayalite	olivine	0.25-0.5	35.26	0.00	0.02	0.03	0.51	37.79	25.85	0.23	0.00	0.00						99.69	0.55
15SUV010	2015_2	4_2	2-4_002	stream sediments	fayalite	olivine	0.25-0.5	35.14	0.00	0.00	0.00	0.53	39.89	24.19	0.26	0.00	0.00						100.01	0.52
15SUV010	2015_2	4_3	2-4_003	stream sediments	fayalite	olivine	0.25-0.5	34.98	0.02	0.00	0.00	0.55	40.70	23.56	0.25	0.00	0.00						100.06	0.51
15SUV020	2015_2	4_5	2-4_005	stream sediments	fayalite	olivine	0.25-0.5	35.98	0.04	0.00	0.00	0.44	34.39	28.72	0.14	0.00	0.00						99.71	0.60
15SUV020	2015_2	4_6	2-4_006	stream sediments	fayalite	olivine	0.25-0.5	35.29	0.02	0.00	0.00	0.50	38.48	25.43	0.24	0.00	0.00						99.96	0.54
15SUV023	2015_2	4_7	2-4_007	till	fayalite	olivine	0.25-0.5	36.17	0.02	0.00	0.00	0.47	34.95	28.01	0.27	0.00	0.00						99.89	0.59
15SUV023	2015_2	4_8	2-4_008	till	fayalite	olivine	0.25-0.5	35.85	0.00	0.00	0.00	0.48	36.27	27.00	0.27	0.00	0.00						99.87	0.57
15SUV023	2015_2	4_9	2-4_009	till	fayalite	olivine	0.25-0.5	35.75	0.02	0.00	0.00	0.52	35.94	27.20	0.27	0.00	0.00						99.70	0.57
15SUV023	2015_2	4_10	2-4_010	till	fayalite	olivine	0.25-0.5	34.67	0.02	0.00	0.00	0.57	42.35	22.42	0.26	0.00	0.00						100.29	0.49
16SUV014	Mount1_042	1_5_1	262	stream sediments	fayalite	olivine	0.25-0.5	35.85	0.00	0.00	0.00	0.52	38.44	25.35	0.20	0.00	0.00	0.00	0.10	0.03	0.00	0.00	100.49	0.54
16SUV014	Mount1_043	1_5_2	263	stream sediments	fayalite	olivine	0.25-0.5	35.02	0.04	0.02	0.00	0.63	41.99	22.65	0.23	0.00	0.00	0.00	0.03	0.03	0.00	0.03	100.65	0.49
16SUV014	Mount1_044	1_5_3	264	stream sediments	fayalite	olivine	0.25-0.5	36.02	0.03	0.03	0.00	0.54	36.08	27.18	0.28	0.00	0.00	0.00	0.09	0.00	0.00	0.00	100.23	0.57
16SUV014	Mount1_045	1_5_4	265	stream sediments	fayalite	olivine	0.25-0.5	35.72	0.00	0.00	0.00	0.56	38.74	25.31	0.22	0.00	0.00	0.00	0.04	0.03	0.00	0.00	100.63	0.54
16SUV014	Mount1_046	1_5_5	266	stream sediments	fayalite	olivine	0.25-0.5	35.64	0.00	0.00	0.00	0.58	38.46	25.31	0.27	0.00	0.00	0.00	0.05	0.03	0.00	0.03	100.37	0.54
16SUV016	Mount1_047	1_5_6	267	stream sediments	fayalite	olivine	0.25-0.5	36.65	0.00	0.02	0.00	0.46	33.61	29.41	0.30	0.00	0.00	0.00	0.09	0.04	0.00	0.02	100.60	0.61
16SUV016	Mount1_048	1_5_7	268	stream sediments	fayalite	olivine	0.25-0.5	37.67	0.00	0.00	0.00	0.40	27.02	34.58	0.30	0.00	0.00	0.00	0.12	0.00	0.00	0.00	100.10	0.70
16SUV016	Mount1_049	1_5_8	269	stream sediments	fayalite	olivine	0.25-0.5	35.59	0.00	0.00	0.00	0.56	39.19	25.00	0.25	0.00	0.00	0.00	0.08	0.04	0.00	0.00	100.70	0.53
16SUV016	Mount1_050	1_5_9	270	stream sediments	fayalite	olivine	0.25-0.5	36.60	0.02	0.00	0.00	0.50	33.61	29.23	0.29	0.00	0.00	0.00	0.08	0.03	0.00	0.00	100.35	0.61
16SUV016	Mount1_051	1_5_10	271	stream sediments	fayalite	olivine	0.25-0.5	36.84	0.03	0.00	0.00	0.39	32.38	30.42	0.13	0.00	0.00	0.00	0.14	0.03	0.00	0.00	100.36	0.63
16SUV016	Mount1_052	1_5_11	272	stream sediments	fayalite	olivine	0.25-0.5	36.29	0.00	0.00	0.00	0.49	34.73	28.48	0.29	0.00	0.00	0.00	0.07	0.03	0.00	0.00	100.37	0.59
16SUV016	Mount1_053	1_5_12	273	stream sediments	fayalite	olivine	0.25-0.5	35.74	0.02	0.02	0.00	0.55	38.25	25.61	0.24	0.04	0.00	0.00	0.05	0.03	0.00	0.00	100.56	0.54
15SUV001	2015_2	1_1	2-1_001	stream sediments	forsterite	olivine	0.25-0.5	39.77	0.00	0.03	0.00	0.21	12.96	45.38	0.20	0.00	0.00						98.55	0.86
15SUV001	2015_2	1_2	2-1_002	stream sediments	forsterite	olivine	0.25-0.5	40.31	0.00	0.05	0.08	0.15	10.98	47.16	0.23	0.00	0.00						98.96	0.88
15SUV008	2015_2	1_3	2-1_003	stream sediments	forsterite	olivine	0.25-0.5	39.31	0.00	0.02	0.00	0.29	16.61	42.65	0.30	0.00	0.00						99.18	0.82
15SUV008	2015_2	1_4	2-1_004	stream sediments	forsterite	olivine	0.25-0.5	38.92	0.00	0.04	0.00	0.31	19.96	39.95	0.31	0.00	0.00						99.49	0.78
15SUV008	2015_2	1_5	2-1_005	stream sediments	forsterite	olivine	0.25-0.5	39.39	0.00	0.04	0.00	0.31	16.99	42.26	0.31	0.00	0.00						99.30	0.82
15SUV008	2015_2	1_6	2-1_006	stream sediments	forsterite	olivine	0.25-0.5	38.79	0.00	0.03	0.04	0.30	20.20	39.91	0.30	0.00	0.00						99.57	0.78
15SUV008	2015_2	1_7	2-1_007	stream sediments	forsterite	olivine	0.25-0.5	40.65	0.00	0.04	0.04	0.21	12.09	46.09	0.38	0.00	0.00						99.50	0.87
15SUV008	2015_2	1_9	2-1_009	stream sediments	forsterite	olivine	0.25-0.5	39.33	0.00	0.02	0.03	0.23	16.48	42.84	0.29	0.00	0.00						99.22	0.82
15SUV009	2015_2	1_10	2-1_010	stream sediments	forsterite	olivine	0.25-0.5	40.25	0.00	0.06	0.08	0.16	10.99	47.19	0.27	0.00	0.00						99.00	0.88
15SUV020	2015_2	2_1	2-2_001	stream sediments	forsterite	olivine	0.25-0.5	37.63	0.00	0.02	0.00	0.35	26.72	34.43	0.20	0.00	0.00						99.35	0.70
15SUV020	2015_2	2_2	2-2_002	stream sediments	forsterite	olivine	0.25-0.5	36.29	0.00	0.00	0.00	0.45	34.28	28.71	0.24	0.00	0.00						99.97	0.60
15SUV020	2015_2	2_3	2-2_003	stream sediments	forsterite	olivine	0.25-0.5	40.86	0.00	0.06	0.06	0.12	8.94	48.99	0.14	0.00	0.00						99.17	0.91
15SUV020	2015_2	2_4	2-2_004	stream sediments	forsterite	olivine	0.25-0.5	39.86	0.00	0.04	0.08	0.20	12.52	45.74	0.29	0.00	0.00						98.73	0.87
15SUV025	2015_2	2_5	2-2_005	stream sediments	forsterite	olivine	0.25-0.5	39.50	0.00	0.03	0.00	0.28	16.11	43.37	0.16	0.00	0.00						99.45	0.83
15SUV026	2015_2	2_6	2-2_006A	stream sediments	forsterite	olivine	0.25-0.5	40.16	0.00	0.05	0.03	0.17	11.25	46.92	0.28	0.00	0.00						98.86	0.88
15SUV026_rpt	2015_2	2_6_rpt	2-2-6B	stream sediments	forsterite	olivine	0.25-0.5	39.78	0.00	0.04	0.07	0.19	12.52	45.67	0.27	0.00	0.00						98.54	0.87
15SUV026	2015_2	2_7	2-2_007	stream sediments	forsterite	olivine	0.25-0.5	39.39	0.00	0.04	0.00	0.21	16.29	42.86	0.25	0.02	0.00						99.06	0.82
15SUV030	Mount3_034	3_3_5	160	Beaufort Formation	forsterite	olivine	0.18-0.25	38.53	0.00	0.03	0.00	0.25	18.71	41.51	0.22	0.00	0.00	0.00	0.25	0.00	0.00	0.06	99.56	0.80
15SUV050	2015_2	2_8	2-2_008	stream sediments	forsterite	olivine	0.25-0.5	40.07	0.00	0.05	0.08	0.16	11.14	46.81	0.27	0.00	0.00						98.58	0.88
15SUV051	2015_2	2_9	2-2_009	stream sediments	forsterite	olivine	0.25-0.5	40.10	0.00	0.06	0.00	0.21	13.79	44.80	0.34	0.00	0.00						99.30	0.85
15SUV051	2015_2	2_10	2-2_010	stream sediments	forsterite	olivine	0.25-0.5	40.13	0.00	0.05	0.07	0.17	11.32	46.76	0.24	0.00	0.00						98.74	0.88
15SUV051_rpt	2015_2	2_10_rpt	2-2_010	stream sediments	forsterite	olivine	0.25-0.5	40.05	0.00	0.05	0.08	0.17	11.36	46.52	0.25	0.00	0.00						98.48	0.88
15SUV051	2015_2	2_11	2-2_011	stream sediments	forsterite	olivine	0.25-0.5	40.48	0.00	0.04	0.05	0.16	10.99	47.37	0.21	0.00	0.00						99.30	0.88
15SUV051_rpt	2015_2	2_11_rpt	2-2_011	stream sediments	forsterite	olivine	0.25-0.5	40.51	0.00	0.05	0.08	0.16	10.96	47.06	0.20	0.00	0.00						99.02	0.88
15SUV051	2015_2	2_12	2-2_012	stream sediments	forsterite	olivine	0.25-0.5	40.04	0.00	0.06	0.10	0.18	13.17	45.05	0.26	0.00	0.00						98.86	0.86
16SUV014	Mount1_040	1_4_7	260	stream sediments	forsterite	olivine	0.25-0.5	37.66	0.00	0.03	0.00	0.40	28.08	33.78	0.30	0.02	0.00	0.00	0.12	0.03	0.00	0.00	100.41	0.68
16SUV028	Mount1_041	1_4_8	261	stream sediments	forsterite	olivine	0.25-0.5	40.27	0.00	0.04	0.00	0.20	13.07	45.99	0.21	0.00	0.00	0.00	0.29	0.00	0.00	0.00	100.06	0.86

[1]MAGNUM = (MgO/40.3)/((MgO/40.3)+(FeO/71.85))

shading depicts duplicate analysis of single grains

APPENDIX 6G

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - EPMA chemistry: CLINOPYROXENE (CPX)

								WT %																
GSC Sample #	**Mount**	**Grain #**	**EPMA #**	**ODM Min ID**	**EPMA Min ID**	**Sample Material**	**Grain Size**	**SiO2**	**TiO2**	**Al2O3**	**Cr2O3**	**MnO**	**FeO**	**MgO**	**CaO**	**Na2O**	**K2O**	**Nb2O5**	**NiO**	**ZnO**	**V2O3**	**P2O5**	**Total**	**MAGNUM**
15SUV004	2015_3	1_3	3-1_003	low-Cr_DC	cpx	stream sediments	0.5-1.0	52.52	0.58	1.39	0.65	0.09	4.91	16.32	20.92	0.79	0.00						98.17	86
15SUV004	2015_3	1_4	3-1_004	low-Cr_DC	cpx	stream sediments	0.25-0.5	52.94	0.39	0.71	1.24	0.08	4.13	16.63	20.99	0.69	0.01						97.81	88
15SUV014	2015_3	1_1	3-1_001	Cr-diopside	cpx	stream sediments	0.25-0.5	52.91	0.13	3.27	0.62	0.07	2.53	16.52	21.23	0.98	0.00						98.26	92
15SUV018	2015_3	3_2	3-3_002	diopside	cpx	Beaufort Fm.	0.25-0.5	54.13	0.03	1.47	0.00	0.15	0.54	17.68	25.43	0.00	0.00						99.43	98
15SUV019	Mount3_036	3_3_7	162	low-Cr_DC	cpx	Beaufort Fm.	0.18-0.25	52.23	0.11	2.31	0.93	0.21	6.08	14.55	22.80	0.45	0.00	0.00	0.05	0.00	0.00	0.00	99.72	81
15SUV019	Mount3_037	3_3_9	163	low-Cr_DC	cpx	Beaufort Fm.	0.18-0.25	50.73	0.39	3.69	1.10	0.14	5.10	17.28	20.05	0.19	0.00	0.00	0.04	0.00	0.04	0.00	98.75	86
15SUV021	2015_3	1_5	3-1_005	low-Cr_DC	cpx	stream sediments	0.5-1.0	52.53	0.27	2.18	0.64	0.16	5.49	17.84	19.11	0.16	0.00						98.38	85
15SUV021	2015_3	1_6	3-1_006	low-Cr_DC	cpx	stream sediments	0.25-0.5	52.73	0.21	1.85	0.79	0.14	4.75	18.02	19.40	0.18	0.00						98.07	87
15SUV024	2015_3	1_2	3-1_002	Cr-diopside	cpx	stream sediments	0.25-0.5	53.09	0.09	1.60	0.60	0.16	3.90	15.56	22.91	0.53	0.00						98.44	88
15SUV027	2015_3	1_7	3-1_007	low-Cr_DC	cpx	stream sediments	0.25-0.5	53.09	0.03	1.29	0.33	0.21	5.46	15.32	21.85	0.46	0.00						98.04	83
15SUV028	2015_3	1_8	3-1_008	low-Cr_DC	cpx	Beaufort Fm.	0.25-0.5	52.69	0.28	1.90	0.65	0.17	5.43	18.45	18.39	0.15	0.00						98.11	86
15SUV028	2015_3	1_9	3-1_009	low-Cr_DC	cpx	Beaufort Fm.	0.25-0.5	50.46	0.43	3.66	1.08	0.17	5.68	16.79	19.15	0.21	0.00						97.63	84
15SUV028	Mount3_038	3_3_10	164	low-Cr_DC	cpx	Beaufort Fm.	0.18-0.25	50.73	0.44	3.89	1.05	0.13	5.26	17.12	20.31	0.20	0.00	0.00	0.04	0.00	0.04	0.03	99.23	85
15SUV028	Mount3_039	3_3_11	165	low-Cr_DC	cpx	Beaufort Fm.	0.18-0.25	50.91	0.18	3.60	1.28	0.12	4.18	17.00	21.25	0.17	0.00	0.00	0.03	0.00	0.00	0.00	98.71	88
15SUV032	2015_3	2_1	3-2_001	low-Cr_DC	cpx	stream sediments	0.25-0.5	49.93	0.37	4.48	0.80	0.14	5.86	15.80	19.86	0.20	0.00						97.44	83
15SUV032	2015_3	2_2	3-2_002	low-Cr_DC	cpx	stream sediments	0.25-0.5	51.00	0.34	3.50	1.24	0.13	4.92	16.71	20.07	0.19	0.00						98.10	86
15SUV032	2015_3	2_3	3-2_003	low-Cr_DC	cpx	stream sediments	0.25-0.5	50.58	0.35	3.52	1.06	0.14	5.22	16.79	19.50	0.20	0.00						97.36	85
15SUV032	2015_3	2_4	3-2_004	low-Cr_DC	cpx	stream sediments	0.25-0.5	51.38	0.30	2.82	1.04	0.15	5.20	17.33	19.28	0.20	0.00						97.70	86
15SUV032	2015_3	2_5	3-2_005	low-Cr_DC	cpx	stream sediments	0.25-0.5	52.20	0.23	2.15	0.94	0.13	4.50	17.49	20.27	0.17	0.00						98.08	87
15SUV032	2015_3	2_6	3-2_006	low-Cr_DC	cpx	stream sediments	0.25-0.5	51.52	0.31	2.90	1.10	0.13	5.14	16.95	19.71	0.18	0.00						97.94	85
15SUV032	2015_3	2_7	3-2_007	low-Cr_DC	cpx	stream sediments	0.25-0.5	50.66	0.41	3.67	0.95	0.14	5.15	16.40	20.08	0.18	0.00						97.64	85
15SUV032	2015_3	2_8	3-2_008	low-Cr_DC	cpx	stream sediments	0.25-0.5	51.24	0.37	3.43	0.95	0.14	5.26	17.42	19.00	0.18	0.00						97.99	86
15SUV032	2015_3	2_9	3-2_009	low-Cr_DC	cpx	stream sediments	0.25-0.5	51.02	0.37	3.52	1.08	0.14	5.19	16.59	19.78	0.20	0.00						97.89	85
15SUV052	2015_3	2_10	3-2_010	diopside	cpx	stream sediments	0.25-0.5	50.32	0.51	4.23	1.38	0.14	5.33	16.50	19.05	0.19	0.00						97.65	85
16SUV019	Mount1_054	1_6_1	274	diopside	cpx	till	0.25-0.5	55.39	0.03	0.61	0.00	0.03	0.70	17.81	25.91	0.05	0.00	0.00	0.00	0.00	0.00	0.00	100.53	98
16SUV019	Mount1_055	1_6_2	275	diopside	cpx	till	0.25-0.5	54.61	0.03	0.40	0.03	0.07	2.86	16.52	25.56	0.16	0.00	0.00	0.00	0.00	0.00	0.00	100.24	91

APPENDIX 6H

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - EPMA chemistry: RUTILE

							WT %															
GSC Sample #	Mount	Grain #	EPMA #	ODM Min ID	EPMA Min ID	Grain Size	SiO2	TiO2	Al2O3	Cr2O3	MnO	FeO	MgO	CaO	Na2O	K2O	Nb2O5	NiO	ZnO	V2O3	P2O5	Total
15SUV018	2015_4	4-8_1	4-8-A_001	red rutile	rutile	0.25-0.5	0.00	97.59	0.00	0.93	0.00	0.36	0.00	0.01	0.00	0.00						98.89
15SUV018_rpt	2015_4	4_8_1_rpt	4-8-B_001	red rutile	rutile	0.25-0.5	0.00	97.60	0.00	0.88	0.00	0.32	0.00	0.00	0.00	0.00						98.80
15SUV028_rpt	2015_4	4_8_2_rpt	4-8-A_002	red rutile	rutile	0.25-0.5	0.00	98.20	0.05	0.00	0.00	0.70	0.00	0.00	0.00	0.00						98.95
15SUV028	2015_4	4_8_2	4-8-B_002	red rutile	rutile	0.25-0.5	0.00	98.49	0.02	0.00	0.00	0.69	0.00	0.00	0.00	0.00						99.20
15SUV028_rpt	2015_4	4_8_3_rpt	4-8-A_003	red rutile	rutile	0.25-0.5	0.00	97.58	0.03	0.21	0.00	0.18	0.00	0.01	0.00	0.00						98.01
15SUV028	2015_4	4_8_3	4-8-B_003	red rutile	rutile	0.25-0.5	0.00	98.13	0.03	0.22	0.00	0.17	0.00	0.01	0.00	0.00						98.56
15SUV030	2015_4	4_8_4	4-8-A_004	red rutile	rutile	0.25-0.5	0.00	98.77	0.02	0.11	0.00	0.29	0.00	0.01	0.00	0.00						99.20
15SUV030_rpt	2015_4	4_8_4_rpt	4-8-B_004	red rutile	rutile	0.25-0.5	0.00	98.73	0.00	0.26	0.00	0.23	0.00	0.00	0.00	0.00						99.22
15SUV030_rpt	2015_4	4_8_5_rpt	4-8-A_005	red rutile	rutile	0.25-0.5	0.00	98.65	0.02	0.13	0.00	0.15	0.00	0.01	0.00	0.00						98.96
15SUV030	2015_4	4_8_5	4-8-B_005	red rutile	rutile	0.25-0.5	0.00	98.89	0.04	0.13	0.00	0.14	0.00	0.00	0.00	0.00						99.20
15SUV030	2015_4	4_8_6	4-8-A_006	red rutile	rutile	0.25-0.5	0.00	98.39	0.03	0.10	0.00	0.30	0.00	0.00	0.00	0.00						98.82
15SUV030_rpt	2015_4	4_8_6_rpt	4-8-B_006	red rutile	rutile	0.25-0.5	0.00	98.45	0.02	0.15	0.00	0.31	0.00	0.00	0.00	0.00						98.93
15SUV030_rpt	2015_4	4_8_7_rpt	4-8-A_007	red rutile	rutile	0.25-0.5	0.00	98.09	0.03	0.07	0.00	0.34	0.00	0.00	0.00	0.00						98.53
15SUV030	2015_4	4_8_7	4-8-B_007	red rutile	rutile	0.25-0.5	0.00	98.23	0.00	0.08	0.00	0.42	0.00	0.00	0.00	0.00						98.73
15SUV030_rpt	2015_4	4_8_8_rpt	4-8-A_008	red rutile	rutile	0.25-0.5	0.00	97.87	0.00	0.55	0.00	0.03	0.00	0.00	0.00	0.00						98.45
15SUV030	2015_4	4_8_8	4-8-B_008	red rutile	rutile	0.25-0.5	0.00	97.94	0.00	0.56	0.00	0.02	0.00	0.00	0.00	0.00						98.52
15SUV030	2015_4	4_8_9	4-8-A_009	red rutile	rutile	0.25-0.5	0.00	98.61	0.03	0.15	0.00	0.07	0.00	0.00	0.00	0.00						98.86
15SUV030_rpt	2015_4	4_8_9_rpt	4-8-B_009	red rutile	rutile	0.25-0.5	0.00	98.60	0.00	0.16	0.00	0.06	0.00	0.00	0.00	0.00						98.82
15SUV030	2015_4	4_8_10	4-8-A_010	red rutile	rutile	0.25-0.5	0.00	98.82	0.05	0.06	0.00	0.29	0.00	0.00	0.00	0.00						99.22
15SUV030_rpt	2015_4	4_8_10_rpt	4-8-B_010	red rutile	rutile	0.25-0.5	0.00	98.64	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00						98.92
15SUV030	2015_4	4_8_11	4-8-A_011	red rutile	rutile	0.25-0.5	0.00	97.00	0.00	0.23	0.00	0.72	0.00	0.00	0.00	0.00						97.95
15SUV030_rpt	2015_4	4_8_11_rpt	4-8-B_011	red rutile	rutile	0.25-0.5	0.00	96.95	0.02	0.22	0.00	0.71	0.00	0.00	0.00	0.00						97.90
15SUV030	2015_4	4_8_12	4-8-A_012	red rutile	rutile	0.25-0.5	0.00	98.08	0.00	0.38	0.00	0.04	0.00	0.01	0.00	0.01						98.52
15SUV030_rpt	2015_4	4_8_12_rpt	4-8-B_012	red rutile	rutile	0.25-0.5	0.00	97.88	0.00	0.38	0.00	0.06	0.00	0.00	0.00	0.00						98.32
15SUV030_rpt	2015_4	4_8_13_rpt	4-8-A_013	red rutile	rutile	0.25-0.5	0.00	98.19	0.00	0.05	0.00	0.63	0.00	0.00	0.00	0.00						98.87
15SUV030	2015_4	4_8_13	4-8-B_013	red rutile	rutile	0.25-0.5	0.00	98.23	0.00	0.08	0.00	0.67	0.00	0.00	0.00	0.00						98.98
16SUV013	2016_2	2_1_1	327	red rutile	rutile	0.25-0.5	0.04	98.85	0.02	0.30	0.00	1.05	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.22	0.00	100.56
16SUV013	2016_2	2_1_2	328	red rutile	rutile	0.25-0.5	0.00	99.95	0.00	0.10	0.00	0.05	0.00	0.00	0.00	0.01	0.04	0.02	0.00	0.19	0.00	100.37
16SUV013	2016_2	2_1_3	329	red rutile	rutile	0.25-0.5	0.00	99.95	0.02	0.18	0.00	0.17	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.28	0.00	100.81
16SUV013	2016_2	2_1_4	330	red rutile	rutile	0.25-0.5	0.00	99.99	0.03	0.05	0.00	0.18	0.00	0.01	0.00	0.00	0.18	0.00	0.00	0.33	0.00	100.77
16SUV013	2016_2	2_1_5	331	red rutile	rutile	0.25-0.5	0.00	100.33	0.02	0.13	0.00	0.11	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.34	0.00	101.00
16SUV013	2016_2	2_1_6	332	red rutile	rutile	0.25-0.5	0.00	99.91	0.02	0.24	0.00	0.03	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.36	0.00	100.74
16SUV013	2016_2	2_1_7	333	red rutile	rutile	0.25-0.5	0.00	100.08	0.04	0.00	0.00	0.15	0.02	0.00	0.00	0.00	0.23	0.00	0.00	0.19	0.00	100.71
16SUV013	2016_2	2_1_8	334	red rutile	rutile	0.25-0.5	0.00	99.81	0.05	0.15	0.00	0.17	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.21	0.00	100.75
16SUV022	2016_2	2_1_9	335	red rutile	rutile	0.25-0.5	0.02	99.26	0.05	0.07	0.00	0.15	0.00	0.00	0.05	0.02	0.54	0.00	0.00	0.37	0.00	100.52
16SUV022	2016_2	2_1_10	336	red rutile	rutile	0.25-0.5	0.00	98.81	0.00	0.21	0.00	0.08	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.61	0.00	99.98
16SUV022	2016_2	2_1_11	337	red rutile	rutile	0.25-0.5	0.00	99.18	0.04	0.10	0.00	0.25	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.47	0.00	100.29
16SUV022	2016_2	2_1_12	338	red rutile	rutile	0.25-0.5	0.00	99.00	0.00	0.16	0.00	0.03	0.00	0.02	0.00	0.00	0.17	0.00	0.00	0.82	0.00	100.20
16SUV023	2016_2	2_2_1	339	red rutile	rutile	0.25-0.5	0.00	99.77	0.02	0.10	0.00	0.23	0.00	0.01	0.03	0.00	0.16	0.00	0.00	0.25	0.00	100.57
16SUV023	2016_2	2_2_2	340	red rutile	rutile	0.25-0.5	0.00	99.52	0.00	0.47	0.00	0.05	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.33	0.00	100.58
16SUV023	2016_2	2_2_3	341	red rutile	rutile	0.25-0.5	0.02	99.21	0.05	0.12	0.00	0.36	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.32	0.00	100.43
16SUV023	2016_2	2_2_4	342	red rutile	rutile	0.25-0.5	0.00	99.30	0.04	0.08	0.00	0.32	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.40	0.00	100.43
16SUV023	2016_2	2_2_5	343	red rutile	rutile	0.25-0.5	0.00	99.84	0.02	0.08	0.00	0.19	0.00	0.10	0.00	0.00	0.15	0.00	0.00	0.43	0.00	100.81
16SUV024	2016_2	2_2_6	344	red rutile	rutile	0.25-0.5	0.00	98.28	0.00	1.26	0.00	0.16	0.00	0.00	0.00	0.01	0.30	0.00	0.00	0.20	0.00	100.20
16SUV024	2016_2	2_2_7	345	red rutile	rutile	0.25-0.5	0.00	99.25	0.02	0.69	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	100.33
16SUV024	2016_2	2_2_8	346	red rutile	rutile	0.25-0.5	0.00	99.96	0.00	0.46	0.00	0.03	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.26	0.00	100.84
16SUV024	2016_2	2_2_9	347	red rutile	rutile	0.25-0.5	0.00	99.11	0.03	0.27	0.00	0.13	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.30	0.00	99.95
16SUV024	2016_2	2_2_10	348	red rutile	rutile	0.25-0.5	0.00	99.42	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.11	0.00	99.94
16SUV014	Mount1_079	1_8_4	299	ilmenite, crustal	pseudorutile	0.25-0.5	0.60	57.12	0.53	0.12	0.69	30.34	1.79	0.02	0.03	0.01	0.00	0.00	0.00	0.74	0.04	92.01
16SUV014	Mount1_085	1_8_10	305	ilmenite, crustal	pseudorutile	0.25-0.5	0.39	57.72	0.29	0.00	0.61	30.99	0.46	0.06	0.00	0.03	0.06	0.00	0.00	0.11	0.08	90.80
16SUV023	Mount1_089	1_8_14	309	ilmenite, crustal	pseudorutile	0.25-0.5	0.35	60.86	0.33	0.23	0.41	25.92	2.99	0.04	0.03	0.00	0.00	0.00	0.00	0.85	0.00	92.02
16SUV028	Mount1_103	1_9_14	323	ilmenite, crustal	pseudorutile	0.25-0.5	0.14	59.80	0.13	0.00	0.38	29.79	0.42	0.02	0.00	0.04	0.11	0.00	0.00	0.14	0.00	90.97
16SUV028	Mount2_069	2_7_1	173	chromite	pseudorutile	0.25-0.5	0.10	55.89	0.15	0.00	1.80	33.20	0.09	0.04	0.04	0.01	0.04	0.00	0.05	0.00	0.05	91.46
16SUV028	Mount2_070	2_7_2	174	chromite	pseudorutile	0.25-0.5	0.45	56.37	0.40	0.34	0.38	30.59	2.24	0.02	0.03	0.00	0.00	0.05	0.00	0.48	0.04	91.38
16SUV028	Mount2_076	2_7_9	180	chromite	pseudorutile	0.25-0.5	0.12	55.72	0.28	0.18	0.39	33.39	1.49	0.12	0.00	0.02	0.05	0.04	0.03	0.35	0.03	92.21

APPENDIX 6I

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - EPMA chemistry: VESUVIANITE

							WT %														
GSC Sample #	Mount	Grain #	EPMA Sample #	ODM Min ID	EPMA Min ID	Grain Size	SiO2	TiO2	Al2O3	Cr2O3	MnO	FeO	MgO	CaO	Na2O	K2O	Nb2O5	NiO	ZnO	V2O3	P2O5	Total
15SUV001	Mount2_081	2_8_1	185	vesuvianite	garnet	0.25-0.5	39.73	0.29	18.94	0.00	0.14	4.17	0.84	36.76	0.00	0.00	0.00	0.00	0.00	0.00	0.04	100.91
15SUV001	Mount2_082	2_8_2	186	vesuvianite	garnet	0.25-0.5	39.60	0.52	18.06	0.00	0.20	5.05	0.77	36.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.75
15SUV001	Mount2_083	2_8_3	187	vesuvianite	vesuvianite	0.25-0.5	37.12	0.70	17.13	0.00	0.02	1.51	3.99	36.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96.96
15SUV001	Mount2_084	2_8_4	188	vesuvianite	garnet	0.25-0.5	39.08	0.34	16.52	0.00	0.10	7.27	0.57	36.08	0.00	0.00	0.00	0.00	0.00	0.04	0.00	100.00
15SUV001	Mount2_085	2_8_5	189	vesuvianite	garnet	0.25-0.5	39.60	0.35	18.85	0.00	0.08	4.27	0.63	36.48	0.00	0.00	0.00	0.00	0.00	0.03	0.00	100.28
15SUV001	Mount2_086	2_8_6	190	vesuvianite	garnet	0.25-0.5	39.34	0.04	17.80	0.00	0.27	6.03	0.71	35.94	0.02	0.00	0.00	0.00	0.00	0.00	0.03	100.17
15SVU002	Mount2_087	2_8_8	191	vesuvianite	garnet	0.5-1.0	38.76	0.24	13.97	0.00	0.12	10.00	0.60	35.94	0.02	0.01	0.00	0.00	0.00	0.09	0.05	99.79
15SVU002	Mount2_088	2_8_9	192	vesuvianite	garnet	0.5-1.0	38.10	2.14	15.05	0.05	0.06	7.42	0.80	36.32	0.02	0.00	0.00	0.00	0.00	0.04	0.00	99.98
15SVU002	Mount2_089	2_8_10	193	vesuvianite	garnet	0.5-1.0	39.31	0.78	17.33	0.00	0.05	5.55	0.83	36.43	0.00	0.01	0.00	0.00	0.00	0.04	0.04	100.35
15SVU002	Mount2_090	2_8_11	194	vesuvianite	garnet	0.5-1.0	39.25	0.67	16.68	0.00	0.03	6.10	0.81	36.80	0.02	0.01	0.00	0.00	0.00	0.00	0.04	100.42
15SVU002rpt	Mount2_090rim	2_8_11	195	vesuvianite	andradite	0.5-1.0	35.19	0.07	2.64	0.00	0.07	23.79	0.60	34.61	0.00	0.00	0.00	0.00	0.00	0.00	0.04	97.02
15SUV003	Mount2_091	2_9_1	196	vesuvianite	garnet	0.25-0.5	39.41	0.22	17.14	0.00	0.06	6.16	0.65	36.84	0.00	0.00	0.00	0.00	0.00	0.03	0.04	100.54
15SUV003rpt	Mount2_092	2_9_1	197	vesuvianite	garnet	0.25-0.5	39.15	0.09	17.33	0.00	0.04	6.06	0.62	36.52	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.83
15SUV003	Mount2_093	2_9_2	198	vesuvianite	garnet	0.25-0.5	39.72	0.19	19.19	0.00	0.11	3.90	0.81	36.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.35
15SUV003	Mount2_094	2_9_3	199	vesuvianite	garnet	0.25-0.5	38.71	1.40	15.92	0.00	0.14	6.90	0.70	36.25	0.03	0.00	0.00	0.00	0.00	0.05	0.00	100.09
15SUV003	Mount2_095	2_9_4	200	vesuvianite	garnet	0.25-0.5	39.19	0.13	17.16	0.00	0.12	6.66	0.74	36.00	0.00	0.01	0.00	0.00	0.00	0.04	0.00	100.04
15SUV003	Mount2_096	2_9_5	201	vesuvianite	garnet	0.25-0.5	39.00	0.72	16.67	0.00	0.05	6.17	0.63	36.60	0.00	0.01	0.00	0.00	0.00	0.04	0.04	99.92
15SUV005	Mount2_097	2_9_6	202	vesuvianite	garnet	0.25-0.5	40.00	0.33	21.82	0.00	0.08	0.54	0.56	37.14	0.02	0.00	0.00	0.00	0.00	0.53	0.00	101.03
15SUV010	Mount2_098	2_9_7	203	vesuvianite	garnet	0.5-1.0	39.76	0.19	20.65	0.00	0.09	2.52	0.19	36.99	0.02	0.01	0.00	0.00	0.00	0.00	0.00	100.42
15SUV010	Mount2_099	2_9_8	204	vesuvianite	garnet	0.5-1.0	39.04	0.32	16.69	0.00	0.11	6.91	0.58	36.27	0.00	0.01	0.00	0.00	0.00	0.00	0.03	99.96
15SUV010rpt	Mount2_100	2_9_8	205	vesuvianite	andradite	0.5-1.0	37.56	0.75	9.50	0.03	0.05	15.32	0.44	35.34	0.00	0.00	0.00	0.00	0.00	0.04	0.04	99.07
15SUV010	Mount2_101	2_9_9	206	vesuvianite	garnet	0.5-1.0	39.88	0.25	20.04	0.03	0.07	2.88	0.73	37.09	0.00	0.01	0.00	0.00	0.00	0.04	0.00	101.01
15SUV010	Mount2_102	2_9_10	207	vesuvianite	garnet	0.5-1.0	38.89	0.49	15.95	0.04	0.10	7.66	0.71	36.21	0.00	0.00	0.00	0.00	0.00	0.07	0.00	100.13
15SUV010	Mount2_103	2_9_11	208	vesuvianite	garnet	0.5-1.0	38.83	1.17	16.60	0.00	0.12	5.98	0.86	36.28	0.00	0.00	0.00	0.00	0.00	0.07	0.00	99.91
15SUV010	Mount2_104	2_9_12	209	vesuvianite	garnet	0.25-0.5	38.99	0.06	15.15	0.00	0.03	8.98	0.45	36.47	0.00	0.01	0.00	0.00	0.00	0.03	0.00	100.17
15SUV010	Mount2_105	2_9_13	210	vesuvianite	andradite	0.25-0.5	35.99	0.00	2.67	0.04	0.00	24.61	0.24	34.55	0.00	0.00	0.00	0.00	0.00	0.00	0.03	98.13
15SUV014	Mount2_106	2_9_14	211	vesuvianite	garnet	0.25-0.5	39.49	0.24	18.00	0.00	0.06	5.42	0.60	36.65	0.02	0.00	0.00	0.00	0.00	0.00	0.00	100.49
15SUV015	Mount2_107	2_10_1	212	vesuvianite	vesuvianite	0.25-0.5	37.19	0.00	17.33	0.00	0.00	2.82	2.38	36.27	0.04	0.01	0.00	0.15	0.00	0.00	0.03	96.22
15SUV021	Mount2_108	2_10_2	213	vesuvianite	andradite	0.25-0.5	35.03	0.00	0.00	0.00	0.03	28.13	0.08	33.96	0.00	0.00	0.00	0.03	0.00	0.00	0.00	97.27
15SUV021rpt	Mount2_109	2_10_2	214	vesuvianite	garnet	0.25-0.5	37.03	1.09	14.43	0.06	0.18	9.14	0.14	36.11	0.00	0.00	0.00	0.02	0.00	0.00	0.00	98.20
15SUV024	Mount2_110	2_10_3	215	vesuvianite	garnet	0.25-0.5	38.65	0.39	13.91	0.00	0.07	10.04	0.56	36.11	0.00	0.00	0.00	0.00	0.00	0.03	0.03	99.78
15SUV024	Mount2_111	2_10_4	216	vesuvianite	andradite	0.25-0.5	36.63	0.00	8.42	0.00	0.04	17.71	0.11	35.71	0.00	0.00	0.00	0.00	0.00	0.06	0.00	98.67
15SUV024rpt	Mount2_112	2_10_4	217	vesuvianite	garnet	0.25-0.5	38.93	0.03	16.37	0.00	0.06	7.85	0.09	36.47	0.02	0.01	0.00	0.00	0.00	0.08	0.00	99.92
15SUV024	Mount2_113	2_10_5	218	vesuvianite	garnet	0.25-0.5	40.13	0.60	15.48	0.00	0.09	6.81	1.88	35.54	0.02	0.00	0.00	0.00	0.00	0.04	0.03	100.63
15SUV024	Mount2_114	2_10_6	219	vesuvianite	talc?	0.25-0.5	40.12	0.02	0.39	0.00	0.10	1.90	25.81	0.05	0.06	0.04	0.00	0.00	0.00	0.00	0.05	68.55
15SUV024rpt	Mount2_115	2_10_6	220	vesuvianite	vesuvianite	0.25-0.5	36.93	0.08	16.75	0.00	0.02	2.42	4.00	36.30	0.02	0.01	0.00	0.00	0.00	0.00	0.00	96.52
15SUV026	Mount2_116	2_10_7	221	vesuvianite	garnet	0.5-1.0	39.25	0.22	17.25	0.00	0.26	6.20	1.05	35.93	0.00	0.00	0.00	0.00	0.00	0.05	0.03	100.23
15SUV027	Mount2_117	2_10_8	222	vesuvianite	garnet	0.5-1.0	37.77	1.09	12.57	0.00	0.10	11.32	0.64	35.99	0.00	0.00	0.00	0.00	0.00	0.04	0.03	99.55
15SUV050	Mount2_118	2_10_9	223	vesuvianite	garnet	0.25-0.5	39.71	0.10	19.78	0.04	0.04	4.10	0.25	36.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.50
15SUV050	Mount2_119	2_10_10	224	vesuvianite	vesuvianite	0.25-0.5	32.38	0.11	21.11	0.00	0.12	2.23	0.36	38.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94.91
15SUV050rpt	Mount2_120	2_10_10	225	vesuvianite	vesuvianite	0.25-0.5	31.83	0.00	21.40	0.00	0.18	1.62	0.64	38.09	0.00	0.19	0.00	0.00	0.00	0.00	0.00	93.96
15SUV050	Mount2_121	2_10_11	226	vesuvianite	garnet	0.25-0.5	38.46	0.40	20.83	0.00	0.28	2.35	0.10	37.50	0.00	0.01	0.00	0.00	0.00	0.00	0.02	99.96
15SUV050rpt	Mount2_122	2_10_11	227	vesuvianite	garnet	0.25-0.5	38.55	0.82	17.34	0.00	0.07	5.70	0.17	36.69	0.02	0.01	0.00	0.00	0.00	0.05	0.00	99.43
15SUV050rpt	Mount2_123	2_10_11	228	vesuvianite	K-feldspar	0.25-0.5	63.04	0.00	18.48	0.00	0.00	0.04	0.00	0.69	0.17	17.44	0.00	0.00	0.00	0.00	0.00	99.85
15SUV050	Mount2_124	2_10_12	229	vesuvianite	garnet	0.25-0.5	39.07	0.37	16.31	0.00	0.05	6.85	0.66	36.38	0.00	0.00	0.00	0.00	0.00	0.04	0.04	99.78
16SUV013	Mount2_125	2_10_13	230	vesuvianite	garnet	0.25-0.5	39.43	0.34	18.81	0.00	0.17	4.23	0.63	36.49	0.02	0.01	0.00	0.00	0.00	0.06	0.04	100.23
16SUV013rpt	Mount2_126	2_10_13	231	vesuvianite	clinopyroxene	0.25-0.5	53.11	0.21	1.05	0.00	0.07	3.84	15.70	25.57	0.22	0.01	0.00	0.00	0.00	0.00	0.12	99.90
16SUV013	Mount2_127	2_10_14	232	vesuvianite	vesuvianite	0.25-0.5	36.39	0.60	17.68	0.00	0.00	0.20	3.89	37.09	0.02	0.01	0.00	0.00	0.00	0.04	0.03	95.94

APPENDIX 6J

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - EPMA chemistry: VESUVIANITE

							WT %															
GSC Sample #	**Mount**	**Grain #**	**EPMA #**	**ODM Min ID**	**EPMA Min ID**	**Grain Size**	**SiO2**	**TiO2**	**Al2O3**	**Cr2O3**	**MnO**	**FeO**	**MgO**	**CaO**	**Na2O**	**K2O**	**Nb2O5**	**NiO**	**ZnO**	**V2O3**	**P2O5**	**Total**
15SUV051	2015_1	3_5	1-3_005-FeAlSi	andradite	tourmaline	0.25-0.5	34.30	0.34	34.29	0.00	0.24	12.73	1.66	0.09	1.82	0.04						85.51
15SUV020	2015_2	4_4	2-4_004_siderite	fayalite	siderite	0.25-0.5	0.04	0.00	0.04	0.00	1.24	46.63	8.69	1.35	0.00	0.00						57.99
15SUV030	2015_5	5_9	5-5_009A	chromite, euhedral	tourmaline	0.25-0.5	34.49	0.77	31.07	0.00	0.06	11.27	5.09	0.85	1.97	0.07						85.64
15SUV030_rpt	2015_5	5_9_rpt	5-5_009B	chromite, euhedral	tourmaline	0.25-0.5	34.39	0.88	31.06	0.00	0.07	11.10	4.95	0.83	1.94	0.07						85.29
15SUV009	2015_6	6_1a_?	6-6-1A_titanite	chromite	titanite	0.25-0.5	30.84	37.38	0.48	0.00	0.00	0.94	0.00	27.85	0.00	0.00						97.49
16SUV018	Mount1_066	1_7_1	286	hercynite	chlorite?	0.25-0.5	34.21	0.16	34.22	0.00	0.17	12.51	2.02	0.12	1.82	0.04	0.00	0.00	0.05	0.00	0.06	85.39
16SUV023	Mount2_037	2_4_5	141	chromite	chlorite?	0.25-0.5	33.85	1.13	25.30	0.00	0.15	18.40	3.60	2.96	1.17	0.04	0.00	0.00	0.05	0.00	0.00	86.65
16SUV028	Mount2_072	2_7_5	176	chromite	chlorite?	0.25-0.5	33.89	0.60	32.99	0.00	0.10	14.12	1.41	0.20	2.08	0.06	0.00	0.00	0.05	0.00	0.00	85.49
15SUV019	Mount3_032	3_3_3	158	apatite	apatite	0.18-0.25	0.28	0.00	0.00	0.00	0.04	0.06	0.00	55.98	0.03	0.00	0.00	0.00	0.00	0.00	41.15	97.53

APPENDIX 6A

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - Kimberlite Indicator Mineral (KIM) - ELECTRON PROBE MICRO-ANALYZER (EPMA; U. Alberta) - CHEMISTRY (WT%)

Count	GSC Sample #	Mount	Grain #	EPMA #	Sample Material	ODM Min ID	EPMA Min ID	Grain Size	Ti WT%	Na WT%	K WT%	Si WT%	Fe WT%	Cr WT%	Mg WT%	Ca WT%	Al WT%	Mn WT%	O WT%	TOTAL	SiO2	TiO2	Al2O3	Cr2O3	MnO	FeO	MgO	CaO	Na2O	K2O	Nb2O5	NiO	ZnO	V2O3	P2O5	Total
1	15SUV024	2015_1	1_1	1-1-1	fluvial	GO[1]	garnet	0.25-0.5	0.3618	0.0353	0	19.4029	6.6768	2.3423	11.5723	4.0161	10.4672	0.2935	43.9720	99.1401	41.51	0.60	19.78	3.42	0.38	8.59	19.19	5.62	0.05	0.00						99.14
2	15SUV024	2015_1	1_2	1-1-2	fluvial	GO	garnet	0.25-0.5	0.0264	0.0011	0.0005	18.1606	20.1530	0.0031	6.0709	0.8159	11.6030	0.3973	41.2434	98.4752	38.85	0.04	21.92	0.00	0.51	25.93	10.07	1.14	0.00	0.00						98.46
4	15SUV009	2015_1	2_2	1-2-2	stream sediments	GP[2]	garnet	0.25-0.5	0.0576	0.0046	0.0003	19.6209	5.9444	2.1743	11.8210	3.8697	11.2082	0.3426	44.4978	99.5412	41.98	0.10	21.18	3.18	0.44	7.65	19.60	5.41	0.00	0.00						99.54
5	15SUV014	2015_1	2_3	1-2-3	stream sediments	GP	garnet	0.25-0.5	0.0128	0.0187	0	19.6119	5.0821	3.7085	13.0659	2.5993	10.3726	0.2746	44.4730	99.2195	41.96	0.02	19.60	5.42	0.35	6.54	21.67	3.64	0.03	0.00						99.23
6	15SUV014	2015_1	2_4	1-2-4	stream sediments	GP	garnet	0.25-0.5	0.0043	0.0000	0.0023	19.2239	4.8944	6.2217	13.2981	2.1683	8.9329	0.3321	43.8423	98.9202	41.13	0.00	16.88	9.09	0.43	6.30	22.05	3.03	0.00	0.00						98.91
7	15SUV019	2015_1	2_5	1-2_005	Beaufort Fm	GP	garnet	0.25-0.5	0.3460	0.0387	0.0054	19.3257	5.6838	3.4526	12.3179	3.7983	9.8600	0.2526	43.9557	99.0367	41.34	0.58	18.63	5.05	0.33	7.31	20.43	5.31	0.05	0.01						99.04
8	15SUV019	2015_1	2_6	1-2_006	Beaufort Fm	GP	garnet	0.25-0.5	0	0	0	19.5801	5.9242	3.2279	12.0378	3.4967	10.8403	0.3455	44.5591	100.0110	41.89	0.00	20.48	4.72	0.45	7.62	19.96	4.89	0.00	0.00						100.01
9	15SUV020	2015_1	2_7	1-2_007	stream sediments	GP	garnet	0.25-0.5	0.1974	0.0195	0.0077	19.5916	5.4073	2.7274	12.5458	3.4689	10.6401	0.2650	44.4551	99.3257	41.91	0.33	20.10	3.99	0.34	6.96	20.80	4.85	0.03	0.01						99.32
10	15SUV024	2015_1	2_8	1-2_008	fluvial	GP	garnet	0.25-0.5	0.1978	0.0467	0	19.3724	5.2299	4.1253	12.4344	3.6187	9.9045	0.2877	44.1468	99.3641	41.44	0.33	18.71	6.03	0.37	6.73	20.62	5.06	0.06	0.00						99.35
11	15SUV026	2015_1	2_9	1-2_009	stream sediments	GP	garnet	0.25-0.5	0.0223	0.0185	0	19.1167	5.4621	6.2127	12.1303	3.4556	8.9496	0.3828	43.6714	99.4219	40.90	0.04	16.91	9.08	0.49	7.03	20.12	4.84	0.02	0.00						99.43
12	15SUV028	2015_1	2_10	1-2_010A	Beaufort Fm	GP	garnet	0.5-1.0	0.1229	0.0426	0	18.9450	5.2203	6.4721	11.1504	5.0202	8.5741	0.3801	43.2466	99.1742	40.53	0.21	16.20	9.46	0.49	6.72	18.49	7.02	0.06	0.00						99.18
13	15SUV028_rpt	2015_1	2_10_r	1-2-10B	Beaufort Fm	GP	garnet	0.5-1.0	0.1086	0.0402	0.0018	19.0626	5.2091	6.7601	10.9510	5.2861	8.3962	0.3904	43.3198	99.5258	40.78	0.18	15.86	9.88	0.50	6.70	18.16	7.40	0.05	0.00						99.51
14	15SUV028_rpt	2015_1	2_11_r	1-2-11A on fracture	Beaufort Fm	GP	garnet	0.25-0.5	0.2982	0.0331	0.0077	18.3282	4.9136	4.4004	10.5787	3.9174	8.0028	0.2424	40.2503	90.9727	39.21	0.50	15.12	6.43	0.31	6.32	17.54	5.48	0.04	0.01						90.96
15	15SUV028	2015_1	2_11	1-2-11B	Beaufort Fm	GP	garnet	0.25-0.5	0.2998	0.0238	0	19.2758	5.0127	4.7393	12.2431	4.2223	9.3807	0.2534	43.9572	99.4081	41.24	0.50	17.72	6.93	0.33	6.45	20.30	5.91	0.03	0.00						99.41
16	15SUV030	2015_1	2_12	1-2-12A	Beaufort Fm	GP	garnet	0.25-0.5	0	0.0012	0.0035	19.2381	5.6717	4.8671	11.2731	4.6660	9.6052	0.3605	43.7241	99.4104	41.16	0.00	18.15	7.11	0.47	7.30	18.69	6.53	0.00	0.00						99.41
17	15SUV030_rpt	2015_1	2_12_r	1-2-12B	Beaufort Fm	GP	garnet	0.25-0.5	0.0013	0	0	19.0681	5.6466	4.9146	11.2813	4.6889	9.4447	0.3550	43.4150	98.8154	40.79	0.00	17.85	7.18	0.46	7.26	18.71	6.56	0.00	0.00						98.81
18	15SUV051	2015_1	2_13	1-2-13	stream sediments	GP	garnet	0.25-0.5	0.0538	0.0013	0	18.8802	5.4505	8.8693	11.0321	4.8011	6.9986	0.3211	42.7008	99.1088	40.39	0.09	13.22	12.96	0.41	7.01	18.29	6.72	0.00	0.00						99.09
19	15SUV028_rpt	2015_1	2_11_r	1-2-11A-repeat	Beaufort Fm	GP	garnet	0.25-0.5	0.2965	0.0232	0	19.2591	5.0365	4.7364	12.2412	4.2477	9.2774	0.2576	43.8596	99.2353	41.20	0.49	17.53	6.92	0.33	6.48	20.30	5.94	0.03	0.00						99.22
20	15SUV001	2015_1	3_1	1-3_001	stream sediments	andradite	garnet	0.25-0.5	1.9657	0.0184	0	16.1210	18.0792	0	0.2680	23.3015	0.7951	0.1637	35.1001	95.8127	34.49	3.28	1.50	0.00	0.21	23.26	0.44	32.60	0.00	0.00						95.78
21	15SUV001	2015_1	3_2	1-3_002	stream sediments	andradite	garnet	0.25-0.5	5.4704	0.0044	0	14.3470	14.9855	0.0315	0.4850	23.3725	1.8245	0.0465	35.5963	96.1636	30.69	9.12	3.45	0.05	0.06	19.28	0.80	32.70	0.00	0.00						96.15
22	15SUV025	2015_1	3_3	1-3_003	stream sediments	andradite	garnet	0.25-0.5	7.1380	0.0125	0.0001	12.8670	15.3821	0	0.2534	23.0549	1.9934	0.0652	35.0025	95.7691	27.53	11.91	3.77	0.00	0.08	19.79	0.42	32.26	0.00	0.00						95.76
23	15SUV025	2015_1	3_4	1-3_004	stream sediments	andradite	garnet	0.25-0.5	1.8845	0.0679	0	16.2493	18.8907	0.0041	0.0238	22.4953	0.7508	0.5837	35.0441	95.9944	34.76	3.14	1.42	0.00	0.75	24.30	0.04	31.48	0.09	0.00						95.98
24	15SUV051	2015_1	3_5	1-3_005-FeAlSi	stream sediments	andradite	tourmaline	0.25-0.5	0.2045	1.3496	0.0342	16.0330	9.8919	0	0.9994	0.0637	18.1496	0.1851	38.5956	85.5067	34.30	0.34	34.29	0.00	0.24	12.73	1.66	0.09	1.82	0.04						85.51
25	15SUV051	2015_1	3_6	1-3_006	stream sediments	andradite	garnet	0.25-0.5	2.7698	0.0078	0	15.7805	18.1086	0	0.1272	22.6406	1.2680	0.1950	35.3273	96.2246	33.76	4.62	2.40	0.00	0.25	23.30	0.21	31.68	0.00	0.00						96.22
26	15SUV051	2015_1	3_7	1-3_007	stream sediments	andradite	garnet	0.25-0.5	7.7053	0.0214	0	14.0316	13.9956	0.0240	0.7733	23.3082	0.7436	0.1082	35.6695	96.3807	30.02	12.85	1.41	0.04	0.14	18.01	1.28	32.61	0.03	0.00						96.39
27	15SUV001	2015_1	4_1	1-4_001	stream sediments	almandine	garnet	0.5-1.0	0.0605	0.0081	0	16.9501	14.6998	0	0.5421	1.1522	10.5329	16.2557	38.4868	98.6882	36.26	0.10	19.90	0.00	20.99	18.91	0.90	1.61	0.00	0.00						98.67
28	15SUV003	2015_1	4_2	1-4_002	stream sediments	almandine	garnet	0.25-0.5	0.0787	0.0206	0.0029	18.2798	15.6833	0.0089	5.2771	5.9755	11.5797	0.3756	41.6536	98.9357	39.11	0.13	21.88	0.00	0.49	20.18	8.75	8.36	0.03	0.00						98.93
29	15SUV003	2015_1	4_3	1-4_003	stream sediments	almandine	garnet	0.25-0.5	0.0424	0.0093	0.0017	17.1618	23.5938	0	0.6421	5.0531	10.7497	1.7497	38.8561	97.8597	36.72	0.07	20.31	0.00	2.26	30.35	1.06	7.07	0.00	0.00						97.84
30	15SUV005	2015_1	4_4	1-4_004	stream sediments	almandine	garnet	0.5-1.0	0	0.0068	0	17.1563	26.6009	0	1.7998	0.4674	11.0374	2.0266	38.9498	98.0450	36.70	0.00	20.85	0.00	2.62	34.22	2.98	0.65	0.00	0.00						98.02
31	15SUV005	2015_1	4_5	1-4_005	stream sediments	almandine	garnet	0.25-0.5	0.0602	0	0	18.1507	17.2120	0.0294	5.2586	4.5338	11.5140	0.4756	41.3167	98.5509	38.83	0.10	21.76	0.04	0.61	22.14	8.72	6.34	0.00	0.00						98.54
32	15SUV006	2015_1	4_6	1-4_006	stream sediments	almandine	garnet	0.25-0.5	0.0122	0.0067	0	17.2498	24.6018	0.0216	2.1037	2.2586	10.8209	1.7664	39.1484	97.9899	36.90	0.00	20.45	0.03	2.28	31.65	3.49	3.16	0.00	0.00						97.96
33	15SUV006	2015_1	4_7	1-4_007	stream sediments	almandine	garnet	0.25-0.5	0.0204	0.0213	0	17.4862	21.7900	0.0241	2.4559	2.0889	10.9234	4.3344	39.6271	98.7718	37.41	0.03	20.64	0.04	5.60	28.03	4.07	2.92	0.03	0.00						98.77
34	15SUV009	2015_1	4_8	1-4_008	stream sediments	almandine	garnet	0.25-0.5	0.0541	0.0079	0	17.8266	22.0268	0.0209	4.4959	1.4915	11.2772	0.7107	40.4629	98.3745	38.14	0.09	21.31	0.03	0.92	28.34	7.46	2.09	0.00	0.00						98.38
35	15SUV024	2015_1	5_1`	1-5_001	fluvial	almandine	garnet	0.25-0.5	0.0031	0.0047	0.0029	17.3156	23.3889	0.0081	0.7549	5.4105	10.7424	1.8359	39.1842	98.6513	37.04	0.00	20.30	0.00	2.37	30.09	1.25	7.57	0.00	0.00						98.62
36	15SUV024	2015_1	5_2	1-5_002	fluvial	almandine	garnet	0.25-0.5	0.0862	0.0086	0	17.6888	20.4076	0	2.1973	6.3408	10.8104	1.1541	39.9908	98.6847	37.84	0.14	20.43	0.00	1.49	26.25	3.64	8.87	0.00	0.00						98.66
37	15SUV024	2015_1	5_3	1-5_003	fluvial	almandine	garnet	0.25-0.5	0.0032	0	0.0007	17.8361	22.5999	0.0800	4.6735	0.8255	11.3726	0.5142	40.5073	98.4131	38.16	0.00	21.49	0.12	0.66	29.07	7.75	1.15	0.00	0.00						98.40
38	15SUV024	2015_1	5_4	1-5_004	fluvial	almandine	garnet	0.25-0.5	0.0688	0	0	17.7749	18.6754	0.0062	4.1515	5.2965	11.1847	0.4422	40.5760	98.1763	38.03	0.11	21.13	0.00	0.57	24.03	6.88	7.41	0.00	0.00						98.16
39	15SUV024	2015_1	5_5	1-5_005	fluvial	almandine	garnet	0.25-0.5	0.1364	0.0221	0	18.0985	16.2993	0.0086	4.5719	6.6571	11.3924	0.2642	41.2706	98.7211	38.72	0.23	21.53	0.00	0.34	20.97	7.58	9.31	0.03	0.00						98.71
40	15SUV024	2015_1	5_6	1-5_006	fluvial	almandine	garnet	0.25-0.5	0.0187	0.0000	0	17.5624	23.6336	0	4.0127	0.8946	11.3309	0.6035	40.0464	98.1028	37.57	0.03	21.41	0.00	0.78	30.40	6.65	1.25	0.00	0.00						98.09
41	15SUV052	2015_1	5_7	1-5_007	stream sediments	almandine	garnet	0.5-1.0	0.0053	0.0125	0.0021	17.0579	25.3845	0	1.6067	0.7810	11.0185	3.2861	38.8432	97.9978	36.49	0.00	20.82	0.00	4.24	32.66	2.66	1.09	0.00	0.00						97.96
42	15SUV052	2015_1	5_8	1-5_008	stream sediments	almandine	garnet	0.5-1.0	0.0398	0.0207	0.0029	17.3473	22.6901	0	1.8934	3.2047	11.0191	2.5184	39.3602	98.0966	37.11	0.07	20.82	0.00	3.25	29.19	3.14	4.48	0.03	0.00						98.09
43	15SUV052	2015_1	5_9	1-5_009	stream sediments	almandine	garnet	0.5-1.0	0	0.0143	0.0003	17.7119	23.3572	0.0108	4.3732	0.7478	11.4010	0.2982	40.2872	98.2019	37.89	0.00	21.54	0.00	0.39	30.05	7.25	1.05	0.00	0.00						98.17
44	15SUV053	2015_1	5_10	1-5_010	stream sediments	almandine	garnet	0.25-0.5	0.0210	0.0095	0.0011	17.2684	23.5718	0.0021	0.9736	5.2630	10.8555	1.0972	39.1639	98.2271	36.94	0.04	20.51	0.00	1.42	30.33	1.61	7.36	0.00	0.00						98.21
45	15SUV053	2015_1	5_11	1-5_011	stream sediments	almandine	garnet	0.25-0.5	0.0055	0.0186	0	17.0492	28.7646	0.0151	0.7930	1.0514	10.9030	0.8671	38.5754	98.0428	36.47	0.00	20.60	0.00	1.12	37.01	1.31	1.47	0.00	0.00						97.98
46	15SUV001	2015_1	6_1	1-6_001	stream sediments	spessartine	garnet	0.25-0.5	0.0814	0.0318	0	16.8302	11.2730	0	0.6931	0.3615	10.4347	20.2911	38.2624	98.2593	36.01	0.14	19.72	0.00	26.20	14.50	1.15	0.51	0.04	0.00						98.27
47	15SUV001	2015_1	6_2	1-6_002	stream sediments	spessartine	garnet	0.25-0.5	0.0869	0.0462	0.0003	16.6058	13.7585	0	0.8373	0.4044	10.6191	16.7402	37.9694	97.0681	35.53	0.15	20.06	0.00	21.62	17.70	1.39	0.57	0.06	0.00						97.08
48	15SUV020	2015_1	6_3	1-6_003	stream sediments	spessartine	garnet	0.25-0.5	0.0913	0.0142	0	16.8268	14.7848	0	0.6385	0.7952	10.3523	16.4770	38.2181	98.1982	36.00	0.15	19.56	0.00	21.28	19.02	1.06	1.11	0.00	0.00						98.18
49	15SUV001	2015_2	1_1	2-1_001	stream sediments	forsterite	olivine	0.25-0.5	0.0067	0	0	18.5913	10.0761	0.0158	27.3656	0.1401	0.0183	0.1591	42.2140	98.5870	39.77	0.00	0.03	0.00	0.21	12.96	45.38	0.20	0.00	0.00						98.55
50	15SUV001	2015_2	1_2	2-1_002	stream sediments	forsterite	olivine	0.25-0.5	0.0059	0.0067	0	18.8424	8.5354	0.0523	28.4393	0.1611	0.0250	0.1175	42.7863	98.9719	40.31	0.00	0.05	0.08	0.15	10.98	47.16	0.23	0.00	0.00						98.96
51	15SUV008	2015_2	1_3	2-1_003	stream sediments	forsterite	olivine	0.25-0.5	0.0071	0	0.0035	18.3737	12.9118	0	25.7219	0.2179	0.0128	0.2272	41.7361	99.2120	39.31	0.00	0.02	0.00	0.29	16.61	42.65	0.30	0.00	0.00						99.18
52	15SUV008	2015_2	1_4	2-1_004	stream sediments	forsterite	olivine	0.25-0.5	0.0035	0.0109	0	18.1904	15.5181	0.0082	24.0934	0.2186	0.0198	0.2371	41.2158	99.5158	38.92	0.00	0.04	0.00	0.31	19.96	39.95	0.31	0.00	0.00						99.49
53	15SUV008	2015_2	1_5	2-1_005	stream sediments	forsterite	olivine	0.25-0.5	0.0063	0	0	18.4119	13.2028	0	25.4831	0.2247	0.0232	0.2395	41.7201	99.3115	39.39	0.00	0.04	0.00	0.31	16.99	42.26	0.31	0.00	0.00						99.30
54	15SUV008	2015_2	1_6	2-1_006	stream sediments	forsterite	olivine	0.25-0.5	0.0076	0	0	18.1306	15.6990	0.0285	24.0642	0.2177	0.0149	0.2319	41.1823	99.5767	38.79	0.00	0.03	0.04	0.30	20.20	39.91	0.30	0.00	0.00						99.57
55	15SUV008	2015_2	1_7	2-1_007	stream sediments	forsterite	olivine	0.25-0.5	0	0.0085	0	18.9998	9.4008	0.0257	27.7912	0.2746	0.0213	0.1597	42.8257	99.5073	40.65	0.00	0.04	0.04	0.21	12.09	46.09	0.38	0.00	0.00						99.50
56	15SUV008	2015_2	1_8	2-1_008	stream sediments	forsterite	garnet	0.25-0.5	0.1069	0.0120	0	18.3672	4.7413	0	0.5474	25.4112	9.0861	0.1210	40.9824	99.3754	39.29	0.18	17.17	0.00	0.16	6.10	0.91	35.56	0.00	0.00						99.37
57	15SUV008	2015_2	1_9	2-1_009	stream sediments	forsterite	olivine	0.25-0.5	0	0	0	18.3817	12.8065	0.0212	25.8359	0.2093	0.0118	0.1806	41.7766	99.2237	39.33	0.00	0.02	0.03	0.23	16.48	42.84	0.29	0.00	0.00						99.22
58	15SUV009	2015_2	1_10	2-1_010	stream sediments	forsterite	olivine	0.25-0.5	0.0040	0.0069	0.0029	18.8119	8.5418	0.0514	28.4574	0.1928	0.0294	0.1203	42.7818	99.0007	40.25	0.00	0.06	0.08	0.16	10.99	47.19	0.27	0.00	0.00						99.00
59	15SUV020	2015_2	2_1	2-2_001	stream sediments	forsterite	olivine	0.25-0.5	0.0081	0	0.0014	17.5881	20.7666	0.0081	20.7597	0.1455	0.0084	0.2721	39.8091	99.3671	37.63	0.00	0.02	0.00	0.35	26.72	34.43	0.20	0.00	0.00						99.35
60	15SUV020	2015_2	2_2	2-2_002	stream sediments	forsterite	olivine	0.25-0.5	0	0.0127	0.0016	16.9625	26.6471	0	17.3133	0.1739	0.0039	0.3452	38.5362	99.9964	36.29	0.00	0.00	0.00	0.45	34.28	28.71	0.24	0.00	0.00						99.97
61	15SUV020	2015_2	2_3	2-2_003	stream sediments	forsterite	olivine	0.25-0.5	0.0036	0.0059	0.0021	19.0997	6.9488	0.0396	29.5409	0.1016	0.0308	0.0962	43.3181	99.1872	40.86	0.00	0.06	0.06	0.12	8.94	48.99	0.14	0.00	0.00						99.17
62	15SUV020	2015_2	2_4	2-2_004	stream sediments	forsterite	olivine	0.25-0.5	0.0021	0	0	18.6297	9.7313	0.0533	27.5821	0.2052	0.0210	0.1544	42.3428	98.7219	39.86	0.00	0.04	0.08	0.20	12.52	45.74	0.29	0.00	0.00						98.73
63	15SUV025	2015_2	2_5	2-2_005	stream sediments	forsterite	olivine	0.25-0.5	0.0048	0.0108	0	18.4637	12.5217	0.0058	26.1539	0.1169	0.0171	0.2186	41.9765	99.4897	39.50	0.00	0.03	0.00	0.28	16.11	43.37	0.16	0.00	0.00						99.45
64	15SUV026	2015_2	2_6	2-2_006A	stream sediments	forsterite	olivine	0.25-0.5	0.0037	0.0052	0.0013	18.7708	8.7428	0.0204	28.2945	0.1986	0.0260	0.1281	42.6715	98.8631	40.16	0.00	0.05	0.03	0.17	11.25	46.92	0.28	0.00	0.00						98.86
65	15SUV026_rpt	2015_2	2_6_r	2-2-6B	stream sediments	forsterite	olivine	0.25-0.5	0	0	0.0048	18.5921	9.7346	0.0472	27.5378	0.1961	0.0231	0.1456	42.2642	98.5454	39.78	0.00	0.04	0.07	0.19	12.52	45.67	0.27	0.00	0.00						98.54
66	15SUV026	2015_2	2_7	2-2_007	stream sediments	forsterite	olivine	0.25-0.5	0.0070	0.0164	0	18.4122	12.6620	0.0097	25.8471	0.1821	0.0219	0.1656	41.7762	99.1002	39.39	0.00	0.04	0.00	0.21	16.29	42.86	0.25	0.02	0.00						99.06
67	15SUV050	2015_2	2_8	2-2_008	stream sediments	forsterite	olivine	0.25-0.5	0.0011	0	0	18.7296	8.6627	0.0519	28.2250	0.1951	0.0286	0.1239	42.5661	98.5838	40.07	0.00	0.05	0.08	0.16	11.14	46.81	0.27	0.00	0.00						98.58
68	15SUV051	2015_2	2_9	2-2_009	stream sediments	forsterite	olivine	0.25-0.5	0.0040	0	0	18.7437	10.7214	0	27.0168	0.2433	0.0334	0.1631	42.3895	99.3151	40.10	0.00	0.06	0.00	0.21	13.79	44.80	0.34	0.00	0.00						99.30
69	15SUV051	2015_2	2_10	2-2_010	stream sediments	forsterite	olivine	0.25-0.5	0.0095	0.0008	0	18.7222	8.8336	0.0578	28.0554	0.1816	0.0278	0.1305	42.4994	98.5186	40.05	0.00	0.05	0.08	0.17	11.36	46.52	0.25	0.00	0.00						98.48
70	15SUV051_rpt	2015_2	2_10_r	2-2_010	stream sediments	forsterite	olivine	0.25-0.5	0	0.0048	0.0022	18.7582	8.7982	0.0502	28.1995	0.1747	0.0286	0.1352	42.6165	98.7680	40.13	0.00	0.05	0.07	0.17	11.32	46.76	0.24	0.00	0.00						98.74
71	15SUV051	2015_2	2_11	2-2_011	stream sediments	forsterite	olivine	0.25-0.5	0	0.0105	0.0017	18.9229	8.5405	0.0358	28.5677	0.1490	0.0219	0.1252	42.9489	99.3242	40.48	0.00	0.04	0.05	0.16	10.99	47.37	0.21	0.00	0.00						99.30
72	15SUV051_rpt	2015_2	2_11_r	2-2_011	stream sediments	forsterite	olivine	0.25-0.5	0.0026	0	0.0005	18.9339	8.5160	0.0541	28.3772	0.1461	0.0243	0.1248	42.8361	99.0154	40.51	0.00	0.05	0.08	0.16	10.96	47.06	0.20	0.00	0.00						99.02
73	15SUV051	2015_2	2_12	2-2_012	stream sediments	forsterite	olivine	0.25-0.5	0.0080	0.0081	0.0016	18.7154	10.2365	0.0670	27.1676	0.1868	0.0298	0.1401	42.3220	98.8829	40.04	0.00	0.06	0.10	0.18	13.17	45.05	0.26	0.00	0.00						98.86
74	15SUV001	2015_2	3_1	2-3_001	stream sediments	fayalite	olivine	0.25-0.5	0.0340	0	0.0036	17.4584	21.7790	0.0093	20.3487	0.1977	0.0170	0.3232	39.7424	99.9132	37.35	0.06	0.03	0.00	0.42	28.02	33.74	0.28	0.00	0.00						99.90
75	15SUV005	2015_2	3_2	2-3_002	stream sediments	fayalite	olivine	0.25-0.5	0.0018	0	0	16.9105	26.3739	0.0062	17.5945	0.2164	0.0115	0.3628	38.6120	100.0900	36.18	0.00	0.02	0.00	0.47	33.93	29.18	0.30	0.00	0.00						100.08
76	15SUV005	2015_2	3_3	2-3_003	stream sediments	fayalite	olivine	0.25-0.5	0.0041	0	0	16.0772	33.4650	0	12.9660	0.1513	0.0076	0.4616	36.6451	99.7778	34.39	0.00	0.00	0.00	0.60	43.05	21.50	0.21	0.00	0.00						99.75
77	15SUV005	2015_2	3_4	2-3_004	stream sediments	fayalite	olivine	0.25-0.5	0.0172	0.0065	0	16.9043	26.3781	0.0013	17.4708	0.1851	0.0127	0.3717	38.5260	99.8736	36.16	0.03	0.02	0.00	0.48	33.94	28.97	0.26	0.00	0.00						99.86
78	15SUV005	2015_2	3_5	2-3_005	stream sediments	fayalite	olivine	0.25-0.5	0	0	0	18.3892	12.0887	0.0340	26.2350	0.1916	0.0123	0.1791	41.8411	98.9710	39.34	0.00	0.02	0.05	0.23	15.55	43.51	0.27	0.00	0.00						98.97
79	15SUV006	2015_2	3_6	2-3_006	stream sediments	fayalite	olivine	0.25-0.5	0.0052	0	0.0020	17.6297	19.9654	0	21.4903	0.2228	0.0058	0.2667	40.1293	99.7172	37.72	0.00	0.00	0.00	0.34	25.69	35.64	0.31	0.00	0.00						99.70
80	15SUV006	2015_2	3_7	2-3_007	stream sediments	fayalite	olivine	0.25-0.5	0.0001	0.0057	0	16.7328	27.9159	0	16.4202	0.2046	0.0162	0.3804	38.0809	99.7569	35.80	0.00	0.03	0.00	0.49	35.91	27.23	0.29	0.00	0.00						99.75
81	15SUV006	2015_2	3_8	2-3_008	stream sediments	fayalite	olivine	0.25-0.5	0.0113	0.0081	0	17.2578	23.0929	0	19.4092	0.2023	0	0.3187	39.2398	99.5401	36.92	0.00	0.00	0.00	0.41	29.71	32.19	0.28	0.00	0.00						99.51
82	15SUV010	2015_2	4_1	2-4_001	stream sediments	fayalite	olivine	0.25-0.5	0.0082	0	0	16.4801	29.3746	0.0202	15.5863	0.1679	0.0086	0.3915	37.6564	99.6937	35.26	0.00	0.02	0.03	0.51	37.79	25.85	0.23	0.00	0.00						99.69
83	15SUV010	2015_2	4_2	2-4_002	stream sediments	fayalite	olivine	0.25-0.5	0.0049	0	0	16.4245	31.0068	0	14.5894	0.1874	0.0034	0.4099	37.4014	100.0280	35.14	0.00	0.00	0.00	0.53	39.89	24.19	0.26	0.00	0.00						100.01
84	15SUV010	2015_2	4_3	2-4_003	stream sediments	fayalite	olivine	0.25-0.5	0.0146	0.0009	0.0003	16.3518	31.6383	0	14.2077	0.1760	0.0023	0.4258	37.2541	100.0720	34.98	0.02	0.00	0.00	0.55	40.70	23.56	0.25	0.00	0.00						100.06
85	15SUV020	2015_2	4_4	2-4_004_siderite	stream sediments	fayalite	siderite	0.25-0.5	0	0.0163	0.0039	0.0166	36.2450	0.0027	5.2424	0.9618	0.0199	0.9576	14.5424	58.0087	0.04	0.00	0.04	0.00	1.24	46.63	8.69	1.35	0.00	0.00						57.99
86	15SUV020	2015_2	4_5	2-4_005	stream sediments	fayalite	olivine	0.25-0.5	0.0223	0.0060	0	16.8201	26.7306	0	17.3218	0.1017	0	0.3436	38.3830	99.7291	35.98	0.04	0.00	0.00	0.44	34.39	28.72	0.14	0.00	0.00						99.71
87	15SUV020	2015_2	4_6	2-4_006	stream sediments	fayalite	olivine	0.25-0.5	0.0145	0	0.0031	16.4950	29.9130	0	15.3355	0.1747	0.0024	0.3871	37.6540	99.9793	35.29	0.02	0.00	0.00	0.50	38.48	25.43	0.24	0.00	0.00						99.96
88	15SUV023	2015_2	4_7	2-4_007	till	fayalite	olivine	0.25-0.5	0.0134	0	0	16.9061	27.1666	0.0069	16.8888	0.1955	0.0077	0.3625	38.3657	99.9130	36.17	0.02	0.00	0.00	0.47	34.95	28.01	0.27	0.00	0.00						99.89
89	15SUV023	2015_2	4_8	2-4_008	till	fayalite	olivine	0.25-0.5	0.0127	0	0	16.7592	28.1954	0.0015	16.2825	0.1904	0.0057	0.3701	38.0894	99.9070	35.85	0.00	0.00	0.00	0.48	36.27	27.00	0.27	0.00	0.00						99.87
90	15SUV023	2015_2	4_9	2-4_009	till	fayalite	olivine	0.25-0.5	0.0142	0.0134	0	16.7107	27.9352	0	16.4019	0.1919	0.0039	0.4046	38.0522	99.7279	35.75	0.02	0.00	0.00	0.52	35.94	27.20	0.27	0.00	0.00						99.70
91	15SUV023	2015_2	4_10	2-4_010	till	fayalite	olivine	0.25-0.5	0.0136	0.0006	0	16.2036	32.9214	0	13.5171	0.1853	0.0067	0.4448	37.0106	100.3040	34.67	0.02	0.00	0.00	0.57	42.35	22.42	0.26	0.00	0.00						100.29
92	15SUV014	2015_3	1_1	3-1_001	stream sediments	Cr-diopside	clinopyroxene	0.25-0.5	0.0809	0.7236	0	24.7323	1.9645	0.4227	9.9613	15.1761	1.7292	0.0560	43.4130	98.2595	52.91	0.13	3.27	0.62	0.07	2.53	16.52	21.23	0.98	0.00						98.26
93	15SUV024	2015_3	1_2	3-1_002	fluvial	Cr-diopside	clinopyroxene	0.25-0.5	0.0529	0.3900	0.0001	24.8166	3.0327	0.4077	9.3844	16.3719	0.8487	0.1239	43.0075	98.4364	53.09	0.09	1.60	0.60	0.16	3.90	15.56	22.91	0.53	0.00						98.44
94	15SUV004	2015_3	1_3	3-1_003	stream sediments	low-Cr_DC	clinopyroxene	0.5-1.0	0.3457	0.5876	0.0007	24.5510	3.8164	0.4421	9.8402	14.9522	0.7370	0.0676	42.8274	98.1680	52.52	0.58	1.39	0.65	0.09	4.91	16.32	20.92	0.79	0.00						98.17

95	15SUV004	2015_3	1_4	3-1_004	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.2363	0.5124	0.0065	24.7472	3.2126	0.8506	10.0273	15.0042	0.3777	0.0603	42.7905	97.8256	52.94	0.39	0.71	1.24	0.08	4.13	16.63	20.99	0.69	0.01	97.81
96	15SUV021	2015_3	1_5	3-1_005	stream sediments	low-Cr_DC	clinopyroxene	0.5-1.0	0.1595	0.1224	0.0003	24.5556	4.2685	0.4356	10.7583	13.6572	1.1544	0.1207	43.1469	98.3794	52.53	0.27	2.18	0.64	0.16	5.49	17.84	19.11	0.16	0.00	98.38
97	15SUV021	2015_3	1_6	3-1_006	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.1270	0.1326	0.0001	24.6489	3.6944	0.5427	10.8687	13.8627	0.9783	0.1067	43.1140	98.0762	52.73	0.21	1.85	0.79	0.14	4.75	18.02	19.40	0.18	0.00	98.07
98	15SUV027	2015_3	1_7	3-1_007	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.0204	0.3397	0.0001	24.8145	4.2478	0.2279	9.2379	15.6126	0.6843	0.1613	42.6961	98.0426	53.09	0.03	1.29	0.33	0.21	5.46	15.32	21.85	0.46	0.00	98.04
99	15SUV028	2015_3	1_8	3-1_008	Beaufort Fm	low-Cr_DC	clinopyroxene	0.25-0.5	0.1661	0.1082	0.0028	24.6310	4.2185	0.4464	11.1244	13.1412	1.0033	0.1283	43.1263	98.0964	52.69	0.28	1.90	0.65	0.17	5.43	18.45	18.39	0.15	0.00	98.11
100	15SUV028	2015_3	1_9	3-1_009	Beaufort Fm	low-Cr_DC	clinopyroxene	0.25-0.5	0.2555	0.1523	0	23.5845	4.4136	0.7410	10.1259	13.6884	1.9380	0.1294	42.5932	97.6218	50.46	0.43	3.66	1.08	0.17	5.68	16.79	19.15	0.21	0.00	97.63
101	15SUV032	2015_3	2_1	3-2_001	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.2238	0.1474	0.0011	23.3411	4.5588	0.5461	9.5262	14.1929	2.3687	0.1097	42.4288	97.4445	49.93	0.37	4.48	0.80	0.14	5.86	15.80	19.86	0.20	0.00	97.44
102	15SUV032	2015_3	2_2	3-2_002	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.2028	0.1425	0	23.8407	3.8240	0.8457	10.0783	14.3458	1.8527	0.0995	42.8724	98.1043	51.00	0.34	3.50	1.24	0.13	4.92	16.71	20.07	0.19	0.00	98.10
103	15SUV032	2015_3	2_3	3-2_003	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.2123	0.1505	0.0022	23.6434	4.0556	0.7261	10.1238	13.9342	1.8621	0.1114	42.5458	97.3673	50.58	0.35	3.52	1.06	0.14	5.22	16.79	19.50	0.20	0.00	97.36
104	15SUV032	2015_3	2_4	3-2_004	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.1772	0.1462	0.0003	24.0167	4.0419	0.7140	10.4484	13.7789	1.4901	0.1183	42.7591	97.6909	51.38	0.30	2.82	1.04	0.15	5.20	17.33	19.28	0.20	0.00	97.70
105	15SUV032	2015_3	2_5	3-2_005	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.1375	0.1249	0	24.4012	3.5008	0.6411	10.5449	14.4867	1.1376	0.0988	43.0013	98.0747	52.20	0.23	2.15	0.94	0.13	4.50	17.49	20.27	0.17	0.00	98.08
106	15SUV032	2015_3	2_6	3-2_006	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.1834	0.1357	0	24.0799	3.9970	0.7513	10.2227	14.0846	1.5361	0.1044	42.8462	97.9412	51.52	0.31	2.90	1.10	0.13	5.14	16.95	19.71	0.18	0.00	97.94
107	15SUV032	2015_3	2_7	3-2_007	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.2462	0.1347	0.0001	23.6788	4.0031	0.6514	9.8878	14.3524	1.9432	0.1078	42.6360	97.6413	50.66	0.41	3.67	0.95	0.14	5.15	16.40	20.08	0.18	0.00	97.64
108	15SUV032	2015_3	2_8	3-2_008	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.2248	0.1331	0.0014	23.9500	4.0860	0.6517	10.5068	13.5778	1.8149	0.1083	42.9387	97.9935	51.24	0.37	3.43	0.95	0.14	5.26	17.42	19.00	0.18	0.00	97.99
109	15SUV032	2015_3	2_9	3-2_009	stream sediments	low-Cr_DC	clinopyroxene	0.25-0.5	0.2235	0.1465	0.0009	23.8487	4.0319	0.7387	10.0043	14.1371	1.8655	0.1115	42.7899	97.8984	51.02	0.37	3.52	1.08	0.14	5.19	16.59	19.78	0.20	0.00	97.89
110	15SUV052	2015_3	2_10	3-2_010	stream sediments	diopside	clinopyroxene	0.25-0.5	0.3075	0.1406	0	23.5204	4.1407	0.9445	9.9490	13.6138	2.2397	0.1115	42.6835	97.6514	50.32	0.51	4.23	1.38	0.14	5.33	16.50	19.05	0.19	0.00	97.65
111	15SUV006	2015_3	3_1	3-3_001	stream sediments	diopside	olivine	0.25-0.5	0.0080	0	0	17.9080	17.4960	0.0078	22.7812	0.1820	0.0134	0.2514	40.5798	99.2275	38.31	0.00	0.03	0.00	0.32	22.51	37.78	0.25	0.00	0.00	99.20
112	15SUV018	2015_3	3_2	3-3_002	Beaufort Fm	diopside	clinopyroxene	0.25-0.5	0.0205	0.0147	0	25.3014	0.4214	0.0148	10.6631	18.1776	0.7790	0.1145	43.9760	99.4831	54.13	0.03	1.47	0.00	0.15	0.54	17.68	25.43	0.00	0.00	99.43
113	15SUV026	2015_3	3_3	3-3_003	stream sediments	diopside	garnet	0.25-0.5	0.6808	0	0	18.0983	5.5406	0.0075	0.4849	25.2395	8.3009	0.0381	40.4556	98.8462	38.72	1.14	15.68	0.00	0.05	7.13	0.80	35.32	0.00	0.00	98.84
114	15SUV026	2015_3	3_4	3-3_004	stream sediments	diopside	garnet	0.25-0.5	0.0029	0.0086	0.0013	16.7485	20.4594	0	0.0701	23.6334	0.1433	0.0171	34.5624	95.6469	35.83	0.00	0.27	0.00	0.02	26.32	0.12	33.07	0.00	0.00	95.63
115	15SUV028	2015_3	3_5	3-3_005	Beaufort Fm	diopside	garnet	0.25-0.5	0.0665	0	0	18.1501	0.8672	0.0181	0.2974	26.0709	11.4246	0.0389	41.7572	98.6907	38.83	0.11	21.59	0.00	0.05	1.12	0.49	36.48	0.00	0.00	98.67
116	15SUV028	2015_3	3_6	3-3_006	Beaufort Fm	diopside	garnet	0.25-0.5	0.1339	0.0085	0	17.2871	0.9666	0	2.0033	25.4659	9.6200	0.0086	40.1096	95.6035	36.98	0.22	18.18	0.00	0.00	1.24	3.32	35.63	0.00	0.00	95.57
117	15SUV006	2015_3	3_7	3-3_007	stream sediments	bronzite	olivine	0.25-0.5	0.0061	0	0.0038	16.9667	27.4527	0	16.6376	0.1223	0.0071	0.3562	38.3125	99.8649	36.30	0.00	0.00	0.00	0.46	35.32	27.59	0.17	0.00	0.00	99.84
118	15SUV021	2015_3	3_8	3-3_008	stream sediments	hedenbergite	garnet	0.5-1.0	0.0010	0	0	16.6792	20.7727	0	0.0047	23.5651	0.0023	0.0043	34.3692	95.3984	35.68	0.00	0.00	0.00	0.00	26.72	0.00	32.97	0.00	0.00	95.37
119	15SUV004	2015_3	3_9	3-3_009	stream sediments	spinel	spinel	0.25-0.5	0.0193	0.0067	0.0027	0	3.7890	0	14.9172	0.0020	36.5467	0.0384	43.4409	98.7628	0.00	0.03	69.05	0.00	0.05	4.87	24.74	0.00	0.00	0.00	98.74
120	15SUV028	2015_3	3_10	3-3_010	Beaufort Fm	spinel	spinel	0.25-0.5	0.0065	0.0028	0	0.0059	4.8881	0.0564	14.7582	0.0023	36.7387	0.0534	43.8487	100.3610	0.00	0.00	69.42	0.08	0.07	6.29	24.47	0.00	0.00	0.00	100.33
121	15SUV003	2015_3	4_1	3-4_001	stream sediments	hercynite	spinel	0.5-1.0	0.3796	0	0.0025	0.0418	16.9342	0.0722	10.5907	0	31.4210	0.1080	40.1384	99.6883	0.09	0.63	59.37	0.11	0.14	21.79	17.56	0.00	0.00	0.00	99.69
122	15SUV003	2015_3	4_2	3-4_002	stream sediments	hercynite	spinel	0.5-1.0	0.3294	0	0	0.0361	15.1259	0.7459	11.1410	0.0028	31.9025	0.0898	40.6770	100.0500	0.08	0.55	60.28	1.09	0.12	19.46	18.48	0.00	0.00	0.00	100.06
124	15SUV014	2015_3	4_4	3-4_004	stream sediments	hercynite	spinel	0.25-0.5	0.0711	0	0.0010	0.0033	8.9105	3.3724	12.6084	0.0009	32.6156	0.0733	41.4938	99.1503	0.00	0.12	61.63	4.93	0.09	11.46	20.91	0.00	0.00	0.00	99.14
125	15SUV014	2015_3	4_5	3-4_005	stream sediments	hercynite	spinel	0.25-0.5	0.4375	0	0	0.0328	18.9682	0.0765	10.2234	0	30.2200	0.1284	39.4470	99.5338	0.07	0.73	57.10	0.11	0.17	24.40	16.95	0.00	0.00	0.00	99.53
126	15SUV020	2015_3	4_6	3-4_006	stream sediments	hercynite	spinel	0.5-1.0	0.2592	0	0	0.0250	15.6548	0.2292	11.0986	0.0002	31.9817	0.1125	40.5786	99.9398	0.05	0.43	60.43	0.33	0.15	20.14	18.40	0.00	0.00	0.00	99.93
127	15SUV020	2015_3	4_7	3-4_007	stream sediments	hercynite	spinel	0.5-1.0	0.2034	0	0.0013	0.0089	14.9283	1.6726	10.9637	0.0049	31.2670	0.1069	40.2571	99.4140	0.00	0.34	59.08	2.44	0.14	19.21	18.18	0.00	0.00	0.00	99.39
128	15SUV025	2015_3	4_8	3-4_008	stream sediments	hercynite	spinel	0.25-0.5	0.3511	0.0026	0	0.0380	15.5743	0.4061	11.0808	0.0013	31.7171	0.0871	40.4603	99.7186	0.08	0.59	59.93	0.59	0.11	20.04	18.38	0.00	0.00	0.00	99.72
129	15SUV026	2015_3	4_9	3-4_009	stream sediments	hercynite	spinel	0.5-1.0	0.1276	0	0.0027	0.0208	7.9597	5.2397	12.9920	0	31.4045	0.0716	41.3157	99.1344	0.04	0.21	59.34	7.66	0.09	10.24	21.54	0.00	0.00	0.00	99.12
130	15SUV051	2015_3	4_10	3-4_010	stream sediments	hercynite	spinel	0.5-1.0	0.3093	0	0	0.0509	16.5284	0.0832	10.9379	0.0006	31.4668	0.1136	40.2612	99.7518	0.11	0.52	59.46	0.12	0.15	21.26	18.14	0.00	0.00	0.00	99.76
131	15SUV001	2015_4	1_1	4-1_001	stream sediments	ilmenite	ilmenite	0.5-1.0	30.6389	0.0076	0.0039	0.0147	24.1748	0.6764	7.6607	0.0124	0.2836	0.2285	33.0938	96.7952	0.03	51.11	0.54	0.99	0.30	31.10	12.70	0.02	0.00	0.00	96.79
132	15SUV001	2015_4	1_2	4-1_002	stream sediments	ilmenite	ilmenite	0.5-1.0	30.2583	0.0089	0.0011	0.0141	28.0501	0.1815	5.9685	0.0120	0.1454	0.1921	32.4729	97.3048	0.03	50.47	0.27	0.27	0.25	36.09	9.90	0.02	0.00	0.00	97.30
133	15SUV001	2015_4	1_3	4-1_003	stream sediments	ilmenite	ilmenite	0.25-0.5	30.7025	0.0290	0	0.0203	23.1102	1.3040	8.1156	0.0156	0.3121	0.2049	33.4532	97.2673	0.04	51.21	0.59	1.91	0.26	29.73	13.46	0.02	0.04	0.00	97.26
134	15SUV001	2015_4	1_4	4-1_004	stream sediments	ilmenite	ilmenite	0.25-0.5	30.8771	0.0046	0.0012	0.0082	23.9970	0.8806	7.8714	0.0124	0.2950	0.2071	33.4298	97.5843	0.00	51.50	0.56	1.29	0.27	30.87	13.05	0.02	0.00	0.00	97.56
135	15SUV001	2015_4	1_5	4-1_005	stream sediments	ilmenite	ilmenite	0.25-0.5	29.5688	0	0	0.0073	27.6577	0.7101	6.3227	0.0134	0.2301	0.2298	32.4528	97.1926	0.00	49.32	0.43	1.04	0.30	35.58	10.49	0.02	0.00	0.00	97.18
136	15SUV003	2015_4	1_6	4-1_006	stream sediments	ilmenite	ilmenite	0.25-0.5	30.5082	0.0509	0.0025	0.1066	24.8005	0.6015	6.7808	0.0551	0.5315	0.1829	32.9157	96.5362	0.23	50.89	1.00	0.88	0.24	31.91	11.24	0.08	0.07	0.00	96.54
137	15SUV014	2015_4	2_1	4-2_001	stream sediments	ilmenite	ilmenite	0.25-0.5	30.7860	0	0	0.0072	22.9877	0.8257	8.2791	0.0113	0.3986	0.1703	33.4009	96.8670	0.00	51.35	0.75	1.21	0.22	29.57	13.73	0.02	0.00	0.00	96.85
138	15SUV020	2015_4	2_2	4-2_002	stream sediments	ilmenite	ilmenite	0.5-1.0	30.8460	0.0014	0.0051	0.0077	24.3200	0.7089	7.7236	0.0169	0.2899	0.2158	33.3239	97.4592	0.00	51.45	0.55	1.04	0.28	31.29	12.81	0.02	0.00	0.00	97.44
139	15SUV020	2015_4	2_3	4-2_003	stream sediments	ilmenite	ilmenite	0.25-0.5	27.1872	0.0234	0.0014	0	30.4447	1.6159	5.3282	0.0076	0.1476	0.2360	31.3498	96.3415	0.00	45.35	0.28	2.36	0.30	39.17	8.84	0.01	0.00	0.00	96.31
140	15SUV020	2015_4	2_4	4-2_004	stream sediments	ilmenite	ilmenite	0.25-0.5	30.1680	0.0019	0.0003	0.0051	25.0783	1.1985	7.1865	0.0187	0.3029	0.2270	32.9724	97.1596	0.00	50.32	0.57	1.75	0.29	32.26	11.92	0.03	0.00	0.00	97.14
141	15SUV020	2015_4	2_5	4-2_005	stream sediments	ilmenite	ilmenite	0.25-0.5	24.9384	0.0046	0.0029	0	29.8107	4.4660	5.2463	0.0038	0.1347	0.2076	30.9000	95.7150	0.00	41.60	0.25	6.53	0.27	38.35	8.70	0.00	0.00	0.00	95.70
142	15SUV020	2015_4	2_6	4-2_006	stream sediments	ilmenite	ilmenite	0.25-0.5	30.2742	0.0046	0	0.0054	22.2919	2.3992	8.1364	0.0194	0.3453	0.1804	33.4504	97.1073	0.00	50.50	0.65	3.51	0.23	28.68	13.49	0.03	0.00	0.00	97.09
143	15SUV051	2015_4	2_7	4-2_007	stream sediments	ilmenite	ilmenite	0.25-0.5	29.9773	0.0296	0.0043	0.0090	26.0581	0.5342	7.0467	0.0132	0.3028	0.1952	32.7305	96.9009	0.00	50.00	0.57	0.78	0.25	33.52	11.69	0.02	0.04	0.00	96.87
144	15SUV001	2015_4	3_1	4-3_001	stream sediments	crustal ilmenite	ilmenite	0.5-1.0	27.1608	0.0065	0.0008	0.0097	38.8646	0	0.1497	0.0027	0.0171	1.3934	29.8137	97.4189	0.02	45.31	0.03	0.00	1.80	50.00	0.25	0.00	0.00	0.00	97.41
145	15SUV001	2015_4	3_2	4-3_002	stream sediments	crustal ilmenite	ilmenite	0.5-1.0	29.3759	0	0.0007	0.0031	36.7912	0.0231	0.3565	0.0061	0.0416	0.3037	30.5422	97.4440	0.00	49.00	0.08	0.03	0.39	47.33	0.59	0.01	0.00	0.00	97.43
146	15SUV001	2015_4	3_3	4-3_003	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.8203	0.0232	0	0.0018	35.8523	0.1634	1.7178	0.0025	0.0169	0.2303	30.8248	97.6535	0.00	48.07	0.03	0.24	0.30	46.12	2.85	0.00	0.00	0.00	97.61
147	15SUV001	2015_4	3_4	4-3_004	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	30.7522	0	0	0.0004	35.9683	0.0101	0.2850	0.0027	0.0000	0.2615	31.1190	98.3991	0.00	51.30	0.00	0.00	0.34	46.27	0.47	0.00	0.00	0.00	98.38
148	15SUV001	2015_4	3_5	4-3_005	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.5366	0.0019	0	0	37.8464	0	0.3592	0	0.0345	0.3122	30.2657	97.3564	0.00	47.60	0.07	0.00	0.40	48.69	0.60	0.00	0.00	0.00	97.36
149	15SUV001	2015_4	3_6	4-3_006	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.2525	0	0.0039	0	37.3959	0.0123	0.2628	0.0050	0.0373	0.3420	30.5705	97.8822	0.00	48.79	0.07	0.00	0.44	48.11	0.44	0.00	0.00	0.00	97.85
150	15SUV001	2015_4	3_7	4-3_007	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.5314	0	0.0003	0.0327	36.9886	0	0.2599	0.0086	0.0266	0.7016	30.0976	96.6472	0.07	47.59	0.05	0.00	0.91	47.59	0.43	0.01	0.00	0.00	96.65
151	15SUV001	2015_4	3_8	4-3_008	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	25.4550	0.0165	0.0024	0.0071	41.2858	0	0.1598	0.0012	0.0382	0.4299	29.1129	96.5089	0.00	42.46	0.07	0.00	0.56	53.11	0.26	0.00	0.00	0.00	96.46
152	15SUV001	2015_4	3_9	4-3_009	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.2359	0.0040	0.0037	0.0091	36.3226	0	0.9704	0.0047	0.0497	0.3255	30.7298	97.6554	0.00	48.77	0.09	0.00	0.42	46.73	1.61	0.00	0.00	0.00	97.62
153	15SUV001	2015_4	3_10	4-3_010	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.3529	0	0.0041	0	36.9393	0	0.0517	0.0031	0.0086	0.9962	30.5263	97.8823	0.00	48.96	0.00	0.00	1.29	47.52	0.09	0.00	0.00	0.00	97.86
154	15SUV001	2015_4	4_1	4-4_001	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.4601	0	0.0053	0.0021	37.0195	0	0.2006	0.0086	0.0096	0.2666	30.5122	97.4845	0.00	49.14	0.00	0.00	0.34	47.63	0.33	0.01	0.00	0.00	97.45
155	15SUV003	2015_4	4_2	4-4_002	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.8389	0	0	0	36.1739	0.0654	0.5128	0	0.0097	0.5330	30.8295	97.9633	0.00	49.77	0.02	0.10	0.69	46.54	0.85	0.00	0.00	0.00	97.97
156	15SUV003	2015_4	4_3	4-4_003	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.3206	0	0.0006	0.0013	38.0070	0.0482	0.2914	0.0027	0.0257	0.2784	30.1294	97.1052	0.00	47.24	0.05	0.07	0.36	48.90	0.48	0.00	0.00	0.00	97.10
157	15SUV006	2015_4	4_4	4-4_004	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.3590	0	0.0020	0.0040	36.9744	0.0185	0.1545	0.0025	0.0085	0.8120	30.5669	97.9025	0.00	48.97	0.00	0.00	1.05	47.57	0.26	0.00	0.00	0.00	97.85
158	15SUV006	2015_4	4_5	4-4_005	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.4381	0.0249	0.0011	0	37.4870	0.0143	0.2090	0.0010	0.0093	0.3396	30.6669	98.1912	0.00	49.10	0.00	0.00	0.44	48.23	0.35	0.00	0.00	0.00	98.12
159	15SUV010	2015_4	4_6	4-4_006	stream sediments	crustal ilmenite	ilmenite	0.5-1.0	29.2242	0.0190	0	0	36.9668	0.0164	0.2330	0.0041	0.0270	0.4071	30.4261	97.3236	0.00	48.75	0.05	0.00	0.53	47.56	0.39	0.00	0.00	0.00	97.28
160	15SUV010	2015_4	4_7	4-4_007	stream sediments	crustal ilmenite	ilmenite	0.5-1.0	29.2967	0.0076	0.0010	0	36.6476	0.0084	0.5306	0.0039	0.0189	0.4043	30.5635	97.4826	0.00	48.87	0.04	0.00	0.52	47.15	0.88	0.00	0.00	0.00	97.46
161	15SUV018	2015_4	4_8	4-4_008A	Beaufort Fm	crustal ilmenite	ilmenite	0.25-0.5	34.6050	0.0270	0.0033	0.0616	25.6331	0.0375	0.2770	0.0501	0.0907	0.4043	30.9602	92.1497	0.13	57.72	0.17	0.05	0.52	32.98	0.46	0.07	0.00	0.00	92.10
162	15SUV018_rpt	2015_4	4_8_r	4-4-008B	Beaufort Fm	crustal ilmenite	ilmenite	0.25-0.5	34.6450	0.0525	0.0029	0.0652	25.0972	0.0257	0.2645	0.0409	0.1272	0.4142	30.8644	91.5995	0.14	57.79	0.24	0.04	0.53	32.29	0.44	0.06	0.07	0.00	91.60
163	15SUV020	2015_4	5_1	4-5_001	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.2906	0	0	0	37.1377	0.0119	0.2753	0.0054	0.0350	0.2984	30.5147	97.5691	0.00	48.86	0.07	0.00	0.39	47.78	0.46	0.00	0.00	0.00	97.56
164	15SUV020	2015_4	5_2	4-5_002	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.8467	0.0032	0	0	37.5976	0.0004	0.0657	0.0053	0.0045	0.6436	30.2810	97.4479	0.00	48.12	0.00	0.00	0.83	48.37	0.11	0.00	0.00	0.00	97.43
165	15SUV020	2015_4	5_3	4-5_003	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.8993	0.0231	0.0035	0.0097	36.6556	0.0043	0.3385	0.0067	0.0287	0.3769	30.8587	98.2049	0.02	49.87	0.05	0.00	0.49	47.16	0.56	0.01	0.00	0.00	98.16
166	15SUV020	2015_4	5_4	4-5_004	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.5497	0.0260	0.0030	0.0024	38.1485	0.0216	0.1725	0.0060	0.0152	0.3699	30.2620	97.5769	0.00	47.62	0.03	0.00	0.48	49.08	0.29	0.01	0.00	0.00	97.51
167	15SUV020	2015_4	5_5	4-5_005	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.3140	0.0178	0.0031	0.0031	37.2425	0.0128	0.1746	0.0020	0.0177	0.3405	30.5003	97.6284	0.00	48.90	0.03	0.00	0.44	47.91	0.29	0.00	0.00	0.00	97.57
168	15SUV020	2015_4	5_6	4-5_006	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.1123	0.0151	0	0.0064	38.4565	0.0123	0.4712	0	0.0259	0.3497	30.2517	97.7012	0.00	46.89	0.05	0.00	0.45	49.47	0.78	0.00	0.00	0.00	97.64
169	15SUV020	2015_4	5_7	4-5_007	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.9676	0	0	0.0062	37.5473	0.0370	0.3174	0.0039	0.0264	0.4396	30.4954	97.8407	0.00	48.32	0.05	0.05	0.57	48.30	0.53	0.00	0.00	0.00	97.82
170	15SUV020	2015_4	5_8	4-5_008	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.3766	0.0019	0.0028	0	36.2549	0.0016	0.2155	0.0046	0.0073	2.6393	30.2650	97.7695	0.00	47.33	0.00	0.00	3.41	46.64	0.36	0.00	0.00	0.00	97.74
171	15SUV024	2015_4	6_1	4-6_001	fluvial	crustal ilmenite	ilmenite	0.25-0.5	34.3128	0	0	0.0552	23.2839	0.1457	1.2350	0.0187	0.1198	0.2945	30.7367	90.2023	0.12	57.24	0.23	0.21	0.38	29.95	2.05	0.03	0.00	0.00	90.21
172	15SUV024	2015_4	6_2	4-6_002	fluvial	crustal ilmenite	ilmenite	0.25-0.5	32.5900	0	0.0069	0.0105	28.0725	0.0866	0.2727	0.0123	0.0275	0.3627	30.1827	91.6245	0.02	54.36	0.05	0.13	0.47	36.12	0.45	0.02	0.00	0.01	91.63
173	15SUV024	2015_4	6_3	4-6_003	fluvial	crustal ilmenite	ilmenite	0.25-0.5	30.5941	0	0	0	34.6560	0.1335	1.0055	0.0037	0.0069	0.4871	31.2405	98.1272	0.00	51.03	0.00	0.20	0.63	44.58	1.67	0.00	0.00	0.00	98.11
174	15SUV024	2015_4	6_4	4-6_004	fluvial	crustal ilmenite	ilmenite	0.25-0.5	37.3640	0.0542	0.0068	0.1327	19.6692	0.1212	0.0503	0.0616	0.2750	0.5578	31.2886	89.5813	0.28	62.33	0.52	0.18	0.72	25.30	0.08	0.09	0.07	0.01	89.58
175	15SUV024	2015_4	6_5	4-6_005	fluvial	crustal ilmenite	ilmenite	0.25-0.5	29.7688	0	0.0026	0.0025	36.7544	0.0170	0.1604	0.0067	0.0017	0.4395	30.6664	97.8200	0.00	49.66	0.00	0.00	0.57	47.28	0.27	0.01	0.00	0.00	97.79
176	15SUV024	2015_4	6_6	4-6_006	fluvial	crustal ilmenite	ilmenite	0.25-0.5	32.1041	0.0130	0.0039	0.0337	25.8931	0.0085	0.0017	0.0173	0.0583	2.2913	29.6405	90.0652	0.07	53.55	0.11	0.00	2.96	33.31	0.00	0.02	0.00	0.00	90.02
177	15SUV024	2015_4	6_7	4-6_007	fluvial	crustal ilmenite	ilmenite	0.25-0.5	35.1853	0.0212	0.0073	0.0598	23.7984	0.0438	0.5118	0.0134	0.0864	0.2320	30.9079	90.8673	0.13	58.69	0.16	0.06	0.30	30.62	0.85	0.02	0.00	0.01	90.84
178	15SUV024	2015_4	6_8	4-6_008	fluvial	crustal ilmenite	ilmenite	0.25-0.5	32.7884	0.0336	0.0077	0.0467	27.1080	0.0000	0.0856	0.0274	0.0810	1.0861	30.1931	91.4576	0.10	54.69	0.15	0.00	1.40	34.87	0.14	0.04	0.05	0.01	91.45
179	15SVU025	2015_4	7_1	4-7_001	stream sediments	crustal ilmenite	ilmenite	0.5-1.0	28.7965	0	0.0039	0	37.6389	0.1004	0.3980	0.0018	0.0098	0.4023	30.4570	97.8087	0.00	48.03	0.02	0.15	0.52	48.42	0.66	0.00	0.00	0.00	97.80
180	15SVU025	2015_4	7_2	4-7_002	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.3323	0	0	0	35.9649	0.0123	0.6539	0.0032	0.0105	1.4995	30.7830	98.2596	0.00	48.93	0.02	0.00	1.94	46.27	1.08	0.00	0.00	0.00	98.24
181	15SVU025	2015_4	7_3	4-7_003	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.1314	0.0010	0	0.0012	34.3325	0	0.0125	0	0.0082	3.9639	30.4693	97.9199	0.00	48.59	0.00	0.00	5.12	44.17	0.00	0.00	0.00	0.00	97.88
182	15SVU025	2015_4	7_4	4-7_004	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.7650	0.0184	0	0.0040	36.3414	0.0123	0.0687	0.0024	0.0075	1.1175	30.6914	98.0285	0.00	49.65	0.00	0.00	1.44	46.75	0.11	0.00	0.00	0.00	97.95
183	15SVU025	2015_4	7_5	4-7_005	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	29.9326	0.0173	0	0.0037	35.1687	0.0143	0.3575	0.0006	0.0707	0.3836	30.4994	96.4484	0.00	49.93	0.13	0.00	0.50	45.24	0.59	0.00	0.00	0.00	96.39
184	15SUV026	2015_4	7_6	4-7_006	stream sediments	crustal ilmenite	ilmenite	0.5-1.0	30.4260	0	0.0001	0	35.4786	0.0538	0.7787	0.0072	0.0016	0.2462	31.1043	98.0964	0.00	50.75	0.00	0.08	0.32	45.64	1.29	0.01	0.00	0.00	98.09
185	15SUV026	2015_4	7_7	4-7_007	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	26.8044	0.0207	0.0009	0.0039	39.9586	0.0010	0.1006	0.0013	0.0017	0.3729	29.5442	96.8103	0.00	44.71	0.00	0.00	0.48	51.41	0.17	0.00	0.00	0.00	96.77
186	15SUV030	2015_4	7_8	4-7_008A	Beaufort Fm	crustal ilmenite	ilmenite	0.5-1.0	30.2736	0.0206	0.0055	0.0080	27.6143	0.2253	6.0165	0.0105	0.2505	0.2253	32.5106	97.1606	0.00	50.50	0.47	0.33	0.29	35.53	9.98	0.01	0.00	0.00	97.11
187	15SUV030_rpt	2015_4	7_8_r	4-7-008B	Beaufort Fm	crustal ilmenite	ilmenite	0.5-1.0	30.2728	0	0.0012	0.0131	27.6614	0.2205	6.1006	0.0120	0.2468	0.2234	32.5714	97.3233	0.03	50.50	0.47	0.32	0.29	35.59	10.12	0.02	0.00	0.00	97.34
188	15SUV033	2015_4	7_9	4-7-9	stream sediments	crustal ilmenite	ilmenite	0.25-0.5	28.9992	0	0	0	37.3609	0.0499	0.2162	0.0048	0.0288	0.2910	30.3546	97.3053	0.00	48.37	0.05	0.07	0.38	48.06	0.36	0.00	0.00	0.00	97.29
189	15SUV018	2015_4	8_1	4-8-A_001	Beaufort Fm	red rutile	rutile	0.25-0.5	58.5067	0	0.0002	0	0.2782	0.6340	0.0052	0.0057	0.0067	0	39.4698	98.9064	0.00	97.59	0.00	0.93	0.00	0.36	0.00	0.01	0.00	0.00	98.89
190	15SUV018_rpt	2015_4	8_1_r	4-8-B_001	Beaufort Fm	red rutile	rutile	0.25-0.5	58.5083	0	0	0.0045	0.2480	0.6002	0	0.0035	0.0032	0	39.4444	98.8122	0.00	97.60	0.00	0.88	0.00	0.32	0.00	0.00	0.00	0.00	98.80
191	15SUV028	2015_4	8_2	4-8-A_002	Beaufort Fm	red rutile	rutile	0.25-0.5	58.8721	0	0.0019	0.0041	0.5423	0	0	0.0036	0.0287	0	39.5174	98.9700	0.00	98.20	0.05	0.00	0.00	0.70	0.00	0.00	0.00	0.00	98.95
192	15SUV028_rpt	2015_4	8_2_r	4-8-B_002	Beaufort Fm	red rutile	rutile	0.25-0.5	59.0441	0.0133	0.0031	0	0.5354	0	0.0052	0.0035	0.0095	0.0002	39.6169	99.2314	0.00	98.49	0.02	0.00	0.00	0.69	0.00	0.00	0.00	0.00	99.20
193	15SUV028	2015_4	8_3	4-8-A_003	Beaufort Fm	red rutile	rutile	0.25-0.5	58.4977	0	0.0020	0.0061	0.1418	0.1423	0.0052	0.0099	0.0175	0	39.2165	98.0390	0.00	97.58	0.03	0.21	0.00	0.18	0.00	0.01	0.00	0.00	98.01
194	15SUV028_rpt	2015_4	8_3_r	4-8-B_003	Beaufort Fm	red rutile	rutile	0.25-0.5	58.8274	0	0.0038	0	0.1358	0.1525	0.0066	0.0053	0.0178	0	39.4325	98.5816	0.00	98.13	0.03	0.22	0.00	0.17	0.00	0.01	0.00	0.00	98.56
195	15SUV030	2015_4	8_4	4-8-A_004	Beaufort Fm	red rutile	rutile	0.25-0.5	59.2102	0	0	0.0014	0.2277	0.0740	0	0.0054	0.0081	0	39.6662	99.1931	0.00	98.77	0.02	0.11	0.00	0.29	0.00	0.01	0.00	0.00	99.20
196	15SUV030_rpt	2015_4	8_4_r	4-8-B_004	Beaufort Fm	red rutile	rutile	0.25-0.5	59.1891	0	0	0	0.1800	0.1768	0	0.0024	0.0071	0	39.6822	99.2376	0.00	98.73	0.00	0.26	0.00	0.23	0.00	0.00	0.00	0.00	99.22
197	15SUV030	2015_4	8_5	4-8-A_005	Beaufort Fm	red rutile	rutile	0.25-0.5	59.1434	0	0	0.0067	0.1127	0.0885	0	0.0051	0.0112	0	39.6040	98.9716	0.00	98.65	0.02	0.13	0.00	0.15	0.00	0.01	0.00	0.00	98.96
198	15SUV030_rpt	2015_4	8_5_r	4-8-B_005	Beaufort Fm	red rutile	rutile	0.25-0.5	59.2872	0	0	0	0.1102	0.0863	0.0017	0.0006	0.0210	0	39.6987	99.2057	0.00	98.89	0.04	0.13	0.00	0.14	0.00	0.00	0.00	0.00	99.20
199	15SUV030	2015_4	8_6	4-8-A_006	Beaufort Fm	red rutile	rutile	0.25-0.5	58.9838	0	0	0	0.2313	0.0687	0	0	0.0158	0	39.5167	98.8163	0.00	98.39	0.03	0.10	0.00	0.30	0.00	0.00	0.00	0.00	98.82

200	15SUV030_rpt	2015_4	8_6_r	4-8-B_006	Beaufort Fm	red rutile	rutile	0.25-0.5	59.0195	0.0037	0.0018	0.0019	0.2398	0.1027	0.0025	0.0024	0.0118	0	39.5615	98.9476	0.00	98.45	0.02	0.15	0.00	0.31	0.00	0.00	0.00	0.00	98.93
201	15SUV030	2015_4	8_7	4-8-A_007	Beaufort Fm	red rutile	rutile	0.25-0.5	58.8038	0	0.0041	0.0031	0.2654	0.0451	0.0054	0.0036	0.0137	0	39.4027	98.5467	0.00	98.09	0.03	0.07	0.00	0.34	0.00	0.00	0.00	0.00	98.53
202	15SUV030_rpt	2015_4	8_7_r	4-8-B_007	Beaufort Fm	red rutile	rutile	0.25-0.5	58.8865	0.0087	0.0010	0.0000	0.3249	0.0568	0	0.0004	0.0039	0.0099	39.4686	98.7605	0.00	98.23	0.00	0.08	0.00	0.42	0.00	0.00	0.00	0.00	98.73
203	15SUV030	2015_4	8_8	4-8-A_008	Beaufort Fm	red rutile	rutile	0.25-0.5	58.6710	0	0.0043	0.0053	0.0199	0.3743	0.0063	0.0033	0	0.0059	39.3882	98.4783	0.00	97.87	0.00	0.55	0.00	0.03	0.00	0.00	0.00	0.00	98.45
204	15SUV030_rpt	2015_4	8_8_rpt	4-8-B_008	Beaufort Fm	red rutile	rutile	0.25-0.5	58.7158	0	0.0018	0	0.0137	0.3850	0	0.0039	0.0035	0.0049	39.4137	98.5425	0.00	97.94	0.00	0.56	0.00	0.02	0.00	0.00	0.00	0.00	98.52
205	15SUV030	2015_4	8_9	4-8-A_009	Beaufort Fm	red rutile	rutile	0.25-0.5	59.1185	0.0007	0	0	0.0512	0.1023	0.0013	0.0017	0.0155	0	39.5720	98.8631	0.00	98.61	0.03	0.15	0.00	0.07	0.00	0.00	0.00	0.00	98.86
206	15SUV030_rpt	2015_4	8_9_r	4-8-B_009	Beaufort Fm	red rutile	rutile	0.25-0.5	59.1086	0	0	0.0003	0.0451	0.1070	0.0048	0.0030	0.0062	0.0057	39.5622	98.8429	0.00	98.60	0.00	0.16	0.00	0.06	0.00	0.00	0.00	0.00	98.82
207	15SUV030	2015_4	8_10	4-8-A_010	Beaufort Fm	red rutile	rutile	0.25-0.5	59.2402	0	0.0020	0.0040	0.2273	0.0382	0.0027	0.0016	0.0255	0	39.6887	99.2302	0.00	98.82	0.05	0.06	0.00	0.29	0.00	0.00	0.00	0.00	99.22
208	15SUV030_rpt	2015_4	8_10_r	4-8-B_010	Beaufort Fm	red rutile	rutile	0.25-0.5	59.1375	0	0.0003	0.0056	0.2172	0.0196	0.0055	0.0030	0.0066	0.0007	39.5958	98.9917	0.00	98.64	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	98.92
209	15SUV030	2015_4	8_11	4-8-A_011	Beaufort Fm	red rutile	rutile	0.25-0.5	58.1513	0	0	0.0077	0.5565	0.1603	0	0	0	0.0060	39.0924	97.9741	0.00	97.00	0.00	0.23	0.00	0.72	0.00	0.00	0.00	0.00	97.95
210	15SUV030_rpt	2015_4	8_11_r	4-8-B_011	Beaufort Fm	red rutile	rutile	0.25-0.5	58.1220	0.0021	0	0	0.5495	0.1525	0	0.0047	0.0115	0	39.0695	97.9118	0.00	96.95	0.02	0.22	0.00	0.71	0.00	0.00	0.00	0.00	97.90
211	15SUV030	2015_4	8_12	4-8-A_012	Beaufort Fm	red rutile	rutile	0.25-0.5	58.8011	0	0.0051	0.0058	0.0309	0.2610	0	0.0051	0.0054	0.0037	39.4275	98.5456	0.00	98.08	0.00	0.38	0.00	0.04	0.00	0.01	0.00	0.01	98.52
212	15SUV030_rpt	2015_4	8_12_r	4-8-B_012	Beaufort Fm	red rutile	rutile	0.25-0.5	58.6809	0.0004	0.0020	0	0.0437	0.2584	0	0.0013	0.0073	0	39.3416	98.3356	0.00	97.88	0.00	0.38	0.00	0.06	0.00	0.00	0.00	0.00	98.32
213	15SUV030	2015_4	8_13	4-8-A_013	Beaufort Fm	red rutile	rutile	0.25-0.5	58.8659	0	0	0.0077	0.4862	0.0346	0.0067	0.0026	0.0022	0	39.4974	98.9034	0.00	98.19	0.00	0.05	0.00	0.63	0.00	0.00	0.00	0.00	98.87
214	15SUV030_rpt	2015_4	8_13_r	4-8-B_013	Beaufort Fm	red rutile	rutile	0.25-0.5	58.8867	0	0.0009	0.0070	0.5187	0.0531	0	0.0024	0.0048	0	39.5262	98.9998	0.00	98.23	0.00	0.08	0.00	0.67	0.00	0.00	0.00	0.00	98.98
217	15SUV001	2015_5	1_1	5-1_001	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.2724	0	0.0005	0	13.2825	33.0601	9.2739	0.0009	8.9588	0.1445	33.3633	98.3569	0.00	0.45	16.93	48.32	0.19	17.09	15.38	0.00	0.00	0.00	98.36
218	15SUV001	2015_5	1_2	5-1_002	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.2686	0	0	0	19.9915	31.7623	5.7149	0	8.5877	0.2272	32.0345	98.5868	0.00	0.45	16.23	46.42	0.29	25.72	9.48	0.00	0.00	0.00	98.59
219	15SUV001	2015_5	1_3	5-1_003	stream sediments	chromite, euhedral	chromite	0.25-0.5	2.1459	0.0212	0	0	22.6930	26.0186	7.6012	0.0015	7.3811	0.1877	31.5765	97.6267	0.00	3.58	13.95	38.03	0.24	29.19	12.61	0.00	0.00	0.00	97.60
220	15SUV001	2015_5	1_4	5-1_004	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.6759	0	0	0	19.6057	29.1009	7.9816	0.0061	7.2756	0.1739	31.9477	97.7673	0.00	2.80	13.75	42.53	0.22	25.22	13.24	0.01	0.00	0.00	97.77
221	15SUV001	2015_5	1_5	5-1_005	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.2739	0.0083	0.0069	0	16.7882	31.9473	7.2916	0.0038	9.0830	0.1928	32.6800	98.2758	0.00	0.46	17.16	46.69	0.25	21.60	12.09	0.00	0.00	0.01	98.26
222	15SUV001	2015_5	1_6	5-1_006	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.6758	0.0029	0	0	19.6585	27.8781	7.9530	0.0037	8.2458	0.1830	32.2452	97.8460	0.00	2.80	15.58	40.75	0.24	25.29	13.19	0.00	0.00	0.00	97.85
223	15SUV001	2015_5	1_7	5-1_007	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.8425	0	0	0	21.6228	25.5155	7.7308	0.0027	8.5975	0.1713	31.9905	97.4736	0.00	3.07	16.24	37.29	0.22	27.82	12.82	0.00	0.00	0.00	97.46
224	15SUV001	2015_5	1_8	5-1_008	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.1459	0	0	0	20.7726	26.6574	5.1682	0.0052	12.5360	0.2067	32.9682	98.4602	0.00	0.24	23.69	38.96	0.27	26.72	8.57	0.00	0.00	0.00	98.45
225	15SUV001	2015_5	1_9	5-1_009	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.4988	0.0079	0	0	17.6354	28.0942	7.4823	0.0007	11.1934	0.1734	33.2887	98.3747	0.00	0.83	21.15	41.06	0.22	22.69	12.41	0.00	0.00	0.00	98.36
226	15SUV001	2015_5	1_10	5-1_010	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3943	0.0055	0.0048	0	18.0103	29.1766	7.0472	0.0025	10.4208	0.1832	32.8560	98.1012	0.00	0.66	19.69	42.64	0.24	23.17	11.69	0.00	0.00	0.00	98.09
227	15SUV001	2015_5	1_11	5-1_011	stream sediments	chromite, euhedral	chromite	0.25-0.5	2.0148	0.0096	0.0046	0	21.2967	22.7404	8.1124	0	10.6399	0.1522	32.7969	97.7675	0.00	3.36	20.10	33.24	0.20	27.40	13.45	0.00	0.00	0.00	97.75
228	15SUV002	2015_5	2_1	5-2_001	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3552	0.0020	0	0	15.4196	31.4583	8.2313	0	9.6662	0.1676	33.2414	98.5416	0.00	0.59	18.26	45.98	0.22	19.84	13.65	0.00	0.00	0.00	98.54
229	15SUV002	2015_5	2_2	5-2_002	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.2919	0	0.0032	0	13.4345	31.9389	9.2504	0.0058	9.7531	0.1447	33.5960	98.4186	0.00	0.49	18.43	46.68	0.19	17.28	15.34	0.01	0.00	0.00	98.42
230	15SUV002	2015_5	2_3	5-2_003	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.0501	0.0082	0	0	24.5681	21.9366	6.7008	0	11.1682	0.1957	32.2705	97.8983	0.00	1.75	21.10	32.06	0.25	31.61	11.11	0.00	0.00	0.00	97.88
231	15SUV002	2015_5	2_4	5-2_004	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3283	0.0065	0.0038	0	16.1840	31.8109	8.1757	0	8.8269	0.1772	32.8272	98.3405	0.00	0.55	16.68	46.49	0.23	20.82	13.56	0.00	0.00	0.00	98.33
232	15SUV002	2015_5	2_5	5-2_005	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3413	0	0	0	20.4868	30.7294	5.9696	0.0011	8.5555	0.1976	31.8791	98.1604	0.00	0.57	16.17	44.91	0.26	26.36	9.90	0.00	0.00	0.00	98.17
233	15SUV002	2015_5	2_6	5-2_006	stream sediments	chromite, euhedral	garnet	0.25-0.5	4.2099	0.0077	0	16.0235	9.2074	0.0000	0.6789	24.2947	4.7050	0.0733	38.0612	97.2615	34.28	7.02	8.89	0.00	0.09	11.85	1.13	33.99	0.00	0.00	97.25
234	15SUV003	2015_5	2_7	5-2_007	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.5392	0.0089	0.0017	0	21.5839	28.4372	5.3150	0.0014	9.9763	0.2277	32.1127	98.2040	0.00	0.90	18.85	41.56	0.29	27.77	8.81	0.00	0.00	0.00	98.18
235	15SUV003	2015_5	2_8	5-2_008	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.1858	0.0135	0	0	10.4384	28.9533	10.4610	0.0002	13.2021	0.1222	35.1486	98.5250	0.00	0.31	24.95	42.32	0.16	13.43	17.35	0.00	0.00	0.00	98.52
236	15SUV003	2015_5	2_9	5-2_009	stream sediments	chromite, euhedral	spinel	0.25-0.5	0.4876	0	0.0035	0	12.3953	18.2921	10.8189	0.0006	19.8507	0.1394	37.1406	99.1287	0.00	0.81	37.51	26.74	0.18	15.95	17.94	0.00	0.00	0.00	99.13
237	15SUV003	2015_5	2_10	5-2_010	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.6154	0	0.0045	0	21.5739	21.1427	8.0090	0	12.0812	0.1975	33.0957	97.7199	0.00	2.69	22.83	30.90	0.26	27.75	13.28	0.00	0.00	0.00	97.71
238	15SUV003	2015_5	2_11	5-2_011	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3572	0	0	0	17.3553	29.8827	7.8795	0.0022	9.6972	0.1801	32.8699	98.2241	0.00	0.60	18.32	43.68	0.23	22.33	13.07	0.00	0.00	0.00	98.23
239	15SUV008	2015_5	3_1	5-3_001	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.2877	0.0193	0	0	18.7778	28.4841	8.0680	0	8.7388	0.1747	32.5293	98.0797	0.00	2.15	16.51	41.63	0.23	24.16	13.38	0.00	0.00	0.00	98.06
240	15SUV020	2015_5	3_2	5-3_002	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.5359	0	0.0055	0	22.2500	25.2742	7.0786	0	10.2751	0.2021	32.2578	97.8792	0.00	0.89	19.41	36.94	0.26	28.62	11.74	0.00	0.00	0.00	97.86
241	15SUV020	2015_5	3_3	5-3_003	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.4218	0	0	0	16.9400	28.6240	8.4013	0.0012	10.4089	0.1487	33.1800	98.1259	0.00	0.70	19.67	41.84	0.19	21.79	13.93	0.00	0.00	0.00	98.12
242	15SUV020	2015_5	3_4	5-3_004	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.8197	0.0003	0.0008	0	13.0142	26.7451	9.7264	0.0026	13.1542	0.1489	34.7689	98.3811	0.00	1.37	24.85	39.09	0.19	16.74	16.13	0.00	0.00	0.00	98.37
243	15SUV020	2015_5	3_5	5-3_005	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3251	0	0.0054	0	13.5460	31.8301	9.1857	0.0020	9.8633	0.1493	33.6555	98.5623	0.00	0.54	18.64	46.52	0.19	17.43	15.23	0.00	0.00	0.00	98.55
244	15SUV020	2015_5	3_6	5-3_006	stream sediments	chromite, euhedral	chromite	0.25-0.5	2.5266	0.0030	0.0016	0	23.4635	22.8631	7.8523	0.0057	8.6418	0.1882	31.8775	97.4233	0.00	4.21	16.33	33.42	0.24	30.19	13.02	0.01	0.00	0.00	97.42
245	15SUV020	2015_5	3_7	5-3_007	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.1494	0.0064	0.0019	0	17.6406	29.8805	8.2946	0.0032	8.2668	0.1706	32.4809	97.8948	0.00	1.92	15.62	43.67	0.22	22.69	13.75	0.00	0.00	0.00	97.87
246	15SUV020	2015_5	3_8	5-3_008	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.4150	0.0053	0.0008	0	16.1815	26.6375	8.7052	0.0032	12.3710	0.1560	33.9915	98.4671	0.00	0.69	23.37	38.93	0.20	20.82	14.44	0.00	0.00	0.00	98.45
247	15SUV020	2015_5	3_9	5-3_009	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.5754	0	0.0008	0	14.6720	21.9476	9.4391	0.0051	16.1471	0.1360	35.3364	98.2594	0.00	0.96	30.51	32.08	0.18	18.88	15.65	0.00	0.00	0.00	98.26
248	15SUV020	2015_5	3_10	5-3_010	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.4850	0.0035	0	0	19.4363	27.6582	8.1525	0.0052	8.5191	0.1856	32.3285	97.7737	0.00	2.48	16.10	40.42	0.24	25.00	13.52	0.00	0.00	0.00	97.76
249	15SUV020	2015_5	4_1	5-4_001	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.1919	0.0301	0.0008	0	17.1360	30.1988	8.5843	0.0016	8.3844	0.1593	32.8112	98.4984	0.00	1.99	15.84	44.14	0.21	22.05	14.24	0.00	0.04	0.00	98.51
250	15SUV020	2015_5	4_2	5-4_002	stream sediments	chromite, euhedral	chromite	0.25-0.5	3.2943	0.0163	0	0	28.1681	24.2002	6.6576	0.0061	4.7294	0.2547	30.1127	97.4394	0.00	5.50	8.94	35.37	0.33	36.24	11.04	0.01	0.00	0.00	97.43
251	15SUV020	2015_5	4_3	5-4_003	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.4174	0.0186	0.0042	0	20.6219	24.7819	7.9190	0.0044	10.1254	0.1821	32.5752	97.6500	0.00	2.36	19.13	36.22	0.24	26.53	13.13	0.00	0.00	0.00	97.61
252	15SUV020	2015_5	4_4	5-4_004	stream sediments	chromite, euhedral	chromite	0.25-0.5	2.0340	0	0	0	27.4541	16.9453	7.4117	0.0015	11.0427	0.2204	31.8120	96.9216	0.00	3.39	20.87	24.77	0.28	35.32	12.29	0.00	0.00	0.00	96.92
253	15SUV020	2015_5	4_5	5-4_005	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.1977	0	0.0004	0	18.0825	30.1129	8.0414	0.0002	8.0754	0.1843	32.4104	98.1051	0.00	2.00	15.26	44.01	0.24	23.26	13.34	0.00	0.00	0.00	98.11
254	15SUV020	2015_5	4_6	5-4_006	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.2823	0.0027	0	0	14.7003	32.7493	8.2926	0.0027	8.9558	0.1609	32.9903	98.1369	0.00	0.47	16.92	47.87	0.21	18.91	13.75	0.00	0.00	0.00	98.13
255	15SUV020	2015_5	4_7	5-4_007	stream sediments	chromite, euhedral	chromite	0.25-0.5	1.4414	0.0018	0	0	19.3569	25.1294	8.4305	0.0003	10.5388	0.1754	33.0834	98.1578	0.00	2.40	19.91	36.73	0.23	24.90	13.98	0.00	0.00	0.00	98.15
256	15SUV020	2015_5	4_8	5-4_008	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3721	0.0166	0	0	17.7139	30.8731	7.3579	0.0007	9.0895	0.1885	32.5634	98.1758	0.00	0.62	17.17	45.12	0.24	22.79	12.20	0.00	0.00	0.00	98.14
257	15SUV020	2015_5	4_9	5-4_009	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.4698	0.0055	0.0048	0	17.1166	29.5222	7.8624	0.0006	10.0715	0.1662	33.0301	98.2495	0.00	0.78	19.03	43.15	0.21	22.02	13.04	0.00	0.00	0.00	98.23
258	15SUV026	2015_5	5_1	5-5_001	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.3063	0	0.0042	0	18.3683	30.6690	6.6449	0	9.6484	0.2083	32.6410	98.4903	0.00	0.51	18.23	44.83	0.27	23.63	11.02	0.00	0.00	0.00	98.49
259	15SUV026	2015_5	5_2	5-5_002	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.4066	0	0	0	16.6706	36.2170	6.1253	0	6.9006	0.2935	32.0203	98.6340	0.00	0.68	13.04	52.93	0.38	21.45	10.16	0.00	0.00	0.00	98.64
260	15SUV026	2015_5	5_3	5-5_003	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.4314	0.0335	0.0050	0	16.8753	27.1117	8.2994	0	11.6852	0.1519	33.5511	98.1445	0.00	0.72	22.08	39.63	0.20	21.71	13.76	0.00	0.05	0.00	98.15
261	15SUV030	2015_5	5_4	5-5_004A	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.6139	0.0057	0.0021	0	19.6702	25.1227	8.2435	0	10.1323	0.1456	32.7936	97.7296	0.00	2.69	19.14	36.72	0.19	25.31	13.67	0.00	0.00	0.00	97.72
262	15SUV030_rpt	2015_5	5_4_r	5-5_004B	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.5756	0.0124	0	0	19.8468	24.8101	8.1672	0.0007	10.3581	0.1773	32.8364	97.7847	0.00	2.63	19.57	36.26	0.23	25.53	13.54	0.00	0.00	0.00	97.76
263	15SUV030	2015_5	5_5	5-5_005A	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	2.0436	0	0.0010	0	22.5831	24.6253	7.6284	0.0059	8.6720	0.1702	31.9891	97.7184	0.00	3.41	16.39	35.99	0.22	29.05	12.65	0.01	0.00	0.00	97.72
264	15SUV030_rpt	2015_5	5_5_r	5-5_005B	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	2.1111	0.0199	0.0023	0	22.6775	24.5131	7.6478	0	8.6303	0.1819	31.9933	97.7771	0.00	3.52	16.31	35.83	0.23	29.17	12.68	0.00	0.00	0.00	97.74
265	15SUV030	2015_5	5_6	5-5_006A	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.0573	0	0	0	16.6628	29.2102	8.9225	0.0036	9.2084	0.1609	33.0755	98.3011	0.00	1.76	17.40	42.69	0.21	21.44	14.80	0.00	0.00	0.00	98.30
266	15SUV030_rpt	2015_5	5_6_r	5-5_006B	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.0486	0.0169	0	0	16.6122	29.3015	8.7255	0.0038	9.1644	0.1657	32.9359	97.9744	0.00	1.75	17.32	42.83	0.21	21.37	14.47	0.00	0.00	0.00	97.95
267	15SUV030	2015_5	5_7	5-5_007A	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.9492	0	0.0005	0	21.8305	23.7511	8.0079	0.0030	9.6930	0.1651	32.4622	97.8624	0.00	3.25	18.31	34.71	0.21	28.08	13.28	0.00	0.00	0.00	97.84
268	15SUV030_rpt	2015_5	5_7_r	5-5_007B	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.9384	0.0085	0.0066	0	21.8881	23.6276	7.9287	0.0056	9.7816	0.1656	32.4465	97.7972	0.00	3.23	18.48	34.53	0.21	28.16	13.15	0.01	0.00	0.01	97.78
269	15SUV030	2015_5	5_8	5-5_008A	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.6308	0	0.0016	0	20.8942	25.4004	7.8135	0.0055	9.2950	0.1649	32.2617	97.4676	0.00	2.72	17.56	37.12	0.21	26.88	12.96	0.00	0.00	0.00	97.45
270	15SUV030_rpt	2015_5	5_8_r	5-5_008B	Beaufort Fm	chromite, euhedral	chromite	0.25-0.5	1.6500	0	0.0054	0	20.9563	25.4637	7.9083	0.0000	9.3369	0.1783	32.4237	97.9227	0.00	2.75	17.64	37.22	0.23	26.96	13.11	0.00	0.00	0.00	97.91
271	15SUV030	2015_5	5_9	5-5_009A	Beaufort Fm	chromite, euhedral	tourmaline	0.25-0.5	0.4621	1.4600	0.0578	16.1218	8.7589	0	3.0686	0.6059	16.4413	0.0489	38.6068	85.6320	34.49	0.77	31.07	0.00	0.06	11.27	5.09	0.85	1.97	0.07	85.64
272	15SUV030_rpt	2015_5	5_9_r	5-5_009B	Beaufort Fm	chromite, euhedral	tourmaline	0.25-0.5	0.5305	1.4378	0.0607	16.0770	8.6317	0.0036	2.9871	0.5923	16.4396	0.0562	38.5011	85.3175	34.39	0.88	31.06	0.00	0.07	11.10	4.95	0.83	1.94	0.07	85.29
273	15SUV031	2015_5	5_10	5-5_010	stream sediments	chromite, euhedral	chromite	0.25-0.5	0.4269	0	0.0024	0	19.6836	29.3343	6.3499	0	9.7667	0.2012	32.3909	98.1558	0.00	0.71	18.45	42.87	0.26	25.32	10.53	0.00	0.00	0.00	98.14
274	15SUV051	2015_5	5_11	5-5_011	stream sediments	chromite, euhedral	chromite	0.5-1.0	0.5816	0	0.0022	0	13.0141	19.0883	10.3951	0.0045	18.7350	0.1218	36.4730	98.4155	0.00	0.97	35.40	27.90	0.16	16.74	17.24	0.00	0.00	0.00	98.41
275	15SUV001	2015_6	1_1	6-1_001	stream sediments	chromite	chromite	0.25-0.5	0.1706	0.0004	0.0044	0	10.9097	26.2210	10.1723	0.0025	15.5762	0.1333	35.9346	99.1251	0.00	0.28	29.43	38.32	0.17	14.04	16.87	0.00	0.00	0.00	99.11
276	15SUV001	2015_6	1_2	6-1_002	stream sediments	chromite	chromite	0.25-0.5	2.0064	0	0.0011	0	22.8742	24.0620	7.5966	0.0031	8.8419	0.1730	31.9175	97.4758	0.00	3.35	16.71	35.17	0.22	29.43	12.60	0.00	0.00	0.00	97.48
277	15SUV001	2015_6	1_3	6-1_003	stream sediments	chromite	chromite	0.25-0.5	0.1082	0.0499	0.0064	0	22.4614	26.0725	2.0179	0.0060	12.9361	0.2989	31.4847	95.4420	0.00	0.18	24.44	38.11	0.39	28.90	3.35	0.01	0.07	0.01	95.46
278	15SUV001	2015_6	1_4	6-1_004	stream sediments	chromite	chromite	0.25-0.5	0.0688	0	0	0	12.1029	32.6419	9.0058	0	10.6393	0.1485	34.0153	98.6226	0.00	0.11	20.10	47.71	0.19	15.57	14.93	0.00	0.00	0.00	98.61
279	15SUV001	2015_6	1_5	6-1_005	stream sediments	chromite	chromite	0.25-0.5	0.7358	0	0	0	15.3088	23.5071	9.3757	0.0063	14.7115	0.1345	35.0271	98.8067	0.00	1.23	27.80	34.36	0.17	19.69	15.55	0.01	0.00	0.00	98.81
280	15SUV001	2015_6	1_6	6-1_006	stream sediments	chromite	spinel	0.25-0.5	0.1229	0	0	0	8.7202	11.2768	12.2418	0.0056	26.8714	0.0853	39.7730	99.0970	0.00	0.21	50.77	16.48	0.11	11.22	20.30	0.01	0.00	0.00	99.10
281	15SUV001	2015_6	1_7	6-1_007	stream sediments	chromite	spinel	0.25-0.5	0.2132	0	0	0	12.1093	16.4135	10.9609	0.0018	21.5739	0.1074	37.6249	99.0049	0.00	0.36	40.76	23.99	0.14	15.58	18.18	0.00	0.00	0.00	99.01
282	15SUV001	2015_6	1_8	6-1_008	stream sediments	chromite	chromite	0.25-0.5	0.5670	0	0.0019	0	11.9417	20.7306	10.5518	0.0030	18.3531	0.1216	36.6768	98.9475	0.00	0.95	34.68	30.30	0.16	15.36	17.50	0.00	0.00	0.00	98.95
283	15SUV001	2015_6	1_9	6-1_009	stream sediments	chromite	chromite	0.25-0.5	0.3680	0.0026	0.0028	0	11.1286	20.8920	10.5560	0	18.9220	0.1241	36.8947	98.8908	0.00	0.61	35.75	30.54	0.16	14.32	17.50	0.00	0.00	0.00	98.88
284	15SUV001	2015_6	1_10	6-1_010	stream sediments	chromite	chromite	0.25-0.5	0.1694	0.0030	0	0	11.8466	27.4877	9.6992	0	14.3216	0.1479	35.3628	99.0383	0.00	0.28	27.06	40.18	0.19	15.24	16.08	0.00	0.00	0.00	99.03
285	15SUV001	2015_6	1_11	6-1_011	stream sediments	chromite	chromite	0.25-0.5	3.2579	0	0.0020	0	26.5111	24.8027	8.0649	0.0036	3.9088	0.2427	30.0785	96.8721	0.00	5.43	7.39	36.25	0.31	34.11	13.37	0.00	0.00	0.00	96.86
286	15SUV002	2015_6	2_1	6-2_001	stream sediments	chromite	chromite	0.25-0.5	1.0876	0	0.0001	0	17.0856	29.5046	8.5704	0.0024	8.8627	0.1581	32.8123	98.0838	0.00	1.81	16.75	43.12	0.20	21.98	14.21	0.00	0.00	0.00	98.07
287	15SUV002	2015_6	2_2	6-2_002	stream sediments	chromite	chromite	0.25-0.5	0.4548	0.0047	0	0	12.2113	23.7322	10.0393	0.0037	16.4019	0.1447	35.9998	98.9922	0.00	0.76	30.99	34.69	0.19	15.71	16.65	0.00	0.00	0.00	98.99
288	15SUV002	2015_6	2_3	6-2_003	stream sediments	chromite	chromite	0.25-0.5	0.3027	0	0.0024	0	19.6045	30.5755	6.0674	0.0030	9.4617	0.2201	32.4076	98.6449	0.00	0.50	17.88	44.69	0.28	25.22	10.06	0.00	0.00	0.00	98.63
289	15SUV002	2015_6	2_4	6-2_004	stream sediments	chromite	spinel	0.25-0.5	0.1331	0	0.0026	0	8.8267	13.2616	12.0024	0	25.3864	0.0838	39.2458	98.9424	0.00	0.22	47.97	19.38	0.11	11.36	19.90	0.00	0.00	0.00	98.94
290	15SUV002	2015_6	2_5	6-2_005	stream sediments	chromite	chromite	0.25-0.5	0.2730	0.0016	0	0	16.3272	32.3442	7.3015	0.0052	8.9912	0.2053	32.6559	98.1051	0.00	0.46	16.99	47.27	0.27	21.00	12.11	0.00	0.00	0.00	98.10
291	15SUV002	2015_6	2_6	6-2_006	stream sediments	chromite	chromite	0.25-0.5	0.0230	0.0269	0.0014	0	15.5843	42.4648	3.8110	0.0009	3.6770	0.5271	30.0237	96.1400	0.00	0.04	6.95	62.07	0.68	20.05	6.32	0.00	0.00	0.00	96.11
292	15SUV002	2015_6	2_7	6-2_007	stream sediments	chromite	chromite	0.25-0.5	2.1264	0	0.0008	0	23.7191	23.6498	7.5417	0.0043	8.5155	0.1992	31.7312	97.4881	0.00	3.55	16.09	34.57	0.26	30.51	12.51	0.00	0.00	0.00	97.49
293	15SUV002	2015_6	2_8	6-2_008	stream sediments	chromite	chromite	0.25-0.5	0.9164	0.0143	0.0032	0	21.6212	29.7002	5.8935	0.0051	8.0147	0.2810	31.6136	98.0632	0.00	1.53	15.14	43.41	0.36	27.82	9.77	0.00	0.00	0.00	98.03
294	15SUV003	2015_6	2_9	6-2_009	stream sediments	chromite	chromite	0.5-1.0	0.1090	0.0088	0.0010	0	10.9536	27.9847	9.9403	0.0020	14.3585	0.1364	35.4872	98.9816	0.00	0.18	27.13	40.90	0.18	14.09	16.48	0.00	0.00	0.00	98.96
295	15SUV003	2015_6	2_10	6-2_010	stream sediments	chromite	spinel	0.5-1.0	0.0318	0	0.0022	0	8.7011	6.6190	12.3320	0	30.4979	0.0874	40.8406	99.1119	0.00	0.05	57.63	9.67	0.11	11.19	20.45	0.00	0.00	0.00	99.10
296	15SUV003	2015_6	3_1	6-3_001	stream sediments	chromite	chromite	0.25-0.5	0.3332	0	0	0	12.8132	27.0881	9.3050	0	13.9059	0.1465	34.9339	98.5258	0.00	0.56	26.27	39.59	0.19	16.48	15.43	0.00	0.00	0.00	98.52
297	15SUV003	2015_6	3_2	6-3_002	stream sediments	chromite	chromite	0.25-0.5	0.1716	0.0012	0	0	10.5310	22.8109	10.5393	0.0024	18.1089	0.1175	36.7418	99.0246	0.00	0.29	34.22	33.34	0.15	13.55	17.48	0.00	0.00	0.00	99.03
298	15SUV003	2015_6	3_3	6-3_003	stream sediments	chromite	chromite	0.25-0.5	1.3670	0	0	0	18.5628	29.6779	8.2523	0.0053	7.7839	0.1719	32.3383	98.1594	0.00	2.28	14.71	43.38	0.22	23.88	13.68	0.00	0.00	0.00	98.15
299	15SUV003	2015_6	3_4	6-3_004	stream sediments	chromite	chromite	0.25-0.5	0.3221	0.0114	0	0	12.2003	31.7118	9.4627	0.0004	10.5585	0.1401	34.0137	98.4210	0.00	0.54	19.95	46.35	0.18	15.70	15.69	0.00	0.00	0.00	98.41

300	15SUV003	2015_6	3_5	6-3_005	stream sediments	chromite	chromite	0.25-0.5	0.6617	0.0111	0.0028	0	13.5339	21.5719	10.0501	0.0047	16.7615	0.1379	35.8480	98.5836	0.00	1.10	31.67	31.53	0.18	17.41	16.67	0.00	0.00	0.00						98.56
301	15SUV003	2015_6	3_6	6-3_006	stream sediments	chromite	spinel	0.25-0.5	0.0111	0.0079	0	0	8.6866	11.5919	12.1693	0.0015	26.9054	0.0916	39.8195	99.2846	0.00	0.00	50.84	16.94	0.12	11.18	20.18	0.00	0.00	0.00						99.26
302	15SUV003	2015_6	3_7	6-3_007	stream sediments	chromite	chromite	0.25-0.5	0.3310	0	0	0	12.2551	25.7175	9.9304	0	15.0974	0.1381	35.6090	99.0785	0.00	0.55	28.53	37.59	0.18	15.77	16.47	0.00	0.00	0.00						99.09
303	15SUV003	2015_6	3_8	6-3_008	stream sediments	chromite	chromite	0.25-0.5	0.2626	0.0024	0	0	15.6326	17.7804	9.0730	0.0013	19.5985	0.1807	36.3203	98.8518	0.00	0.44	37.03	25.99	0.23	20.11	15.05	0.00	0.00	0.00						98.85
304	15SUV003	2015_6	3_9	6-3_009	stream sediments	chromite	chromite	0.25-0.5	0.5471	0	0.0011	0	14.0486	20.9451	9.8686	0.0060	17.2937	0.1301	35.9775	98.8178	0.00	0.91	32.68	30.61	0.17	18.07	16.37	0.01	0.00	0.00						98.82
305	15SUV003	2015_6	3_10	6-3_010	stream sediments	chromite	chromite	0.25-0.5	0.0800	0	0	0	9.7183	17.5518	11.2356	0.0016	22.1886	0.1026	38.1025	98.9811	0.00	0.13	41.93	25.65	0.13	12.50	18.63	0.00	0.00	0.00						98.97
306	15SUV003	2015_6	3_11	6-3_011	stream sediments	chromite	chromite	0.25-0.5	0.2321	0	0	0	11.4614	29.0572	9.7467	0.0065	13.2951	0.1512	35.1394	99.0896	0.00	0.39	25.12	42.47	0.20	14.75	16.16	0.01	0.00	0.00						99.10
307	15SUV004	2015_6	4_1	6-4_001	stream sediments	chromite	chromite	0.25-0.5	0.1722	0	0	0	23.5842	28.0759	3.5936	0.0030	10.9674	0.2418	32.0236	98.6617	0.00	0.29	20.72	41.04	0.31	30.34	5.96	0.00	0.00	0.00						98.66
308	15SUV004	2015_6	4_2	6-4_002	stream sediments	chromite	chromite	0.25-0.5	0.3467	0.0006	0	0	17.7767	31.8616	6.5345	0.0063	9.0692	0.2247	32.4677	98.2879	0.00	0.58	17.14	46.57	0.29	22.87	10.84	0.01	0.00	0.00						98.30
309	15SUV004	2015_6	4_3	6-4_003	stream sediments	chromite	ilmenite	0.25-0.5	28.5804	0.0141	0.0051	0.0033	37.8181	0.0096	0.3457	0.0036	0.0292	0.2445	30.2684	97.3219	0.00	47.67	0.06	0.00	0.32	48.65	0.57	0.00	0.00	0.00						97.27
310	15SUV005	2015_6	4_4	6-4_004	stream sediments	chromite	chromite	0.25-0.5	0.0393	0.0206	0	0	25.0965	23.9423	3.8782	0.0024	12.8113	0.2722	32.3033	98.3662	0.00	0.07	24.21	34.99	0.35	32.29	6.43	0.00	0.00	0.00						98.34
311	15SUV006	2015_6	4_5	6-4_005	stream sediments	chromite	chromite	0.25-0.5	0.4447	0.0011	0	0	12.0716	27.3011	10.0019	0.0019	13.6250	0.1436	35.1034	98.6942	0.00	0.74	25.74	39.90	0.19	15.53	16.59	0.00	0.00	0.00						98.69
312	15SUV009	2015_6	4_6	6-4_006	stream sediments	chromite	chromite	0.5-1.0	0.6931	0.0081	0.0007	0	15.5332	21.0488	9.3578	0.0017	16.3915	0.1413	35.4138	98.5901	0.00	1.16	30.97	30.76	0.18	19.98	15.52	0.00	0.00	0.00						98.57
313	15SUV009	2015_6	5_1	6-5_001	stream sediments	chromite	ilmenite	0.25-0.5	29.3794	0	0	0	37.2021	0.0072	0.1410	0	0.0050	0.4297	30.5112	97.6755	0.00	49.01	0.00	0.00	0.55	47.86	0.23	0.00	0.00	0.00						97.65
314	15SUV009	2015_6	5_2	6-5_002	stream sediments	chromite	ilmenite	0.25-0.5	29.5114	0	0	0.0025	37.2020	0.0000	0.1285	0.0053	0	0.5626	30.6270	98.0394	0.00	49.23	0.00	0.00	0.73	47.86	0.21	0.00	0.00	0.00						98.03
315	15SUV009	2015_6	5_3	6-5_003	stream sediments	chromite	ilmenite	0.25-0.5	29.2232	0	0.0011	0.0059	37.5479	0.0058	0.0778	0	0.0107	0.5253	30.5035	97.9011	0.00	48.75	0.02	0.00	0.68	48.31	0.13	0.00	0.00	0.00						97.89
316	15SUV009	2015_6	5_4	6-5_004	stream sediments	chromite	ilmenite	0.25-0.5	21.5905	0.0027	0	0.0088	44.2926	0.0264	1.0096	0.0028	0.0674	0.2458	27.9338	95.1803	0.00	36.01	0.13	0.04	0.32	56.98	1.67	0.00	0.00	0.00						95.15
317	15SUV009	2015_6	5_5	6-5_005	stream sediments	chromite	ilmenite	0.25-0.5	33.2265	0.0238	0.0174	0.1150	24.7790	0.0418	0.0231	0.0187	0.0864	2.4471	30.2707	91.0495	0.25	55.42	0.16	0.06	3.16	31.88	0.04	0.03	0.00	0.02						91.02
318	15SUV009	2015_6	5_6	6-5_006	stream sediments	chromite	ilmenite	0.25-0.5	28.8106	0	0.0013	0.0055	37.1967	0.0032	0.8020	0.0023	0.0463	0.3411	30.5812	97.7902	0.00	48.06	0.09	0.00	0.44	47.85	1.33	0.00	0.00	0.00						97.77
319	15SUV009	2015_6	5_7	6-5_007	stream sediments	chromite	ilmenite	0.25-0.5	28.8188	0.0103	0.0022	0	36.8873	0.0136	0.4159	0.0024	0.0555	0.2525	30.2287	96.6871	0.00	48.07	0.10	0.00	0.33	47.46	0.69	0.00	0.00	0.00						96.65
320	15SUV009	2015_6	5_8	6-5_008	stream sediments	chromite	ilmenite	0.25-0.5	30.8045	0.0157	0.0027	0.0156	23.4235	1.0362	7.9914	0.0191	0.3031	0.2207	33.3943	97.2268	0.03	51.38	0.57	1.51	0.29	30.13	13.25	0.03	0.00	0.00						97.19
321	15SUV009	2015_6	5_9	6-5_009	stream sediments	chromite	ilmenite	0.25-0.5	26.9529	0.0108	0.0036	0.0020	39.0767	0.0072	0.8169	0.0009	0.0282	0.3943	29.8897	97.1832	0.00	44.96	0.05	0.00	0.51	50.27	1.35	0.00	0.00	0.00						97.14
322	15SUV009	2015_6	5_10	6-5_010	stream sediments	chromite	chromite	0.25-0.5	0.4456	0.0007	0	0	16.5752	30.0719	7.7432	0.0053	10.2321	0.1689	33.1770	98.4198	0.00	0.74	19.33	43.95	0.22	21.32	12.84	0.00	0.00	0.00						98.40
323	15SUV009	2015_6	6_1a_?	6-6-1A_titanite	stream sediments	chromite	titanite	0.25-0.5	22.4072	0.0115	0.0018	14.4153	0.7293	0.0098	0.0000	19.9041	0.2557	0.0017	39.7850	97.5213	30.84	37.38	0.48	0.00	0.00	0.94	0.00	27.85	0.00	0.00						97.49
324	15SUV009	2015_6	6_1b_?	6-6-1B_ilmenite	stream sediments	chromite	ilmenite	0.25-0.5	29.1600	0.0216	0.0009	0.0049	37.3062	0.0180	0.1751	0.0069	0.0285	0.5566	30.4957	97.7741	0.00	48.64	0.05	0.00	0.72	47.99	0.29	0.01	0.00	0.00						97.70
325	15SUV009	2015_6	6_2	6-6_002	stream sediments	chromite	ilmenite	0.25-0.5	28.0417	0	0.0017	0	38.5776	0	0.2968	0.0007	0.0050	0.6187	30.1664	97.7085	0.00	46.78	0.00	0.00	0.80	49.63	0.49	0.00	0.00	0.00						97.70
326	15SUV009	2015_6	6_3	6-6_003	stream sediments	chromite	chromite	0.25-0.5	0.0340	0.0099	0.0017	0	17.1781	41.4687	4.5524	0	4.0893	0.3021	30.8110	98.4472	0.00	0.06	7.73	60.61	0.39	22.10	7.55	0.00	0.00	0.00						98.44
327	15SUV009	2015_6	6_4	6-6_004	stream sediments	chromite	chromite	0.25-0.5	0.1363	0.0043	0.0003	0	16.0873	24.5919	7.8501	0.0087	15.2500	0.1754	34.8395	98.9438	0.00	0.23	28.81	35.94	0.23	20.70	13.02	0.01	0.00	0.00						98.94
328	15SUV009	2015_6	6_5	6-6_005	stream sediments	chromite	ilmenite	0.25-0.5	30.9186	0	0.0019	0.0051	34.6387	0.0621	0.0320	0.0036	0.0223	0.4657	30.7922	96.9422	0.00	51.57	0.04	0.09	0.60	44.56	0.05	0.00	0.00	0.00						96.91
329	15SUV009	2015_6	6_6	6-6_006	stream sediments	chromite	ilmenite	0.25-0.5	29.1019	0	0.0021	0.0094	37.4949	0.0005	0.1505	0.0079	0.0056	0.6409	30.4893	97.9030	0.00	48.54	0.00	0.00	0.83	48.24	0.25	0.01	0.00	0.00						97.87
330	15SUV009	2015_6	6_7	6-6_007	stream sediments	chromite	chromite	0.25-0.5	0.2257	0	0.0011	0	10.9218	24.9768	10.2159	0.0000	16.4374	0.1352	36.1940	99.1079	0.00	0.38	31.06	36.51	0.17	14.05	16.94	0.00	0.00	0.00						99.11
331	15SUV009	2015_6	6_8	6-6_008	stream sediments	chromite	ilmenite	0.25-0.5	28.9755	0	0.0012	0	37.5715	0.0219	0.4882	0.0024	0.0232	0.2267	30.5408	97.8513	0.00	48.33	0.04	0.00	0.29	48.34	0.81	0.00	0.00	0.00						97.81
332	15SUV009	2015_6	6_9	6-6_009	stream sediments	chromite	chromite	0.25-0.5	0.9795	0.0114	0	0	16.7324	30.3551	8.5415	0.0034	8.6250	0.1688	32.8084	98.2255	0.00	1.63	16.30	44.37	0.22	21.53	14.16	0.00	0.00	0.00						98.21
333	15SUV009	2015_6	6_10	6-6_010	stream sediments	chromite	ilmenite	0.25-0.5	33.1971	0.0296	0.0086	0.1283	23.6653	0.0593	0.6085	0.0370	0.2225	0.2301	29.8235	88.0097	0.27	55.37	0.42	0.09	0.30	30.45	1.01	0.05	0.04	0.01						88.01
334	15SUV010	2015_7	1_1	7-1_001	stream sediments	chromite	chromite	0.25-0.5	0.0357	0.0012	0.0015	0	9.7852	21.4431	10.9819	0.0026	19.4515	0.1088	37.2895	99.1010	0.00	0.06	36.75	31.34	0.14	12.59	18.21	0.00	0.00	0.00						99.09
335	15SUV010	2015_7	1_2	7-1_002	stream sediments	chromite	chromite	0.25-0.5	0.0943	0.0032	0	0	12.3904	23.5995	8.4023	0.0011	18.0254	0.2210	36.1361	98.8733	0.00	0.16	34.06	34.49	0.29	15.94	13.93	0.00	0.00	0.00						98.87
336	15SUV014	2015_7	1_3	7-1_003	stream sediments	chromite	chromite	0.25-0.5	0.5282	0	0	0	21.3573	27.0619	5.8535	0.0053	10.8182	0.2107	32.5021	98.3370	0.00	0.88	20.44	39.55	0.27	27.48	9.71	0.00	0.00	0.00						98.33
337	15SUV014	2015_7	1_4	7-1_004	stream sediments	chromite	chromite	0.25-0.5	0.4198	0.0135	0	0	15.8044	25.1218	8.7904	0.0014	13.6696	0.1690	34.4039	98.3936	0.00	0.70	25.83	36.72	0.22	20.33	14.58	0.00	0.00	0.00						98.38
338	15SUV014	2015_7	1_5	7-1_005	stream sediments	chromite	chromite	0.25-0.5	0.3307	0	0.0002	0	12.2552	29.0281	8.4250	0.0174	12.9446	0.1243	34.2340	97.3595	0.00	0.55	24.46	42.43	0.16	15.77	13.97	0.02	0.00	0.00						97.36
339	15SUV014	2015_7	1_6	7-1_006	stream sediments	chromite	chromite	0.25-0.5	0.3692	0	0.0010	0	16.2562	27.0997	8.4249	0.0041	12.0397	0.1757	33.7207	98.0913	0.00	0.62	22.75	39.61	0.23	20.91	13.97	0.00	0.00	0.00						98.09
340	15SUV014	2015_7	1_7	7-1_007	stream sediments	chromite	chromite	0.25-0.5	0.3232	0	0	0	11.3875	32.2151	9.2807	0.0013	11.1229	0.1683	34.4007	98.8998	0.00	0.54	21.02	47.08	0.22	14.65	15.39	0.00	0.00	0.00						98.90
341	15SUV018	2015_7	1_8	7-1_008A	Beaufort Fm	chromite	chromite	0.25-0.5	0.9647	0	0.0006	0	17.6328	29.7883	7.5853	0.0023	9.5446	0.2050	32.9896	98.7131	0.00	1.61	18.03	43.54	0.26	22.68	12.58	0.00	0.00	0.00						98.70
342	15SUV018_rpt	2015_7	1_8_r	7-1-008B	Beaufort Fm	chromite	chromite	0.25-0.5	0.9308	0.0099	0	0	17.6040	29.6903	7.5203	0.0029	9.5392	0.1849	32.8636	98.3459	0.00	1.55	18.02	43.39	0.24	22.65	12.47	0.00	0.00	0.00						98.32
343	15SUV018	2015_7	1_9	7-1_009A	Beaufort Fm	chromite	chromite	0.25-0.5	0.8695	0	0.0009	0	21.9983	29.0219	5.0280	0.0039	8.9129	0.2589	31.5941	97.6884	0.00	1.45	16.84	42.42	0.33	28.30	8.34	0.00	0.00	0.00						97.68
344	15SUV018_rpt	2015_7	1_9_r	7-1-009B	Beaufort Fm	chromite	chromite	0.25-0.5	0.8487	0.0151	0.0026	0	21.6855	29.0177	5.3013	0.0012	9.0506	0.2502	31.7929	97.9657	0.00	1.42	17.10	42.41	0.32	27.90	8.79	0.00	0.00	0.00						97.94
345	15SUV018	2015_7	1_10	7-1_010A	Beaufort Fm	chromite	chromite	0.25-0.5	1.5707	0.0131	0	0	19.4910	28.2472	8.0749	0.0031	8.0286	0.1691	32.1836	97.7812	0.00	2.62	15.17	41.29	0.22	25.08	13.39	0.00	0.00	0.00						97.77
346	15SUV018_rpt	2015_7	1_10_r	7-1-010B	Beaufort Fm	chromite	chromite	0.25-0.5	1.5835	0.0075	0.0031	0	19.5118	28.3044	8.1519	0.0053	7.9855	0.1695	32.2365	97.9589	0.00	2.64	15.09	41.37	0.22	25.10	13.52	0.00	0.00	0.00						97.94
347	15SUV020	2015_7	1_11	7-1_011	stream sediments	chromite	chromite	0.5-1.0	0.6546	0	0	0	13.2796	24.9646	9.8835	0.0028	14.5985	0.1390	35.2979	98.8206	0.00	1.09	27.58	36.49	0.18	17.08	16.39	0.00	0.00	0.00						98.81
348	15SUV020	2015_7	2_1	7-2_001	stream sediments	chromite	chromite	0.25-0.5	0.4070	0	0.0006	0	11.6870	22.8093	10.1838	0	17.2831	0.1269	36.2624	98.7601	0.00	0.68	32.66	33.34	0.16	15.04	16.89	0.00	0.00	0.00						98.77
349	15SUV020	2015_7	2_2	7-2_002	stream sediments	chromite	chromite	0.25-0.5	0.0457	0.0061	0	0	11.0350	28.7805	9.8202	0.0040	13.7720	0.1355	35.2341	98.8330	0.00	0.08	26.02	42.06	0.18	14.20	16.28	0.00	0.00	0.00						98.82
350	15SUV020	2015_7	2_3	7-2_003	stream sediments	chromite	chromite	0.25-0.5	0.8646	0.0017	0.0031	0	15.8807	24.1362	9.0391	0	13.7195	0.1351	34.4622	98.2422	0.00	1.44	25.92	35.28	0.17	20.43	14.99	0.00	0.00	0.00						98.23
351	15SUV020	2015_7	2_4	7-2_004	stream sediments	chromite	chromite	0.25-0.5	0.1045	0	0	0	12.4046	28.5492	9.3222	0.0025	13.3955	0.1556	34.8994	98.8335	0.00	0.17	25.31	41.73	0.20	15.96	15.46	0.00	0.00	0.00						98.83
352	15SUV020	2015_7	2_5	7-2_005	stream sediments	chromite	chromite	0.25-0.5	0.0631	0	0.0007	0	12.0208	32.3992	9.1653	0	10.8071	0.1703	34.1366	98.7630	0.00	0.11	20.42	47.35	0.22	15.46	15.20	0.00	0.00	0.00						98.76
353	15SUV020	2015_7	2_6	7-2_006	stream sediments	chromite	spinel	0.25-0.5	0.1899	0	0	0.0300	8.5815	6.8583	12.6860	0.0060	29.9030	0.0714	40.7578	99.0839	0.06	0.32	56.50	10.02	0.09	11.04	21.04	0.01	0.00	0.00						99.08
354	15SUV020	2015_7	2_7	7-2_007	stream sediments	chromite	chromite	0.25-0.5	0.3064	0	0	0	12.3801	23.9871	9.8946	0	16.2697	0.1562	35.8541	98.8480	0.00	0.51	30.74	35.06	0.20	15.93	16.41	0.00	0.00	0.00						98.85
355	15SUV020	2015_7	2_8	7-2_008	stream sediments	chromite	chromite	0.25-0.5	0.5465	0	0	0	12.9357	19.1221	10.4607	0	18.9651	0.1334	36.6917	98.8552	0.00	0.91	35.83	27.95	0.17	16.64	17.35	0.00	0.00	0.00						98.85
356	15SUV020	2015_7	2_9	7-2_009	stream sediments	chromite	chromite	0.25-0.5	1.7085	0	0.0016	0	19.5890	28.3409	8.2515	0.0047	7.5268	0.1826	32.0173	97.6229	0.00	2.85	14.22	41.42	0.24	25.20	13.68	0.00	0.00	0.00						97.61
357	15SUV020	2015_7	3_1	7-3_001	stream sediments	chromite	spinel	0.25-0.5	0.0830	0.0146	0.0007	0	10.0212	17.0786	11.1228	0.0021	22.4444	0.1115	38.1341	99.0129	0.00	0.14	42.41	24.96	0.14	12.89	18.45	0.00	0.00	0.00						98.99
358	15SUV020	2015_7	3_2	7-3_002	stream sediments	chromite	spinel	0.25-0.5	0.0502	0.0056	0.0014	0	9.1313	11.2080	11.9726	0.0007	26.8404	0.0928	39.6080	98.9109	0.00	0.08	50.71	16.38	0.12	11.75	19.85	0.00	0.00	0.00						98.89
359	15SUV020	2015_7	3_3	7-3_003	stream sediments	chromite	chromite	0.25-0.5	0.4438	0.0071	0.0012	0	11.7423	23.0524	10.3085	0.0050	17.0012	0.1381	36.2543	98.9538	0.00	0.74	32.12	33.69	0.18	15.11	17.09	0.00	0.00	0.00						98.93
360	15SUV020	2015_7	3_4	7-3_004	stream sediments	chromite	chromite	0.25-0.5	0.9454	0	0.0007	0	16.8948	30.8911	8.4036	0.0035	8.1433	0.1878	32.5621	98.0322	0.00	1.58	15.39	45.15	0.24	21.74	13.94	0.00	0.00	0.00						98.04
361	15SUV020	2015_7	3_5	7-3_005	stream sediments	chromite	spinel	0.25-0.5	0.2303	0.0051	0	0	14.4131	11.1179	10.3853	0.0087	24.4311	0.1214	38.0232	98.7361	0.00	0.38	46.16	16.25	0.16	18.54	17.22	0.01	0.00	0.00						98.72
362	15SUV020	2015_7	3_6	7-3_006	stream sediments	chromite	chromite	0.25-0.5	0.2151	0.0038	0.0056	0	20.9875	30.2625	5.2363	0.0036	9.3110	0.2437	31.9289	98.1980	0.00	0.36	17.59	44.23	0.31	27.00	8.68	0.00	0.00	0.00						98.17
363	15SUV020	2015_7	3_7	7-3_007	stream sediments	chromite	chromite	0.25-0.5	0.6501	0.0149	0.0012	0	16.5512	36.8299	7.2045	0.0071	5.0472	0.2223	31.4810	98.0093	0.00	1.08	9.54	53.83	0.29	21.29	11.95	0.01	0.00	0.00						97.99
364	15SUV020	2015_7	3_8	7-3_008	stream sediments	chromite	chromite	0.25-0.5	2.9561	0.0062	0.0031	0	32.4758	21.5391	4.2906	0.0013	5.6793	0.2028	29.1594	96.3134	0.00	4.93	10.73	31.48	0.26	41.78	7.12	0.00	0.00	0.00						96.30
365	15SUV024	2015_7	4_1	7-4_001	fluvial	chromite	spinel	0.25-0.5	0.5535	0.0066	0.0024	0	14.6266	19.5141	9.7339	0.0042	17.9403	0.1402	35.9781	98.4999	0.00	0.92	33.90	28.52	0.18	18.82	16.14	0.00	0.00	0.00						98.48
366	15SUV025	2015_7	4_2	7-4_002	stream sediments	chromite	chromite	0.25-0.5	1.8783	0.0001	0	0	20.7217	25.0359	8.2689	0.0010	9.1413	0.1732	32.3728	97.5933	0.00	3.13	17.27	36.59	0.22	26.66	13.71	0.00	0.00	0.00						97.58
367	15SUV026	2015_7	4_3	7-4_003	stream sediments	chromite	chromite	0.5-1.0	0.5463	0.0140	0	0	16.3810	24.9277	8.6313	0.0036	13.4035	0.1734	34.2250	98.3059	0.00	0.91	25.33	36.43	0.22	21.07	14.31	0.00	0.00	0.00						98.27
368	15SUV026	2015_7	4_4	7-4_004	stream sediments	chromite	chromite	0.5-1.0	2.1030	0.0236	0.0032	0	33.5211	23.5703	3.7709	0.0026	4.3557	0.2102	28.3159	95.8765	0.00	3.51	8.23	34.45	0.27	43.12	6.25	0.00	0.00	0.00						95.83
369	15SUV026	2015_7	4_5	7-4_005	stream sediments	chromite	chromite	0.25-0.5	0.1519	0.0069	0.0020	0.0000	12.2415	28.9179	9.2480	0.0000	13.1261	0.1751	34.7736	98.6430	0.00	0.25	24.80	42.27	0.23	15.75	15.34	0.00	0.00	0.00						98.64
370	15SUV026	2015_7	4_6	7-4_006	stream sediments	chromite	chromite	0.25-0.5	0.0090	0.0000	0.0024	0.0000	11.5222	31.1643	8.1726	0.0000	13.0509	0.2020	34.7396	98.8630	0.00	0.00	24.66	45.55	0.26	14.82	13.55	0.00	0.00	0.00						98.84
371	15SUV026	2015_7	4_7	7-4_007	stream sediments	chromite	chromite	0.25-0.5	0.4878	0.0002	0.0023	0.0000	13.7910	24.4822	9.3758	0.0000	15.1546	0.1658	35.2779	98.7376	0.00	0.81	28.63	35.78	0.21	17.74	15.55	0.00	0.00	0.00						98.72
372	15SUV026	2015_7	4_8	7-4_008	stream sediments	chromite	chromite	0.25-0.5	0.1397	0.0112	0.0029	0.0000	13.3752	24.3663	8.6675	0.0000	16.5772	0.2889	35.7117	99.1407	0.00	0.23	31.32	35.61	0.37	17.21	14.37	0.00	0.00	0.00						99.11
373	15SUV050	2015_7	5_1	7-5_001	stream sediments	chromite	chromite	0.25-0.5	0.4867	0.0083	0.0000	0.0000	16.8517	24.4509	8.5967	0.0021	13.6706	0.1800	34.3142	98.5612	0.00	0.81	25.83	35.74	0.23	21.68	14.26	0.00	0.00	0.00						98.55
374	15SUV050	2015_7	5_2	7-5_002	stream sediments	chromite	chromite	0.25-0.5	0.3699	0.0000	0.0024	0.0000	20.6505	29.1267	5.6713	0.0071	9.8766	0.2292	32.1961	98.1298	0.00	0.62	18.66	42.57	0.30	26.57	9.40	0.01	0.00	0.00						98.13
375	15SUV050	2015_7	5_3	7-5_003	stream sediments	chromite	chromite	0.25-0.5	0.1493	0.0000	0.0042	0.0000	14.9221	28.4227	8.1479	0.0038	12.5807	0.1686	34.0996	98.4989	0.00	0.25	23.77	41.54	0.22	19.20	13.51	0.00	0.00	0.00						98.49
376	15SUV051	2015_7	5_4	7-5_004	stream sediments	chromite	chromite	0.25-0.5	0.1514	0.0025	0.0000	0.0000	11.0788	24.9690	10.2376	0.0044	16.3074	0.1372	36.0874	98.9758	0.00	0.25	30.81	36.49	0.18	14.25	16.98	0.00	0.00	0.00						98.96
377	15SUV051	2015_7	5_5	7-5_005	stream sediments	chromite	chromite	0.25-0.5	1.2950	0.0144	0.0031	0.0000	15.9953	28.7733	8.6460	0.0000	9.8194	0.1823	33.2133	97.9421	0.00	2.16	18.55	42.05	0.24	20.58	14.34	0.00	0.00	0.00						97.92
378	15SUV051	2015_7	5_6	7-5_006	stream sediments	chromite	chromite	0.25-0.5	0.3214	0.0060	0.0019	0.0000	18.9719	27.4246	6.7537	0.0033	11.6093	0.1908	33.1402	98.4230	0.00	0.54	21.94	40.08	0.25	24.41	11.20	0.00	0.00	0.00						98.42
379	15SUV054	2015_7	5_7	7-5_007	till	chromite	chromite	0.25-0.5	0.3437	0.0019	0.0007	0.0000	16.0958	30.2931	8.2798	0.0000	9.8506	0.1578	33.0828	98.1061	0.00	0.57	18.61	44.28	0.20	20.71	13.73	0.00	0.00	0.00						98.10
380	15SUV054	2015_7	5_8	7-5_008	till	chromite	chromite	0.25-0.5	1.2226	0.0218	0.0000	0.0000	18.1355	28.3233	8.3592	0.0022	9.0853	0.1754	32.7295	98.0549	0.00	2.04	17.17	41.40	0.23	23.33	13.86	0.00	0.00	0.00						98.03
382	16SUV023	2016_1	1_1_2	222	Beaufort Fm	GO	garnet	0.25-0.5	0.4113	0.0312	0.0037	19.5851	6.5500	2.3342	11.9732	3.8279	10.5192	0.2324	44.4308	99.9697	41.90	0.69	19.88	3.41	0.30	8.43	19.86	5.36	0.04	0.00	0.00	0.02	0.00	0.06	0.03	99.97
383	16SUV023	2016_1	1_1_3	223	Beaufort Fm	GO	garnet	0.25-0.5	0.1461	0.0301	0.0025	19.8596	6.0466	0.5586	12.7679	3.0824	12.0891	0.2164	45.2017	100.0480	42.49	0.24	22.84	0.82	0.28	7.78	21.17	4.31	0.04	0.00	0.00	0.02	0.00	0.02	0.00	100.02
384	16SUV028	2016_1	1_1_4	224	stream sediments	GO	garnet	0.5-1.0	0.0947	0.0165	0.0016	18.5789	16.6202	0.0575	5.9139	4.5115	11.9448	0.4685	42.5075	100.7600	39.75	0.16	22.57	0.08	0.60	21.38	9.81	6.31	0.02	0.00	0.00	0.00	0.00	0.05	0.00	100.74
385	16SUV028	2016_1	1_1_5	225	stream sediments	GO	garnet	0.25-0.5	0.3744	0.0219	0.0015	19.8642	6.3873	0.5880	12.2924	3.7140	12.0557	0.2265	45.3839	100.9580	42.50	0.62	22.78	0.86	0.29	8.22	20.38	5.20	0.03	0.00	0.00	0.00	0.00	0.03	0.00	100.91
386	16SUV015	2016_1	1_1_6	226	stream sediments	GP	garnet	0.25-0.5	0.0497	0.0180	0.0066	19.7933	5.5203	3.9544	12.1538	3.8204	10.2679	0.2840	44.7591	100.6720	42.35	0.08	19.40	5.78	0.37	7.10	20.15	5.35	0.02	0.01	0.00	0.02	0.00	0.04	0.00	100.67
387	16SUV023	2016_1	1_2_1	227	Beaufort Fm	GP	garnet	0.25-0.5	0.0744	0.0259	0.0064	19.4529	5.1280	5.7453	12.3772	3.5449	9.0864	0.2732	44.1065	99.8802	41.62	0.12	17.17	8.40	0.35	6.60	20.53	4.96	0.03	0.01	0.00	0.00	0.00	0.05	0.03	99.87
388	16SUV023	2016_1	1_2_2	228	Beaufort Fm	GP	garnet	0.25-0.5	0.2522	0.0368	0.0032	19.5284	6.1201	4.5459	11.5442	4.3053	9.5790	0.3144	44.2609	100.5540	41.78	0.42	18.10	6.64	0.41	7.87	19.14	6.02	0.05	0.00	0.00	0.00	0.00	0.05	0.05	100.54
389	16SUV023	2016_1	1_2_3	229	Beaufort Fm	GP	garnet	0.25-0.5	0.3641	0.0396	0.0014	19.4963	5.5011	3.3220	11.1311	5.5990	10.2242	0.2924	44.3425	100.3540	41.71	0.61	19.32	4.86	0.38	7.08	18.46	7.83	0.05	0.00	0.00	0.00	0.00	0.05	0.00	100.34
390	16SUV023	2016_1	1_2_4	230	Beaufort Fm	GP	garnet	0.25-0.5	0.1800	0.0244	0.0000	19.2375	5.1485	7.0669	11.5176	4.9537	8.1538	0.2725	43.7108	100.3250	41.16	0.30	15.41	10.33	0.35	6.62	19.10	6.93	0.03	0.00	0.00	0.00	0.00	0.06	0.00	100.29
391	16SUV023	2016_1	1_2_5	231	Beaufort Fm	GP	garnet	0.25-0.5	0.1575	0.0246	0.0034	19.5197	5.1568	5.6851	12.0093	4.1903	9.1370	0.2813	44.3002	100.5590	41.76	0.26	17.26	8.31	0.36	6.63	19.92	5.86	0.03	0.00	0.00	0.02	0.00	0.06	0.05	100.54
392	16SUV023	2016_1	1_2_6	232	Beaufort Fm	GP	garnet	0.25-0.5	0.1965	0.0343	0.0016	19.4217	5.0970	6.1997	12.1572	4.1286	8.7946	0.2999	44.1921	100.5730	41.55	0.33	16.62	9.06	0.39	6.56	20.16	5.78	0.05	0.00	0.00	0.00	0.00	0.04	0.04	100.56
393	16SUV023	2016_1	1_2_7	233	Beaufort Fm	GP	garnet	0.25-0.5	0.0103	0.0055	0.0086	19.6845	6.0125	3.8416	13.6772	1.2725	10.5943	0.3722	45.0009	100.5200	42.11	0.00	20.02	5.61	0.48	7.74	22.68	1.78	0.00	0.01	0.00	0.00	0.00	0.03	0.00	100.46
394	16SUV023	2016_1	1_2_8	234	Beaufort Fm	GP	garnet	0.25-0.5	0.3417	0.0389	0.0165	19.9023	5.6181	1.8600	12.8714	3.5016	10.9823	0.2391	45.1339	100.5590	42.58	0.57	20.75	2.72	0.31	7.23	21.34	4.90	0.05	0.02	0.00	0.00	0.00	0.04	0.03	100.55
395	16SUV023	2016_1	1_2_9	235	Beaufort Fm	GP	garnet	0.25-0.5	0.1476	0.0291	0.0029	19.4607	5.4580	5.8039	11.6102	4.6923	8.9520	0.2570	44.1171	100.5860	41.63	0.25	16.91	8.48	0.33	7.02	19.25	6.57	0.04	0.00	0.00	0.00	0.00	0.05	0.04	100.57
396	16SUV023	2016_1	1_2_10	236	Beaufort Fm	GP	garnet	0.25-0.5	0.0106	0.0066	0.0028	19.2236	5.8397	6.9347	11.4092	4.0503	8.6479	0.3812	43.7350	100.2810	41.13	0.00	16.34	10.14	0.49	7.51	18.92	5.67	0.00	0.00	0.00	0.00	0.00	0.03	0.00	100.23
397	16SUV023	2016_1	1_2_11	237	Beaufort Fm	GP	garnet	0.25-0.5	0.0051	0.0202	0.0070	19.0744	5.8388	7.3079	10.0262	6.0271	8.2249	0.4322	43.2742	100.2890	40.81	0.00	15.54	10.68	0.56	7.51	16.63	8.43	0.03	0.01	0.00	0.02	0.00	0.03	0.04	100.28
398	16SUV023	2016_1	1_2_12	238	Beaufort Fm	GP	garnet	0.25-0.5	0.2759	0.0386	0.0017	19.6103	5.5588	3.8234	12.1777	3.9397	10.0208	0.2951	44.5307	100.3490	41.95	0.46	18.93	5.59	0.38	7.15	20.19	5.51	0.05	0.00	0.00	0.00	0.00	0.06	0.03	100.31
399	16SUV023	2016_1	1_2_13	239	Beaufort Fm	GP	garnet	0.25-0.5	0.1897	0.0166	0.0028	19.2950	4.9632	5.5365	12.0129	4.5908	9.1237	0.2721	44.0710	100.1440	41.28	0.32	17.24	8.09	0.35	6.39	19.92	6.42	0.02	0.00	0.00	0.00	0.00	0.04	0.03	100.10

400	16SUV023	2016_1	1_3_1	240	Beaufort Fm	GP	garnet	0.25-0.5	0.0121	0.0167	0.0015	19.6744	5.6272	3.0914	11.8688	4.2204	10.9736	0.3032	44.8400	100.6830	42.09	0.02	20.73	4.52	0.39	7.24	19.68	5.91	0.02	0.00	0.00	0.00	0.00	0.04	0.00	100.65
401	16SUV023	2016_1	1_3_2	241	Beaufort Fm	GP	garnet	0.25-0.5	0.2249	0.0327	0.0017	19.1743	5.4437	7.3365	11.2279	5.1056	7.8072	0.2680	43.4514	100.1350	41.02	0.38	14.75	10.72	0.35	7.00	18.62	7.14	0.04	0.00	0.00	0.00	0.00	0.06	0.05	100.13
402	16SUV023	2016_1	1_3_3	242	Beaufort Fm	GP	garnet	0.25-0.5	0.1260	0.0234	0.0000	19.5032	4.7122	6.4822	11.9379	4.4069	8.6819	0.2644	44.1144	100.3240	41.72	0.21	16.40	9.47	0.34	6.06	19.80	6.17	0.03	0.00	0.00	0.00	0.00	0.06	0.03	100.30
403	16SUV023	2016_1	1_3_4	243	Beaufort Fm	GP	garnet	0.25-0.5	0.1764	0.0330	0.0047	19.3374	5.3483	6.1475	11.6082	4.4638	8.7673	0.3194	43.8951	100.1650	41.37	0.29	16.57	8.99	0.41	6.88	19.25	6.25	0.04	0.00	0.00	0.00	0.00	0.06	0.05	100.16
404	16SUV023	2016_1	1_3_5	244	Beaufort Fm	GP	garnet	0.25-0.5	0.0801	0.0131	0.0078	19.7110	5.8188	2.8152	12.3328	3.5379	10.9677	0.2888	44.8881	100.5170	42.17	0.13	20.72	4.11	0.37	7.49	20.45	4.95	0.02	0.01	0.00	0.00	0.00	0.05	0.03	100.50
405	16SUV025	2016_1	1_3_6	245	stream sediments	GP	garnet	0.25-0.5	0.0000	0.0086	0.0004	19.6205	5.2996	6.5367	12.6313	2.7436	8.7965	0.3099	44.2514	100.2560	41.98	0.00	16.62	9.55	0.40	6.82	20.95	3.84	0.00	0.00	0.00	0.00	0.00	0.05	0.02	100.23
406	16SUV025	2016_1	1_3_7	246	stream sediments	GP	garnet	0.25-0.5	0.0273	0.0155	0.0035	19.5449	5.8068	3.1066	11.7069	4.2905	10.8846	0.3438	44.6145	100.3770	41.81	0.05	20.57	4.54	0.44	7.47	19.41	6.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02	100.34
407	16SUV028_rpt	2016_1	1_3_8_r	247	stream sediments	GP	garnet	0.5-1.0	0.2059	0.0276	0.0036	19.3921	5.3044	6.0947	11.6392	4.6967	8.6741	0.2680	43.9466	100.3140	41.49	0.34	16.39	8.91	0.35	6.82	19.30	6.57	0.04	0.00	0.00	0.00	0.00	0.05	0.04	100.30
408	16SUV028	2016_1	1_3_8	248	stream sediments	GP	garnet	0.5-1.0	0.2224	0.0296	0.0046	19.4472	5.3164	6.1680	11.6639	4.6569	8.6694	0.2835	44.0547	100.5740	41.60	0.37	16.38	9.02	0.37	6.84	19.34	6.52	0.04	0.00	0.00	0.00	0.00	0.06	0.03	100.56
409	16SUV028	2016_1	1_3_9	249	stream sediments	GP	garnet	0.25-0.5	0.0030	0.0059	0.0046	19.7447	5.9224	3.4676	12.3012	3.2033	10.7369	0.3800	44.8678	100.6900	42.24	0.00	20.29	5.07	0.49	7.62	20.40	4.48	0.00	0.00	0.00	0.00	0.00	0.03	0.03	100.65
410	16SUV030	2016_1	1_3_10	250	stream sediments	GP	garnet	0.5-1.0	0.2092	0.0313	0.0032	19.7302	5.2668	4.2818	12.1170	4.0094	9.9724	0.2798	44.6818	100.6370	42.21	0.35	18.84	6.26	0.36	6.78	20.09	5.61	0.04	0.00	0.00	0.00	0.00	0.04	0.04	100.62
411	16SUV027	2016_1	1_3_11	251	stream sediments	andradite	andradite	0.5-1.0	1.5629	0.0213	0.0023	16.3010	17.1834	0.0041	0.2217	23.4476	2.5169	0.1217	36.4061	97.9258	34.87	2.61	4.76	0.00	0.16	22.11	0.37	32.81	0.03	0.00	0.00	0.00	0.00	0.16	0.04	97.90
412	16SUV027	2016_1	1_3_12	252	stream sediments	andradite	andradite	0.25-0.5	3.0185	0.0447	0.0040	16.1952	14.9484	0.0140	0.2218	23.9409	2.7257	0.0953	37.0913	98.6249	34.65	5.04	5.15	0.00	0.12	19.23	0.37	33.50	0.06	0.00	0.00	0.00	0.00	0.42	0.03	98.57
413	16SUV028	2016_1	1_3_13	253	stream sediments	andradite	andradite	0.25-0.5	0.0032	0.0190	0.0066	16.5970	21.8584	0.0061	0.0482	24.0323	0.0000	0.0127	34.8347	97.4342	35.51	0.00	0.00	0.00	0.02	28.12	0.08	33.63	0.03	0.01	0.00	0.00	0.00	0.00	0.04	97.42
414	16SUV023	2016_1	1_4_1	254	Beaufort Fm	almandine	garnet	0.25-0.5	0.0954	0.0016	0.0040	18.0544	20.7730	0.0098	3.0335	5.2647	11.4273	0.7784	41.1085	100.5950	38.62	0.16	21.59	0.00	1.01	26.72	5.03	7.37	0.00	0.00	0.00	0.00	0.00	0.03	0.00	100.54
415	16SUV023	2016_1	1_4_2	255	Beaufort Fm	almandine	garnet	0.25-0.5	0.0248	0.0026	0.0047	17.8851	21.8073	0.0243	2.6355	5.0206	11.3143	1.0102	40.7841	100.5700	38.26	0.04	21.38	0.04	1.30	28.06	4.37	7.02	0.00	0.00	0.00	0.00	0.00	0.06	0.00	100.54
416	16SUV028	2016_1	1_4_3	256	stream sediments	almandine	garnet	0.5-1.0	0.0346	0.0024	0.0017	18.5894	19.1640	0.0161	7.0218	0.8910	11.9047	0.2821	42.3719	100.3240	39.77	0.06	22.49	0.00	0.36	24.65	11.64	1.25	0.00	0.00	0.00	0.02	0.03	0.00	0.00	100.28
417	16SUV028	2016_1	1_4_4	257	stream sediments	almandine	garnet	0.5-1.0	0.0095	0.0009	0.0062	17.8155	25.1175	0.0137	2.1261	3.4504	11.2273	0.5678	40.4489	100.8110	38.11	0.00	21.21	0.00	0.73	32.31	3.53	4.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.73
418	16SUV028	2016_1	1_4_5	258	stream sediments	almandine	garnet	0.5-1.0	0.0773	0.0293	0.0017	18.3983	17.3772	0.0000	3.7782	7.1208	11.4227	0.5770	41.6895	100.5170	39.36	0.13	21.58	0.00	0.74	22.36	6.27	9.96	0.04	0.00	0.00	0.00	0.00	0.03	0.03	100.50
419	16SUV028	2016_1	1_4_6	259	stream sediments	almandine	garnet	0.25-0.5	0.0263	0.0148	0.0050	18.5306	17.9775	0.0421	5.4388	4.0878	11.8351	0.3562	42.1851	100.5610	39.64	0.04	22.36	0.06	0.46	23.13	9.02	5.72	0.02	0.00	0.00	0.00	0.00	0.00	0.03	100.49
420	16SUV014	2016_1	1_4_7	260	stream sediments	forsterite	olivine	0.25-0.5	0.0027	0.0135	0.0030	17.6015	21.8293	0.0000	20.3680	0.2171	0.0145	0.3109	39.9452	100.4220	37.66	0.00	0.03	0.00	0.40	28.08	33.78	0.30	0.02	0.00	0.12	0.03	0.00	0.00	0.00	100.41
421	16SUV028	2016_1	1_4_8	261	stream sediments	forsterite	olivine	0.25-0.5	0.0071	0.0044	0.0055	18.8214	10.1583	0.0000	27.7356	0.1499	0.0201	0.1521	42.8099	100.0950	40.27	0.00	0.04	0.00	0.20	13.07	45.99	0.21	0.00	0.00	0.29	0.00	0.00	0.00	0.00	100.06
422	16SUV014	2016_1	1_5_1	262	stream sediments	fayalite	olivine	0.25-0.5	0.0086	0.0016	0.0000	16.7562	29.8793	0.0000	15.2845	0.1444	0.0033	0.4055	37.9290	100.5190	35.85	0.00	0.00	0.00	0.52	38.44	25.35	0.20	0.00	0.00	0.10	0.03	0.00	0.00	0.00	100.49
423	16SUV014	2016_1	1_5_2	263	stream sediments	fayalite	olivine	0.25-0.5	0.0210	0.0071	0.0000	16.3693	32.6369	0.0042	13.6614	0.1612	0.0106	0.4875	37.2587	100.6820	35.02	0.04	0.02	0.00	0.63	41.99	22.65	0.23	0.00	0.00	0.03	0.03	0.00	0.00	0.03	100.65
424	16SUV014	2016_1	1_5_3	264	stream sediments	fayalite	olivine	0.25-0.5	0.0155	0.0118	0.0000	16.8354	28.0485	0.0019	16.3882	0.1970	0.0137	0.4160	38.2719	100.3040	36.02	0.03	0.03	0.00	0.54	36.08	27.18	0.28	0.00	0.00	0.09	0.00	0.00	0.00	0.00	100.23
425	16SUV014	2016_1	1_5_4	265	stream sediments	fayalite	olivine	0.25-0.5	0.0098	0.0049	0.0000	16.6955	30.1157	0.0030	15.2596	0.1607	0.0018	0.4330	37.9221	100.6770	35.72	0.00	0.00	0.00	0.56	38.74	25.31	0.22	0.00	0.00	0.04	0.03	0.00	0.00	0.00	100.63
426	16SUV014	2016_1	1_5_5	266	stream sediments	fayalite	olivine	0.25-0.5	0.0120	0.0089	0.0000	16.6600	29.8977	0.0059	15.2607	0.1927	0.0073	0.4483	37.8531	100.4200	35.64	0.00	0.00	0.00	0.58	38.46	25.31	0.27	0.00	0.00	0.05	0.03	0.00	0.00	0.03	100.37
427	16SUV016	2016_1	1_5_6	267	stream sediments	fayalite	olivine	0.25-0.5	0.0061	0.0048	0.0000	17.1326	26.1223	0.0062	17.7342	0.2114	0.0109	0.3564	38.9268	100.6280	36.65	0.00	0.02	0.00	0.46	33.61	29.41	0.30	0.00	0.00	0.09	0.04	0.00	0.00	0.02	100.60
428	16SUV016	2016_1	1_5_7	268	stream sediments	fayalite	olivine	0.25-0.5	0.0022	0.0000	0.0034	17.6090	21.0048	0.0027	20.8555	0.2143	0.0050	0.3074	40.0281	100.1480	37.67	0.00	0.00	0.00	0.40	27.02	34.58	0.30	0.00	0.00	0.12	0.00	0.00	0.00	0.00	100.10
429	16SUV016	2016_1	1_5_8	269	stream sediments	fayalite	olivine	0.25-0.5	0.0010	0.0000	0.0036	16.6342	30.4647	0.0018	15.0727	0.1772	0.0031	0.4353	37.8328	100.7250	35.59	0.00	0.00	0.00	0.56	39.19	25.00	0.25	0.00	0.00	0.08	0.04	0.00	0.00	0.00	100.70
430	16SUV016	2016_1	1_5_9	270	stream sediments	fayalite	olivine	0.25-0.5	0.0133	0.0062	0.0000	17.1073	26.1242	0.0086	17.6279	0.2041	0.0027	0.3856	38.8230	100.4010	36.60	0.02	0.00	0.00	0.50	33.61	29.23	0.29	0.00	0.00	0.08	0.03	0.00	0.00	0.00	100.35
431	16SUV016	2016_1	1_5_10	271	stream sediments	fayalite	olivine	0.25-0.5	0.0179	0.0121	0.0033	17.2205	25.1662	0.0045	18.3425	0.0930	0.0052	0.3052	39.1036	100.4350	36.84	0.03	0.00	0.00	0.39	32.38	30.42	0.13	0.00	0.00	0.14	0.03	0.00	0.00	0.00	100.36
432	16SUV016	2016_1	1_5_11	272	stream sediments	fayalite	olivine	0.25-0.5	0.0100	0.0055	0.0020	16.9638	26.9969	0.0000	17.1728	0.2055	0.0080	0.3759	38.6049	100.4290	36.29	0.00	0.00	0.00	0.49	34.73	28.48	0.29	0.00	0.00	0.07	0.03	0.00	0.00	0.00	100.37
433	16SUV016	2016_1	1_5_12	273	stream sediments	fayalite	olivine	0.25-0.5	0.0128	0.0333	0.0030	16.7057	29.7317	0.0000	15.4438	0.1698	0.0120	0.4245	37.9729	100.5960	35.74	0.02	0.02	0.00	0.55	38.25	25.61	0.24	0.04	0.00	0.05	0.03	0.00	0.00	0.00	100.56
434	16SUV019	2016_1	1_6_1	274	till	diopside	clinopyroxene	0.25-0.5	0.0183	0.0349	0.0044	25.8898	0.5460	0.0000	10.7406	18.5164	0.3234	0.0215	44.4498	100.5810	55.39	0.03	0.61	0.00	0.03	0.70	17.81	25.91	0.05	0.00	0.00	0.00	0.00	0.00	0.00	100.53
435	16SUV019	2016_1	1_6_2	275	till	diopside	clinopyroxene	0.25-0.5	0.0156	0.1181	0.0020	25.5267	2.2233	0.0207	9.9643	18.2707	0.2108	0.0546	43.8482	100.2720	54.61	0.03	0.40	0.03	0.07	2.86	16.52	25.56	0.16	0.00	0.00	0.00	0.00	0.00	0.00	100.24
436	16SUV028	2016_1	1_6_3	276	stream sediments	diopside	garnet	0.25-0.5	0.0378	0.0031	0.0052	17.9433	10.0217	0.0000	0.2931	25.5783	6.4243	0.0999	39.5355	100.0240	38.39	0.06	12.14	0.00	0.13	12.89	0.49	35.79	0.00	0.00	0.00	0.00	0.00	0.07	0.03	99.98
437	16SUV024	2016_1	1_6_4	277	bedrock	gahnite	gahnite	0.25-0.5	0.0000	0.0000	0.0019	0.0000	9.2433	0.0000	2.5928	0.0000	31.6472	0.3431	37.5630	101.6350	0.00	0.00	59.80	0.00	0.44	11.89	4.30	0.00	0.00	0.00	0.00	0.00	25.18	0.00	0.00	101.61
438	16SUV024	2016_1	1_6_5	278	bedrock	gahnite	gahnite	0.25-0.5	0.0078	0.0000	0.0030	0.0023	5.0713	0.0208	2.1828	0.0000	31.0166	0.2109	36.9614	101.6390	0.00	0.00	58.61	0.00	0.27	6.52	3.62	0.00	0.00	0.00	0.00	0.00	32.56	0.00	0.00	101.59
439	16SUV024	2016_1	1_6_6	279	bedrock	gahnite	gahnite	0.25-0.5	0.0000	0.0000	0.0010	0.0002	6.0382	0.0615	1.5737	0.0043	30.6179	0.2337	36.6130	101.6780	0.00	0.00	57.85	0.09	0.30	7.77	2.61	0.00	0.00	0.00	0.00	0.00	32.91	0.11	0.00	101.64
440	16SUV024	2016_1	1_6_7	280	bedrock	gahnite	gahnite	0.25-0.5	0.0000	0.0000	0.0006	0.0056	12.7710	0.0058	2.3960	0.0000	31.3015	0.0272	37.2961	100.9440	0.00	0.00	59.14	0.00	0.04	16.43	3.97	0.00	0.00	0.00	0.00	0.03	21.28	0.03	0.00	100.92
441	16SUV024	2016_1	1_6_8	281	bedrock	gahnite	gahnite	0.25-0.5	0.0078	0.0000	0.0082	0.0162	13.1480	0.0707	1.6378	0.0061	28.4834	0.1010	34.4812	95.1071	0.03	0.00	53.82	0.10	0.13	16.91	2.72	0.01	0.00	0.00	0.01	0.00	21.30	0.03	0.00	95.06
442	16SUV013	2016_1	1_6_9	282	glaciofluvial	spinel	spinel	0.25-0.5	0.0033	0.0055	0.0022	0.0029	5.3850	0.0460	14.5352	0.0021	36.3311	0.0951	43.5088	100.0030	0.00	0.00	68.65	0.07	0.12	6.93	24.10	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	99.96
443	16SUV023	2016_1	1_6_10	283	Beaufort Fm	spinel	spinel	0.25-0.5	0.0300	0.0019	0.0000	0.0048	3.3398	0.0279	15.5814	0.0023	36.9301	0.0720	44.1896	100.4210	0.00	0.05	69.78	0.04	0.09	4.30	25.84	0.00	0.00	0.00	0.00	0.00	0.27	0.03	0.00	100.40
444	16SUV028	2016_1	1_6_11	284	stream sediments	spinel	spinel	0.25-0.5	0.0241	0.0034	0.0013	0.0000	2.6518	0.0205	15.6799	0.0086	37.2559	0.0195	44.2818	100.0050	0.00	0.04	70.39	0.03	0.03	3.41	26.00	0.01	0.00	0.00	0.00	0.02	0.00	0.04	0.00	99.98
446	16SUV018	2016_1	1_7_1	286	glaciofluvial	hercynite	chlorite?	0.25-0.5	0.0976	1.3523	0.0321	15.9886	9.7218	0.0000	1.2210	0.0875	18.1124	0.1316	38.5744	85.3862	34.21	0.16	34.22	0.00	0.17	12.51	2.02	0.12	1.82	0.04	0.00	0.00	0.00	0.05	0.06	85.39
447	16SUV018	2016_1	1_7_2	287	glaciofluvial	hercynite	gahnite	0.25-0.5	0.0059	0.0000	0.0014	0.0022	12.4727	0.0000	4.7491	0.0000	32.6121	0.1250	38.7578	101.0050	0.00	0.00	61.62	0.00	0.16	16.05	7.88	0.00	0.00	0.00	0.00	0.00	15.28	0.00	0.00	100.98
448	16SUV018	2016_1	1_7_3	288	glaciofluvial	hercynite	spinel/hercynite	0.25-0.5	0.3216	0.0038	0.0016	0.0411	16.6804	0.0294	11.0936	0.0000	31.3869	0.1098	40.3779	100.2450	0.09	0.54	59.31	0.04	0.14	21.46	18.40	0.00	0.00	0.00	0.00	0.10	0.07	0.08	0.00	100.23
449	16SUV018	2016_1	1_7_4	289	glaciofluvial	hercynite	spinel/hercynite	0.25-0.5	0.1703	0.0000	0.0015	0.0125	22.3522	0.0072	7.4482	0.0000	30.7619	0.1797	38.9288	100.0880	0.03	0.28	58.12	0.00	0.23	28.76	12.35	0.00	0.00	0.00	0.00	0.02	0.17	0.08	0.00	100.05
450	16SUV023	2016_1	1_7_5	290	Beaufort Fm	hercynite	andradite	0.25-0.5	1.8923	0.0484	0.0019	16.1133	19.1479	0.0017	0.2639	23.4338	0.7523	0.1501	35.4262	97.3453	34.47	3.16	1.42	0.00	0.19	24.63	0.44	32.79	0.07	0.00	0.05	0.00	0.00	0.08	0.03	97.32
451	16SUV023	2016_1	1_7_6	291	Beaufort Fm	hercynite	spinel/hercynite	0.25-0.5	0.1060	0.0063	0.0033	0.0554	14.9144	0.0024	10.9570	0.0061	32.6855	0.0984	40.8235	99.9759	0.12	0.18	61.76	0.00	0.13	19.19	18.17	0.01	0.00	0.00	0.00	0.24	0.09	0.07	0.00	99.95
452	16SUV023	2016_1	1_7_7	292	Beaufort Fm	hercynite	spinel/hercynite	0.25-0.5	0.2017	0.0000	0.0000	0.0250	17.8686	0.1218	9.5952	0.0013	31.9917	0.1248	40.2158	100.3290	0.05	0.34	60.45	0.18	0.16	22.99	15.91	0.00	0.00	0.00	0.00	0.05	0.09	0.08	0.00	100.31
453	16SUV023	2016_1	1_7_8	293	Beaufort Fm	hercynite	spinel/hercynite	0.25-0.5	0.5553	0.0000	0.0007	0.0600	17.8732	0.0054	10.3845	0.0000	30.7066	0.1076	39.8458	99.8379	0.13	0.93	58.02	0.00	0.14	22.99	17.22	0.00	0.00	0.00	0.00	0.11	0.15	0.13	0.00	99.81
454	16SUV027	2016_1	1_7_9	294	stream sediments	hercynite	spinel/hercynite	0.5-1.0	0.4116	0.0013	0.0000	0.0379	16.2643	0.3460	10.9067	0.0000	31.2084	0.0928	40.1885	99.7170	0.08	0.69	58.97	0.51	0.12	20.92	18.09	0.00	0.00	0.00	0.00	0.13	0.10	0.12	0.00	99.72
455	16SUV027	2016_1	1_7_10	295	stream sediments	hercynite	spinel/hercynite	0.25-0.5	0.1923	0.0017	0.0000	0.0318	15.0893	0.7279	11.3066	0.0042	31.7712	0.1142	40.6307	100.1070	0.07	0.32	60.03	1.06	0.15	19.41	18.75	0.00	0.00	0.00	0.00	0.15	0.11	0.05	0.00	100.10
456	16SUV014	2016_1	1_8_1	296	stream sediments	ilmenite, crustal	ilmenite	0.5-1.0	28.9545	0.0000	0.0016	0.0179	37.5856	0.0000	0.3006	0.0032	0.0286	0.3718	30.5282	97.9405	0.04	48.30	0.05	0.00	0.48	48.35	0.50	0.00	0.00	0.00	0.06	0.00	0.00	0.12	0.00	97.91
457	16SUV014	2016_1	1_8_2	297	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.0839	0.0000	0.0007	0.0050	37.1603	0.0000	0.1651	0.0008	0.0157	0.6685	30.4955	97.8086	0.00	48.51	0.03	0.00	0.86	47.81	0.27	0.00	0.00	0.00	0.07	0.00	0.00	0.22	0.00	97.77
458	16SUV014	2016_1	1_8_3	298	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.1381	0.0037	0.0029	0.0017	37.5394	0.0000	0.1686	0.0002	0.0326	0.4064	30.6265	98.2221	0.00	48.60	0.06	0.00	0.52	48.29	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	98.17
459	16SUV014	2016_1	1_8_4	299	stream sediments	ilmenite, crustal	pseudorutile	0.25-0.5	34.2457	0.0224	0.0066	0.2800	23.5801	0.0835	1.0770	0.0109	0.2794	0.5358	31.3812	92.0421	0.60	57.12	0.53	0.12	0.69	30.34	1.79	0.02	0.03	0.01	0.00	0.00	0.00	0.74	0.04	92.01
460	16SUV014	2016_1	1_8_5	300	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.0937	0.0222	0.0029	0.0000	37.4162	0.0230	0.1830	0.0040	0.0357	0.3328	30.4953	97.7660	0.00	48.53	0.07	0.03	0.43	48.14	0.30	0.00	0.03	0.00	0.00	0.00	0.00	0.19	0.00	97.72
461	16SUV014	2016_1	1_8_6	301	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.2458	0.0000	0.0000	0.0000	37.6106	0.0000	0.2177	0.0002	0.0202	0.3976	30.6822	98.3770	0.00	48.78	0.04	0.00	0.51	48.39	0.36	0.00	0.00	0.00	0.07	0.00	0.00	0.22	0.00	98.37
462	16SUV014	2016_1	1_8_7	302	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.0887	0.0000	0.0015	0.0000	37.5055	0.0028	0.1145	0.0000	0.0175	0.5703	30.6622	98.4506	0.00	48.52	0.03	0.00	0.74	48.25	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00	98.42
463	16SUV014	2016_1	1_8_8	303	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.4173	0.0058	0.0003	0.0004	37.1675	0.0105	0.2220	0.0003	0.0070	0.7292	30.7360	98.4342	0.00	49.07	0.00	0.00	0.94	47.82	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	98.34
464	16SUV014	2016_1	1_8_9	304	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.1124	0.0096	0.0000	0.0011	37.1433	0.0148	0.1371	0.0043	0.0169	0.7288	30.6248	98.2287	0.00	48.56	0.03	0.00	0.94	47.78	0.23	0.00	0.00	0.00	0.05	0.00	0.00	0.59	0.00	98.19
465	16SUV014	2016_1	1_8_10	305	stream sediments	ilmenite, crustal	pseudorutile	0.25-0.5	34.6003	0.0152	0.0275	0.1836	24.0875	0.0184	0.2762	0.0463	0.1547	0.4762	30.8175	90.8583	0.39	57.72	0.29	0.00	0.61	30.99	0.46	0.06	0.00	0.03	0.06	0.00	0.00	0.11	0.08	90.80
466	16SUV014	2016_1	1_8_11	306	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	28.0892	0.0154	0.0000	0.0089	38.5532	0.0052	0.1159	0.0055	0.0081	0.6144	30.1321	97.6409	0.00	46.85	0.00	0.00	0.79	49.60	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	97.54
467	16SUV014	2016_1	1_8_12	307	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	30.5530	0.0021	0.0000	0.0047	35.5086	0.0000	0.1694	0.0000	0.0020	1.2702	31.1383	98.7884	0.00	50.96	0.00	0.00	1.64	45.68	0.28	0.00	0.00	0.00	0.07	0.00	0.04	0.06	0.03	98.77
468	16SUV023	2016_1	1_8_13	308	Beaufort Fm	ilmenite, crustal	ilmenite	0.25-0.5	28.9887	0.0154	0.0019	0.0002	36.0736	0.0052	0.1786	0.0000	0.0047	2.4011	30.5677	98.3215	0.00	48.35	0.00	0.00	3.10	46.41	0.30	0.00	0.00	0.00	0.04	0.00	0.00	0.07	0.00	98.27
469	16SUV023	2016_1	1_8_14	309	Beaufort Fm	ilmenite, crustal	pseudorutile	0.25-0.5	36.4837	0.0229	0.0047	0.1640	20.1513	0.1585	1.8016	0.0311	0.1772	0.3213	32.1588	92.0938	0.35	60.86	0.33	0.23	0.41	25.92	2.99	0.04	0.03	0.00	0.00	0.00	0.00	0.85	0.00	92.02
471	16SUV027	2016_1	1_9_1	427	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.9489	0.0000	0.0000	0.0163	35.9923	0.0099	0.3296	0.0042	0.0052	0.4393	30.7742	97.7095	0.03	49.96	0.00	0.00	0.57	46.30	0.55	0.00	0.00	0.00	0.04	0.03	0.03	0.16	0.00	97.67
472	16SUV027	2016_1	1_9_2	311	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.1868	0.0000	0.0000	0.0070	36.9129	0.0182	0.1913	0.0000	0.0204	0.7305	30.6114	98.0401	0.00	48.69	0.04	0.00	0.94	47.49	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	97.93
473	16SUV027	2016_1	1_9_3	312	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.6969	0.0000	0.0000	0.0037	35.2888	0.0628	1.2725	0.0043	0.0058	0.3077	31.0509	97.9903	0.00	49.54	0.00	0.09	0.40	45.40	2.11	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	97.91
474	16SUV027	2016_1	1_9_4	313	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.3356	0.0000	0.0000	0.0110	37.7048	0.0000	0.1838	0.0024	0.0152	0.4419	30.7856	98.7327	0.02	48.93	0.03	0.00	0.57	48.51	0.30	0.00	0.00	0.00	0.13	0.00	0.04	0.19	0.00	98.73
475	16SUV027	2016_1	1_9_5	314	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.1096	0.0000	0.0000	0.0043	37.4894	0.0071	0.3131	0.0018	0.0193	0.3371	30.5969	98.0557	0.00	48.56	0.04	0.00	0.44	48.23	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	98.00
476	16SUV027	2016_1	1_9_6	315	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	25.0751	0.0044	0.0000	0.0000	37.1486	0.0000	3.0641	0.0065	0.2150	0.9101	29.9695	96.6183	0.00	41.83	0.41	0.00	1.18	47.79	5.08	0.01	0.00	0.00	0.13	0.00	0.05	0.14	0.00	96.60
477	16SUV027	2016_1	1_9_7	316	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	28.0086	0.0000	0.0009	0.0010	38.5295	0.0488	0.0691	0.0000	0.0413	0.7008	30.1506	97.7398	0.00	46.72	0.08	0.07	0.90	49.57	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	97.70
478	16SUV027	2016_1	1_9_8	317	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.0767	0.0000	0.0035	0.0014	37.8076	0.0117	0.1120	0.0048	0.0127	0.4061	30.5577	98.1911	0.00	48.50	0.02	0.00	0.52	48.64	0.19	0.00	0.00	0.00	0.07	0.00	0.00	0.20	0.00	98.14
479	16SUV027	2016_1	1_9_9	318	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	28.8397	0.0088	0.0047	0.0140	30.4194	0.2799	5.3993	0.0125	0.2092	0.2202	32.0999	97.8763	0.03	48.11	0.40	0.41	0.28	39.13	8.95	0.02	0.00	0.00	0.18	0.06	0.00	0.28	0.00	97.84
480	16SUV028	2016_1	1_9_10	319	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.1128	0.0017	0.0008	0.0000	37.0318	0.0000	0.1070	0.0059	0.0173	0.7797	30.6212	98.2082	0.00	48.56	0.03	0.00	1.01	47.64	0.18	0.01	0.00	0.00	0.00	0.00	0.00	0.73	0.00	98.16
481	16SUV028	2016_1	1_9_11	320	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.4000	0.0000	0.0000	0.0000	37.3879	0.0030	0.2020	0.0010	0.0157	0.3489	30.6914	98.2310	0.00	49.04	0.03	0.00	0.45	48.10	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	98.16
482	16SUV028	2016_1	1_9_12	321	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	28.4913	0.0034	0.0051	0.0039	37.9841	0.0303	0.3852	0.0000	0.0181	0.3924	30.4241	97.9753	0.00	47.53	0.03	0.04	0.51	48.87	0.64	0.00	0.00	0.00	0.07	0.00	0.04	0.22	0.00	97.94
483	16SUV028	2016_1	1_9_13	322	stream sediments	ilmenite, crustal	ilmenite	0.25-0.5	29.2069	0.0000	0.0000	0.0000	37.2976	0.0038	0.4834	0.0009	0.0172	0.7618	30.8054	98.6954	0.00	48.72	0.03	0.00	0.98	47.98	0.80	0.00	0.00	0.00	0.00	0.00	0.03	0.09	0.00	98.63
484	16SUV028	2016_1	1_9_14	323	stream sediments	ilmenite, crustal	pseudorutile	0.25-0.5	35.8486	0.0167	0.0361	0.0647	23.1594	0.0175	0.2560	0.0130	0.0685	0.2926	31.0901	91.0604	0.14	59.80	0.13	0.00	0.38	29.79	0.42	0.02	0.00	0.00	0.04	0.11	0.00	0.14	0.00	90.97
485	16SUV013	2016_2	2_1_1	327	glaciofluvial	red rutile	rutile	0.25-0.5	59.2599	0.0000	0.0000	0.0203	0.8172	0.2039	0.0011	0.0001	0.0114	0.0000	40.0390	100.5630	0.04	98.85	0.02	0.30	0.00	1.05	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.22	0.00	100.56
486	16SUV013	2016_2	2_1_2	328	glaciofluvial	red rutile	rutile	0.25-0.5	59.9221	0.0109	0.0104	0.0000	0.0365	0.0685	0.0000	0.0000	0.0073	0.0000	40.1642	100.3950	0.00	99.95	0.00	0.10	0.00	0.05	0.00	0.00	0.00	0.01	0.04	0.02	0.00	0.19	0.00	100.37
487	16SUV013	2016_2	2_1_3	329	glaciofluvial	red rutile	rutile	0.25-0.5	59.9223	0.0144	0.0019	0.0029	0.1354	0.1264	0.0000	0.0029	0.0118	0.0031	40.3004	100.8530	0.00	99.95	0.02	0.18	0.00	0.17	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.28	0.00	100.81
488	16SUV013	2016_2	2_1_4	330	glaciofluvial	red rutile	rutile	0.25-0.5	59.9462	0.0003	0.0032	0.0008	0.1374	0.0319	0.0000	0.0048	0.0178	0.0000	40.2816	100.7750	0.00	99.99	0.03	0.05	0.00	0.18	0.00	0.01	0.00	0.00	0.18	0.00	0.00	0.33	0.00	100.77
489	16SUV013	2016_2	2_1_5	331	glaciofluvial	red rutile	rutile	0.25-0.5	60.1490	0.0000	0.0000	0.0053	0.0861	0.0896	0.0000	0.0000	0.0122	0.0000	40.3944	101.0130	0.00	100.33	0.02	0.13	0.00	0.11	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.34	0.00	101.00
490	16SUV013	2016_2	2_1_6	332	glaciofluvial	red rutile	rutile	0.25-0.5	59.8953	0.0000	0.0016	0.0000	0.0195	0.1608	0.0000	0.0019	0.0125	0.0092	40.2849	100.7660	0.00	99.91	0.02	0.24	0.00	0.03	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.36	0.00	100.74
491	16SUV013	2016_2	2_1_7	333	glaciofluvial	red rutile	rutile	0.25-0.5	59.9959	0.0103	0.0000	0.0000	0.1151	0.0220	0.0119	0.0037	0.0211	0.0004	40.2920	100.7740	0.00	100.08	0.04	0.00	0.00	0.15	0.02	0.00	0.00	0.00	0.23	0.00	0.00	0.19	0.00	100.71
492	16SUV013	2016_2	2_1_8	334	glaciofluvial	red rutile	rutile	0.25-0.5	59.8368	0.0010	0.0009	0.0000	0.1293	0.1028	0.0000	0.0000	0.0261	0.0059	40.2663	100.7790	0.00	99.81	0.05	0.15	0.00	0.17	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.21	0.00	100.75
493	16SUV022	2016_2	2_1_9	335	bedrock	red rutile	rutile	0.25-0.5	59.5083	0.0334	0.0138	0.0083	0.1173	0.0466	0.0055	0.0029	0.0253	0.0000	40.1441	100.5400	0.02	99.26	0.05	0.07	0.00	0.15	0.00	0.00	0.05	0.02	0.54	0.00	0.00	0.37	0.00	100.52
494	16SUV022	2016_2	2_1_10	336	bedrock	red rutile	rutile	0.25-0.5	59.2341	0.0038	0.0051	0.0041	0.0586	0.1428	0.0071	0.0018	0.0000	0.0083	39.9559	100.0350	0.00	98.81	0.00	0.21	0.00	0.08	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.61	0.00	99.98
495	16SUV022	2016_2	2_1_11	337	bedrock	red rutile	rutile	0.25-0.5	59.4555	0.0046	0.0046	0.0000	0.1965	0.0715	0.0000	0.0028	0.0215	0.0087	40.0614	100.3250	0.00	99.18	0.04	0.10	0.00	0.25	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.47	0.00	100.29
496	16SUV022	2016_2	2_1_12	338	bedrock	red rutile	rutile	0.25-0.5	59.3532	0.0000	0.0049	0.0008	0.0197	0.1103	0.0000	0.0119	0.0000	0.0023	40.0316	100.2140	0.00	99.00	0.00	0.16	0.00	0.03	0.00	0.02	0.00	0.00	0.17	0.00	0.00	0.82	0.00	100.20
497	16SUV023	2016_2	2_2_1	339	Beaufort Fm	red rutile	rutile	0.25-0.5	59.8123	0.0194	0.0052	0.0062	0.1810	0.0651	0.0015	0.0051	0.0098	0.0034	40.2095	100.6240	0.00	99.77	0.02	0.10	0.00	0.23	0.00	0.01	0.03	0.00	0.16	0.00	0.00	0.25	0.00	100.57
498	16SUV023	2016_2	2_2_2	340	Beaufort Fm	red rutile	rutile	0.25-0.5	59.6627	0.0007	0.0027	0.0043	0.0364	0.3189	0.0000	0.0016	0.0054	0.0059	40.2026	100.6240	0.00	99.52	0.00	0.47	0.00	0.05	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.33	0.00	100.58
499	16SUV023	2016_2	2_2_3	341	Beaufort Fm	red rutile	rutile	0.25-0.5	59.4771	0.0145	0.0025	0.0082	0.2784	0.0804	0.0000	0.0000	0.0239	0.0004	40.1017	100.4710	0.02	99.21	0.05	0.12	0.00	0.36	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.32	0.00	100.43

500	16SUV023	2016_2	2_2_4	342	Beaufort Fm	red rutile	rutile	0.25-0.5	59.5313	0.0066	0.0028	0.0027	0.2481	0.0552	0.0004	0.0040	0.0193	0.0031	40.1099	100.4670	0.00	99.30	0.04	0.08	0.00	0.32	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.40	0.00	100.43
501	16SUV023	2016_2	2_2_5	343	Beaufort Fm	red rutile	rutile	0.25-0.5	59.8564	0.0000	0.0029	0.0010	0.1445	0.0535	0.0000	0.0701	0.0105	0.0038	40.2827	100.8320	0.00	99.84	0.02	0.08	0.00	0.19	0.00	0.10	0.00	0.00	0.15	0.00	0.00	0.43	0.00	100.81
502	16SUV024	2016_2	2_2_6	344	bedrock	red rutile	rutile	0.25-0.5	58.9205	0.0015	0.0059	0.0000	0.1237	0.8629	0.0000	0.0046	0.0005	0.0000	39.9536	100.2160	0.00	98.28	0.00	1.26	0.00	0.16	0.00	0.00	0.00	0.01	0.30	0.00	0.00	0.20	0.00	100.20
503	16SUV024	2016_2	2_2_7	345	bedrock	red rutile	rutile	0.25-0.5	59.4977	0.0060	0.0022	0.0011	0.1292	0.4707	0.0000	0.0024	0.0089	0.0026	40.0919	100.3760	0.00	99.25	0.02	0.69	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	100.33
504	16SUV024	2016_2	2_2_8	346	bedrock	red rutile	rutile	0.25-0.5	59.9246	0.0111	0.0050	0.0046	0.0238	0.3147	0.0000	0.0008	0.0000	0.0000	40.3176	100.8690	0.00	99.96	0.00	0.46	0.00	0.03	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.26	0.00	100.84
505	16SUV024	2016_2	2_2_9	347	bedrock	red rutile	rutile	0.25-0.5	59.4186	0.0094	0.0000	0.0034	0.1003	0.1849	0.0067	0.0031	0.0152	0.0001	39.9635	99.9836	0.00	99.11	0.03	0.27	0.00	0.13	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.30	0.00	99.95
506	16SUV024	2016_2	2_2_10	348	bedrock	red rutile	rutile	0.25-0.5	59.6001	0.0064	0.0031	0.0000	0.2540	0.0000	0.0065	0.0040	0.0067	0.0000	39.9748	100.0040	0.00	99.42	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.11	0.00	99.94
507	16SUV013	2016_2	2_3_1	127	glaciofluvial	chromite	chromite	0.25-0.5	0.0531	0.0000	0.0023	0.0000	15.5729	34.7047	6.1719	0.0036	9.7128	0.1587	33.3619	100.0780	0.00	0.09	18.35	50.72	0.20	20.03	10.23	0.00	0.00	0.00	0.00	0.02	0.32	0.07	0.00	100.05
508	16SUV013	2016_2	2_3_2	128	glaciofluvial	chromite	chromite	0.25-0.5	0.9232	0.0000	0.0022	0.0000	14.4680	26.2809	9.6712	0.0033	12.6113	0.1193	34.6306	99.0482	0.00	1.54	23.83	38.41	0.15	18.61	16.04	0.00	0.00	0.00	0.00	0.19	0.07	0.19	0.00	99.04
509	16SUV014	2016_2	2_3_3	129	stream sediments	chromite	chromite	0.25-0.5	0.9819	0.0000	0.0000	0.0000	13.8766	35.3843	8.7407	0.0000	6.8459	0.1487	32.9446	99.2069	0.00	1.64	12.94	51.72	0.19	17.85	14.49	0.00	0.00	0.00	0.00	0.16	0.08	0.14	0.00	99.21
510	16SUV014	2016_2	2_3_4	130	stream sediments	chromite	chromite	0.25-0.5	2.0329	0.0123	0.0010	0.0000	20.0272	32.0508	8.9028	0.0032	3.5871	0.1630	31.0852	98.1564	0.00	3.39	6.78	46.84	0.21	25.76	14.76	0.00	0.00	0.00	0.00	0.25	0.04	0.09	0.00	98.13
511	16SUV018	2016_2	2_3_6	131	glaciofluvial	chromite	chromite	0.25-0.5	0.1168	0.0000	0.0053	0.0000	11.4149	31.7378	9.4049	0.0060	11.7176	0.1356	34.7613	99.6017	0.00	0.19	22.14	46.39	0.18	14.69	15.60	0.01	0.00	0.00	0.00	0.22	0.04	0.10	0.00	99.55
512	16SUV018	2016_2	2_3_8	132	glaciofluvial	chromite	chromite	0.25-0.5	0.3180	0.0076	0.0000	0.0000	14.0824	25.3860	8.7754	0.0009	14.8891	0.1447	35.1428	99.0841	0.00	0.53	28.13	37.10	0.19	18.12	14.55	0.00	0.00	0.00	0.00	0.18	0.10	0.16	0.00	99.06
513	16SUV018	2016_2	2_3_9	133	glaciofluvial	chromite	chromite	0.25-0.5	0.0530	0.0000	0.0008	0.0000	12.4678	25.8439	9.1054	0.0028	15.6326	0.1486	35.5791	99.1487	0.00	0.09	29.54	37.77	0.19	16.04	15.10	0.00	0.00	0.00	0.00	0.15	0.15	0.11	0.00	99.14
514	16SUV023	2016_2	2_3_10	134	Beaufort Fm	chromite	chromite	0.25-0.5	1.4233	0.0193	0.0022	0.0000	20.2808	29.3618	7.7308	0.0074	7.2045	0.1622	31.9673	98.4309	0.00	2.37	13.61	42.91	0.21	26.09	12.82	0.01	0.03	0.00	0.00	0.14	0.06	0.16	0.00	98.42
515	16SUV023	2016_2	2_3_11	135	Beaufort Fm	chromite	chromite	0.25-0.5	1.9511	0.0080	0.0055	0.0000	24.7480	23.2224	7.2309	0.0021	8.1873	0.3121	31.3586	97.3431	0.00	3.25	15.47	33.94	0.40	31.84	11.99	0.00	0.00	0.00	0.00	0.16	0.10	0.15	0.00	97.31
516	16SUV023	2016_2	2_3_12	136	Beaufort Fm	chromite	chromite	0.25-0.5	1.0022	0.0064	0.0111	0.0000	17.9882	21.2449	8.8230	0.0015	14.5675	0.1417	34.5504	98.6703	0.00	1.67	27.53	31.05	0.18	23.14	14.63	0.00	0.00	0.01	0.00	0.21	0.08	0.15	0.00	98.66
517	16SUV023	2016_2	2_4_1	137	Beaufort Fm	chromite	chromite	0.25-0.5	0.0296	0.0011	0.0036	0.0000	18.0557	25.7168	7.4086	0.0060	13.3519	0.1940	33.9995	99.2315	0.00	0.05	25.23	37.59	0.25	23.23	12.29	0.01	0.00	0.00	0.00	0.13	0.41	0.04	0.00	99.23
518	16SUV023	2016_2	2_4_2	138	Beaufort Fm	chromite	chromite	0.25-0.5	0.5888	0.0009	0.0000	0.0000	13.6477	24.7749	9.8420	0.0022	14.6564	0.1090	35.3866	99.3191	0.00	0.98	27.69	36.21	0.14	17.56	16.32	0.00	0.00	0.00	0.00	0.24	0.06	0.12	0.00	99.31
519	16SUV023	2016_2	2_4_3	139	Beaufort Fm	chromite	chromite	0.25-0.5	0.7027	0.0105	0.0034	0.0000	20.1147	29.8084	6.2140	0.0065	9.0064	0.1945	32.2948	98.7380	0.00	1.17	17.02	43.57	0.25	25.88	10.30	0.01	0.00	0.00	0.00	0.16	0.09	0.26	0.00	98.71
520	16SUV023	2016_2	2_4_4	140	Beaufort Fm	chromite	chromite	0.25-0.5	0.4615	0.0008	0.0025	0.0000	12.6743	25.8910	9.8480	0.0000	14.5947	0.1180	35.5103	99.4400	0.00	0.77	27.58	37.84	0.15	16.31	16.33	0.00	0.00	0.00	0.00	0.21	0.06	0.17	0.00	99.42
521	16SUV023	2016_2	2_4_5	141	Beaufort Fm	chromite	chlorite?	0.25-0.5	0.6772	0.8643	0.0324	15.8235	14.3021	0.0000	2.1715	2.1155	13.3918	0.1200	37.1274	86.6893	33.85	1.13	25.30	0.00	0.15	18.40	3.60	2.96	1.17	0.04	0.00	0.00	0.05	0.00	0.00	86.65
522	16SUV023	2016_2	2_4_6	142	Beaufort Fm	chromite	chromite	0.25-0.5	0.0631	0.0000	0.0045	0.0000	13.2507	28.6546	8.1727	0.0000	13.7595	0.1606	34.8694	99.3442	0.00	0.11	26.00	41.88	0.21	17.05	13.55	0.00	0.00	0.00	0.00	0.09	0.22	0.23	0.00	99.34
523	16SUV023	2016_2	2_4_7	143	Beaufort Fm	chromite	chromite	0.25-0.5	0.4389	0.0000	0.0068	0.0000	10.3052	20.3499	10.8549	0.0041	19.1444	0.0912	36.9664	98.5525	0.00	0.73	36.17	29.74	0.12	13.26	18.00	0.00	0.00	0.01	0.00	0.28	0.09	0.11	0.00	98.52
524	16SUV024	2016_2	2_4_8	144	bedrock	chromite	chromite	0.25-0.5	2.2310	0.0016	0.0025	0.0000	26.2735	26.6321	4.7067	0.0000	6.7551	0.2433	30.6947	98.0827	0.00	3.72	12.76	38.92	0.31	33.80	7.81	0.00	0.00	0.00	0.00	0.13	0.16	0.45	0.00	98.07
525	16SUV024	2016_2	2_4_9	145	bedrock	chromite	chromite	0.25-0.5	0.2972	0.0000	0.0021	0.0000	14.2181	33.7547	8.3669	0.0024	8.4048	0.1196	32.9694	98.4218	0.00	0.50	15.88	49.34	0.15	18.29	13.87	0.00	0.00	0.00	0.00	0.19	0.05	0.15	0.00	98.41
526	16SUV024	2016_2	2_4_10	146	bedrock	chromite	chromite	0.25-0.5	0.0514	0.0000	0.0019	0.0000	28.5184	36.2931	2.2659	0.0079	1.0430	0.2723	27.5880	96.4668	0.00	0.09	1.97	53.05	0.35	36.69	3.76	0.01	0.00	0.00	0.00	0.09	0.33	0.13	0.00	96.46
527	16SUV027	2016_2	2_5_1	147	stream sediments	chromite	chromite	0.5-1.0	0.7161	0.0000	0.0000	0.0000	11.2115	23.0690	10.4085	0.0017	16.6696	0.1030	36.1637	98.6983	0.00	1.19	31.50	33.72	0.13	14.42	17.26	0.00	0.00	0.00	0.00	0.26	0.06	0.15	0.00	98.70
528	16SUV027	2016_2	2_5_2	148	stream sediments	chromite	chromite	0.5-1.0	0.0325	0.0000	0.0000	0.0000	11.2725	27.6951	9.9374	0.0013	14.4886	0.1101	35.5949	99.4305	0.00	0.05	27.38	40.48	0.14	14.50	16.48	0.00	0.00	0.00	0.00	0.20	0.06	0.14	0.00	99.43
529	16SUV027	2016_2	2_5_3	149	stream sediments	chromite	chromite	0.5-1.0	0.2065	0.0011	0.0119	0.0000	15.5537	24.9538	7.9498	0.0008	14.9811	0.2039	34.8446	99.0475	0.00	0.34	28.31	36.47	0.26	20.01	13.18	0.00	0.00	0.01	0.00	0.20	0.09	0.15	0.00	99.04
530	16SUV027	2016_2	2_5_4	150	stream sediments	chromite	chromite	0.25-0.5	1.3449	0.0000	0.0014	0.0000	18.6124	28.8660	8.2562	0.0030	8.3710	0.1514	32.5778	98.4623	0.00	2.24	15.82	42.19	0.20	23.94	13.69	0.00	0.00	0.00	0.00	0.16	0.06	0.16	0.00	98.46
531	16SUV027	2016_2	2_5_6	151	stream sediments	chromite	chromite	0.25-0.5	0.3781	0.0102	0.0022	0.0000	11.4752	18.9714	11.0176	0.0018	19.7253	0.1020	37.2387	99.2485	0.00	0.63	37.27	27.73	0.13	14.76	18.27	0.00	0.00	0.00	0.04	0.24	0.05	0.09	0.00	99.22
532	16SUV027	2016_2	2_5_7	152	stream sediments	chromite	chromite	0.25-0.5	1.0734	0.0022	0.0000	0.0000	16.9355	29.7446	8.6853	0.0073	8.6027	0.1376	32.8156	98.3111	0.00	1.79	16.25	43.47	0.18	21.79	14.40	0.01	0.00	0.00	0.00	0.22	0.04	0.15	0.00	98.30
533	16SUV027	2016_2	2_5_8	153	stream sediments	chromite	chromite	0.25-0.5	1.5829	0.0084	0.0034	0.0000	21.1174	22.9389	7.9902	0.0047	11.0926	0.1600	32.9917	98.2410	0.00	2.64	20.96	33.53	0.21	27.17	13.25	0.00	0.00	0.00	0.00	0.20	0.09	0.18	0.00	98.22
534	16SUV027	2016_2	2_5_9	154	stream sediments	chromite	chromite	0.25-0.5	0.3509	0.0000	0.0002	0.0000	18.4858	28.9053	7.3076	0.0028	10.5052	0.1501	33.1603	99.1116	0.00	0.59	19.85	42.25	0.19	23.78	12.12	0.00	0.00	0.00	0.00	0.12	0.05	0.16	0.00	99.11
535	16SUV027	2016_2	2_5_10	155	stream sediments	chromite	andradite	0.25-0.5	3.3389	0.0511	0.0063	15.3434	18.1646	0.0000	0.3985	23.7469	0.8248	0.1310	35.5028	97.6025	32.83	5.57	1.56	0.00	0.17	23.37	0.66	33.23	0.07	0.01	0.00	0.00	0.00	0.10	0.03	97.59
536	16SUV027	2016_2	2_5_11	156	stream sediments	chromite	chromite	0.25-0.5	0.2627	0.0152	0.0017	0.0000	19.6957	31.7254	5.8184	0.0068	8.6717	0.1823	32.1572	98.8294	0.00	0.44	16.38	46.37	0.24	25.34	9.65	0.01	0.00	0.00	0.00	0.21	0.08	0.09	0.00	98.81
537	16SUV027	2016_2	2_5_12	157	stream sediments	chromite	chromite	0.25-0.5	1.4237	0.0133	0.0042	0.0000	20.6441	23.7291	8.1756	0.0025	10.7546	0.1378	32.9083	98.0687	0.00	2.37	20.32	34.68	0.18	26.56	13.56	0.00	0.00	0.00	0.00	0.15	0.06	0.16	0.00	98.04
538	16SUV028	2016_2	2_6_1	158	stream sediments	chromite	chromite	0.25-0.5	0.3532	0.0000	0.0000	0.0000	11.8114	26.6009	9.8340	0.0009	14.6047	0.1222	35.5127	99.1765	0.00	0.59	27.60	38.88	0.16	15.20	16.31	0.00	0.00	0.00	0.00	0.22	0.09	0.13	0.00	99.16
539	16SUV028	2016_2	2_6_2	159	stream sediments	chromite	chromite	0.25-0.5	0.4843	0.0157	0.0000	0.0000	11.9993	28.4531	9.7819	0.0024	12.8662	0.1277	34.9425	99.0237	0.00	0.81	24.31	41.59	0.16	15.44	16.22	0.00	0.02	0.00	0.00	0.21	0.07	0.16	0.00	98.99
540	16SUV028	2016_2	2_6_3	160	stream sediments	chromite	chromite	0.25-0.5	0.6696	0.0097	0.0000	0.0000	13.0753	28.0369	9.2763	0.0031	12.8672	0.1330	34.8372	99.2263	0.00	1.12	24.31	40.98	0.17	16.82	15.38	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	99.21
541	16SUV028	2016_2	2_6_4	161	stream sediments	chromite	chromite	0.25-0.5	0.1793	0.0108	0.0033	0.0000	12.0749	29.5386	9.4890	0.0029	12.8031	0.1185	35.0092	99.5692	0.00	0.30	24.19	43.17	0.15	15.53	15.74	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	99.52
542	16SUV028	2016_2	2_6_5	162	stream sediments	chromite	chromite	0.25-0.5	0.4347	0.0091	0.0015	0.0000	11.7211	28.0501	9.8156	0.0009	13.6031	0.1240	35.2925	99.3445	0.00	0.73	25.70	41.00	0.16	15.08	16.28	0.00	0.00	0.00	0.00	0.21	0.06	0.09	0.00	99.30
543	16SUV028	2016_2	2_6_6	163	stream sediments	chromite	chromite	0.25-0.5	1.1381	0.0104	0.0052	0.0000	17.1707	24.1626	8.8746	0.0013	12.7597	0.1260	34.1732	98.7564	0.00	1.90	24.11	35.32	0.16	22.09	14.72	0.00	0.00	0.00	0.00	0.22	0.09	0.13	0.00	98.73
544	16SUV028	2016_2	2_6_7	164	stream sediments	chromite	chromite	0.25-0.5	0.9353	0.0050	0.0041	0.0000	13.6285	27.2364	9.8208	0.0059	12.3531	0.1213	34.7106	99.1606	0.00	1.56	23.34	39.81	0.16	17.53	16.29	0.01	0.00	0.00	0.00	0.21	0.06	0.19	0.00	99.15
545	16SUV028	2016_2	2_6_8	165	stream sediments	chromite	chromite	0.25-0.5	0.7345	0.0080	0.0000	0.0000	12.3179	22.6094	10.2850	0.0003	16.6506	0.1030	36.1815	99.2151	0.00	1.23	31.46	33.05	0.13	15.85	17.06	0.00	0.00	0.00	0.00	0.23	0.07	0.12	0.00	99.18
546	16SUV028	2016_2	2_6_9	166	stream sediments	chromite	chromite	0.5-1.0	1.3344	0.0130	0.0016	0.0000	18.9572	28.0833	8.2151	0.0021	8.7349	0.1578	32.6206	98.4250	0.00	2.23	16.50	41.05	0.20	24.39	13.62	0.00	0.00	0.00	0.00	0.17	0.06	0.18	0.00	98.40
547	16SUV028	2016_2	2_6_10	167	stream sediments	chromite	chromite	0.5-1.0	0.2724	0.0000	0.0000	0.0000	11.4853	15.9903	11.0236	0.0005	22.1760	0.1064	37.9709	99.3551	0.00	0.45	41.90	23.37	0.14	14.78	18.28	0.00	0.00	0.00	0.00	0.26	0.05	0.09	0.00	99.33
548	16SUV028	2016_2	2_6_11	168	stream sediments	chromite	chromite	0.25-0.5	0.9171	0.0000	0.0025	0.0000	14.3856	26.2385	9.6256	0.0027	12.7692	0.1192	34.6817	99.0554	0.00	1.53	24.13	38.35	0.15	18.51	15.96	0.00	0.00	0.00	0.00	0.20	0.05	0.16	0.00	99.05
549	16SUV028	2016_2	2_6_12	169	stream sediments	chromite	chromite	0.25-0.5	0.7077	0.0027	0.0000	0.0000	12.3491	26.5286	10.1999	0.0018	13.7619	0.0944	35.3565	99.3500	0.00	1.18	26.00	38.77	0.12	15.89	16.91	0.00	0.00	0.00	0.00	0.23	0.06	0.15	0.00	99.32
550	16SUV028	2016_2	2_6_13	170	stream sediments	chromite	chromite	0.25-0.5	0.6440	0.0126	0.0000	0.0000	12.9912	28.2739	9.7158	0.0033	12.3568	0.1313	34.7326	99.1583	0.00	1.07	23.35	41.32	0.17	16.71	16.11	0.00	0.00	0.00	0.00	0.19	0.06	0.14	0.00	99.13
551	16SUV028	2016_2	2_6_14	171	stream sediments	chromite	chromite	0.25-0.5	0.8645	0.0036	0.0046	0.0000	13.7723	26.1242	9.8196	0.0006	12.9412	0.1240	34.7200	98.7256	0.00	1.44	24.45	38.18	0.16	17.72	16.28	0.00	0.00	0.00	0.00	0.22	0.06	0.17	0.00	98.70
552	16SUV028	2016_2	2_6_15	172	stream sediments	chromite	chromite	0.25-0.5	2.2109	0.0181	0.0000	0.0000	24.4361	27.2582	6.7108	0.0045	5.8048	0.2035	30.8020	97.7034	0.00	3.69	10.97	39.84	0.26	31.44	11.13	0.00	0.00	0.00	0.00	0.08	0.07	0.19	0.00	97.67
553	16SUV028	2016_2	2_7_1	173	stream sediments	chromite	pseudorutile	0.25-0.5	33.5064	0.0312	0.0063	0.0447	25.8063	0.0092	0.0514	0.0268	0.0802	1.3927	30.4272	91.5001	0.10	55.89	0.15	0.00	1.80	33.20	0.09	0.04	0.04	0.01	0.04	0.00	0.05	0.00	0.05	91.46
554	16SUV028	2016_2	2_7_2	174	stream sediments	chromite	pseudorutile	0.25-0.5	33.7940	0.0228	0.0013	0.2081	23.7791	0.2311	1.3482	0.0146	0.2102	0.2975	31.1017	91.4117	0.45	56.37	0.40	0.34	0.38	30.59	2.24	0.02	0.03	0.00	0.00	0.05	0.00	0.48	0.04	91.38
555	16SUV028	2016_2	2_7_4	175	stream sediments	chromite	chromite	0.25-0.5	1.6165	0.0031	0.0021	0.0000	19.0319	29.3915	7.9706	0.0031	7.6251	0.1487	32.2960	98.4282	0.00	2.70	14.41	42.96	0.19	24.48	13.22	0.00	0.00	0.00	0.00	0.20	0.06	0.18	0.00	98.40
556	16SUV028	2016_2	2_7_5	176	stream sediments	chromite	chlorite?	0.25-0.5	0.3603	1.5423	0.0457	15.8393	10.9782	0.0000	0.8512	1.1427	17.4588	0.0774	38.1673	85.5159	33.89	0.60	32.99	0.00	0.10	14.12	1.41	0.20	2.08	0.06	0.00	0.00	0.05	0.00	0.00	85.49
557	16SUV028	2016_2	2_7_6	177	stream sediments	chromite	chromite	0.25-0.5	1.3714	0.0000	0.0035	0.0000	17.3399	18.7843	9.4278	0.0084	16.1450	0.1303	35.2818	98.8393	0.00	2.29	30.51	27.45	0.17	22.31	15.63	0.01	0.00	0.00	0.00	0.22	0.07	0.14	0.00	98.81
558	16SUV028	2016_2	2_7_7	178	stream sediments	chromite	ilmenite	0.25-0.5	29.2953	0.0000	0.0000	0.0031	37.3155	0.0253	0.2050	0.0043	0.0169	0.4317	30.5762	97.9237	0.00	48.87	0.03	0.04	0.56	48.01	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	97.89
559	16SUV028	2016_2	2_7_8	179	stream sediments	chromite	chromite	0.25-0.5	1.2937	0.0000	0.0006	0.0000	19.3565	28.4330	8.0442	0.0049	8.4622	0.1535	32.5178	98.6025	0.00	2.16	15.99	41.56	0.20	24.90	13.34	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	98.58
560	16SUV028	2016_2	2_7_9	180	stream sediments	chromite	pseudorutile	0.25-0.5	33.4056	0.0147	0.0168	0.0565	25.9532	0.1239	0.8974	0.0884	0.1486	0.2991	30.8867	92.2277	0.12	55.72	0.28	0.18	0.39	33.39	1.49	0.12	0.00	0.02	0.05	0.04	0.03	0.35	0.03	92.21
561	16SUV028	2016_2	2_7_10	181	stream sediments	chromite	chromite	0.25-0.5	2.1378	0.0000	0.0026	0.0000	22.0005	24.4370	7.9494	0.0129	8.6923	0.1508	32.1231	97.7821	0.00	3.57	16.42	35.72	0.19	28.30	13.18	0.02	0.00	0.00	0.00	0.17	0.03	0.17	0.00	97.78
562	16SUV028	2016_2	2_7_11	182	stream sediments	chromite	chromite	0.25-0.5	1.7891	0.0016	0.0036	0.0000	21.0259	23.1026	8.3165	0.0041	10.6413	0.1237	32.9970	98.3901	0.00	2.98	20.11	33.77	0.16	27.05	13.79	0.00	0.00	0.00	0.00	0.24	0.09	0.16	0.02	98.38
563	16SUV028	2016_2	2_7_12	183	stream sediments	chromite	chromite	0.25-0.5	0.1533	0.0153	0.0103	0.0000	21.5383	26.8714	5.4247	0.0003	11.6493	0.1771	32.7496	98.8554	0.00	0.26	22.01	39.27	0.23	27.71	9.00	0.00	0.00	0.01	0.00	0.10	0.16	0.09	0.00	98.83
564	16SUV013	2016_2	2_7_13	184	glaciofluvial	chromite	chromite	0.25-0.5	0.1645	0.0052	0.0028	0.0000	15.3625	29.0602	7.9815	0.0000	12.0913	0.1377	34.0758	99.1921	0.00	0.27	22.85	42.47	0.18	19.76	13.24	0.00	0.00	0.00	0.00	0.22	0.07	0.12	0.00	99.18
565	15SUV001	2016_2	2_8_1	185	stream sediments	vesuvianite	garnet	0.25-0.5	0.1728	0.0035	0.0000	18.5730	3.2410	0.0024	0.5040	26.2731	10.0233	0.1076	42.0041	100.9410	39.73	0.29	18.94	0.00	0.14	4.17	0.84	36.76	0.00	0.00	0.00	0.00	0.00	0.00	0.04	100.91
566	15SUV001	2016_2	2_8_2	186	stream sediments	vesuvianite	garnet	0.25-0.5	0.3130	0.0000	0.0040	18.5089	3.9227	0.0095	0.4642	26.1256	9.5590	0.1519	41.7237	100.8080	39.60	0.52	18.06	0.00	0.20	5.05	0.77	36.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.75
567	15SUV001	2016_2	2_8_3	187	stream sediments	vesuvianite	vesuvianite	0.25-0.5	0.4190	0.0093	0.0056	17.3530	1.1760	0.0066	2.4041	26.0764	9.0684	0.0122	40.4703	97.0283	37.12	0.70	17.13	0.00	0.02	1.51	3.99	36.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96.96
568	15SUV001	2016_2	2_8_4	188	stream sediments	vesuvianite	garnet	0.25-0.5	0.2030	0.0069	0.0048	18.2657	5.6533	0.0000	0.3461	25.7849	8.7421	0.0795	40.9170	100.0490	39.08	0.34	16.52	0.00	0.10	7.27	0.57	36.08	0.00	0.00	0.00	0.00	0.00	0.00	0.04	100.00
569	15SUV001	2016_2	2_8_5	189	stream sediments	vesuvianite	garnet	0.25-0.5	0.2071	0.0062	0.0029	18.5103	3.3170	0.0068	0.3784	26.0738	9.9763	0.0623	41.7578	100.3370	39.60	0.35	18.85	0.00	0.08	4.27	0.63	36.48	0.00	0.00	0.00	0.00	0.00	0.03	0.00	100.28
570	15SUV001	2016_2	2_8_6	190	stream sediments	vesuvianite	garnet	0.25-0.5	0.0236	0.0166	0.0042	18.3872	4.6871	0.0079	0.4261	25.6869	9.4192	0.2062	41.3172	100.2180	39.34	0.04	17.80	0.00	0.27	6.03	0.71	35.94	0.02	0.00	0.00	0.00	0.00	0.00	0.03	100.17
571	15SVU002	2016_2	2_8_8	191	stream sediments	vesuvianite	garnet	0.5-1.0	0.1412	0.0136	0.0083	18.1191	7.7710	0.0146	0.3614	25.6844	7.3925	0.0899	40.1323	99.8196	38.76	0.24	13.97	0.00	0.12	10.00	0.60	35.94	0.02	0.01	0.00	0.00	0.00	0.09	0.05	99.79
572	15SVU002	2016_2	2_8_9	192	stream sediments	vesuvianite	garnet	0.5-1.0	1.2808	0.0128	0.0054	17.8102	5.7664	0.0315	0.4831	25.9566	7.9657	0.0435	40.6201	100.0160	38.10	2.14	15.05	0.05	0.06	7.42	0.80	36.32	0.02	0.00	0.00	0.00	0.00	0.04	0.00	99.98
573	15SVU002	2016_2	2_8_10	193	stream sediments	vesuvianite	garnet	0.5-1.0	0.4679	0.0000	0.0058	18.3755	4.3119	0.0131	0.5013	26.0330	9.1710	0.0364	41.4169	100.3830	39.31	0.78	17.33	0.00	0.05	5.55	0.83	36.43	0.00	0.01	0.00	0.00	0.00	0.04	0.04	100.35
574	15SVU002	2016_2	2_8_11	194	stream sediments	vesuvianite	garnet	0.5-1.0	0.4014	0.0159	0.0094	18.3443	4.7430	0.0000	0.4904	26.3041	8.8277	0.0259	41.2544	100.4690	39.25	0.67	16.68	0.00	0.03	6.10	0.81	36.80	0.02	0.01	0.00	0.00	0.00	0.00	0.04	100.42
575	15SVU002_rpt	2016_2	2_8_11_r	195	stream sediments	vesuvianite	andradite	0.5-1.0	0.0408	0.0082	0.0024	16.4506	18.4927	0.0038	0.3614	24.7383	1.3978	0.0572	35.4780	97.0698	35.19	0.07	2.64	0.00	0.07	23.79	0.60	34.61	0.00	0.00	0.00	0.00	0.00	0.00	0.04	97.02
576	15SUV003	2016_2	2_9_1	196	stream sediments	vesuvianite	garnet	0.25-0.5	0.1309	0.0045	0.0000	18.4213	4.7899	0.0113	0.3895	26.3323	9.0687	0.0479	41.3434	100.6000	39.41	0.22	17.14	0.00	0.06	6.16	0.65	36.84	0.00	0.00	0.00	0.00	0.00	0.03	0.04	100.54
577	15SUV003_rpt	2016_2	2_9_1_r	197	stream sediments	vesuvianite	garnet	0.25-0.5	0.0530	0.0025	0.0023	18.2992	4.7125	0.0000	0.3720	26.1013	9.1715	0.0279	41.0944	99.8805	39.15	0.09	17.33	0.00	0.04	6.06	0.62	36.52	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.83
578	15SUV003	2016_2	2_9_2	198	stream sediments	vesuvianite	garnet	0.25-0.5	0.1121	0.0008	0.0045	18.5660	3.0278	0.0076	0.4860	26.0488	10.1543	0.0854	41.8869	100.3930	39.72	0.19	19.19	0.00	0.11	3.90	0.81	36.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.35
579	15SUV003	2016_2	2_9_3	199	stream sediments	vesuvianite	garnet	0.25-0.5	0.8372	0.0213	0.0018	18.0944	5.3642	0.0000	0.4195	25.9101	8.4250	0.1100	40.8981	100.1440	38.71	1.40	15.92	0.00	0.14	6.90	0.70	36.25	0.03	0.00	0.00	0.00	0.00	0.05	0.00	100.09
580	15SUV003	2016_2	2_9_4	200	stream sediments	vesuvianite	garnet	0.25-0.5	0.0769	0.0006	0.0076	18.3170	5.1758	0.0000	0.4448	25.7295	9.0800	0.0967	41.0953	100.0610	39.19	0.13	17.16	0.00	0.12	6.66	0.74	36.00	0.00	0.01	0.00	0.00	0.00	0.04	0.00	100.04
581	15SUV003	2016_2	2_9_5	201	stream sediments	vesuvianite	garnet	0.25-0.5	0.4320	0.0000	0.0068	18.2299	4.7958	0.0000	0.3800	26.1586	8.8224	0.0382	41.0170	99.9211	39.00	0.72	16.67	0.00	0.05	6.17	0.63	36.60	0.00	0.01	0.00	0.00	0.00	0.04	0.04	99.92
582	15SUV005	2016_2	2_9_6	202	stream sediments	vesuvianite	garnet	0.25-0.5	0.1992	0.0142	0.0020	18.6991	0.4203	0.0105	0.3375	26.5466	11.5475	0.0653	42.8611	101.0910	40.00	0.33	21.82	0.00	0.08	0.54	0.56	37.14	0.02	0.00	0.00	0.00	0.00	0.53	0.00	101.03
583	15SUV010	2016_2	2_9_7	203	stream sediments	vesuvianite	garnet	0.5-1.0	0.1119	0.0122	0.0082	18.5873	1.9609	0.0000	0.1143	26.4355	10.9266	0.0707	42.2054	100.4620	39.76	0.19	20.65	0.00	0.09	2.52	0.19	36.99	0.02	0.01	0.00	0.00	0.00	0.00	0.00	100.42
584	15SUV010	2016_2	2_9_8	204	stream sediments	vesuvianite	garnet	0.5-1.0	0.1913	0.0053	0.0089	18.2480	5.3723	0.0046	0.3475	25.9223	8.8350	0.0837	40.9412	99.9774	39.04	0.32	16.69	0.00	0.11	6.91	0.58	36.27	0.00	0.01	0.00	0.00	0.00	0.00	0.03	99.96
585	15SUV010_rpt	2016_2	2_9_8_r	205	stream sediments	vesuvianite	andradite	0.5-1.0	0.4505	0.0000	0.0043	17.5544	11.9079	0.0239	0.2668	25.2548	5.0283	0.0394	38.5016	99.0818	37.56	0.75	9.50	0.03	0.05	15.32	0.44	35.34	0.00	0.00	0.00	0.00	0.00	0.04	0.04	99.07
586	15SUV010	2016_2	2_9_9	206	stream sediments	vesuvianite	garnet	0.5-1.0	0.1487	0.0038	0.0063	18.6402	2.2417	0.0220	0.4391	26.5055	10.6038	0.0564	42.3418	101.0630	39.88	0.25	20.04	0.03	0.07	2.88	0.73	37.09	0.00	0.01	0.00	0.00	0.00	0.04	0.00	101.01
587	15SUV010	2016_2	2_9_10	207	stream sediments	vesuvianite	garnet	0.5-1.0	0.2944	0.0047	0.0054	18.1770	5.9562	0.0274	0.4267	25.8804	8.4422	0.0783	40.8063	100.1600	38.89	0.49	15.95	0.04	0.10	7.66	0.71	36.21	0.00	0.00	0.00	0.00	0.00	0.07	0.00	100.13
588	15SUV010	2016_2	2_9_11	208	stream sediments	vesuvianite	garnet	0.5-1.0	0.7039	0.0028	0.0000	18.1520	4.6464	0.0035	0.5211	25.9287	8.7841	0.0954	41.0568	99.9571	38.83	1.17	16.60	0.00	0.12	5.98	0.86	36.28	0.00	0.00	0.00	0.00	0.00	0.07	0.00	99.91
589	15SUV010	2016_2	2_9_12	209	stream sediments	vesuvianite	garnet	0.25-0.5	0.0371	0.0093	0.0062	18.2262	6.9786	0.0000	0.2710	26.0674	8.0185	0.0231	40.5362	100.2030	38.99	0.06	15.15	0.00	0.03	8.98	0.45	36.47	0.00	0.01	0.00	0.00	0.00	0.03	0.00	100.17
590	15SUV010	2016_2	2_9_13	210	stream sediments	vesuvianite	andradite	0.25-0.5	0.0052	0.0085	0.0016	16.8248	19.1282	0.0263	0.1442	24.6940	1.4128	0.0059	35.8987	98.1736	35.99	0.00	2.67	0.04	0.00	24.61	0.24	34.55	0.00	0.00	0.00	0.00	0.00	0.00	0.03	98.13
591	15SUV014	2016_2	2_9_14	211	stream sediments	vesuvianite	garnet	0.25-0.5	0.1448	0.0140	0.0028	18.4598	4.2131	0.0164	0.3637	26.1953	9.5246	0.0481	41.5534	100.5750	39.49	0.24	18.00	0.00	0.06	5.42	0.60	36.65	0.02	0.00	0.00	0.00	0.00	0.00	0.00	100.49
592	15SUV015	2016_2	2_10_1	212	Beaufort Fm	vesuvianite	vesuvianite	0.25-0.5	0.0000	0.0294	0.0060	17.3858	2.1889	0.0013	1.4374	25.9225	9.1737	0.0058	39.9554	96.2494	37.19	0.00	17.33	0.00	0.00	2.82	2.38	36.27	0.04	0.01	0.00	0.15	0.00	0.00	0.03	96.22
593	15SUV021	2016_2	2_10_2	213	stream sediments	vesuvianite	andradite	0.25-0.5	0.0000	0.0077	0.0043	16.3749	21.8660	0.0000	0.0488	24.2718	0.0000	0.0232	34.6804	97.3360	35.03	0.00	0.00	0.00	0.03	28.13	0.08	33.96	0.00	0.00	0.00	0.03	0.00	0.00	0.00	97.27
594	15SUV021_rpt	2016_2	2_10_2_r	214	stream sediments	vesuvianite	garnet	0.25-0.5	0.6523	0.0016	0.0018	17.3105	7.1084	0.0383	0.0848	25.8088	7.6361	0.1395	39.4278	98.2545	37.03	1.09	14.43	0.06	0.18	9.14	0.14	36.11	0.00	0.00	0.00	0.02	0.00	0.00	0.00	98.20
595	15SUV024	2016_2	2_10_3	215	fluvial	vesuvianite	garnet	0.25-0.5	0.2358	0.0034	0.0041	18.0666	7.8051	0.0000	0.3362	25.8047	7.3633	0.0526	40.0962	99.8108	38.65	0.39	13.91	0.00	0.07	10.04	0.56	36.11	0.00	0.00	0.00	0.00	0.00	0.03	0.03	99.78
596	15SUV024	2016_2	2_10_4	216	fluvial	vesuvianite	andradite	0.25-0.5	0.0127	0.0134	0.0040	17.1210	13.7644	0.0000	0.0650	25.5209	4.4564	0.0307	37.7009	98.7553	36.63	0.00	8.42	0.00	0.04	17.71	0.11	35.71	0.00	0.00	0.00	0.00	0.00	0.06	0.00	98.67
597	15SUV024_rpt	2016_2	2_10_4_r	217	fluvial	vesuvianite	garnet	0.25-0.5	0.0157	0.0141	0.0087	18.1983	6.0994	0.0000	0.0552	26.0651	8.6662	0.0476	40.6982	99.9317	38.93	0.03	16.37	0.00	0.06	7.85	0.09	36.47	0.02	0.01	0.00	0.00	0.00	0.08	0.00	99.92
598	15SUV024	2016_2	2_10_5	218	fluvial	vesuvianite	garnet	0.25-0.5	0.3605	0.0177	0.0039	18.7594	5.2922	0.0000	1.1342	25.4017	8.1920	0.0721	41.3627	100.6450	40.13	0.60	15.48	0.00	0.09	6.81	1.88	35.54	0.02	0.00	0.00	0.00	0.00	0.04	0.03	100.63
599	15SUV024	2016_2	2_10_6	219	fluvial	vesuvianite	talc?	0.25-0.5	0.0138	0.0438	0.0353	18.7542	1.4800	0.0153	15.5617	0.0382	0.2071	0.0747	32.3253	68.5736	40.12	0.02	0.39	0.00	0.10	1.90	25.81	0.05	0.06	0.04	0.00	0.00	0.00	0.00	0.05	68.55

600	15SUV024_rpt	2016_2	2_10_6_r	220	fluvial	vesuvianite	vesuvianite	0.25-0.5	0.0478	0.0156	0.0077	17.2611	1.8788	0.0015	2.4148	25.9404	8.8655	0.0132	40.0916	96.5609	36.93	0.08	16.75	0.00	0.02	2.42	4.00	36.30	0.02	0.01	0.00	0.00	0.00	0.00	0.00	96.52
601	15SUV026	2016_2	2_10_7	221	stream sediments	vesuvianite	garnet	0.5-1.0	0.1295	0.0000	0.0026	18.3463	4.8205	0.0075	0.6309	25.6808	9.1275	0.1976	41.2528	100.2520	39.25	0.22	17.25	0.00	0.26	6.20	1.05	35.93	0.00	0.00	0.00	0.00	0.00	0.05	0.03	100.23
602	15SUV027	2016_2	2_10_8	222	stream sediments	vesuvianite	garnet	0.5-1.0	0.6528	0.0000	0.0045	17.6560	8.7958	0.0000	0.3875	25.7221	6.6542	0.0770	39.5685	99.5642	37.77	1.09	12.57	0.00	0.10	11.32	0.64	35.99	0.00	0.00	0.00	0.00	0.00	0.04	0.03	99.55
603	15SUV050	2016_2	2_10_9	223	stream sediments	vesuvianite	garnet	0.25-0.5	0.0583	0.0045	0.0016	18.5629	3.1835	0.0253	0.1534	26.0761	10.4699	0.0288	41.9607	100.5530	39.71	0.10	19.78	0.04	0.04	4.10	0.25	36.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.50
604	15SUV050	2016_2	2_10_10	224	stream sediments	vesuvianite	vesuvianite	0.25-0.5	0.0639	0.0038	0.0000	15.1339	1.7337	0.0052	0.2169	27.5923	11.1733	0.0925	38.9247	94.9633	32.38	0.11	21.11	0.00	0.12	2.23	0.36	38.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94.91
605	15SUV050_rpt	2016_2	2_10_10_r	225	stream sediments	vesuvianite	vesuvianite	0.25-0.5	0.0103	0.0066	0.1609	14.8800	1.2611	0.0069	0.3832	27.2224	11.3260	0.1429	38.6074	94.0247	31.83	0.00	21.40	0.00	0.18	1.62	0.64	38.09	0.00	0.19	0.00	0.00	0.00	0.00	0.00	93.96
606	15SUV050	2016_2	2_10_11	226	stream sediments	vesuvianite	garnet	0.25-0.5	0.2374	0.0071	0.0124	17.9757	1.8262	0.0000	0.0620	26.8039	11.0243	0.2174	41.7989	99.9972	38.46	0.40	20.83	0.00	0.28	2.35	0.10	37.50	0.00	0.01	0.00	0.00	0.00	0.00	0.02	99.96
607	15SUV050_rpt	2016_2	2_10_11_r	227	stream sediments	vesuvianite	garnet	0.25-0.5	0.4909	0.0170	0.0105	18.0207	4.4323	0.0000	0.1022	26.2202	9.1766	0.0518	40.8735	99.4377	38.55	0.82	17.34	0.00	0.07	5.70	0.17	36.69	0.02	0.01	0.00	0.00	0.00	0.05	0.00	99.43
608	15SUV050_rpt	2016_2	2_10_11_r	228	stream sediments	vesuvianite	K-feldspar	0.25-0.5	0.0000	0.1244	14.4760	29.4690	0.0282	0.0000	0.0012	0.4927	9.7783	0.0000	45.4864	99.8664	63.04	0.00	18.48	0.00	0.00	0.04	0.00	0.69	0.17	17.44	0.00	0.00	0.00	0.00	0.00	99.85
609	15SUV050	2016_2	2_10_12	229	stream sediments	vesuvianite	garnet	0.25-0.5	0.2222	0.0000	0.0005	18.2646	5.3219	0.0039	0.4010	26.0034	8.6302	0.0407	40.8579	99.8079	39.07	0.37	16.31	0.00	0.05	6.85	0.66	36.38	0.00	0.00	0.00	0.00	0.00	0.04	0.04	99.78
610	16SUV013	2016_2	2_10_13	230	glaciofluvial	vesuvianite	garnet	0.25-0.5	0.2024	0.0156	0.0077	18.4324	3.2904	0.0000	0.3790	26.0798	9.9537	0.1333	41.6842	100.2520	39.43	0.34	18.81	0.00	0.17	4.23	0.63	36.49	0.02	0.01	0.00	0.00	0.00	0.06	0.04	100.23
611	16SUV013_rpt	2016_2	2_10_13_r	231	glaciofluvial	vesuvianite	clinopyroxene	0.25-0.5	0.1268	0.1653	0.0118	24.8239	2.9877	0.0000	9.4690	18.2725	0.5534	0.0524	43.3923	99.9240	53.11	0.21	1.05	0.00	0.07	3.84	15.70	25.57	0.22	0.01	0.00	0.00	0.00	0.00	0.12	99.90
612	16SUV013	2016_2	2_10_14	232	glaciofluvial	vesuvianite	vesuvianite	0.25-0.5	0.3585	0.0139	0.0099	17.0104	0.1519	0.0000	2.3455	26.5109	9.3567	0.0000	40.1475	95.9426	36.39	0.60	17.68	0.00	0.00	0.20	3.89	37.09	0.02	0.01	0.00	0.00	0.00	0.04	0.03	95.94
613	15SUV019	2016_3	3_1_1	127	Beaufort Fm	GP	garnet	0.18-0.25	0.2142	0.0413	0.0022	19.6634	5.2453	1.4525	12.8714	2.9067	11.4936	0.2278	44.6854	98.8331	42.07	0.36	21.72	2.12	0.29	6.75	21.34	4.07	0.06	0.00	0.00	0.00	0.00	0.00	0.04	98.82
614	15SUV019	2016_3	3_1_2	128	Beaufort Fm	GP	garnet	0.18-0.25	0.2066	0.0254	0.0017	19.4204	5.1623	2.1598	12.7537	3.7197	11.1529	0.2371	44.6462	99.5254	41.55	0.34	21.07	3.16	0.31	6.64	21.15	5.20	0.03	0.00	0.00	0.00	0.00	0.00	0.03	99.48
615	15SUV028	2016_3	3_1_3	129	Beaufort Fm	GP	garnet	0.18-0.25	0.1643	0.0291	0.0018	19.6425	5.5814	2.2081	12.7121	3.4981	10.9934	0.2526	44.7480	99.8554	42.02	0.27	20.77	3.23	0.33	7.18	21.08	4.89	0.04	0.00	0.00	0.00	0.00	0.03	0.00	99.84
616	15SUV028	2016_3	3_1_4	130	Beaufort Fm	GP	garnet	0.18-0.25	0.5662	0.0346	0.0000	19.2983	5.6856	3.4554	12.3393	4.1102	9.6390	0.2474	44.0437	99.4718	41.29	0.94	18.21	5.05	0.32	7.31	20.46	5.75	0.05	0.00	0.00	0.02	0.00	0.03	0.03	99.46
617	16SUV023	2016_3	3_1_5	131	Beaufort Fm	GP	garnet	0.18-0.25	0.2675	0.0300	0.0000	19.3019	5.0958	4.7732	12.1971	4.1381	9.4117	0.2815	44.0106	99.5552	41.29	0.45	17.78	6.98	0.36	6.56	20.23	5.79	0.04	0.00	0.00	0.00	0.00	0.04	0.03	99.55
618	16SUV023	2016_3	3_1_6	132	Beaufort Fm	GP	garnet	0.18-0.25	0.0375	0.0020	0.0053	19.0386	6.0431	5.6792	10.7006	5.1545	9.0293	0.4224	43.3588	99.5222	40.73	0.06	17.06	8.30	0.55	7.77	17.74	7.21	0.00	0.00	0.00	0.00	0.00	0.05	0.00	99.48
619	16SUV023	2016_3	3_1_7	133	Beaufort Fm	GP	garnet	0.18-0.25	0.2814	0.0378	0.0021	19.3095	6.2221	2.5884	12.3908	3.4082	10.7295	0.2778	44.3568	99.6658	41.31	0.47	20.27	3.78	0.36	8.00	20.55	4.77	0.05	0.00	0.00	0.00	0.00	0.04	0.03	99.64
620	16SUV023	2016_3	3_1_8	134	Beaufort Fm	GP	garnet	0.18-0.25	0.1083	0.0296	0.0013	19.3218	5.3184	4.9201	12.1040	4.0384	9.5205	0.2767	44.0650	99.7601	41.34	0.18	17.99	7.19	0.36	6.84	20.07	5.65	0.04	0.00	0.00	0.00	0.00	0.04	0.05	99.75
621	16SUV023	2016_3	3_1_9	135	Beaufort Fm	GP	garnet	0.18-0.25	0.1529	0.0126	0.0037	19.1050	5.0912	6.4062	11.7010	4.8566	8.5323	0.2636	43.6327	99.8187	40.87	0.25	16.12	9.36	0.34	6.55	19.40	6.80	0.02	0.00	0.00	0.03	0.00	0.04	0.03	99.81
622	16SUV023	2016_3	3_1_10	136	Beaufort Fm	GP	garnet	0.18-0.25	0.0534	0.0119	0.0000	19.5043	6.1474	3.4330	12.1319	3.8333	10.1451	0.2691	44.2513	99.8380	41.73	0.09	19.17	5.02	0.35	7.91	20.12	5.36	0.02	0.00	0.00	0.00	0.00	0.07	0.00	99.82
623	16SUV023	2016_3	3_1_11	137	Beaufort Fm	GP	garnet	0.18-0.25	0.1399	0.0263	0.0000	19.5053	5.2266	4.0853	12.3514	3.7790	10.0191	0.2810	44.3679	99.8146	41.73	0.23	18.93	5.97	0.36	6.72	20.48	5.29	0.04	0.00	0.00	0.00	0.00	0.00	0.03	99.79
624	16SUV023	2016_3	3_1_12	138	Beaufort Fm	GP	garnet	0.18-0.25	0.0000	0.0159	0.0059	19.3234	6.1036	3.9550	12.2523	3.0667	10.3695	0.3928	44.2349	99.7402	41.34	0.00	19.59	5.78	0.51	7.85	20.32	4.29	0.02	0.01	0.00	0.00	0.00	0.00	0.00	99.71
625	16SUV023	2016_3	3_1_13	139	Beaufort Fm	GP	garnet	0.18-0.25	0.3592	0.0365	0.0062	19.3475	6.6283	2.3610	11.9126	3.8121	10.5592	0.2751	44.1610	99.5287	41.39	0.60	19.95	3.45	0.36	8.53	19.75	5.33	0.05	0.01	0.00	0.00	0.00	0.06	0.02	99.51
626	16SUV023	2016_3	3_1_14	140	Beaufort Fm	GP	garnet	0.18-0.25	0.0000	0.0000	0.0041	19.5310	4.9393	4.0703	13.7103	1.8939	10.3875	0.2731	44.6657	99.5101	41.78	0.00	19.63	5.95	0.35	6.35	22.74	2.65	0.00	0.00	0.00	0.00	0.00	0.04	0.00	99.49
627	16SUV023	2016_3	3_2_1	141	Beaufort Fm	GP	garnet	0.18-0.25	0.0368	0.0111	0.0000	19.5160	5.9981	2.2452	12.4173	3.4122	11.1773	0.3000	44.5987	99.7431	41.75	0.06	21.12	3.28	0.39	7.72	20.59	4.77	0.00	0.00	0.00	0.00	0.00	0.03	0.00	99.71
628	16SUV023	2016_3	3_2_2	142	Beaufort Fm	GP	garnet	0.18-0.25	0.2090	0.0208	0.0017	19.4736	6.0960	2.9354	12.1346	3.7440	10.4882	0.2563	44.3426	99.7351	41.66	0.35	19.82	4.29	0.33	7.84	20.12	5.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	99.68
629	16SUV023	2016_3	3_2_3	143	Beaufort Fm	GP	garnet	0.18-0.25	0.0361	0.0252	0.0014	19.3417	5.7411	3.5447	12.5823	3.4191	10.4477	0.3185	44.4262	99.9373	41.38	0.06	19.74	5.18	0.41	7.39	20.87	4.78	0.03	0.00	0.00	0.00	0.00	0.03	0.05	99.92
630	16SUV023	2016_3	3_2_4	144	Beaufort Fm	GP	garnet	0.18-0.25	0.0002	0.0239	0.0017	19.6335	5.2933	3.6742	13.2617	2.4149	10.5747	0.2984	44.8498	100.1080	42.00	0.00	19.98	5.37	0.39	6.81	21.99	3.38	0.03	0.00	0.00	0.00	0.00	0.00	0.10	100.05
631	16SUV023	2016_3	3_2_5	145	Beaufort Fm	GP	garnet	0.18-0.25	0.0000	0.0124	0.0064	19.3298	5.1606	6.5588	13.1424	2.3444	8.8688	0.3326	44.1218	99.9070	41.35	0.00	16.76	9.59	0.43	6.64	21.79	3.28	0.02	0.01	0.00	0.00	0.00	0.04	0.00	99.91
632	16SUV023	2016_3	3_2_6	146	Beaufort Fm	GP	garnet	0.18-0.25	0.0000	0.0120	0.0077	19.0760	6.0470	5.0704	10.8191	5.1912	9.4669	0.4111	43.5813	99.7527	40.81	0.00	17.89	7.41	0.53	7.78	17.94	7.26	0.02	0.01	0.00	0.00	0.00	0.06	0.00	99.71
633	16SUV023	2016_3	3_2_7	147	Beaufort Fm	GP	garnet	0.18-0.25	0.2265	0.0276	0.0022	19.4361	5.7973	3.2748	12.3037	3.7661	10.2221	0.2659	44.2725	99.6338	41.58	0.38	19.31	4.79	0.34	7.46	20.40	5.27	0.04	0.00	0.00	0.00	0.00	0.03	0.00	99.60
634	16SUV023	2016_3	3_2_8	148	Beaufort Fm	GP	garnet	0.18-0.25	0.0683	0.0269	0.0000	19.3099	5.3295	4.0105	12.4257	3.7789	10.1096	0.3096	44.2628	99.7191	41.31	0.11	19.10	5.86	0.40	6.86	20.61	5.29	0.04	0.00	0.00	0.02	0.00	0.04	0.06	99.69
635	16SUV023	2016_3	3_2_9	149	Beaufort Fm	GP	garnet	0.18-0.25	0.2549	0.0421	0.0031	19.3025	5.0814	4.4127	12.5012	3.8501	9.6827	0.2519	44.1492	99.5774	41.29	0.43	18.30	6.45	0.33	6.54	20.73	5.39	0.06	0.00	0.00	0.00	0.00	0.04	0.00	99.54
636	16SUV023	2016_3	3_2_10	150	Beaufort Fm	GP	garnet	0.18-0.25	0.2199	0.0417	0.0000	19.2336	5.4710	5.3909	11.8733	4.1903	9.1015	0.2934	43.8242	99.6691	41.15	0.37	17.20	7.88	0.38	7.04	19.69	5.86	0.06	0.00	0.00	0.00	0.00	0.03	0.03	99.67
637	16SUV023	2016_3	3_2_11	151	Beaufort Fm	GP	garnet	0.18-0.25	0.1944	0.0425	0.0000	19.4682	5.6350	2.9253	12.6220	3.4501	10.6951	0.2876	44.6063	99.9766	41.65	0.32	20.21	4.28	0.37	7.25	20.93	4.83	0.06	0.00	0.00	0.00	0.00	0.03	0.03	99.96
638	16SUV023	2016_3	3_2_12	152	Beaufort Fm	GP	garnet	0.18-0.25	0.0848	0.0277	0.0000	19.2402	5.7774	4.5059	11.6806	4.2908	9.7894	0.3298	43.9854	99.8014	41.16	0.14	18.50	6.59	0.43	7.43	19.37	6.00	0.04	0.00	0.00	0.00	0.00	0.06	0.05	99.77
639	16SUV023	2016_3	3_2_13	153	Beaufort Fm	GP	garnet	0.18-0.25	0.2200	0.0284	0.0024	19.5312	5.1359	2.5874	12.7977	3.4116	10.8500	0.2590	44.6277	99.5043	41.78	0.37	20.50	3.78	0.33	6.61	21.22	4.77	0.04	0.00	0.00	0.00	0.00	0.05	0.04	99.50
640	16SUV023	2016_3	3_2_14	154	Beaufort Fm	GP	garnet	0.18-0.25	0.0375	0.0160	0.0065	19.7486	5.8339	1.5059	12.8229	3.3164	11.6300	0.2576	45.0427	100.0820	42.25	0.06	21.97	2.20	0.33	7.51	21.26	4.39	0.02	0.01	0.00	0.00	0.00	0.03	0.03	100.07
641	16SUV023	2016_3	3_2_15	155	Beaufort Fm	GP	spinel	0.18-0.25	0.0411	0.0085	0.0018	0.0208	2.8506	0.0566	15.7505	0.0009	36.8250	0.0085	44.0385	99.6412	0.04	0.07	69.58	0.08	0.00	3.67	26.12	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	99.60
642	15SUV019	2016_3	3_3_1	156	Beaufort Fm	almandine	garnet	0.18-0.25	0.0216	0.0000	0.0000	18.1518	21.2621	0.0489	5.7821	0.8735	11.5640	0.3515	41.3795	99.4669	38.83	0.04	21.85	0.07	0.45	27.35	9.59	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.44
643	16SUV023	2016_3	3_3_2	157	Beaufort Fm	almandine	garnet	0.18-0.25	0.0211	0.0037	0.0018	17.4129	24.1996	0.0000	2.3520	2.6763	11.1382	1.6258	39.7891	99.2274	37.25	0.04	21.05	0.00	2.10	31.13	3.90	3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.21
644	15SUV019	2016_3	3_3_3	158	Beaufort Fm	apatite	apatite	0.18-0.25	0.0000	0.0190	0.0001	0.1315	0.0449	0.0000	0.0012	40.0065	0.0000	0.0302	39.3444	97.5468	0.28	0.00	0.00	0.00	0.04	0.06	0.00	55.98	0.03	0.00	0.00	0.00	0.00	0.00	41.15	97.53
645	16SUV023	2016_3	3_3_4	159	Beaufort Fm	grossular	garnet	0.18-0.25	0.1581	0.0025	0.0037	18.1765	5.3614	0.0000	0.0297	23.8164	10.6350	0.5030	41.4974	100.1930	38.89	0.26	20.09	0.00	0.65	6.90	0.05	33.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16
646	15SUV030	2016_3	3_3_5	160	Beaufort Fm	forsterite	olivine	0.18-0.25	0.0029	0.0061	0.0022	18.0107	14.5434	0.0159	25.0290	0.1598	0.0161	0.1957	41.4002	99.6185	38.53	0.00	0.03	0.00	0.25	18.71	41.51	0.22	0.00	0.00	0.00	0.25	0.00	0.00	0.06	99.56
647	15SUV019	2016_3	3_3_6	161	Beaufort Fm	diopside	garnet	0.18-0.25	0.2697	0.0056	0.0043	18.0206	7.8903	0.0105	0.3425	25.8160	7.3353	0.0409	40.0703	99.8338	38.55	0.45	13.86	0.00	0.05	10.15	0.57	36.12	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.78
648	15SUV019	2016_3	3_3_7	162	Beaufort Fm	low-Cr diop	clinopyroxene	0.18-0.25	0.0672	0.3347	0.0007	24.4159	4.7255	0.6376	8.7728	16.2950	1.2222	0.1606	43.0724	99.7724	52.23	0.11	2.31	0.93	0.21	6.08	14.55	22.80	0.45	0.00	0.00	0.05	0.00	0.00	0.00	99.72
649	15SUV019	2016_3	3_3_9	163	Beaufort Fm	low-Cr diop	clinopyroxene	0.18-0.25	0.2340	0.1445	0.0047	23.7147	3.9616	0.7557	10.4180	14.3310	1.9507	0.1048	43.0803	98.7637	50.73	0.39	3.69	1.10	0.14	5.10	17.28	20.05	0.19	0.00	0.00	0.04	0.00	0.04	0.00	98.75
650	15SUV028	2016_3	3_3_10	164	Beaufort Fm	low-Cr diop	clinopyroxene	0.18-0.25	0.2644	0.1494	0.0011	23.7109	4.0876	0.7158	10.3224	14.5141	2.0583	0.1003	43.2366	99.2425	50.73	0.44	3.89	1.05	0.13	5.26	17.12	20.31	0.20	0.00	0.00	0.04	0.00	0.04	0.03	99.23
651	15SUV028	2016_3	3_3_11	165	Beaufort Fm	low-Cr diop	clinopyroxene	0.18-0.25	0.1061	0.1269	0.0000	23.7962	3.2507	0.8734	10.2494	15.1848	1.9065	0.0932	43.1205	98.7605	50.91	0.18	3.60	1.28	0.12	4.18	17.00	21.25	0.17	0.00	0.00	0.03	0.00	0.00	0.00	98.71
652	16SUV023	2016_3	3_4_1	166	Beaufort Fm	ilmenite	chromite	0.18-0.25	0.9268	0.0092	0.0031	0.0000	14.3488	26.7173	9.6073	0.0038	12.5170	0.1291	34.6702	99.2501	0.00	1.55	23.65	39.05	0.17	18.46	15.93	0.00	0.00	0.00	0.21	0.06	0.16	0.00	99.22
653	16SUV023	2016_3	3_4_2	167	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.3217	0.0163	0.0009	0.0131	22.9349	2.0674	8.1279	0.0116	0.4052	0.1747	33.7361	98.2413	0.03	50.58	0.77	3.02	0.23	29.51	13.48	0.02	0.00	0.00	0.20	0.19	0.00	0.20	0.00	98.21
654	16SUV023	2016_3	3_4_3	168	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.3961	0.0004	0.0012	0.0023	23.5452	1.9205	7.9266	0.0150	0.3048	0.2166	33.6755	98.4308	0.00	50.70	0.58	2.81	0.28	30.29	13.14	0.02	0.00	0.00	0.20	0.13	0.00	0.25	0.00	98.41
655	16SUV023	2016_3	3_4_4	169	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.1691	0.0044	0.0044	0.0007	24.2635	1.9334	7.6555	0.0138	0.2323	0.2293	33.4975	98.4469	0.00	50.32	0.44	2.83	0.30	31.21	12.70	0.02	0.00	0.00	0.26	0.14	0.00	0.21	0.00	98.42
656	16SUV023	2016_3	3_4_5	170	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.0985	0.0085	0.0001	0.0147	25.9423	1.1634	7.0687	0.0137	0.3113	0.2070	33.2754	98.5325	0.03	50.21	0.59	1.70	0.27	33.37	11.72	0.02	0.00	0.00	0.25	0.11	0.00	0.23	0.00	98.49
657	16SUV023	2016_3	3_4_6	171	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.4927	0.0162	0.0034	0.0096	23.4504	1.8756	7.9698	0.0136	0.3018	0.2091	33.7258	98.5017	0.02	50.86	0.57	2.74	0.27	30.17	13.22	0.02	0.00	0.00	0.17	0.16	0.03	0.25	0.00	98.47
658	16SUV023	2016_3	3_4_7	172	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	29.8641	0.0058	0.0000	0.0115	25.6530	1.2726	7.1647	0.0121	0.3214	0.2088	33.1130	97.9831	0.02	49.82	0.61	1.86	0.27	33.00	11.88	0.02	0.00	0.00	0.21	0.10	0.00	0.16	0.00	97.95
659	16SUV023	2016_3	3_4_8	173	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	28.7263	0.0052	0.0019	0.0037	37.7635	0.0059	0.3440	0.0003	0.0230	0.4924	30.4621	97.9448	0.00	47.92	0.04	0.00	0.64	48.58	0.57	0.00	0.00	0.00	0.06	0.00	0.00	0.10	0.00	97.92
660	16SUV023	2016_3	3_4_9	174	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.7764	0.0098	0.0000	0.0140	23.7700	1.0568	7.9194	0.0136	0.2818	0.2321	33.5880	98.0860	0.03	51.34	0.53	1.54	0.30	30.58	13.13	0.02	0.00	0.00	0.21	0.11	0.00	0.26	0.00	98.05
661	16SUV023	2016_3	3_4_10	175	Beaufort Fm	ilmenite	chromite	0.18-0.25	1.4472	0.0000	0.0034	0.0000	19.1916	22.9219	8.5689	0.0027	12.4307	0.1410	33.8940	98.9336	0.00	2.41	23.49	33.50	0.18	24.69	14.21	0.00	0.00	0.00	0.20	0.09	0.15	0.00	98.93
662	16SUV023	2016_3	3_4_11	176	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.3517	0.0000	0.0010	0.0113	23.6113	1.8393	7.8860	0.0170	0.2972	0.2241	33.6258	98.3495	0.02	50.63	0.56	2.69	0.29	30.38	13.08	0.02	0.00	0.00	0.21	0.15	0.00	0.29	0.00	98.33
663	16SUV023	2016_3	3_4_12	177	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	28.0943	0.0111	0.0031	0.0037	38.1084	0.0049	0.5695	0.0070	0.0382	0.3251	30.2942	97.6771	0.00	46.86	0.07	0.00	0.42	49.03	0.94	0.01	0.00	0.00	0.06	0.00	0.00	0.22	0.00	97.61
664	16SUV023	2016_3	3_4_13	178	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.0114	0.0064	0.0000	0.0093	25.7258	1.1146	7.2090	0.0160	0.3188	0.2107	33.2040	98.2159	0.02	50.06	0.60	1.63	0.27	33.10	11.95	0.02	0.00	0.00	0.17	0.11	0.00	0.26	0.00	98.20
665	16SUV023	2016_3	3_4_14	179	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	30.4939	0.0118	0.0039	0.0072	24.9582	0.9792	7.6028	0.0111	0.3066	0.2216	33.4913	98.4643	0.00	50.87	0.58	1.43	0.29	32.11	12.61	0.02	0.00	0.00	0.21	0.08	0.00	0.23	0.00	98.41
666	16SUV023	2016_3	3_4_15	180	Beaufort Fm	ilmenite	ilmenite	0.18-0.25	27.6288	0.0036	0.0021	0.0061	30.6783	1.1011	5.6035	0.0113	0.1383	0.2211	31.8896	97.8687	0.00	46.09	0.26	1.61	0.29	39.47	9.29	0.02	0.00	0.00	0.45	0.07	0.04	0.27	0.00	97.85
667	15SUV015	2016_3	3_5_1	181	Beaufort Fm	chromite	chromite	0.18-0.25	2.4147	0.0125	0.0023	0.0000	30.9301	25.6987	3.7263	0.0000	4.9189	0.2641	29.4228	97.8500	0.00	4.03	9.29	37.56	0.34	39.79	6.18	0.00	0.00	0.00	0.00	0.08	0.15	0.40	0.00	97.82
668	15SUV018	2016_3	3_5_2	182	Beaufort Fm	chromite	chromite	0.18-0.25	0.2953	0.0000	0.0043	0.0000	14.2709	38.1212	6.5423	0.0000	6.5680	0.1342	32.1992	98.4752	0.00	0.49	12.41	55.72	0.17	18.36	10.85	0.00	0.00	0.00	0.00	0.14	0.08	0.22	0.00	98.44
669	15SUV018	2016_3	3_5_3	183	Beaufort Fm	chromite	chromite	0.18-0.25	0.6499	0.0000	0.0027	0.0028	14.5671	14.0097	10.3482	0.0000	21.8061	0.1115	37.4300	99.2661	0.00	1.08	41.20	20.48	0.14	18.74	17.16	0.00	0.00	0.00	0.00	0.22	0.08	0.13	0.00	99.24
670	15SUV018	2016_3	3_5_4	184	Beaufort Fm	chromite	chromite	0.18-0.25	0.1120	0.0036	0.0039	0.0192	8.8436	15.5167	11.9966	0.0015	23.5005	0.0835	38.7265	99.1552	0.04	0.19	44.40	22.68	0.11	11.38	19.89	0.00	0.00	0.00	0.00	0.31	0.05	0.09	0.00	99.14
671	15SUV018	2016_3	3_5_5	185	Beaufort Fm	chromite	chromite	0.18-0.25	0.6800	0.0000	0.0043	0.0000	21.4256	28.4461	6.0202	0.0003	9.1311	0.1890	32.2121	98.7791	0.00	1.13	17.60	41.58	0.24	27.56	9.98	0.00	0.00	0.00	0.00	0.15	0.11	0.41	0.00	98.77
672	15SUV019	2016_3	3_5_6	186	Beaufort Fm	chromite	chromite	0.18-0.25	1.2149	0.0165	0.0020	0.0000	21.6553	28.4398	6.9605	0.0061	7.7581	0.1997	31.8555	98.5549	0.00	2.03	14.66	41.57	0.26	27.86	11.54	0.01	0.00	0.00	0.00	0.22	0.07	0.32	0.00	98.53
673	15SUV019	2016_3	3_5_7	187	Beaufort Fm	chromite	chromite	0.18-0.25	1.1261	0.0129	0.0009	0.0000	25.7423	27.3818	4.7817	0.0055	7.9859	0.2365	31.2231	98.8576	0.00	1.88	15.09	40.02	0.31	33.12	7.93	0.00	0.00	0.00	0.00	0.12	0.11	0.25	0.00	98.82
674	15SUV019	2016_3	3_5_8	188	Beaufort Fm	chromite	chromite	0.18-0.25	0.0220	0.0000	0.0063	0.0000	16.7706	42.9251	4.8507	0.0042	3.3956	0.2456	31.0029	99.4840	0.00	0.04	6.42	62.74	0.32	21.58	8.04	0.00	0.00	0.01	0.00	0.00	0.22	0.12	0.00	99.47
675	15SUV019	2016_3	3_5_9	189	Beaufort Fm	chromite	chromite	0.18-0.25	1.2057	0.0000	0.0002	0.0000	20.8396	26.4034	7.4638	0.0007	9.6101	0.1795	32.5839	98.5951	0.00	2.01	18.16	38.59	0.23	26.81	12.38	0.00	0.00	0.00	0.00	0.17	0.07	0.18	0.00	98.59
676	15SUV028	2016_3	3_5_10	190	Beaufort Fm	chromite	chromite	0.18-0.25	0.3985	0.0000	0.0000	0.0000	14.4479	25.5678	9.8778	0.0041	13.7490	0.1354	35.0509	99.4525	0.00	0.66	25.98	37.37	0.17	18.59	16.38	0.00	0.00	0.00	0.00	0.18	0.03	0.08	0.00	99.45
677	15SUV028	2016_3	3_5_11	191	Beaufort Fm	chromite	chromite	0.18-0.25	1.1436	0.0074	0.0000	0.0000	21.6544	29.3983	5.9006	0.0000	8.0677	0.2089	31.8174	98.6339	0.00	1.91	15.24	42.97	0.27	27.86	9.78	0.00	0.00	0.00	0.00	0.19	0.11	0.28	0.00	98.62
678	15SUV028	2016_3	3_5_12	192	Beaufort Fm	chromite	chromite	0.18-0.25	0.2805	0.0000	0.0018	0.0000	15.6228	32.4160	8.0480	0.0049	9.2529	0.1487	33.2998	99.3779	0.00	0.47	17.48	47.38	0.19	20.10	13.35	0.00	0.00	0.00	0.00	0.26	0.00	0.12	0.00	99.34
679	15SUV030	2016_3	3_5_13	193	Beaufort Fm	chromite	chromite	0.18-0.25	0.8607	0.0062	0.0007	0.0000	22.5476	27.7837	5.9520	0.0004	9.0595	0.1730	32.0702	98.9498	0.00	1.44	17.12	40.61	0.22	29.01	9.87	0.00	0.00	0.00	0.00	0.18	0.13	0.37	0.00	98.94
680	15SUV030	2016_3	3_5_14	194	Beaufort Fm	chromite	chromite	0.18-0.25	0.8258	0.0092	0.0029	0.0000	20.6551	29.3534	6.5444	0.0038	8.7340	0.1889	32.2967	98.9936	0.00	1.38	16.50	42.90	0.24	26.57	10.85	0.00	0.00	0.00	0.00	0.17	0.09	0.25	0.00	98.96
681	16SUV023	2016_3	3_6_1	195	Beaufort Fm	chromite	chromite	0.18-0.25	0.1031	0.0000	0.0002	0.0000	17.5028	37.0438	5.5439	0.0030	6.3545	0.1782	31.6210	98.6131	0.00	0.17	12.01	54.14	0.23	22.52	9.19	0.00	0.00	0.00	0.00	0.08	0.16	0.10	0.00	98.60
682	16SUV023	2016_3	3_6_2	196	Beaufort Fm	chromite	chromite	0.18-0.25	1.4574	0.0007	0.0000	0.0000	19.9020	28.2384	8.0866	0.0025	8.2001	0.1388	32.4795	98.8321	0.00	2.43	15.49	41.27	0.18	25.60	13.41	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	98.82
683	16SUV023	2016_3	3_6_3	197	Beaufort Fm	chromite	chromite	0.18-0.25	0.4356	0.0106	0.0000	0.0000	34.1039	23.6667	6.4870	0.0102	3.1235	0.2133	28.1739	96.4491	0.00	0.73	5.90	34.59	0.28	43.87	10.76	0.01	0.00	0.00	0.00	0.18	0.05	0.07	0.00	96.43
684	16SUV023	2016_3	3_6_4	198	Beaufort Fm	chromite	chromite	0.18-0.25	0.2362	0.0074	0.0000	0.0000	25.4182	33.8539	4.7979	0.0075	3.5026	0.3037	29.5240	97.9290	0.00	0.39	6.62	49.48	0.39	32.70	7.96	0.01	0.00	0.00	0.00	0.11	0.17	0.06	0.00	97.90
685	16SUV023	2016_3	3_6_5	199	Beaufort Fm	chromite	chromite	0.18-0.25	1.3756	0.0000	0.0000	0.0000	21.4429	25.7232	7.8606	0.0005	9.0996	0.1536	32.3621	98.3218	0.00	2.29	17.19	37.60	0.20	27.59	13.04	0.00	0.00	0.00	0.00	0.17	0.03	0.18	0.00	98.29
686	16SUV023	2016_3	3_6_6	200	Beaufort Fm	chromite	chromite	0.18-0.25	0.3283	0.0000	0.0020	0.0000	23.8462	29.0405	4.0065	0.0056	9.4045	0.2286	31.6372	98.8287	0.00	0.55	17.77	42.44	0.30	30.68	6.64	0.00	0.00	0.00	0.00	0.08	0.18	0.18	0.00	98.82
687	16SUV023	2016_3	3_6_7	201	Beaufort Fm	chromite	chromite	0.18-0.25	0.1420	0.0133	0.0020	0.0000	22.7847	34.0238	3.0168	0.0097	7.2797	0.2600	30.9695	98.7890	0.00	0.24	13.75	49.73	0.34	29.31	5.00	0.01	0.00	0.00	0.00	0.16	0.09	0.10	0.00	98.73
688	16SUV023	2016_3	3_6_8	202	Beaufort Fm	chromite	chromite	0.18-0.25	0.2308	0.0000	0.0013	0.0000	14.2833	27.4110	8.9455	0.0054	13.2558	0.1596	34.7370	99.3171	0.00	0.39	25.05	40.06	0.21	18.38	14.83	0.00	0.00	0.00	0.00	0.10	0.05	0.24	0.00	99.31
689	16SUV023	2016_3	3_6_9	203	Beaufort Fm	chromite	chromite	0.18-0.25	0.5366	0.0000	0.0018	0.0000	11.3433	19.5788	11.0471	0.0066	19.1722	0.1001	37.1031	99.2000	0.00	0.90	36.23	28.62	0.13	14.59	18.32	0.01	0.00	0.00	0.00	0.22	0.07	0.12	0.00	99.19
690	16SUV023	2016_3	3_6_10	204	Beaufort Fm	chromite	chromite	0.18-0.25	1.2538	0.0000	0.0048	0.0000	17.8538	29.2848	8.3999	0.0000	8.7345	0.1407	32.9116	98.8771	0.00	2.09	16.50	42.80	0.18	22.97	13.93	0.00	0.00	0.00	0.00	0.18	0.08	0.13	0.00	98.86
691	16SUV023	2016_3	3_6_11	205	Beaufort Fm	chromite	chromite	0.18-0.25	0.5781	0.0056	0.0000	0.0000	14.1214	31.2230	7.7517	0.0034	10.2175	0.1158	33.1779	97.4849	0.00	0.96	19.31	45.63	0.15	18.17	12.85	0.00	0.00	0.00	0.00	0.18	0.06	0.14	0.00	97.45
692	16SUV023	2016_3	3_6_12	206	Beaufort Fm	chromite	chromite	0.18-0.25	0.8030	0.0183	0.0000	0.0000	14.4360	38.3925	5.4052	0.0095	5.6185	0.1409	31.1604	96.4170	0.00	1.34	10.62	56.11	0.18	18.57	8.96	0.01	0.02	0.00	0.00	0.14	0.16	0.28	0.00	96.40
693	16SUV023	2016_3	3_6_13	207	Beaufort Fm	chromite	chromite	0.18-0.25	0.0373	0.0000	0.0036	0.0000	12.7347	30.9495	8.1788	0.0011	12.6275	0.1495	34.7269	99.7285	0.00	0.06	23.86	45.24	0.19	16.38	13.56	0.00	0.00	0.00	0.00	0.08	0.16	0.17	0.00	99.72
694	16SUV023	2016_3	3_6_14	208	Beaufort Fm	chromite	chromite	0.18-0.25	1.2513	0.0000	0.0000	0.0000	20.2894	19.2625	8.7641	0.0013	14.4564	0.1587	34.3462	98.8826	0.00	2.09	27.32	28.15	0.20	26.10	14.53	0.00	0.00	0.00	0.00	0.19	0.05	0.22	0.00	98.85
695	16SUV023	2016_3	3_6_15	209	Beaufort Fm	chromite	chromite	0.18-0.25	1.2298	0.0043	0.0058	0.0000	17.4789	30.2634	8.5796	0.0026	8.2322	0.1472	32.9126	99.1433	0.00	2.05	15.55	44.23	0.19	22.49	14.23	0.00	0.00	0.00	0.00	0.19	0.05	0.12	0.00	99.11

[1]GO - mantle garnets incluidng eclogitic pyrope-almandine and Cr-poor megacrystic pyropes

[2]GP - purple to red peridotitic garnet (Cr-pyrope)

shading depicts duplicate analysis of single grains

APPENDIX 6B

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - EPMA chemistry: GARNET

								WT %																Grütter et al. (2004) garnet classification Calculations						Hardman et al. (2018) ecologitic garnet classification calculations					
GSC Sample #	Mount	Grain #	EPMA #	ODM Min ID	EPMA Min ID	Garnet Class[1]	Grain Size	SiO2	TiO2	Al2O3	Cr2O3	MnO	FeO	MgO	CaO	Na2O	K2O	Nb2O5	NiO	ZnO	V2O3	P2O5	Total	If CaO (WT %) is < 3.375+0.25*Cr2O3	Then CA_INT[2]	Else CA_INT[3]	MGNUM[4]	5.0+0.94*CaO	2.13-2.1*MGNUM	MgO/FeO	Factor 1.782	ln Mg/Fe	TiO2/SiO2	Factor 0.752	ln Ti/Si
15SUV001	2015_1	3_1	1-3_001	andradite	garnet	G0	0.25-0.5	34.49	3.28	1.50	0.00	0.21	23.26	0.44	32.60	0.00	0.00						95.78	3.375		32.600	0.033		2.061						
15SUV001	2015_1	3_2	1-3_002	andradite	garnet	G0	0.25-0.5	30.69	9.12	3.45	0.05	0.06	19.28	0.80	32.70	0.00	0.00						96.15	3.388		32.688	0.069		1.985						
15SUV001	2015_1	4_1	1-4_001	almandine	garnet	G0	0.5-1.0	36.26	0.10	19.90	0.00	20.99	18.91	0.90	1.61	0.00	0.00						98.67	3.375	1.610		0.078		1.966	0.04759	0.08481	-2.46732	0.00276	0.00207	-6.17832
15SUV001	2015_1	6_1	1-6_001	spessartine	garnet	G0	0.25-0.5	36.01	0.14	19.72	0.00	26.20	14.50	1.15	0.51	0.04	0.00						98.27	3.375	0.510		0.124		1.870	0.07931	0.14133	-1.95665	0.00389	0.00292	-5.83493
15SUV001	2015_1	6_2	1-6_002	spessartine	garnet	G0	0.25-0.5	35.53	0.15	20.06	0.00	21.62	17.70	1.39	0.57	0.06	0.00						97.08	3.375	0.570		0.123		1.872	0.07853	0.13994	-1.96652	0.00422	0.00317	-5.75252
15SUV002	2015_5	2_6	5-2_006	chromite, euhedral	garnet	G0	0.25-0.5	34.28	7.02	8.89	0.00	0.09	11.85	1.13	33.99	0.00	0.00						97.25	3.375		33.990	0.145		1.825						
15SUV003	2015_1	4_2	1-4_002	almandine	garnet	G3	0.25-0.5	39.11	0.13	21.88	0.00	0.49	20.18	8.75	8.36	0.03	0.00						98.93	3.375		8.360	0.436		1.214	0.43360	0.77267	-0.25790	0.00332	0.00250	-5.99162
15SUV003	2015_1	4_3	1-4_003	almandine	garnet	G0	0.25-0.5	36.72	0.07	20.31	0.00	2.26	30.35	1.06	7.07	0.00	0.00						97.84	3.375		7.070	0.059		2.007	0.03493	0.06224	-2.77679	0.00191	0.00143	-6.54760
15SUV005	2015_1	4_4	1-4_004	almandine	garnet	G0	0.5-1.0	36.70	0.00	20.85	0.00	2.62	34.22	2.98	0.65	0.00	0.00						98.02	3.375	0.650		0.134		1.848	0.08708	0.15518	-1.86315	0.00027	0.00020	-8.49297
15SUV005	2015_1	4_5	1-4_005	almandine	garnet	G3	0.25-0.5	38.83	0.10	21.76	0.04	0.61	22.14	8.72	6.34	0.00	0.00						98.54	3.385		6.330	0.413		1.264	0.39386	0.70185	-0.35403	0.00258	0.00194	-6.24680
15SUV006	2015_1	4_6	1-4_006	almandine	garnet	G0	0.25-0.5	36.90	0.00	20.45	0.03	2.28	31.65	3.49	3.16	0.00	0.00						97.96	3.383	3.153		0.164		1.785	0.11027	0.19650	-1.62710	0.00027	0.00020	-8.49840
15SUV006	2015_1	4_7	1-4_007	almandine	garnet	G0	0.25-0.5	37.41	0.03	20.64	0.04	5.60	28.03	4.07	2.92	0.03	0.00						98.77	3.385	2.911		0.206		1.698	0.14520	0.25875	-1.35190	0.00080	0.00060	-7.41351
15SUV008	2015_2	1_8	2-1_008	forsterite	garnet	G0	0.25-0.5	39.29	0.18	17.17	0.00	0.16	6.10	0.91	35.56	0.00	0.00						99.37	3.375		35.560	0.210		1.689						
15SUV009	2015_1	2_2	1-2-2	GP[5]	garnet	G9	0.25-0.5	41.98	0.10	21.18	3.18	0.44	7.65	19.60	5.41	0.00	0.00						99.54	4.170		4.615	0.820								
15SUV009	2015_1	4_8	1-4_008	almandine	garnet	G4	0.25-0.5	38.14	0.09	21.31	0.03	0.92	28.34	7.46	2.09	0.00	0.00						98.38	3.383	2.085		0.319		1.459	0.26323	0.46908	-0.75698	0.00236	0.00177	-6.33423
15SUV014	2015_1	2_3	1-2-3	GP	garnet	G10	0.25-0.5	41.96	0.02	19.60	5.42	0.35	6.54	21.67	3.64	0.03	0.00						99.23	4.730	2.597		0.855	8.422							
15SUV014	2015_1	2_4	1-2-4	GP	garnet	G10D	0.25-0.5	41.13	0.00	16.88	9.09	0.43	6.30	22.05	3.03	0.00	0.00						98.91	5.648	1.811		0.862	7.848							
15SUV019	2015_1	2_5	1-2_005	GP	garnet	G9	0.25-0.5	41.34	0.58	18.63	5.05	0.33	7.31	20.43	5.31	0.05	0.01						99.04	4.638		4.048	0.833								
15SUV019	2015_1	2_6	1-2_006	GP	garnet	G9	0.25-0.5	41.89	0.00	20.48	4.72	0.45	7.62	19.96	4.89	0.00	0.00						100.01	4.555		3.710	0.824								
15SUV019	Mount3_001	3_1_1	127	GP	garnet	G11	0.18-0.25	42.07	0.36	21.72	2.12	0.29	6.75	21.34	4.07	0.06	0.00	0.00	0.00	0.00	0.00	0.04	98.82	3.906		3.536	0.849								
15SUV019	Mount3_002	3_1_2	128	GP	garnet	G11	0.18-0.25	41.55	0.34	21.07	3.16	0.31	6.64	21.15	5.20	0.03	0.00	0.00	0.00	0.00	0.00	0.03	99.48	4.164		4.415	0.850								
15SUV019	Mount3_030	3_3_1	156	almandine	garnet	G0	0.18-0.25	38.83	0.04	21.85	0.07	0.45	27.35	9.59	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.44	3.393	1.216		0.385			0.35054	0.62466	-0.47055	0.00093	0.00070	-7.26970
15SUV019	Mount3_035	3_3_6	161	diopside	garnet	G0	0.18-0.25	38.55	0.45	13.86	0.00	0.05	10.15	0.57	36.12	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.78	3.375		36.122	0.091		1.940						
15SUV020	2015_1	2_7	1-2_007	GP	garnet	G9	0.25-0.5	41.91	0.33	20.10	3.99	0.34	6.96	20.80	4.85	0.03	0.01						99.32	4.373		3.853	0.842								
15SUV020	2015_1	6_3	1-6_003	spessartine	garnet	G0	0.25-0.5	36.00	0.15	19.56	0.00	21.28	19.02	1.06	1.11	0.00	0.00						98.18	3.375	1.110		0.090		1.940	0.05573	0.09931	-2.30949	0.00417	0.00313	-5.76566
15SUV021	2015_3	3_8	3-3_008	hedenbergite	garnet	G0	0.5-1.0	35.68	0.00	0.00	0.00	0.00	26.72	0.00	32.97	0.00	0.00						95.37	3.375		32.970	0.000		2.130						
15SUV024	2015_1	1_1	1-1-1	GO[6]	garnet	G9	0.25-0.5	41.51	0.60	19.78	3.42	0.38	8.59	19.19	5.62	0.05	0.00						99.14	4.230		4.765	0.799								
15SUV024	2015_1	1_2	1-1-2	GO	garnet	G0	0.25-0.5	38.85	0.04	21.92	0.00	0.51	25.93	10.07	1.14	0.00	0.00						98.46	3.375	1.140		0.409		1.271	0.38835	0.69205	-0.36810	0.00103	0.00077	-7.16360
15SUV024	2015_1	2_8	1-2_008	GP	garnet	G9	0.25-0.5	41.44	0.33	18.71	6.03	0.37	6.73	20.62	5.06	0.06	0.00						99.35	4.883		3.553	0.845								
15SUV024	2015_1	5_1`	1-5_001	almandine	garnet	G0	0.25-0.5	37.04	0.00	20.30	0.00	2.37	30.09	1.25	7.57	0.00	0.00						98.62	3.375		7.570	0.069		1.985	0.04154	0.07403	-2.60331	0.00027	0.00020	-8.50219
15SUV024	2015_1	5_2	1-5_002	almandine	garnet	G3	0.25-0.5	37.84	0.14	20.43	0.00	1.49	26.25	3.64	8.87	0.00	0.00						98.66	3.375		8.870	0.198		1.714	0.13867	0.24710	-1.39795	0.00370	0.00278	-5.88450
15SUV024	2015_1	5_3	1-5_003	almandine	garnet	G0	0.25-0.5	38.16	0.00	21.49	0.12	0.66	29.07	7.75	1.15	0.00	0.00						98.40	3.405	1.140		0.322		1.453	0.26660	0.47508	-0.74428	0.00026	0.00020	-8.53198
15SUV024	2015_1	5_4	1-5_004	almandine	garnet	G3	0.25-0.5	38.03	0.11	21.13	0.00	0.57	24.03	6.88	7.41	0.00	0.00						98.16	3.375		7.410	0.338		1.420	0.28631	0.51020	-0.67295	0.00289	0.00218	-6.13067
15SUV024	2015_1	5_5	1-5_005	almandine	garnet	G3	0.25-0.5	38.72	0.23	21.53	0.00	0.34	20.97	7.58	9.31	0.03	0.00						98.71	3.375		9.310	0.392		1.307	0.36147	0.64414	-0.43984	0.00594	0.00447	-5.41105
15SUV024	2015_1	5_6	1-5_006	almandine	garnet	G0	0.25-0.5	37.57	0.03	21.41	0.00	0.78	30.40	6.65	1.25	0.00	0.00						98.09	3.375	1.250		0.281		1.541	0.21875	0.38981	-0.94209	0.00080	0.00060	-7.41778
15SUV025	2015_1	3_3	1-3_003	andradite	garnet	G0	0.25-0.5	27.53	11.91	3.77	0.00	0.08	19.79	0.42	32.26	0.00	0.00						95.76	3.375		32.260	0.036		2.053						
15SUV025	2015_1	3_4	1-3_004	andradite	garnet	G0	0.25-0.5	34.76	3.14	1.42	0.00	0.75	24.30	0.04	31.48	0.09	0.00						95.98	3.375		31.480	0.003		2.124						
15SUV026	2015_1	2_9	1-2_009	GP	garnet	G10	0.25-0.5	40.90	0.04	16.91	9.08	0.49	7.03	20.12	4.84	0.02	0.00						99.43	5.645	2.894		0.836	9.550							
15SUV026	2015_3	3_3	3-3_003	diopside	garnet	G0	0.25-0.5	38.72	1.14	15.68	0.00	0.05	7.13	0.80	35.32	0.00	0.00						98.84	3.375		35.320	0.167		1.780						
15SUV026	2015_3	3_4	3-3_004	diopside	garnet	G0	0.25-0.5	35.83	0.00	0.27	0.00	0.02	26.32	0.12	33.07	0.00	0.00						95.63	3.375		33.070	0.008		2.113						
15SUV028	2015_1	2_10	1-2_010A	GP	garnet	G9	0.5-1.0	40.53	0.21	16.20	9.46	0.49	6.72	18.49	7.02	0.06	0.00						99.18	5.740		4.655	0.831								
15SUV028_rpt	2015_1	2_10_rpt	1-2-10B	GP	garnet	G9	0.5-1.0	40.78	0.18	15.86	9.88	0.50	6.70	18.16	7.40	0.05	0.00						99.51	5.845		4.930	0.829								
15SUV028_rpt	2015_1	2_11_rpt	1-2-11A on fracture	GP	garnet	G9	0.25-0.5	39.21	0.50	15.12	6.43	0.31	6.32	17.54	5.48	0.04	0.01						90.96	4.983		3.873	0.832								
15SUV028_rpt	2015_1	2_11_rpt	1-2-11A-repeat	GP	garnet	G9	0.25-0.5	41.20	0.49	17.53	6.92	0.33	6.48	20.30	5.94	0.03	0.00						99.22	5.105		4.210	0.848								
15SUV028	2015_1	2_11	1-2-11B	GP	garnet	G9	0.25-0.5	41.24	0.50	17.72	6.93	0.33	6.45	20.30	5.91	0.03	0.00						99.41	5.108		4.178	0.849								
15SUV028	2015_3	3_5	3-3_005	diopside	garnet	G0	0.25-0.5	38.83	0.11	21.59	0.00	0.05	1.12	0.49	36.48	0.00	0.00						98.67	3.375		36.480	0.438		1.210						
15SUV028	2015_3	3_6	3-3_006	diopside	garnet	G0	0.25-0.5	36.98	0.22	18.18	0.00	0.00	1.24	3.32	35.63	0.00	0.00						95.57	3.375		35.630	0.827		0.394						
15SUV028	Mount3_003	3_1_3	129	GP	garnet	G9	0.18-0.25	42.02	0.27	20.77	3.23	0.33	7.18	21.08	4.89	0.04	0.00	0.00	0.00	0.00	0.03	0.00	99.84	4.182		4.088	0.840								
15SUV028	Mount3_004	3_1_4	130	GP	garnet	G11	0.18-0.25	41.29	0.94	18.21	5.05	0.32	7.31	20.46	5.75	0.05	0.00	0.00	0.02	0.00	0.03	0.03	99.46	4.638		4.488	0.833								
15SUV030	2015_1	2_12	1-2-12A	GP	garnet	G9	0.25-0.5	41.16	0.00	18.15	7.11	0.47	7.30	18.69	6.53	0.00	0.00						99.41	5.153		4.753	0.820								
15SUV030_rpt	2015_1	2_12_rpt	1-2-12B	GP	garnet	G9	0.25-0.5	40.79	0.00	17.85	7.18	0.46	7.26	18.71	6.56	0.00	0.00						98.81	5.170		4.765	0.821								
15SUV051	2015_1	2_13	1-2-13	GP	garnet	G9	0.25-0.5	40.39	0.09	13.22	12.96	0.41	7.01	18.29	6.72	0.00	0.00						99.09	6.615		3.480	0.823								
15SUV051	2015_1	3_6	1-3_006	andradite	garnet	G0	0.25-0.5	33.76	4.62	2.40	0.00	0.25	23.30	0.21	31.68	0.00	0.00						96.22	3.375		31.680	0.016		2.097						
15SUV051	2015_1	3_7	1-3_007	andradite	garnet	G0	0.25-0.5	30.02	12.85	1.41	0.04	0.14	18.01	1.28	32.61	0.03	0.00						96.39	3.385		32.600	0.112		1.894						
15SUV052	2015_1	5_7	1-5_007	almandine	garnet	G0	0.5-1.0	36.49	0.00	20.82	0.00	4.24	32.66	2.66	1.09	0.00	0.00						97.96	3.375	1.090		0.127		1.864	0.08145	0.14514	-1.93009	0.00027	0.00021	-8.48723
15SUV052	2015_1	5_8	1-5_008	almandine	garnet	G0	0.5-1.0	37.11	0.07	20.82	0.00	3.25	29.19	3.14	4.48	0.03	0.00						98.09	3.375		4.480	0.161		1.792	0.10757	0.19169	-1.65187	0.00189	0.00142	-6.55817
15SUV052	2015_1	5_9	1-5_009	almandine	garnet	G0	0.5-1.0	37.89	0.00	21.54	0.00	0.39	30.05	7.25	1.05	0.00	0.00						98.17	3.375	1.050		0.301		1.498	0.24126	0.42993	-0.84412	0.00026	0.00020	-8.52488
15SUV053	2015_1	5_10	1-5_010	almandine	garnet	G0	0.25-0.5	36.94	0.04	20.51	0.00	1.42	30.33	1.61	7.36	0.00	0.00						98.21	3.375		7.360	0.086		1.948	0.05308	0.09459	-2.35817	0.00108	0.00081	-7.11319
15SUV053	2015_1	5_11	1-5_011	almandine	garnet	G0	0.25-0.5	36.47	0.00	20.60	0.00	1.12	37.01	1.31	1.47	0.00	0.00						97.98	3.375	1.470		0.059		2.005	0.03540	0.06308	-2.76342	0.00027	0.00021	-8.48668

16SUV015	Mount1_006	1_1_6	226	GP	garnet	G9	0.25-0.5	42.35	0.08	19.40	5.78	0.37	7.10	20.15	5.35	0.02	0.01	0.00	0.02	0.00	0.04	0.00	100.67	4.820		3.901	0.835							
16SUV023	Mount1_002	1_1_2	222	GO	garnet	G1	0.25-0.5	41.90	0.69	19.88	3.41	0.30	8.43	19.86	5.36	0.04	0.00	0.00	0.02	0.00	0.06	0.03	99.97	4.228		4.503	0.808							
16SUV023	Mount1_003	1_1_3	223	GO	garnet	G4	0.25-0.5	42.49	0.24	22.84	0.82	0.28	7.78	21.17	4.31	0.04	0.00	0.00	0.02	0.00	0.02	0.00	100.02	3.579		4.109	0.829		2.72183	4.85029	1.57904	0.00574	0.00431	-5.44611
16SUV023	Mount1_007	1_2_1	227	GP	garnet	G10	0.25-0.5	41.62	0.12	17.17	8.40	0.35	6.60	20.53	4.96	0.03	0.01	0.00	0.00	0.00	0.05	0.03	99.87	5.474	3.058		0.847							
16SUV023	Mount1_008	1_2_2	228	GP	garnet	G11	0.25-0.5	41.78	0.42	18.10	6.64	0.41	7.87	19.14	6.02	0.05	0.00	0.00	0.00	0.00	0.05	0.05	100.54	5.036		4.363	0.813							
16SUV023	Mount1_009	1_2_3	229	GP	garnet	G11	0.25-0.5	41.71	0.61	19.32	4.86	0.38	7.08	18.46	7.83	0.05	0.00	0.00	0.00	0.00	0.05	0.00	100.34	4.589		6.620	0.823							
16SUV023	Mount1_010	1_2_4	230	GP	garnet	G9	0.25-0.5	41.16	0.30	15.41	10.33	0.35	6.62	19.10	6.93	0.03	0.00	0.00	0.00	0.00	0.06	0.00	100.29	5.957		4.349	0.837							
16SUV023	Mount1_011	1_2_5	231	GP	garnet	G9	0.25-0.5	41.76	0.26	17.26	8.31	0.36	6.63	19.92	5.86	0.03	0.00	0.00	0.02	0.00	0.06	0.05	100.54	5.452		3.786	0.843							
16SUV023	Mount1_012	1_2_6	232	GP	garnet	G9	0.25-0.5	41.55	0.33	16.62	9.06	0.39	6.56	20.16	5.78	0.05	0.00	0.00	0.00	0.00	0.04	0.04	100.56	5.640		3.511	0.846							
16SUV023	Mount1_013	1_2_7	233	GP	garnet	G10	0.25-0.5	42.11	0.00	20.02	5.61	0.48	7.74	22.68	1.78	0.00	0.01	0.00	0.00	0.00	0.03	0.00	100.46	4.779	1.257		0.839							
16SUV023	Mount1_014	1_2_8	234	GP	garnet	G1	0.25-0.5	42.58	0.57	20.75	2.72	0.31	7.23	21.34	4.90	0.05	0.02	0.00	0.00	0.00	0.04	0.03	100.55	4.055		4.220	0.840							
16SUV023	Mount1_015	1_2_9	235	GP	garnet	G9	0.25-0.5	41.63	0.25	16.91	8.48	0.33	7.02	19.25	6.57	0.04	0.00	0.00	0.00	0.00	0.05	0.04	100.57	5.496		4.445	0.830							
16SUV023	Mount1_016	1_2_10	236	GP	garnet	G10	0.25-0.5	41.13	0.00	16.34	10.14	0.49	7.51	18.92	5.67	0.00	0.00	0.00	0.00	0.00	0.03	0.00	100.23	5.909	3.237		0.818							
16SUV023	Mount1_017	1_2_11	237	GP	garnet	G12	0.25-0.5	40.81	0.00	15.54	10.68	0.56	7.51	16.63	8.43	0.03	0.01	0.00	0.02	0.00	0.03	0.04	100.28	6.045		5.763	0.798							
16SUV023	Mount1_018	1_2_12	238	GP	garnet	G11	0.25-0.5	41.95	0.46	18.93	5.59	0.38	7.15	20.19	5.51	0.05	0.00	0.00	0.00	0.00	0.06	0.03	100.31	4.772		4.115	0.834							
16SUV023	Mount1_019	1_2_13	239	GP	garnet	G9	0.25-0.5	41.28	0.32	17.24	8.09	0.35	6.39	19.92	6.42	0.02	0.00	0.00	0.00	0.00	0.04	0.03	100.10	5.398		4.400	0.848							
16SUV023	Mount1_020	1_3_1	240	GP	garnet	G9	0.25-0.5	42.09	0.02	20.73	4.52	0.39	7.24	19.68	5.91	0.02	0.00	0.00	0.00	0.00	0.04	0.00	100.65	4.505		4.776	0.829							
16SUV023	Mount1_021	1_3_2	241	GP	garnet	G9	0.25-0.5	41.02	0.38	14.75	10.72	0.35	7.00	18.62	7.14	0.04	0.00	0.00	0.00	0.00	0.06	0.05	100.13	6.056		4.463	0.826							
16SUV023	Mount1_022	1_3_3	242	GP	garnet	G9	0.25-0.5	41.72	0.21	16.40	9.47	0.34	6.06	19.80	6.17	0.03	0.00	0.00	0.00	0.00	0.06	0.03	100.30	5.744		3.798	0.853							
16SUV023	Mount1_023	1_3_4	243	GP	garnet	G9	0.25-0.5	41.37	0.29	16.57	8.99	0.41	6.88	19.25	6.25	0.04	0.00	0.00	0.00	0.00	0.06	0.05	100.16	5.621		4.000	0.833							
16SUV023	Mount1_024	1_3_5	244	GP	garnet	G9	0.25-0.5	42.17	0.13	20.72	4.11	0.37	7.49	20.45	4.95	0.02	0.01	0.00	0.00	0.00	0.05	0.03	100.50	4.404		3.922	0.830							
16SUV023	Mount1_034	1_4_1	254	almandine	garnet	G3	0.25-0.5	38.62	0.16	21.59	0.00	1.01	26.72	5.03	7.37	0.00	0.00	0.00	0.00	0.00	0.03	0.00	100.54	3.375		7.366	0.251		0.18824	0.33544	-1.09232	0.00412	0.00310	-5.77717
16SUV023	Mount1_035	1_4_2	255	almandine	garnet	G3	0.25-0.5	38.26	0.04	21.38	0.04	1.30	28.06	4.37	7.02	0.00	0.00	0.00	0.00	0.00	0.06	0.00	100.54	3.384		7.016	0.217		0.15578	0.27760	-1.28158	0.00108	0.00081	-7.11467
16SUV023	Mount1_070	1_7_5	290	hercynite	andradite	G0	0.25-0.5	34.47	3.16	1.42	0.00	0.19	24.63	0.44	32.79	0.07	0.00	0.05	0.00	0.00	0.08	0.03	97.32	3.375		32.789	0.031	2.066						
16SUV023	Mount3_005	3_1_5	131	GP	garnet	G11	0.18-0.25	41.29	0.45	17.78	6.98	0.36	6.56	20.23	5.79	0.04	0.00	0.00	0.00	0.00	0.04	0.03	99.55	5.119		4.046	0.846							
16SUV023	Mount3_006	3_1_6	132	GP	garnet	G9	0.18-0.25	40.73	0.06	17.06	8.30	0.55	7.77	17.74	7.21	0.00	0.00	0.00	0.00	0.00	0.05	0.00	99.48	5.450		5.137	0.803							
16SUV023	Mount3_007	3_1_7	133	GP	garnet	G1	0.18-0.25	41.31	0.47	20.27	3.78	0.36	8.00	20.55	4.77	0.05	0.00	0.00	0.00	0.00	0.04	0.03	99.64	4.321		3.823	0.821							
16SUV023	Mount3_008	3_1_8	134	GP	garnet	G9	0.18-0.25	41.34	0.18	17.99	7.19	0.36	6.84	20.07	5.65	0.04	0.00	0.00	0.00	0.00	0.04	0.05	99.75	5.173		3.853	0.839							
16SUV023	Mount3_009	3_1_9	135	GP	garnet	G9	0.18-0.25	40.87	0.25	16.12	9.36	0.34	6.55	19.40	6.80	0.02	0.00	0.00	0.03	0.00	0.04	0.03	99.81	5.716		4.455	0.841							
16SUV023	Mount3_010	3_1_10	136	GP	garnet	G9	0.18-0.25	41.73	0.09	19.17	5.02	0.35	7.91	20.12	5.36	0.02	0.00	0.00	0.00	0.00	0.07	0.00	99.82	4.629		4.109	0.819							
16SUV023	Mount3_011	3_1_11	137	GP	garnet	G9	0.18-0.25	41.73	0.23	18.93	5.97	0.36	6.72	20.48	5.29	0.04	0.00	0.00	0.00	0.00	0.00	0.03	99.79	4.868		3.795	0.845							
16SUV023	Mount3_012	3_1_12	138	GP	garnet	G10	0.18-0.25	41.34	0.00	19.59	5.78	0.51	7.85	20.32	4.29	0.02	0.01	0.00	0.00	0.00	0.00	0.00	99.71	4.820	3.004		0.822							
16SUV023	Mount3_013	3_1_13	139	GP	garnet	G1	0.18-0.25	41.39	0.60	19.95	3.45	0.36	8.53	19.75	5.33	0.05	0.01	0.00	0.00	0.00	0.06	0.02	99.51	4.238		4.471	0.805							
16SUV023	Mount3_014	3_1_14	140	GP	garnet	G10	0.18-0.25	41.78	0.00	19.63	5.95	0.35	6.35	22.74	2.65	0.00	0.00	0.00	0.00	0.00	0.04	0.00	99.49	4.862	1.839		0.864							
16SUV023	Mount3_015	3_2_1	141	GP	garnet	G9	0.18-0.25	41.75	0.06	21.12	3.28	0.39	7.72	20.59	4.77	0.00	0.00	0.00	0.00	0.00	0.03	0.00	99.71	4.195		3.954	0.826							
16SUV023	Mount3_016	3_2_2	142	GP	garnet	G9	0.18-0.25	41.66	0.35	19.82	4.29	0.33	7.84	20.12	5.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	99.68	4.448		4.166	0.821							
16SUV023	Mount3_017	3_2_3	143	GP	garnet	G9	0.18-0.25	41.38	0.06	19.74	5.18	0.41	7.39	20.87	4.78	0.03	0.00	0.00	0.00	0.00	0.03	0.05	99.92	4.670		3.489	0.834							
16SUV023	Mount3_018	3_2_4	144	GP	garnet	G10	0.18-0.25	42.00	0.00	19.98	5.37	0.39	6.81	21.99	3.38	0.03	0.00	0.00	0.00	0.00	0.00	0.10	100.05	4.718	2.417		0.852							
16SUV023	Mount3_019	3_2_5	145	GP	garnet	G10D	0.18-0.25	41.35	0.00	16.76	9.59	0.43	6.64	21.79	3.28	0.02	0.01	0.00	0.00	0.00	0.04	0.00	99.91	5.772	1.918		0.854							
16SUV023	Mount3_020	3_2_6	146	GP	garnet	G12	0.18-0.25	40.81	0.00	17.89	7.41	0.53	7.78	17.94	7.26	0.02	0.01	0.00	0.00	0.00	0.06	0.00	99.71	5.228		5.411	0.804							
16SUV023	Mount3_021	3_2_7	147	GP	garnet	G9	0.18-0.25	41.58	0.38	19.31	4.79	0.34	7.46	20.40	5.27	0.04	0.00	0.00	0.00	0.00	0.03	0.00	99.60	4.572		4.073	0.830							
16SUV023	Mount3_022	3_2_8	148	GP	garnet	G9	0.18-0.25	41.31	0.11	19.10	5.86	0.40	6.86	20.61	5.29	0.04	0.00	0.00	0.02	0.00	0.04	0.06	99.69	4.840		3.822	0.843							
16SUV023	Mount3_023	3_2_9	149	GP	garnet	G11	0.18-0.25	41.29	0.43	18.30	6.45	0.33	6.54	20.73	5.39	0.06	0.00	0.00	0.00	0.00	0.04	0.00	99.54	4.987		3.775	0.850							
16SUV023	Mount3_024	3_2_10	150	GP	garnet	G9	0.18-0.25	41.15	0.37	17.20	7.88	0.38	7.04	19.69	5.86	0.06	0.00	0.00	0.00	0.00	0.03	0.03	99.67	5.345		3.893	0.833							
16SUV023	Mount3_025	3_2_11	151	GP	garnet	G9	0.18-0.25	41.65	0.32	20.21	4.28	0.37	7.25	20.93	4.83	0.06	0.00	0.00	0.00	0.00	0.03	0.03	99.96	4.444		3.758	0.837							
16SUV023	Mount3_026	3_2_12	152	GP	garnet	G9	0.18-0.25	41.16	0.14	18.50	6.59	0.43	7.43	19.37	6.00	0.04	0.00	0.00	0.00	0.00	0.06	0.05	99.77	5.021		4.357	0.823							
16SUV023	Mount3_027	3_2_13	153	GP	garnet	G11	0.18-0.25	41.78	0.37	20.50	3.78	0.33	6.61	21.22	4.77	0.04	0.00	0.00	0.00	0.00	0.05	0.04	99.50	4.320		3.828	0.851							
16SUV023	Mount3_028	3_2_14	154	GP	garnet	G9	0.18-0.25	42.25	0.06	21.97	2.20	0.33	7.51	21.26	4.39	0.02	0.01	0.00	0.00	0.00	0.03	0.03	100.07	3.925		3.838	0.835							
16SUV023	Mount3_031	3_3_2	157	almandine	garnet	G4	0.18-0.25	37.25	0.04	21.05	0.00	2.10	31.13	3.90	3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.21	3.375		3.745	0.183		0.12528	0.22325	-1.49945	0.00094	0.00071	-7.25195
16SUV023	Mount3_033	3_3_4	159	grossular	garnet	G9	0.18-0.25	38.89	0.26	20.09	0.00	0.65	6.90	0.05	33.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	3.375		33.324	0.013							
16SUV025	Mount1_025	1_3_6	245	GP	garnet	G10D	0.25-0.5	41.98	0.00	16.62	9.55	0.40	6.82	20.95	3.84	0.00	0.00	0.00	0.00	0.00	0.05	0.02	100.23	5.763	2.248		0.846							
16SUV025	Mount1_026	1_3_7	246	GP	garnet	G9	0.25-0.5	41.81	0.05	20.57	4.54	0.44	7.47	19.41	6.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02	100.34	4.510		4.868	0.822							
16SUV027	Mount1_031	1_3_11	251	andradite	andradite	G0	0.5-1.0	34.87	2.61	4.76	0.00	0.16	22.11	0.37	32.81	0.03	0.00	0.00	0.00	0.00	0.16	0.04	97.90	3.375		32.808	0.029							
16SUV027	Mount1_032	1_3_12	252	andradite	andradite	G0	0.25-0.5	34.65	5.04	5.15	0.00	0.12	19.23	0.37	33.50	0.06	0.00	0.00	0.00	0.00	0.42	0.03	98.57	3.375		33.498	0.033							
16SUV027	Mount2_051	2_5_10	155	chromite	andradite	G0	0.25-0.5	32.83	5.57	1.56	0.00	0.17	23.37	0.66	33.23	0.07	0.01	0.00	0.00	0.00	0.10	0.03	97.59	3.375		33.227	0.048	2.029						
16SUV028	Mount1_004	1_1_4	224	GO	garnet	G3	0.5-1.0	39.75	0.16	22.57	0.08	0.60	21.38	9.81	6.31	0.02	0.00	0.00	0.00	0.00	0.05	0.00	100.74	3.396		6.291	0.450		0.45866	0.81733	-0.20171	0.00397	0.00299	-5.81327
16SUV028	Mount1_005	1_1_5	225	GO	garnet	G1	0.25-0.5	42.50	0.62	22.78	0.86	0.29	8.22	20.38	5.20	0.03	0.00	0.00	0.00	0.00	0.03	0.00	100.91	3.590		4.982	0.816		2.48071	4.42063	1.48628	0.01470	0.01105	-4.50509
16SUV028rpt	Mount1_027	1_3_8	247	GP	garnet	G9	0.5-1.0	41.49	0.34	16.39	8.91	0.35	6.82	19.30	6.57	0.04	0.00	0.00	0.00	0.00	0.05	0.04	100.30	5.602		4.345	0.835							
16SUV028	Mount1_028	1_3_8	248	GP	garnet	G9	0.5-1.0	41.60	0.37	16.38	9.02	0.37	6.84	19.34	6.52	0.04	0.00	0.00	0.00	0.00	0.06	0.03	100.56	5.629		4.262	0.834							
16SUV028	Mount1_029	1_3_9	249	GP	garnet	G10	0.25-0.5	42.24	0.00	20.29	5.07	0.49	7.62	20.40	4.48	0.00	0.00	0.00	0.00	0.00	0.03	0.03	100.65	4.642	3.259		0.827							
16SUV028	Mount1_033	1_3_13	253	andradite	andradite	G0	0.25-0.5	35.51	0.00	0.00	0.00	0.02	28.12	0.08	33.63	0.03	0.01	0.00	0.00	0.00	0.00	0.04	97.42	3.375		33.626	0.005							
16SUV028	Mount1_036	1_4_3	256	almandine	garnet	G0	0.5-1.0	39.77	0.06	22.49	0.00	0.36	24.65	11.64	1.25	0.00	0.00	0.00	0.02	0.03	0.00	0.00	100.28	3.375	1.247		0.457		0.47230	0.84163	-0.17241	0.00145	0.00109	-6.82049
16SUV028	Mount1_037	1_4_4	257	almandine	garnet	G0	0.5-1.0	38.11	0.00	21.21	0.00	0.73	32.31	3.53	4.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.73	3.375	4.828		0.163		0.10911	0.19443	-1.63768	0.00026	0.00020	-8.53077
16SUV028	Mount1_038	1_4_5	258	almandine	garnet	G3	0.5-1.0	39.36	0.13	21.58	0.00	0.74	22.36	6.27	9.96	0.04	0.00	0.00	0.00	0.00	0.03	0.03	100.50	3.375		9.963	0.333		0.28025	0.49941	-0.69432	0.00327	0.00246	-6.00662
16SUV028	Mount1_039	1_4_6	259	almandine	garnet	G4	0.25-0.5	39.64	0.04	22.36	0.06	0.46	23.13	9.02	5.72	0.02	0.00	0.00	0.00	0.00	0.00	0.03	100.49	3.390		5.704	0.410		0.38997	0.69493	-0.36395	0.00111	0.00083	-7.09250
16SUV028	Mount1_056	1_6_3	276	diopside	garnet	G0	0.25-0.5	38.39	0.06	12.14	0.00	0.13	12.89	0.49	35.79	0.00	0.00	0.00	0.00	0.00	0.07	0.03	99.98	3.375		35.789	0.063	1.998						
16SUV030	Mount1_030	1_3_10	250	GP	garnet	G9	0.5-1.0	42.21	0.35	18.84	6.26	0.36	6.78	20.09	5.61	0.04	0.00	0.00	0.00	0.00	0.04	0.04	100.62	4.940		4.045	0.841							

[1]Garnet Classification: Grütter et al. (2004)

[2]If CaO is < 3.375+0.25*Cr2O3 THEN **Ca INT** = 13.5*((CaO)/(Cr2O3+13.5))

[3]If CaO is > 3.375+0.25*Cr2O3 ELSE **Ca INT** = CaO-(0.25*Cr2O3)

[4]MAGNUM = (MgO/40.3)/((MgO/40.3)+(FeO/71.85))

[5]GP - purple to red peridotitic garnet (Cr-pyrope)

[6]GO - mantle garnets incluidng eclogitic pyrope-almandine and Cr-poor megacrystic pyropes

shading depicts duplicate analysis of single grains

APPENDIX 6C

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - EPMA chemistry: SPINEL - CHROMITE-SERIES

							WT %																	
GSC Sample #	Mount	Grain #	EPMA #	ODM Min ID	EPMA Min ID	Grain Size	SiO2	TiO2	Al2O3	Cr2O3	MnO	FeO	MgO	CaO	Na2O	K2O	Nb2O5	NiO	ZnO	V2O3	P2O5	Total	Mg #	CR #
15SUV001	2015_5	1_1	5-1_001	chromite, euhedral	chromite	0.25-0.5	0.00	0.45	16.93	48.32	0.19	17.09	15.38	0.00	0.00	0.00						98.36	0.62	0.64
15SUV001	2015_5	1_2	5-1_002	chromite, euhedral	chromite	0.25-0.5	0.00	0.45	16.23	46.42	0.29	25.72	9.48	0.00	0.00	0.00						98.59	0.40	0.64
15SUV001	2015_5	1_3	5-1_003	chromite, euhedral	chromite	0.25-0.5	0.00	3.58	13.95	38.03	0.24	29.19	12.61	0.00	0.00	0.00						97.60	0.44	0.63
15SUV001	2015_5	1_4	5-1_004	chromite, euhedral	chromite	0.25-0.5	0.00	2.80	13.75	42.53	0.22	25.22	13.24	0.01	0.00	0.00						97.77	0.48	0.66
15SUV001	2015_5	1_5	5-1_005	chromite, euhedral	chromite	0.25-0.5	0.00	0.46	17.16	46.69	0.25	21.60	12.09	0.00	0.00	0.01						98.26	0.50	0.63
15SUV001	2015_5	1_6	5-1_006	chromite, euhedral	chromite	0.25-0.5	0.00	2.80	15.58	40.75	0.24	25.29	13.19	0.00	0.00	0.00						97.85	0.48	0.62
15SUV001	2015_5	1_7	5-1_007	chromite, euhedral	chromite	0.25-0.5	0.00	3.07	16.24	37.29	0.22	27.82	12.82	0.00	0.00	0.00						97.46	0.45	0.59
15SUV001	2015_5	1_8	5-1_008	chromite, euhedral	chromite	0.25-0.5	0.00	0.24	23.69	38.96	0.27	26.72	8.57	0.00	0.00	0.00						98.45	0.36	0.51
15SUV001	2015_5	1_9	5-1_009	chromite, euhedral	chromite	0.25-0.5	0.00	0.83	21.15	41.06	0.22	22.69	12.41	0.00	0.00	0.00						98.36	0.49	0.55
15SUV001	2015_5	1_10	5-1_010	chromite, euhedral	chromite	0.25-0.5	0.00	0.66	19.69	42.64	0.24	23.17	11.69	0.00	0.00	0.00						98.09	0.47	0.58
15SUV001	2015_5	1_11	5-1_011	chromite, euhedral	chromite	0.25-0.5	0.00	3.36	20.10	33.24	0.20	27.40	13.45	0.00	0.00	0.00						97.75	0.47	0.51
15SUV002	2015_5	2_1	5-2_001	chromite, euhedral	chromite	0.25-0.5	0.00	0.59	18.26	45.98	0.22	19.84	13.65	0.00	0.00	0.00						98.54	0.55	0.61
15SUV002	2015_5	2_2	5-2_002	chromite, euhedral	chromite	0.25-0.5	0.00	0.49	18.43	46.68	0.19	17.28	15.34	0.01	0.00	0.00						98.42	0.61	0.62
15SUV002	2015_5	2_3	5-2_003	chromite, euhedral	chromite	0.25-0.5	0.00	1.75	21.10	32.06	0.25	31.61	11.11	0.00	0.00	0.00						97.88	0.39	0.49
15SUV002	2015_5	2_4	5-2_004	chromite, euhedral	chromite	0.25-0.5	0.00	0.55	16.68	46.49	0.23	20.82	13.56	0.00	0.00	0.00						98.33	0.54	0.64
15SUV002	2015_5	2_5	5-2_005	chromite, euhedral	chromite	0.25-0.5	0.00	0.57	16.17	44.91	0.26	26.36	9.90	0.00	0.00	0.00						98.17	0.40	0.64
15SUV003	2015_5	2_7	5-2_007	chromite, euhedral	chromite	0.25-0.5	0.00	0.90	18.85	41.56	0.29	27.77	8.81	0.00	0.00	0.00						98.18	0.36	0.58
15SUV003	2015_5	2_8	5-2_008	chromite, euhedral	chromite	0.25-0.5	0.00	0.31	24.95	42.32	0.16	13.43	17.35	0.00	0.00	0.00						98.52	0.70	0.52
15SUV003	2015_5	2_10	5-2_010	chromite, euhedral	chromite	0.25-0.5	0.00	2.69	22.83	30.90	0.26	27.75	13.28	0.00	0.00	0.00						97.71	0.46	0.46
15SUV003	2015_5	2_11	5-2_011	chromite, euhedral	chromite	0.25-0.5	0.00	0.60	18.32	43.68	0.23	22.33	13.07	0.00	0.00	0.00						98.23	0.51	0.60
15SUV008	2015_5	3_1	5-3_001	chromite, euhedral	chromite	0.25-0.5	0.00	2.15	16.51	41.63	0.23	24.16	13.38	0.00	0.00	0.00						98.06	0.50	0.61
15SUV020	2015_5	3_2	5-3_002	chromite, euhedral	chromite	0.25-0.5	0.00	0.89	19.41	36.94	0.26	28.62	11.74	0.00	0.00	0.00						97.86	0.42	0.55
15SUV020	2015_5	3_3	5-3_003	chromite, euhedral	chromite	0.25-0.5	0.00	0.70	19.67	41.84	0.19	21.79	13.93	0.00	0.00	0.00						98.12	0.53	0.57
15SUV020	2015_5	3_4	5-3_004	chromite, euhedral	chromite	0.25-0.5	0.00	1.37	24.85	39.09	0.19	16.74	16.13	0.00	0.00	0.00						98.37	0.63	0.50
15SUV020	2015_5	3_5	5-3_005	chromite, euhedral	chromite	0.25-0.5	0.00	0.54	18.64	46.52	0.19	17.43	15.23	0.00	0.00	0.00						98.55	0.61	0.61
15SUV020	2015_5	3_6	5-3_006	chromite, euhedral	chromite	0.25-0.5	0.00	4.21	16.33	33.42	0.24	30.19	13.02	0.01	0.00	0.00						97.42	0.43	0.56
15SUV020	2015_5	3_7	5-3_007	chromite, euhedral	chromite	0.25-0.5	0.00	1.92	15.62	43.67	0.22	22.69	13.75	0.00	0.00	0.00						97.87	0.52	0.64
15SUV020	2015_5	3_8	5-3_008	chromite, euhedral	chromite	0.25-0.5	0.00	0.69	23.37	38.93	0.20	20.82	14.44	0.00	0.00	0.00						98.45	0.55	0.51
15SUV020	2015_5	3_9	5-3_009	chromite, euhedral	chromite	0.25-0.5	0.00	0.96	30.51	32.08	0.18	18.88	15.65	0.00	0.00	0.00						98.26	0.60	0.40
15SUV020	2015_5	3_10	5-3_010	chromite, euhedral	chromite	0.25-0.5	0.00	2.48	16.10	40.42	0.24	25.00	13.52	0.00	0.00	0.00						97.76	0.49	0.61
15SUV020	2015_5	4_1	5-4_001	chromite, euhedral	chromite	0.25-0.5	0.00	1.99	15.84	44.14	0.21	22.05	14.24	0.00	0.04	0.00						98.51	0.54	0.64
15SUV020	2015_5	4_2	5-4_002	chromite, euhedral	chromite	0.25-0.5	0.00	5.50	8.94	35.37	0.33	36.24	11.04	0.01	0.00	0.00						97.43	0.35	0.71
15SUV020	2015_5	4_3	5-4_003	chromite, euhedral	chromite	0.25-0.5	0.00	2.36	19.13	36.22	0.24	26.53	13.13	0.00	0.00	0.00						97.61	0.47	0.54
15SUV020	2015_5	4_4	5-4_004	chromite, euhedral	chromite	0.25-0.5	0.00	3.39	20.87	24.77	0.28	35.32	12.29	0.00	0.00	0.00						96.92	0.38	0.43
15SUV020	2015_5	4_5	5-4_005	chromite, euhedral	chromite	0.25-0.5	0.00	2.00	15.26	44.01	0.24	23.26	13.34	0.00	0.00	0.00						98.11	0.51	0.65
15SUV020	2015_5	4_6	5-4_006	chromite, euhedral	chromite	0.25-0.5	0.00	0.47	16.92	47.87	0.21	18.91	13.75	0.00	0.00	0.00						98.13	0.56	0.64
15SUV020	2015_5	4_7	5-4_007	chromite, euhedral	chromite	0.25-0.5	0.00	2.40	19.91	36.73	0.23	24.90	13.98	0.00	0.00	0.00						98.15	0.50	0.54
15SUV020	2015_5	4_8	5-4_008	chromite, euhedral	chromite	0.25-0.5	0.00	0.62	17.17	45.12	0.24	22.79	12.20	0.00	0.00	0.00						98.14	0.49	0.62
15SUV020	2015_5	4_9	5-4_009	chromite, euhedral	chromite	0.25-0.5	0.00	0.78	19.03	43.15	0.21	22.02	13.04	0.00	0.00	0.00						98.23	0.51	0.59
15SUV026	2015_5	5_1	5-5_001	chromite, euhedral	chromite	0.25-0.5	0.00	0.51	18.23	44.83	0.27	23.63	11.02	0.00	0.00	0.00						98.49	0.45	0.61
15SUV026	2015_5	5_2	5-5_002	chromite, euhedral	chromite	0.25-0.5	0.00	0.68	13.04	52.93	0.38	21.45	10.16	0.00	0.00	0.00						98.64	0.46	0.72
15SUV026	2015_5	5_3	5-5_003	chromite, euhedral	chromite	0.25-0.5	0.00	0.72	22.08	39.63	0.20	21.71	13.76	0.00	0.05	0.00						98.15	0.53	0.53
15SUV030	2015_5	5_4	5-5_004A	chromite, euhedral	chromite	0.25-0.5	0.00	2.69	19.14	36.72	0.19	25.31	13.67	0.00	0.00	0.00						97.72	0.49	0.55
15SUV030_rpt	2015_5	5_4_rpt	5-5_004B	chromite, euhedral	chromite	0.25-0.5	0.00	2.63	19.57	36.26	0.23	25.53	13.54	0.00	0.00	0.00						97.76	0.49	0.54
15SUV030	2015_5	5_5	5-5_005A	chromite, euhedral	chromite	0.25-0.5	0.00	3.41	16.39	35.99	0.22	29.05	12.65	0.01	0.00	0.00						97.72	0.44	0.58
15SUV030_rpt	2015_5	5_5_rpt	5-5_005B	chromite, euhedral	chromite	0.25-0.5	0.00	3.52	16.31	35.83	0.23	29.17	12.68	0.00	0.00	0.00						97.74	0.44	0.58
15SUV030	2015_5	5_6	5-5_006A	chromite, euhedral	chromite	0.25-0.5	0.00	1.76	17.40	42.69	0.21	21.44	14.80	0.00	0.00	0.00						98.30	0.55	0.61
15SUV030_rpt	2015_5	5_6_rpt	5-5_006B	chromite, euhedral	chromite	0.25-0.5	0.00	1.75	17.32	42.83	0.21	21.37	14.47	0.00	0.00	0.00						97.95	0.55	0.61
15SUV030	2015_5	5_7	5-5_007A	chromite, euhedral	chromite	0.25-0.5	0.00	3.25	18.31	34.71	0.21	28.08	13.28	0.00	0.00	0.00						97.84	0.46	0.55
15SUV030_rpt	2015_5	5_7_rpt	5-5_007B	chromite, euhedral	chromite	0.25-0.5	0.00	3.23	18.48	34.53	0.21	28.16	13.15	0.01	0.00	0.01						97.78	0.45	0.54
15SUV030_rpt	2015_5	5_8_rpt	5-5_008A	chromite, euhedral	chromite	0.25-0.5	0.00	2.72	17.56	37.12	0.21	26.88	12.96	0.00	0.00	0.00						97.45	0.46	0.57
15SUV030	2015_5	5_8	5-5_008B	chromite, euhedral	chromite	0.25-0.5	0.00	2.75	17.64	37.22	0.23	26.96	13.11	0.00	0.00	0.00						97.91	0.46	0.57
15SUV031	2015_5	5_10	5-5_010	chromite, euhedral	chromite	0.25-0.5	0.00	0.71	18.45	42.87	0.26	25.32	10.53	0.00	0.00	0.00						98.14	0.43	0.60
15SUV051	2015_5	5_11	5-5_011	chromite, euhedral	chromite	0.5-1.0	0.00	0.97	35.40	27.90	0.16	16.74	17.24	0.00	0.00	0.00						98.41	0.65	0.33

15SUV001	2015_6	1_1	6-1_001	chromite	chromite	0.25-0.5	0.00	0.28	29.43	38.32	0.17	14.04	16.87	0.00	0.00	0.00	99.11	0.68	0.45
15SUV001	2015_6	1_2	6-1_002	chromite	chromite	0.25-0.5	0.00	3.35	16.71	35.17	0.22	29.43	12.60	0.00	0.00	0.00	97.48	0.43	0.57
15SUV001	2015_6	1_3	6-1_003	chromite	chromite	0.25-0.5	0.00	0.18	24.44	38.11	0.39	28.90	3.35	0.01	0.07	0.01	95.46	0.17	0.50
15SUV001	2015_6	1_4	6-1_004	chromite	chromite	0.25-0.5	0.00	0.11	20.10	47.71	0.19	15.57	14.93	0.00	0.00	0.00	98.61	0.63	0.60
15SUV001	2015_6	1_5	6-1_005	chromite	chromite	0.25-0.5	0.00	1.23	27.80	34.36	0.17	19.69	15.55	0.01	0.00	0.00	98.81	0.58	0.44
15SUV001	2015_6	1_8	6-1_008	chromite	chromite	0.25-0.5	0.00	0.95	34.68	30.30	0.16	15.36	17.50	0.00	0.00	0.00	98.95	0.67	0.36
15SUV001	2015_6	1_9	6-1_009	chromite	chromite	0.25-0.5	0.00	0.61	35.75	30.54	0.16	14.32	17.50	0.00	0.00	0.00	98.88	0.69	0.35
15SUV001	2015_6	1_10	6-1_010	chromite	chromite	0.25-0.5	0.00	0.28	27.06	40.18	0.19	15.24	16.08	0.00	0.00	0.00	99.03	0.65	0.48
15SUV001	2015_6	1_11	6-1_011	chromite	chromite	0.25-0.5	0.00	5.43	7.39	36.25	0.31	34.11	13.37	0.00	0.00	0.00	96.86	0.41	0.76
15SUV002	2015_6	2_1	6-2_001	chromite	chromite	0.25-0.5	0.00	1.81	16.75	43.12	0.20	21.98	14.21	0.00	0.00	0.00	98.07	0.54	0.62
15SUV002	2015_6	2_2	6-2_002	chromite	chromite	0.25-0.5	0.00	0.76	30.99	34.69	0.19	15.71	16.65	0.00	0.00	0.00	98.99	0.65	0.41
15SUV002	2015_6	2_3	6-2_003	chromite	chromite	0.25-0.5	0.00	0.50	17.88	44.69	0.28	25.22	10.06	0.00	0.00	0.00	98.63	0.42	0.61
15SUV002	2015_6	2_5	6-2_005	chromite	chromite	0.25-0.5	0.00	0.46	16.99	47.27	0.27	21.00	12.11	0.00	0.00	0.00	98.10	0.51	0.64
15SUV002	2015_6	2_6	6-2_006	chromite	chromite	0.25-0.5	0.00	0.04	6.95	62.07	0.68	20.05	6.32	0.00	0.00	0.00	96.11	0.36	0.85
15SUV002	2015_6	2_7	6-2_007	chromite	chromite	0.25-0.5	0.00	3.55	16.09	34.57	0.26	30.51	12.51	0.00	0.00	0.00	97.49	0.42	0.58
15SUV002	2015_6	2_8	6-2_008	chromite	chromite	0.25-0.5	0.00	1.53	15.14	43.41	0.36	27.82	9.77	0.00	0.00	0.00	98.03	0.39	0.64
15SUV003	2015_6	2_9	6-2_009	chromite	chromite	0.5-1.0	0.00	0.18	27.13	40.90	0.18	14.09	16.48	0.00	0.00	0.00	98.96	0.68	0.49
15SUV003	2015_6	3_1	6-3_001	chromite	chromite	0.25-0.5	0.00	0.56	26.27	39.59	0.19	16.48	15.43	0.00	0.00	0.00	98.52	0.63	0.49
15SUV003	2015_6	3_2	6-3_002	chromite	chromite	0.25-0.5	0.00	0.29	34.22	33.34	0.15	13.55	17.48	0.00	0.00	0.00	99.03	0.70	0.38
15SUV003	2015_6	3_3	6-3_003	chromite	chromite	0.25-0.5	0.00	2.28	14.71	43.38	0.22	23.88	13.68	0.00	0.00	0.00	98.15	0.51	0.65
15SUV003	2015_6	3_4	6-3_004	chromite	chromite	0.25-0.5	0.00	0.54	19.95	46.35	0.18	15.70	15.69	0.00	0.00	0.00	98.41	0.64	0.60
15SUV003	2015_6	3_5	6-3_005	chromite	chromite	0.25-0.5	0.00	1.10	31.67	31.53	0.18	17.41	16.67	0.00	0.00	0.00	98.56	0.63	0.39
15SUV003	2015_6	3_7	6-3_007	chromite	chromite	0.25-0.5	0.00	0.55	28.53	37.59	0.18	15.77	16.47	0.00	0.00	0.00	99.09	0.65	0.45
15SUV003	2015_6	3_8	6-3_008	chromite	chromite	0.25-0.5	0.00	0.44	37.03	25.99	0.23	20.11	15.05	0.00	0.00	0.00	98.85	0.57	0.31
15SUV003	2015_6	3_9	6-3_009	chromite	chromite	0.25-0.5	0.00	0.91	32.68	30.61	0.17	18.07	16.37	0.01	0.00	0.00	98.82	0.62	0.37
15SUV003	2015_6	3_10	6-3_010	chromite	chromite	0.25-0.5	0.00	0.13	41.93	25.65	0.13	12.50	18.63	0.00	0.00	0.00	98.97	0.73	0.28
15SUV003	2015_6	3_11	6-3_011	chromite	chromite	0.25-0.5	0.00	0.39	25.12	42.47	0.20	14.75	16.16	0.01	0.00	0.00	99.10	0.66	0.52
15SUV004	2015_6	4_1	6-4_001	chromite	chromite	0.25-0.5	0.00	0.29	20.72	41.04	0.31	30.34	5.96	0.00	0.00	0.00	98.66	0.26	0.56
15SUV004	2015_6	4_2	6-4_002	chromite	chromite	0.25-0.5	0.00	0.58	17.14	46.57	0.29	22.87	10.84	0.01	0.00	0.00	98.30	0.46	0.63
15SUV005	2015_6	4_4	6-4_004	chromite	chromite	0.25-0.5	0.00	0.07	24.21	34.99	0.35	32.29	6.43	0.00	0.00	0.00	98.34	0.26	0.48
15SUV006	2015_6	4_5	6-4_005	chromite	chromite	0.25-0.5	0.00	0.74	25.74	39.90	0.19	15.53	16.59	0.00	0.00	0.00	98.69	0.66	0.50
15SUV009	2015_6	4_6	6-4_006	chromite	chromite	0.5-1.0	0.00	1.16	30.97	30.76	0.18	19.98	15.52	0.00	0.00	0.00	98.57	0.58	0.39
15SUV009	2015_6	5_10	6-5_010	chromite	chromite	0.25-0.5	0.00	0.74	19.33	43.95	0.22	21.32	12.84	0.00	0.00	0.00	98.40	0.52	0.59
15SUV009	2015_6	6_3	6-6_003	chromite	chromite	0.25-0.5	0.00	0.06	7.73	60.61	0.39	22.10	7.55	0.00	0.00	0.00	98.44	0.38	0.83
15SUV009	2015_6	6_4	6-6_004	chromite	chromite	0.25-0.5	0.00	0.23	28.81	35.94	0.23	20.70	13.02	0.01	0.00	0.00	98.94	0.53	0.44
15SUV009	2015_6	6_7	6-6_007	chromite	chromite	0.25-0.5	0.00	0.38	31.06	36.51	0.17	14.05	16.94	0.00	0.00	0.00	99.11	0.68	0.43
15SUV009	2015_6	6_9	6-6_009	chromite	chromite	0.25-0.5	0.00	1.63	16.30	44.37	0.22	21.53	14.16	0.00	0.00	0.00	98.21	0.54	0.63
15SUV010	2015_7	1_1	7-1_001	chromite	chromite	0.25-0.5	0.00	0.06	36.75	31.34	0.14	12.59	18.21	0.00	0.00	0.00	99.09	0.72	0.35
15SUV010	2015_7	1_2	7-1_002	chromite	chromite	0.25-0.5	0.00	0.16	34.06	34.49	0.29	15.94	13.93	0.00	0.00	0.00	98.87	0.61	0.39
15SUV014	2015_7	1_3	7-1_003	chromite	chromite	0.25-0.5	0.00	0.88	20.44	39.55	0.27	27.48	9.71	0.00	0.00	0.00	98.33	0.39	0.55
15SUV014	2015_7	1_4	7-1_004	chromite	chromite	0.25-0.5	0.00	0.70	25.83	36.72	0.22	20.33	14.58	0.00	0.00	0.00	98.38	0.56	0.47
15SUV014	2015_7	1_5	7-1_005	chromite	chromite	0.25-0.5	0.00	0.55	24.46	42.43	0.16	15.77	13.97	0.02	0.00	0.00	97.36	0.61	0.52
15SUV014	2015_7	1_6	7-1_006	chromite	chromite	0.25-0.5	0.00	0.62	22.75	39.61	0.23	20.91	13.97	0.00	0.00	0.00	98.09	0.54	0.52
15SUV014	2015_7	1_7	7-1_007	chromite	chromite	0.25-0.5	0.00	0.54	21.02	47.08	0.22	14.65	15.39	0.00	0.00	0.00	98.90	0.65	0.59
15SUV018	2015_7	1_8_rpt	7-1_008A	chromite	chromite	0.25-0.5	0.00	1.61	18.03	43.54	0.26	22.68	12.58	0.00	0.00	0.00	98.70	0.50	0.60
15SUV018	2015_7	1_8	7-1-B_008	chromite	chromite	0.25-0.5	0.00	1.55	18.02	43.39	0.24	22.65	12.47	0.00	0.00	0.00	98.32	0.50	0.60
15SUV018	2015_7	1_9_rpt	7-1_009A	chromite	chromite	0.25-0.5	0.00	1.45	16.84	42.42	0.33	28.30	8.34	0.00	0.00	0.00	97.68	0.34	0.61
15SUV018	2015_7	1_9	7-1-B_009	chromite	chromite	0.25-0.5	0.00	1.42	17.10	42.41	0.32	27.90	8.79	0.00	0.00	0.00	97.94	0.36	0.61
15SUV018	2015_7	1_10_rpt	7-1_010A	chromite	chromite	0.25-0.5	0.00	2.62	15.17	41.29	0.22	25.08	13.39	0.00	0.00	0.00	97.77	0.49	0.63
15SUV018	2015_7	1_10	7-1-B_010	chromite	chromite	0.25-0.5	0.00	2.64	15.09	41.37	0.22	25.10	13.52	0.00	0.00	0.00	97.94	0.49	0.63
15SUV020	2015_7	1_11	7-1_011	chromite	chromite	0.5-1.0	0.00	1.09	27.58	36.49	0.18	17.08	16.39	0.00	0.00	0.00	98.81	0.63	0.46
15SUV020	2015_7	2_1	7-2_001	chromite	chromite	0.25-0.5	0.00	0.68	32.66	33.34	0.16	15.04	16.89	0.00	0.00	0.00	98.77	0.67	0.39
15SUV020	2015_7	2_2	7-2_002	chromite	chromite	0.25-0.5	0.00	0.08	26.02	42.06	0.18	14.20	16.28	0.00	0.00	0.00	98.82	0.67	0.51
15SUV020	2015_7	2_3	7-2_003	chromite	chromite	0.25-0.5	0.00	1.44	25.92	35.28	0.17	20.43	14.99	0.00	0.00	0.00	98.23	0.57	0.46
15SUV020	2015_7	2_4	7-2_004	chromite	chromite	0.25-0.5	0.00	0.17	25.31	41.73	0.20	15.96	15.46	0.00	0.00	0.00	98.83	0.63	0.51
15SUV020	2015_7	2_5	7-2_005	chromite	chromite	0.25-0.5	0.00	0.11	20.42	47.35	0.22	15.46	15.20	0.00	0.00	0.00	98.76	0.64	0.59
15SUV020	2015_7	2_7	7-2_007	chromite	chromite	0.25-0.5	0.00	0.51	30.74	35.06	0.20	15.93	16.41	0.00	0.00	0.00	98.85	0.65	0.42
15SUV020	2015_7	2_8	7-2_008	chromite	chromite	0.25-0.5	0.00	0.91	35.83	27.95	0.17	16.64	17.35	0.00	0.00	0.00	98.85	0.65	0.33
15SUV020	2015_7	2_9	7-2_009	chromite	chromite	0.25-0.5	0.00	2.85	14.22	41.42	0.24	25.20	13.68	0.00	0.00	0.00	97.61	0.49	0.65
15SUV020	2015_7	3_3	7-3_003	chromite	chromite	0.25-0.5	0.00	0.74	32.12	33.69	0.18	15.11	17.09	0.00	0.00	0.00	98.93	0.67	0.40
15SUV020	2015_7	3_4	7-3_004	chromite	chromite	0.25-0.5	0.00	1.58	15.39	45.15	0.24	21.74	13.94	0.00	0.00	0.00	98.04	0.53	0.65

15SUV020	2015_7	3_6	7-3_006	chromite	chromite	0.25-0.5	0.00	0.36	17.59	44.23	0.31	27.00	8.68	0.00	0.00	0.00						98.17	0.36	0.61
15SUV020	2015_7	3_7	7-3_007	chromite	chromite	0.25-0.5	0.00	1.08	9.54	53.83	0.29	21.29	11.95	0.01	0.00	0.00						97.99	0.50	0.78
15SUV020	2015_7	3_8	7-3_008	chromite	chromite	0.25-0.5	0.00	4.93	10.73	31.48	0.26	41.78	7.12	0.00	0.00	0.00						96.30	0.23	0.65
15SUV025	2015_7	4_2	7-4_002	chromite	chromite	0.25-0.5	0.00	3.13	17.27	36.59	0.22	26.66	13.71	0.00	0.00	0.00						97.58	0.48	0.57
15SUV026	2015_7	4_3	7-4_003	chromite	chromite	0.5-1.0	0.00	0.91	25.33	36.43	0.22	21.07	14.31	0.00	0.00	0.00						98.27	0.55	0.48
15SUV026	2015_7	4_4	7-4_004	chromite	chromite	0.5-1.0	0.00	3.51	8.23	34.45	0.27	43.12	6.25	0.00	0.00	0.00						95.83	0.21	0.73
15SUV026	2015_7	4_5	7-4_005	chromite	chromite	0.25-0.5	0.00	0.25	24.80	42.27	0.23	15.75	15.34	0.00	0.00	0.00						98.64	0.63	0.52
15SUV026	2015_7	4_6	7-4_006	chromite	chromite	0.25-0.5	0.00	0.00	24.66	45.55	0.26	14.82	13.55	0.00	0.00	0.00						98.84	0.62	0.54
15SUV026	2015_7	4_7	7-4_007	chromite	chromite	0.25-0.5	0.00	0.81	28.63	35.78	0.21	17.74	15.55	0.00	0.00	0.00						98.72	0.61	0.44
15SUV026	2015_7	4_8	7-4_008	chromite	chromite	0.25-0.5	0.00	0.23	31.32	35.61	0.37	17.21	14.37	0.00	0.00	0.00						99.11	0.60	0.42
15SUV050	2015_7	5_1	7-5_001	chromite	chromite	0.25-0.5	0.00	0.81	25.83	35.74	0.23	21.68	14.26	0.00	0.00	0.00						98.55	0.54	0.47
15SUV050	2015_7	5_2	7-5_002	chromite	chromite	0.25-0.5	0.00	0.62	18.66	42.57	0.30	26.57	9.40	0.01	0.00	0.00						98.13	0.39	0.59
15SUV050	2015_7	5_3	7-5_003	chromite	chromite	0.25-0.5	0.00	0.25	23.77	41.54	0.22	19.20	13.51	0.00	0.00	0.00						98.49	0.56	0.52
15SUV051	2015_7	5_4	7-5_004	chromite	chromite	0.25-0.5	0.00	0.25	30.81	36.49	0.18	14.25	16.98	0.00	0.00	0.00						98.96	0.68	0.43
15SUV051	2015_7	5_5	7-5_005	chromite	chromite	0.25-0.5	0.00	2.16	18.55	42.05	0.24	20.58	14.34	0.00	0.00	0.00						97.92	0.55	0.59
15SUV051	2015_7	5_6	7-5_006	chromite	chromite	0.25-0.5	0.00	0.54	21.94	40.08	0.25	24.41	11.20	0.00	0.00	0.00						98.42	0.45	0.54
15SUV054	2015_7	5_7	7-5_007	chromite	chromite	0.25-0.5	0.00	0.57	18.61	44.28	0.20	20.71	13.73	0.00	0.00	0.00						98.10	0.54	0.60
15SUV054	2015_7	5_8	7-5_008	chromite	chromite	0.25-0.5	0.00	2.04	17.17	41.40	0.23	23.33	13.86	0.00	0.00	0.00						98.03	0.51	0.60
16SUV013	Mount2_023	2_3_1	127	chromite	chromite	0.25-0.5	0.00	0.09	18.35	50.72	0.20	20.03	10.23	0.00	0.00	0.00	0.00	0.02	0.32	0.07	0.00	100.05	0.48	0.64
16SUV013	Mount2_024	2_3_2	128	chromite	chromite	0.25-0.5	0.00	1.54	23.83	38.41	0.15	18.61	16.04	0.00	0.00	0.00	0.00	0.19	0.07	0.19	0.00	99.04	0.61	0.50
16SUV014	Mount2_025	2_3_3	129	chromite	chromite	0.25-0.5	0.00	1.64	12.94	51.72	0.19	17.85	14.49	0.00	0.00	0.00	0.00	0.16	0.08	0.14	0.00	99.21	0.59	0.72
16SUV014	Mount2_026	2_3_4	130	chromite	chromite	0.25-0.5	0.00	3.39	6.78	46.84	0.21	25.76	14.76	0.00	0.00	0.00	0.00	0.25	0.04	0.09	0.00	98.13	0.51	0.81
16SUV018	Mount2_027	2_3_6	131	chromite	chromite	0.25-0.5	0.00	0.19	22.14	46.39	0.18	14.69	15.60	0.01	0.00	0.00	0.00	0.22	0.04	0.10	0.00	99.55	0.65	0.57
16SUV018	Mount2_028	2_3_8	132	chromite	chromite	0.25-0.5	0.00	0.53	28.13	37.10	0.19	18.12	14.55	0.00	0.00	0.00	0.00	0.18	0.10	0.16	0.00	99.06	0.59	0.45
16SUV018	Mount2_029	2_3_9	133	chromite	chromite	0.25-0.5	0.00	0.09	29.54	37.77	0.19	16.04	15.10	0.00	0.00	0.00	0.00	0.15	0.15	0.11	0.00	99.14	0.63	0.45
16SUV023	Mount2_030	2_3_10	134	chromite	chromite	0.25-0.5	0.00	2.37	13.61	42.91	0.21	26.09	12.82	0.01	0.03	0.00	0.00	0.14	0.06	0.16	0.00	98.42	0.47	0.67
16SUV023	Mount2_031	2_3_11	135	chromite	chromite	0.25-0.5	0.00	3.25	15.47	33.94	0.40	31.84	11.99	0.00	0.00	0.00	0.00	0.16	0.10	0.15	0.00	97.31	0.40	0.58
16SUV023	Mount2_032	2_3_12	136	chromite	chromite	0.25-0.5	0.00	1.67	27.53	31.05	0.18	23.14	14.63	0.00	0.00	0.01	0.00	0.21	0.08	0.15	0.00	98.66	0.53	0.42
16SUV023	Mount2_033	2_4_1	137	chromite	chromite	0.25-0.5	0.00	0.05	25.23	37.59	0.25	23.23	12.29	0.01	0.00	0.00	0.00	0.13	0.41	0.04	0.00	99.23	0.49	0.49
16SUV023	Mount2_034	2_4_2	138	chromite	chromite	0.25-0.5	0.00	0.98	27.69	36.21	0.14	17.56	16.32	0.00	0.00	0.00	0.00	0.24	0.06	0.12	0.00	99.31	0.62	0.45
16SUV023	Mount2_035	2_4_3	139	chromite	chromite	0.25-0.5	0.00	1.17	17.02	43.57	0.25	25.88	10.30	0.01	0.00	0.00	0.00	0.16	0.09	0.26	0.00	98.71	0.42	0.62
16SUV023	Mount2_036	2_4_4	140	chromite	chromite	0.25-0.5	0.00	0.77	27.58	37.84	0.15	16.31	16.33	0.00	0.00	0.00	0.00	0.21	0.06	0.17	0.00	99.42	0.64	0.46
16SUV023	Mount2_038	2_4_6	142	chromite	chromite	0.25-0.5	0.00	0.11	26.00	41.88	0.21	17.05	13.55	0.00	0.00	0.00	0.00	0.09	0.22	0.23	0.00	99.34	0.59	0.50
16SUV023	Mount2_039	2_4_7	143	chromite	chromite	0.25-0.5	0.00	0.73	36.17	29.74	0.12	13.26	18.00	0.00	0.00	0.01	0.00	0.28	0.09	0.11	0.00	98.52	0.71	0.34
16SUV024	Mount2_040	2_4_8	144	chromite	chromite	0.25-0.5	0.00	3.72	12.76	38.92	0.31	33.80	7.81	0.00	0.00	0.00	0.00	0.13	0.16	0.45	0.00	98.07	0.29	0.66
16SUV024	Mount2_041	2_4_9	145	chromite	chromite	0.25-0.5	0.00	0.50	15.88	49.34	0.15	18.29	13.87	0.00	0.00	0.00	0.00	0.19	0.05	0.15	0.00	98.41	0.57	0.66
16SUV024	Mount2_042	2_4_10	146	chromite	chromite	0.25-0.5	0.00	0.09	1.97	53.05	0.35	36.69	3.76	0.01	0.00	0.00	0.00	0.09	0.33	0.13	0.00	96.46	0.15	0.94
16SUV027	Mount2_043	2_5_1	147	chromite	chromite	0.5-1.0	0.00	1.19	31.50	33.72	0.13	14.42	17.26	0.00	0.00	0.00	0.00	0.26	0.06	0.15	0.00	98.70	0.68	0.40
16SUV027	Mount2_044	2_5_2	148	chromite	chromite	0.5-1.0	0.00	0.05	27.38	40.48	0.14	14.50	16.48	0.00	0.00	0.00	0.00	0.20	0.06	0.14	0.00	99.43	0.67	0.48
16SUV027	Mount2_045	2_5_3	149	chromite	chromite	0.5-1.0	0.00	0.34	28.31	36.47	0.26	20.01	13.18	0.00	0.00	0.01	0.00	0.20	0.09	0.15	0.00	99.04	0.54	0.45
16SUV027	Mount2_046	2_5_4	150	chromite	chromite	0.25-0.5	0.00	2.24	15.82	42.19	0.20	23.94	13.69	0.00	0.00	0.00	0.00	0.16	0.06	0.16	0.00	98.46	0.50	0.63
16SUV027	Mount2_047	2_5_6	151	chromite	chromite	0.25-0.5	0.00	0.63	37.27	27.73	0.13	14.76	18.27	0.00	0.00	0.00	0.04	0.24	0.05	0.09	0.00	99.22	0.69	0.32
16SUV027	Mount2_048	2_5_7	152	chromite	chromite	0.25-0.5	0.00	1.79	16.25	43.47	0.18	21.79	14.40	0.01	0.00	0.00	0.00	0.22	0.04	0.15	0.00	98.30	0.54	0.63
16SUV027	Mount2_049	2_5_8	153	chromite	chromite	0.25-0.5	0.00	2.64	20.96	33.53	0.21	27.17	13.25	0.00	0.00	0.00	0.00	0.20	0.09	0.18	0.00	98.22	0.47	0.50
16SUV027	Mount2_050	2_5_9	154	chromite	chromite	0.25-0.5	0.00	0.59	19.85	42.25	0.19	23.78	12.12	0.00	0.00	0.00	0.00	0.12	0.05	0.16	0.00	99.11	0.48	0.57
16SUV027	Mount2_052	2_5_11	156	chromite	chromite	0.25-0.5	0.00	0.44	16.38	46.37	0.24	25.34	9.65	0.01	0.00	0.00	0.00	0.21	0.08	0.09	0.00	98.81	0.40	0.64
16SUV027	Mount2_053	2_5_12	157	chromite	chromite	0.25-0.5	0.00	2.37	20.32	34.68	0.18	26.56	13.56	0.00	0.00	0.00	0.00	0.15	0.06	0.16	0.00	98.04	0.48	0.52
16SUV028	Mount2_054	2_6_1	158	chromite	chromite	0.25-0.5	0.00	0.59	27.60	38.88	0.16	15.20	16.31	0.00	0.00	0.00	0.00	0.22	0.09	0.13	0.00	99.16	0.66	0.47
16SUV028	Mount2_055	2_6_2	159	chromite	chromite	0.25-0.5	0.00	0.81	24.31	41.59	0.16	15.44	16.22	0.00	0.02	0.00	0.00	0.21	0.07	0.16	0.00	98.99	0.65	0.52
16SUV028	Mount2_056	2_6_3	160	chromite	chromite	0.25-0.5	0.00	1.12	24.31	40.98	0.17	16.82	15.38	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	99.21	0.62	0.52
16SUV028	Mount2_057	2_6_4	161	chromite	chromite	0.25-0.5	0.00	0.30	24.19	43.17	0.15	15.53	15.74	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	99.52	0.64	0.53
16SUV028	Mount2_058	2_6_5	162	chromite	chromite	0.25-0.5	0.00	0.73	25.70	41.00	0.16	15.08	16.28	0.00	0.00	0.00	0.00	0.21	0.06	0.09	0.00	99.30	0.66	0.50
16SUV028	Mount2_059	2_6_6	163	chromite	chromite	0.25-0.5	0.00	1.90	24.11	35.32	0.16	22.09	14.72	0.00	0.00	0.00	0.00	0.22	0.09	0.13	0.00	98.73	0.54	0.48
16SUV028	Mount2_060	2_6_7	164	chromite	chromite	0.25-0.5	0.00	1.56	23.34	39.81	0.16	17.53	16.29	0.01	0.00	0.00	0.00	0.21	0.06	0.19	0.00	99.15	0.62	0.52
16SUV028	Mount2_061	2_6_8	165	chromite	chromite	0.25-0.5	0.00	1.23	31.46	33.05	0.13	15.85	17.06	0.00	0.00	0.00	0.00	0.23	0.07	0.12	0.00	99.18	0.66	0.40
16SUV028	Mount2_062	2_6_9	166	chromite	chromite	0.5-1.0	0.00	2.23	16.50	41.05	0.20	24.39	13.62	0.00	0.00	0.00	0.00	0.17	0.06	0.18	0.00	98.40	0.50	0.61
16SUV028	Mount2_063	2_6_10	167	chromite	chromite	0.5-1.0	0.00	0.45	41.90	23.37	0.14	14.78	18.28	0.00	0.00	0.00	0.00	0.26	0.05	0.09	0.00	99.33	0.69	0.26
16SUV028	Mount2_064	2_6_11	168	chromite	chromite	0.25-0.5	0.00	1.53	24.13	38.35	0.15	18.51	15.96	0.00	0.00	0.00	0.00	0.20	0.05	0.16	0.00	99.05	0.61	0.50
16SUV028	Mount2_065	2_6_12	169	chromite	chromite	0.25-0.5	0.00	1.18	26.00	38.77	0.12	15.89	16.91	0.00	0.00	0.00	0.00	0.23	0.06	0.15	0.00	99.32	0.65	0.49
16SUV028	Mount2_066	2_6_13	170	chromite	chromite	0.25-0.5	0.00	1.07	23.35	41.32	0.17	16.71	16.11	0.00	0.00	0.00	0.00	0.19	0.06	0.14	0.00	99.13	0.63	0.53
16SUV028	Mount2_067	2_6_14	171	chromite	chromite	0.25-0.5	0.00	1.44	24.45	38.18	0.16	17.72	16.28	0.00	0.00	0.00	0.00	0.22	0.06	0.17	0.00	98.70	0.62	0.50

16SUV028	Mount2_068	2_6_15	172	chromite	chromite	0.25-0.5	0.00	3.69	10.97	39.84	0.26	31.44	11.13	0.00	0.00	0.00	0.00	0.08	0.07	0.19	0.00	97.67	0.39	0.70
16SUV028	Mount2_071	2_7_4	175	chromite	chromite	0.25-0.5	0.00	2.70	14.41	42.96	0.19	24.48	13.22	0.00	0.00	0.00	0.00	0.20	0.06	0.18	0.00	98.40	0.49	0.65
16SUV028	Mount2_073	2_7_6	177	chromite	chromite	0.25-0.5	0.00	2.29	30.51	27.45	0.17	22.31	15.63	0.01	0.00	0.00	0.00	0.22	0.07	0.14	0.00	98.81	0.56	0.36
16SUV028	Mount2_075	2_7_8	179	chromite	chromite	0.25-0.5	0.00	2.16	15.99	41.56	0.20	24.90	13.34	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	98.58	0.49	0.62
16SUV028	Mount2_077	2_7_10	181	chromite	chromite	0.25-0.5	0.00	3.57	16.42	35.72	0.19	28.30	13.18	0.02	0.00	0.00	0.00	0.17	0.03	0.17	0.00	97.78	0.45	0.58
16SUV028	Mount2_078	2_7_11	182	chromite	chromite	0.25-0.5	0.00	2.98	20.11	33.77	0.16	27.05	13.79	0.00	0.00	0.00	0.00	0.24	0.09	0.16	0.02	98.38	0.48	0.52
16SUV028	Mount2_079	2_7_12	183	chromite	chromite	0.25-0.5	0.00	0.26	22.01	39.27	0.23	27.71	9.00	0.00	0.00	0.01	0.00	0.10	0.16	0.09	0.00	98.83	0.37	0.53
16SUV013	Mount2_080	2_7_13	184	chromite	chromite	0.25-0.5	0.00	0.27	22.85	42.47	0.18	19.76	13.24	0.00	0.00	0.00	0.00	0.22	0.07	0.12	0.00	99.18	0.54	0.54
16SUV023	Mount3_040	3_4_1	166	ilmenite	chromite	0.18-0.25	0.00	1.55	23.65	39.05	0.17	18.46	15.93	0.00	0.00	0.00	0.00	0.21	0.06	0.16	0.00	99.22	0.61	0.51
16SUV023	Mount3_049	3_4_10	175	ilmenite	chromite	0.18-0.25	0.00	2.41	23.49	33.50	0.18	24.69	14.21	0.00	0.00	0.00	0.00	0.20	0.09	0.15	0.00	98.93	0.51	0.47
15SUV015	Mount3_055	3_5_1	181	chromite	chromite	0.18-0.25	0.00	4.03	9.29	37.56	0.34	39.79	6.18	0.00	0.00	0.00	0.00	0.08	0.15	0.40	0.00	97.82	0.22	0.72
15SUV018	Mount3_056	3_5_2	182	chromite	chromite	0.18-0.25	0.00	0.49	12.41	55.72	0.17	18.36	10.85	0.00	0.00	0.00	0.00	0.14	0.08	0.22	0.00	98.44	0.51	0.74
15SUV018	Mount3_057	3_5_3	183	chromite	chromite	0.18-0.25	0.00	1.08	41.20	20.48	0.14	18.74	17.16	0.00	0.00	0.00	0.00	0.22	0.08	0.13	0.00	99.24	0.62	0.24
15SUV018	Mount3_058	3_5_4	184	chromite	chromite	0.18-0.25	0.04	0.19	44.40	22.68	0.11	11.38	19.89	0.00	0.00	0.00	0.00	0.31	0.05	0.09	0.00	99.14	0.76	0.24
15SUV018	Mount3_059	3_5_5	185	chromite	chromite	0.18-0.25	0.00	1.13	17.60	41.58	0.24	27.56	9.98	0.00	0.00	0.00	0.00	0.15	0.11	0.41	0.00	98.77	0.39	0.60
15SUV019	Mount3_060	3_5_6	186	chromite	chromite	0.18-0.25	0.00	2.03	14.66	41.57	0.26	27.86	11.54	0.01	0.00	0.00	0.00	0.22	0.07	0.32	0.00	98.53	0.42	0.64
15SUV019	Mount3_061	3_5_7	187	chromite	chromite	0.18-0.25	0.00	1.88	15.09	40.02	0.31	33.12	7.93	0.00	0.00	0.00	0.00	0.12	0.11	0.25	0.00	98.82	0.30	0.63
15SUV019	Mount3_062	3_5_8	188	chromite	chromite	0.18-0.25	0.00	0.04	6.42	62.74	0.32	21.58	8.04	0.00	0.00	0.01	0.00	0.00	0.22	0.12	0.00	99.47	0.40	0.86
15SUV019	Mount3_063	3_5_9	189	chromite	chromite	0.18-0.25	0.00	2.01	18.16	38.59	0.23	26.81	12.38	0.00	0.00	0.00	0.00	0.17	0.07	0.18	0.00	98.59	0.45	0.57
15SUV028	Mount3_064	3_5_10	190	chromite	chromite	0.18-0.25	0.00	0.66	25.98	37.37	0.17	18.59	16.38	0.00	0.00	0.00	0.00	0.18	0.03	0.08	0.00	99.45	0.61	0.48
15SUV028	Mount3_065	3_5_11	191	chromite	chromite	0.18-0.25	0.00	1.91	15.24	42.97	0.27	27.86	9.78	0.00	0.00	0.00	0.00	0.19	0.11	0.28	0.00	98.62	0.39	0.64
15SUV028	Mount3_066	3_5_12	192	chromite	chromite	0.18-0.25	0.00	0.47	17.48	47.38	0.19	20.10	13.35	0.00	0.00	0.00	0.00	0.26	0.00	0.12	0.00	99.34	0.54	0.63
15SUV030	Mount3_067	3_5_13	193	chromite	chromite	0.18-0.25	0.00	1.44	17.12	40.61	0.22	29.01	9.87	0.00	0.00	0.00	0.00	0.18	0.13	0.37	0.00	98.94	0.38	0.60
15SUV030	Mount3_068	3_5_14	194	chromite	chromite	0.18-0.25	0.00	1.38	16.50	42.90	0.24	26.57	10.85	0.00	0.00	0.00	0.00	0.17	0.09	0.25	0.00	98.96	0.42	0.62
16SUV023	Mount3_069	3_6_1	195	chromite	chromite	0.18-0.25	0.00	0.17	12.01	54.14	0.23	22.52	9.19	0.00	0.00	0.00	0.00	0.08	0.16	0.10	0.00	98.60	0.42	0.74
16SUV023	Mount3_070	3_6_2	196	chromite	chromite	0.18-0.25	0.00	2.43	15.49	41.27	0.18	25.60	13.41	0.00	0.00	0.00	0.00	0.19	0.07	0.17	0.00	98.82	0.48	0.63
16SUV023	Mount3_071	3_6_3	197	chromite	chromite	0.18-0.25	0.00	0.73	5.90	34.59	0.28	43.87	10.76	0.01	0.00	0.00	0.00	0.18	0.05	0.07	0.00	96.43	0.30	0.79
16SUV023	Mount3_072	3_6_4	198	chromite	chromite	0.18-0.25	0.00	0.39	6.62	49.48	0.39	32.70	7.96	0.01	0.00	0.00	0.00	0.11	0.17	0.06	0.00	97.90	0.30	0.83
16SUV023	Mount3_073	3_6_5	199	chromite	chromite	0.18-0.25	0.00	2.29	17.19	37.60	0.20	27.59	13.04	0.00	0.00	0.00	0.00	0.17	0.03	0.18	0.00	98.29	0.46	0.58
16SUV023	Mount3_074	3_6_6	200	chromite	chromite	0.18-0.25	0.00	0.55	17.77	42.44	0.30	30.68	6.64	0.00	0.00	0.00	0.00	0.08	0.18	0.18	0.00	98.82	0.28	0.60
16SUV023	Mount3_075	3_6_7	201	chromite	chromite	0.18-0.25	0.00	0.24	13.75	49.73	0.34	29.31	5.00	0.01	0.00	0.00	0.00	0.16	0.09	0.10	0.00	98.73	0.23	0.70
16SUV023	Mount3_076	3_6_8	202	chromite	chromite	0.18-0.25	0.00	0.39	25.05	40.06	0.21	18.38	14.83	0.00	0.00	0.00	0.00	0.10	0.05	0.24	0.00	99.31	0.59	0.50
16SUV023	Mount3_077	3_6_9	203	chromite	chromite	0.18-0.25	0.00	0.90	36.23	28.62	0.13	14.59	18.32	0.01	0.00	0.00	0.00	0.22	0.07	0.12	0.00	99.19	0.69	0.33
16SUV023	Mount3_078	3_6_10	204	chromite	chromite	0.18-0.25	0.00	2.09	16.50	42.80	0.18	22.97	13.93	0.00	0.00	0.00	0.00	0.18	0.08	0.13	0.00	98.86	0.52	0.62
16SUV023	Mount3_079	3_6_11	205	chromite	chromite	0.18-0.25	0.00	0.96	19.31	45.63	0.15	18.17	12.85	0.00	0.00	0.00	0.00	0.18	0.06	0.14	0.00	97.45	0.56	0.60
16SUV023	Mount3_080	3_6_12	206	chromite	chromite	0.18-0.25	0.00	1.34	10.62	56.11	0.18	18.57	8.96	0.01	0.02	0.00	0.00	0.14	0.16	0.28	0.00	96.40	0.46	0.77
16SUV023	Mount3_081	3_6_13	207	chromite	chromite	0.18-0.25	0.00	0.06	23.86	45.24	0.19	16.38	13.56	0.00	0.00	0.00	0.00	0.08	0.16	0.17	0.00	99.72	0.60	0.55
16SUV023	Mount3_082	3_6_14	208	chromite	chromite	0.18-0.25	0.00	2.09	27.32	28.15	0.20	26.10	14.53	0.00	0.00	0.00	0.00	0.19	0.05	0.22	0.00	98.85	0.50	0.39
16SUV023	Mount3_083	3_6_15	209	chromite	chromite	0.18-0.25	0.00	2.05	15.55	44.23	0.19	22.49	14.23	0.00	0.00	0.00	0.00	0.19	0.05	0.12	0.00	99.11	0.53	0.64

shading depicts duplicate analysis of single grains

APPENDIX 6D

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - EPMA chemistry: SPINEL - ALUMINIUM-SERIES

							WT %															
GSC Sample #	**Mount**	**Grain #**	**EPMA #**	**ODM Min ID**	**EPMA Min ID**	**Grain Size**	**SiO2**	**TiO2**	**Al2O3**	**Cr2O3**	**MnO**	**FeO**	**MgO**	**CaO**	**Na2O**	**K2O**	**Nb2O5**	**NiO**	**ZnO**	**V2O3**	**P2O5**	**Total**
15SUV004	2015_3	3_9	3-3_009	spinel	spinel	0.25-0.5	0.00	0.03	69.05	0.00	0.05	4.87	24.74	0.00	0.00	0.00						98.74
15SUV028	2015_3	3_10	3-3_010	spinel	spinel	0.25-0.5	0.00	0.00	69.42	0.08	0.07	6.29	24.47	0.00	0.00	0.00						100.33
15SUV003	2015_3	4_1	3-4_001	hercynite	spinel	0.5-1.0	0.09	0.63	59.37	0.11	0.14	21.79	17.56	0.00	0.00	0.00						99.69
15SUV003	2015_3	4_2	3-4_002	hercynite	spinel	0.5-1.0	0.08	0.55	60.28	1.09	0.12	19.46	18.48	0.00	0.00	0.00						100.06
15SUV014	2015_3	4_4	3-4_004	hercynite	spinel	0.25-0.5	0.00	0.12	61.63	4.93	0.09	11.46	20.91	0.00	0.00	0.00						99.14
15SUV014	2015_3	4_5	3-4_005	hercynite	spinel	0.25-0.5	0.07	0.73	57.10	0.11	0.17	24.40	16.95	0.00	0.00	0.00						99.53
15SUV020	2015_3	4_6	3-4_006	hercynite	spinel	0.5-1.0	0.05	0.43	60.43	0.33	0.15	20.14	18.40	0.00	0.00	0.00						99.93
15SUV020	2015_3	4_7	3-4_007	hercynite	spinel	0.5-1.0	0.00	0.34	59.08	2.44	0.14	19.21	18.18	0.00	0.00	0.00						99.39
15SUV025	2015_3	4_8	3-4_008	hercynite	spinel	0.25-0.5	0.08	0.59	59.93	0.59	0.11	20.04	18.38	0.00	0.00	0.00						99.72
15SUV026	2015_3	4_9	3-4_009	hercynite	spinel	0.5-1.0	0.04	0.21	59.34	7.66	0.09	10.24	21.54	0.00	0.00	0.00						99.12
15SUV051	2015_3	4_10	3-4_010	hercynite	spinel	0.5-1.0	0.11	0.52	59.46	0.12	0.15	21.26	18.14	0.00	0.00	0.00						99.76
15SUV003	2015_5	2_9	5-2_009	chromite, euhedral	spinel	0.25-0.5	0.00	0.81	37.51	26.74	0.18	15.95	17.94	0.00	0.00	0.00						99.13
15SUV001	2015_6	1_6	6-1_006	chromite	spinel	0.25-0.5	0.00	0.21	50.77	16.48	0.11	11.22	20.30	0.01	0.00	0.00						99.10
15SUV001	2015_6	1_7	6-1_007	chromite	spinel	0.25-0.5	0.00	0.36	40.76	23.99	0.14	15.58	18.18	0.00	0.00	0.00						99.01
15SUV002	2015_6	2_4	6-2_004	chromite	spinel	0.25-0.5	0.00	0.22	47.97	19.38	0.11	11.36	19.90	0.00	0.00	0.00						98.94
15SUV003	2015_6	2_10	6-2_010	chromite	spinel	0.5-1.0	0.00	0.05	57.63	9.67	0.11	11.19	20.45	0.00	0.00	0.00						99.10
15SUV003	2015_6	3_6	6-3_006	chromite	spinel	0.25-0.5	0.00	0.00	50.84	16.94	0.12	11.18	20.18	0.00	0.00	0.00						99.26
15SUV020	2015_7	2_6	7-2_006	chromite	spinel	0.25-0.5	0.06	0.32	56.50	10.02	0.09	11.04	21.04	0.01	0.00	0.00						99.08
15SUV020	2015_7	3_1	7-3_001	chromite	spinel	0.25-0.5	0.00	0.14	42.41	24.96	0.14	12.89	18.45	0.00	0.00	0.00						98.99
15SUV020	2015_7	3_2	7-3_002	chromite	spinel	0.25-0.5	0.00	0.08	50.71	16.38	0.12	11.75	19.85	0.00	0.00	0.00						98.89
15SUV020	2015_7	3_5	7-3_005	chromite	spinel	0.25-0.5	0.00	0.38	46.16	16.25	0.16	18.54	17.22	0.01	0.00	0.00						98.72
15SUV024	2015_7	4_1	7-4_001	chromite	spinel	0.25-0.5	0.00	0.92	33.90	28.52	0.18	18.82	16.14	0.00	0.00	0.00						98.48
16SUV024	Mount1_057	1_6_4	277	gahnite	gahnite	0.25-0.5	0.00	0.00	59.80	0.00	0.44	11.89	4.30	0.00	0.00	0.00	0.00	0.00	25.18	0.00	0.00	101.61
16SUV024	Mount1_058	1_6_5	278	gahnite	gahnite	0.25-0.5	0.00	0.00	58.61	0.00	0.27	6.52	3.62	0.00	0.00	0.00	0.00	0.00	32.56	0.00	0.00	101.59
16SUV024	Mount1_059	1_6_6	279	gahnite	gahnite	0.25-0.5	0.00	0.00	57.85	0.09	0.30	7.77	2.61	0.00	0.00	0.00	0.00	0.00	32.91	0.11	0.00	101.64
16SUV024	Mount1_060	1_6_7	280	gahnite	gahnite	0.25-0.5	0.00	0.00	59.14	0.00	0.04	16.43	3.97	0.00	0.00	0.00	0.00	0.03	21.28	0.03	0.00	100.92
16SUV024	Mount1_061	1_6_8	281	gahnite	gahnite	0.25-0.5	0.03	0.00	53.82	0.10	0.13	16.91	2.72	0.01	0.00	0.01	0.00	0.00	21.30	0.03	0.00	95.06
16SUV013	Mount1_062	1_6_9	282	spinel	spinel	0.25-0.5	0.00	0.00	68.65	0.07	0.12	6.93	24.10	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	99.96
16SUV023	Mount1_063	1_6_10	283	spinel	spinel	0.25-0.5	0.00	0.05	69.78	0.04	0.09	4.30	25.84	0.00	0.00	0.00	0.00	0.00	0.27	0.03	0.00	100.40
16SUV028	Mount1_064	1_6_11	284	spinel	spinel	0.25-0.5	0.00	0.04	70.39	0.03	0.03	3.41	26.00	0.01	0.00	0.00	0.00	0.02	0.00	0.04	0.00	99.98
16SUV018	Mount1_067	1_7_2	287	hercynite	gahnite	0.25-0.5	0.00	0.00	61.62	0.00	0.16	16.05	7.88	0.00	0.00	0.00	0.00	0.00	15.28	0.00	0.00	100.98
16SUV018	Mount1_068	1_7_3	288	hercynite	spinel/hercynite	0.25-0.5	0.09	0.54	59.31	0.04	0.14	21.46	18.40	0.00	0.00	0.00	0.00	0.10	0.07	0.08	0.00	100.23
16SUV018	Mount1_069	1_7_4	289	hercynite	spinel/hercynite	0.25-0.5	0.03	0.28	58.12	0.00	0.23	28.76	12.35	0.00	0.00	0.00	0.00	0.02	0.17	0.08	0.00	100.05
16SUV023	Mount1_071	1_7_6	291	hercynite	spinel/hercynite	0.25-0.5	0.12	0.18	61.76	0.00	0.13	19.19	18.17	0.01	0.00	0.00	0.00	0.24	0.09	0.07	0.00	99.95
16SUV023	Mount1_072	1_7_7	292	hercynite	spinel/hercynite	0.25-0.5	0.05	0.34	60.45	0.18	0.16	22.99	15.91	0.00	0.00	0.00	0.00	0.05	0.09	0.08	0.00	100.31
16SUV023	Mount1_073	1_7_8	293	hercynite	spinel/hercynite	0.25-0.5	0.13	0.93	58.02	0.00	0.14	22.99	17.22	0.00	0.00	0.00	0.00	0.11	0.15	0.13	0.00	99.81
16SUV027	Mount1_074	1_7_9	294	hercynite	spinel/hercynite	0.5-1.0	0.08	0.69	58.97	0.51	0.12	20.92	18.09	0.00	0.00	0.00	0.00	0.13	0.10	0.12	0.00	99.72
16SUV027	Mount1_075	1_7_10	295	hercynite	spinel/hercynite	0.25-0.5	0.07	0.32	60.03	1.06	0.15	19.41	18.75	0.00	0.00	0.00	0.00	0.15	0.11	0.05	0.00	100.10
16SUV023	Mount3_029	3_2_15	155	GP	spinel	0.18-0.25	0.04	0.07	69.58	0.08	0.00	3.67	26.12	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	99.60

APPENDIX 6E

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - EPMA chemistry: Mg-ILMENITE

								WT %																
GSC Sample #	**Sample Type**	**Mount**	**Grain #**	**EPMA #**	**ODM Min ID**	**EPMA Min ID**	**Grain Size**	**SiO2**	**TiO2**	**Al2O3**	**Cr2O3**	**MnO**	**FeO**	**MgO**	**CaO**	**Na2O**	**K2O**	**Nb2O5**	**NiO**	**ZnO**	**V2O3**	**P2O5**	**Total**	**Classification[1]**
15SUV001	stream sediments	2015_4	1_1	4-1_001	ilmenite	ilmenite	0.5-1.0	0.03	51.11	0.54	0.99	0.30	31.10	12.70	0.02	0.00	0.00						96.79	kimberlitic
15SUV001	stream sediments	2015_4	1_2	4-1_002	ilmenite	ilmenite	0.5-1.0	0.03	50.47	0.27	0.27	0.25	36.09	9.90	0.02	0.00	0.00						97.30	kimberlitic
15SUV001	stream sediments	2015_4	1_3	4-1_003	ilmenite	ilmenite	0.25-0.5	0.04	51.21	0.59	1.91	0.26	29.73	13.46	0.02	0.04	0.00						97.26	kimberlitic
15SUV001	stream sediments	2015_4	1_4	4-1_004	ilmenite	ilmenite	0.25-0.5	0.00	51.50	0.56	1.29	0.27	30.87	13.05	0.02	0.00	0.00						97.56	kimberlitic
15SUV001	stream sediments	2015_4	1_5	4-1_005	ilmenite	ilmenite	0.25-0.5	0.00	49.32	0.43	1.04	0.30	35.58	10.49	0.02	0.00	0.00						97.18	kimberlitic
15SUV001	stream sediments	2015_4	3_1	4-3_001	ilmenite, crustal	ilmenite	0.5-1.0	0.02	45.31	0.03	0.00	1.80	50.00	0.25	0.00	0.00	0.00						97.41	non-kimberlitic
15SUV001	stream sediments	2015_4	3_2	4-3_002	ilmenite, crustal	ilmenite	0.5-1.0	0.00	49.00	0.08	0.03	0.39	47.33	0.59	0.01	0.00	0.00						97.43	non-kimberlitic
15SUV001	stream sediments	2015_4	3_3	4-3_003	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.07	0.03	0.24	0.30	46.12	2.85	0.00	0.00	0.00						97.61	non-kimberlitic
15SUV001	stream sediments	2015_4	3_4	4-3_004	ilmenite, crustal	ilmenite	0.25-0.5	0.00	51.30	0.00	0.00	0.34	46.27	0.47	0.00	0.00	0.00						98.38	non-kimberlitic
15SUV001	stream sediments	2015_4	3_5	4-3_005	ilmenite, crustal	ilmenite	0.25-0.5	0.00	47.60	0.07	0.00	0.40	48.69	0.60	0.00	0.00	0.00						97.36	non-kimberlitic
15SUV001	stream sediments	2015_4	3_6	4-3_006	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.79	0.07	0.00	0.44	48.11	0.44	0.00	0.00	0.00						97.85	non-kimberlitic
15SUV001	stream sediments	2015_4	3_7	4-3_007	ilmenite, crustal	ilmenite	0.25-0.5	0.07	47.59	0.05	0.00	0.91	47.59	0.43	0.01	0.00	0.00						96.65	non-kimberlitic
15SUV001	stream sediments	2015_4	3_8	4-3_008	ilmenite, crustal	ilmenite	0.25-0.5	0.00	42.46	0.07	0.00	0.56	53.11	0.26	0.00	0.00	0.00						96.46	non-kimberlitic
15SUV001	stream sediments	2015_4	3_9	4-3_009	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.77	0.09	0.00	0.42	46.73	1.61	0.00	0.00	0.00						97.62	non-kimberlitic
15SUV001	stream sediments	2015_4	3_10	4-3_010	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.96	0.00	0.00	1.29	47.52	0.09	0.00	0.00	0.00						97.86	non-kimberlitic
15SUV002	stream sediments	2015_4	4_1	4-4_001	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.14	0.00	0.00	0.34	47.63	0.33	0.01	0.00	0.00						97.45	non-kimberlitic
15SUV003	stream sediments	2015_4	1_6	4-1_006	ilmenite	ilmenite	0.25-0.5	0.23	50.89	1.00	0.88	0.24	31.91	11.24	0.08	0.07	0.00						96.54	kimberlitic
15SUV003	stream sediments	2015_4	4_2	4-4_002	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.77	0.02	0.10	0.69	46.54	0.85	0.00	0.00	0.00						97.97	non-kimberlitic
15SUV003	stream sediments	2015_4	4_3	4-4_003	ilmenite, crustal	ilmenite	0.25-0.5	0.00	47.24	0.05	0.07	0.36	48.90	0.48	0.00	0.00	0.00						97.10	non-kimberlitic
15SUV004	stream sediments	2015_6	4_3	6-4_003	chromite	ilmenite	0.25-0.5	0.00	47.67	0.06	0.00	0.32	48.65	0.57	0.00	0.00	0.00						97.27	non-kimberlitic
15SUV006	stream sediments	2015_4	4_4	4-4_004	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.97	0.00	0.00	1.05	47.57	0.26	0.00	0.00	0.00						97.85	non-kimberlitic
15SUV006	stream sediments	2015_4	4_5	4-4_005	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.10	0.00	0.00	0.44	48.23	0.35	0.00	0.00	0.00						98.12	non-kimberlitic
15SUV009	stream sediments	2015_6	5_1	6-5_001	chromite	ilmenite	0.25-0.5	0.00	49.01	0.00	0.00	0.55	47.86	0.23	0.00	0.00	0.00						97.65	non-kimberlitic
15SUV009	stream sediments	2015_6	5_2	6-5_002	chromite	ilmenite	0.25-0.5	0.00	49.23	0.00	0.00	0.73	47.86	0.21	0.00	0.00	0.00						98.03	non-kimberlitic
15SUV009	stream sediments	2015_6	5_3	6-5_003	chromite	ilmenite	0.25-0.5	0.00	48.75	0.02	0.00	0.68	48.31	0.13	0.00	0.00	0.00						97.89	non-kimberlitic
15SUV009	stream sediments	2015_6	5_4	6-5_004	chromite	ilmenite	0.25-0.5	0.00	36.01	0.13	0.04	0.32	56.98	1.67	0.00	0.00	0.00						95.15	non-kimberlitic
15SUV009	stream sediments	2015_6	5_5	6-5_005	chromite	ilmenite	0.25-0.5	0.25	55.42	0.16	0.06	3.16	31.88	0.04	0.03	0.00	0.02						91.02	non-kimberlitic
15SUV009	stream sediments	2015_6	5_6	6-5_006	chromite	ilmenite	0.25-0.5	0.00	48.06	0.09	0.00	0.44	47.85	1.33	0.00	0.00	0.00						97.77	non-kimberlitic
15SUV009	stream sediments	2015_6	5_7	6-5_007	chromite	ilmenite	0.25-0.5	0.00	48.07	0.10	0.00	0.33	47.46	0.69	0.00	0.00	0.00						96.65	non-kimberlitic
15SUV009	stream sediments	2015_6	5_8	6-5_008	chromite	ilmenite	0.25-0.5	0.03	51.38	0.57	1.51	0.29	30.13	13.25	0.03	0.00	0.00						97.19	kimberlitic
15SUV009	stream sediments	2015_6	5_9	6-5_009	chromite	ilmenite	0.25-0.5	0.00	44.96	0.05	0.00	0.51	50.27	1.35	0.00	0.00	0.00						97.14	non-kimberlitic
15SUV009	stream sediments	2015_6	6_1b_?	6-6-1B_ilmenite	chromite	ilmenite	0.25-0.5	0.00	48.64	0.05	0.00	0.72	47.99	0.29	0.01	0.00	0.00						97.70	non-kimberlitic
15SUV009	stream sediments	2015_6	6_2	6-6_002	chromite	ilmenite	0.25-0.5	0.00	46.78	0.00	0.00	0.80	49.63	0.49	0.00	0.00	0.00						97.70	non-kimberlitic
15SUV009	stream sediments	2015_6	6_5	6-6_005	chromite	ilmenite	0.25-0.5	0.00	51.57	0.04	0.09	0.60	44.56	0.05	0.00	0.00	0.00						96.91	non-kimberlitic
15SUV009	stream sediments	2015_6	6_6	6-6_006	chromite	ilmenite	0.25-0.5	0.00	48.54	0.00	0.00	0.83	48.24	0.25	0.01	0.00	0.00						97.87	non-kimberlitic
15SUV009	stream sediments	2015_6	6_8	6-6_008	chromite	ilmenite	0.25-0.5	0.00	48.33	0.04	0.00	0.29	48.34	0.81	0.00	0.00	0.00						97.81	non-kimberlitic
15SUV009	stream sediments	2015_6	6_10	6-6_010	chromite	ilmenite	0.25-0.5	0.27	55.37	0.42	0.09	0.30	30.45	1.01	0.05	0.04	0.01						88.01	non-kimberlitic
15SUV010	stream sediments	2015_4	4_6	4-4_006	ilmenite, crustal	ilmenite	0.5-1.0	0.00	48.75	0.05	0.00	0.53	47.56	0.39	0.00	0.00	0.00						97.28	non-kimberlitic
15SUV010	stream sediments	2015_4	4_7	4-4_007	ilmenite, crustal	ilmenite	0.5-1.0	0.00	48.87	0.04	0.00	0.52	47.15	0.88	0.00	0.00	0.00						97.46	non-kimberlitic
15SUV014	stream sediments	2015_4	2_1	4-2_001	ilmenite	ilmenite	0.25-0.5	0.00	51.35	0.75	1.21	0.22	29.57	13.73	0.02	0.00	0.00						96.85	kimberlitic
15SUV018	Beaufort Fm.	2015_4	4_8	4-4_008A	ilmenite, crustal	ilmenite	0.25-0.5	0.13	57.72	0.17	0.05	0.52	32.98	0.46	0.07	0.00	0.00						92.10	non-kimberlitic
15SUV018_rpt	Beaufort Fm.	2015_4	4_8_rpt	4-4-8B	ilmenite, crustal	ilmenite	0.25-0.5	0.14	57.79	0.24	0.04	0.53	32.29	0.44	0.06	0.07	0.00						91.60	non-kimberlitic
15SUV020	stream sediments	2015_4	2_2	4-2_002	ilmenite	ilmenite	0.5-1.0	0.00	51.45	0.55	1.04	0.28	31.29	12.81	0.02	0.00	0.00						97.44	kimberlitic
15SUV020	stream sediments	2015_4	2_3	4-2_003	ilmenite	ilmenite	0.25-0.5	0.00	45.35	0.28	2.36	0.30	39.17	8.84	0.01	0.00	0.00						96.31	kimberlitic
15SUV020	stream sediments	2015_4	2_4	4-2_004	ilmenite	ilmenite	0.25-0.5	0.00	50.32	0.57	1.75	0.29	32.26	11.92	0.03	0.00	0.00						97.14	kimberlitic
15SUV020	stream sediments	2015_4	2_5	4-2_005	ilmenite	ilmenite	0.25-0.5	0.00	41.60	0.25	6.53	0.27	38.35	8.70	0.00	0.00	0.00						95.70	kimberlitic
15SUV020	stream sediments	2015_4	2_6	4-2_006	ilmenite	ilmenite	0.25-0.5	0.00	50.50	0.65	3.51	0.23	28.68	13.49	0.03	0.00	0.00						97.09	kimberlitic
15SUV020	stream sediments	2015_4	5_1	4-5_001	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.86	0.07	0.00	0.39	47.78	0.46	0.00	0.00	0.00						97.56	non-kimberlitic
15SUV020	stream sediments	2015_4	5_2	4-5_002	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.12	0.00	0.00	0.83	48.37	0.11	0.00	0.00	0.00						97.43	non-kimberlitic
15SUV020	stream sediments	2015_4	5_3	4-5_003	ilmenite, crustal	ilmenite	0.25-0.5	0.02	49.87	0.05	0.00	0.49	47.16	0.56	0.01	0.00	0.00						98.16	non-kimberlitic
15SUV020	stream sediments	2015_4	5_4	4-5_004	ilmenite, crustal	ilmenite	0.25-0.5	0.00	47.62	0.03	0.00	0.48	49.08	0.29	0.01	0.00	0.00						97.51	non-kimberlitic
15SUV020	stream sediments	2015_4	5_5	4-5_005	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.90	0.03	0.00	0.44	47.91	0.29	0.00	0.00	0.00						97.57	non-kimberlitic
15SUV020	stream sediments	2015_4	5_6	4-5_006	ilmenite, crustal	ilmenite	0.25-0.5	0.00	46.89	0.05	0.00	0.45	49.47	0.78	0.00	0.00	0.00						97.64	non-kimberlitic
15SUV020	stream sediments	2015_4	5_7	4-5_007	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.32	0.05	0.05	0.57	48.30	0.53	0.00	0.00	0.00						97.82	non-kimberlitic
15SUV020	stream sediments	2015_4	5_8	4-5_008	ilmenite, crustal	ilmenite	0.25-0.5	0.00	47.33	0.00	0.00	3.41	46.64	0.36	0.00	0.00	0.00						97.74	non-kimberlitic
15SUV024	stream sediments	2015_4	6_1	4-6_001	ilmenite, crustal	ilmenite	0.25-0.5	0.12	57.24	0.23	0.21	0.38	29.95	2.05	0.03	0.00	0.00						90.21	non-kimberlitic
15SUV024	stream sediments	2015_4	6_2	4-6_002	ilmenite, crustal	ilmenite	0.25-0.5	0.02	54.36	0.05	0.13	0.47	36.12	0.45	0.02	0.00	0.01						91.63	non-kimberlitic
15SUV024	stream sediments	2015_4	6_3	4-6_003	ilmenite, crustal	ilmenite	0.25-0.5	0.00	51.03	0.00	0.20	0.63	44.58	1.67	0.00	0.00	0.00						98.11	non-kimberlitic
15SUV024	stream sediments	2015_4	6_4	4-6_004	ilmenite, crustal	ilmenite	0.25-0.5	0.28	62.33	0.52	0.18	0.72	25.30	0.08	0.09	0.07	0.01						89.58	non-kimberlitic

15SUV024	stream sediments	2015_4	6_5	4-6_005	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.66	0.00	0.00	0.57	47.28	0.27	0.01	0.00	0.00						97.79	non-kimberlitic
15SUV024	stream sediments	2015_4	6_6	4-6_006	ilmenite, crustal	ilmenite	0.25-0.5	0.07	53.55	0.11	0.00	2.96	33.31	0.00	0.02	0.00	0.00						90.02	non-kimberlitic
15SUV024	stream sediments	2015_4	6_7	4-6_007	ilmenite, crustal	ilmenite	0.25-0.5	0.13	58.69	0.16	0.06	0.30	30.62	0.85	0.02	0.00	0.01						90.84	non-kimberlitic
15SUV024	stream sediments	2015_4	6_8	4-6_008	ilmenite, crustal	ilmenite	0.25-0.5	0.10	54.69	0.15	0.00	1.40	34.87	0.14	0.04	0.05	0.01						91.45	non-kimberlitic
15SUV026	stream sediments	2015_4	7_6	4-7_006	ilmenite, crustal	ilmenite	0.5-1.0	0.00	50.75	0.00	0.08	0.32	45.64	1.29	0.01	0.00	0.00						98.09	non-kimberlitic
15SUV026	stream sediments	2015_4	7_7	4-7_007	ilmenite, crustal	ilmenite	0.25-0.5	0.00	44.71	0.00	0.00	0.48	51.41	0.17	0.00	0.00	0.00						96.77	non-kimberlitic
15SUV030	Beaufort Fm.	2015_4	7_8	4-7-8B	ilmenite, crustal	ilmenite	0.5-1.0	0.03	50.50	0.47	0.32	0.29	35.59	10.12	0.02	0.00	0.00						97.34	kimberlitic
15SUV030_rpt	Beaufort Fm.	2015_4	7_8_rpt	4-7_008A	ilmenite, crustal	ilmenite	0.5-1.0	0.00	50.50	0.47	0.33	0.29	35.53	9.98	0.01	0.00	0.00						97.11	kimberlitic
15SUV033	stream sediments	2015_4	7_9	4-7-9	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.37	0.05	0.07	0.38	48.06	0.36	0.00	0.00	0.00						97.29	non-kimberlitic
15SUV051	stream sediments	2015_4	2_7	4-2_007	ilmenite	ilmenite	0.25-0.5	0.00	50.00	0.57	0.78	0.25	33.52	11.69	0.02	0.04	0.00						96.87	kimberlitic
15SVU025	stream sediments	2015_4	7_1	4-7_001	ilmenite, crustal	ilmenite	0.5-1.0	0.00	48.03	0.02	0.15	0.52	48.42	0.66	0.00	0.00	0.00						97.80	non-kimberlitic
15SVU025	stream sediments	2015_4	7_2	4-7_002	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.93	0.02	0.00	1.94	46.27	1.08	0.00	0.00	0.00						98.24	non-kimberlitic
15SVU025	stream sediments	2015_4	7_3	4-7_003	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.59	0.00	0.00	5.12	44.17	0.00	0.00	0.00	0.00						97.88	non-kimberlitic
15SVU025	stream sediments	2015_4	7_4	4-7_004	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.65	0.00	0.00	1.44	46.75	0.11	0.00	0.00	0.00						97.95	non-kimberlitic
15SVU025	stream sediments	2015_4	7_5	4-7_005	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.93	0.13	0.00	0.50	45.24	0.59	0.00	0.00	0.00						96.39	non-kimberlitic
16SUV014	stream sediments	Mount1_076	1_8_1	296	ilmenite, crustal	ilmenite	0.5-1.0	0.04	48.30	0.05	0.00	0.48	48.35	0.50	0.00	0.00	0.00	0.06	0.00	0.00	0.12	0.00	97.91	non-kimberlitic
16SUV014	stream sediments	Mount1_077	1_8_2	297	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.51	0.03	0.00	0.86	47.81	0.27	0.00	0.00	0.00	0.07	0.00	0.00	0.22	0.00	97.77	non-kimberlitic
16SUV014	stream sediments	Mount1_078	1_8_3	298	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.60	0.06	0.00	0.52	48.29	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	98.17	non-kimberlitic
16SUV014	stream sediments	Mount1_080	1_8_5	300	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.53	0.07	0.03	0.43	48.14	0.30	0.00	0.03	0.00	0.00	0.00	0.00	0.19	0.00	97.72	non-kimberlitic
16SUV014	stream sediments	Mount1_081	1_8_6	301	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.78	0.04	0.00	0.51	48.39	0.36	0.00	0.00	0.00	0.07	0.00	0.00	0.22	0.00	98.37	non-kimberlitic
16SUV014	stream sediments	Mount1_082	1_8_7	302	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.52	0.03	0.00	0.74	48.25	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00	98.42	non-kimberlitic
16SUV014	stream sediments	Mount1_083	1_8_8	303	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.07	0.00	0.00	0.94	47.82	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	98.34	non-kimberlitic
16SUV014	stream sediments	Mount1_084	1_8_9	304	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.56	0.03	0.00	0.94	47.78	0.23	0.00	0.00	0.00	0.05	0.00	0.00	0.59	0.00	98.19	non-kimberlitic
16SUV014	stream sediments	Mount1_086	1_8_11	306	ilmenite, crustal	ilmenite	0.25-0.5	0.00	46.85	0.00	0.00	0.79	49.60	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	97.54	non-kimberlitic
16SUV014	stream sediments	Mount1_087	1_8_12	307	ilmenite, crustal	ilmenite	0.25-0.5	0.00	50.96	0.00	0.00	1.64	45.68	0.28	0.00	0.00	0.00	0.07	0.00	0.04	0.06	0.03	98.77	non-kimberlitic
16SUV023	Beaufort Fm.	Mount1_088	1_8_13	308	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.35	0.00	0.00	3.10	46.41	0.30	0.00	0.00	0.00	0.04	0.00	0.00	0.07	0.00	98.27	non-kimberlitic
16SUV023	Beaufort Fm.	Mount3_041	3_4_2	167	ilmenite	ilmenite	0.18-0.25	0.03	50.58	0.77	3.02	0.23	29.51	13.48	0.02	0.00	0.00	0.20	0.19	0.00	0.20	0.00	98.21	kimberlitic
16SUV023	Beaufort Fm.	Mount3_042	3_4_3	168	ilmenite	ilmenite	0.18-0.25	0.00	50.70	0.58	2.81	0.28	30.29	13.14	0.02	0.00	0.00	0.20	0.13	0.00	0.25	0.00	98.41	kimberlitic
16SUV023	Beaufort Fm.	Mount3_043	3_4_4	169	ilmenite	ilmenite	0.18-0.25	0.00	50.32	0.44	2.83	0.30	31.21	12.70	0.02	0.00	0.00	0.26	0.14	0.00	0.21	0.00	98.42	kimberlitic
16SUV023	Beaufort Fm.	Mount3_044	3_4_5	170	ilmenite	ilmenite	0.18-0.25	0.03	50.21	0.59	1.70	0.27	33.37	11.72	0.02	0.00	0.00	0.25	0.11	0.00	0.23	0.00	98.49	kimberlitic
16SUV023	Beaufort Fm.	Mount3_045	3_4_6	171	ilmenite	ilmenite	0.18-0.25	0.02	50.86	0.57	2.74	0.27	30.17	13.22	0.02	0.00	0.00	0.17	0.16	0.03	0.25	0.00	98.47	kimberlitic
16SUV023	Beaufort Fm.	Mount3_046	3_4_7	172	ilmenite	ilmenite	0.18-0.25	0.02	49.82	0.61	1.86	0.27	33.00	11.88	0.02	0.00	0.00	0.21	0.10	0.00	0.16	0.00	97.95	kimberlitic
16SUV023	Beaufort Fm.	Mount3_047	3_4_8	173	ilmenite	ilmenite	0.18-0.25	0.00	47.92	0.04	0.00	0.64	48.58	0.57	0.00	0.00	0.00	0.06	0.00	0.00	0.10	0.00	97.92	non-kimberlitic
16SUV023	Beaufort Fm.	Mount3_048	3_4_9	174	ilmenite	ilmenite	0.18-0.25	0.03	51.34	0.53	1.54	0.30	30.58	13.13	0.02	0.00	0.00	0.21	0.11	0.00	0.26	0.00	98.05	kimberlitic
16SUV023	Beaufort Fm.	Mount3_050	3_4_11	176	ilmenite	ilmenite	0.18-0.25	0.02	50.63	0.56	2.69	0.29	30.38	13.08	0.02	0.00	0.00	0.21	0.15	0.00	0.29	0.00	98.33	kimberlitic
16SUV023	Beaufort Fm.	Mount3_051	3_4_12	177	ilmenite	ilmenite	0.18-0.25	0.00	46.86	0.07	0.00	0.42	49.03	0.94	0.01	0.00	0.00	0.00	0.06	0.00	0.22	0.00	97.61	non-kimberlitic
16SUV023	Beaufort Fm.	Mount3_052	3_4_13	178	ilmenite	ilmenite	0.18-0.25	0.02	50.06	0.60	1.63	0.27	33.10	11.95	0.02	0.00	0.00	0.17	0.11	0.00	0.26	0.00	98.20	kimberlitic
16SUV023	Beaufort Fm.	Mount3_053	3_4_14	179	ilmenite	ilmenite	0.18-0.25	0.00	50.87	0.58	1.43	0.29	32.11	12.61	0.02	0.00	0.00	0.21	0.08	0.00	0.23	0.00	98.41	kimberlitic
16SUV023	Beaufort Fm.	Mount3_054	3_4_15	180	ilmenite	ilmenite	0.18-0.25	0.00	46.09	0.26	1.61	0.29	39.47	9.29	0.02	0.00	0.00	0.45	0.07	0.04	0.27	0.00	97.85	kimberlitic
16SUV027	stream sediments	Mount1_090r	1_9_1	427	ilmenite, crustal	ilmenite	0.25-0.5	0.03	49.96	0.00	0.00	0.57	46.30	0.55	0.00	0.00	0.00	0.04	0.03	0.03	0.16	0.00	97.67	non-kimberlitic
16SUV027	stream sediments	Mount1_091	1_9_2	311	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.69	0.04	0.00	0.94	47.49	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	97.93	non-kimberlitic
16SUV027	stream sediments	Mount1_092	1_9_3	312	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.54	0.00	0.09	0.40	45.40	2.11	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	97.91	non-kimberlitic
16SUV027	stream sediments	Mount1_093	1_9_4	313	ilmenite, crustal	ilmenite	0.25-0.5	0.02	48.93	0.03	0.00	0.57	48.51	0.30	0.00	0.00	0.00	0.13	0.00	0.04	0.19	0.00	98.73	non-kimberlitic
16SUV027	stream sediments	Mount1_094	1_9_5	314	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.56	0.04	0.00	0.44	48.23	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	98.00	non-kimberlitic
16SUV027	stream sediments	Mount1_095	1_9_6	315	ilmenite, crustal	ilmenite	0.25-0.5	0.00	41.83	0.41	0.00	1.18	47.79	5.08	0.01	0.00	0.00	0.13	0.00	0.05	0.14	0.00	96.60	kimberlitic
16SUV027	stream sediments	Mount1_096	1_9_7	316	ilmenite, crustal	ilmenite	0.25-0.5	0.00	46.72	0.08	0.07	0.90	49.57	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	97.70	non-kimberlitic
16SUV027	stream sediments	Mount1_097	1_9_8	317	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.50	0.02	0.00	0.52	48.64	0.19	0.00	0.00	0.00	0.07	0.00	0.00	0.20	0.00	98.14	non-kimberlitic
16SUV027	stream sediments	Mount1_098	1_9_9	318	ilmenite, crustal	ilmenite	0.25-0.5	0.03	48.11	0.40	0.41	0.28	39.13	8.95	0.02	0.00	0.00	0.18	0.06	0.00	0.28	0.00	97.84	kimberlitic
16SUV028	stream sediments	Mount1_099	1_9_10	319	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.56	0.03	0.00	1.01	47.64	0.18	0.01	0.00	0.00	0.00	0.00	0.00	0.73	0.00	98.16	non-kimberlitic
16SUV028	stream sediments	Mount1_100	1_9_11	320	ilmenite, crustal	ilmenite	0.25-0.5	0.00	49.04	0.03	0.00	0.45	48.10	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	98.16	non-kimberlitic
16SUV028	stream sediments	Mount1_101	1_9_12	321	ilmenite, crustal	ilmenite	0.25-0.5	0.00	47.53	0.03	0.04	0.51	48.87	0.64	0.00	0.00	0.00	0.07	0.00	0.04	0.22	0.00	97.94	non-kimberlitic
16SUV028	stream sediments	Mount1_102	1_9_13	322	ilmenite, crustal	ilmenite	0.25-0.5	0.00	48.72	0.03	0.00	0.98	47.98	0.80	0.00	0.00	0.00	0.00	0.00	0.03	0.09	0.00	98.63	non-kimberlitic
16SUV028	stream sediments	Mount2_074	2_7_7	178	chromite	ilmenite	0.25-0.5	0.00	48.87	0.03	0.04	0.56	48.01	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	97.89	non-kimberlitic

[1]Ilmenite classification according to Wyatt et al.'s (2004) "non-kimberlitic/kimberlitic" bounding reference line on a TiO2 - MgO (wt%) plot (Fig. 15B)

shading depicts duplicate analysis of single grains

APPENDIX 6F

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - EPMA chemistry: OLIVINE

								WT %																
GSC Sample #	Mount	Grain #	EPMA #	Sample Material	ODM Min ID	EPMA Min ID	Grain Size	SiO2	TiO2	Al2O3	Cr2O3	MnO	FeO	MgO	CaO	Na2O	K2O	Nb2O5	NiO	ZnO	V2O3	P2O5	Total	MAGNUM[1]
15SUV006	2015_3	3_7	3-3_007	stream sediments	bronzite	olivine	0.25-0.5	36.30	0.00	0.00	0.00	0.46	35.32	27.59	0.17	0.00	0.00						99.84	0.58
15SUV006	2015_3	3_1	3-3_001	stream sediments	diopside	olivine	0.25-0.5	38.31	0.00	0.03	0.00	0.32	22.51	37.78	0.25	0.00	0.00						99.20	0.75
15SUV001	2015_2	3_1	2-3_001	stream sediments	fayalite	olivine	0.25-0.5	37.35	0.06	0.03	0.00	0.42	28.02	33.74	0.28	0.00	0.00						99.90	0.68
15SUV005	2015_2	3_2	2-3_002	stream sediments	fayalite	olivine	0.25-0.5	36.18	0.00	0.02	0.00	0.47	33.93	29.18	0.30	0.00	0.00						100.08	0.61
15SUV005	2015_2	3_3	2-3_003	stream sediments	fayalite	olivine	0.25-0.5	34.39	0.00	0.00	0.00	0.60	43.05	21.50	0.21	0.00	0.00						99.75	0.47
15SUV005	2015_2	3_4	2-3_004	stream sediments	fayalite	olivine	0.25-0.5	36.16	0.03	0.02	0.00	0.48	33.94	28.97	0.26	0.00	0.00						99.86	0.60
15SUV005	2015_2	3_5	2-3_005	stream sediments	fayalite	olivine	0.25-0.5	39.34	0.00	0.02	0.05	0.23	15.55	43.51	0.27	0.00	0.00						98.97	0.83
15SUV006	2015_2	3_6	2-3_006	stream sediments	fayalite	olivine	0.25-0.5	37.72	0.00	0.00	0.00	0.34	25.69	35.64	0.31	0.00	0.00						99.70	0.71
15SUV006	2015_2	3_7	2-3_007	stream sediments	fayalite	olivine	0.25-0.5	35.80	0.00	0.03	0.00	0.49	35.91	27.23	0.29	0.00	0.00						99.75	0.57
15SUV006	2015_2	3_8	2-3_008	stream sediments	fayalite	olivine	0.25-0.5	36.92	0.00	0.00	0.00	0.41	29.71	32.19	0.28	0.00	0.00						99.51	0.66
15SUV010	2015_2	4_1	2-4_001	stream sediments	fayalite	olivine	0.25-0.5	35.26	0.00	0.02	0.03	0.51	37.79	25.85	0.23	0.00	0.00						99.69	0.55
15SUV010	2015_2	4_2	2-4_002	stream sediments	fayalite	olivine	0.25-0.5	35.14	0.00	0.00	0.00	0.53	39.89	24.19	0.26	0.00	0.00						100.01	0.52
15SUV010	2015_2	4_3	2-4_003	stream sediments	fayalite	olivine	0.25-0.5	34.98	0.02	0.00	0.00	0.55	40.70	23.56	0.25	0.00	0.00						100.06	0.51
15SUV020	2015_2	4_5	2-4_005	stream sediments	fayalite	olivine	0.25-0.5	35.98	0.04	0.00	0.00	0.44	34.39	28.72	0.14	0.00	0.00						99.71	0.60
15SUV020	2015_2	4_6	2-4_006	stream sediments	fayalite	olivine	0.25-0.5	35.29	0.02	0.00	0.00	0.50	38.48	25.43	0.24	0.00	0.00						99.96	0.54
15SUV023	2015_2	4_7	2-4_007	till	fayalite	olivine	0.25-0.5	36.17	0.02	0.00	0.00	0.47	34.95	28.01	0.27	0.00	0.00						99.89	0.59
15SUV023	2015_2	4_8	2-4_008	till	fayalite	olivine	0.25-0.5	35.85	0.00	0.00	0.00	0.48	36.27	27.00	0.27	0.00	0.00						99.87	0.57
15SUV023	2015_2	4_9	2-4_009	till	fayalite	olivine	0.25-0.5	35.75	0.02	0.00	0.00	0.52	35.94	27.20	0.27	0.00	0.00						99.70	0.57
15SUV023	2015_2	4_10	2-4_010	till	fayalite	olivine	0.25-0.5	34.67	0.02	0.00	0.00	0.57	42.35	22.42	0.26	0.00	0.00						100.29	0.49
16SUV014	Mount1_042	1_5_1	262	stream sediments	fayalite	olivine	0.25-0.5	35.85	0.00	0.00	0.00	0.52	38.44	25.35	0.20	0.00	0.00	0.00	0.10	0.03	0.00	0.00	100.49	0.54
16SUV014	Mount1_043	1_5_2	263	stream sediments	fayalite	olivine	0.25-0.5	35.02	0.04	0.02	0.00	0.63	41.99	22.65	0.23	0.00	0.00	0.00	0.03	0.03	0.00	0.03	100.65	0.49
16SUV014	Mount1_044	1_5_3	264	stream sediments	fayalite	olivine	0.25-0.5	36.02	0.03	0.03	0.00	0.54	36.08	27.18	0.28	0.00	0.00	0.00	0.09	0.00	0.00	0.00	100.23	0.57
16SUV014	Mount1_045	1_5_4	265	stream sediments	fayalite	olivine	0.25-0.5	35.72	0.00	0.00	0.00	0.56	38.74	25.31	0.22	0.00	0.00	0.00	0.04	0.03	0.00	0.00	100.63	0.54
16SUV014	Mount1_046	1_5_5	266	stream sediments	fayalite	olivine	0.25-0.5	35.64	0.00	0.00	0.00	0.58	38.46	25.31	0.27	0.00	0.00	0.00	0.05	0.03	0.00	0.03	100.37	0.54
16SUV016	Mount1_047	1_5_6	267	stream sediments	fayalite	olivine	0.25-0.5	36.65	0.00	0.02	0.00	0.46	33.61	29.41	0.30	0.00	0.00	0.00	0.09	0.04	0.00	0.02	100.60	0.61
16SUV016	Mount1_048	1_5_7	268	stream sediments	fayalite	olivine	0.25-0.5	37.67	0.00	0.00	0.00	0.40	27.02	34.58	0.30	0.00	0.00	0.00	0.12	0.00	0.00	0.00	100.10	0.70
16SUV016	Mount1_049	1_5_8	269	stream sediments	fayalite	olivine	0.25-0.5	35.59	0.00	0.00	0.00	0.56	39.19	25.00	0.25	0.00	0.00	0.00	0.08	0.04	0.00	0.00	100.70	0.53
16SUV016	Mount1_050	1_5_9	270	stream sediments	fayalite	olivine	0.25-0.5	36.60	0.02	0.00	0.00	0.50	33.61	29.23	0.29	0.00	0.00	0.00	0.08	0.03	0.00	0.00	100.35	0.61
16SUV016	Mount1_051	1_5_10	271	stream sediments	fayalite	olivine	0.25-0.5	36.84	0.03	0.00	0.00	0.39	32.38	30.42	0.13	0.00	0.00	0.00	0.14	0.03	0.00	0.00	100.36	0.63
16SUV016	Mount1_052	1_5_11	272	stream sediments	fayalite	olivine	0.25-0.5	36.29	0.00	0.00	0.00	0.49	34.73	28.48	0.29	0.00	0.00	0.00	0.07	0.03	0.00	0.00	100.37	0.59
16SUV016	Mount1_053	1_5_12	273	stream sediments	fayalite	olivine	0.25-0.5	35.74	0.02	0.02	0.00	0.55	38.25	25.61	0.24	0.04	0.00	0.00	0.05	0.03	0.00	0.00	100.56	0.54
15SUV001	2015_2	1_1	2-1_001	stream sediments	forsterite	olivine	0.25-0.5	39.77	0.00	0.03	0.00	0.21	12.96	45.38	0.20	0.00	0.00						98.55	0.86
15SUV001	2015_2	1_2	2-1_002	stream sediments	forsterite	olivine	0.25-0.5	40.31	0.00	0.05	0.08	0.15	10.98	47.16	0.23	0.00	0.00						98.96	0.88
15SUV008	2015_2	1_3	2-1_003	stream sediments	forsterite	olivine	0.25-0.5	39.31	0.00	0.02	0.00	0.29	16.61	42.65	0.30	0.00	0.00						99.18	0.82
15SUV008	2015_2	1_4	2-1_004	stream sediments	forsterite	olivine	0.25-0.5	38.92	0.00	0.04	0.00	0.31	19.96	39.95	0.31	0.00	0.00						99.49	0.78
15SUV008	2015_2	1_5	2-1_005	stream sediments	forsterite	olivine	0.25-0.5	39.39	0.00	0.04	0.00	0.31	16.99	42.26	0.31	0.00	0.00						99.30	0.82
15SUV008	2015_2	1_6	2-1_006	stream sediments	forsterite	olivine	0.25-0.5	38.79	0.00	0.03	0.04	0.30	20.20	39.91	0.30	0.00	0.00						99.57	0.78
15SUV008	2015_2	1_7	2-1_007	stream sediments	forsterite	olivine	0.25-0.5	40.65	0.00	0.04	0.04	0.21	12.09	46.09	0.38	0.00	0.00						99.50	0.87
15SUV008	2015_2	1_9	2-1_009	stream sediments	forsterite	olivine	0.25-0.5	39.33	0.00	0.02	0.03	0.23	16.48	42.84	0.29	0.00	0.00						99.22	0.82
15SUV009	2015_2	1_10	2-1_010	stream sediments	forsterite	olivine	0.25-0.5	40.25	0.00	0.06	0.08	0.16	10.99	47.19	0.27	0.00	0.00						99.00	0.88
15SUV020	2015_2	2_1	2-2_001	stream sediments	forsterite	olivine	0.25-0.5	37.63	0.00	0.02	0.00	0.35	26.72	34.43	0.20	0.00	0.00						99.35	0.70
15SUV020	2015_2	2_2	2-2_002	stream sediments	forsterite	olivine	0.25-0.5	36.29	0.00	0.00	0.00	0.45	34.28	28.71	0.24	0.00	0.00						99.97	0.60
15SUV020	2015_2	2_3	2-2_003	stream sediments	forsterite	olivine	0.25-0.5	40.86	0.00	0.06	0.06	0.12	8.94	48.99	0.14	0.00	0.00						99.17	0.91
15SUV020	2015_2	2_4	2-2_004	stream sediments	forsterite	olivine	0.25-0.5	39.86	0.00	0.04	0.08	0.20	12.52	45.74	0.29	0.00	0.00						98.73	0.87
15SUV025	2015_2	2_5	2-2_005	stream sediments	forsterite	olivine	0.25-0.5	39.50	0.00	0.03	0.00	0.28	16.11	43.37	0.16	0.00	0.00						99.45	0.83
15SUV026	2015_2	2_6	2-2_006A	stream sediments	forsterite	olivine	0.25-0.5	40.16	0.00	0.05	0.03	0.17	11.25	46.92	0.28	0.00	0.00						98.86	0.88
15SUV026_rpt	2015_2	2_6_rpt	2-2-6B	stream sediments	forsterite	olivine	0.25-0.5	39.78	0.00	0.04	0.07	0.19	12.52	45.67	0.27	0.00	0.00						98.54	0.87
15SUV026	2015_2	2_7	2-2_007	stream sediments	forsterite	olivine	0.25-0.5	39.39	0.00	0.04	0.00	0.21	16.29	42.86	0.25	0.02	0.00						99.06	0.82
15SUV030	Mount3_034	3_3_5	160	Beaufort Formation	forsterite	olivine	0.18-0.25	38.53	0.00	0.03	0.00	0.25	18.71	41.51	0.22	0.00	0.00	0.00	0.25	0.00	0.00	0.06	99.56	0.80
15SUV050	2015_2	2_8	2-2_008	stream sediments	forsterite	olivine	0.25-0.5	40.07	0.00	0.05	0.08	0.16	11.14	46.81	0.27	0.00	0.00						98.58	0.88
15SUV051	2015_2	2_9	2-2_009	stream sediments	forsterite	olivine	0.25-0.5	40.10	0.00	0.06	0.00	0.21	13.79	44.80	0.34	0.00	0.00						99.30	0.85
15SUV051	2015_2	2_10	2-2_010	stream sediments	forsterite	olivine	0.25-0.5	40.13	0.00	0.05	0.07	0.17	11.32	46.76	0.24	0.00	0.00						98.74	0.88
15SUV051_rpt	2015_2	2_10_rpt	2-2_010	stream sediments	forsterite	olivine	0.25-0.5	40.05	0.00	0.05	0.08	0.17	11.36	46.52	0.25	0.00	0.00						98.48	0.88
15SUV051	2015_2	2_11	2-2_011	stream sediments	forsterite	olivine	0.25-0.5	40.48	0.00	0.04	0.05	0.16	10.99	47.37	0.21	0.00	0.00						99.30	0.88
15SUV051_rpt	2015_2	2_11_rpt	2-2_011	stream sediments	forsterite	olivine	0.25-0.5	40.51	0.00	0.05	0.08	0.16	10.96	47.06	0.20	0.00	0.00						99.02	0.88
15SUV051	2015_2	2_12	2-2_012	stream sediments	forsterite	olivine	0.25-0.5	40.04	0.00	0.06	0.10	0.18	13.17	45.05	0.26	0.00	0.00						98.86	0.86
16SUV014	Mount1_040	1_4_7	260	stream sediments	forsterite	olivine	0.25-0.5	37.66	0.00	0.03	0.00	0.40	28.08	33.78	0.30	0.02	0.00	0.00	0.12	0.03	0.00	0.00	100.41	0.68
16SUV028	Mount1_041	1_4_8	261	stream sediments	forsterite	olivine	0.25-0.5	40.27	0.00	0.04	0.00	0.20	13.07	45.99	0.21	0.00	0.00	0.00	0.29	0.00	0.00	0.00	100.06	0.86

[1]MAGNUM = (MgO/40.3)/((MgO/40.3)+(FeO/71.85))

shading depicts duplicate analysis of single grains

APPENDIX 6G

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - EPMA chemistry: CLINOPYROXENE (CPX)

								WT %																
GSC Sample #	**Mount**	**Grain #**	**EPMA #**	**ODM Min ID**	**EPMA Min ID**	**Sample Material**	**Grain Size**	**SiO2**	**TiO2**	**Al2O3**	**Cr2O3**	**MnO**	**FeO**	**MgO**	**CaO**	**Na2O**	**K2O**	**Nb2O5**	**NiO**	**ZnO**	**V2O3**	**P2O5**	**Total**	**MAGNUM**
15SUV004	2015_3	1_3	3-1_003	low-Cr_DC	cpx	stream sediments	0.5-1.0	52.52	0.58	1.39	0.65	0.09	4.91	16.32	20.92	0.79	0.00						98.17	86
15SUV004	2015_3	1_4	3-1_004	low-Cr_DC	cpx	stream sediments	0.25-0.5	52.94	0.39	0.71	1.24	0.08	4.13	16.63	20.99	0.69	0.01						97.81	88
15SUV014	2015_3	1_1	3-1_001	Cr-diopside	cpx	stream sediments	0.25-0.5	52.91	0.13	3.27	0.62	0.07	2.53	16.52	21.23	0.98	0.00						98.26	92
15SUV018	2015_3	3_2	3-3_002	diopside	cpx	Beaufort Fm.	0.25-0.5	54.13	0.03	1.47	0.00	0.15	0.54	17.68	25.43	0.00	0.00						99.43	98
15SUV019	Mount3_036	3_3_7	162	low-Cr_DC	cpx	Beaufort Fm.	0.18-0.25	52.23	0.11	2.31	0.93	0.21	6.08	14.55	22.80	0.45	0.00	0.00	0.05	0.00	0.00	0.00	99.72	81
15SUV019	Mount3_037	3_3_9	163	low-Cr_DC	cpx	Beaufort Fm.	0.18-0.25	50.73	0.39	3.69	1.10	0.14	5.10	17.28	20.05	0.19	0.00	0.00	0.04	0.00	0.04	0.00	98.75	86
15SUV021	2015_3	1_5	3-1_005	low-Cr_DC	cpx	stream sediments	0.5-1.0	52.53	0.27	2.18	0.64	0.16	5.49	17.84	19.11	0.16	0.00						98.38	85
15SUV021	2015_3	1_6	3-1_006	low-Cr_DC	cpx	stream sediments	0.25-0.5	52.73	0.21	1.85	0.79	0.14	4.75	18.02	19.40	0.18	0.00						98.07	87
15SUV024	2015_3	1_2	3-1_002	Cr-diopside	cpx	stream sediments	0.25-0.5	53.09	0.09	1.60	0.60	0.16	3.90	15.56	22.91	0.53	0.00						98.44	88
15SUV027	2015_3	1_7	3-1_007	low-Cr_DC	cpx	stream sediments	0.25-0.5	53.09	0.03	1.29	0.33	0.21	5.46	15.32	21.85	0.46	0.00						98.04	83
15SUV028	2015_3	1_8	3-1_008	low-Cr_DC	cpx	Beaufort Fm.	0.25-0.5	52.69	0.28	1.90	0.65	0.17	5.43	18.45	18.39	0.15	0.00						98.11	86
15SUV028	2015_3	1_9	3-1_009	low-Cr_DC	cpx	Beaufort Fm.	0.25-0.5	50.46	0.43	3.66	1.08	0.17	5.68	16.79	19.15	0.21	0.00						97.63	84
15SUV028	Mount3_038	3_3_10	164	low-Cr_DC	cpx	Beaufort Fm.	0.18-0.25	50.73	0.44	3.89	1.05	0.13	5.26	17.12	20.31	0.20	0.00	0.00	0.04	0.00	0.04	0.03	99.23	85
15SUV028	Mount3_039	3_3_11	165	low-Cr_DC	cpx	Beaufort Fm.	0.18-0.25	50.91	0.18	3.60	1.28	0.12	4.18	17.00	21.25	0.17	0.00	0.00	0.03	0.00	0.00	0.00	98.71	88
15SUV032	2015_3	2_1	3-2_001	low-Cr_DC	cpx	stream sediments	0.25-0.5	49.93	0.37	4.48	0.80	0.14	5.86	15.80	19.86	0.20	0.00						97.44	83
15SUV032	2015_3	2_2	3-2_002	low-Cr_DC	cpx	stream sediments	0.25-0.5	51.00	0.34	3.50	1.24	0.13	4.92	16.71	20.07	0.19	0.00						98.10	86
15SUV032	2015_3	2_3	3-2_003	low-Cr_DC	cpx	stream sediments	0.25-0.5	50.58	0.35	3.52	1.06	0.14	5.22	16.79	19.50	0.20	0.00						97.36	85
15SUV032	2015_3	2_4	3-2_004	low-Cr_DC	cpx	stream sediments	0.25-0.5	51.38	0.30	2.82	1.04	0.15	5.20	17.33	19.28	0.20	0.00						97.70	86
15SUV032	2015_3	2_5	3-2_005	low-Cr_DC	cpx	stream sediments	0.25-0.5	52.20	0.23	2.15	0.94	0.13	4.50	17.49	20.27	0.17	0.00						98.08	87
15SUV032	2015_3	2_6	3-2_006	low-Cr_DC	cpx	stream sediments	0.25-0.5	51.52	0.31	2.90	1.10	0.13	5.14	16.95	19.71	0.18	0.00						97.94	85
15SUV032	2015_3	2_7	3-2_007	low-Cr_DC	cpx	stream sediments	0.25-0.5	50.66	0.41	3.67	0.95	0.14	5.15	16.40	20.08	0.18	0.00						97.64	85
15SUV032	2015_3	2_8	3-2_008	low-Cr_DC	cpx	stream sediments	0.25-0.5	51.24	0.37	3.43	0.95	0.14	5.26	17.42	19.00	0.18	0.00						97.99	86
15SUV032	2015_3	2_9	3-2_009	low-Cr_DC	cpx	stream sediments	0.25-0.5	51.02	0.37	3.52	1.08	0.14	5.19	16.59	19.78	0.20	0.00						97.89	85
15SUV052	2015_3	2_10	3-2_010	diopside	cpx	stream sediments	0.25-0.5	50.32	0.51	4.23	1.38	0.14	5.33	16.50	19.05	0.19	0.00						97.65	85
16SUV019	Mount1_054	1_6_1	274	diopside	cpx	till	0.25-0.5	55.39	0.03	0.61	0.00	0.03	0.70	17.81	25.91	0.05	0.00	0.00	0.00	0.00	0.00	0.00	100.53	98
16SUV019	Mount1_055	1_6_2	275	diopside	cpx	till	0.25-0.5	54.61	0.03	0.40	0.03	0.07	2.86	16.52	25.56	0.16	0.00	0.00	0.00	0.00	0.00	0.00	100.24	91

APPENDIX 6H

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - EPMA chemistry: RUTILE

							WT %															
GSC Sample #	Mount	Grain #	EPMA #	ODM Min ID	EPMA Min ID	Grain Size	SiO2	TiO2	Al2O3	Cr2O3	MnO	FeO	MgO	CaO	Na2O	K2O	Nb2O5	NiO	ZnO	V2O3	P2O5	Total
15SUV018	2015_4	4-8_1	4-8-A_001	red rutile	rutile	0.25-0.5	0.00	97.59	0.00	0.93	0.00	0.36	0.00	0.01	0.00	0.00						98.89
15SUV018_rpt	2015_4	4_8_1_rpt	4-8-B_001	red rutile	rutile	0.25-0.5	0.00	97.60	0.00	0.88	0.00	0.32	0.00	0.00	0.00	0.00						98.80
15SUV028_rpt	2015_4	4_8_2_rpt	4-8-A_002	red rutile	rutile	0.25-0.5	0.00	98.20	0.05	0.00	0.00	0.70	0.00	0.00	0.00	0.00						98.95
15SUV028	2015_4	4_8_2	4-8-B_002	red rutile	rutile	0.25-0.5	0.00	98.49	0.02	0.00	0.00	0.69	0.00	0.00	0.00	0.00						99.20
15SUV028_rpt	2015_4	4_8_3_rpt	4-8-A_003	red rutile	rutile	0.25-0.5	0.00	97.58	0.03	0.21	0.00	0.18	0.00	0.01	0.00	0.00						98.01
15SUV028	2015_4	4_8_3	4-8-B_003	red rutile	rutile	0.25-0.5	0.00	98.13	0.03	0.22	0.00	0.17	0.00	0.01	0.00	0.00						98.56
15SUV030	2015_4	4_8_4	4-8-A_004	red rutile	rutile	0.25-0.5	0.00	98.77	0.02	0.11	0.00	0.29	0.00	0.01	0.00	0.00						99.20
15SUV030_rpt	2015_4	4_8_4_rpt	4-8-B_004	red rutile	rutile	0.25-0.5	0.00	98.73	0.00	0.26	0.00	0.23	0.00	0.00	0.00	0.00						99.22
15SUV030_rpt	2015_4	4_8_5_rpt	4-8-A_005	red rutile	rutile	0.25-0.5	0.00	98.65	0.02	0.13	0.00	0.15	0.00	0.01	0.00	0.00						98.96
15SUV030	2015_4	4_8_5	4-8-B_005	red rutile	rutile	0.25-0.5	0.00	98.89	0.04	0.13	0.00	0.14	0.00	0.00	0.00	0.00						99.20
15SUV030	2015_4	4_8_6	4-8-A_006	red rutile	rutile	0.25-0.5	0.00	98.39	0.03	0.10	0.00	0.30	0.00	0.00	0.00	0.00						98.82
15SUV030_rpt	2015_4	4_8_6_rpt	4-8-B_006	red rutile	rutile	0.25-0.5	0.00	98.45	0.02	0.15	0.00	0.31	0.00	0.00	0.00	0.00						98.93
15SUV030_rpt	2015_4	4_8_7_rpt	4-8-A_007	red rutile	rutile	0.25-0.5	0.00	98.09	0.03	0.07	0.00	0.34	0.00	0.00	0.00	0.00						98.53
15SUV030	2015_4	4_8_7	4-8-B_007	red rutile	rutile	0.25-0.5	0.00	98.23	0.00	0.08	0.00	0.42	0.00	0.00	0.00	0.00						98.73
15SUV030_rpt	2015_4	4_8_8_rpt	4-8-A_008	red rutile	rutile	0.25-0.5	0.00	97.87	0.00	0.55	0.00	0.03	0.00	0.00	0.00	0.00						98.45
15SUV030	2015_4	4_8_8	4-8-B_008	red rutile	rutile	0.25-0.5	0.00	97.94	0.00	0.56	0.00	0.02	0.00	0.00	0.00	0.00						98.52
15SUV030	2015_4	4_8_9	4-8-A_009	red rutile	rutile	0.25-0.5	0.00	98.61	0.03	0.15	0.00	0.07	0.00	0.00	0.00	0.00						98.86
15SUV030_rpt	2015_4	4_8_9_rpt	4-8-B_009	red rutile	rutile	0.25-0.5	0.00	98.60	0.00	0.16	0.00	0.06	0.00	0.00	0.00	0.00						98.82
15SUV030	2015_4	4_8_10	4-8-A_010	red rutile	rutile	0.25-0.5	0.00	98.82	0.05	0.06	0.00	0.29	0.00	0.00	0.00	0.00						99.22
15SUV030_rpt	2015_4	4_8_10_rpt	4-8-B_010	red rutile	rutile	0.25-0.5	0.00	98.64	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00						98.92
15SUV030	2015_4	4_8_11	4-8-A_011	red rutile	rutile	0.25-0.5	0.00	97.00	0.00	0.23	0.00	0.72	0.00	0.00	0.00	0.00						97.95
15SUV030_rpt	2015_4	4_8_11_rpt	4-8-B_011	red rutile	rutile	0.25-0.5	0.00	96.95	0.02	0.22	0.00	0.71	0.00	0.00	0.00	0.00						97.90
15SUV030	2015_4	4_8_12	4-8-A_012	red rutile	rutile	0.25-0.5	0.00	98.08	0.00	0.38	0.00	0.04	0.00	0.01	0.00	0.01						98.52
15SUV030_rpt	2015_4	4_8_12_rpt	4-8-B_012	red rutile	rutile	0.25-0.5	0.00	97.88	0.00	0.38	0.00	0.06	0.00	0.00	0.00	0.00						98.32
15SUV030_rpt	2015_4	4_8_13_rpt	4-8-A_013	red rutile	rutile	0.25-0.5	0.00	98.19	0.00	0.05	0.00	0.63	0.00	0.00	0.00	0.00						98.87
15SUV030	2015_4	4_8_13	4-8-B_013	red rutile	rutile	0.25-0.5	0.00	98.23	0.00	0.08	0.00	0.67	0.00	0.00	0.00	0.00						98.98
16SUV013	2016_2	2_1_1	327	red rutile	rutile	0.25-0.5	0.04	98.85	0.02	0.30	0.00	1.05	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.22	0.00	100.56
16SUV013	2016_2	2_1_2	328	red rutile	rutile	0.25-0.5	0.00	99.95	0.00	0.10	0.00	0.05	0.00	0.00	0.00	0.01	0.04	0.02	0.00	0.19	0.00	100.37
16SUV013	2016_2	2_1_3	329	red rutile	rutile	0.25-0.5	0.00	99.95	0.02	0.18	0.00	0.17	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.28	0.00	100.81
16SUV013	2016_2	2_1_4	330	red rutile	rutile	0.25-0.5	0.00	99.99	0.03	0.05	0.00	0.18	0.00	0.01	0.00	0.00	0.18	0.00	0.00	0.33	0.00	100.77
16SUV013	2016_2	2_1_5	331	red rutile	rutile	0.25-0.5	0.00	100.33	0.02	0.13	0.00	0.11	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.34	0.00	101.00
16SUV013	2016_2	2_1_6	332	red rutile	rutile	0.25-0.5	0.00	99.91	0.02	0.24	0.00	0.03	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.36	0.00	100.74
16SUV013	2016_2	2_1_7	333	red rutile	rutile	0.25-0.5	0.00	100.08	0.04	0.00	0.00	0.15	0.02	0.00	0.00	0.00	0.23	0.00	0.00	0.19	0.00	100.71
16SUV013	2016_2	2_1_8	334	red rutile	rutile	0.25-0.5	0.00	99.81	0.05	0.15	0.00	0.17	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.21	0.00	100.75
16SUV022	2016_2	2_1_9	335	red rutile	rutile	0.25-0.5	0.02	99.26	0.05	0.07	0.00	0.15	0.00	0.00	0.05	0.02	0.54	0.00	0.00	0.37	0.00	100.52
16SUV022	2016_2	2_1_10	336	red rutile	rutile	0.25-0.5	0.00	98.81	0.00	0.21	0.00	0.08	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.61	0.00	99.98
16SUV022	2016_2	2_1_11	337	red rutile	rutile	0.25-0.5	0.00	99.18	0.04	0.10	0.00	0.25	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.47	0.00	100.29
16SUV022	2016_2	2_1_12	338	red rutile	rutile	0.25-0.5	0.00	99.00	0.00	0.16	0.00	0.03	0.00	0.02	0.00	0.00	0.17	0.00	0.00	0.82	0.00	100.20
16SUV023	2016_2	2_2_1	339	red rutile	rutile	0.25-0.5	0.00	99.77	0.02	0.10	0.00	0.23	0.00	0.01	0.03	0.00	0.16	0.00	0.00	0.25	0.00	100.57
16SUV023	2016_2	2_2_2	340	red rutile	rutile	0.25-0.5	0.00	99.52	0.00	0.47	0.00	0.05	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.33	0.00	100.58
16SUV023	2016_2	2_2_3	341	red rutile	rutile	0.25-0.5	0.02	99.21	0.05	0.12	0.00	0.36	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.32	0.00	100.43
16SUV023	2016_2	2_2_4	342	red rutile	rutile	0.25-0.5	0.00	99.30	0.04	0.08	0.00	0.32	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.40	0.00	100.43
16SUV023	2016_2	2_2_5	343	red rutile	rutile	0.25-0.5	0.00	99.84	0.02	0.08	0.00	0.19	0.00	0.10	0.00	0.00	0.15	0.00	0.00	0.43	0.00	100.81
16SUV024	2016_2	2_2_6	344	red rutile	rutile	0.25-0.5	0.00	98.28	0.00	1.26	0.00	0.16	0.00	0.00	0.00	0.01	0.30	0.00	0.00	0.20	0.00	100.20
16SUV024	2016_2	2_2_7	345	red rutile	rutile	0.25-0.5	0.00	99.25	0.02	0.69	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	100.33
16SUV024	2016_2	2_2_8	346	red rutile	rutile	0.25-0.5	0.00	99.96	0.00	0.46	0.00	0.03	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.26	0.00	100.84
16SUV024	2016_2	2_2_9	347	red rutile	rutile	0.25-0.5	0.00	99.11	0.03	0.27	0.00	0.13	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.30	0.00	99.95
16SUV024	2016_2	2_2_10	348	red rutile	rutile	0.25-0.5	0.00	99.42	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.11	0.00	99.94
16SUV014	Mount1_079	1_8_4	299	ilmenite, crustal	pseudorutile	0.25-0.5	0.60	57.12	0.53	0.12	0.69	30.34	1.79	0.02	0.03	0.01	0.00	0.00	0.00	0.74	0.04	92.01
16SUV014	Mount1_085	1_8_10	305	ilmenite, crustal	pseudorutile	0.25-0.5	0.39	57.72	0.29	0.00	0.61	30.99	0.46	0.06	0.00	0.03	0.06	0.00	0.00	0.11	0.08	90.80
16SUV023	Mount1_089	1_8_14	309	ilmenite, crustal	pseudorutile	0.25-0.5	0.35	60.86	0.33	0.23	0.41	25.92	2.99	0.04	0.03	0.00	0.00	0.00	0.00	0.85	0.00	92.02
16SUV028	Mount1_103	1_9_14	323	ilmenite, crustal	pseudorutile	0.25-0.5	0.14	59.80	0.13	0.00	0.38	29.79	0.42	0.02	0.00	0.04	0.11	0.00	0.00	0.14	0.00	90.97
16SUV028	Mount2_069	2_7_1	173	chromite	pseudorutile	0.25-0.5	0.10	55.89	0.15	0.00	1.80	33.20	0.09	0.04	0.04	0.01	0.04	0.00	0.05	0.00	0.05	91.46
16SUV028	Mount2_070	2_7_2	174	chromite	pseudorutile	0.25-0.5	0.45	56.37	0.40	0.34	0.38	30.59	2.24	0.02	0.03	0.00	0.00	0.05	0.00	0.48	0.04	91.38
16SUV028	Mount2_076	2_7_9	180	chromite	pseudorutile	0.25-0.5	0.12	55.72	0.28	0.18	0.39	33.39	1.49	0.12	0.00	0.02	0.05	0.04	0.03	0.35	0.03	92.21

APPENDIX 6I

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - EPMA chemistry: VESUVIANITE

							WT %														
GSC Sample #	**Mount**	**Grain #**	**EPMA Sample #**	**ODM Min ID**	**EPMA Min ID**	**Grain Size**	**SiO2**	**TiO2**	**Al2O3**	**Cr2O3**	**MnO**	**FeO**	**MgO**	**CaO**	**Na2O**	**K2O**	**Nb2O5**	**NiO**	**ZnO**	**V2O3**	**P2O5**	**Total**
15SUV001	Mount2_081	2_8_1	185	vesuvianite	garnet	0.25-0.5	39.73	0.29	18.94	0.00	0.14	4.17	0.84	36.76	0.00	0.00	0.00	0.00	0.00	0.00	0.04	100.91
15SUV001	Mount2_082	2_8_2	186	vesuvianite	garnet	0.25-0.5	39.60	0.52	18.06	0.00	0.20	5.05	0.77	36.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.75
15SUV001	Mount2_083	2_8_3	187	vesuvianite	vesuvianite	0.25-0.5	37.12	0.70	17.13	0.00	0.02	1.51	3.99	36.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96.96
15SUV001	Mount2_084	2_8_4	188	vesuvianite	garnet	0.25-0.5	39.08	0.34	16.52	0.00	0.10	7.27	0.57	36.08	0.00	0.00	0.00	0.00	0.00	0.04	0.00	100.00
15SUV001	Mount2_085	2_8_5	189	vesuvianite	garnet	0.25-0.5	39.60	0.35	18.85	0.00	0.08	4.27	0.63	36.48	0.00	0.00	0.00	0.00	0.00	0.03	0.00	100.28
15SUV001	Mount2_086	2_8_6	190	vesuvianite	garnet	0.25-0.5	39.34	0.04	17.80	0.00	0.27	6.03	0.71	35.94	0.02	0.00	0.00	0.00	0.00	0.00	0.03	100.17
15SVU002	Mount2_087	2_8_8	191	vesuvianite	garnet	0.5-1.0	38.76	0.24	13.97	0.00	0.12	10.00	0.60	35.94	0.02	0.01	0.00	0.00	0.00	0.09	0.05	99.79
15SVU002	Mount2_088	2_8_9	192	vesuvianite	garnet	0.5-1.0	38.10	2.14	15.05	0.05	0.06	7.42	0.80	36.32	0.02	0.00	0.00	0.00	0.00	0.04	0.00	99.98
15SVU002	Mount2_089	2_8_10	193	vesuvianite	garnet	0.5-1.0	39.31	0.78	17.33	0.00	0.05	5.55	0.83	36.43	0.00	0.01	0.00	0.00	0.00	0.04	0.04	100.35
15SVU002	Mount2_090	2_8_11	194	vesuvianite	garnet	0.5-1.0	39.25	0.67	16.68	0.00	0.03	6.10	0.81	36.80	0.02	0.01	0.00	0.00	0.00	0.00	0.04	100.42
15SVU002rpt	Mount2_090rim	2_8_11	195	vesuvianite	andradite	0.5-1.0	35.19	0.07	2.64	0.00	0.07	23.79	0.60	34.61	0.00	0.00	0.00	0.00	0.00	0.00	0.04	97.02
15SUV003	Mount2_091	2_9_1	196	vesuvianite	garnet	0.25-0.5	39.41	0.22	17.14	0.00	0.06	6.16	0.65	36.84	0.00	0.00	0.00	0.00	0.00	0.03	0.04	100.54
15SUV003rpt	Mount2_092	2_9_1	197	vesuvianite	garnet	0.25-0.5	39.15	0.09	17.33	0.00	0.04	6.06	0.62	36.52	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.83
15SUV003	Mount2_093	2_9_2	198	vesuvianite	garnet	0.25-0.5	39.72	0.19	19.19	0.00	0.11	3.90	0.81	36.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.35
15SUV003	Mount2_094	2_9_3	199	vesuvianite	garnet	0.25-0.5	38.71	1.40	15.92	0.00	0.14	6.90	0.70	36.25	0.03	0.00	0.00	0.00	0.00	0.05	0.00	100.09
15SUV003	Mount2_095	2_9_4	200	vesuvianite	garnet	0.25-0.5	39.19	0.13	17.16	0.00	0.12	6.66	0.74	36.00	0.00	0.01	0.00	0.00	0.00	0.04	0.00	100.04
15SUV003	Mount2_096	2_9_5	201	vesuvianite	garnet	0.25-0.5	39.00	0.72	16.67	0.00	0.05	6.17	0.63	36.60	0.00	0.01	0.00	0.00	0.00	0.04	0.04	99.92
15SUV005	Mount2_097	2_9_6	202	vesuvianite	garnet	0.25-0.5	40.00	0.33	21.82	0.00	0.08	0.54	0.56	37.14	0.02	0.00	0.00	0.00	0.00	0.53	0.00	101.03
15SUV010	Mount2_098	2_9_7	203	vesuvianite	garnet	0.5-1.0	39.76	0.19	20.65	0.00	0.09	2.52	0.19	36.99	0.02	0.01	0.00	0.00	0.00	0.00	0.00	100.42
15SUV010	Mount2_099	2_9_8	204	vesuvianite	garnet	0.5-1.0	39.04	0.32	16.69	0.00	0.11	6.91	0.58	36.27	0.00	0.01	0.00	0.00	0.00	0.00	0.03	99.96
15SUV010rpt	Mount2_100	2_9_8	205	vesuvianite	andradite	0.5-1.0	37.56	0.75	9.50	0.03	0.05	15.32	0.44	35.34	0.00	0.00	0.00	0.00	0.00	0.04	0.04	99.07
15SUV010	Mount2_101	2_9_9	206	vesuvianite	garnet	0.5-1.0	39.88	0.25	20.04	0.03	0.07	2.88	0.73	37.09	0.00	0.01	0.00	0.00	0.00	0.04	0.00	101.01
15SUV010	Mount2_102	2_9_10	207	vesuvianite	garnet	0.5-1.0	38.89	0.49	15.95	0.04	0.10	7.66	0.71	36.21	0.00	0.00	0.00	0.00	0.00	0.07	0.00	100.13
15SUV010	Mount2_103	2_9_11	208	vesuvianite	garnet	0.5-1.0	38.83	1.17	16.60	0.00	0.12	5.98	0.86	36.28	0.00	0.00	0.00	0.00	0.00	0.07	0.00	99.91
15SUV010	Mount2_104	2_9_12	209	vesuvianite	garnet	0.25-0.5	38.99	0.06	15.15	0.00	0.03	8.98	0.45	36.47	0.00	0.01	0.00	0.00	0.00	0.03	0.00	100.17
15SUV010	Mount2_105	2_9_13	210	vesuvianite	andradite	0.25-0.5	35.99	0.00	2.67	0.04	0.00	24.61	0.24	34.55	0.00	0.00	0.00	0.00	0.00	0.00	0.03	98.13
15SUV014	Mount2_106	2_9_14	211	vesuvianite	garnet	0.25-0.5	39.49	0.24	18.00	0.00	0.06	5.42	0.60	36.65	0.02	0.00	0.00	0.00	0.00	0.00	0.00	100.49
15SUV015	Mount2_107	2_10_1	212	vesuvianite	vesuvianite	0.25-0.5	37.19	0.00	17.33	0.00	0.00	2.82	2.38	36.27	0.04	0.01	0.00	0.15	0.00	0.00	0.03	96.22
15SUV021	Mount2_108	2_10_2	213	vesuvianite	andradite	0.25-0.5	35.03	0.00	0.00	0.00	0.03	28.13	0.08	33.96	0.00	0.00	0.00	0.03	0.00	0.00	0.00	97.27
15SUV021rpt	Mount2_109	2_10_2	214	vesuvianite	garnet	0.25-0.5	37.03	1.09	14.43	0.06	0.18	9.14	0.14	36.11	0.00	0.00	0.00	0.02	0.00	0.00	0.00	98.20
15SUV024	Mount2_110	2_10_3	215	vesuvianite	garnet	0.25-0.5	38.65	0.39	13.91	0.00	0.07	10.04	0.56	36.11	0.00	0.00	0.00	0.00	0.00	0.03	0.03	99.78
15SUV024	Mount2_111	2_10_4	216	vesuvianite	andradite	0.25-0.5	36.63	0.00	8.42	0.00	0.04	17.71	0.11	35.71	0.00	0.00	0.00	0.00	0.00	0.06	0.00	98.67
15SUV024rpt	Mount2_112	2_10_4	217	vesuvianite	garnet	0.25-0.5	38.93	0.03	16.37	0.00	0.06	7.85	0.09	36.47	0.02	0.01	0.00	0.00	0.00	0.08	0.00	99.92
15SUV024	Mount2_113	2_10_5	218	vesuvianite	garnet	0.25-0.5	40.13	0.60	15.48	0.00	0.09	6.81	1.88	35.54	0.02	0.00	0.00	0.00	0.00	0.04	0.03	100.63
15SUV024	Mount2_114	2_10_6	219	vesuvianite	talc?	0.25-0.5	40.12	0.02	0.39	0.00	0.10	1.90	25.81	0.05	0.06	0.04	0.00	0.00	0.00	0.00	0.05	68.55
15SUV024rpt	Mount2_115	2_10_6	220	vesuvianite	vesuvianite	0.25-0.5	36.93	0.08	16.75	0.00	0.02	2.42	4.00	36.30	0.02	0.01	0.00	0.00	0.00	0.00	0.00	96.52
15SUV026	Mount2_116	2_10_7	221	vesuvianite	garnet	0.5-1.0	39.25	0.22	17.25	0.00	0.26	6.20	1.05	35.93	0.00	0.00	0.00	0.00	0.00	0.05	0.03	100.23
15SUV027	Mount2_117	2_10_8	222	vesuvianite	garnet	0.5-1.0	37.77	1.09	12.57	0.00	0.10	11.32	0.64	35.99	0.00	0.00	0.00	0.00	0.00	0.04	0.03	99.55
15SUV050	Mount2_118	2_10_9	223	vesuvianite	garnet	0.25-0.5	39.71	0.10	19.78	0.04	0.04	4.10	0.25	36.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.50
15SUV050	Mount2_119	2_10_10	224	vesuvianite	vesuvianite	0.25-0.5	32.38	0.11	21.11	0.00	0.12	2.23	0.36	38.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94.91
15SUV050rpt	Mount2_120	2_10_10	225	vesuvianite	vesuvianite	0.25-0.5	31.83	0.00	21.40	0.00	0.18	1.62	0.64	38.09	0.00	0.19	0.00	0.00	0.00	0.00	0.00	93.96
15SUV050	Mount2_121	2_10_11	226	vesuvianite	garnet	0.25-0.5	38.46	0.40	20.83	0.00	0.28	2.35	0.10	37.50	0.00	0.01	0.00	0.00	0.00	0.00	0.02	99.96
15SUV050rpt	Mount2_122	2_10_11	227	vesuvianite	garnet	0.25-0.5	38.55	0.82	17.34	0.00	0.07	5.70	0.17	36.69	0.02	0.01	0.00	0.00	0.00	0.05	0.00	99.43
15SUV050rpt	Mount2_123	2_10_11	228	vesuvianite	K-feldspar	0.25-0.5	63.04	0.00	18.48	0.00	0.00	0.04	0.00	0.69	0.17	17.44	0.00	0.00	0.00	0.00	0.00	99.85
15SUV050	Mount2_124	2_10_12	229	vesuvianite	garnet	0.25-0.5	39.07	0.37	16.31	0.00	0.05	6.85	0.66	36.38	0.00	0.00	0.00	0.00	0.00	0.04	0.04	99.78
16SUV013	Mount2_125	2_10_13	230	vesuvianite	garnet	0.25-0.5	39.43	0.34	18.81	0.00	0.17	4.23	0.63	36.49	0.02	0.01	0.00	0.00	0.00	0.06	0.04	100.23
16SUV013rpt	Mount2_126	2_10_13	231	vesuvianite	clinopyroxene	0.25-0.5	53.11	0.21	1.05	0.00	0.07	3.84	15.70	25.57	0.22	0.01	0.00	0.00	0.00	0.00	0.12	99.90
16SUV013	Mount2_127	2_10_14	232	vesuvianite	vesuvianite	0.25-0.5	36.39	0.60	17.68	0.00	0.00	0.20	3.89	37.09	0.02	0.01	0.00	0.00	0.00	0.04	0.03	95.94

APPENDIX 6J

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - EPMA chemistry: VESUVIANITE

							WT %														
GSC Sample #	Mount	Grain #	EPMA #	ODM Min ID	EPMA Min ID	Grain Size	SiO2	TiO2	Al2O3	Cr2O3	MnO	FeO	MgO	CaO	Na2O	K2O	Nb2O5	NiO	ZnO	V2O3	P2O5	Total
15SUV051	2015_1	3_5	1-3_005-FeAlSi	andradite	tourmaline	0.25-0.5	34.30	0.34	34.29	0.00	0.24	12.73	1.66	0.09	1.82	0.04						85.51
15SUV020	2015_2	4_4	2-4_004_siderite	fayalite	siderite	0.25-0.5	0.04	0.00	0.04	0.00	1.24	46.63	8.69	1.35	0.00	0.00						57.99
15SUV030	2015_5	5_9	5-5_009A	chromite, euhedral	tourmaline	0.25-0.5	34.49	0.77	31.07	0.00	0.06	11.27	5.09	0.85	1.97	0.07						85.64
15SUV030_rpt	2015_5	5_9_rpt	5-5_009B	chromite, euhedral	tourmaline	0.25-0.5	34.39	0.88	31.06	0.00	0.07	11.10	4.95	0.83	1.94	0.07						85.29
15SUV009	2015_6	6_1a_?	6-6-1A_titanite	chromite	titanite	0.25-0.5	30.84	37.38	0.48	0.00	0.00	0.94	0.00	27.85	0.00	0.00						97.49
16SUV018	Mount1_066	1_7_1	286	hercynite	chlorite?	0.25-0.5	34.21	0.16	34.22	0.00	0.17	12.51	2.02	0.12	1.82	0.04	0.00	0.00	0.05	0.00	0.06	85.39
16SUV023	Mount2_037	2_4_5	141	chromite	chlorite?	0.25-0.5	33.85	1.13	25.30	0.00	0.15	18.40	3.60	2.96	1.17	0.04	0.00	0.00	0.05	0.00	0.00	86.65
16SUV028	Mount2_072	2_7_5	176	chromite	chlorite?	0.25-0.5	33.89	0.60	32.99	0.00	0.10	14.12	1.41	0.20	2.08	0.06	0.00	0.00	0.05	0.00	0.00	85.49
15SUV019	Mount3_032	3_3_3	158	apatite	apatite	0.18-0.25	0.28	0.00	0.00	0.00	0.04	0.06	0.00	55.98	0.03	0.00	0.00	0.00	0.00	0.00	41.15	97.53

APPENDIX 7A

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); GARNET

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Garnet class[1]	Grain Size	Ca	Ti_m47	Ti_m49	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ni-in-garnet (°C)[3] Ryan et al., 1996	Ni-in-garnet(°C)[4] Griffin et al., 1989	Ni-in-garnet (°C)[5] Canil, 1999	Ni-in-garnet(°C)[6] Avg. (Griffin + Canil)
Gar15SUV001row3grain1 - 1	2015_1	1-3_001	andradite	garnet	G9	0.25-0.5	263400	20900	20910	0.77	29.1	10.29	95.5	67.2		21.34	161.4	32.7	167.3	21.44	4.47	8.78	0.737	3	0.403	0.779	0.0856	0.511	0.0781	1.761	369.92			
Gar15SUV001row3grain1 - 2	2015_1	1-3_001_rpt	andradite	garnet	G9	0.25-0.5	260500	20600	20530	0.85	28.06	10.24	96.4	65.3		20.5	154.6	31.38	160.8	21.17	4.4	8.84	0.73	2.89	0.394	0.76	0.0896	0.505	0.0783	1.701	377.74			
Gar15SUV001row3grain2 - 1	2015_1	1-3_002	andradite	garnet	G9	0.25-0.5	251000	56600	56400	13.78	18.4	161.7	136.7	47.3	5.91	4.71	65.5	17.58	105	27.8	5.34	30.2	4.49	30.2	6.03	15.93	2.24	13.4	1.615	1.57	716.89			
Gar15SUV001row4grain1 - 1	2015_1	1-4_001	almandine	garnet	G0	0.5-1.0	9860	1020	1037		0.162	2980	5.02	1.07		0.0043	0.025	0.0251	0.859	11.05	0.09	58.7	22.8	215	42	150.5	31.7	294	39.3	0.945				
Gar15SUV001row4grain1 - 2	2015_1	1-4_001_rpt	almandine	garnet	G0	0.5-1.0	10280	1128	1144		0.166	3170	5.48	1.19		0.0016	0.0193	0.0295	0.867	12.78	0.111	64.8	25.3	240	46.1	158.1	31.9	284	35.2	1.05				
Gar15SUV001row6grain1 - 1	2015_1	1-6_001	spessartine	garnet	G0	0.25-0.5	3470	853	855		0.439	3730	3.53	0.133			0.0056	0.0127	0.385	3.95	0.0088	31.5	12.91	168	53.2	280	82.3	1055	221	0.287				
Gar15SUV001row6grain1 - 2	2015_1	1-6_001_rpt	spessartine	garnet	G0	0.25-0.5	3580	934	945		0.563	4300	4.3	0.181			0.0087	0.0165	0.482	4.64	0.0114	36.2	14.8	194	63.2	343	103.7	1356	291	0.34				
Gar15SUV001row6grain1 - 3	2015_1	1-6_001_rpt	spessartine	garnet	G0	0.25-0.5	3280	880	881		0.445	3700	3.99	0.57		0.0012	0.0106	0.0137	0.503	4.11	0.008	32	13.02	165	52.1	272	80.1	1024	214	0.276				
Gar15SUV001row6grain1 - 4	2015_1	1-6_001_rpt	spessartine	garnet	G0	0.25-0.5	3630	930	945		0.588	4340	4.55	0.174			0.0104	0.0107	0.538	4.61	0.0135	36.1	14.91	196	63.2	347	106	1382	291	0.364				
Gar15SUV001row6grain2 - 1	2015_1	1-6_002	spessartine	garnet	G0	0.25-0.5	4980	852	855		0.773	7830	16.8	5.57	0.0009	0.0072	0.0492	0.0261	1.07	15.1	0.0125	122.6	49.5	552	143.1	632	169	1900	343	1.7				
Gar15SUV001row6grain2 - 2	2015_1	1-6_002_rpt	spessartine	garnet	G0	0.25-0.5	5090	690	700		0.227	2970	6.55	41		0.025	0.101	0.0217	0.225	3.05	0.005	40.5	19.8	212	49.3	194	47.8	498	81.6	0.645				
Gar15SUV001row6grain2 - 3	2015_1	1-6_002_rpt	spessartine	garnet	G0	0.25-0.5	4750	996	981		0.723	6780	18.1	21.9		0.0501	0.309	0.087	0.99	8.44	0.0136	88.3	40.6	475	127	569	153.7	1760	327	1.69				
Gar15SUV003row4grain2 - 1	2015_1	1-4_002	almandine	garnet	G3	0.25-0.5	57500	1045	1055	13.6	0.027	50.7	12.72	0.0034		0.0067	0.117	0.0749	1.285	1.72	0.762	4.23	1.027	9.44	1.97	5.36	0.668	4	0.47	0.133	714.46			
Gar15SUV003row4grain2 - 2	2015_1	1-4_002_rpt	almandine	garnet	G3	0.25-0.5	59800	1167	1174	13.63	0.0196	60.1	13.5	0.0031		0.0159	0.166	0.091	1.39	1.89	0.849	4.41	1.039	9.71	2.19	6.5	0.894	5.85	0.682	0.15	714.87			
Gar15SUV003row4grain3 - 1	2015_1	1-4_003	almandine	garnet	G0	0.25-0.5	51600	490	483	0.61	0.132	1950	4.4	0.0032		0.0042	0.108	0.106	2.19	9.53	1.26	70.1	25.5	293	80.4	280	40.7	274	37	0.124	352.23			
Gar15SUV004row2grain1 - 1	2015_1	missing	garnet	missing EPMA		0.25-0.5	37900	673	675	21.9	0.149	19.7	28.8	0.077		0.0186	0.211	0.0804	1.058	0.733	0.313	1.39	0.312	2.96	0.76	2.7	0.44	3.22	0.488	0.472	810.83			
Gar15SUV004row2grain1 - 2	2015_1	missing	garnet	missing EPMA		0.25-0.5	38300	669	680	21.9	0.148	20.14	29.4	0.088		0.0182	0.221	0.0873	1.092	0.745	0.313	1.35	0.319	2.98	0.774	2.69	0.439	3.13	0.515	0.426	810.83			
Gar15SUV005row4grain4 - 1	2015_1	1-4_004	almandine	garnet	G0	0.5-1.0	4650	22.8	22.9		0.159	721	4.1				0.0243	0.0142	0.229	0.421	0.0063	4.11	2.92	58.2	27	161	36.3	333	58.6	0.097				
Gar15SUV005row4grain4 - 2	2015_1	1-4_004_rpt	almandine	garnet	G0	0.5-1.0	7450	35.1	34.5		0.144	954	2.2	0.0023			0.0269	0.0193	0.465	1.024	0.0213	6.6	4.47	81.7	33.3	169.8	34.3	281	43.8	0.075				
Gar15SUV005row4grain4 - 3	2015_1	1-4_004_rpt	almandine	garnet	G0	0.5-1.0	10200	46	45.1	0.41	0.089	985	1.33	0.0021			0.0222	0.0238	0.541	1.51	0.0267	10.22	6.46	99.4	32.5	134.3	23.4	171	24.2	0.033	324.19			
Gar15SUV005row4grain5 - 1	2015_1	1-4_005	almandine	garnet	G3	0.25-0.5	47700	960	950	6.77	0.0186	50.5	13.14	0.004			0.0659	0.0478	0.799	1.38	0.717	4.36	0.995	8.61	1.9	5.84	0.866	5.56	0.76	0.171	600.72			
Gar15SUV006row4grain6 - 1	2015_1	1-4_006	almandine	garnet	G0	0.25-0.5	19450	121.6	121.2		0.086	962	2.97	0.003		0.0025	0.0468	0.0403	1.088	5.3	0.121	30.5	11.36	120.3	32.7	121.3	20.88	155.4	23.01	0.086				
Gar15SUV006row4grain6 - 2	2015_1	1-4_006_rpt	almandine	garnet	G0	0.25-0.5	23500	130.3	129.8	0.42	0.074	1153	3.06	0.0039		0.0019	0.0611	0.0622	1.33	5.9	0.128	30.8	11.5	136.9	39.8	137.8	22.4	156.6	21.79	0.061	325.82			
Gar15SUV006row4grain7 - 1	2015_1	1-4_007	almandine	garnet	G0	0.25-0.5	21600	129	126.3	0.71	0.056	1401	3.15	0.0047		0.0055	0.0905	0.0854	1.67	7.1	0.354	49.6	19.27	202	51.3	155.8	20.4	115.1	14.1	0.089	363.65			
Gar15SUV006row4grain7 - 2	2015_1	1-4_007_rpt	almandine	garnet	G0	0.25-0.5	20900	122.1	122.5	0.61	0.054	1374	3.23	0.0042		0.0037	0.1	0.083	1.61	6.97	0.33	48.8	18.92	197.5	47.7	140.6	18.23	104	12.33	0.096	352.23			
Gar15SUV009row2grain2 - 1	2015_1	1-2-2	garnet	garnet	G9	0.25-0.5	38600	735	749	27.4	0.066	16.15	15.7	0.071		0.0129	0.112	0.0349	0.448	0.536	0.337	1.44	0.309	2.61	0.605	1.99	0.36	2.47	0.434	0.249	862.97			
Gar15SUV009row4grain8 - 2	2015_1	1-4_008_rpt	almandine	garnet	G4	0.25-0.5	13710	584	582	0.7	0.0157	341	21.8	0.0041			0.157	0.171	3.99	8.42	0.535	25.1	6.3	54.9	11.92	33.8	4.51	28.2	3.41	0.314	362.56			
Gar15SUV014row2grain3 - 1	2015_1	1-2-3	garnet	garnet	G10	0.25-0.5	28500	102.8	103.4	47.8	3.19	1.64	10.37	0.982		0.703	4.81	0.908	4.6	0.913	0.276	0.745	0.08	0.376	0.0595	0.217	0.0531	0.543	0.158	0.177	1017.10	1074.72	1042.12	1058.42
Gar15SUV014row2grain3 - 2	2015_1	1-2-3_rpt	garnet	garnet	G10	0.25-0.5	26000	94	94	44.4	2.62	1.527	10.63	0.929		0.609	4.25	0.849	4.56	0.975	0.322	0.781	0.088	0.376	0.0495	0.187	0.0462	0.617	0.136	0.212	994.30	1049.86	1027.73	1038.80
Gar15SUV014row2grain3 - 3	2015_1	1-2-3_rpt	garnet	garnet	G10	0.25-0.5	24500	89.4	90.2	42.1	2.77	1.424	8.73	0.851		0.625	4.27	0.794	4.13	0.744	0.264	0.61	0.074	0.301	0.0494	0.177	0.0485	0.557	0.127	0.154	978.36	1032.51	1017.55	1025.03
Gar15SUV014row2grain4 - 1	2015_1	1-2-4	garnet	garnet	G10D	0.25-0.5	21900	161	156	46.3	4.6	1.423	5.33	1.83	0.86	2.13	4.13	0.771	4.74	1.101	0.333	0.755	0.0727	0.348	0.0537	0.11	0.019	0.228	0.062	0.055	1007.15	1063.86	1035.86	1049.86
Gar15SUV019row1grain1 - 1	Mount 3	127	garnet	garnet	G11	0.18-0.25	57500	4860	4830	179.3	0.736	66.2	145.4	0.316	-0.09	0.0275	0.455	0.217	2.8	2.52	1.259	5.74	1.261	10.53	2.6	8.19	1.252	8.67	1.302	3.22	1630.79	1758.53	1367.30	1562.91
Gar15SUV019row1grain2 - 1	Mount 3	128	garnet	garnet	G11	0.18-0.25	70200	4390	4310	139.6	0.706	50.1	121.5	0.354	-0.114	0.0112	0.216	0.139	2.13	3.47	1.805	7.46	1.377	9.73	1.918	5.38	0.726	4.6	0.672	2.59	1473.51	1580.49	1293.95	1437.22
Gar15SUV019row2grain5 - 1	2015_1	1-2_005	garnet	garnet	G9	0.25-0.5	37500	3870	3910	89.2	0.405	15.41	44.7	0.384		0.0347	0.413	0.141	1.288	0.936	0.465	1.88	0.361	2.83	0.656	1.96	0.285	2.17	0.301	1.15	1248.55	1329.21	1177.85	1253.53
Gar15SUV019row2grain5 - 2	2015_1	1-2_005_rpt	garnet	garnet	G9	0.25-0.5	37000	3840	3880	88.2	0.387	15.68	44.4	0.449		0.0355	0.394	0.131	1.3	0.924	0.437	1.81	0.379	3	0.66	1.93	0.297	2.02	0.307	1.2	1243.64	1323.76	1175.15	1249.45
Gar15SUV019row2grain5 - 3	2015_1	1-2_005_rpt	garnet	garnet	G9	0.25-0.5	36900	3900	3910	87.3	0.416	14.99	43.7	0.421		0.0327	0.407	0.14	1.35	1.002	0.468	1.81	0.346	2.69	0.606	1.83	0.279	1.95	0.29	1.098	1239.19	1318.83	1172.70	1245.77
Gar15SUV019row2grain6 - 1	2015_1	1-2_006	garnet	garnet	G9	0.25-0.5	34900	41.4	41.2	19.2	1.055	1.33	0.188	0.188		0.332	1.029	0.1	0.199	0.0105	0.0074		0.0029	0.071	0.0531	0.25	0.071	0.744	0.177	0.0021	782.38	820.72	883.88	852.30
Gar15SUV019row2grain6 - 2	2015_1	1-2_006_rpt	garnet	garnet	G9	0.25-0.5	36200	39.7	41.4	18.3	1.091	1.458	0.266	0.197		0.352	1.127	0.107	0.274	0.038	0.0124	0.026	0.0028	0.088	0.0464	0.297	0.077	0.864	0.164	0.0026	772.37	809.98	876.60	843.29
Gar15SUV019row3grain1 - 1	Mount 3	156	almandine	garnet	G0	0.18-0.25	16930	451	466	6.67	0.011	152.5	133.7	0.0161	0.048	-0.0014	0.0323	0.119	5.99	19.9	0.936	37.2	5.79	35.2	5.97	14.71	1.87	11.38	1.537	2.12	598.57			
Diop15SUV019row3grain6 - 1	Mount 3	161	diopside	garnet	G0	0.18-0.25	5620	180	0.384	2	5.56	0.037	50.5	0.29	12.16	0.12	1.971	0.46	7.09	0.042	0.749	0.15									454.28			
Gar15SUV020row2grain7 - 1	2015_1	1-2_007	garnet	garnet	G9	0.25-0.5	35400	2210	2220	73.1	0.356	15.35	25.2	0.367		0.0209	0.264	0.102	0.928	0.742	0.355	1.5	0.339	2.6	0.616	1.93	0.292	2.08	0.338	0.616	1166.17	1238.16	1131.60	1184.88
Gar15SUV020row2grain7 - 2	2015_1	1-2_007_rpt	garnet	garnet	G9	0.25-0.5	32900	2079	2100	67.8	0.345	14.43	23.46	0.314		0.0193	0.258	0.0954	0.912	0.698	0.336	1.4	0.267	2.35	0.575	1.8	0.257	1.94	0.288	0.506	1137.30	1206.37	1114.87	1160.62
Gar15SUV020row2grain7 - 3	2015_1	1-2_007_rpt	garnet	garnet	G9	0.25-0.5	34900	2210	2220	71.7	0.325	14.85	24.7	0.363		0.024	0.27	0.096	0.978	0.762	0.353	1.38	0.298	2.58	0.597	1.89	0.279	2.01	0.325	0.616	1158.64	1229.86	1127.26	1178.56
Gar15SUV020row6grain3 - 1	2015_1	1-6_003	spessartine	garnet	G0	0.25-0.5	9280	946	953		0.619	5720	3.82	1.47		0.022	0.059	0.022	0.632	6.16	0.0395	62.3	27.5	373	127.1	607	145.8	1446	260	0.289				
Gar15SUV020row6grain3 - 2	2015_1	1-6_003_rpt	spessartine	garnet	G0	0.25-0.5	7540	1217	1230		0.28	4600	5.28	0.506		0.0026	0.0246	0.0268	1.151	11.7	0.0463	83.9	29.6	312	78.1	298	64.6	600	95.9	0.478				
Gar15SUV024row1grain1 - 1	2015_1	1-1-1	GO[2]	garnet	G9	0.25-0.5	39500	4050	4110	44.7	0.37	12.96	38.5	0.332		0.0251	0.304	0.1065	1.12	0.72	0.342	1.47	0.27	2.24	0.525	1.6	0.252	1.77	0.277	0.916	996.35			
Gar15SUV024row1grain2 - 1	2015_1	1-1-2	GO	garnet	G0	0.25-0.5	7750	324	334	3.54	0.028	133.4	56.8	0.0057			0.0428	0.0772	3.03	9.34	0.612	15.66	2.87	22.9	5.37	16.82	2.35	15.55	2.27	0.67	516.22			
Gar15SUV024row1grain2 - 2	2015_1	1-1-2_rpt	GO	garnet	G0	0.25-0.5	8090	303	309	2.8		134.3	79.6	0.0047			0.0707	0.0848	2.77	8.65	0.592	16.5	3.07	23.2	5.03	15.21	2.13	14.3	2.02	1.26	489.54			
Gar15SUV024row1grain2 - 3	2015_1	1-1-2_rpt	GO	garnet	G0	0.25-0.5	7750	258	262	2.62		116.5	62.3	0.0056			0.0564	0.0623	2.26	7.03	0.482	13.94	2.64	20.3	4.41	13.35	1.85	12.1	1.76	1.29	482.31			
Gar15SUV024row2grain8 - 1	2015_1	1-2_008	garnet	garnet	G9	0.25-0.5	35700	2188	2185	51.7	0.488	21.7	56.6	0.5		0.0358	0.424	0.157	1.65	1.27	0.68	2.58	0.546	3.99	0.876	2.56	0.349	2.33	0.354	1.248	1042.26	1102.18	1057.77	1079.98

Gar15SUV024row2grain8 - 2	2015_1	1-2_008	garnet	garnet	G9	0.25-0.5	34700	2106	2098	50.4	0.467	21.4	55.8	0.48		0.0294	0.395	0.141	1.75	1.29	0.624	2.46	0.514	3.91	0.841	2.52	0.349	2.19	0.343	1.212	1033.98	1093.14	1052.65	1072.89
Gar15SUV024row5grain1 - 1	2015_1	1-5_001	almandine	garnet	G0	0.25-0.5	52500	69.6	72.6		0.056	132.6	3.74	0.0067		0.0247	0.191	0.0899	1.26	1.48	1.585	4.99	1.103	10.17	2.85	8.84	1.143	7.51	1.211	0.063				
Gar15SUV024row5grain2 - 1	2015_1	1-5_002	almandine	garnet	G3	0.25-0.5	59100	796	802	0.32	0.0449	332	11.72	0.0041		0.0294	0.513	0.281	4.34	7.65	2.54	24.1	5.78	52.6	12.49	41.5	6.3	45.3	6.58	0.251	307.94			
Gar15SUV024row5grain2 - 2	2015_1	1-5_002_rpt	almandine	garnet	G3	0.25-0.5	58300	848	852		0.0454	343	13.23	0.0073		0.0187	0.502	0.271	4.57	7.78	2.31	25	6.11	54	13.01	43.4	6.56	47.6	7.05	0.253				
Gar15SUV024row5grain3 - 1	2015_1	1-5_003	almandine	garnet	G0	0.25-0.5	8210	227	236	1.69	0.05	189	23.6	0.054	1.38	0.0013	0.0121	0.0105	0.316	3.15	0.146	16.97	4.39	35.1	6.93	20	2.82	17.8	2.46	0.512	437.82			
Gar15SUV024row5grain4 - 1	2015_1	1-5_004	almandine	garnet	G3	0.25-0.5	49500	721	734	5.46	0.082	66.6	14.55			0.0085	0.19	0.129	2.15	3.1	1.6	7.23	1.493	11.92	2.58	8.17	1.157	8.17	1.125	0.168	570.75			
Gar15SUV024row5grain4 - 2	2015_1	1-5_004_rpt	almandine	garnet	G3	0.25-0.5	53100	766	770	5.29	0.168	70	14.46			0.0115	0.217	0.139	2.14	3.07	1.68	7.44	1.58	12.24	2.64	8.18	1.204	8.25	1.16	0.172	566.52			
Gar15SUV024row5grain5 - 1	2015_1	1-5_005	almandine	garnet	G3	0.25-0.5	67900	1478	1469	14.67	0.0265	13.5	41.4	0.0052		0.0055	0.187	0.162	2.82	2.42	1.406	3.25	0.502	2.98	0.455	1.017	0.117	0.704	0.094	0.371	728.62			
Gar15SUV024row5grain5 - 2	2015_1	1-5_005_rpt	almandine	garnet	G3	0.25-0.5	67200	1514	1518	15.2	0.063	15.07	43.1	0.0132		0.094	0.55	0.21	2.79	2.49	1.419	3.31	0.519	3.23	0.559	1.31	0.171	0.973	0.141	0.454	735.39			
Gar15SUV024row5grain6 - 1	2015_1	1-5_006	almandine	garnet	G0	0.25-0.5	8890	180	178.7			191	20.7	0.0022	0.007	0.00089	0.0519	0.0593	1.36	3.98	0.085	17.2	4.5	34.7	6.84	17.7	2.29	12.95	1.6	0.563				
Gar15SUV025row3grain3 - 1	2015_1	1-3_003	andradite	garnet	G9	0.25-0.5	268000	81700	81500	0.96	4.27	341	1832	8.77		5.41	29	6.22	47.7	25.9	13.57	42.6	7.43	55.4	12	34.4	5.3	34.5	4.92	32.8	387.63			
Gar15SUV025row3grain4 - 1	2015_1	1-3_004	andradite	garnet	G9	0.25-0.5	244500	23500	23370		2.839	173	497	62.7		58.7	194.7	27.5	142.1	37.2	8.04	31.9	4.14	24.12	4.19	10.88	1.64	10.45	1.391	2.42				
Gar15SUV026row2grain9 - 1	2015_1	1-2_009	garnet	garnet	G10	0.25-0.5	33800	254	255	23	3.24	1.081	1.56	0.274		0.973	2.87	0.298	1.07	0.161	0.0266	0.086	0.0163	0.151	0.0373	0.179	0.0353	0.405	0.099	0.047	821.82	863.11	912.12	887.61
Gar15SUV026row2grain9 - 2	2015_1	1-2_009_rpt	garnet	garnet	G10	0.25-0.5	33800	231	231	22	3.13	1.039	1.74	0.301		0.874	3.4	0.452	1.84	0.242	0.0368	0.082	0.0167	0.119	0.0394	0.142	0.0371	0.381	0.086	0.048	811.84	852.37	905.04	878.71
Diop15SUV026row3grain3 - 1	2015_3	3-3_003	diopside	garnet	G0	0.25-0.5	247500		8330	0.92	0.207	18.11	613	18.71	0.038	3.55	19.17	3.777	20.98	5.08	3.134	3.84	0.593	3.64	0.687	1.88	0.263	1.9	0.288	19.16	384.13			
Diop15SUV026row3grain3 - 2	2015_3	3-3_003_rpt	diopside	garnet	G0	0.25-0.5	247700		7780	0.96	0.155	17.1	537.7	15.42		3.831	20.83	4.041	21.71	5	3.249	3.68	0.552	3.47	0.653	1.817	0.272	1.85	0.277	15.9	387.63			
Diop15SUV026row3grain4 - 1	2015_3	3-3_004	diopside	garnet	G0	0.25-0.5	219200		10.01	0.37	0.361	0.016	0.0169	0.0004		0.413	1.341	0.078	0.075	0.0053	0.0115		0.00063	0.0011		1.18E-07	5.68E-07				317.35			
Diop15SUV026row3grain4 - 2	2015_3	3-3_004_rpt	diopside	garnet	G0	0.25-0.5	220800		1.1	0.42	0.33			0.00084		0.374	0.952	0.0647	0.07	0	0.0139	0.0016				2.89E-07	7.01E-07	0.0006			325.82			
Gar15SUV028row1grain3 - 1	Mount 3	129	garnet	garnet	G9	0.18-0.25	66700	3480	3370	168.8	0.544	19.24	47.2	0.638	-0.104	0.0345	0.42	0.133	1.56	1.12	0.538	2.1	0.408	3.37	0.745	2.37	0.359	2.74	0.422	1.26	1590.33	1712.54	1349.00	1530.77
Gar15SUV028row1grain4 - 1	Mount 3	130	garnet	garnet	G11	0.18-0.25	79100	12240	11860	259	1.658	41.6	173.8	1.085	-0.093	0.122	1.602	0.532	4.79	3.1	1.247	5.01	0.999	7.65	1.631	4.82	0.708	4.92	0.735	4.59	1921.14	2092.40	1488.46	1790.43
Gar15SUV028row2grain10 - 1	2015_1	1-2_010	garnet	garnet	G9	0.5-1.0	48100	1167	1174	30.9	0.754	15.04	69.6	0.36	0.023	0.233	2.14	0.564	4.42	2.75	1.193	3.6	0.543	3.49	0.61	1.68	0.221	1.48	0.208	0.929	893.06	939.98	961.37	950.67
Gar15SUV028row2grain10 - 2	2015_1	1-2_010_rpt	garnet	garnet	G9	0.5-1.0	50000	1222	1224	30.2	0.626	15.09	69.4	0.403		0.261	2.19	0.569	4.39	2.79	1.209	3.71	0.556	3.6	0.639	1.642	0.228	1.459	0.23	1.015	887.20	933.64	957.40	945.52
Gar15SUV028row2grain10 - 3	2015_1	1-2_010_rpt	garnet	garnet	G9	0.5-1.0	51900	1268	1279	30	0.62	15.74	71	0.434		0.26	2.26	0.594	4.48	2.79	1.226	3.81	0.577	3.71	0.661	1.716	0.217	1.54	0.215	0.992	885.52	931.82	956.25	944.04
Gar15SUV028row2grain10 - 4	2015_1	1-2_010_rpt	garnet	garnet	G9	0.5-1.0	46600	1156	1155	30.4	0.725	14.36	66.7	0.381	0.026	0.233	2.132	0.56	4.1	2.66	1.189	3.51	0.529	3.45	0.602	1.576	0.212	1.326	0.199	0.931	888.89	935.46	958.54	947.00
Gar15SUV028row2grain11 - 1	2015_1	1-2-11	garnet	garnet	G9	0.25-0.5	43200	3500	3500	77.1	0.526	14.45	40.8	0.487		0.0401	0.465	0.169	1.6	1.09	0.472	1.85	0.36	2.74	0.521	1.58	0.229	1.48	0.222	0.892	1187.33	1261.50	1143.69	1202.59
Diop15SUV028row3grain5 - 1	2015_3	3-3_005	diopside	garnet	G0	0.25-0.5	255300		1651	8.65	5.63	11.46	43	29.41	4.02	1.325	5.28	1.102	6.93	2.37	0.63	1.93	0.323	2.03	0.395	1.215	0.177	1.213	0.189	0.893	637.56			
Diop15SUV028row3grain5 - 2	2015_3	3-3_005_rpt	diopside	garnet	G0	0.25-0.5	256400		4190	7.48	8.06	17.1	93.8	17.9	10.3	2.97	6.19	0.878	4.47	1.93	0.301	2.31	0.426	3.14	0.659	1.946	0.293	2.11	0.284	2.17	615.35			
Diop15SUV028row3grain6 - 1	2015_3	3-3_006	diopside	garnet	G0	0.25-0.5	251700		2167	5.68	116.3	29	43.1	4.45	6.53	59.8	152	19	71	11.6	3.05	7.73	0.968	5.82	1.013	2.53	0.349	2.05	0.238	0.824	576.10			
Gar15SUV030row2grain12 - 1	2015_1	1-2-12	garnet	garnet	G9	0.25-0.5	46500	7.51	7.5	32.9	0.65	0.478	13.21	0.723		0.45	3.74	0.836	5.18	1.24	0.283	0.514	0.0363	0.134	0.0126	0.049	0.0145	0.167	0.0421	0.167	909.41	957.67	972.36	965.01
Gar15SUV030row2grain12 - 2	2015_1	1-2-12_rpt	garnet	garnet	G9	0.25-0.5	45000	7.76	7.17	32.1	0.434	0.442	9.89	0.708		0.405	2.91	0.592	3.5	0.856	0.215	0.374	0.029	0.106	0.0157	0.051	0.0145	0.15	0.036	0.11	902.94	950.66	968.02	959.34
Gar15SUV051row2grain13 - 1	2015_1	1-2-13	garnet	garnet	G9	0.25-0.5	47100	667	668	58.5	2.99	4.42	9.93	1.869		0.468	3.95	0.823	3.91	0.73	0.206	0.776	0.114	0.812	0.178	0.555	0.0933	0.669	0.119	0.218	1083.94	1147.79	1083.20	1115.50
Gar15SUV051row2grain13 - 2	2015_1	1-2-13_rpt	garnet	garnet	G9	0.25-0.5	47000	664	671	60.6	2.98	4.55	10.16	1.908		0.441	4.04	0.871	4.4	0.826	0.209	0.719	0.116	0.887	0.184	0.544	0.085	0.751	0.115	0.288	1096.32	1161.37	1090.64	1126.00
Gar15SUV051row3grain6 - 1	2015_1	1-3_006	andradite	garnet	G0	0.25-0.5	256500	29300	29100	0.49	2.173	175.8	483	6.12		5.86	49.1	11.62	77	27.3	8.56	31.4	4.96	33.4	6.58	18.06	2.66	17.16	2.45	16.87	336.45			
Gar15SUV051row3grain7 - 1	2015_1	1-3_007	andradite	garnet	G0	0.25-0.5	273000	88100	87800	5.07	2.86	58	123.5	45.9	0.057	7.2	31.9	6.35	40	14.84	4.18	16.25	2.38	14.62	2.55	5.9	0.702	3.57	0.433	7.57	560.90			
Gar15SUV052row5grain7 - 1	2015_1	1-5_007	almandine	garnet	G0	0.5-1.0	8630	30.8	29.7		0.149	1193	14.28	0.0075	0.0011	0.00063	0.0026	0.003	0.102	0.94	0.054	15.9	9.45	129.3	41.5	173	34.9	285	45.4	0.437				
Gar15SUV052row5grain7 - 2	2015_1	1-5_007_rpt	almandine	garnet	G0	0.5-1.0	8550	35.4	35.8		0.117	1229	27.3	0.0154	0.0023		0.0027	0.0035	0.134	1.27	0.059	20.1	11	142	41.6	164.5	31.4	250	37.5	0.842				
Gar15SUV052row5grain8 - 1	2015_1	1-5_008	almandine	garnet	G0	0.5-1.0	32000	340	337		0.177	2036	11.42	0.0054	0.002	0.0088	0.233	0.205	4.88	11.43	0.147	50.7	18.22	228	71.7	293	54.9	431	65	0.275				
Gar15SUV052row5grain8 - 2	2015_1	1-5_008_rpt	almandine	garnet	G0	0.5-1.0	32700	302	299		0.171	1774	8.24	0.0076		0.0144	0.286	0.213	4.14	9.9	0.161	46.6	16.53	202	64.6	265	48.9	380	58.4	0.237				
Gar15SUV052row5grain8 - 3	2015_1	1-5_008_rpt	almandine	garnet	G0	0.5-1.0	31300	328	329		0.183	1993	10.21	0.0058	0.0078	0.0102	0.261	0.215	4.52	11.15	0.136	49.6	17.75	221	71.1	291	54.6	426	64.6	0.272				
Gar15SUV052row5grain9 - 1	2015_1	1-5_009	almandine	garnet	G0	0.5-1.0	7190	140.9	136.9	1.6		256	7.68		0.013	0.00032	0.0079	0.01	0.439	1.75	0.0547	5.2	2.09	29	8.77	27.6	3.32	17.59	2	0.199	432.63			
Gar15SUV052row5grain9 - 2	2015_1	1-5_009_rpt	almandine	garnet	G0	0.5-1.0	7020	122.7	123.9	1.39		137.2	4.44		0.0035		0.0244	0.0253	0.619	1.17	0.0489	4.65	2.05	23.7	5.08	11.39	1.147	6.41	0.853	0.134	419.64			
Gar15SUV052row5grain9 - 3	2015_1	1-5_009_rpt	almandine	garnet	G0	0.5-1.0	6470	131	131.5	0.79		52.5	5.95	0.00109			0.0249	0.0343	0.841	1.82	0.0551	7.2	2.241	14.82	1.92	3.45	0.354	1.95	0.282	0.145	371.93			
Gar15SUV053row5grain10 - 1	2015_1	1-5_010	almandine	garnet	G0	0.25-0.5	48600	322	320		0.0237	247	10.66	0.0048		0.0139	0.214	0.143	2.85	5.1	1.7	16.2	3.82	35.3	9.14	34.5	5.93	47.5	7.98	0.177				
Gar15SUV053row5grain10 - 2	2015_1	1-5_010_rpt	almandine	garnet	G0	0.25-0.5	52200	386	382		0.0213	238	12.67	0.0063		0.0163	0.315	0.196	3.21	5.54	1.76	17.1	4.07	36.3	8.85	30.7	4.86	38.3	6.29	0.217				
Gar15SUV053row5grain11 - 1	2015_1	1-5_011	almandine	garnet	G0	0.25-0.5	10280	82	82			780	3.1	0.0022		0.0095	0.274	0.213	4.03	12.62	0.138	76.1	25.1	199	28.8	51.1	4.74	24.4	2.6	0.123				
Gar15SUV053row5grain11 - 2	2015_1	1-5_011_rpt	almandine	garnet	G0	0.25-0.5	9770	83.2	83			652	3.44	0.0046		0.0056	0.262	0.207	4.14	13.65	0.115	79.2	24.5	180.5	24.4	40.7	3.71	18.38	1.901	0.094				
Gar16SUV015row1grain6 - 1	Mount 1	226	garnet	garnet	G9	0.25-0.5	35800	447	471	73.2	0.116	2.73	6.81	0.609	-0.003	0.0584	0.358	0.0686	0.446	0.13	0.0392	0.132	0.0323	0.348	0.0967	0.362	0.0684	0.625	0.1026	0.158	1166.71	1238.75	1131.90	1185.33
Gar16SUV023row1grain1 - 1	Mount 1	missing	GO	missing EPMA		0.25-0.5	27320	2921	2993	99.3	0.49	9.02	32.8	0.3	0.001	0.0288	0.319	0.102	0.986	0.653	0.275	1.081	0.203	1.623	0.347	1.012	0.157	1.165	0.174	0.84	1296.98			
Gar16SUV023row1grain10 - 1	Mount 3	136	garnet	garnet	G9	0.18-0.25	76200	1058	1044	184.4	0.408	7.35	3.37	1.084	0.078	0.1	0.92	0.236	1.58	0.359	0.089	0.286	0.077	0.853	0.279	1.021	0.21	1.84	0.363	0.085	1650.20	1780.63	1375.95	1578.29
Gar16SUV023row1grain11 - 1	Mount 3	137	garnet	garnet	G9	0.18-0.25	73800	3110	3100	107.5	1.27	15.81	65.3	0.97	5.1	0.115	1.098	0.404	4.13	2.75	1.108	3.53	0.526	3.33	0.667	1.79	0.245	1.77	0.267	1.39	1334.84	1425.12	1224.07	1324.59
Gar16SUV023row1grain12 - 1	Mount 3	138	garnet	garnet	G10	0.18-0.25	58600	56.2	58.2	31.8	13.17	1.709	114.5	0.266	0.201	0.6	11.28	3.84	27.8	8.1	1.836	3.93	0.244	0.752	0.0662	0.125	0.0176	0.201	0.064	3.35	900.49	948.01	966.38	957.19
Gar16SUV023row1grain13 - 1	Mount 3	139	garnet	garnet	G1	0.18-0.25	74300	7600	7790	130.7	0.791	24.33	78.3	0.672	0.247	0.059	0.628	0.227	2.25	1.47	0.704	2.82	0.562	4.57	1.045	3.16	0.49	3.45	0.54	2.16	1436.34			
Gar16SUV023row1grain14 - 1	Mount 3	140	garnet	garnet	G10	0.18-0.25	38100	35	26.1	59.9	1.69	0.115	0.88	0.184	0.08	1.21	2.85	0.213	0.89	0.185	0.031	0.012	0.006	0.017	0.0007	0.018	0.011	0.193	0.069	0.015	1092.22	1156.86	1088.18	1122.52
Gar16SUV023row1grain2 - 1	Mount 1	222	GO	garnet	G1	0.25-0.5	35200	4080	4200	79	0.525	14.08	48.4	0.374	0	0.0449	0.445	0.145	1.457	0.971	0.454	1.63	0.325	2.46	0.579	1.78	0.265	1.825	0.276	1.314	1197.21			
Gar16SUV023row1grain3 - 1	Mount 1	223	GO	garnet	G4	0.25-0.5	28000	1435	1492	89.8	0.241	14.13	14.28	0.196	0.001	0.0121	0.179	0.069	0.671	0.435	0.199	0.95	0.223	2.04	0.557	1.845	0.291	2.11	0.307	0.403	1251.49			
Gar16SUV023row1grain6 - 1	Mount 3	132	garnet	garnet	G9	0.18-0.25	100500	714	688	41.4	0.859	4.3	27.9	0.515	-0.076	0.16	2.087	0.857	7.8	2.33	0.664	1.56	0.158	0.719	0.158	0.493	0.107	1.038	0.202	0.565	973.42	1027.13	1014.37	1020.75
Gar16SUV023row1grain7 - 1	Mount 3	133	garnet	garnet	G1	0.18-0.25	62800	6120	5840	118.1	0.599	40.9	75.2	0.512	-0.08	0.0267	0.383	0.166	1.81	1.89	0.995	4.79	1.088	8.29	1.635	4.42	0.621	3.94	0.561	1.77	1382.13			
Gar16SUV023row1grain8 - 1	Mount 3	134	garnet	garnet	G9	0.18-0.25	75700	2548	2449	110.8	1.326	15.24	69.4	1.059	-0.044	0.098	1.435	0.581	6.05	3.59	1.301	3.9	0.566	3.38	0.583	1.5	0.217	1.554	0.252	1.294	1349.75	1441.76	1231.83	1336.79
Gar16SUV023row1grain9 - 1	Mount 3	135	garnet	garnet	G9	0.18-0.25	93000	3350	3270	145.8	1.246	7.1	51.4	1.454	0.024	0.137	1.495	0.506	4.88	2.79	0.985	2.61	0.334	1.71	0.278	0.63	0.0874	0.641	0.141	1.31	1498.93	1609.13	1306.21	1457.67
Gar16SUV023row2grain1 - 1	Mount 1	227	garnet	garnet	G10	0.25-0.5	33300	760	764	70.2	0.566	2.37	29.6	0.603	0.012	0.0451	0.569	0.195	1.877	1.176	0.406	1.264	0.157	0.775	0.0958	0.174	0.0215	0.218	0.0616	0.674	1150.50	1220.89	1122.55	1171.72

Gar16SUV023row2grain1 - 1	Mount 3	141	garnet	garnet	G9	0.18-0.25	64200	722	753	95.3	0.623	10.63	15.32	2.47	-0.045	0.131	1.505	0.395	2.98	0.95	0.317	1.02	0.164	1.341	0.39	1.48	0.266	2.17	0.38	0.261	1278.06	1361.94	1193.90	1277.92
Gar16SUV023row2grain10 - 1	Mount 1	236	garnet	garnet	G10	0.25-0.5	39000	17.19	18.5	26.7	3.27	0.388	2.28	0.509	29.5	2.43	6.58	0.847	3.32	0.438	0.089	0.256	0.0218	0.116	0.0188	0.0454	0.0079	0.109	0.0296	0.04	856.69	900.69	936.50	918.59
Gar16SUV023row2grain10 - 1	Mount 3	150	garnet	garnet	G9	0.18-0.25	84800	4710	5050	111.6	1.614	53.2	115.1	1.116	0.099	0.098	1.39	0.558	5.81	4.19	1.95	7.88	1.606	10.96	2.142	5.08	0.645	3.58	0.48	2.37	1353.33	1445.76	1233.69	1339.73
Gar16SUV023row2grain11 - 1	Mount 1	237	garnet	garnet	G12	0.25-0.5	56700	83.5	85.8	25.42	1.036	0.916	13.59	2.79	0.014	0.766	4.71	0.924	4.8	1.03	0.259	0.43	0.0406	0.168	0.0336	0.122	0.0252	0.29	0.072	0.138	844.96	888.04	928.36	908.20
Gar16SUV023row2grain11 - 1	Mount 3	151	garnet	garnet	G9	0.18-0.25	64500	3450	3710	120.8	0.945	38.5	116.2	0.528	0.016	0.0307	0.587	0.256	3.18	2.66	1.345	5.25	1.019	7.12	1.524	4.18	0.611	3.87	0.568	2.59	1393.92	1491.14	1254.48	1372.81
Gar16SUV023row2grain12 - 1	Mount 1	238	garnet	garnet	G11	0.25-0.5	37500	2862	2909	78.3	0.617	5.46	94.3	0.374	-0.005	0.0315	0.427	0.184	2.34	1.89	0.645	1.93	0.211	1.209	0.211	0.589	0.0955	0.688	0.1154	2.324	1193.58	1268.40	1147.23	1207.81
Gar16SUV023row2grain12 - 1	Mount 3	152	garnet	garnet	G9	0.18-0.25	91500	2060	2160	91.8	1.45	17.4	43.4	2.02	0.28	0.293	3.15	0.886	8.2	3.19	1.19	3.43	0.514	3.1	0.69	2.1	0.326	2.87	0.416	0.79	1261.23	1343.26	1184.78	1264.02
Gar16SUV023row2grain13 - 1	Mount 1	239	garnet	garnet	G9	0.25-0.5	42500	1879	1963	61.7	0.948	3.66	35.3	0.632	0.012	0.0588	0.899	0.395	4.11	1.74	0.548	1.36	0.163	0.856	0.1401	0.369	0.049	0.393	0.0788	0.887	1102.73	1168.39	1094.47	1131.43
Gar16SUV023row2grain13 - 1	Mount 3	153	garnet	garnet	G11	0.18-0.25	69100	4570	4860	148.2	0.607	37.4	73.2	0.605	0.054	0.0428	0.536	0.153	2.11	2.38	0.828	3.1	0.686	6.02	1.494	4.87	0.769	5.69	0.887	1.93	1508.67	1620.12	1310.87	1465.50
Gar16SUV023row2grain14 - 1	Mount 3	154	garnet	garnet	G9	0.18-0.25	61300	740	775	143.6	0.356	12.86	19.87	0.68	0.032	0.0255	0.434	0.192	1.77	0.713	0.254	0.86	0.181	1.72	0.474	1.76	0.319	2.39	0.439	0.317	1489.95	1599.01	1301.90	1450.46
Gar16SUV023row2grain2 - 1	Mount 1	228	garnet	garnet	G11	0.25-0.5	41900	3000	3050	56.5	0.742	13.74	44.6	0.51	1.85	0.209	1.2	0.21	1.96	1.212	0.593	2.09	0.384	2.74	0.529	1.412	0.201	1.31	0.198	1.003	1071.94	1134.64	1075.95	1105.30
Gar16SUV023row2grain2 - 1	Mount 3	142	garnet	garnet	G9	0.18-0.25	72900	4050	4170	181.2	0.775	18.23	69.7	0.692	0.027	0.064	0.77	0.27	2.48	1.5	0.631	2.26	0.4	3.07	0.693	2.23	0.379	2.55	0.428	1.437	1638.04	1766.78	1370.54	1568.66
Gar16SUV023row2grain3 - 1	Mount 1	229	garnet	garnet	G11	0.25-0.5	51000	3760	3810	58	0.48	14.4	42.4	0.426	-0.001	0.0287	0.345	0.136	1.434	1.03	0.487	1.85	0.353	2.71	0.563	1.563	0.226	1.428	0.203	1.018	1080.96	1144.52	1081.41	1112.96
Gar16SUV023row2grain3 - 1	Mount 3	143	garnet	garnet	G9	0.18-0.25	67100	586	602	89.7	1.238	21.16	108	1.339	0.168	0.138	1.505	0.55	6.01	4.76	2.02	6.41	0.949	5.04	0.834	1.99	0.308	2.37	0.439	1.68	1251.00	1331.92	1179.19	1255.56
Gar16SUV023row2grain4 - 1	Mount 1	230	garnet	garnet	G9	0.25-0.5	47500	1951	1954	58.4	0.747	5.05	16.17	0.747	0.027	0.0708	0.854	0.346	3.29	1.023	0.305	0.893	0.1456	0.907	0.191	0.548	0.0825	0.735	0.132	0.543	1083.34	1147.14	1082.84	1114.99
Gar16SUV023row2grain4 - 1	Mount 3	144	garnet	garnet	G10	0.18-0.25	48000	64.1	66.8	71.7	8.87	18.03	49.8	1.014	0.163	0.963	9.91	2.3	11.65	3.12	1.216	4.1	0.576	3.5	0.695	2.08	0.326	2.79	0.553	0.838	1158.64	1229.86	1127.26	1178.56
Gar16SUV023row2grain5 - 1	Mount 1	231	garnet	garnet	G9	0.25-0.5	36800	1930	1940	76.2	2.39	2.25	25.3	3.36	23.9	1.39	4.17	0.532	3.3	1.311	0.419	1.209	0.126	0.613	0.0849	0.225	0.0362	0.324	0.0616	0.571	1182.62	1256.29	1141.00	1198.65
Gar16SUV023row2grain5 - 1	Mount 3	145	garnet	garnet	G10D	0.18-0.25	47000	36.6	41.7	85.4	9.83	0.255	1.95	0.619	-0.084	3.03	12.92	1.308	3.9	0.296	0.062	0.092	0.0083	0.041	0.0085	0.046	0.0107	0.172	0.064	0.025	1229.74	1308.37	1167.48	1237.92
Gar16SUV023row2grain6 - 1	Mount 1	232	garnet	garnet	G9	0.25-0.5	40300	2279	2286	62.5	0.735	4.05	45.3	0.593	0.024	0.0582	0.63	0.212	2.02	1.484	0.631	2.13	0.282	1.423	0.16	0.295	0.0342	0.369	0.0878	1.224	1107.35	1173.47	1097.22	1135.34
Gar16SUV023row2grain6 - 1	Mount 3	146	garnet	garnet	G12	0.18-0.25	101100	89.4	90	36.4	5.44	0.98	4.63	0.683	-0.077	0.477	4.48	1.553	15.02	2.83	0.556	0.694	0.0577	0.228	0.0286	0.078	0.0199	0.203	0.07	0.091	936.74	987.29	990.50	988.89
Gar16SUV023row2grain7 - 1	Mount 1	233	garnet	garnet	G10	0.25-0.5	11120	12.3	11.48	22.66	18.63	0.448	1.43	0.089	0.135	0.226	4.08	0.916	4.77	0.846	0.214	0.329	0.0276	0.113	0.0199	0.076	0.026	0.338	0.1005	0.027	818.46	859.49	909.74	884.61
Gar16SUV023row2grain7 - 1	Mount 3	147	garnet	garnet	G9	0.18-0.25	74000	4710	4940	160.8	0.728	20.93	58.7	0.704	-0.036	0.0478	0.578	0.186	2.12	1.57	0.723	2.69	0.52	3.85	0.816	2.36	0.409	2.84	0.444	1.52	1559.01	1677.03	1334.56	1505.79
Gar16SUV023row2grain8 - 1	Mount 1	234	garnet	garnet	G1	0.25-0.5	33100	3610	3640	111.3	0.699	10.3	50.7	0.46	0.2	0.0639	0.54	0.169	1.552	0.919	0.418	1.525	0.28	2.05	0.418	1.181	0.165	1.137	0.18	1.207	1351.99			
Gar16SUV023row2grain8 - 1	Mount 3	148	garnet	garnet	G9	0.18-0.25	73700	1745	1826	104.4	1.218	25.5	89.8	1.161	0.092	0.112	1.401	0.526	5.69	3.64	1.453	4.17	0.587	4.12	0.951	3.21	0.511	3.85	0.61	1.345	1320.66	1409.33	1216.62	1312.98
Gar16SUV023row2grain9 - 1	Mount 1	235	garnet	garnet	G9	0.25-0.5	45000	1690	1712	79.7	0.628	2.16	17.06	0.571	0.81	0.0806	0.671	0.197	1.88	0.935	0.314	0.829	0.0978	0.493	0.0761	0.209	0.0368	0.303	0.0637	0.356	1200.82	1276.39	1151.32	1213.86
Gar16SUV023row2grain9 - 1	Mount 3	149	garnet	garnet	G11	0.18-0.25	74100	5190	5560	145.5	1.047	27	76.2	0.819	0.081	0.0592	0.74	0.266	2.64	1.88	0.919	3.75	0.773	5.51	1.073	2.77	0.36	2.24	0.339	1.93	1497.71	1607.75	1305.63	1456.69
Gar16SUV023row3grain1 - 1	Mount 1	240	garnet	garnet	G9	0.25-0.5	42200	205.4	212.4	46.6	0.023	4.77	2.95	0.577	0.008	0.0487	0.313	0.0637	0.434	0.186	0.066	0.217	0.0506	0.579	0.181	0.681	0.138	1.106	0.173	0.044	1009.15	1066.05	1037.13	1051.59
Gar16SUV023row3grain2 - 1	Mount 1	241	garnet	garnet	G9	0.25-0.5	49900	2540	2640	80.8	0.972	7.31	34	0.922	-0.004	0.0937	1.031	0.345	3.23	1.78	0.697	2.11	0.302	1.82	0.291	0.653	0.0736	0.461	0.0808	0.799	1206.47	1282.64	1154.49	1218.56
Gar16SUV023row3grain2 - 1	Mount 3	157	almandine	garnet	G4	0.18-0.25	49000	356	367	0.22	0.052	686	20.9	0.0106	-0.016	0.0231	0.75	0.625	12.8	27.8	0.717	77	16.54	124.7	26.6	78.5	12.01	82.8	12.09	0.417	284.98			
Gar16SUV023row3grain3 - 1	Mount 1	242	garnet	garnet	G9	0.25-0.5	42800	1309	1349	65.7	0.659	3.8	27.9	0.756	0.059	0.0614	0.737	0.264	2.42	1.146	0.373	0.97	0.132	0.804	0.146	0.413	0.0619	0.489	0.0849	0.782	1125.57	1193.48	1107.99	1150.73
Gar16SUV023row3grain4 - 1	Mount 1	243	garnet	garnet	G9	0.25-0.5	43900	1827	1876	47.4	1.125	14.55	52.9	0.993	-0.007	0.0739	1.08	0.421	4.46	3.02	1.206	3.71	0.567	3.2	0.545	1.277	0.163	0.984	0.148	0.974	1014.46	1071.84	1040.47	1056.15
Gar16SUV023row3grain4 - 1	Mount 3	159	grossular	garnet	G9	0.18-0.25	462000	3460	3490	0.82	0.576	112.6	30.3	10.29	-0.001	0.0258	0.666	0.428	6.67	7.51	1.403	14.3	2.82	19.26	3.59	10.02	1.466	9.76	1.236	1.59	374.88			
Gar16SUV023row3grain5 - 1	Mount 1	244	garnet	garnet	G9	0.25-0.5	32000	829	858	59.6	0.219	9.03	8.89	0.413	0.052	0.0322	0.299	0.0923	0.703	0.377	0.187	0.649	0.156	1.371	0.35	1.099	0.196	1.359	0.224	0.203	1090.45	1154.93	1087.12	1121.02
Gar16SUV023row4grain1 - 1	Mount 1	254	almandine	garnet	G3	0.25-0.5	49000	958	946	0.97	0.028	125.2	30.6	0.0029	0.029	0.0237	0.379	0.216	3.27	3.56	1.594	9.12	2.263	20.4	5.1	15.28	2.222	14.29	2.007	0.316	388.48			
Gar16SUV023row4grain2 - 1	Mount 1	255	almandine	garnet	G3	0.25-0.5	43600	360	358	3.05	0.018	111.7	15.98	0.0007	0.036	0.0035	0.114	0.0898	1.8	3.29	1.083	9.23	2.13	17.38	4.09	12.64	1.944	13.03	1.898	0.232	499.06			
Hercy16SUV023row7grai5 - 1	Mount 1	1_7_5	hercynite	andradite	G0	0.25-0.5	229200	19020	18930	2.22	35.33	8.673	105.45	160.52	-0.012	23.78	146.2	28.01	128.9	14.28	2.953	6.206	0.506	1.934	0.2572	0.525	0.0627	0.376	0.0657	1.436	464.86			
Gar16SUV025row3grain6 - 1	Mount 1	245	garnet	garnet	G10D	0.25-0.5	26500	76	75.9	38.8	2.38	0.926	5.08	0.426	-0.005	0.69	4.96	0.849	4.31	0.666	0.154	0.324	0.0353	0.164	0.0339	0.1	0.02	0.161	0.0398	0.105	954.66	1006.74	1002.23	1004.49
Gar16SUV025row3grain7 - 1	Mount 1	246	garnet	garnet	G9	0.25-0.5	38900	288	285	42.5	0.277	5.33	16.3	0.579	0.004	0.0564	0.772	0.27	2.27	0.93	0.303	0.85	0.1251	0.854	0.195	0.67	0.1114	0.91	0.176	0.17	981.16	1035.56	1019.35	1027.45
Gar16SUV027row3grain11 - 1	Mount 1	251	andradite	andradite	G0	0.5-1.0	236700	16380	16070	2.14	1.203	61.1	312.3	6.17	0.001	6.35	38.9	7.09	37.2	9.61	4.4	10.13	1.628	11.02	2.34	7.12	1.072	7.2	1.062	7.43	461.10			
Gar16SUV027row3grain12 - 1	Mount 1	252	andradite	andradite	G0	0.25-0.5	242300	30000	29730	4.79	1.38	34.85	96.5	7.56	0.007	1.401	8.86	2.151	15.28	5.73	1.89	6.62	1.045	7.01	1.397	3.95	0.548	3.41	0.453	0.955	553.50			
Chr16SUV027row5grain10 - 1	Mount 2	155	chromite	andradite	G0	0.25-0.5	224100	34270	34340	9.5	23.43	16.58	238	262.4	4.4	28.16	178.4	31.16	135.7	18.34	4.606	10.98	1.102	4.899	0.679	1.449	0.1645	0.971	0.1627	9.22	652.49			
Gar16SUV028row1grain4 - 1	Mount 1	224	GO	garnet	G3	0.5-1.0	42100	843	902	1.11	0.025	52	18.18	0.0006	0.039	0.002	0.0265	0.0281	0.817	1.68	0.576	4.91	1.068	8.8	2.02	6.35	0.952	6.58	0.907	0.248	399.82			
Gar16SUV028row1grain5 - 1	Mount 1	225	GO	garnet	G1	0.25-0.5	34400	3790	3940	101.2	0.384	19.38	52.2	0.146	0.001	0.0273	0.317	0.123	1.155	0.925	0.461	1.91	0.393	3.32	0.786	2.62	0.405	2.84	0.417	1.441	1305.86			
Gar16SUV028row3grain13 - 1	Mount 1	253	andradite	andradite	G0	0.25-0.5	249800	2.32	0.38	1.99	0.032	6.4	0.0118	0.0004	0.015	12.18	47.7	6.44	24.6	3.61	1.51	2.82	0.27	1.25	0.188	0.39	0.038	0.158	0.0082	0.0006	453.77			
Gar16SUV028row3grain8 - 1	Mount 1	248	garnet	garnet	G9	0.5-1.0	43900	2235	2226	76.7	0.805	7.34	35.8	0.658	0.081	0.106	0.732	0.234	2.169	1.435	0.574	1.94	0.287	1.737	0.283	0.695	0.085	0.546	0.0811	0.849	1185.24	1259.19	1142.50	1200.84
Gar16SUV028row3grain9 - 1	Mount 1	249	garnet	garnet	G10	0.25-0.5	32200	42.9	42.7	22.99	0.69	1.011	8.67	0.263	-0.015	0.244	2.74	0.833	6.35	1.61	0.38	0.814	0.0664	0.264	0.0357	0.137	0.0359	0.453	0.108	0.141	821.72	863.00	912.05	887.53
Gar16SUV028row4grain3 - 1	Mount 1	256	almandine	garnet	G0	0.5-1.0	7570	291	287	24.5	0.005	4.3	46.4	0.0039	0.012	0.0119	0.49	0.331	5.11	4.43	0.912	2.54	0.259	1.17	0.161	0.404	0.0544	0.359	0.0531	1.059	836.32			
Gar16SUV028row4grain4 - 1	Mount 1	257	almandine	garnet	G0	0.5-1.0	29200	88.2	86.7	0.62	0.014	48.5	8.26	0.0029	0.035	0.0016	0.091	0.1134	3.21	5.33	1.569	8.04	1.306	8.57	1.627	4.7	0.71	4.79	0.675	0.123	353.43			
Gar16SUV028row4grain5 - 1	Mount 1	258	almandine	garnet	G3	0.5-1.0	65100	804	806	3.01	0.014	75.6	13.68	-0.0008	0.002	0.0014	0.0222	0.0415	1.096	2.13	0.913	4.46	1.258	12.13	2.83	8.36	1.133	7.11	0.917	0.18	497.57			
Gar16SUV028row4grain6 - 1	Mount 1	259	almandine	garnet	G4	0.25-0.5	35300	263	267	11.09	0.03	39.5	17.45	0.0678	0.003	0.0736	0.998	0.1058	0.509	1.123	0.606	4.03	0.954	7.16	1.543	4.41	0.619	4.05	0.609	0.268	678.24			
Diop16SUV028row6grain3 - 1	Mount 1	276	diopside	garnet	G0	0.25-0.5	1021	37	0.85	0.27	9.65	0.054	21.49	0.15	3.66	0.1	0.332	0.11	0.685	0.0095	0.0253	0.016									297.30			
Gar16SUV030row3grain10 - 1	Mount 1	250	garnet	garnet	G9	0.5-1.0	38500	2106	2108	67.2	2.5	4.61	30	0.471	7.1	1.98	3.9	0.384	2.09	1.212	0.47	1.54	0.229	1.156	0.185	0.417	0.0578	0.444	0.0773	0.719	1133.96	1202.71	1112.92	1157.81

[1]Garnet Classification: Grütter et al. 2004

[2]GO = eclogitic garnet

[3] °C (Ni-in-Garnet); Ryan et al. 1996; =1000/(1.506-0.189*(LN(Ni ppm)))-273

[4] °C (Ni-in-Garnet); Griffin_et_al.,1989; =1000/((-0.435*((LOG((Ni ppm)/30))+0.83))-273

[5] °C (Ni-in-Garnet); Canil, 1999; =(8772/(2.53-(LN((Ni(grt)/Ni(ol)))))-273.15

[6] °C (Ni-in-Garnet); average of methods 4 and 5

Shading identifies duplicate analyses on a single grain

APPENDIX 7B

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); Spinel-CHROMITE

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Grain Size	Note	Si	Ca	Ti_47	Ti_m49	Cr_m52	Cr_m53	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Chr15SUV015row5grain1 - 1	Mount3	181	chromite	chromite	0.18-0.25		1039	-10	24730	24210	264400	278200	824	0.05	0.0046	4.29	1.826	0.024	0.0004	-7.10E-06	0.00021	-2.33E-05	-3.19E-06	0.0019	-0.000675	-1.18E-06	-1.13E-05	-2.45E-06	-1.84E-06	0.0008	0.0073	0.003	0.85
Chr15SUV018row5grain2 - 1	Mount3	182	chromite	chromite	0.18-0.25	Very pitted	1687	84	2403	2331	469000	492000	1685	0.191	0.165	1.571	0.48	0.244	0.0496	0.125	0.0182	0.13	0.011	0.0191	0.051	0.0049	0.034	0.0068	0.019	0.0024	0.0036	0.0015	0.021
Chr15SUV018row5grain3 - 1	Mount3	183	chromite	chromite	0.18-0.25		1581	-9	6650	6780	141200	148000	2130	0.018	0.0012	0.517	0.211	-0.002	-4.41E-05	-1.60E-05	-4.10E-06	-4.98E-05	-7.69E-06	0.0009	-0.001249	-2.82E-06	-2.55E-05	-5.21E-06	-4.47E-06	-2.85E-05	-0.0001653	-0.0001029	0.016
Chr15SUV018row5grain4 - 1	Mount3	184	chromite	chromite	0.18-0.25		1950	-75	1200	1200	156300	166300	3297	-0.011	-0.0004	0.202	0.121	-0.006	-4.58E-05	-1.68E-05	-4.40E-06	-5.06E-05	-8.35E-06	0.0009	-0.001152	-3.08E-06	-2.67E-05	-5.28E-06	-4.91E-06	-2.94E-05	-0.000171	0.0045	0.023
Chr15SUV018row5grain5 - 1	Mount3	185	chromite	chromite	0.18-0.25		1104	29	6900	6990	284500	299100	1248	0.011	0.0024	1.67	0.289	-0.009	-3.00E-05	0.0019	0.0013	-3.33E-05	0.0022	-0.0001504	0.0021	-2.15E-06	-1.85E-05	-3.53E-06	-3.52E-06	-1.96E-05	0.003	-7.15E-05	0.039
Chr15SUV019row5grain6 - 1	Mount3	186	chromite	chromite	0.18-0.25		938	-22	12420	12470	284000	301900	2135	0.028	0.027	5.03	0.441	0.002	-2.80E-05	0.0019	-2.77E-06	0.0018	-5.55E-06	-0.0001362	0.0076	-2.10E-06	-1.73E-05	-3.17E-06	-3.35E-06	0.00038	0.003	-6.51E-05	0.279
Chr15SUV019row5grain7 - 1	Mount3	187	chromite	chromite	0.18-0.25		1130	71	11920	11990	274400	286400	1086	0.028	0.0044	2.95	0.592	0.021	-2.26E-05	-8.87E-06	-2.42E-06	-2.32E-05	-5.45E-06	0.0028	0.0035	-2.10E-06	-1.52E-05	-2.37E-06	-3.43E-06	-1.40E-05	0.008	-5.31E-05	0.086
Chr15SUV019row5grain8 - 1	Mount3	188	chromite	chromite	0.18-0.25		973	83	288.4	288.4	430600	458800	115.6	0.0219	0.0039	0.293	0.311	0.006	0.0047	0.0037	0.00129	-1.57E-05	-3.84E-06	0.0029	0.0073	-1.49E-06	0.0011	-1.59E-06	0.0008	0.001	0.0098	0.0009	0.027
Chr15SUV019row5grain9 - 1	Mount3	189	chromite	chromite	0.18-0.25		1296	139	13080	13150	297600	308000	1753	0.023	0.0136	1.6	0.348	-0.007	-2.43E-05	0.0017	-2.75E-06	-2.44E-05	-6.31E-06	0.004	0.0001403	-2.45E-06	0.006	-2.51E-06	-4.09E-06	0.0076	0.082	0.003	0.04
Chr15SUV028row5grain10 - 1	Mount3	190	chromite	chromite	0.18-0.25		1221	79	3980	3910	252400	255000	1639	0.01	0.0035	0.464	0.268	0.027	-2.58E-05	-1.04E-05	-2.89E-06	-2.53E-05	-6.91E-06	-0.0001173	0.0002134	-2.69E-06	-1.80E-05	-2.55E-06	-4.42E-06	-1.55E-05	-9.41E-05	0.01	0.18
Chr15SUV028row5grain11 - 1	Mount3	191	chromite	chromite	0.18-0.25		829	130	12010	12030	301400	319100	1789	0.018	0.0162	6.52	1.11	-0.013	0.0041	0.0108	0.0009	0.01	-6.00E-06	0.0004	0.0002196	-2.36E-06	0.0092	-2.11E-06	-3.86E-06	-1.30E-05	0.007	0.0028	0.434
Chr15SUV028row5grain12 - 1	Mount3	192	chromite	chromite	0.18-0.25		1046	58	2565	2578	286500	299900	1909	0.011	0.0031	0.601	0.221	0.009	0.00063	-8.26E-06	0.0012	0.0081	-5.80E-06	0.0008	0.0002358	-2.26E-06	-1.44E-05	-1.90E-06	-3.76E-06	0.002	0.015	0.0036	0.055
Chr15SUV030row5grain13 - 1	Mount3	193	chromite	chromite	0.18-0.25		1140	7	8804	8781	281500	296300	1700	0.028	0.0047	0.844	0.272	0.002	-2.22E-05	-9.64E-06	-2.80E-06	-1.91E-05	-7.52E-06	-9.44E-05	0.0001733	-2.96E-06	-1.70E-05	-1.85E-06	-5.13E-06	-1.29E-05	0.013	0.0032	0.008
Chr15SUV030row5grain14 - 1	Mount3	194	chromite	chromite	0.18-0.25		1100	56	8407	8543	306400	319500	1516	0.015	0.0061	1.162	0.362	0.014	-2.25E-05	0.004	-2.87E-06	0.0044	-7.90E-06	-9.51E-05	0.013	-3.11E-06	-1.74E-05	-1.82E-06	-5.35E-06	0.002	0.011	0.0008	0.12
Chr16SUV013row3grain1 - 1	Mount 2	127	chromite	chromite	0.25-0.5		1940	440	640	661	272600	363000	247.9	0.29	0.0214	0.87	0.68	0.81	0.022	0.048	0.0072	0.033	0.009	0.0006	-0.0007	0.00039	0.0019	0.00096	0.0028	0.00185	0.0033	0.0022	0.0109
Chr16SUV013row3grain2 - 1	Mount 2	128	chromite	chromite	0.25-0.5		1412	266	9750	9690	223900	282200	1798	0.046	0.0092	1.267	0.71	0.014	0.00115	0.0031	0.00085	0.0039	0.0005	0.0019	0.0001	-0.00027	0.0019	9.00E-05	0.0011	0.00081	-0.0023	0.0013	0.0362
Chr16SUV014row3grain3 - 1	Mount 2	129	chromite	chromite	0.25-0.5		1137	187	8360	8310	288400	357400	1409	0.062	0.008	1.705	0.978	0.027	0.00176	0.0035	0.00118	0.0063	0.0036	0.0036	0.0011	8.00E-05	0.0024	0.00059	0.0014	0.00082	0.0021	0.00045	0.0697
Chr16SUV014row3grain4 - 1	Mount 2	130	chromite	chromite	0.25-0.5		1450	147	21370	21250	332900	346800	2056	0.224	0.0179	9.81	2.135	0.004	0.0034	0.0051	0.00162	0.0084	0.0019	0.0032	0.0036	0.00086	0.0049	0.00137	0.0026	0.00053	0.0007	0.00109	0.5
Chr16SUV018row3grain6 - 1	Mount 2	131	chromite	chromite	0.25-0.5		1136	193	904	906	263800	272500	1348	0.0221	0.0069	0.493	0.558	0.002	0.0005	0.00075	0.00079	0.0032	0.0013	0.0025	0.0044	-1.00E-05	-1.37E-05	0.00061	0.0023	0.00062	0.0026	0.00057	0.0065
Chr16SUV018row3grain8 - 1	Mount 2	132	chromite	chromite	0.25-0.5		1327	206	2879	2920	250900	264000	1437	0.04	0.0065	0.539	0.505	0.023	0.00116	0.00014	0.00092	0.0028	0.0036	0.0033	-0.0017	0.00011	0.0016	0.00042	0.00024	-1.23E-06	-0.001	0.00055	0.0028
Chr16SUV018row3grain9 - 1	Mount 2	133	chromite	chromite	0.25-0.5		1820	270	769	730	273800	292000	1195	0.021	0.0062	0.443	0.561	0.009	-0.0005	0.0022	0.00102	0.0028	0.0071	0.0028	0.0029	0.00082	-1.71E-05	0.00036	0.0014	0.00023	0.0014	0.0002	-0.0035
Ilm16SUV023row4grain1 - 1	Mount3	166	ilmenite	chromite	0.18-0.25		1570	12	9780	9960	270200	299000	2004	0.025	0.0006	1.01	0.318	0.005	0.00057	0.00015	-2.35E-06	0.0008	-8.28E-08	0.002	0.013	2.88E-07	-1.23E-05	-5.34E-06	1.27E-06	-2.05E-05	0.014	0.0067	0.032
Ilm16SUV023row4grain10 - 1	Mount3	175	ilmenite	chromite	0.18-0.25		1217	64	15620	15800	240000	253200	1976	0.041	0.0067	2.56	0.61	0.06	0.00081	0.0104	0.00027	-4.29E-05	-2.27E-06	-0.0001722	0.01	0.00043	-1.43E-05	-4.63E-06	-4.79E-07	-2.01E-05	0.0031	0.0007	0.113
Chr16SUV023row3grain10 - 1	Mount 2	134	chromite	chromite	0.25-0.5		1083	75	15210	15120	297400	313600	1181	0.091	0.0133	2.236	0.76	0.019	0.00039	0.0021	0.00064	0.0018	0.0036	0.0022	0.0072	0.00016	0.0042	0.00081	0.0029	0.00054	0.0014	0.00073	0.086
Chr16SUV023row3grain11 - 1	Mount 2	135	chromite	chromite	0.25-0.5		1173	91	28600	28550	237600	261300	1420	0.152	0.0218	4.41	1.047	0.056	0.0026	0.0044	0.00125	0.004	0.0036	0.0023	0.0004	0.00068	0.0069	0.00173	0.0033	0.00033	0.0066	0.00213	0.193
Chr16SUV023row3grain12 - 1	Mount 2	136	chromite	chromite	0.25-0.5		1039	-16	10480	10380	151300	229900	1945	0.088	0.0064	1.195	0.804	0.047	-0.0002	0.0037	0.00011	0.0036	-5.64E-05	-0.0015	-0.0115	-0.0002	-2.71E-05	0.00054	0.0007	0.00046	-0.0011	0.0017	0.0287
Chr16SUV023row4grain1 - 1	Mount 2	137	chromite	chromite	0.25-0.5		888	182	369	367	168200	278600	1221	0.05	0.0152	0.554	0.538	-0.006	0.0364	0.0947	0.0048	0.0197	0.004	0.0016	-0.001	0.00033	0.0048	0.00068	0.0031	0.00058	0.0027	0.0022	0.0047
Chr16SUV023row4grain2 - 1	Mount 2	138	chromite	chromite	0.25-0.5		1336	230	6000	6090	150500	272200	1939	0.055	0.0099	1.093	0.641	0.083	0.0004	0.007	0.00094	0.0034	0.0018	0.0033	0.0023	0.00086	-1.90E-05	-1.10E-06	0.002	0.0009	-0.0025	0.0029	0.041
Chr16SUV023row4grain3 - 1	Mount 2	139	chromite	chromite	0.25-0.5		900	113	7510	7490	178200	331400	1531	0.062	0.0234	3.489	0.905	0.013	0.0013	0.0062	0.00188	0.0118	0.0062	0.0036	0.0095	0.0016	0.0097	0.0014	0.0034	0.00084	0.0007	0.0016	0.126
Chr16SUV023row4grain4 - 1	Mount 2	140	chromite	chromite	0.25-0.5		1430	1070	4940	4830	143100	285000	1761	49	0.296	3.18	4.13	22.5	9.3	11.5	0.75	2.09	0.214	0.057	0.131	0.0109	0.061	0.0111	0.0325	0.00201	0.0111	0.0045	0.06
Chr16SUV023row4grain5 - 1	Mount 2	141	chromite	chlorite?	0.25-0.5		160500	16950	8350	8190	4390	9900	71.9	167.4	0.0331	0.507	2.652	3.56	1.579	2.4	0.187	0.535	0.034	0.296	0.0115	0.00114	0.0041	0.00129	0.0057	0.00106	0.0097	0.0062	0.0335
Chr16SUV023row4grain6 - 1	Mount 2	142	chromite	chromite	0.25-0.5		970	196	752	754	177500	318600	828	0.47	0.0138	0.521	0.62	0.134	0.0146	0.087	0.0068	0.0243	0.0117	0.0048	0.005	0.00028	0.0035	0.00112	0.001	0.00038	-0.0004	0.00111	-0.0026
Chr16SUV023row4grain7 - 1	Mount 2	143	chromite	chromite	0.25-0.5		1075	235	4360	4370	132000	223000	2190	0.065	0.0053	0.613	0.834	0.094	0.0046	0.0155	0.00158	0.0106	0.0061	0.0023	-0.0106	0.00018	0.0068	9.00E-05	0.0022	0.00035	0.0009	0.00106	0.0048
Chr16SUV023row6grain1 - 1	Mount3	195	chromite	chromite	0.18-0.25		1004	23	1120	1117	377900	391800	742	0.0199	0.002	0.206	0.273	0.006	-1.87E-05	0.00024	-2.42E-06	-1.53E-05	-6.78E-06	0.0011	0.0087	0.0007	-1.46E-05	-1.46E-06	-4.58E-06	0.0014	0.021	0.0012	0.0026
Chr16SUV023row6grain10 - 1	Mount3	204	chromite	chromite	0.18-0.25		1322	40	12760	12640	305400	319400	1800	0.015	0.0038	2.19	0.451	0.007	0.007	0.026	0.0023	-9.91E-06	-9.65E-06	0.0009	-0.00309	-3.94E-06	-1.78E-05	-7.24E-07	-6.79E-06	-1.11E-05	-6.15E-05	-4.37E-05	0.097
Chr16SUV023row6grain11 - 1	Mount3	205	chromite	chromite	0.18-0.25	Pitted grain	1485	-21	5620	5830	313500	340000	1867	0.067	0.0283	1.096	0.343	0.445	0.0315	0.061	0.012	0.029	0.02	0.0074	0.017	0.0019	0.0045	0.0011	-8.38E-06	-1.10E-05	0.0038	0.0017	0.021
Chr16SUV023row6grain12 - 1	Mount3	206	chromite	chromite	0.18-0.25	Pitted grain	981	10	8130	8310	378000	407000	1338	0.037	0.0503	1.101	0.345	0.296	0.0374	0.136	0.0181	0.108	0.045	0.004	0.0069	0.0031	0.031	0.0016	0.008	-8.56E-06	0.0046	0.0013	0.015
Chr16SUV023row6grain13 - 1	Mount3	207	chromite	chromite	0.18-0.25		1004	-1	329	331.7	330200	336600	895	0.024	0.0012	0.19	0.246	0.005	-2.05E-05	0.0019	-3.88E-06	0.0051	-1.37E-05	-6.68E-05	-0.00654	-5.56E-06	-2.36E-05	-2.65E-07	-1.03E-05	-1.26E-05	-6.89E-05	-4.97E-05	-0.0002242
Chr16SUV023row6grain14 - 1	Mount3	208	chromite	chromite	0.18-0.25		1214	32	12890	13180	206800	212200	1771	0.022	0.0053	0.956	0.244	0.031	-2.28E-05	0.001	0.0016	-7.18E-06	-1.57E-05	-7.21E-05	-0.00782	-6.31E-06	-2.69E-05	-1.97E-07	-1.16E-05	0.0009	-7.67E-05	0.015	0.043
Chr16SUV023row6grain15 - 1	Mount3	209	chromite	chromite	0.18-0.25		1256	49	12800	12840	314800	329100	1817	0.017	0.0108	2.82	0.426	0.069	0.001	-9.16E-06	0.0013	-4.39E-06	-1.09E-05	-4.78E-05	-0.0008	0.0021	-1.86E-05	-6.76E-08	0.0086	-9.52E-06	-5.19E-05	-3.74E-05	0.121

Chr16SUV023row6grain2 - 1	Mount3	196	chromite	chromite	0.18-0.25		1254	20	15170	15290	292600	302800	1674	0.029	0.0084	2.25	0.403	-0.01	0.00064	-9.16E-06	-2.71E-06	-1.64E-05	-7.68E-06	0.0024	-0.0001393	-3.03E-06	-1.63E-05	-1.55E-06	-5.18E-06	-1.20E-05	-7.50E-05	0.0037	0.12
Chr16SUV023row6grain3 - 1	Mount3	197	chromite	chromite	0.18-0.25		1101	100	4404	4474	252700	265000	1720	0.236	0.0204	0.779	0.194	0.034	0.0023	0.0078	0.00071	0.0017	-5.17E-06	0.0012	0.0098	-2.04E-06	-1.08E-05	0.0009	0.003	0.0005	-4.89E-05	0.0007	0.044
Chr16SUV023row6grain4 - 1	Mount3	198	chromite	chromite	0.18-0.25		927	23	2612	2670	343100	363400	1046	0.0108	0.0036	1.266	0.264	0.017	0.00052	-6.76E-06	-2.02E-06	-1.13E-05	-5.90E-06	-5.98E-05	0.0095	-2.34E-06	0.0071	-1.05E-06	-3.93E-06	0.001	0.0065	0.0078	0.054
Chr16SUV023row6grain5 - 1	Mount3	199	chromite	chromite	0.18-0.25		1420	97	14130	14290	266000	276500	1640	0.029	0.0069	1.601	0.343	0	-1.88E-05	-9.15E-06	-2.81E-06	-1.24E-05	-8.96E-06	-7.21E-05	0.003	-3.60E-06	-1.71E-05	-1.05E-06	-6.04E-06	-1.13E-05	0.0026	0.008	0.081
Chr16SUV023row6grain6 - 1	Mount3	200	chromite	chromite	0.18-0.25		1437	100	3384	3442	299800	316400	884	0.018	0.0037	0.545	0.207	0.057	-2.27E-05	-1.12E-05	0.00035	0.0045	0.0016	-8.65E-05	-0.002358	-4.39E-06	-2.06E-05	-1.21E-06	-7.39E-06	-1.38E-05	-7.97E-05	0.001	0.075
Chr16SUV023row6grain7 - 1	Mount3	201	chromite	chromite	0.18-0.25		1549	166	1348	1350	347900	363800	1519	0	0.0028	0.462	0.233	0.024	-1.94E-05	0.0004	-3.00E-06	-1.20E-05	-9.56E-06	0.0007	0.0012	0.00049	0.0092	-9.64E-07	-6.53E-06	0.0029	0.015	0.001	0.02
Chr16SUV023row6grain8 - 1	Mount3	202	chromite	chromite	0.18-0.25		1157	135	2028	2072	254500	263800	832	0.01	0.0069	0.203	0.17	0.029	-2.37E-05	0.00037	0.00086	-1.43E-05	-1.20E-05	-8.96E-05	-0.00324	-4.83E-06	-2.21E-05	-1.10E-06	-8.27E-06	-1.44E-05	0.01	0.0018	0.024
Chr16SUV023row6grain9 - 1	Mount3	203	chromite	chromite	0.18-0.25		1674	69	5461	5560	201800	207900	2531	0.011	0.0044	0.694	0.253	0.046	-2.94E-05	0.0024	-4.74E-06	-1.69E-05	-1.54E-05	-0.0001091	-0.004527	-6.26E-06	-2.83E-05	-1.27E-06	-1.07E-05	-1.78E-05	-0.0001017	-7.20E-05	0.008
Chr16SUV024row4grain10 - 1	Mount 2	146	chromite	chromite	0.25-0.5	Inclusions	12800	2240	1279	1242	249400	367500	893	2.54	0.136	7.9	4.24	23.4	0.317	0.87	0.097	0.371	0.078	0.0134	0.06	0.0084	0.0368	0.0079	0.0174	0.0026	0.0153	0.0027	0.186
Chr16SUV024row4grain8 - 1	Mount 2	144	chromite	chromite	0.25-0.5		798	92	23560	23440	184100	292900	1068	0.139	0.0107	7.34	1.123	0.09	0.0029	0.0088	0.00139	0.0062	0.0024	0.0019	-0.003	0.00032	0.0033	0.00063	0.00096	0.0004	0.0001	0.00064	0.285
Chr16SUV024row4grain9 - 1	Mount 2	145	chromite	chromite	0.25-0.5		1253	89	3079	3097	234400	356600	1517	0.052	0.0065	0.842	0.719	0.022	0.00048	0.0024	0.00108	0.0021	0.0092	0.0018	0.0001	0.00052	0.0015	0.00046	0.0014	0.00149	0.0004	0.00143	0.0203
Chr16SUV027row5grain1 - 1	Mount 2	147	chromite	chromite	0.5-1.0		1101	296	7500	7600	194800	251300	2207	0.055	0.0054	0.842	0.628	0.036	-8.00E-05	0.0014	0.00088	0.0016	0.0046	0.0053	0.004	0.0003	0.0013	0.0001	-8.47E-06	-2.02E-06	0.0009	0.00068	0.0164
Chr16SUV027row5grain11 - 1	Mount 2	156	chromite	chromite	0.25-0.5		1523	155	2672	2727	215100	310900	1552	0.035	0.0087	0.945	0.699	0.025	0.0024	0.038	0.0035	0.0206	0.0057	0.0039	0.0029	0.00044	0.0029	0.00059	0.0011	0.00071	-0.0022	0.00095	0.0338
Chr16SUV027row5grain12 - 1	Mount 2	157	chromite	chromite	0.25-0.5		1442	185	15100	15260	169100	254000	1516	0.081	0.0134	1.847	0.7	0.018	0.00025	0.00049	0.00089	0.002	0.0068	0.0021	0.0149	0.00067	0.003	0.00026	0.00077	0.00084	-0.0003	0.00119	0.068
Chr16SUV027row5grain2 - 1	Mount 2	148	chromite	chromite	0.5-1.0		841	124	408	427	265300	298300	1743	0.021	0.0056	0.553	1.747	0.028	0.0009	0.00083	0.00101	0.0015	0.0017	0.0002	0.0002	0.00073	-2.14E-05	0.00114	-9.38E-06	0.00093	-0.003	0.00056	0.0037
Chr16SUV027row5grain3 - 1	Mount 2	149	chromite	chromite	0.5-1.0		1213	236	2131	2139	242400	264800	1890	0.017	0.0173	1.324	0.724	-0.002	0.0008	0.0013	0.00108	0.002	0.0042	0.0036	-0.009	0.00093	0.0084	0.00071	0.0026	0.00098	-0.002	0.00094	0.0297
Chr16SUV027row5grain4 - 1	Mount 2	150	chromite	chromite	0.25-0.5		1320	136	14260	14340	270200	310800	1387	0.24	0.0116	2.081	0.818	0.04	0.00067	0.0043	0.00101	0.0048	0.0009	0.0012	-0.0032	0.00028	0.0023	0.00082	0.0015	0.00136	0.0098	0.0014	0.0783
Chr16SUV027row5grain6 - 1	Mount 2	151	chromite	chromite	0.25-0.5		2540	930	3920	3900	172000	204700	2280	9.5	0.138	1.86	1.64	15.6	0.73	1.44	0.145	0.46	0.044	0.0213	0.055	0.005	0.0238	0.005	0.0142	0.00154	0.0095	0.0014	0.034
Chr16SUV027row5grain7 - 1	Mount 2	152	chromite	chromite	0.25-0.5		1346	59	11080	11060	261100	312400	1850	0.067	0.0134	1.978	0.754	0.022	0.00014	0.00092	0.00084	0.0054	0.0036	0.0023	-0.0012	0.00171	0.0023	0.00034	0.0033	0.00026	-0.0006	0.002	0.073
Chr16SUV027row5grain8 - 1	Mount 2	153	chromite	chromite	0.25-0.5		1273	96	16460	16580	193900	245300	1726	0.101	0.0113	2.99	1.695	0.103	0.0003	0.003	0.00135	0.005	-3.25E-05	0.0039	-0.0014	0.00031	0.0016	0.0003	-1.01E-05	-2.22E-06	-0.0016	0.0019	0.098
Chr16SUV027row5grain9 - 1	Mount 2	154	chromite	chromite	0.25-0.5		1434	199	3779	3811	211400	295900	1115	0.032	0.0101	0.897	0.68	0.051	0.0063	0.024	0.0061	0.039	0.0038	0.0017	0.0101	0.0002	0.003	-1.60E-06	0.001	0.00063	0	0.00076	0.0296
Chr16SUV028row6grain1 - 1	Mount 2	158	chromite	chromite	0.25-0.5		1311	245	3990	3720	185500	282900	1827	0.05	0.0076	0.932	0.796	0.16	0.0051	0.004	0.00148	0.0082	0.0027	0.0016	0.0075	0.00035	0.0024	0.00041	0.0018	-2.31E-06	-0.0019	0.00067	0.0193
Chr16SUV028row6grain10 - 1	Mount 2	167	chromite	chromite	0.5-1.0		2499	487	2960	3050	102700	159500	2350	0.075	0.0054	0.477	0.437	0.043	0.0037	0.016	0.00105	0.0034	0.0035	0.0029	0.006	0.00075	0.0007	-2.68E-06	0.0017	0.00108	0.0022	0.00055	0.0061
Chr16SUV028row6grain11 - 1	Mount 2	168	chromite	chromite	0.25-0.5		2261	294	9170	9170	165600	261600	1695	0.063	0.0051	1.19	0.682	0.018	0.0012	0.0008	0.0008	0.0069	0.0052	0.0008	-0.0009	0.00039	0.0021	0.00043	0.0022	0.0008	0.0034	0.0016	0.047
Chr16SUV028row6grain12 - 1	Mount 2	169	chromite	chromite	0.25-0.5		2187	295	7570	7630	166900	268300	1988	0.065	0.0079	0.938	0.671	0.019	-0.00025	0.0013	0.00134	0.0028	0.0037	0.0032	0.0079	0.00053	0.0017	-2.03E-06	0.00058	0.0022	0.0063	0.0012	0.0268
Chr16SUV028row6grain13 - 1	Mount 2	170	chromite	chromite	0.25-0.5		2076	264	6900	7010	178100	279500	1778	0.068	0.0055	1.029	0.712	0.045	0.00102	0.0015	0.00029	0.0043	0.0034	0.0017	0.0125	0.00074	0.0014	0.00057	0.0015	0.00038	0.0024	0.0038	0.0299
Chr16SUV028row6grain14 - 1	Mount 2	171	chromite	chromite	0.25-0.5		1997	217	9310	8840	169500	261300	1929	0.112	0.0109	1.334	0.702	0.05	0.0019	0.0012	0.00064	0.0027	0.0018	0.0033	0.0057	0.00074	0.0007	0.00035	0.0019	0.00047	0.0047	0.0007	0.0408
Chr16SUV028row6grain2 - 1	Mount 2	159	chromite	chromite	0.25-0.5		1579	221	5360	5240	194200	293300	1817	0.329	0.0198	4.51	0.874	0.43	0.027	0.0462	0.0075	0.0219	0.007	0.0057	0.02	0.00153	0.0045	0.00117	0.0026	0.00038	0	0.00037	0.153
Chr16SUV028row6grain3 - 1	Mount 2	160	chromite	chromite	0.25-0.5		1192	203	7140	7080	183500	283600	1582	0.046	0.0076	1.009	1.543	0.057	0.00066	-1.00E-05	0.00037	0.0039	0.0029	0.0014	-0.0001	0.00017	0.0034	0.00029	0.0018	0.0007	0.0017	0.0027	0.032
Chr16SUV028row6grain4 - 1	Mount 2	161	chromite	chromite	0.25-0.5		1390	242	1792	1823	188300	296900	1610	0.024	0.0058	1.517	1.614	0.031	0.00144	0.0018	0.00101	0.0042	0.002	0.0011	0.0037	0.00075	0.0013	0.00035	0.001	0.00036	0.0006	0.00086	0.0136
Chr16SUV028row6grain5 - 1	Mount 2	162	chromite	chromite	0.25-0.5		1428	218	4463	4570	176700	281700	1746	0.03	0.0063	1.044	1.072	0.025	0.00122	0.002	0.00087	0.0056	0.0016	0.0023	0.0025	0.00065	-2.03E-05	0.00045	0.0019	0.00048	-0.0004	0.00078	0.0207
Chr16SUV028row6grain6 - 1	Mount 2	163	chromite	chromite	0.25-0.5		1797	182	11970	11920	154300	247000	1895	0.068	0.0089	1.798	0.804	0.014	0.0007	0.0015	0.00143	0.004	-2.89E-05	0.0013	0.0038	0.0015	-2.44E-05	0.00021	0.0009	0.00064	0.001	0.00095	0.055
Chr16SUV028row6grain7 - 1	Mount 2	164	chromite	chromite	0.25-0.5		2007	200	9920	9770	167800	270000	1831	0.044	0.0096	1.082	0.726	0.05	0.0038	0.0062	0.0018	0.0021	0.0055	0.0029	0.0063	0.00051	0.0012	0.00054	-1.42E-05	0.00062	0.0038	0.00044	0.0276
Chr16SUV028row6grain8 - 1	Mount 2	165	chromite	chromite	0.25-0.5		2211	257	7520	7630	139700	223500	1952	0.091	0.0094	0.842	0.633	0.282	0.0061	0.0108	0.004	0.0038	0.0049	0.0035	-0.0014	0.00105	-2.69E-05	-2.42E-06	0.0027	-3.16E-06	-0.0026	0.0015	0.03
Chr16SUV028row6grain9 - 1	Mount 2	166	chromite	chromite	0.5-1.0		1922	213	14190	14060	177300	281500	1478	0.085	0.0143	2.171	0.752	0.048	0	0.0018	0.00137	0.0052	0.0052	0.0043	0.0045	0.00068	0.0028	0.00074	0.0026	0.00053	0.0045	0.0023	0.085
Chr16SUV028row7grain10 - 1	Mount 2	181	chromite	chromite	0.25-0.5		1272	169	22620	22430	188300	252700	1637	0.138	0.0165	2.863	1.14	0.063	0.033	0.037	0.0051	0.0106	0.0062	0.0017	0.0058	0.00133	0.0037	0.00073	0.002	0.00089	0.0016	0.002	0.124
Chr16SUV028row7grain11 - 1	Mount 2	182	chromite	chromite	0.25-0.5		1321	135	18610	18950	185600	247100	2320	0.117	0.0152	2.359	0.736	0.021	0.00053	0.0003	0.00137	0.0055	0.0041	0	0.0068	0.00102	0.0007	0.0003	0.0034	0.00057	0.0036	0.0024	0.095
Chr16SUV028row7grain12 - 1	Mount 2	183	chromite	chromite	0.25-0.5		1315	169	2200	2207	208600	270000	880	0.075	0.0364	0.865	0.615	0.105	0.0071	0.0104	0.0033	0.0125	0.003	0.0041	-0.0014	0.00062	0.0093	0.00137	0.0045	0.00051	0.009	0.00055	0.0157
Chr16SUV028row7grain4 - 1	Mount 2	175	chromite	chromite	0.25-0.5		1404	341	16980	16980	190400	291400	1629	0.112	0.0153	2.721	0.838	0.031	-0.00019	0.00064	0.00074	0.0024	0.0038	0.0017	0.005	0.00041	0.0028	8.00E-05	0.0026	0.00026	0.0021	0.00052	0.111
Chr16SUV028row7grain5 - 1	Mount 2	176	chromite	chlorite?	0.25-0.5	Has cracks	154500	1592	3990	3950	7000	11200	70.5	1.927	0.0257	0.212	0.57	0.057	1.517	2.642	0.224	0.546	0.083	0.0196	0.0244	0.0033	0.0093	0.00108	-1.59E-05	0.00069	0.0023	0.00018	0.047
Chr16SUV028row7grain6 - 1	Mount 2	177	chromite	chromite	0.25-0.5		1520	539	14590	14360	124100	189100	1943	0.096	0.0098	1.72	0.533	0.012	0.0034	0.0086	0.00133	0.0017	-2.15E-05	0.0032	0	0.00086	0.00029	0.00072	0.0029	0.00051	0.0065	0.004	0.067
Chr16SUV028row7grain8 - 1	Mount 2	179	chromite	chromite	0.25-0.5		1332	135	14050	14160	202100	286200	1692	0.084	0.0096	2.223	0.787	0.046	0.00138	0.0025	0.00065	0.0028	0.0051	0.0007	0.0084	0.00052	0.0028	0.00046	0.0009	0.00173	0.01	0.0015	0.103
Chr16SUV030row7grain13 - 1	Mount 2	184	chromite	chromite	0.25-0.5		1257	138	1600	1590	216400	274100	1856	0.023	0.0054	0.578	0.602	-0.002	0.00082	0.0013	0.00143	0.003	0.001	0.0025	0.0012	0.00079	0.0029	0.00025	0.0021	0.00063	-0.0001	0.00088	0.0063

APPENDIX 7C

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); Spinel-ALUMINIUM SERIES

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Grain Size	Si	Ca	Ti_m47	Ti_m49	Cr_m52	Cr_m53	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Gah16SUV024row6grain4 - 1	Mount 1	1_6_4	gahnite	gahnite	0.25-0.5	885	-7	23.7	19	10.76	12	7.8	0.006	0	-0.0031	0	-0.036	-0.00117	-0.00059	-0.0003318	5.48E-05	1.95E-07	-0.0009	0.01	0.00014	-3.81E-05	-4.47E-07	-3.82E-05	-5.37E-05	-0.0201	-1.52E-05	0.001
Gah16SUV024row6grain5 - 1	Mount 1	1_6_5	gahnite	gahnite	0.25-0.5	698	-16	11.4	9.6	120.5	143.5	-0.7	0.009	0.0003	-0.0029	-0.0014	-0.034	-0.00086	-0.00078	-0.0002706	0.001	-1.71E-06	0	0.003	-6.25E-05	-3.61E-05	-5.19E-07	-3.57E-05	0.00053	-0.001	-1.43E-05	0.0006
Gah16SUV024row6grain6 - 1	Mount 1	1_6_6	gahnite	gahnite	0.25-0.5	819	-49	6.8	5.4	691	824	-0.89	-0.017	-0.0013	0.0028	-0.0002	-0.038	-0.0005	0.0006	0.00017	3.51E-05	-3.77E-06	-0.0016	-0.0069	-6.42E-05	-3.72E-05	-6.39E-07	0.0006	0.00039	-0.0094	0.0026	0.0017
Gah16SUV024row6grain7 - 1	Mount 1	1_6_7	gahnite	gahnite	0.25-0.5	988	3	20.7	18.7	8.36	6	261.9	0.012	0.0008	-0.0031	0.0009	-0.024	-0.00088	-0.00025	-0.00049	2.79E-05	-6.16E-06	-0.0028	-0.004	0.00038	-4.00E-05	-7.92E-07	-3.88E-05	-5.36E-05	0.012	-1.57E-05	-2.98E-05
Gah16SUV024row6grain8 - 1	Mount 1	1_6_8	gahnite	gahnite	0.25-0.5	1670	48	10.4	8.9	661.4	777.6	28.18	0.021	0.0176	0.309	0.0179	0.097	0.0358	0.107	0.0097	0.043	0.0075	0.0037	0.002	0.0024	0.0058	0.00046	0.0023	0.0006	-0.0031	0.0022	0.0232
Spinel16SUV013row6grain9 - 1	Mount 1	1_6_9	spinel	spinel	0.25-0.5	1108	146	63.9	66.4	307	377.2	21	0.002	0.0038	-0.0021	-0.0014	-0.05	-0.0002	-0.00141	0.00036	0.0017	-2.41E-05	-0.0012	-0.0107	-8.18E-05	-5.15E-05	-1.85E-06	-4.40E-05	-6.20E-05	-0.0161	-2.01E-05	0.0039
Spinel16SUV023row6grain10 - 1	Mount 1	1_6_10	spinel	spinel	0.25-0.5	895	135	225.5	227.2	263.8	327.1	34.44	0.026	0.0007	0.0003	0.0056	0.053	-0.001	0.0003	0.0011	0.0017	0.0019	-0.0004	-0.01	0.00031	0.0006	-1.98E-06	-4.53E-05	0.00028	-0.0134	-2.10E-05	0.0051
Spinel16SUV028row6grain11 - 1	Mount 1	1_6_11	spinel	spinel	0.25-0.5	864	111	232.9	232.2	146.9	182.4	62.7	-0.014	0.001	-0.0011	0.0016	-0.017	-0.0009	-0.00171	-0.000463	-6.53E-05	-3.21E-05	-0.0026	0.008	0.00032	-5.62E-05	-2.29E-06	-4.77E-05	-6.46E-05	-0.0036	-2.16E-05	0.0052
Hercy15SUV018row7grain1 - 1	Mount 1	1_7_1	hercynite	chlorite?	0.25-0.5	169100	831	924.5	920.5	3.47	0.39	-0.9	1.68	0.0123	0.341	0.647	0.038	0.946	1.402	0.12	0.294	0.082	0.02	0.025	0.0036	0.0083	0.00032	-2.79E-05	0.0002	-0.0029	0.00117	0.1
Hercy15SUV018row7grai2 - 1	Mount 1	1_7_2	hercynite	gahnite	0.25-0.5	888	18	36.9	35.4	4.8	1.02	-1.95	-0.012	-0.0024	-0.0034	-0.0024	-0.017	-0.00134	-0.00165	5.00E-05	-9.01E-05	-3.75E-05	-0.0006	0.008	0.00065	0.0006	-2.40E-06	-4.65E-05	0.0017	-0.0043	0.0011	0.0012
Hercy16SUV018row7grai3 - 1	Mount 1	1_7_3	hercynite	spinel/hercynite	0.25-0.5	1435	24	2873	2884	370.6	506.4	984.7	-0.016	-0.0015	0.074	0.0349	-0.01	0.0001	-0.0013	-0.00031	-0.0001102	-4.40E-05	0.0012	-0.013	0.0016	0.0019	-2.99E-06	-4.91E-05	-6.49E-05	-0.0008	0.0009	0.0021
Hercy16SUV018row7grai4 - 1	Mount 1	1_7_4	hercynite	spinel/hercynite	0.25-0.5	1119	102	1607	1617	115.6	160.5	335.8	0.065	0.0004	0.057	0.0041	-0.033	-0.0001	-0.0023	-0.00091	-0.000226	-7.43E-05	0.0098	-0.029	0.00017	-8.20E-05	-4.91E-06	-5.84E-05	-7.51E-05	-0.00092	-3.08E-05	0.0012
Hercy16SUV023row7grai6 - 1	Mount 1	1_7_6	hercynite	spinel/hercynite	0.25-0.5	2796	279	887	877	36.9	24.5	1977	0.031	-0.0019	0.0267	0.0093	0.048	-0.00109	0.0002	-0.00021	-0.0001621	-5.06E-05	0.0037	-0.008	-6.27E-05	-4.86E-05	-3.17E-06	0.0027	-4.44E-05	0.0042	0.0007	0.015
Hercy16SUV023row7grai7 - 1	Mount 1	1_7_7	hercynite	spinel/hercynite	0.25-0.5	2056	216	1805	1817	800.6	1175	620.9	0.03	-0.0038	0.033	0.0187	0.074	0.0003	-0.0002	-0.000883	-0.0001953	-5.96E-05	0.0025	0	0.00016	-5.47E-05	-3.68E-06	-3.91E-05	0.00021	0.000306	0.00025	-0.0001239
Hercy16SUV023row7grai8 - 1	Mount 1	1_7_8	hercynite	spinel/hercynite	0.25-0.5	2212	141	4721	4744	162	224.2	1242	0.066	0.0068	0.114	0.0258	0.129	0.0059	0.024	0.0013	0.0045	-6.04E-05	0.0045	-0.005	0.0008	0.0023	0.0011	-3.79E-05	0.00027	-0.001187	-1.99E-05	0.0068
Hercy16SUV027row7grai9 - 1	Mount 1	1_7_9	hercynite	spinel/hercynite	0.5-1.0	1678	88	3396	3445	2467	3581	1337	0.045	0.0014	0.069	0.032	0.027	0.0004	-0.0009	-0.000887	-0.000214	-6.26E-05	0.0066	-0.004	-6.51E-05	-5.41E-05	-3.86E-06	-3.77E-05	-4.63E-05	-0.002811	-2.01E-05	0.0031
Hercy16SUV027row7grai10 - 1	Mount 1	1_7_10	hercynite	spinel/hercynite	0.25-0.5	1403	76	1583	1590	4891	7013	1429	0.063	0.0005	0.095	0.0399	0.009	-0.0007	-0.0004	-0.000889	-0.0002256	-6.57E-05	0.0023	0.016	0.00048	0.0011	-4.06E-06	-3.75E-05	-4.54E-05	-0.004267	0.0011	0.0034

APPENDIX 7D

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); ILMENITE

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Grain Size	Si	Ca	Ti_m47	Ti_m49	Cr_m52	Cr_m53	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Ilm16SUV014row8grai1 - 1	Mount 1	296	IM crustal	ilmenite	0.5-1.0	920	43	321500	325900	12.1	11.82	57.6	1.03	3.77	1467	133.8	0.058	0.0075	0.0283	0.0049	0.0414	0.0183	0.002	0.068	0.0371	0.565	0.284	2.126	0.596	6.6	1.412	27.24
Ilm16SUV014row8grai11 - 1	Mount 1	306	IM crustal	ilmenite	0.25-0.5	1620	1280	310200	312800	12.6	10.75	118	1.88	0.227	9.64	364.8	0.83	0.072	0.126	0.0141	0.056	0.0091	0.0218	0.023	0.00172	0.0094	0.0055	0.0362	0.0168	0.308	0.1199	0.993
Ilm16SUV014row8grai12 - 1	Mount 1	307	IM crustal	ilmenite	0.25-0.5	704	19	339200	340900	26.2	25.89	9.78	1.295	0.0908	0.307	319.1	0.002	0.033	0.0563	0.0046	0.0158	0.002	0.0049	-0.0014	0.00032	0.0028	0.0008	0.0014	0.00076	0.0052	0.002	0.0233
Ilm16SUV014row8grai2 - 1	Mount 1	297	IM crustal	ilmenite	0.25-0.5	954	155	319800	320600	15.3	13.18	32.12	1.093	0.959	1294	697	-0.01	-0.00014	-0.00035	0.00011	0.0021	0.0046	-0.0002	0.0165	0.0088	0.138	0.0657	0.501	0.1344	1.528	0.36	40.35
Ilm16SUV014row8grai3 - 1	Mount 1	298	IM crustal	ilmenite	0.25-0.5	1057	209	321600	326600	13.7	9.93	22.77	1.171	4.81	648.4	214.5	-0.006	0.00025	0.00096	0.00068	0.0144	0.0254	0.0032	0.111	0.0571	0.754	0.335	1.976	0.47	4.63	0.848	15.88
Ilm16SUV014row8grai5 - 1	Mount 1	300	IM crustal	ilmenite	0.25-0.5	821	59	319900	325000	20.5	20.63	42.3	1.189	0.91	1091	330.2	0.007	0.00122	0.0023	0.00043	0.0054	0.0045	0.0026	0.021	0.0075	0.133	0.063	0.432	0.1169	1.229	0.263	23.44
Ilm16SUV014row8grai6 - 1	Mount 1	301	IM crustal	ilmenite	0.25-0.5	772	25	325200	326700	4.5	0.84	31.41	1.171	1.787	355.7	161	0.01	0.00235	0.0054	0.0037	0.0219	0.0139	0.0025	0.06	0.0247	0.347	0.1698	1.097	0.253	2.57	0.515	7.76
Ilm16SUV014row8grai7 - 1	Mount 1	302	IM crustal	ilmenite	0.25-0.5	819	19	318600	321500	43.9	50.9	31.43	1.158	0.939	911	220.7	0.028	0.00267	0.0043	0.00101	0.0036	0.0018	0.0009	0.019	0.0104	0.167	0.0959	0.671	0.1721	1.905	0.4	28.21
Ilm16SUV014row8grai8 - 1	Mount 1	303	IM crustal	ilmenite	0.25-0.5	940	116	324400	328800	118.5	136.5	10.82	1.311	0.0923	10.28	177.4	0.45	0.0372	0.0576	0.0033	0.0162	0.0034	0.0001	-0.0003	0.00073	0.0016	0.00056	0.0014	0.00129	0.0163	0.009	0.458
Ilm16SUV014row8grai9 - 1	Mount 1	304	IM crustal	ilmenite	0.25-0.5	822	62	324400	323700	8.8	5.97	22.86	1.251	1.757	990	192.9	0.081	0.0259	0.0632	0.0059	0.0289	0.0142	0.0018	0.06	0.0203	0.324	0.149	0.851	0.21	2.076	0.403	34.52
Ilm16SUV023row4grain11 - 1	Mount3	176	ilmenite	ilmenite	0.18-0.25	712	132	345700	346000	20560	21480	1337	0.4	0.0506	153.6	1898	0.045	0.00121	0.0083	0.00149	0.012	0.0046	0.0029	0.016	0.00076	0.005	0.00042	0.0046	0.00048	0.0068	0.0027	5.92
Ilm16SUV023row4grain12 - 1	Mount3	177	ilmenite	ilmenite	0.18-0.25	646	-4	319500	319400	4.6	2.14	394	0.381	4.57	2230	306.9	0.053	0.002	0.071	0.0087	0.059	0.103	0.0051	0.216	0.081	0.66	0.207	1.04	0.29	3.22	0.627	64.3
Ilm16SUV023row4grain13 - 1	Mount3	178	ilmenite	ilmenite	0.18-0.25	1009	171	332900	334100	11910	12270	1036	0.425	0.0593	153.3	1674	0.099	0.00036	0.0094	0.0015	0.0154	-1.52E-06	0.00051	0.0052	0.00094	0.0074	0.00106	0.0062	0.00023	0.0062	0.0007	5.96
Ilm16SUV023row4grain14 - 1	Mount3	179	ilmenite	ilmenite	0.18-0.25	994	161	342000	338300	10540	10990	779	0.46	0.0597	159.4	1853	0.074	0.00075	0.0113	0.0025	0.0102	0.0028	0.00026	0.0055	0.00051	0.0032	0.00042	0.0098	0.00084	0.018	0.0084	5.73
Ilm16SUV023row4grain15 - 1	Mount3	180	ilmenite	ilmenite	0.18-0.25	887	108	306100	301200	11820	12140	632	0.41	0.0634	317	3575	-0.0021	0.00056	0.0062	0.00111	0.0052	0.0018	0.001	0.005	0.00019	0.004	0.0009	0.0049	-8.70E-06	0.0075	0.0021	10.65
Ilm16SUV023row4grain2 - 1	Mount3	167	ilmenite	ilmenite	0.18-0.25	836	175	351900	358300	23260	25850	1686	1.08	0.0478	169.2	1502	1.14	0.104	0.183	0.0222	0.072	0.0075	0.0015	0.0046	9.33E-08	0.0078	0.0013	0.0038	0.00074	0.013	0.0033	6.13
Ilm16SUV023row4grain3 - 1	Mount3	168	ilmenite	ilmenite	0.18-0.25	635	145	343400	349100	20620	22220	1362	0.331	0.12	161	1948	3	0.06	0.097	0.0256	0.059	0.0128	0.0066	0.028	0.0041	0.026	0.0061	0.0147	0.0016	0.013	0.0043	5.8
Ilm16SUV023row4grain4 - 1	Mount3	169	ilmenite	ilmenite	0.18-0.25	662	134	334900	335500	20200	22160	1224	0.313	0.0467	176.7	2213	0.097	0.00057	0.0058	0.0006	0.0038	0.0032	0.0016	0.0102	0.00134	0.0017	0.00054	0.0058	0.0017	0.0046	0.001	6.73
Ilm16SUV023row4grain5 - 1	Mount3	170	ilmenite	ilmenite	0.18-0.25	666	116	332800	331300	12120	13080	880	0.327	0.0473	163.1	1951	-0.01762	0.0026	0.0088	0.00039	0.0063	-3.17E-07	0.0012	0.0049	0.00016	0.0133	0.0011	0.0037	0.00074	0.03	0.0034	6.12
Ilm16SUV023row4grain6 - 1	Mount3	171	ilmenite	ilmenite	0.18-0.25	704	113	340100	343200	19930	21230	1380	0.364	0.0499	150.7	1862	0.122	9.00E-05	0.0054	0.00105	0.0049	0.0054	0.0011	0.0048	0.00015	0.0019	0.0013	0.0006	0.0035	0.014	-3.43E-05	5.51
Ilm16SUV023row4grain7 - 1	Mount3	172	ilmenite	ilmenite	0.18-0.25	864	120	332900	336900	14050	14640	950	0.385	0.0566	171	1795	0.1	0.00021	0.0072	0.00062	0.0048	-7.36E-07	0.0016	0.0056	0.00126	0.0099	0.00066	0.0041	-8.52E-06	0.0062	0.0058	6.56
Ilm16SUV023row4grain8 - 1	Mount3	173	ilmenite	ilmenite	0.18-0.25	737	70	321600	324100	4.12	2	22.66	0.384	3.565	2294	724	0.064	0.0003	0.0022	0.00169	0.0169	0.0162	0.0035	0.096	0.0371	0.488	0.166	1.021	0.238	2.63	0.542	73.6
Ilm16SUV023row4grain9 - 1	Mount3	174	ilmenite	ilmenite	0.18-0.25	805	158	349100	350100	11880	12350	886	0.411	0.0572	143	1837	0.085	0.00077	0.0056	0.0016	0.0077	0.0028	0.0014	0.0052	0.00035	0.0056	-1.91E-06	0.005	0.0012	0.0116	0.0016	5.56
Ilm16SUV023row8grai13 - 1	Mount 1	308	IM crustal	ilmenite	0.25-0.5	1034	-55	326400	321900	3.6	0.51	0.55	1.191	0.1064	112.1	421.7	0.026	0.0022	0.0064	0.00034	0.0058	-4.65E-05	0.0017	-0.0016	0.0001	0.0018	0.0018	0.0234	0.0116	0.198	0.0783	17.64
Ilm16SUV027row9grai1 - 1	Mount 1	427	IM crustal	ilmenite	0.25-0.5	1018	10	338200	339200	151	171.3	1.59	1.259	0.0925	21.33	310.7	0.116	0.0168	0.0439	0.0038	0.0131	0.0018	0.0014	-0.0006	0.00039	0.0011	0.00013	0.003	0.00227	0.0341	0.0226	1.25
Ilm16SUV027row9grain2 - 1	Mount 1	311	IM crustal	ilmenite	0.25-0.5	856	6	319800	319000	110.8	122.4	42.9	1.246	2.58	2060	313.9	0.148	0.155	0.235	0.0358	0.128	0.058	0.0068	0.125	0.0383	0.444	0.177	0.96	0.223	2.18	0.429	67.5
Ilm16SUV027row9grain3 - 1	Mount 1	312	IM crustal	ilmenite	0.25-0.5	960	71	331000	330300	645	733	64.4	1.294	0.117	33.2	67.6	0.34	0.03	0.072	0.0111	0.036	0.0058	0.0015	0.011	0.00102	0.0096	0.0028	0.0292	0.0226	0.465	0.1518	2.552
Ilm16SUV027row9grain4 - 1	Mount 1	313	IM crustal	ilmenite	0.25-0.5	745	49	320900	322400	18.3	15.46	0.09	1.292	0.212	9.86	754	0.25	0.0896	0.224	0.033	0.13	0.0278	0.0033	0.0242	0.0038	0.0299	0.0067	0.0388	0.013	0.225	0.0751	0.964
Ilm16SUV027row9grain5 - 1	Mount 1	314	IM crustal	ilmenite	0.25-0.5	1260	1	315800	323000	13.9	11.59	32.42	1.286	2.812	1729	204.1	0.83	0.0091	0.025	0.0033	0.0208	0.0189	0.0055	0.078	0.0374	0.46	0.1856	1.032	0.25	2.32	0.45	43.2
Ilm16SUV027row9grain6 - 1	Mount 1	315	IM crustal	ilmenite	0.25-0.5	997	67	274300	273300	12.4	7.98	2.28	1.08	2.825	1246	1265	0.074	0.0085	0.1403	0.0209	0.181	0.109	0.037	0.179	0.0507	0.512	0.1435	0.621	0.1284	1.253	0.253	24.32
Ilm16SUV027row9grain7 - 1	Mount 1	316	IM crustal	ilmenite	0.25-0.5	907	5	314400	317700	444.2	475	26.85	1.231	0.095	16.7	306.8	0.057	0.0109	0.0221	0.00116	0.0091	0.00025	0.0004	0.0006	0.00038	0.002	0.00119	0.014	0.0103	0.166	0.0665	1.01
Ilm16SUV027row9grain8 - 1	Mount 1	317	IM crustal	ilmenite	0.25-0.5	783	13	322300	318800	12.7	7.92	7.68	1.261	1.278	1052	400	0.003	0.00033	3.00E-05	0.00075	0.0048	0.0053	0.0018	0.0173	0.0129	0.187	0.1047	0.712	0.197	2.093	0.401	39.34
Ilm16SUV027row9grain9 - 1	Mount 1	318	IM crustal	ilmenite	0.25-0.5	861	55	318200	316200	2928	3175	382.7	1.209	0.1318	402.8	1356	0.055	0.00093	0.0064	0.00162	0.0058	0.0057	0.0009	0.0048	0.00149	0.0099	0.00269	0.0074	0.00202	0.0081	0.0041	13.88
Chr16SUV028row7grain7 - 1	Mount 2	178	chromite	ilmenite	0.25-0.5	1360	349	329700	328900	350	330	12.7	1.662	1.923	1165	84.1	0.24	0.0241	0.027	0.0032	0.0154	0.0056	0.0024	0.0384	0.0159	0.25	0.1457	1.045	0.29	3.16	0.645	24.45
Ilm16SUV028row9grain10 - 1	Mount 1	319	IM crustal	ilmenite	0.25-0.5	668	28	322100	322600	65.4	66.5	13.64	1.256	3.65	1176	387.5	0.005	2.00E-05	0.00154	0.00058	0.0049	0.0097	0.0001	0.09	0.0387	0.643	0.306	1.883	0.448	4.3	0.763	75.2
Ilm16SUV028row9grain11 - 1	Mount 1	320	IM crustal	ilmenite	0.25-0.5	787	95	327300	326300	162.9	176.4	38.7	1.304	3.29	1649	155.3	-0.008	0.0031	0.0065	0.00189	0.0159	0.012	0.0008	0.07	0.0301	0.422	0.217	1.468	0.433	4.84	1.146	21.03
Ilm16SUV028row9grain12 - 1	Mount 1	321	IM crustal	ilmenite	0.25-0.5	699	35	313300	314800	233.9	254.5	21.27	1.268	0.0901	5.6	552	0.044	0.0328	0.0424	0.0047	0.0124	0.0029	0.0019	0.0016	0.00023	0.0019	-3.87E-06	0.0032	0.00137	0.0209	0.0122	0.285
Ilm16SUV028row9grain13 - 1	Mount 1	322	IM crustal	ilmenite	0.25-0.5	868	20	324300	326600	79.9	83.2	16.11	1.356	0.0977	5.83	265.3	0.331	0.093	0.147	0.0131	0.0344	0.0055	0.0015	0.0025	0.00054	0.008	0.00076	0.0021	0.00133	0.0336	0.0196	0.451
Ilm16SUV014row8grai10 - 1	Mount 1	305	IM crustal	pseudorutile	0.25-0.5	3023	582	379700	385900	224.2	266.3	87.5	33.89	10.25	317.5	298.5	861	58.35	80.3	9.27	30.72	4.48	0.96	3.19	0.452	2.692	0.569	2.621	0.632	6.71	1.495	17.32
Ilm16SUV014row8grai4 - 1	Mount 1	299	IM crustal	pseudorutile	0.25-0.5	2280	368	365700	370200	874	1132	53.55	16.44	3.681	310.1	135.6	318.3	22.43	29.31	4.098	13.88	2.21	0.445	1.446	0.208	1.149	0.205	0.611	0.1114	1.008	0.193	7.81
Ilm16SUV023row8grai14 - 1	Mount 1	309	IM crustal	pseudorutile	0.25-0.5	3159	769	389000	391400	1588	1847	206.1	73.4	14.28	373.4	87.2	772	31.81	63.3	7.9	26.13	4.27	0.868	3.189	0.549	3.87	0.901	3.27	0.601	4.24	0.735	10.41
Ilm16SUV028row9grain14 - 1	Mount 1	323	IM crustal	pseudorutile	0.25-0.5	1671	659	418400	414700	183.8	211.5	18.47	68.41	39.58	897	808	326.6	71	156	12.22	37.42	5.58	1.258	5.26	0.989	7.35	1.687	5.49	0.827	5.48	0.813	16.41
Chr16SUV028row7grain1 - 1	Mount 2	173	chromite	pseudorutile	0.25-0.5	1050	512	359100	360600	271	540	11.4	20.44	3.862	51.8	498.7	458.1	17.39	24.92	2.691	8.93	1.445	0.312	1.146	0.1693	0.956	0.172	0.454	0.0639	0.44	0.0789	1.289
Chr16SUV028row7grain2 - 1	Mount 2	174	chromite	pseudorutile	0.25-0.5	35000	6700	367500	375300	2870	3930	303.8	25.7	5.99	602	352.1	435.8	28.21	43.1	5.37	17.84	2.96	0.585	2	0.303	1.719	0.334	1.348	0.308	3.08	0.623	30.66
Chr16SUV028row7grain9 - 1	Mount 2	180	chromite	pseudorutile	0.25-0.5	1153	336	352100	353500	1259	1610	323.4	11.1	8.26	144.2	499.7	157	34.2	43.3	6.32	21.72	3.21	0.618	2.2	0.317	1.891	0.431	1.699	0.349	3.19	0.639	4.31

APPENDIX 7E

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); OLIVINE

Sample #	Mount	EPMA #	ODM Min ID	EPMA Min ID	Grain Size	Ca	Ti_m47	Ti_m49	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
Diop15SUV006row3grain1 - 1	2015_3	111	diopside	olivine	0.25-0.5	1702		69.6	1357		0.148	0.0359						6.27E-06	0.001	0.0019		0.00075	0.0116	0.0051	0.0199	0.0037	0.054	0.0123
Diop15SUV006row3grain1 - 2	2015_3	111_rpt	diopside	olivine	0.25-0.5	1707		61.9	1160	0.042	0.233	0.082	0.0029	0.105	0.043	0.19	0.0076	0.058	0.0073	0.0027	0.0127	0.002	0.031	0.0092	0.032	0.0065	0.075	0.0146
Olv15SUV030row3grain5 - 1	Mount 3	160	forsterite	olivine	0.18-0.25	146.7	4.8	-0.015	0.039	0.0006	0.036	0.0002	0.00067	0.0058	0.0034	0.0076	0.017	0.119	0.0039	0.0341	0.008							
Olv16SUV014row4grain7 - 1	Mount 1	260	forsterite	olivine	0.25-0.5	163.7	4	0.025	0.026	-0.0018	0.032	0.0022	0.00063	0.0008	0.003	0.0047	0.012	0.054	0.0045	0.0408	0.018							
Olv16SUV014row5grain1 - 1	Mount 1	262	fayalite	olivine	0.25-0.5	317.9	10	0.001	0.1	0.0016	0.038	0.0041	0.0011	0.014	0.0033	0.0168	0.035	0.399	0.0084	0.199	0.0037							
Olv16SUV014row5grain2 - 1	Mount 1	263	fayalite	olivine	0.25-0.5	603	22	0.02	0.13	0.0009	0.04	0.0031	0.00065	0.0008	0.0023	0.0175	0.037	0.409	0.011	0.16	0.01							
Olv16SUV014row5grain3 - 1	Mount 1	264	fayalite	olivine	0.25-0.5	318	9.3	0.037	0.11	0.0023	0.09	0.039	0.0025	0.045	0.0036	0.0307	0.042	0.458	0.012	0.128	0.0047							
Olv16SUV014row5grain4 - 1	Mount 1	265	fayalite	olivine	0.25-0.5	284.6	8.9	0.015	0.057	0.0012	0.033	-0.0015	0.00055	0.0005	0.0019	0.0131	0.026	0.276	0.0066	0.111	0.0072							
Olv16SUV014row5grain5 - 1	Mount 1	266	fayalite	olivine	0.25-0.5	569	19	0.068	0.1	0.0011	0.1	0.0138	0.0013	0.0185	0.003	0.0339	0.038	0.533	0.01	0.162	0.0062							
Olv16SUV016row5grain10 - 1	Mount 1	271	fayalite	olivine	0.25-0.5	347	14	-0.009	0.18	0.0002	0.035	0.0085	0.0014	0.027	0.0041	0.0254	0.036	0.599	0.014	0.265	0.013							
Olv16SUV016row5grain11 - 1	Mount 1	272	fayalite	olivine	0.25-0.5	163.9	6.5	-0.011	0.071	0.0001	0.061	0.0034	0.00068	0.019	0.0033	0.0148	0.035	0.206	0.0065	0.0482	0.0088							
Olv16SUV016row5grain12 - 1	Mount 1	273	fayalite	olivine	0.25-0.5	358.8	9.9	-0.018	0.082	-0.0004	0.032	0	0.00045	0.008	0.0021	0.0232	0.028	0.371	0.0097	0.119	0.0052							
Olv16SUV016row5grain6 - 1	Mount 1	267	fayalite	olivine	0.25-0.5	213.4	5.8	0.006	0.084	-0.0006	0.031	0.0058	0.0017	0.0096	0.0036	0.0226	0.031	0.282	0.0071	0.083	0.0028							
Olv16SUV016row5grain7 - 1	Mount 1	268	fayalite	olivine	0.25-0.5	166.6	4.9	0.002	0.032	0.0003	0.033	0.0024	0.001	-0.000191	0.003	0.0073	0.015	0.089	0.0042	0.0277	0.0057							
Olv16SUV016row5grain8 - 1	Mount 1	269	fayalite	olivine	0.25-0.5	478	14	0.031	0.079	0.0034	0.035	0.004	0.0009	0.0091	0.0036	0.0097	0.039	0.281	0.0081	0.09	0.007							
Olv16SUV016row5grain9 - 1	Mount 1	270	fayalite	olivine	0.25-0.5	329.2	9.8	0.004	0.11	0.0004	0.029	0.0077	0.00091	0.026	0.0033	0.0351	0.037	0.461	0.0095	0.114	0.0068							
Olv16SUV028row4grain8 - 1	Mount 1	261	forsterite	olivine	0.25-0.5	215.1	7.3	0.036	0.022	-0.0016	0.03	0.0009	0.00083	-0.0001721	0.0019	0.0032	0.0091	0.071	0.0037	0.0477	0.02							

APPENDIX 7F

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); CLINOPYROXENE (CPX)

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Note	Mg	Si	Ca	Sc	Ti_47	Ti_49	V	Cr_52	Cr_53	Mn	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
Diop15SUV004row1grain3 - 1	2015_3	3-1_003	low-CR_DC	cpx		115500	230000	146700	48.23		2930	123.6	7070	7020	606.7	34.04	317.3	2.91	23.07	2.343		100.99	2.093	4.88	0.07	0.45	1.235	4.155	0.636	3.03	0.754	0.23	0.661	0.077	0.477	0.089	0.178	0.0283	0.154	0.0279	0.223	0.0024	0.066	0.004	0.00057
Diop15SUV004row1grain3 - 2	2015_3	3-1_003_rpt	low-CR_DC	cpx		117490	210000	146040	45.1		2330	89.3	8405	8350	533.4	30.84	326	2.97	17.1	1.705	0.0099	90.13	1.444	2.925	0.043	1.13	0.886	2.886	0.444	2.22	0.479	0.16	0.477	0.062	0.324	0.0502	0.121	0.0185	0.103	0.0182	0.158	0.001	0.096	0.0041	0.00027
Diop15SUV004row1grain4 - 1	2015_3	3-1_004	low-CR_DC	cpx		119280	233500	147200	44.94		2391	112.9	8777	8676	618.3	34.98	375.5	8.08	23.08	1.691	0.0115	83.35	1.487	3.23	0.0592	0.138	0.861	2.851	0.44	2.15	0.511	0.167	0.442	0.0593	0.381	0.0676	0.154	0.0171	0.129	0.0179	0.147	0.0022	0.0499	0.003	0.00015
Diop15SUV014row1grain1 - 1	2015_3	3-1_001	Cr-diopside	cpx		119200	223000	148300	74.17		740.8	203	6490	6391	681.8	22.36	382.4	0.786	11.96	2.41		251.6	11.69	29.08	0.387	0.08	8.556	32.5	4.858	22.38	4.58	1.451	3.4	0.435	2.412	0.437	1.088	0.161	0.978	0.127	0.578	0.0292	0.779	0.323	0.0611
Diop15SUV014row1grain1 - 2	2015_3	3-1_001_rpt	Cr-diopside	cpx		116330	221300	147410	74.13		770.9	204.1	6520	6490	669.3	21.97	379.1	0.746	11.11	2.327		250.5	11.91	30.59	0.407	0.088	8.504	32.76	4.856	22.53	4.62	1.468	3.41	0.426	2.57	0.45	1.139	0.158	1.017	0.1361	0.703	0.0272	0.677	0.336	0.0643
Diop15SUV018row3grain2 - 1	2015_3	112	Cr-diopside	cpx		80430	171000	179450	1.271		955	2.85	6.2	4.3	1597	4.82	0.787	0.087	9.04	6.24	0.102	14.15	2.96	192.6	4.34	4.3	8.14	13.5	1.33	4.71	0.786	0.107	0.546	0.0867	0.573	0.123	0.33	0.0492	0.35	0.0534	4.62	0.23	1.35	5.8	0.542
Diop15SUV018row3grain2 - 2	2015_3	112	Cr-diopside	cpx		50700	138000	178600	1.761		1370	4.22	7.9	5.89	1870	1.77	1.06	0.105	6.38	5.75	0.0307	4.42	13.8	361	12.2	2.06	6.7	19	2.93	13.3	2.41	0.349	1.67	0.276	1.99	0.458	1.55	0.251	1.99	0.322	7.35	0.93	1.362	6.1	2.97
Diop15SUV019row3grain7 - 1	Mount 3	162	low_Cr diop	cpx	Has cracks			1651		31	9.61						1.3					0.183	0.11	80	0.26	15.47	0.087	1.958	0.32	6.65	0.032	0.875	0.11												
Diop15SUV019row3grain8 - 1	Mount 3	missing	low-CR_DC	missing				4970		110	22.49						0.39					0.0578	0.033	4.08	0.031	2.21	0.033	0.515	0.12	2.06	0.013	0.239	0.06												
Diop15SUV019row3grain9 - 1	Mount 3	163	low-CR_DC	cpx				5370		120	21.18						0.4					0.0664	0.11	3.84	0.031	2.16	0.036	0.533	0.1	2.067	0.017	0.246	0.059												
Diop15SUV021row1grain5 - 1	2015_3	3-1_005	low-CR_DC	cpx		126400	226000	133400	108.08		3220	538.8	4216	4298	1422	50.8	318.1	2.86	36.6	6.96	1.54	12.06	12.04	16.54	0.297	7.5	1.304	4.3	0.713	4.07	1.57	0.431	1.99	0.351	2.331	0.511	1.381	0.187	1.283	0.178	0.782	0.0203	0.269	0.148	0.0321
Diop15SUV021row1grain5 - 2	2015_3	3-1_005_rpt	low-CR_DC	cpx		119300	220000	134080	76.83		1788	357.7	7729	7884	1130.6	43.42	315.8	0.951	26.32	4.45		8.75	7.09	5.36	0.0181	0.036	0.446	1.94	0.381	2.21	0.899	0.243	1.26	0.192	1.357	0.279	0.75	0.1014	0.698	0.0977	0.273	0.0016	0.154	0.0122	0.0027
Diop15SUV021row1grain6 - 1	2015_3	3-1_006	low-CR_DC	cpx		130570	227300	135510	83.64		1902	297.9	8976	8819	1237	45.91	330.6	2.44	28.69	4.9	0.29	8.75	7.75	7.23	0.0288	0.165	0.488	2.019	0.379	2.354	0.994	0.289	1.236	0.204	1.471	0.302	0.924	0.123	0.823	0.112	0.337		0.083	0.0415	0.0028
Diop15SUV024row1grain2 - 1	2015_3	3-1_002	Cr-diopside	cpx		115710	229500	160300	29.99		530.3	99.55	4020	3982	1300	45.76	812.5	0.141	53.56	5.44	0.0268	12.09	10.38	28.24	0.0298	1.22	15.2	55.64	6.761	22.71	3.33	1.115	2.026	0.312	1.99	0.368	1.085	0.155	1.066	0.15	0.91	0.0057	0.93	0.205	0.0577
Diop15SUV024row1grain2 - 2	2015_3	3-1_002_rpt	Cr-diopside	cpx		113030	223000	158900	29.68		489.1	97.15	4021	3972	1258.7	44.54	811.6	0.201	50.07	5.25		11.73	10.04	26.86	0.0258	0.029	14.24	52.4	6.379	21.73	3.11	1.065	1.855	0.299	1.842	0.373	1.086	0.168	0.995	0.148	0.815	0.0063	0.935	0.201	0.0491
Diop15SUV027row1grain7 - 1	2015_3	3-1_007	low-CR_DC	cpx		110230	241100	152700	50.86		168.9	166.1	2851	2791	1614	44.12	556.5	0.098	58.99	5		8.11	41.6	21.45	0.0252		15.94	59.12	7.074	25.96	6.26	0.774	5.57	1.038	7.28	1.448	4.19	0.638	4.33	0.602	1.285	0.0086	0.853	0.203	0.348
Diop15SUV027row1grain7 - 2	2015_3	3-1_007_rpt	low-CR_DC	cpx		110800	232000	153400	50.87		170.1	162.3	2842	2769	1612	44.48	559.9	0.146	57.5	4.92		7.9	43.13	21.52	0.0234		15.87	60.34	7.193	26.59	6.4	0.808	5.96	1.037	7.33	1.461	4.32	0.643	4.31	0.609	1.322	0.0141	0.864	0.206	0.339
Diop15SUV028row1grain8 - 1	2015_3	3-1_008	low-CR_DC	cpx		110440	201700	129130	95.64		2413	357.6	6452	6727	1023.4	40.62	306.6	2.75	23.86	5.5	0.05	9.67	8.54	9.14	0.0327	0.122	0.482	2.024	0.397	2.56	1.047	0.348	1.482	0.25	1.763	0.338	0.946	0.124	0.825	0.1072	0.44	0.004	0.095	0.0185	0.00182
Diop15SUV028row1grain8 - 2	2015_3	3-1_008_rpt	low-CR_DC	cpx		134400	240000	128260	73.3		1751	263.4	5207	5057	1347	50.01	366.4	3.91	31.42	3.85	0.102	7.14	6.2	4.91	0.024	0.206	0.302	1.29	0.256	1.71	0.724	0.229	0.991	0.166	1.289	0.255	0.653	0.101	0.666	0.091	0.242	0.0011	0.198	0.025	0.00198
Diop15SUV028row1grain9 - 1	2015_3	3-1_009	low-CR_DC	cpx		118230	213800	134040	94.88		2495	351.1	7881	8130	1100.5	43.21	330.3	1.57	25.25	5.64		9.66	8.68	9.09	0.0272		0.489	1.97	0.392	2.58	1.025	0.352	1.369	0.242	1.754	0.364	0.975	0.1235	0.862	0.115	0.498	0.0029	0.0339	0.0146	0.00125
Diop15SUV028row3grain10 - 1	Mount 3	164	low-CR_DC	cpx	Has cracks			2504		54	14.85						0.2					0.0372	0.03	0.78	0.01	0.772	0.02	0.242	0.085	1.035	0.012	0.118	0.036												
Diop15SUV032row2grain1 - 1	2015_3	3-2_001	low-CR_DC	cpx		116670	232000	140040	82.29		1392.1	191.7	6446	6248	964	38.7	279.6	2.21	22.01	4.39	0.361	7.85	4.673	3.083	0.0325	1.53	0.166	0.569	0.1126	0.773	0.404	0.189	0.66	0.1188	0.923	0.187	0.492	0.0715	0.436	0.0689	0.163	0.0043	0.361	0.005	0.00301
Diop15SUV032row2grain1 - 2	2015_3	3-2_001_rpt	low-CR_DC	cpx		116990	225000	139290	80.53		1732	215.1	5583	5415	990	41.6	277.5	0.392	21.89	4.83	0.52	7.69	5.71	4.34	0.018	0.97	0.128	0.64	0.141	1.035	0.518	0.203	0.863	0.156	1.107	0.237	0.623	0.0893	0.561	0.0749	0.219		0.0153	0.0014	0.00065
Diop15SUV032row2grain2 - 1	2015_3	3-2_002	low-CR_DC	cpx		130530	244800	140370	67.47		1544	240.7	5981	5790	1119	44	316.4	0.65	25.89	3.5		9.21	5.65	4.23	0.0178	0.188	0.413	1.605	0.298	1.865	0.655	0.215	0.96	0.162	1.173	0.212	0.618	0.0835	0.601	0.0833	0.215		0.0435	0.0041	0.00222
Diop15SUV032row2grain2 - 2	2015_3	3-2_002_rpt	low-CR_DC	cpx		121300	231000	140760	86		2064	315.1	8077	8020	1049	41.65	302.6	0.85	26.8	5.25	0.127	11.21	7.58	7.3	0.0277	2.99	0.688	2.375	0.419	2.434	0.995	0.302	1.274	0.208	1.518	0.301	0.855	0.115	0.756	0.1	0.386		0.54	0.0138	0.0057
Diop15SUV032row2grain3 - 1	2015_3	3-2_003	low-CR_DC	cpx		118600	230200	136430	85.23		2201	306.7	7555	7490	1040.4	41.84	328.6	2.565	24.3	5.23	0.028	10.4	7.8	6.99	0.0235	0.063	0.454	1.888	0.38	2.45	0.971	0.346	1.278	0.219	1.567	0.311	0.914	0.118	0.774	0.1154	0.366	0.0023	0.169	0.0141	0.00176
Diop15SUV032row2grain4 - 1	2015_3	3-2_004	low-CR_DC	cpx		131930	224000	135230	78.3		1874	266	6906	6610	1260	47.73	348.8	3.03	29.8	4.41	0.0103	8.57	6.61	5.01	0.0268	0.086	0.355	1.469	0.294	1.872	0.756	0.279	1.048	0.176	1.314	0.257	0.721	0.099	0.658	0.0955	0.271		0.185	0.021	0.00214
Diop15SUV032row2grain4 - 2	2015_3	3-2_004_rpt	low-CR_DC	cpx		121950	206300	135070	75.01		1869	261.6	6478	6319	1115.1	43.86	326.7	2.85	26.1	4.31		9.43	6.182	4.9	0.0208	0.0064	0.324	1.443	0.268	1.802	0.78	0.255	1.007	0.179	1.233	0.257	0.708	0.0858	0.61	0.0802	0.263		0.0266	0.0055	0.00097
Diop15SUV032row2grain5 - 1	2015_3	3-2_005	low-CR_DC	cpx		131000	211000	141980	66.54		1441	226.7	6606	6370	1103	43.69	338	0.536	25.97	3.581	0.0181	8.79	5.3	3.7	0.0166	0.06	0.351	1.469	0.269	1.746	0.697	0.211	0.877	0.145	1.015	0.218	0.588	0.082	0.446	0.0804	0.175		0.169	0.0085	0.00103
Diop15SUV032row2grain6 - 1	2015_3	3-2_006	low-CR_DC	cpx		122490	208200	138150	92.8		2221	360.4	7790	7850	1167.7	46.35	307.5	2.12	27.84	5.38	0.0204	10.14	8.14	7.41	0.0269	0.443	0.46	2.02	0.385	2.44	0.987	0.335	1.317	0.242	1.578	0.315	0.928	0.126	0.773	0.122	0.424	0.0022	0.092	0.0071	0.0031
Diop15SUV032row2grain6 - 2	2015_3	3-2_006_rpt	low-CR_DC	cpx		118800	206900	138290	83.06		2036	324.2	5770	5750	1101	44.82	287.1	0.817	26.12	4.49		10.64	6.86	5.59	0.0173	0.113	0.449	1.798	0.34	2.162	0.891	0.302	1.205	0.203	1.462	0.279	0.801	0.0937	0.668	0.0859	0.287		0.0371	0.008	0.00112
Diop15SUV032row2grain7 - 1	2015_3	3-2_007	low-CR_DC	cpx		116200	189000	141000	94.99		2558	381	7443	7506	1036	42.39	335.5	2.75	24.66	5.85	0.043	10.85	7.92	8.25	0.0266	0.23	0.406	1.814	0.377	2.308	0.988	0.351	1.39	0.238	1.596	0.324	0.83	0.116	0.792	0.0937	0.485	0.0036	0.154	0.0109	0.00085
Diop15SUV032row2grain8 - 1	2015_3	3-2_008	low-CR_DC	cpx		121440	211000	133530	64.81		1623	220.6	4506	4314	1044.6	41.8	396.2	0.641	24.39	3.471	0.0127	8.994	5.26	3.758	0.0099		0.311	1.282	0.263	1.565	0.666	0.228	0.867	0.1555	1.096	0.208	0.595	0.0743	0.513	0.0727	0.229		0.0257	0.0046	0.00032
Diop15SUV032row2grain9 - 1	2015_3	3-2_009	low-CR_DC	cpx		117300	205000	138550	89.96		2409	325.9	7440	7416	1070.1	42.93	333.2	2.04	24.84	5.58		10.69	8.46	7.75	0.0284		0.464	1.966	0.392	2.5	1.041	0.355	1.372	0.249	1.686	0.356	0.985	0.1268	0.831	0.123	0.41		0.0275	0.0064	0.00086
Diop15SUV052row2grain10 - 1	2015_3	3-2_010	Cr-diopside	cpx		117670	204700	134130	81.48		1856	278.5	8144	7831	1050.9	40.95	304.2	0.46	24.29	4.51		9.28	7.18	6.21	0.026		0.467	1.905	0.368	2.388	0.889	0.263	1.137	0.207	1.376	0.278	0.836	0.1024	0.785	0.1012	0.338		0.0367	0.0114	0.00176
Diop16SUV019row6grain1 - 1	Mount 1	274	Cr-diopside	cpx				802		57	79.4						0.36					2.74	0.66	26.1	0.16	2.24	0.041	0.288	0.11	1.08	0.021	0.19	0.11												
Diop16SUV019row6grain2 - 1	Mount 1	275	Cr-diopside	cpx				118.3		4.5	61.2						0.051					0.0005	0.038	3.001	0.026	0.471	0.014	0.0366	0.034	0.177	0.0071	0.068	0.041												

APPENDIX 7G

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); RUTILE

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Grain Size	Ti_m47	Si	Ca	Ti_m49	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Rut16SUV013row1grain1 - 1	Mount 2	2_1_1	red rutile	rutile	0.25-0.5	4.12E+08	3600	470	593600	2.23	4.76	3.38	179.8	982	72.6	2.66	6.4	0.77	2.84	0.731	0.181	0.669	0.1207	0.763	0.149	0.419	0.0564	0.413	0.0553	8.38
Rut16SUV013row1grain2 - 1	Mount 2	2_1_2	red rutile	rutile	0.25-0.5	6.57E+08	1100	91	600100	0.05	2.094	0.528	2648	185.3	0.88	0.785	1.025	0.0933	0.3	0.0359	0.0347	0.061	0.0122	0.114	0.0276	0.105	0.0171	0.097	0.0154	107.6
Rut16SUV013row1grain3 - 1	Mount 2	2_1_3	red rutile	rutile	0.25-0.5	6.77E+08	800	146	600900	0.04	1.599	0.1011	33.1	1645	0.038	0.00095	0.0011	-0.00019	0.0036	0.0029	0.0019	0.0052	-0.00019	-0.00029	0.00038	0.00069	0.00015	0.0009	1.00E-05	1.44
Rut16SUV013row1grain4 - 1	Mount 2	2_1_4	red rutile	rutile	0.25-0.5	8.97E+08	200	160	602400	0.145	1.632	0.1092	1219	1330	0.038	0.00322	0.0027	6.00E-05	0.0062	0.002	0.00025	0.0034	0.00025	0.00095	0.00039	-1.22E-05	0.00029	-0.0014	8.00E-06	62.75
Rut16SUV013row1grain5 - 1	Mount 2	2_1_5	red rutile	rutile	0.25-0.5	6.79E+08	500	281	605600	0.05	1.653	0.1138	1143	757.5	0.087	0.0396	0.0844	0.0088	0.032	0.0041	0.0039	0.0044	0.00037	0.0023	0.00071	0.00017	-9.00E-05	-0.0003	-0.0004	54.13
Rut16SUV013row1grain6 - 1	Mount 2	2_1_6	red rutile	rutile	0.25-0.5	6.63E+08	-300	292	594000	0.05	1.667	0.1178	1297	1695	0.044	0.00078	0.00101	-0.00024	0.0057	0.0054	0.0001	0.0042	-0.00021	0.0033	3.00E-05	0.00128	5.00E-05	-0.0013	-0.00056	69.8
Rut16SUV013row1grain7 - 1	Mount 2	2_1_7	red rutile	rutile	0.25-0.5	7.81E+08	1100	128	602000	0.203	1.629	0.1172	1116	1986	0.135	0.00131	0.00166	0.00068	0.0016	0.001	0.0007	0.0018	0.0006	0.00094	0.00035	0.00092	0.00036	0.0015	6.00E-05	66.31
Rut16SUV013row1grain8 - 1	Mount 2	2_1_8	red rutile	rutile	0.25-0.5	6.45E+08	-500	211	596100	0.21	1.738	0.1216	824.9	3373	0.091	0.0052	0.0069	0.00135	0.0039	0.0029	0	-0.0027	0.0002	0.0009	7.00E-05	9.00E-05	0.00038	-0.0009	0.0012	50.58
Rut16SUV022row1grain9 - 1	Mount 2	2_1_9	red rutile	rutile	0.25-0.5	7.45E+08	200	237	591000	0.22	1.692	0.13	2445	4627	0.052	0.00106	0.00143	0.00072	0.0046	0.0041	0.0011	0.0043	4.00E-05	0.0015	0.00049	0.00094	-0.00011	-0.001	-0.00018	116.5
Rut16SUV022row1grain10 - 1	Mount 2	2_1_10	red rutile	rutile	0.25-0.5	6.32E+08	1300	660	588300	0.34	2.08	0.132	1279	2267	1.17	0.036	0.087	0.0129	0.038	0.0091	0.002	0.0061	0.00051	0.0047	0.00043	0.0017	0.00079	0.0039	0.00033	68.5
Rut16SUV022row1grain11 - 1	Mount 2	2_1_11	red rutile	rutile	0.25-0.5	6.97E+08	-800	315	597000	0.29	1.707	0.1208	1413	1618	0.063	0.0464	0.088	0.0109	0.052	0.0087	0.0002	0.0049	-1.00E-05	0.0012	0.00042	0.00031	0.00034	-0.001	0.00027	71.9
Rut16SUV023row2grain1 - 1	Mount 2	2_2_1	red rutile	rutile	0.25-0.5	8.09E+08	800	285	595500	0.32	1.7	0.1311	1257	1931	0.053	0.0072	0.0179	0.0039	0.0175	0.005	0.00051	0.0095	0.00059	0.0035	0.0007	0.0024	0.00051	0.0043	0.00075	52.12
Rut16SUV023row2grain2 - 1	Mount 2	2_2_2	red rutile	rutile	0.25-0.5	6.44E+08	100	126	601300	0.37	1.669	0.1191	260	1992	0.015	0.0032	0.0034	0.00064	0.0018	0.0026	0	-0.0028	0.00049	0.00035	0.0001	0.00022	0.00055	0.0002	-0.0004	6.15
Rut16SUV023row2grain3 - 1	Mount 2	2_2_3	red rutile	rutile	0.25-0.5	8.68E+08	-500	167	591800	0.213	1.735	0.1277	2081	3492	0.048	0.002	0.0051	0.00101	0.0034	0.0014	-0.00024	0.0039	0.00046	0.0009	0.00047	0.00128	0.00035	0.0013	0.00106	92.4
Rut16SUV023row2grain4 - 1	Mount 2	2_2_4	red rutile	rutile	0.25-0.5	9.04E+08	-200	212	593600	0.135	1.709	0.1196	1260	2446	0.077	3.00E-05	0.00027	0.00066	0.0046	0.0023	0.0004	0.0014	0.00047	0.0017	0.00039	0.00081	0.00043	0.0037	0.00256	54.43
Rut16SUV024row2grain6 - 1	Mount 2	2_2_6	red rutile	rutile	0.25-0.5	7.64E+08	300	313	597300	0.166	1.754	0.1282	997.4	2333	0.034	0.011	0.037	0.00295	0.0188	0.0025	0.0008	-0.0005	-0.00013	0.00077	0.00058	0.0018	0.00046	0.0028	0.00099	45.29
Rut16SUV024row2grain8 - 1	Mount 2	2_2_8	red rutile	rutile	0.25-0.5	7.69E+08	0	103	588800	0.1	1.85	0.1293	559.8	936	1.25	0.186	0.405	0.0356	0.099	0.0082	0.0024	0.0057	0.00103	0.0039	0.00034	0.0021	9.00E-05	0.0014	9.00E-05	28.77
Rut16SUV024row2grain9 - 1	Mount 2	2_2_9	red rutile	rutile	0.25-0.5	6.79E+08	1000	176	598000	0.018	1.76	0.1496	2366	1094	0.081	0.0413	0.096	0.0076	0.0285	0.007	0.0006	-0.0003	0.00143	0.0088	0.00166	0.0027	0.00057	0.0071	0.00039	75.2
Rut16SUV024row2grain10 - 1	Mount 2	2_2_10	red rutile	rutile	0.25-0.5	6.84E+08	4200	1360	598100	0.48	3.47	0.349	1021	1209	9.8	0.297	0.81	0.084	0.374	0.067	0.0163	0.046	0.0071	0.054	0.0098	0.0271	0.0042	0.0343	0.0055	37.15

APPENDIX 7H

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); VESUVIANITE

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Grain Size	Ca	Ti_m47	Ti_m49	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Ves15SUV001row8grain1 - 1	Mount 2	185	vesuvianite	garnet	0.25-0.5	534000	3600	3950	6.66	0.265	21.14	285	11.82	0.008	6.3	47.6	10.58	60.8	10.84	2.89	5.96	0.869	4.84	0.862	2.42	0.349	2.52	0.439	7.79
Ves15SUV001row8grain3 - 1	Mount 2	187	vesuvianite	vesuvianite	0.25-0.5	591000	9690	10660	0.96	204.8	20.21	334.8	35.1	0.034	40.8	85.7	9.87	38.6	7.19	1.147	5.48	0.761	4.38	0.833	2.17	0.32	1.88	0.278	9.37
Ves15SUV001row8grain4 - 1	Mount 2	188	vesuvianite	garnet	0.25-0.5	497000	4100	4470	2.02	0.149	27.5	47.8	11.01	0.146	1.428	9.78	2.197	15.79	6.84	4.8	7.44	1.016	5.78	0.998	2.512	0.311	1.74	0.257	1.255
Ves15SUV001row8grain5 - 1	Mount 2	189	vesuvianite	garnet	0.25-0.5	534000	4380	4720	1.43	0.189	26.87	137.7	232.4	0.029	6.26	57.1	13.18	74.2	14.28	4.72	7.69	0.935	5.04	0.954	2.64	0.376	2.4	0.363	3.59
Ves15SUV001row8grain6 - 1	Mount 2	190	vesuvianite	garnet	0.25-0.5	527000	1657	1780	17.69	0.671	44.4	3.94	32.9	0.073	19.53	37.3	2.69	10.52	3.06	1.516	3.96	0.788	6.23	1.492	5.06	0.836	5.48	0.704	0.101
Ves15SUV002row8grain8 - 1	Mount 2	191	vesuvianite	garnet	0.5-1.0	529000	17100	18350	1.3	0.626	23.9	190.4	7.71	0.193	5.33	40.2	8.24	47.4	15.29	3.54	14.21	1.526	6.7	0.853	1.72	0.173	1.12	0.159	4.18
Ves15SUV002row8grain9 - 1	Mount 2	192	vesuvianite	garnet	0.5-1.0	551000	28900	30200	3.41	0.684	27.7	232.1	83.1	0.075	10.15	82.5	15.65	69	8.98	2.66	6.51	0.956	5.73	1.086	2.87	0.389	2.57	0.368	8.35
Ves15SUV002row8grain10 - 1	Mount 2	193	vesuvianite	garnet	0.5-1.0	522000	14140	15080	0.78	0.18	60.6	202	163.6	0.077	11.41	71.9	14.72	90.3	27.4	8.99	21.3	2.83	15.4	2.68	6.51	0.805	4.43	0.544	5.48
Ves15SUV003row9grain1 - 1	Mount 2	196	vesuvianite	garnet	0.25-0.5	535000	3103	3320	1.28	0.199	37.9	71.3	36.1	0.146	9.16	78.3	17.69	97.1	19.76	5.34	11.97	1.451	8.05	1.434	3.87	0.517	3.3	0.449	1.84
Ves15SUV003row9grain2 - 1	Mount 2	198	vesuvianite	garnet	0.25-0.5	524000	2181	2276	9.17	0.391	21.22	1.386	10.98	0.106	4.92	26.56	4.48	21.04	4.74	1.664	4.65	0.693	4.38	0.84	2.35	0.309	1.84	0.222	0.0041
Ves15SUV003row9grain3 - 1	Mount 2	199	vesuvianite	garnet	0.25-0.5	548000	15470	16420	11.92	0.282	32.63	128.2	7.02	-0.001	2.27	15.39	3.08	17.28	4.58	2.366	5.32	0.919	6.22	1.297	3.75	0.503	3.27	0.432	4.75
Ves15SUV003row9grain4 - 1	Mount 2	200	vesuvianite	garnet	0.25-0.5	512000	2020	2130	1.22	0.166	447	0.542	15.08	0.039	1.812	12.87	3.29	29.4	24.5	6.31	52.1	10.51	75.3	15.2	40.8	5.08	27.3	2.88	0.0062
Ves15SUV003row9grain5 - 1	Mount 2	201	vesuvianite	garnet	0.25-0.5	532000	5780	6100	0.62	0.587	52.3	143.5	86.2	-0.009	7.08	57.1	11.85	64.6	14.49	2.78	11.01	1.569	9.39	1.83	5.28	0.83	5.63	0.786	2.66
Ves15SUV005row9grain6 - 1	Mount 2	202	vesuvianite	garnet	0.25-0.5	513000	4290	4510	-0.1	0.436	40.3	168.8	4.03	0.01	2.62	28.1	6.94	38.9	9.34	2.06	7.99	1.184	7.62	1.458	4.35	0.655	4.26	0.616	4.39
Ves15SUV010row9grain7 - 1	Mount 2	203	vesuvianite	garnet	0.5-1.0	549000	1981	2101	1.88	0.191	4.13	27.5	5.43	0.082	1.037	7.28	1.625	7.69	1.28	0.606	0.871	0.123	0.82	0.148	0.402	0.0571	0.39	0.06	0.869
Ves15SUV010row9grain8 - 1	Mount 2	204	vesuvianite	garnet	0.5-1.0	551000	4730	4950	17	2.02	13	11.1	0.961	3.9	3.8	17	2.65	12.07	2.48	1.35	2.79	0.419	2.67	0.463	1.18	0.149	0.99	0.111	0.185
Ves15SUV010row9grain9 - 1	Mount 2	206	vesuvianite	garnet	0.5-1.0	523000	2710	2834	0.15	2.6	37.5	123.8	7.35	0.143	10	48.5	10.45	53	9.95	1.84	7.16	1.063	6.83	1.408	4.22	0.618	4.03	0.548	3.6
Ves15SUV010row9grain10 - 1	Mount 2	207	vesuvianite	garnet	0.5-1.0	537000	5800	6100	15.78	0.901	20.13	7.16	105	0.03	4.06	27.11	5.61	32.7	7.62	3.52	6.52	0.789	4.09	0.701	1.624	0.209	1.21	0.164	0.082
Ves15SUV010row9grain11 - 1	Mount 2	208	vesuvianite	garnet	0.5-1.0	524000	16580	17380	21.93	0.84	90.3	27.46	43.1	0.9	4.69	27.79	4.9	23.31	4.64	2.7	6.22	1.298	12.04	3.08	11.13	1.864	13.44	1.997	0.27
Ves15SUV010row9grain12 - 1	Mount 2	209	vesuvianite	garnet	0.25-0.5	525000	801	828	0.45	0.507	26.99	1.106	15.66	0.079	3.21	21.61	4.85	34.6	9.6	3.09	5.63	0.757	4.5	0.872	2.51	0.369	2.57	0.389	0.017
Ves15SUV010row9grain13 - 1	Mount 2	210	vesuvianite	andradite	0.25-0.5	589000	370	361	0.36	0.207	24.6	57.7	0.806	0.045	6.6	54	8.05	24.62	2.69	1.291	2.82	0.485	3.62	0.779	2.61	0.46	3.72	0.663	1.55
Ves15SUV014row9grain14 - 1	Mount 2	211	vesuvianite	garnet	0.25-0.5	468000	3620	3800	1.13	0.276	18.53	52.6	7.35	-0.014	4.55	38.2	7.04	27.42	3.78	1.274	3.27	0.519	3.61	0.717	1.98	0.3	1.81	0.264	1.112
Ves15SUV015row10grain1 - 1	Mount 2	212	vesuvianite	vesuvianite	0.25-0.5	571000	5080	5290	0.71	329	1.92	544	41.5	0.66	1.85	6.5	0.88	3.24	0.369	0.071	0.164	0.0311	0.236	0.033	0.175	0.0375	0.254	0.0458	2.31
Ves15SUV021row10grain2 - 1	Mount 2	213	vesuvianite	andradite	0.25-0.5	514000	12980	13430	3.94	0.333	27.1	321	3.53	0.25	0.64	3.07	0.799	7.64	3.11	1.47	3.58	0.666	4.72	1	3.11	0.469	2.58	0.459	9.7
Ves15SUV024row10grain3 - 1	Mount 2	215	vesuvianite	garnet	0.25-0.5	513000	4970	5170	55.9	0.291	132.5	457	79.4	0.053	13.39	67.3	12.39	73.8	23.9	4.47	24.35	3.9	25.55	5.2	14.84	2.221	15.52	2.388	10.34
Ves15SUV024row10grain4 - 1	Mount 2	216	vesuvianite	andradite	0.25-0.5	553000	485	497	1.89	0.451	9.53	0.506	0.7	0.033	0.296	3.05	1.076	10.39	4.31	1.62	3.47	0.403	2.29	0.369	0.907	0.126	0.671	0.085	-0.0003
Ves15SUV024row10grain5 - 1	Mount 2	218	vesuvianite	garnet	0.25-0.5	518000	7630	7930	2.48	1.91	89	216.4	25.57	0.273	16.09	76.9	14.35	76.4	19.37	5.25	17.22	2.597	16.63	3.18	8.91	1.286	8.06	1.092	7.53
Ves15SUV024row10grain6 - 1	Mount 2	219	vesuvianite	talc?	0.25-0.5	588000	1084	1118	2.77	217	2.9	10.84	1.251	0.56	271	387	27	53.6	3.27	0.904	1.3	0.138	0.754	0.121	0.306	0.0348	0.146	0.0178	0.248
Ves15SUV026row10grain7 - 1	Mount 2	221	vesuvianite	garnet	0.5-1.0	561000	2710	2800	17.13	0.747	18.85	3.51	9.82	-0.051	11.63	51.4	6.63	26.3	4.56	1.9	3.66	0.529	3.4	0.731	2.14	0.378	2.91	0.488	0.036
Ves15SUV027row10grain8 - 1	Mount 2	222	vesuvianite	garnet	0.5-1.0	538000	15780	16170	0.4	1.59	52.3	90.1	12.19	1.9	4.45	25.1	5.05	29.6	9.58	3.29	9.88	1.576	10.27	2	5.51	0.777	5.05	0.642	1.03
Ves15SUV050row10grain9 - 1	Mount 2	223	vesuvianite	garnet	0.25-0.5	522000	5420	5590	2.75	35.7	41.6	56.8	23.4	19.9	2.83	12	3.23	22.5	7.63	1.475	7.87	1.207	7.88	1.552	4.43	0.647	4.08	0.565	1.043
Ves15SUV050row10grain10 - 1	Mount 2	224	vesuvianite	vesuvianite	0.25-0.5	517000	2004	2074	5.31	8.74	12.28	52.5	2.97	4.32	12.95	26.14	3.26	13.69	2.94	0.786	2.26	0.368	2.37	0.477	1.35	0.198	1.38	0.183	1.149
Ves15SUV050row10grain11 - 1	Mount 2	226	vesuvianite	garnet	0.25-0.5	414000	8930	9200	4.58	3.04	58.1	151.3	28.7	3.55	3.79	18.33	4.15	26.2	7.81	2.56	7.72	1.376	10.05	2.02	5.93	0.865	4.9	0.586	3.19
Ves15SUV050row10grain12 - 1	Mount 2	229	vesuvianite	garnet	0.25-0.5	539000	5970	6170	3.7	2.5	29.4	72.8	19.6	4.1	14.04	67.7	10.09	42.6	9	3.02	7.23	0.999	6.21	1.147	3.18	0.483	2.88	0.384	1.89
Ves16SUV013row10grain13 - 1	Mount 2	230	vesuvianite	garnet	0.25-0.5	469000	3850	3950	6.5	7.6	66.7	218.8	113.3	2.08	6.62	39.2	7.43	41	10.41	3.45	9.18	1.521	10.12	2.26	7.33	1.179	8.37	1.225	5.7

APPENDIX 7A

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); GARNET

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Garnet class[1]	Grain Size	Ca	Ti_m47	Ti_m49	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ni-in-garnet (°C)[3] Ryan et al., 1996	Ni-in-garnet(°C)[4] Griffin et al., 1989	Ni-in-garnet (°C)[5] Canil, 1999	Ni-in-garnet(°C)[6] Avg. (Griffin + Canil)
Gar15SUV001row3grain1 - 1	2015_1	1-3_001	andradite	garnet	G9	0.25-0.5	263400	20900	20910	0.77	29.1	10.29	95.5	67.2		21.34	161.4	32.7	167.3	21.44	4.47	8.78	0.737	3	0.403	0.779	0.0856	0.511	0.0781	1.761	369.92			
Gar15SUV001row3grain1 - 2	2015_1	1-3_001_rpt	andradite	garnet	G9	0.25-0.5	260500	20600	20530	0.85	28.06	10.24	96.4	65.3		20.5	154.6	31.38	160.8	21.17	4.4	8.84	0.73	2.89	0.394	0.76	0.0896	0.505	0.0783	1.701	377.74			
Gar15SUV001row3grain2 - 1	2015_1	1-3_002	andradite	garnet	G9	0.25-0.5	251000	56600	56400	13.78	18.4	161.7	136.7	47.3	5.91	4.71	65.5	17.58	105	27.8	5.34	30.2	4.49	30.2	6.03	15.93	2.24	13.4	1.615	1.57	716.89			
Gar15SUV001row4grain1 - 1	2015_1	1-4_001	almandine	garnet	G0	0.5-1.0	9860	1020	1037		0.162	2980	5.02	1.07		0.0043	0.025	0.0251	0.859	11.05	0.09	58.7	22.8	215	42	150.5	31.7	294	39.3	0.945				
Gar15SUV001row4grain1 - 2	2015_1	1-4_001_rpt	almandine	garnet	G0	0.5-1.0	10280	1128	1144		0.166	3170	5.48	1.19		0.0016	0.0193	0.0295	0.867	12.78	0.111	64.8	25.3	240	46.1	158.1	31.9	284	35.2	1.05				
Gar15SUV001row6grain1 - 1	2015_1	1-6_001	spessartine	garnet	G0	0.25-0.5	3470	853	855		0.439	3730	3.53	0.133			0.0056	0.0127	0.385	3.95	0.0088	31.5	12.91	168	53.2	280	82.3	1055	221	0.287				
Gar15SUV001row6grain1 - 2	2015_1	1-6_001_rpt	spessartine	garnet	G0	0.25-0.5	3580	934	945		0.563	4300	4.3	0.181			0.0087	0.0165	0.482	4.64	0.0114	36.2	14.8	194	63.2	343	103.7	1356	291	0.34				
Gar15SUV001row6grain1 - 3	2015_1	1-6_001_rpt	spessartine	garnet	G0	0.25-0.5	3280	880	881		0.445	3700	3.99	0.57		0.0012	0.0106	0.0137	0.503	4.11	0.008	32	13.02	165	52.1	272	80.1	1024	214	0.276				
Gar15SUV001row6grain1 - 4	2015_1	1-6_001_rpt	spessartine	garnet	G0	0.25-0.5	3630	930	945		0.588	4340	4.55	0.174			0.0104	0.0107	0.538	4.61	0.0135	36.1	14.91	196	63.2	347	106	1382	291	0.364				
Gar15SUV001row6grain2 - 1	2015_1	1-6_002	spessartine	garnet	G0	0.25-0.5	4980	852	855		0.773	7830	16.8	5.57	0.0009	0.0072	0.0492	0.0261	1.07	15.1	0.0125	122.6	49.5	552	143.1	632	169	1900	343	1.7				
Gar15SUV001row6grain2 - 2	2015_1	1-6_002_rpt	spessartine	garnet	G0	0.25-0.5	5090	690	700		0.227	2970	6.55	41		0.025	0.101	0.0217	0.225	3.05	0.005	40.5	19.8	212	49.3	194	47.8	498	81.6	0.645				
Gar15SUV001row6grain2 - 3	2015_1	1-6_002_rpt	spessartine	garnet	G0	0.25-0.5	4750	996	981		0.723	6780	18.1	21.9		0.0501	0.309	0.087	0.99	8.44	0.0136	88.3	40.6	475	127	569	153.7	1760	327	1.69				
Gar15SUV003row4grain2 - 1	2015_1	1-4_002	almandine	garnet	G3	0.25-0.5	57500	1045	1055	13.6	0.027	50.7	12.72	0.0034		0.0067	0.117	0.0749	1.285	1.72	0.762	4.23	1.027	9.44	1.97	5.36	0.668	4	0.47	0.133	714.46			
Gar15SUV003row4grain2 - 2	2015_1	1-4_002_rpt	almandine	garnet	G3	0.25-0.5	59800	1167	1174	13.63	0.0196	60.1	13.5	0.0031		0.0159	0.166	0.091	1.39	1.89	0.849	4.41	1.039	9.71	2.19	6.5	0.894	5.85	0.682	0.15	714.87			
Gar15SUV003row4grain3 - 1	2015_1	1-4_003	almandine	garnet	G0	0.25-0.5	51600	490	483	0.61	0.132	1950	4.4	0.0032		0.0042	0.108	0.106	2.19	9.53	1.26	70.1	25.5	293	80.4	280	40.7	274	37	0.124	352.23			
Gar15SUV004row2grain1 - 1	2015_1	missing	garnet	missing EPMA		0.25-0.5	37900	673	675	21.9	0.149	19.7	28.8	0.077		0.0186	0.211	0.0804	1.058	0.733	0.313	1.39	0.312	2.96	0.76	2.7	0.44	3.22	0.488	0.472	810.83			
Gar15SUV004row2grain1 - 2	2015_1	missing	garnet	missing EPMA		0.25-0.5	38300	669	680	21.9	0.148	20.14	29.4	0.088		0.0182	0.221	0.0873	1.092	0.745	0.313	1.35	0.319	2.98	0.774	2.69	0.439	3.13	0.515	0.426	810.83			
Gar15SUV005row4grain4 - 1	2015_1	1-4_004	almandine	garnet	G0	0.5-1.0	4650	22.8	22.9		0.159	721	4.1				0.0243	0.0142	0.229	0.421	0.0063	4.11	2.92	58.2	27	161	36.3	333	58.6	0.097				
Gar15SUV005row4grain4 - 2	2015_1	1-4_004_rpt	almandine	garnet	G0	0.5-1.0	7450	35.1	34.5		0.144	954	2.2	0.0023			0.0269	0.0193	0.465	1.024	0.0213	6.6	4.47	81.7	33.3	169.8	34.3	281	43.8	0.075				
Gar15SUV005row4grain4 - 3	2015_1	1-4_004_rpt	almandine	garnet	G0	0.5-1.0	10200	46	45.1	0.41	0.089	985	1.33	0.0021			0.0222	0.0238	0.541	1.51	0.0267	10.22	6.46	99.4	32.5	134.3	23.4	171	24.2	0.033	324.19			
Gar15SUV005row4grain5 - 1	2015_1	1-4_005	almandine	garnet	G3	0.25-0.5	47700	960	950	6.77	0.0186	50.5	13.14	0.004			0.0659	0.0478	0.799	1.38	0.717	4.36	0.995	8.61	1.9	5.84	0.866	5.56	0.76	0.171	600.72			
Gar15SUV006row4grain6 - 1	2015_1	1-4_006	almandine	garnet	G0	0.25-0.5	19450	121.6	121.2		0.086	962	2.97	0.003		0.0025	0.0468	0.0403	1.088	5.3	0.121	30.5	11.36	120.3	32.7	121.3	20.88	155.4	23.01	0.086				
Gar15SUV006row4grain6 - 2	2015_1	1-4_006_rpt	almandine	garnet	G0	0.25-0.5	23500	130.3	129.8	0.42	0.074	1153	3.06	0.0039		0.0019	0.0611	0.0622	1.33	5.9	0.128	30.8	11.5	136.9	39.8	137.8	22.4	156.6	21.79	0.061	325.82			
Gar15SUV006row4grain7 - 1	2015_1	1-4_007	almandine	garnet	G0	0.25-0.5	21600	129	126.3	0.71	0.056	1401	3.15	0.0047		0.0055	0.0905	0.0854	1.67	7.1	0.354	49.6	19.27	202	51.3	155.8	20.4	115.1	14.1	0.089	363.65			
Gar15SUV006row4grain7 - 2	2015_1	1-4_007_rpt	almandine	garnet	G0	0.25-0.5	20900	122.1	122.5	0.61	0.054	1374	3.23	0.0042		0.0037	0.1	0.083	1.61	6.97	0.33	48.8	18.92	197.5	47.7	140.6	18.23	104	12.33	0.096	352.23			
Gar15SUV009row2grain2 - 1	2015_1	1-2-2	garnet	garnet	G9	0.25-0.5	38600	735	749	27.4	0.066	16.15	15.7	0.071		0.0129	0.112	0.0349	0.448	0.536	0.337	1.44	0.309	2.61	0.605	1.99	0.36	2.47	0.434	0.249	862.97			
Gar15SUV009row4grain8 - 2	2015_1	1-4_008_rpt	almandine	garnet	G4	0.25-0.5	13710	584	582	0.7	0.0157	341	21.8	0.0041			0.157	0.171	3.99	8.42	0.535	25.1	6.3	54.9	11.92	33.8	4.51	28.2	3.41	0.314	362.56			
Gar15SUV014row2grain3 - 1	2015_1	1-2-3	garnet	garnet	G10	0.25-0.5	28500	102.8	103.4	47.8	3.19	1.64	10.37	0.982		0.703	4.81	0.908	4.6	0.913	0.276	0.745	0.08	0.376	0.0595	0.217	0.0531	0.543	0.158	0.177	1017.10	1074.72	1042.12	1058.42
Gar15SUV014row2grain3 - 2	2015_1	1-2-3_rpt	garnet	garnet	G10	0.25-0.5	26000	94	94	44.4	2.62	1.527	10.63	0.929		0.609	4.25	0.849	4.56	0.975	0.322	0.781	0.088	0.376	0.0495	0.187	0.0462	0.617	0.136	0.212	994.30	1049.86	1027.73	1038.80
Gar15SUV014row2grain3 - 3	2015_1	1-2-3_rpt	garnet	garnet	G10	0.25-0.5	24500	89.4	90.2	42.1	2.77	1.424	8.73	0.851		0.625	4.27	0.794	4.13	0.744	0.264	0.61	0.074	0.301	0.0494	0.177	0.0485	0.557	0.127	0.154	978.36	1032.51	1017.55	1025.03
Gar15SUV014row2grain4 - 1	2015_1	1-2-4	garnet	garnet	G10D	0.25-0.5	21900	161	156	46.3	4.6	1.423	5.33	1.83	0.86	2.13	4.13	0.771	4.74	1.101	0.333	0.755	0.0727	0.348	0.0537	0.11	0.019	0.228	0.062	0.055	1007.15	1063.86	1035.86	1049.86
Gar15SUV019row1grain1 - 1	Mount 3	127	garnet	garnet	G11	0.18-0.25	57500	4860	4830	179.3	0.736	66.2	145.4	0.316	-0.09	0.0275	0.455	0.217	2.8	2.52	1.259	5.74	1.261	10.53	2.6	8.19	1.252	8.67	1.302	3.22	1630.79	1758.53	1367.30	1562.91
Gar15SUV019row1grain2 - 1	Mount 3	128	garnet	garnet	G11	0.18-0.25	70200	4390	4310	139.6	0.706	50.1	121.5	0.354	-0.114	0.0112	0.216	0.139	2.13	3.47	1.805	7.46	1.377	9.73	1.918	5.38	0.726	4.6	0.672	2.59	1473.51	1580.49	1293.95	1437.22
Gar15SUV019row2grain5 - 1	2015_1	1-2_005	garnet	garnet	G9	0.25-0.5	37500	3870	3910	89.2	0.405	15.41	44.7	0.384		0.0347	0.413	0.141	1.288	0.936	0.465	1.88	0.361	2.83	0.656	1.96	0.285	2.17	0.301	1.15	1248.55	1329.21	1177.85	1253.53
Gar15SUV019row2grain5 - 2	2015_1	1-2_005_rpt	garnet	garnet	G9	0.25-0.5	37000	3840	3880	88.2	0.387	15.68	44.4	0.449		0.0355	0.394	0.131	1.3	0.924	0.437	1.81	0.379	3	0.66	1.93	0.297	2.02	0.307	1.2	1243.64	1323.76	1175.15	1249.45
Gar15SUV019row2grain5 - 3	2015_1	1-2_005_rpt	garnet	garnet	G9	0.25-0.5	36900	3900	3910	87.3	0.416	14.99	43.7	0.421		0.0327	0.407	0.14	1.35	1.002	0.468	1.81	0.346	2.69	0.606	1.83	0.279	1.95	0.29	1.098	1239.19	1318.83	1172.70	1245.77
Gar15SUV019row2grain6 - 1	2015_1	1-2_006	garnet	garnet	G9	0.25-0.5	34900	41.4	41.2	19.2	1.055	1.33	0.188	0.188		0.332	1.029	0.1	0.199	0.0105	0.0074		0.0029	0.071	0.0531	0.25	0.071	0.744	0.177	0.0021	782.38	820.72	883.88	852.30
Gar15SUV019row2grain6 - 2	2015_1	1-2_006_rpt	garnet	garnet	G9	0.25-0.5	36200	39.7	41.4	18.3	1.091	1.458	0.266	0.197		0.352	1.127	0.107	0.274	0.038	0.0124	0.026	0.0028	0.088	0.0464	0.297	0.077	0.864	0.164	0.0026	772.37	809.98	876.60	843.29
Gar15SUV019row3grain1 - 1	Mount 3	156	almandine	garnet	G0	0.18-0.25	16930	451	466	6.67	0.011	152.5	133.7	0.0161	0.048	-0.0014	0.0323	0.119	5.99	19.9	0.936	37.2	5.79	35.2	5.97	14.71	1.87	11.38	1.537	2.12	598.57			
Diop15SUV019row3grain6 - 1	Mount 3	161	diopside	garnet	G0	0.18-0.25	5620	180	0.384	2	5.56	0.037	50.5	0.29	12.16	0.12	1.971	0.46	7.09	0.042	0.749	0.15									454.28			
Gar15SUV020row2grain7 - 1	2015_1	1-2_007	garnet	garnet	G9	0.25-0.5	35400	2210	2220	73.1	0.356	15.35	25.2	0.367		0.0209	0.264	0.102	0.928	0.742	0.355	1.5	0.339	2.6	0.616	1.93	0.292	2.08	0.338	0.616	1166.17	1238.16	1131.60	1184.88
Gar15SUV020row2grain7 - 2	2015_1	1-2_007_rpt	garnet	garnet	G9	0.25-0.5	32900	2079	2100	67.8	0.345	14.43	23.46	0.314		0.0193	0.258	0.0954	0.912	0.698	0.336	1.4	0.267	2.35	0.575	1.8	0.257	1.94	0.288	0.506	1137.30	1206.37	1114.87	1160.62
Gar15SUV020row2grain7 - 3	2015_1	1-2_007_rpt	garnet	garnet	G9	0.25-0.5	34900	2210	2220	71.7	0.325	14.85	24.7	0.363		0.024	0.27	0.096	0.978	0.762	0.353	1.38	0.298	2.58	0.597	1.89	0.279	2.01	0.325	0.616	1158.64	1229.86	1127.26	1178.56
Gar15SUV020row6grain3 - 1	2015_1	1-6_003	spessartine	garnet	G0	0.25-0.5	9280	946	953		0.619	5720	3.82	1.47		0.022	0.059	0.022	0.632	6.16	0.0395	62.3	27.5	373	127.1	607	145.8	1446	260	0.289				
Gar15SUV020row6grain3 - 2	2015_1	1-6_003_rpt	spessartine	garnet	G0	0.25-0.5	7540	1217	1230		0.28	4600	5.28	0.506		0.0026	0.0246	0.0268	1.151	11.7	0.0463	83.9	29.6	312	78.1	298	64.6	600	95.9	0.478				
Gar15SUV024row1grain1 - 1	2015_1	1-1-1	GO[2]	garnet	G9	0.25-0.5	39500	4050	4110	44.7	0.37	12.96	38.5	0.332		0.0251	0.304	0.1065	1.12	0.72	0.342	1.47	0.27	2.24	0.525	1.6	0.252	1.77	0.277	0.916	996.35			
Gar15SUV024row1grain2 - 1	2015_1	1-1-2	GO	garnet	G0	0.25-0.5	7750	324	334	3.54	0.028	133.4	56.8	0.0057			0.0428	0.0772	3.03	9.34	0.612	15.66	2.87	22.9	5.37	16.82	2.35	15.55	2.27	0.67	516.22			
Gar15SUV024row1grain2 - 2	2015_1	1-1-2_rpt	GO	garnet	G0	0.25-0.5	8090	303	309	2.8		134.3	79.6	0.0047			0.0707	0.0848	2.77	8.65	0.592	16.5	3.07	23.2	5.03	15.21	2.13	14.3	2.02	1.26	489.54			
Gar15SUV024row1grain2 - 3	2015_1	1-1-2_rpt	GO	garnet	G0	0.25-0.5	7750	258	262	2.62		116.5	62.3	0.0056			0.0564	0.0623	2.26	7.03	0.482	13.94	2.64	20.3	4.41	13.35	1.85	12.1	1.76	1.29	482.31			
Gar15SUV024row2grain8 - 1	2015_1	1-2_008	garnet	garnet	G9	0.25-0.5	35700	2188	2185	51.7	0.488	21.7	56.6	0.5		0.0358	0.424	0.157	1.65	1.27	0.68	2.58	0.546	3.99	0.876	2.56	0.349	2.33	0.354	1.248	1042.26	1102.18	1057.77	1079.98

Gar15SUV024row2grain8 - 2	2015_1	1-2_008	garnet	garnet	G9	0.25-0.5	34700	2106	2098	50.4	0.467	21.4	55.8	0.48		0.0294	0.395	0.141	1.75	1.29	0.624	2.46	0.514	3.91	0.841	2.52	0.349	2.19	0.343	1.212	1033.98	1093.14	1052.65	1072.89
Gar15SUV024row5grain1 - 1	2015_1	1-5_001	almandine	garnet	G0	0.25-0.5	52500	69.6	72.6		0.056	132.6	3.74	0.0067		0.0247	0.191	0.0899	1.26	1.48	1.585	4.99	1.103	10.17	2.85	8.84	1.143	7.51	1.211	0.063				
Gar15SUV024row5grain2 - 1	2015_1	1-5_002	almandine	garnet	G3	0.25-0.5	59100	796	802	0.32	0.0449	332	11.72	0.0041		0.0294	0.513	0.281	4.34	7.65	2.54	24.1	5.78	52.6	12.49	41.5	6.3	45.3	6.58	0.251	307.94			
Gar15SUV024row5grain2 - 2	2015_1	1-5_002_rpt	almandine	garnet	G3	0.25-0.5	58300	848	852		0.0454	343	13.23	0.0073		0.0187	0.502	0.271	4.57	7.78	2.31	25	6.11	54	13.01	43.4	6.56	47.6	7.05	0.253				
Gar15SUV024row5grain3 - 1	2015_1	1-5_003	almandine	garnet	G0	0.25-0.5	8210	227	236	1.69	0.05	189	23.6	0.054	1.38	0.0013	0.0121	0.0105	0.316	3.15	0.146	16.97	4.39	35.1	6.93	20	2.82	17.8	2.46	0.512	437.82			
Gar15SUV024row5grain4 - 1	2015_1	1-5_004	almandine	garnet	G3	0.25-0.5	49500	721	734	5.46	0.082	66.6	14.55			0.0085	0.19	0.129	2.15	3.1	1.6	7.23	1.493	11.92	2.58	8.17	1.157	8.17	1.125	0.168	570.75			
Gar15SUV024row5grain4 - 2	2015_1	1-5_004_rpt	almandine	garnet	G3	0.25-0.5	53100	766	770	5.29	0.168	70	14.46			0.0115	0.217	0.139	2.14	3.07	1.68	7.44	1.58	12.24	2.64	8.18	1.204	8.25	1.16	0.172	566.52			
Gar15SUV024row5grain5 - 1	2015_1	1-5_005	almandine	garnet	G3	0.25-0.5	67900	1478	1469	14.67	0.0265	13.5	41.4	0.0052		0.0055	0.187	0.162	2.82	2.42	1.406	3.25	0.502	2.98	0.455	1.017	0.117	0.704	0.094	0.371	728.62			
Gar15SUV024row5grain5 - 2	2015_1	1-5_005_rpt	almandine	garnet	G3	0.25-0.5	67200	1514	1518	15.2	0.063	15.07	43.1	0.0132		0.094	0.55	0.21	2.79	2.49	1.419	3.31	0.519	3.23	0.559	1.31	0.171	0.973	0.141	0.454	735.39			
Gar15SUV024row5grain6 - 1	2015_1	1-5_006	almandine	garnet	G0	0.25-0.5	8890	180	178.7			191	20.7	0.0022	0.007	0.00089	0.0519	0.0593	1.36	3.98	0.085	17.2	4.5	34.7	6.84	17.7	2.29	12.95	1.6	0.563				
Gar15SUV025row3grain3 - 1	2015_1	1-3_003	andradite	garnet	G9	0.25-0.5	268000	81700	81500	0.96	4.27	341	1832	8.77		5.41	29	6.22	47.7	25.9	13.57	42.6	7.43	55.4	12	34.4	5.3	34.5	4.92	32.8	387.63			
Gar15SUV025row3grain4 - 1	2015_1	1-3_004	andradite	garnet	G9	0.25-0.5	244500	23500	23370		2.839	173	497	62.7		58.7	194.7	27.5	142.1	37.2	8.04	31.9	4.14	24.12	4.19	10.88	1.64	10.45	1.391	2.42				
Gar15SUV026row2grain9 - 1	2015_1	1-2_009	garnet	garnet	G10	0.25-0.5	33800	254	255	23	3.24	1.081	1.56	0.274		0.973	2.87	0.298	1.07	0.161	0.0266	0.086	0.0163	0.151	0.0373	0.179	0.0353	0.405	0.099	0.047	821.82	863.11	912.12	887.61
Gar15SUV026row2grain9 - 2	2015_1	1-2_009_rpt	garnet	garnet	G10	0.25-0.5	33800	231	231	22	3.13	1.039	1.74	0.301		0.874	3.4	0.452	1.84	0.242	0.0368	0.082	0.0167	0.119	0.0394	0.142	0.0371	0.381	0.086	0.048	811.84	852.37	905.04	878.71
Diop15SUV026row3grain3 - 1	2015_3	3-3_003	diopside	garnet	G0	0.25-0.5	247500		8330	0.92	0.207	18.11	613	18.71	0.038	3.55	19.17	3.777	20.98	5.08	3.134	3.84	0.593	3.64	0.687	1.88	0.263	1.9	0.288	19.16	384.13			
Diop15SUV026row3grain3 - 2	2015_3	3-3_003_rpt	diopside	garnet	G0	0.25-0.5	247700		7780	0.96	0.155	17.1	537.7	15.42		3.831	20.83	4.041	21.71	5	3.249	3.68	0.552	3.47	0.653	1.817	0.272	1.85	0.277	15.9	387.63			
Diop15SUV026row3grain4 - 1	2015_3	3-3_004	diopside	garnet	G0	0.25-0.5	219200		10.01	0.37	0.361	0.016	0.0169	0.0004		0.413	1.341	0.078	0.075	0.0053	0.0115		0.00063	0.0011		1.18E-07	5.68E-07				317.35			
Diop15SUV026row3grain4 - 2	2015_3	3-3_004_rpt	diopside	garnet	G0	0.25-0.5	220800		1.1	0.42	0.33			0.00084		0.374	0.952	0.0647	0.07	0	0.0139	0.0016				2.89E-07	7.01E-07	0.0006			325.82			
Gar15SUV028row1grain3 - 1	Mount 3	129	garnet	garnet	G9	0.18-0.25	66700	3480	3370	168.8	0.544	19.24	47.2	0.638	-0.104	0.0345	0.42	0.133	1.56	1.12	0.538	2.1	0.408	3.37	0.745	2.37	0.359	2.74	0.422	1.26	1590.33	1712.54	1349.00	1530.77
Gar15SUV028row1grain4 - 1	Mount 3	130	garnet	garnet	G11	0.18-0.25	79100	12240	11860	259	1.658	41.6	173.8	1.085	-0.093	0.122	1.602	0.532	4.79	3.1	1.247	5.01	0.999	7.65	1.631	4.82	0.708	4.92	0.735	4.59	1921.14	2092.40	1488.46	1790.43
Gar15SUV028row2grain10 - 1	2015_1	1-2_010	garnet	garnet	G9	0.5-1.0	48100	1167	1174	30.9	0.754	15.04	69.6	0.36	0.023	0.233	2.14	0.564	4.42	2.75	1.193	3.6	0.543	3.49	0.61	1.68	0.221	1.48	0.208	0.929	893.06	939.98	961.37	950.67
Gar15SUV028row2grain10 - 2	2015_1	1-2_010_rpt	garnet	garnet	G9	0.5-1.0	50000	1222	1224	30.2	0.626	15.09	69.4	0.403		0.261	2.19	0.569	4.39	2.79	1.209	3.71	0.556	3.6	0.639	1.642	0.228	1.459	0.23	1.015	887.20	933.64	957.40	945.52
Gar15SUV028row2grain10 - 3	2015_1	1-2_010_rpt	garnet	garnet	G9	0.5-1.0	51900	1268	1279	30	0.62	15.74	71	0.434		0.26	2.26	0.594	4.48	2.79	1.226	3.81	0.577	3.71	0.661	1.716	0.217	1.54	0.215	0.992	885.52	931.82	956.25	944.04
Gar15SUV028row2grain10 - 4	2015_1	1-2_010_rpt	garnet	garnet	G9	0.5-1.0	46600	1156	1155	30.4	0.725	14.36	66.7	0.381	0.026	0.233	2.132	0.56	4.1	2.66	1.189	3.51	0.529	3.45	0.602	1.576	0.212	1.326	0.199	0.931	888.89	935.46	958.54	947.00
Gar15SUV028row2grain11 - 1	2015_1	1-2-11	garnet	garnet	G9	0.25-0.5	43200	3500	3500	77.1	0.526	14.45	40.8	0.487		0.0401	0.465	0.169	1.6	1.09	0.472	1.85	0.36	2.74	0.521	1.58	0.229	1.48	0.222	0.892	1187.33	1261.50	1143.69	1202.59
Diop15SUV028row3grain5 - 1	2015_3	3-3_005	diopside	garnet	G0	0.25-0.5	255300		1651	8.65	5.63	11.46	43	29.41	4.02	1.325	5.28	1.102	6.93	2.37	0.63	1.93	0.323	2.03	0.395	1.215	0.177	1.213	0.189	0.893	637.56			
Diop15SUV028row3grain5 - 2	2015_3	3-3_005_rpt	diopside	garnet	G0	0.25-0.5	256400		4190	7.48	8.06	17.1	93.8	17.9	10.3	2.97	6.19	0.878	4.47	1.93	0.301	2.31	0.426	3.14	0.659	1.946	0.293	2.11	0.284	2.17	615.35			
Diop15SUV028row3grain6 - 1	2015_3	3-3_006	diopside	garnet	G0	0.25-0.5	251700		2167	5.68	116.3	29	43.1	4.45	6.53	59.8	152	19	71	11.6	3.05	7.73	0.968	5.82	1.013	2.53	0.349	2.05	0.238	0.824	576.10			
Gar15SUV030row2grain12 - 1	2015_1	1-2-12	garnet	garnet	G9	0.25-0.5	46500	7.51	7.5	32.9	0.65	0.478	13.21	0.723		0.45	3.74	0.836	5.18	1.24	0.283	0.514	0.0363	0.134	0.0126	0.049	0.0145	0.167	0.0421	0.167	909.41	957.67	972.36	965.01
Gar15SUV030row2grain12 - 2	2015_1	1-2-12_rpt	garnet	garnet	G9	0.25-0.5	45000	7.76	7.17	32.1	0.434	0.442	9.89	0.708		0.405	2.91	0.592	3.5	0.856	0.215	0.374	0.029	0.106	0.0157	0.051	0.0145	0.15	0.036	0.11	902.94	950.66	968.02	959.34
Gar15SUV051row2grain13 - 1	2015_1	1-2-13	garnet	garnet	G9	0.25-0.5	47100	667	668	58.5	2.99	4.42	9.93	1.869		0.468	3.95	0.823	3.91	0.73	0.206	0.776	0.114	0.812	0.178	0.555	0.0933	0.669	0.119	0.218	1083.94	1147.79	1083.20	1115.50
Gar15SUV051row2grain13 - 2	2015_1	1-2-13_rpt	garnet	garnet	G9	0.25-0.5	47000	664	671	60.6	2.98	4.55	10.16	1.908		0.441	4.04	0.871	4.4	0.826	0.209	0.719	0.116	0.887	0.184	0.544	0.085	0.751	0.115	0.288	1096.32	1161.37	1090.64	1126.00
Gar15SUV051row3grain6 - 1	2015_1	1-3_006	andradite	garnet	G0	0.25-0.5	256500	29300	29100	0.49	2.173	175.8	483	6.12		5.86	49.1	11.62	77	27.3	8.56	31.4	4.96	33.4	6.58	18.06	2.66	17.16	2.45	16.87	336.45			
Gar15SUV051row3grain7 - 1	2015_1	1-3_007	andradite	garnet	G0	0.25-0.5	273000	88100	87800	5.07	2.86	58	123.5	45.9	0.057	7.2	31.9	6.35	40	14.84	4.18	16.25	2.38	14.62	2.55	5.9	0.702	3.57	0.433	7.57	560.90			
Gar15SUV052row5grain7 - 1	2015_1	1-5_007	almandine	garnet	G0	0.5-1.0	8630	30.8	29.7		0.149	1193	14.28	0.0075	0.0011	0.00063	0.0026	0.003	0.102	0.94	0.054	15.9	9.45	129.3	41.5	173	34.9	285	45.4	0.437				
Gar15SUV052row5grain7 - 2	2015_1	1-5_007_rpt	almandine	garnet	G0	0.5-1.0	8550	35.4	35.8		0.117	1229	27.3	0.0154	0.0023		0.0027	0.0035	0.134	1.27	0.059	20.1	11	142	41.6	164.5	31.4	250	37.5	0.842				
Gar15SUV052row5grain8 - 1	2015_1	1-5_008	almandine	garnet	G0	0.5-1.0	32000	340	337		0.177	2036	11.42	0.0054	0.002	0.0088	0.233	0.205	4.88	11.43	0.147	50.7	18.22	228	71.7	293	54.9	431	65	0.275				
Gar15SUV052row5grain8 - 2	2015_1	1-5_008_rpt	almandine	garnet	G0	0.5-1.0	32700	302	299		0.171	1774	8.24	0.0076		0.0144	0.286	0.213	4.14	9.9	0.161	46.6	16.53	202	64.6	265	48.9	380	58.4	0.237				
Gar15SUV052row5grain8 - 3	2015_1	1-5_008_rpt	almandine	garnet	G0	0.5-1.0	31300	328	329		0.183	1993	10.21	0.0058	0.0078	0.0102	0.261	0.215	4.52	11.15	0.136	49.6	17.75	221	71.1	291	54.6	426	64.6	0.272				
Gar15SUV052row5grain9 - 1	2015_1	1-5_009	almandine	garnet	G0	0.5-1.0	7190	140.9	136.9	1.6		256	7.68		0.013	0.00032	0.0079	0.01	0.439	1.75	0.0547	5.2	2.09	29	8.77	27.6	3.32	17.59	2	0.199	432.63			
Gar15SUV052row5grain9 - 2	2015_1	1-5_009_rpt	almandine	garnet	G0	0.5-1.0	7020	122.7	123.9	1.39		137.2	4.44		0.0035		0.0244	0.0253	0.619	1.17	0.0489	4.65	2.05	23.7	5.08	11.39	1.147	6.41	0.853	0.134	419.64			
Gar15SUV052row5grain9 - 3	2015_1	1-5_009_rpt	almandine	garnet	G0	0.5-1.0	6470	131	131.5	0.79		52.5	5.95	0.00109			0.0249	0.0343	0.841	1.82	0.0551	7.2	2.241	14.82	1.92	3.45	0.354	1.95	0.282	0.145	371.93			
Gar15SUV053row5grain10 - 1	2015_1	1-5_010	almandine	garnet	G0	0.25-0.5	48600	322	320		0.0237	247	10.66	0.0048		0.0139	0.214	0.143	2.85	5.1	1.7	16.2	3.82	35.3	9.14	34.5	5.93	47.5	7.98	0.177				
Gar15SUV053row5grain10 - 2	2015_1	1-5_010_rpt	almandine	garnet	G0	0.25-0.5	52200	386	382		0.0213	238	12.67	0.0063		0.0163	0.315	0.196	3.21	5.54	1.76	17.1	4.07	36.3	8.85	30.7	4.86	38.3	6.29	0.217				
Gar15SUV053row5grain11 - 1	2015_1	1-5_011	almandine	garnet	G0	0.25-0.5	10280	82	82			780	3.1	0.0022		0.0095	0.274	0.213	4.03	12.62	0.138	76.1	25.1	199	28.8	51.1	4.74	24.4	2.6	0.123				
Gar15SUV053row5grain11 - 2	2015_1	1-5_011_rpt	almandine	garnet	G0	0.25-0.5	9770	83.2	83			652	3.44	0.0046		0.0056	0.262	0.207	4.14	13.65	0.115	79.2	24.5	180.5	24.4	40.7	3.71	18.38	1.901	0.094				
Gar16SUV015row1grain6 - 1	Mount 1	226	garnet	garnet	G9	0.25-0.5	35800	447	471	73.2	0.116	2.73	6.81	0.609	-0.003	0.0584	0.358	0.0686	0.446	0.13	0.0392	0.132	0.0323	0.348	0.0967	0.362	0.0684	0.625	0.1026	0.158	1166.71	1238.75	1131.90	1185.33
Gar16SUV023row1grain1 - 1	Mount 1	missing	GO	missing EPMA		0.25-0.5	27320	2921	2993	99.3	0.49	9.02	32.8	0.3	0.001	0.0288	0.319	0.102	0.986	0.653	0.275	1.081	0.203	1.623	0.347	1.012	0.157	1.165	0.174	0.84	1296.98			
Gar16SUV023row1grain10 - 1	Mount 3	136	garnet	garnet	G9	0.18-0.25	76200	1058	1044	184.4	0.408	7.35	3.37	1.084	0.078	0.1	0.92	0.236	1.58	0.359	0.089	0.286	0.077	0.853	0.279	1.021	0.21	1.84	0.363	0.085	1650.20	1780.63	1375.95	1578.29
Gar16SUV023row1grain11 - 1	Mount 3	137	garnet	garnet	G9	0.18-0.25	73800	3110	3100	107.5	1.27	15.81	65.3	0.97	5.1	0.115	1.098	0.404	4.13	2.75	1.108	3.53	0.526	3.33	0.667	1.79	0.245	1.77	0.267	1.39	1334.84	1425.12	1224.07	1324.59
Gar16SUV023row1grain12 - 1	Mount 3	138	garnet	garnet	G10	0.18-0.25	58600	56.2	58.2	31.8	13.17	1.709	114.5	0.266	0.201	0.6	11.28	3.84	27.8	8.1	1.836	3.93	0.244	0.752	0.0662	0.125	0.0176	0.201	0.064	3.35	900.49	948.01	966.38	957.19
Gar16SUV023row1grain13 - 1	Mount 3	139	garnet	garnet	G1	0.18-0.25	74300	7600	7790	130.7	0.791	24.33	78.3	0.672	0.247	0.059	0.628	0.227	2.25	1.47	0.704	2.82	0.562	4.57	1.045	3.16	0.49	3.45	0.54	2.16	1436.34			
Gar16SUV023row1grain14 - 1	Mount 3	140	garnet	garnet	G10	0.18-0.25	38100	35	26.1	59.9	1.69	0.115	0.88	0.184	0.08	1.21	2.85	0.213	0.89	0.185	0.031	0.012	0.006	0.017	0.0007	0.018	0.011	0.193	0.069	0.015	1092.22	1156.86	1088.18	1122.52
Gar16SUV023row1grain2 - 1	Mount 1	222	GO	garnet	G1	0.25-0.5	35200	4080	4200	79	0.525	14.08	48.4	0.374	0	0.0449	0.445	0.145	1.457	0.971	0.454	1.63	0.325	2.46	0.579	1.78	0.265	1.825	0.276	1.314	1197.21			
Gar16SUV023row1grain3 - 1	Mount 1	223	GO	garnet	G4	0.25-0.5	28000	1435	1492	89.8	0.241	14.13	14.28	0.196	0.001	0.0121	0.179	0.069	0.671	0.435	0.199	0.95	0.223	2.04	0.557	1.845	0.291	2.11	0.307	0.403	1251.49			
Gar16SUV023row1grain6 - 1	Mount 3	132	garnet	garnet	G9	0.18-0.25	100500	714	688	41.4	0.859	4.3	27.9	0.515	-0.076	0.16	2.087	0.857	7.8	2.33	0.664	1.56	0.158	0.719	0.158	0.493	0.107	1.038	0.202	0.565	973.42	1027.13	1014.37	1020.75
Gar16SUV023row1grain7 - 1	Mount 3	133	garnet	garnet	G1	0.18-0.25	62800	6120	5840	118.1	0.599	40.9	75.2	0.512	-0.08	0.0267	0.383	0.166	1.81	1.89	0.995	4.79	1.088	8.29	1.635	4.42	0.621	3.94	0.561	1.77	1382.13			
Gar16SUV023row1grain8 - 1	Mount 3	134	garnet	garnet	G9	0.18-0.25	75700	2548	2449	110.8	1.326	15.24	69.4	1.059	-0.044	0.098	1.435	0.581	6.05	3.59	1.301	3.9	0.566	3.38	0.583	1.5	0.217	1.554	0.252	1.294	1349.75	1441.76	1231.83	1336.79
Gar16SUV023row1grain9 - 1	Mount 3	135	garnet	garnet	G9	0.18-0.25	93000	3350	3270	145.8	1.246	7.1	51.4	1.454	0.024	0.137	1.495	0.506	4.88	2.79	0.985	2.61	0.334	1.71	0.278	0.63	0.0874	0.641	0.141	1.31	1498.93	1609.13	1306.21	1457.67
Gar16SUV023row2grain1 - 1	Mount 1	227	garnet	garnet	G10	0.25-0.5	33300	760	764	70.2	0.566	2.37	29.6	0.603	0.012	0.0451	0.569	0.195	1.877	1.176	0.406	1.264	0.157	0.775	0.0958	0.174	0.0215	0.218	0.0616	0.674	1150.50	1220.89	1122.55	1171.72

Gar16SUV023row2grain1 - 1	Mount 3	141	garnet	garnet	G9	0.18-0.25	64200	722	753	95.3	0.623	10.63	15.32	2.47	-0.045	0.131	1.505	0.395	2.98	0.95	0.317	1.02	0.164	1.341	0.39	1.48	0.266	2.17	0.38	0.261	1278.06	1361.94	1193.90	1277.92
Gar16SUV023row2grain10 - 1	Mount 1	236	garnet	garnet	G10	0.25-0.5	39000	17.19	18.5	26.7	3.27	0.388	2.28	0.509	29.5	2.43	6.58	0.847	3.32	0.438	0.089	0.256	0.0218	0.116	0.0188	0.0454	0.0079	0.109	0.0296	0.04	856.69	900.69	936.50	918.59
Gar16SUV023row2grain10 - 1	Mount 3	150	garnet	garnet	G9	0.18-0.25	84800	4710	5050	111.6	1.614	53.2	115.1	1.116	0.099	0.098	1.39	0.558	5.81	4.19	1.95	7.88	1.606	10.96	2.142	5.08	0.645	3.58	0.48	2.37	1353.33	1445.76	1233.69	1339.73
Gar16SUV023row2grain11 - 1	Mount 1	237	garnet	garnet	G12	0.25-0.5	56700	83.5	85.8	25.42	1.036	0.916	13.59	2.79	0.014	0.766	4.71	0.924	4.8	1.03	0.259	0.43	0.0406	0.168	0.0336	0.122	0.0252	0.29	0.072	0.138	844.96	888.04	928.36	908.20
Gar16SUV023row2grain11 - 1	Mount 3	151	garnet	garnet	G9	0.18-0.25	64500	3450	3710	120.8	0.945	38.5	116.2	0.528	0.016	0.0307	0.587	0.256	3.18	2.66	1.345	5.25	1.019	7.12	1.524	4.18	0.611	3.87	0.568	2.59	1393.92	1491.14	1254.48	1372.81
Gar16SUV023row2grain12 - 1	Mount 1	238	garnet	garnet	G11	0.25-0.5	37500	2862	2909	78.3	0.617	5.46	94.3	0.374	-0.005	0.0315	0.427	0.184	2.34	1.89	0.645	1.93	0.211	1.209	0.211	0.589	0.0955	0.688	0.1154	2.324	1193.58	1268.40	1147.23	1207.81
Gar16SUV023row2grain12 - 1	Mount 3	152	garnet	garnet	G9	0.18-0.25	91500	2060	2160	91.8	1.45	17.4	43.4	2.02	0.28	0.293	3.15	0.886	8.2	3.19	1.19	3.43	0.514	3.1	0.69	2.1	0.326	2.87	0.416	0.79	1261.23	1343.26	1184.78	1264.02
Gar16SUV023row2grain13 - 1	Mount 1	239	garnet	garnet	G9	0.25-0.5	42500	1879	1963	61.7	0.948	3.66	35.3	0.632	0.012	0.0588	0.899	0.395	4.11	1.74	0.548	1.36	0.163	0.856	0.1401	0.369	0.049	0.393	0.0788	0.887	1102.73	1168.39	1094.47	1131.43
Gar16SUV023row2grain13 - 1	Mount 3	153	garnet	garnet	G11	0.18-0.25	69100	4570	4860	148.2	0.607	37.4	73.2	0.605	0.054	0.0428	0.536	0.153	2.11	2.38	0.828	3.1	0.686	6.02	1.494	4.87	0.769	5.69	0.887	1.93	1508.67	1620.12	1310.87	1465.50
Gar16SUV023row2grain14 - 1	Mount 3	154	garnet	garnet	G9	0.18-0.25	61300	740	775	143.6	0.356	12.86	19.87	0.68	0.032	0.0255	0.434	0.192	1.77	0.713	0.254	0.86	0.181	1.72	0.474	1.76	0.319	2.39	0.439	0.317	1489.95	1599.01	1301.90	1450.46
Gar16SUV023row2grain2 - 1	Mount 1	228	garnet	garnet	G11	0.25-0.5	41900	3000	3050	56.5	0.742	13.74	44.6	0.51	1.85	0.209	1.2	0.21	1.96	1.212	0.593	2.09	0.384	2.74	0.529	1.412	0.201	1.31	0.198	1.003	1071.94	1134.64	1075.95	1105.30
Gar16SUV023row2grain2 - 1	Mount 3	142	garnet	garnet	G9	0.18-0.25	72900	4050	4170	181.2	0.775	18.23	69.7	0.692	0.027	0.064	0.77	0.27	2.48	1.5	0.631	2.26	0.4	3.07	0.693	2.23	0.379	2.55	0.428	1.437	1638.04	1766.78	1370.54	1568.66
Gar16SUV023row2grain3 - 1	Mount 1	229	garnet	garnet	G11	0.25-0.5	51000	3760	3810	58	0.48	14.4	42.4	0.426	-0.001	0.0287	0.345	0.136	1.434	1.03	0.487	1.85	0.353	2.71	0.563	1.563	0.226	1.428	0.203	1.018	1080.96	1144.52	1081.41	1112.96
Gar16SUV023row2grain3 - 1	Mount 3	143	garnet	garnet	G9	0.18-0.25	67100	586	602	89.7	1.238	21.16	108	1.339	0.168	0.138	1.505	0.55	6.01	4.76	2.02	6.41	0.949	5.04	0.834	1.99	0.308	2.37	0.439	1.68	1251.00	1331.92	1179.19	1255.56
Gar16SUV023row2grain4 - 1	Mount 1	230	garnet	garnet	G9	0.25-0.5	47500	1951	1954	58.4	0.747	5.05	16.17	0.747	0.027	0.0708	0.854	0.346	3.29	1.023	0.305	0.893	0.1456	0.907	0.191	0.548	0.0825	0.735	0.132	0.543	1083.34	1147.14	1082.84	1114.99
Gar16SUV023row2grain4 - 1	Mount 3	144	garnet	garnet	G10	0.18-0.25	48000	64.1	66.8	71.7	8.87	18.03	49.8	1.014	0.163	0.963	9.91	2.3	11.65	3.12	1.216	4.1	0.576	3.5	0.695	2.08	0.326	2.79	0.553	0.838	1158.64	1229.86	1127.26	1178.56
Gar16SUV023row2grain5 - 1	Mount 1	231	garnet	garnet	G9	0.25-0.5	36800	1930	1940	76.2	2.39	2.25	25.3	3.36	23.9	1.39	4.17	0.532	3.3	1.311	0.419	1.209	0.126	0.613	0.0849	0.225	0.0362	0.324	0.0616	0.571	1182.62	1256.29	1141.00	1198.65
Gar16SUV023row2grain5 - 1	Mount 3	145	garnet	garnet	G10D	0.18-0.25	47000	36.6	41.7	85.4	9.83	0.255	1.95	0.619	-0.084	3.03	12.92	1.308	3.9	0.296	0.062	0.092	0.0083	0.041	0.0085	0.046	0.0107	0.172	0.064	0.025	1229.74	1308.37	1167.48	1237.92
Gar16SUV023row2grain6 - 1	Mount 1	232	garnet	garnet	G9	0.25-0.5	40300	2279	2286	62.5	0.735	4.05	45.3	0.593	0.024	0.0582	0.63	0.212	2.02	1.484	0.631	2.13	0.282	1.423	0.16	0.295	0.0342	0.369	0.0878	1.224	1107.35	1173.47	1097.22	1135.34
Gar16SUV023row2grain6 - 1	Mount 3	146	garnet	garnet	G12	0.18-0.25	101100	89.4	90	36.4	5.44	0.98	4.63	0.683	-0.077	0.477	4.48	1.553	15.02	2.83	0.556	0.694	0.0577	0.228	0.0286	0.078	0.0199	0.203	0.07	0.091	936.74	987.29	990.50	988.89
Gar16SUV023row2grain7 - 1	Mount 1	233	garnet	garnet	G10	0.25-0.5	11120	12.3	11.48	22.66	18.63	0.448	1.43	0.089	0.135	0.226	4.08	0.916	4.77	0.846	0.214	0.329	0.0276	0.113	0.0199	0.076	0.026	0.338	0.1005	0.027	818.46	859.49	909.74	884.61
Gar16SUV023row2grain7 - 1	Mount 3	147	garnet	garnet	G9	0.18-0.25	74000	4710	4940	160.8	0.728	20.93	58.7	0.704	-0.036	0.0478	0.578	0.186	2.12	1.57	0.723	2.69	0.52	3.85	0.816	2.36	0.409	2.84	0.444	1.52	1559.01	1677.03	1334.56	1505.79
Gar16SUV023row2grain8 - 1	Mount 1	234	garnet	garnet	G1	0.25-0.5	33100	3610	3640	111.3	0.699	10.3	50.7	0.46	0.2	0.0639	0.54	0.169	1.552	0.919	0.418	1.525	0.28	2.05	0.418	1.181	0.165	1.137	0.18	1.207	1351.99			
Gar16SUV023row2grain8 - 1	Mount 3	148	garnet	garnet	G9	0.18-0.25	73700	1745	1826	104.4	1.218	25.5	89.8	1.161	0.092	0.112	1.401	0.526	5.69	3.64	1.453	4.17	0.587	4.12	0.951	3.21	0.511	3.85	0.61	1.345	1320.66	1409.33	1216.62	1312.98
Gar16SUV023row2grain9 - 1	Mount 1	235	garnet	garnet	G9	0.25-0.5	45000	1690	1712	79.7	0.628	2.16	17.06	0.571	0.81	0.0806	0.671	0.197	1.88	0.935	0.314	0.829	0.0978	0.493	0.0761	0.209	0.0368	0.303	0.0637	0.356	1200.82	1276.39	1151.32	1213.86
Gar16SUV023row2grain9 - 1	Mount 3	149	garnet	garnet	G11	0.18-0.25	74100	5190	5560	145.5	1.047	27	76.2	0.819	0.081	0.0592	0.74	0.266	2.64	1.88	0.919	3.75	0.773	5.51	1.073	2.77	0.36	2.24	0.339	1.93	1497.71	1607.75	1305.63	1456.69
Gar16SUV023row3grain1 - 1	Mount 1	240	garnet	garnet	G9	0.25-0.5	42200	205.4	212.4	46.6	0.023	4.77	2.95	0.577	0.008	0.0487	0.313	0.0637	0.434	0.186	0.066	0.217	0.0506	0.579	0.181	0.681	0.138	1.106	0.173	0.044	1009.15	1066.05	1037.13	1051.59
Gar16SUV023row3grain2 - 1	Mount 1	241	garnet	garnet	G9	0.25-0.5	49900	2540	2640	80.8	0.972	7.31	34	0.922	-0.004	0.0937	1.031	0.345	3.23	1.78	0.697	2.11	0.302	1.82	0.291	0.653	0.0736	0.461	0.0808	0.799	1206.47	1282.64	1154.49	1218.56
Gar16SUV023row3grain2 - 1	Mount 3	157	almandine	garnet	G4	0.18-0.25	49000	356	367	0.22	0.052	686	20.9	0.0106	-0.016	0.0231	0.75	0.625	12.8	27.8	0.717	77	16.54	124.7	26.6	78.5	12.01	82.8	12.09	0.417	284.98			
Gar16SUV023row3grain3 - 1	Mount 1	242	garnet	garnet	G9	0.25-0.5	42800	1309	1349	65.7	0.659	3.8	27.9	0.756	0.059	0.0614	0.737	0.264	2.42	1.146	0.373	0.97	0.132	0.804	0.146	0.413	0.0619	0.489	0.0849	0.782	1125.57	1193.48	1107.99	1150.73
Gar16SUV023row3grain4 - 1	Mount 1	243	garnet	garnet	G9	0.25-0.5	43900	1827	1876	47.4	1.125	14.55	52.9	0.993	-0.007	0.0739	1.08	0.421	4.46	3.02	1.206	3.71	0.567	3.2	0.545	1.277	0.163	0.984	0.148	0.974	1014.46	1071.84	1040.47	1056.15
Gar16SUV023row3grain4 - 1	Mount 3	159	grossular	garnet	G9	0.18-0.25	462000	3460	3490	0.82	0.576	112.6	30.3	10.29	-0.001	0.0258	0.666	0.428	6.67	7.51	1.403	14.3	2.82	19.26	3.59	10.02	1.466	9.76	1.236	1.59	374.88			
Gar16SUV023row3grain5 - 1	Mount 1	244	garnet	garnet	G9	0.25-0.5	32000	829	858	59.6	0.219	9.03	8.89	0.413	0.052	0.0322	0.299	0.0923	0.703	0.377	0.187	0.649	0.156	1.371	0.35	1.099	0.196	1.359	0.224	0.203	1090.45	1154.93	1087.12	1121.02
Gar16SUV023row4grain1 - 1	Mount 1	254	almandine	garnet	G3	0.25-0.5	49000	958	946	0.97	0.028	125.2	30.6	0.0029	0.029	0.0237	0.379	0.216	3.27	3.56	1.594	9.12	2.263	20.4	5.1	15.28	2.222	14.29	2.007	0.316	388.48			
Gar16SUV023row4grain2 - 1	Mount 1	255	almandine	garnet	G3	0.25-0.5	43600	360	358	3.05	0.018	111.7	15.98	0.0007	0.036	0.0035	0.114	0.0898	1.8	3.29	1.083	9.23	2.13	17.38	4.09	12.64	1.944	13.03	1.898	0.232	499.06			
Hercy16SUV023row7grai5 - 1	Mount 1 1_7_5		hercynite	andradite	G0	0.25-0.5	229200	19020	18930	2.22	35.33	8.673	105.45	160.52	-0.012	23.78	146.2	28.01	128.9	14.28	2.953	6.206	0.506	1.934	0.2572	0.525	0.0627	0.376	0.0657	1.436	464.86			
Gar16SUV025row3grain6 - 1	Mount 1	245	garnet	garnet	G10D	0.25-0.5	26500	76	75.9	38.8	2.38	0.926	5.08	0.426	-0.005	0.69	4.96	0.849	4.31	0.666	0.154	0.324	0.0353	0.164	0.0339	0.1	0.02	0.161	0.0398	0.105	954.66	1006.74	1002.23	1004.49
Gar16SUV025row3grain7 - 1	Mount 1	246	garnet	garnet	G9	0.25-0.5	38900	288	285	42.5	0.277	5.33	16.3	0.579	0.004	0.0564	0.772	0.27	2.27	0.93	0.303	0.85	0.1251	0.854	0.195	0.67	0.1114	0.91	0.176	0.17	981.16	1035.56	1019.35	1027.45
Gar16SUV027row3grain11 - 1	Mount 1	251	andradite	andradite	G0	0.5-1.0	236700	16380	16070	2.14	1.203	61.1	312.3	6.17	0.001	6.35	38.9	7.09	37.2	9.61	4.4	10.13	1.628	11.02	2.34	7.12	1.072	7.2	1.062	7.43	461.10			
Gar16SUV027row3grain12 - 1	Mount 1	252	andradite	andradite	G0	0.25-0.5	242300	30000	29730	4.79	1.38	34.85	96.5	7.56	0.007	1.401	8.86	2.151	15.28	5.73	1.89	6.62	1.045	7.01	1.397	3.95	0.548	3.41	0.453	0.955	553.50			
Chr16SUV027row5grain10 - 1	Mount 2	155	chromite	andradite	G0	0.25-0.5	224100	34270	34340	9.5	23.43	16.58	238	262.4	4.4	28.16	178.4	31.16	135.7	18.34	4.606	10.98	1.102	4.899	0.679	1.449	0.1645	0.971	0.1627	9.22	652.49			
Gar16SUV028row1grain4 - 1	Mount 1	224	GO	garnet	G3	0.5-1.0	42100	843	902	1.11	0.025	52	18.18	0.0006	0.039	0.002	0.0265	0.0281	0.817	1.68	0.576	4.91	1.068	8.8	2.02	6.35	0.952	6.58	0.907	0.248	399.82			
Gar16SUV028row1grain5 - 1	Mount 1	225	GO	garnet	G1	0.25-0.5	34400	3790	3940	101.2	0.384	19.38	52.2	0.146	0.001	0.0273	0.317	0.123	1.155	0.925	0.461	1.91	0.393	3.32	0.786	2.62	0.405	2.84	0.417	1.441	1305.86			
Gar16SUV028row3grain13 - 1	Mount 1	253	andradite	andradite	G0	0.25-0.5	249800	2.32	0.38	1.99	0.032	6.4	0.0118	0.0004	0.015	12.18	47.7	6.44	24.6	3.61	1.51	2.82	0.27	1.25	0.188	0.39	0.038	0.158	0.0082	0.0006	453.77			
Gar16SUV028row3grain8 - 1	Mount 1	248	garnet	garnet	G9	0.5-1.0	43900	2235	2226	76.7	0.805	7.34	35.8	0.658	0.081	0.106	0.732	0.234	2.169	1.435	0.574	1.94	0.287	1.737	0.283	0.695	0.085	0.546	0.0811	0.849	1185.24	1259.19	1142.50	1200.84
Gar16SUV028row3grain9 - 1	Mount 1	249	garnet	garnet	G10	0.25-0.5	32200	42.9	42.7	22.99	0.69	1.011	8.67	0.263	-0.015	0.244	2.74	0.833	6.35	1.61	0.38	0.814	0.0664	0.264	0.0357	0.137	0.0359	0.453	0.108	0.141	821.72	863.00	912.05	887.53
Gar16SUV028row4grain3 - 1	Mount 1	256	almandine	garnet	G0	0.5-1.0	7570	291	287	24.5	0.005	4.3	46.4	0.0039	0.012	0.0119	0.49	0.331	5.11	4.43	0.912	2.54	0.259	1.17	0.161	0.404	0.0544	0.359	0.0531	1.059	836.32			
Gar16SUV028row4grain4 - 1	Mount 1	257	almandine	garnet	G0	0.5-1.0	29200	88.2	86.7	0.62	0.014	48.5	8.26	0.0029	0.035	0.0016	0.091	0.1134	3.21	5.33	1.569	8.04	1.306	8.57	1.627	4.7	0.71	4.79	0.675	0.123	353.43			
Gar16SUV028row4grain5 - 1	Mount 1	258	almandine	garnet	G3	0.5-1.0	65100	804	806	3.01	0.014	75.6	13.68	-0.0008	0.002	0.0014	0.0222	0.0415	1.096	2.13	0.913	4.46	1.258	12.13	2.83	8.36	1.133	7.11	0.917	0.18	497.57			
Gar16SUV028row4grain6 - 1	Mount 1	259	almandine	garnet	G4	0.25-0.5	35300	263	267	11.09	0.03	39.5	17.45	0.0678	0.003	0.0736	0.998	0.1058	0.509	1.123	0.606	4.03	0.954	7.16	1.543	4.41	0.619	4.05	0.609	0.268	678.24			
Diop16SUV028row6grain3 - 1	Mount 1	276	diopside	garnet	G0	0.25-0.5	1021	37	0.85	0.27	9.65	0.054	21.49	0.15	3.66	0.1	0.332	0.11	0.685	0.0095	0.0253	0.016									297.30			
Gar16SUV030row3grain10 - 1	Mount 1	250	garnet	garnet	G9	0.5-1.0	38500	2106	2108	67.2	2.5	4.61	30	0.471	7.1	1.98	3.9	0.384	2.09	1.212	0.47	1.54	0.229	1.156	0.185	0.417	0.0578	0.444	0.0773	0.719	1133.96	1202.71	1112.92	1157.81

[1]Garnet Classification: Grütter et al. 2004

[2]GO = eclogitic garnet

[3] °C (Ni-in-Garnet); Ryan et al. 1996; =1000/(1.506-0.189*(LN(Ni ppm)))-273

[4] °C (Ni-in-Garnet); Griffin_et_al.,1989; =1000/((-0.435*((LOG((Ni ppm)/30))+0.83))-273

[5] °C (Ni-in-Garnet); Canil, 1999; =(8772/(2.53-(LN((Ni(grt)/Ni(ol))))-273.15

[6] °C (Ni-in-Garnet); average of methods 4 and 5

Shading identifies duplicate analyses on a single grain

APPENDIX 7B

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); Spinel-CHROMITE

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Grain Size	Note	Si	Ca	Ti_47	Ti_m49	Cr_m52	Cr_m53	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Chr15SUV015row5grain1 - 1	Mount3	181	chromite	chromite	0.18-0.25		1039	-10	24730	24210	264400	278200	824	0.05	0.0046	4.29	1.826	0.024	0.0004	-7.10E-06	0.00021	-2.33E-05	-3.19E-06	0.0019	-0.000675	-1.18E-06	-1.13E-05	-2.45E-06	-1.84E-06	0.0008	0.0073	0.003	0.85
Chr15SUV018row5grain2 - 1	Mount3	182	chromite	chromite	0.18-0.25	Very pitted	1687	84	2403	2331	469000	492000	1685	0.191	0.165	1.571	0.48	0.244	0.0496	0.125	0.0182	0.13	0.011	0.0191	0.051	0.0049	0.034	0.0068	0.019	0.0024	0.0036	0.0015	0.021
Chr15SUV018row5grain3 - 1	Mount3	183	chromite	chromite	0.18-0.25		1581	-9	6650	6780	141200	148000	2130	0.018	0.0012	0.517	0.211	-0.002	-4.41E-05	-1.60E-05	-4.10E-06	-4.98E-05	-7.69E-06	0.0009	-0.001249	-2.82E-06	-2.55E-05	-5.21E-06	-4.47E-06	-2.85E-05	-0.0001653	-0.0001029	0.016
Chr15SUV018row5grain4 - 1	Mount3	184	chromite	chromite	0.18-0.25		1950	-75	1200	1200	156300	166300	3297	-0.011	-0.0004	0.202	0.121	-0.006	-4.58E-05	-1.68E-05	-4.40E-06	-5.06E-05	-8.35E-06	0.0009	-0.001152	-3.08E-06	-2.67E-05	-5.28E-06	-4.91E-06	-2.94E-05	-0.000171	0.0045	0.023
Chr15SUV018row5grain5 - 1	Mount3	185	chromite	chromite	0.18-0.25		1104	29	6900	6990	284500	299100	1248	0.011	0.0024	1.67	0.289	-0.009	-3.00E-05	0.0019	0.0013	-3.33E-05	0.0022	-0.0001504	0.0021	-2.15E-06	-1.85E-05	-3.53E-06	-3.52E-06	-1.96E-05	0.003	-7.15E-05	0.039
Chr15SUV019row5grain6 - 1	Mount3	186	chromite	chromite	0.18-0.25		938	-22	12420	12470	284000	301900	2135	0.028	0.027	5.03	0.441	0.002	-2.80E-05	0.0019	-2.77E-06	0.0018	-5.55E-06	-0.0001362	0.0076	-2.10E-06	-1.73E-05	-3.17E-06	-3.35E-06	0.00038	0.003	-6.51E-05	0.279
Chr15SUV019row5grain7 - 1	Mount3	187	chromite	chromite	0.18-0.25		1130	71	11920	11990	274400	286400	1086	0.028	0.0044	2.95	0.592	0.021	-2.26E-05	-8.87E-06	-2.42E-06	-2.32E-05	-5.45E-06	0.0028	0.0035	-2.10E-06	-1.52E-05	-2.37E-06	-3.43E-06	-1.40E-05	0.008	-5.31E-05	0.086
Chr15SUV019row5grain8 - 1	Mount3	188	chromite	chromite	0.18-0.25		973	83	288.4	288.4	430600	458800	115.6	0.0219	0.0039	0.293	0.311	0.006	0.0047	0.0037	0.00129	-1.57E-05	-3.84E-06	0.0029	0.0073	-1.49E-06	0.0011	-1.59E-06	0.0008	0.001	0.0098	0.0009	0.027
Chr15SUV019row5grain9 - 1	Mount3	189	chromite	chromite	0.18-0.25		1296	139	13080	13150	297600	308000	1753	0.023	0.0136	1.6	0.348	-0.007	-2.43E-05	0.0017	-2.75E-06	-2.44E-05	-6.31E-06	0.004	0.0001403	-2.45E-06	0.006	-2.51E-06	-4.09E-06	0.0076	0.082	0.003	0.04
Chr15SUV028row5grain10 - 1	Mount3	190	chromite	chromite	0.18-0.25		1221	79	3980	3910	252400	255000	1639	0.01	0.0035	0.464	0.268	0.027	-2.58E-05	-1.04E-05	-2.89E-06	-2.53E-05	-6.91E-06	-0.0001173	0.0002134	-2.69E-06	-1.80E-05	-2.55E-06	-4.42E-06	-1.55E-05	-9.41E-05	0.01	0.18
Chr15SUV028row5grain11 - 1	Mount3	191	chromite	chromite	0.18-0.25		829	130	12010	12030	301400	319100	1789	0.018	0.0162	6.52	1.11	-0.013	0.0041	0.0108	0.0009	0.01	-6.00E-06	0.0004	0.0002196	-2.36E-06	0.0092	-2.11E-06	-3.86E-06	-1.30E-05	0.007	0.0028	0.434
Chr15SUV028row5grain12 - 1	Mount3	192	chromite	chromite	0.18-0.25		1046	58	2565	2578	286500	299900	1909	0.011	0.0031	0.601	0.221	0.009	0.00063	-8.26E-06	0.0012	0.0081	-5.80E-06	0.0008	0.0002358	-2.26E-06	-1.44E-05	-1.90E-06	-3.76E-06	0.002	0.015	0.0036	0.055
Chr15SUV030row5grain13 - 1	Mount3	193	chromite	chromite	0.18-0.25		1140	7	8804	8781	281500	296300	1700	0.028	0.0047	0.844	0.272	0.002	-2.22E-05	-9.64E-06	-2.80E-06	-1.91E-05	-7.52E-06	-9.44E-05	0.0001733	-2.96E-06	-1.70E-05	-1.85E-06	-5.13E-06	-1.29E-05	0.013	0.0032	0.008
Chr15SUV030row5grain14 - 1	Mount3	194	chromite	chromite	0.18-0.25		1100	56	8407	8543	306400	319500	1516	0.015	0.0061	1.162	0.362	0.014	-2.25E-05	0.004	-2.87E-06	0.0044	-7.90E-06	-9.51E-05	0.013	-3.11E-06	-1.74E-05	-1.82E-06	-5.35E-06	0.002	0.011	0.0008	0.12
Chr16SUV013row3grain1 - 1	Mount 2	127	chromite	chromite	0.25-0.5		1940	440	640	661	272600	363000	247.9	0.29	0.0214	0.87	0.68	0.81	0.022	0.048	0.0072	0.033	0.009	0.0006	-0.0007	0.00039	0.0019	0.00096	0.0028	0.00185	0.0033	0.0022	0.0109
Chr16SUV013row3grain2 - 1	Mount 2	128	chromite	chromite	0.25-0.5		1412	266	9750	9690	223900	282200	1798	0.046	0.0092	1.267	0.71	0.014	0.00115	0.0031	0.00085	0.0039	0.0005	0.0019	0.0001	-0.00027	0.0019	9.00E-05	0.0011	0.00081	-0.0023	0.0013	0.0362
Chr16SUV014row3grain3 - 1	Mount 2	129	chromite	chromite	0.25-0.5		1137	187	8360	8310	288400	357400	1409	0.062	0.008	1.705	0.978	0.027	0.00176	0.0035	0.00118	0.0063	0.0036	0.0036	0.0011	8.00E-05	0.0024	0.00059	0.0014	0.00082	0.0021	0.00045	0.0697
Chr16SUV014row3grain4 - 1	Mount 2	130	chromite	chromite	0.25-0.5		1450	147	21370	21250	332900	346800	2056	0.224	0.0179	9.81	2.135	0.004	0.0034	0.0051	0.00162	0.0084	0.0019	0.0032	0.0036	0.00086	0.0049	0.00137	0.0026	0.00053	0.0007	0.00109	0.5
Chr16SUV018row3grain6 - 1	Mount 2	131	chromite	chromite	0.25-0.5		1136	193	904	906	263800	272500	1348	0.0221	0.0069	0.493	0.558	0.002	0.0005	0.00075	0.00079	0.0032	0.0013	0.0025	0.0044	-1.00E-05	-1.37E-05	0.00061	0.0023	0.00062	0.0026	0.00057	0.0065
Chr16SUV018row3grain8 - 1	Mount 2	132	chromite	chromite	0.25-0.5		1327	206	2879	2920	250900	264000	1437	0.04	0.0065	0.539	0.505	0.023	0.00116	0.00014	0.00092	0.0028	0.0036	0.0033	-0.0017	0.00011	0.0016	0.00042	0.00024	-1.23E-06	-0.001	0.00055	0.0028
Chr16SUV018row3grain9 - 1	Mount 2	133	chromite	chromite	0.25-0.5		1820	270	769	730	273800	292000	1195	0.021	0.0062	0.443	0.561	0.009	-0.0005	0.0022	0.00102	0.0028	0.0071	0.0028	0.0029	0.00082	-1.71E-05	0.00036	0.0014	0.00023	0.0014	0.0002	-0.0035
Ilm16SUV023row4grain1 - 1	Mount3	166	ilmenite	chromite	0.18-0.25		1570	12	9780	9960	270200	299000	2004	0.025	0.0006	1.01	0.318	0.005	0.00057	0.00015	-2.35E-06	0.0008	-8.28E-08	0.002	0.013	2.88E-07	-1.23E-05	-5.34E-06	1.27E-06	-2.05E-05	0.014	0.0067	0.032
Ilm16SUV023row4grain10 - 1	Mount3	175	ilmenite	chromite	0.18-0.25		1217	64	15620	15800	240000	253200	1976	0.041	0.0067	2.56	0.61	0.06	0.00081	0.0104	0.00027	-4.29E-05	-2.27E-06	-0.0001722	0.01	0.00043	-1.43E-05	-4.63E-06	-4.79E-07	-2.01E-05	0.0031	0.0007	0.113
Chr16SUV023row3grain10 - 1	Mount 2	134	chromite	chromite	0.25-0.5		1083	75	15210	15120	297400	313600	1181	0.091	0.0133	2.236	0.76	0.019	0.00039	0.0021	0.00064	0.0018	0.0036	0.0022	0.0072	0.00016	0.0042	0.00081	0.0029	0.00054	0.0014	0.00073	0.086
Chr16SUV023row3grain11 - 1	Mount 2	135	chromite	chromite	0.25-0.5		1173	91	28600	28550	237600	261300	1420	0.152	0.0218	4.41	1.047	0.056	0.0026	0.0044	0.00125	0.004	0.0036	0.0023	0.0004	0.00068	0.0069	0.00173	0.0033	0.00033	0.0066	0.00213	0.193
Chr16SUV023row3grain12 - 1	Mount 2	136	chromite	chromite	0.25-0.5		1039	-16	10480	10380	151300	229900	1945	0.088	0.0064	1.195	0.804	0.047	-0.0002	0.0037	0.00011	0.0036	-5.64E-05	-0.0015	-0.0115	-0.0002	-2.71E-05	0.00054	0.0007	0.00046	-0.0011	0.0017	0.0287
Chr16SUV023row4grain1 - 1	Mount 2	137	chromite	chromite	0.25-0.5		888	182	369	367	168200	278600	1221	0.05	0.0152	0.554	0.538	-0.006	0.0364	0.0947	0.0048	0.0197	0.004	0.0016	-0.001	0.00033	0.0048	0.00068	0.0031	0.00058	0.0027	0.0022	0.0047
Chr16SUV023row4grain2 - 1	Mount 2	138	chromite	chromite	0.25-0.5		1336	230	6000	6090	150500	272200	1939	0.055	0.0099	1.093	0.641	0.083	0.0004	0.007	0.00094	0.0034	0.0018	0.0033	0.0023	0.00086	-1.90E-05	-1.10E-06	0.002	0.0009	-0.0025	0.0029	0.041
Chr16SUV023row4grain3 - 1	Mount 2	139	chromite	chromite	0.25-0.5		900	113	7510	7490	178200	331400	1531	0.062	0.0234	3.489	0.905	0.013	0.0013	0.0062	0.00188	0.0118	0.0062	0.0036	0.0095	0.0016	0.0097	0.0014	0.0034	0.00084	0.0007	0.0016	0.126
Chr16SUV023row4grain4 - 1	Mount 2	140	chromite	chromite	0.25-0.5		1430	1070	4940	4830	143100	285000	1761	49	0.296	3.18	4.13	22.5	9.3	11.5	0.75	2.09	0.214	0.057	0.131	0.0109	0.061	0.0111	0.0325	0.00201	0.0111	0.0045	0.06
Chr16SUV023row4grain5 - 1	Mount 2	141	chromite	chlorite?	0.25-0.5		160500	16950	8350	8190	4390	9900	71.9	167.4	0.0331	0.507	2.652	3.56	1.579	2.4	0.187	0.535	0.034	0.296	0.0115	0.00114	0.0041	0.00129	0.0057	0.00106	0.0097	0.0062	0.0335
Chr16SUV023row4grain6 - 1	Mount 2	142	chromite	chromite	0.25-0.5		970	196	752	754	177500	318600	828	0.47	0.0138	0.521	0.62	0.134	0.0146	0.087	0.0068	0.0243	0.0117	0.0048	0.005	0.00028	0.0035	0.00112	0.001	0.00038	-0.0004	0.00111	-0.0026
Chr16SUV023row4grain7 - 1	Mount 2	143	chromite	chromite	0.25-0.5		1075	235	4360	4370	132000	223000	2190	0.065	0.0053	0.613	0.834	0.094	0.0046	0.0155	0.00158	0.0106	0.0061	0.0023	-0.0106	0.00018	0.0068	9.00E-05	0.0022	0.00035	0.0009	0.00106	0.0048
Chr16SUV023row6grain1 - 1	Mount3	195	chromite	chromite	0.18-0.25		1004	23	1120	1117	377900	391800	742	0.0199	0.002	0.206	0.273	0.006	-1.87E-05	0.00024	-2.42E-06	-1.53E-05	-6.78E-06	0.0011	0.0087	0.0007	-1.46E-05	-1.46E-06	-4.58E-06	0.0014	0.021	0.0012	0.0026
Chr16SUV023row6grain10 - 1	Mount3	204	chromite	chromite	0.18-0.25		1322	40	12760	12640	305400	319400	1800	0.015	0.0038	2.19	0.451	0.007	0.007	0.026	0.0023	-9.91E-06	-9.65E-06	0.0009	-0.00309	-3.94E-06	-1.78E-05	-7.24E-07	-6.79E-06	-1.11E-05	-6.15E-05	-4.37E-05	0.097
Chr16SUV023row6grain11 - 1	Mount3	205	chromite	chromite	0.18-0.25	Pitted grain	1485	-21	5620	5830	313500	340000	1867	0.067	0.0283	1.096	0.343	0.445	0.0315	0.061	0.012	0.029	0.02	0.0074	0.017	0.0019	0.0045	0.0011	-8.38E-06	-1.10E-05	0.0038	0.0017	0.021
Chr16SUV023row6grain12 - 1	Mount3	206	chromite	chromite	0.18-0.25	Pitted grain	981	10	8130	8310	378000	407000	1338	0.037	0.0503	1.101	0.345	0.296	0.0374	0.136	0.0181	0.108	0.045	0.004	0.0069	0.0031	0.031	0.0016	0.008	-8.56E-06	0.0046	0.0013	0.015
Chr16SUV023row6grain13 - 1	Mount3	207	chromite	chromite	0.18-0.25		1004	-1	329	331.7	330200	336600	895	0.024	0.0012	0.19	0.246	0.005	-2.05E-05	0.0019	-3.88E-06	0.0051	-1.37E-05	-6.68E-05	-0.00654	-5.56E-06	-2.36E-05	-2.65E-07	-1.03E-05	-1.26E-05	-6.89E-05	-4.97E-05	-0.0002242
Chr16SUV023row6grain14 - 1	Mount3	208	chromite	chromite	0.18-0.25		1214	32	12890	13180	206800	212200	1771	0.022	0.0053	0.956	0.244	0.031	-2.28E-05	0.001	0.0016	-7.18E-06	-1.57E-05	-7.21E-05	-0.00782	-6.31E-06	-2.69E-05	-1.97E-07	-1.16E-05	0.0009	-7.67E-05	0.015	0.043
Chr16SUV023row6grain15 - 1	Mount3	209	chromite	chromite	0.18-0.25		1256	49	12800	12840	314800	329100	1817	0.017	0.0108	2.82	0.426	0.069	0.001	-9.16E-06	0.0013	-4.39E-06	-1.09E-05	-4.78E-05	-0.0008	0.0021	-1.86E-05	-6.76E-08	0.0086	-9.52E-06	-5.19E-05	-3.74E-05	0.121

Chr16SUV023row6grain2 - 1	Mount3	196	chromite	chromite	0.18-0.25		1254	20	15170	15290	292600	302800	1674	0.029	0.0084	2.25	0.403	-0.01	0.00064	-9.16E-06	-2.71E-06	-1.64E-05	-7.68E-06	0.0024	-0.0001393	-3.03E-06	-1.63E-05	-1.55E-06	-5.18E-06	-1.20E-05	-7.50E-05	0.0037	0.12
Chr16SUV023row6grain3 - 1	Mount3	197	chromite	chromite	0.18-0.25		1101	100	4404	4474	252700	265000	1720	0.236	0.0204	0.779	0.194	0.034	0.0023	0.0078	0.00071	0.0017	-5.17E-06	0.0012	0.0098	-2.04E-06	-1.08E-05	0.0009	0.003	0.0005	-4.89E-05	0.0007	0.044
Chr16SUV023row6grain4 - 1	Mount3	198	chromite	chromite	0.18-0.25		927	23	2612	2670	343100	363400	1046	0.0108	0.0036	1.266	0.264	0.017	0.00052	-6.76E-06	-2.02E-06	-1.13E-05	-5.90E-06	-5.98E-05	0.0095	-2.34E-06	0.0071	-1.05E-06	-3.93E-06	0.001	0.0065	0.0078	0.054
Chr16SUV023row6grain5 - 1	Mount3	199	chromite	chromite	0.18-0.25		1420	97	14130	14290	266000	276500	1640	0.029	0.0069	1.601	0.343	0	-1.88E-05	-9.15E-06	-2.81E-06	-1.24E-05	-8.96E-06	-7.21E-05	0.003	-3.60E-06	-1.71E-05	-1.05E-06	-6.04E-06	-1.13E-05	0.0026	0.008	0.081
Chr16SUV023row6grain6 - 1	Mount3	200	chromite	chromite	0.18-0.25		1437	100	3384	3442	299800	316400	884	0.018	0.0037	0.545	0.207	0.057	-2.27E-05	-1.12E-05	0.00035	0.0045	0.0016	-8.65E-05	-0.002358	-4.39E-06	-2.06E-05	-1.21E-06	-7.39E-06	-1.38E-05	-7.97E-05	0.001	0.075
Chr16SUV023row6grain7 - 1	Mount3	201	chromite	chromite	0.18-0.25		1549	166	1348	1350	347900	363800	1519	0	0.0028	0.462	0.233	0.024	-1.94E-05	0.0004	-3.00E-06	-1.20E-05	-9.56E-06	0.0007	0.0012	0.00049	0.0092	-9.64E-07	-6.53E-06	0.0029	0.015	0.001	0.02
Chr16SUV023row6grain8 - 1	Mount3	202	chromite	chromite	0.18-0.25		1157	135	2028	2072	254500	263800	832	0.01	0.0069	0.203	0.17	0.029	-2.37E-05	0.00037	0.00086	-1.43E-05	-1.20E-05	-8.96E-05	-0.00324	-4.83E-06	-2.21E-05	-1.10E-06	-8.27E-06	-1.44E-05	0.01	0.0018	0.024
Chr16SUV023row6grain9 - 1	Mount3	203	chromite	chromite	0.18-0.25		1674	69	5461	5560	201800	207900	2531	0.011	0.0044	0.694	0.253	0.046	-2.94E-05	0.0024	-4.74E-06	-1.69E-05	-1.54E-05	-0.0001091	-0.004527	-6.26E-06	-2.83E-05	-1.27E-06	-1.07E-05	-1.78E-05	-0.0001017	-7.20E-05	0.008
Chr16SUV024row4grain10 - 1	Mount 2	146	chromite	chromite	0.25-0.5	Inclusions	12800	2240	1279	1242	249400	367500	893	2.54	0.136	7.9	4.24	23.4	0.317	0.87	0.097	0.371	0.078	0.0134	0.06	0.0084	0.0368	0.0079	0.0174	0.0026	0.0153	0.0027	0.186
Chr16SUV024row4grain8 - 1	Mount 2	144	chromite	chromite	0.25-0.5		798	92	23560	23440	184100	292900	1068	0.139	0.0107	7.34	1.123	0.09	0.0029	0.0088	0.00139	0.0062	0.0024	0.0019	-0.003	0.00032	0.0033	0.00063	0.00096	0.0004	0.0001	0.00064	0.285
Chr16SUV024row4grain9 - 1	Mount 2	145	chromite	chromite	0.25-0.5		1253	89	3079	3097	234400	356600	1517	0.052	0.0065	0.842	0.719	0.022	0.00048	0.0024	0.00108	0.0021	0.0092	0.0018	0.0001	0.00052	0.0015	0.00046	0.0014	0.00149	0.0004	0.00143	0.0203
Chr16SUV027row5grain1 - 1	Mount 2	147	chromite	chromite	0.5-1.0		1101	296	7500	7600	194800	251300	2207	0.055	0.0054	0.842	0.628	0.036	-8.00E-05	0.0014	0.00088	0.0016	0.0046	0.0053	0.004	0.0003	0.0013	0.0001	-8.47E-06	-2.02E-06	0.0009	0.00068	0.0164
Chr16SUV027row5grain11 - 1	Mount 2	156	chromite	chromite	0.25-0.5		1523	155	2672	2727	215100	310900	1552	0.035	0.0087	0.945	0.699	0.025	0.0024	0.038	0.0035	0.0206	0.0057	0.0039	0.0029	0.00044	0.0029	0.00059	0.0011	0.00071	-0.0022	0.00095	0.0338
Chr16SUV027row5grain12 - 1	Mount 2	157	chromite	chromite	0.25-0.5		1442	185	15100	15260	169100	254000	1516	0.081	0.0134	1.847	0.7	0.018	0.00025	0.00049	0.00089	0.002	0.0068	0.0021	0.0149	0.00067	0.003	0.00026	0.00077	0.00084	-0.0003	0.00119	0.068
Chr16SUV027row5grain2 - 1	Mount 2	148	chromite	chromite	0.5-1.0		841	124	408	427	265300	298300	1743	0.021	0.0056	0.553	1.747	0.028	0.0009	0.00083	0.00101	0.0015	0.0017	0.0002	0.0002	0.00073	-2.14E-05	0.00114	-9.38E-06	0.00093	-0.003	0.00056	0.0037
Chr16SUV027row5grain3 - 1	Mount 2	149	chromite	chromite	0.5-1.0		1213	236	2131	2139	242400	264800	1890	0.017	0.0173	1.324	0.724	-0.002	0.0008	0.0013	0.00108	0.002	0.0042	0.0036	-0.009	0.00093	0.0084	0.00071	0.0026	0.00098	-0.002	0.00094	0.0297
Chr16SUV027row5grain4 - 1	Mount 2	150	chromite	chromite	0.25-0.5		1320	136	14260	14340	270200	310800	1387	0.24	0.0116	2.081	0.818	0.04	0.00067	0.0043	0.00101	0.0048	0.0009	0.0012	-0.0032	0.00028	0.0023	0.00082	0.0015	0.00136	0.0098	0.0014	0.0783
Chr16SUV027row5grain6 - 1	Mount 2	151	chromite	chromite	0.25-0.5		2540	930	3920	3900	172000	204700	2280	9.5	0.138	1.86	1.64	15.6	0.73	1.44	0.145	0.46	0.044	0.0213	0.055	0.005	0.0238	0.005	0.0142	0.00154	0.0095	0.0014	0.034
Chr16SUV027row5grain7 - 1	Mount 2	152	chromite	chromite	0.25-0.5		1346	59	11080	11060	261100	312400	1850	0.067	0.0134	1.978	0.754	0.022	0.00014	0.00092	0.00084	0.0054	0.0036	0.0023	-0.0012	0.00171	0.0023	0.00034	0.0033	0.00026	-0.0006	0.002	0.073
Chr16SUV027row5grain8 - 1	Mount 2	153	chromite	chromite	0.25-0.5		1273	96	16460	16580	193900	245300	1726	0.101	0.0113	2.99	1.695	0.103	0.0003	0.003	0.00135	0.005	-3.25E-05	0.0039	-0.0014	0.00031	0.0016	0.0003	-1.01E-05	-2.22E-06	-0.0016	0.0019	0.098
Chr16SUV027row5grain9 - 1	Mount 2	154	chromite	chromite	0.25-0.5		1434	199	3779	3811	211400	295900	1115	0.032	0.0101	0.897	0.68	0.051	0.0063	0.024	0.0061	0.039	0.0038	0.0017	0.0101	0.0002	0.003	-1.60E-06	0.001	0.00063	0	0.00076	0.0296
Chr16SUV028row6grain1 - 1	Mount 2	158	chromite	chromite	0.25-0.5		1311	245	3990	3720	185500	282900	1827	0.05	0.0076	0.932	0.796	0.16	0.0051	0.004	0.00148	0.0082	0.0027	0.0016	0.0075	0.00035	0.0024	0.00041	0.0018	-2.31E-06	-0.0019	0.00067	0.0193
Chr16SUV028row6grain10 - 1	Mount 2	167	chromite	chromite	0.5-1.0		2499	487	2960	3050	102700	159500	2350	0.075	0.0054	0.477	0.437	0.043	0.0037	0.016	0.00105	0.0034	0.0035	0.0029	0.006	0.00075	0.0007	-2.68E-06	0.0017	0.00108	0.0022	0.00055	0.0061
Chr16SUV028row6grain11 - 1	Mount 2	168	chromite	chromite	0.25-0.5		2261	294	9170	9170	165600	261600	1695	0.063	0.0051	1.19	0.682	0.018	0.0012	0.0008	0.0008	0.0069	0.0052	0.0008	-0.0009	0.00039	0.0021	0.00043	0.0022	0.0008	0.0034	0.0016	0.047
Chr16SUV028row6grain12 - 1	Mount 2	169	chromite	chromite	0.25-0.5		2187	295	7570	7630	166900	268300	1988	0.065	0.0079	0.938	0.671	0.019	-0.00025	0.0013	0.00134	0.0028	0.0037	0.0032	0.0079	0.00053	0.0017	-2.03E-06	0.00058	0.0022	0.0063	0.0012	0.0268
Chr16SUV028row6grain13 - 1	Mount 2	170	chromite	chromite	0.25-0.5		2076	264	6900	7010	178100	279500	1778	0.068	0.0055	1.029	0.712	0.045	0.00102	0.0015	0.00029	0.0043	0.0034	0.0017	0.0125	0.00074	0.0014	0.00057	0.0015	0.00038	0.0024	0.0038	0.0299
Chr16SUV028row6grain14 - 1	Mount 2	171	chromite	chromite	0.25-0.5		1997	217	9310	8840	169500	261300	1929	0.112	0.0109	1.334	0.702	0.05	0.0019	0.0012	0.00064	0.0027	0.0018	0.0033	0.0057	0.00074	0.0007	0.00035	0.0019	0.00047	0.0047	0.0007	0.0408
Chr16SUV028row6grain2 - 1	Mount 2	159	chromite	chromite	0.25-0.5		1579	221	5360	5240	194200	293300	1817	0.329	0.0198	4.51	0.874	0.43	0.027	0.0462	0.0075	0.0219	0.007	0.0057	0.02	0.00153	0.0045	0.00117	0.0026	0.00038	0	0.00037	0.153
Chr16SUV028row6grain3 - 1	Mount 2	160	chromite	chromite	0.25-0.5		1192	203	7140	7080	183500	283600	1582	0.046	0.0076	1.009	1.543	0.057	0.00066	-1.00E-05	0.00037	0.0039	0.0029	0.0014	-0.0001	0.00017	0.0034	0.00029	0.0018	0.0007	0.0017	0.0027	0.032
Chr16SUV028row6grain4 - 1	Mount 2	161	chromite	chromite	0.25-0.5		1390	242	1792	1823	188300	296900	1610	0.024	0.0058	1.517	1.614	0.031	0.00144	0.0018	0.00101	0.0042	0.002	0.0011	0.0037	0.00075	0.0013	0.00035	0.001	0.00036	0.0006	0.00086	0.0136
Chr16SUV028row6grain5 - 1	Mount 2	162	chromite	chromite	0.25-0.5		1428	218	4463	4570	176700	281700	1746	0.03	0.0063	1.044	1.072	0.025	0.00122	0.002	0.00087	0.0056	0.0016	0.0023	0.0025	0.00065	-2.03E-05	0.00045	0.0019	0.00048	-0.0004	0.00078	0.0207
Chr16SUV028row6grain6 - 1	Mount 2	163	chromite	chromite	0.25-0.5		1797	182	11970	11920	154300	247000	1895	0.068	0.0089	1.798	0.804	0.014	0.0007	0.0015	0.00143	0.004	-2.89E-05	0.0013	0.0038	0.0015	-2.44E-05	0.00021	0.0009	0.00064	0.001	0.00095	0.055
Chr16SUV028row6grain7 - 1	Mount 2	164	chromite	chromite	0.25-0.5		2007	200	9920	9770	167800	270000	1831	0.044	0.0096	1.082	0.726	0.05	0.0038	0.0062	0.0018	0.0021	0.0055	0.0029	0.0063	0.00051	0.0012	0.00054	-1.42E-05	0.00062	0.0038	0.00044	0.0276
Chr16SUV028row6grain8 - 1	Mount 2	165	chromite	chromite	0.25-0.5		2211	257	7520	7630	139700	223500	1952	0.091	0.0094	0.842	0.633	0.282	0.0061	0.0108	0.004	0.0038	0.0049	0.0035	-0.0014	0.00105	-2.69E-05	-2.42E-06	0.0027	-3.16E-06	-0.0026	0.0015	0.03
Chr16SUV028row6grain9 - 1	Mount 2	166	chromite	chromite	0.5-1.0		1922	213	14190	14060	177300	281500	1478	0.085	0.0143	2.171	0.752	0.048	0	0.0018	0.00137	0.0052	0.0052	0.0043	0.0045	0.00068	0.0028	0.00074	0.0026	0.00053	0.0045	0.0023	0.085
Chr16SUV028row7grain10 - 1	Mount 2	181	chromite	chromite	0.25-0.5		1272	169	22620	22430	188300	252700	1637	0.138	0.0165	2.863	1.14	0.063	0.033	0.037	0.0051	0.0106	0.0062	0.0017	0.0058	0.00133	0.0037	0.00073	0.002	0.00089	0.0016	0.002	0.124
Chr16SUV028row7grain11 - 1	Mount 2	182	chromite	chromite	0.25-0.5		1321	135	18610	18950	185600	247100	2320	0.117	0.0152	2.359	0.736	0.021	0.00053	0.0003	0.00137	0.0055	0.0041	0	0.0068	0.00102	0.0007	0.0003	0.0034	0.00057	0.0036	0.0024	0.095
Chr16SUV028row7grain12 - 1	Mount 2	183	chromite	chromite	0.25-0.5		1315	169	2200	2207	208600	270000	880	0.075	0.0364	0.865	0.615	0.105	0.0071	0.0104	0.0033	0.0125	0.003	0.0041	-0.0014	0.00062	0.0093	0.00137	0.0045	0.00051	0.009	0.00055	0.0157
Chr16SUV028row7grain4 - 1	Mount 2	175	chromite	chromite	0.25-0.5		1404	341	16980	16980	190400	291400	1629	0.112	0.0153	2.721	0.838	0.031	-0.00019	0.00064	0.00074	0.0024	0.0038	0.0017	0.005	0.00041	0.0028	8.00E-05	0.0026	0.00026	0.0021	0.00052	0.111
Chr16SUV028row7grain5 - 1	Mount 2	176	chromite	chlorite?	0.25-0.5	Has cracks	154500	1592	3990	3950	7000	11200	70.5	1.927	0.0257	0.212	0.57	0.057	1.517	2.642	0.224	0.546	0.083	0.0196	0.0244	0.0033	0.0093	0.00108	-1.59E-05	0.00069	0.0023	0.00018	0.047
Chr16SUV028row7grain6 - 1	Mount 2	177	chromite	chromite	0.25-0.5		1520	539	14590	14360	124100	189100	1943	0.096	0.0098	1.72	0.533	0.012	0.0034	0.0086	0.00133	0.0017	-2.15E-05	0.0032	0	0.00086	0.00029	0.00072	0.0029	0.00051	0.0065	0.004	0.067
Chr16SUV028row7grain8 - 1	Mount 2	179	chromite	chromite	0.25-0.5		1332	135	14050	14160	202100	286200	1692	0.084	0.0096	2.223	0.787	0.046	0.00138	0.0025	0.00065	0.0028	0.0051	0.0007	0.0084	0.00052	0.0028	0.00046	0.0009	0.00173	0.01	0.0015	0.103
Chr16SUV030row7grain13 - 1	Mount 2	184	chromite	chromite	0.25-0.5		1257	138	1600	1590	216400	274100	1856	0.023	0.0054	0.578	0.602	-0.002	0.00082	0.0013	0.00143	0.003	0.001	0.0025	0.0012	0.00079	0.0029	0.00025	0.0021	0.00063	-0.0001	0.00088	0.0063

APPENDIX 7C

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); Spinel-ALUMINIUM SERIES

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Grain Size	Si	Ca	Ti_m47	Ti_m49	Cr_m52	Cr_m53	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Gah16SUV024row6grain4 - 1	Mount 1	1_6_4	gahnite	gahnite	0.25-0.5	885	-7	23.7	19	10.76	12	7.8	0.006	0	-0.0031	0	-0.036	-0.00117	-0.00059	-0.0003318	5.48E-05	1.95E-07	-0.0009	0.01	0.00014	-3.81E-05	-4.47E-07	-3.82E-05	-5.37E-05	-0.0201	-1.52E-05	0.001
Gah16SUV024row6grain5 - 1	Mount 1	1_6_5	gahnite	gahnite	0.25-0.5	698	-16	11.4	9.6	120.5	143.5	-0.7	0.009	0.0003	-0.0029	-0.0014	-0.034	-0.00086	-0.00078	-0.0002706	0.001	-1.71E-06	0	0.003	-6.25E-05	-3.61E-05	-5.19E-07	-3.57E-05	0.00053	-0.001	-1.43E-05	0.0006
Gah16SUV024row6grain6 - 1	Mount 1	1_6_6	gahnite	gahnite	0.25-0.5	819	-49	6.8	5.4	691	824	-0.89	-0.017	-0.0013	0.0028	-0.0002	-0.038	-0.0005	0.0006	0.00017	3.51E-05	-3.77E-06	-0.0016	-0.0069	-6.42E-05	-3.72E-05	-6.39E-07	0.0006	0.00039	-0.0094	0.0026	0.0017
Gah16SUV024row6grain7 - 1	Mount 1	1_6_7	gahnite	gahnite	0.25-0.5	988	3	20.7	18.7	8.36	6	261.9	0.012	0.0008	-0.0031	0.0009	-0.024	-0.00088	-0.00025	-0.00049	2.79E-05	-6.16E-06	-0.0028	-0.004	0.00038	-4.00E-05	-7.92E-07	-3.88E-05	-5.36E-05	0.012	-1.57E-05	-2.98E-05
Gah16SUV024row6grain8 - 1	Mount 1	1_6_8	gahnite	gahnite	0.25-0.5	1670	48	10.4	8.9	661.4	777.6	28.18	0.021	0.0176	0.309	0.0179	0.097	0.0358	0.107	0.0097	0.043	0.0075	0.0037	0.002	0.0024	0.0058	0.00046	0.0023	0.0006	-0.0031	0.0022	0.0232
Spinel16SUV013row6grain9 - 1	Mount 1	1_6_9	spinel	spinel	0.25-0.5	1108	146	63.9	66.4	307	377.2	21	0.002	0.0038	-0.0021	-0.0014	-0.05	-0.0002	-0.00141	0.00036	0.0017	-2.41E-05	-0.0012	-0.0107	-8.18E-05	-5.15E-05	-1.85E-06	-4.40E-05	-6.20E-05	-0.0161	-2.01E-05	0.0039
Spinel16SUV023row6grain10 - 1	Mount 1	1_6_10	spinel	spinel	0.25-0.5	895	135	225.5	227.2	263.8	327.1	34.44	0.026	0.0007	0.0003	0.0056	0.053	-0.001	0.0003	0.0011	0.0017	0.0019	-0.0004	-0.01	0.00031	0.0006	-1.98E-06	-4.53E-05	0.00028	-0.0134	-2.10E-05	0.0051
Spinel16SUV028row6grain11 - 1	Mount 1	1_6_11	spinel	spinel	0.25-0.5	864	111	232.9	232.2	146.9	182.4	62.7	-0.014	0.001	-0.0011	0.0016	-0.017	-0.0009	-0.00171	-0.000463	-6.53E-05	-3.21E-05	-0.0026	0.008	0.00032	-5.62E-05	-2.29E-06	-4.77E-05	-6.46E-05	-0.0036	-2.16E-05	0.0052
Hercy15SUV018row7grain1 - 1	Mount 1	1_7_1	hercynite	chlorite?	0.25-0.5	169100	831	924.5	920.5	3.47	0.39	-0.9	1.68	0.0123	0.341	0.647	0.038	0.946	1.402	0.12	0.294	0.082	0.02	0.025	0.0036	0.0083	0.00032	-2.79E-05	0.0002	-0.0029	0.00117	0.1
Hercy15SUV018row7grai2 - 1	Mount 1	1_7_2	hercynite	gahnite	0.25-0.5	888	18	36.9	35.4	4.8	1.02	-1.95	-0.012	-0.0024	-0.0034	-0.0024	-0.017	-0.00134	-0.00165	5.00E-05	-9.01E-05	-3.75E-05	-0.0006	0.008	0.00065	0.0006	-2.40E-06	-4.65E-05	0.0017	-0.0043	0.0011	0.0012
Hercy16SUV018row7grai3 - 1	Mount 1	1_7_3	hercynite	spinel/hercynite	0.25-0.5	1435	24	2873	2884	370.6	506.4	984.7	-0.016	-0.0015	0.074	0.0349	-0.01	0.0001	-0.0013	-0.00031	-0.0001102	-4.40E-05	0.0012	-0.013	0.0016	0.0019	-2.99E-06	-4.91E-05	-6.49E-05	-0.0008	0.0009	0.0021
Hercy16SUV018row7grai4 - 1	Mount 1	1_7_4	hercynite	spinel/hercynite	0.25-0.5	1119	102	1607	1617	115.6	160.5	335.8	0.065	0.0004	0.057	0.0041	-0.033	-0.0001	-0.0023	-0.00091	-0.000226	-7.43E-05	0.0098	-0.029	0.00017	-8.20E-05	-4.91E-06	-5.84E-05	-7.51E-05	-0.00092	-3.08E-05	0.0012
Hercy16SUV023row7grai6 - 1	Mount 1	1_7_6	hercynite	spinel/hercynite	0.25-0.5	2796	279	887	877	36.9	24.5	1977	0.031	-0.0019	0.0267	0.0093	0.048	-0.00109	0.0002	-0.00021	-0.0001621	-5.06E-05	0.0037	-0.008	-6.27E-05	-4.86E-05	-3.17E-06	0.0027	-4.44E-05	0.0042	0.0007	0.015
Hercy16SUV023row7grai7 - 1	Mount 1	1_7_7	hercynite	spinel/hercynite	0.25-0.5	2056	216	1805	1817	800.6	1175	620.9	0.03	-0.0038	0.033	0.0187	0.074	0.0003	-0.0002	-0.000883	-0.0001953	-5.96E-05	0.0025	0	0.00016	-5.47E-05	-3.68E-06	-3.91E-05	0.00021	0.000306	0.00025	-0.0001239
Hercy16SUV023row7grai8 - 1	Mount 1	1_7_8	hercynite	spinel/hercynite	0.25-0.5	2212	141	4721	4744	162	224.2	1242	0.066	0.0068	0.114	0.0258	0.129	0.0059	0.024	0.0013	0.0045	-6.04E-05	0.0045	-0.005	0.0008	0.0023	0.0011	-3.79E-05	0.00027	-0.001187	-1.99E-05	0.0068
Hercy16SUV027row7grai9 - 1	Mount 1	1_7_9	hercynite	spinel/hercynite	0.5-1.0	1678	88	3396	3445	2467	3581	1337	0.045	0.0014	0.069	0.032	0.027	0.0004	-0.0009	-0.000887	-0.000214	-6.26E-05	0.0066	-0.004	-6.51E-05	-5.41E-05	-3.86E-06	-3.77E-05	-4.63E-05	-0.002811	-2.01E-05	0.0031
Hercy16SUV027row7grai10 - 1	Mount 1	1_7_10	hercynite	spinel/hercynite	0.25-0.5	1403	76	1583	1590	4891	7013	1429	0.063	0.0005	0.095	0.0399	0.009	-0.0007	-0.0004	-0.000889	-0.0002256	-6.57E-05	0.0023	0.016	0.00048	0.0011	-4.06E-06	-3.75E-05	-4.54E-05	-0.004267	0.0011	0.0034

APPENDIX 7D

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); ILMENITE

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Grain Size	Si	Ca	Ti_m47	Ti_m49	Cr_m52	Cr_m53	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Ilm16SUV014row8grai1 - 1	Mount 1	296	IM crustal	ilmenite	0.5-1.0	920	43	321500	325900	12.1	11.82	57.6	1.03	3.77	1467	133.8	0.058	0.0075	0.0283	0.0049	0.0414	0.0183	0.002	0.068	0.0371	0.565	0.284	2.126	0.596	6.6	1.412	27.24
Ilm16SUV014row8grai11 - 1	Mount 1	306	IM crustal	ilmenite	0.25-0.5	1620	1280	310200	312800	12.6	10.75	118	1.88	0.227	9.64	364.8	0.83	0.072	0.126	0.0141	0.056	0.0091	0.0218	0.023	0.00172	0.0094	0.0055	0.0362	0.0168	0.308	0.1199	0.993
Ilm16SUV014row8grai12 - 1	Mount 1	307	IM crustal	ilmenite	0.25-0.5	704	19	339200	340900	26.2	25.89	9.78	1.295	0.0908	0.307	319.1	0.002	0.033	0.0563	0.0046	0.0158	0.002	0.0049	-0.0014	0.00032	0.0028	0.0008	0.0014	0.00076	0.0052	0.002	0.0233
Ilm16SUV014row8grai2 - 1	Mount 1	297	IM crustal	ilmenite	0.25-0.5	954	155	319800	320600	15.3	13.18	32.12	1.093	0.959	1294	697	-0.01	-0.00014	-0.00035	0.00011	0.0021	0.0046	-0.0002	0.0165	0.0088	0.138	0.0657	0.501	0.1344	1.528	0.36	40.35
Ilm16SUV014row8grai3 - 1	Mount 1	298	IM crustal	ilmenite	0.25-0.5	1057	209	321600	326600	13.7	9.93	22.77	1.171	4.81	648.4	214.5	-0.006	0.00025	0.00096	0.00068	0.0144	0.0254	0.0032	0.111	0.0571	0.754	0.335	1.976	0.47	4.63	0.848	15.88
Ilm16SUV014row8grai5 - 1	Mount 1	300	IM crustal	ilmenite	0.25-0.5	821	59	319900	325000	20.5	20.63	42.3	1.189	0.91	1091	330.2	0.007	0.00122	0.0023	0.00043	0.0054	0.0045	0.0026	0.021	0.0075	0.133	0.063	0.432	0.1169	1.229	0.263	23.44
Ilm16SUV014row8grai6 - 1	Mount 1	301	IM crustal	ilmenite	0.25-0.5	772	25	325200	326700	4.5	0.84	31.41	1.171	1.787	355.7	161	0.01	0.00235	0.0054	0.0037	0.0219	0.0139	0.0025	0.06	0.0247	0.347	0.1698	1.097	0.253	2.57	0.515	7.76
Ilm16SUV014row8grai7 - 1	Mount 1	302	IM crustal	ilmenite	0.25-0.5	819	19	318600	321500	43.9	50.9	31.43	1.158	0.939	911	220.7	0.028	0.00267	0.0043	0.00101	0.0036	0.0018	0.0009	0.019	0.0104	0.167	0.0959	0.671	0.1721	1.905	0.4	28.21
Ilm16SUV014row8grai8 - 1	Mount 1	303	IM crustal	ilmenite	0.25-0.5	940	116	324400	328800	118.5	136.5	10.82	1.311	0.0923	10.28	177.4	0.45	0.0372	0.0576	0.0033	0.0162	0.0034	0.0001	-0.0003	0.00073	0.0016	0.00056	0.0014	0.00129	0.0163	0.009	0.458
Ilm16SUV014row8grai9 - 1	Mount 1	304	IM crustal	ilmenite	0.25-0.5	822	62	324400	323700	8.8	5.97	22.86	1.251	1.757	990	192.9	0.081	0.0259	0.0632	0.0059	0.0289	0.0142	0.0018	0.06	0.0203	0.324	0.149	0.851	0.21	2.076	0.403	34.52
Ilm16SUV023row4grain11 - 1	Mount3	176	ilmenite	ilmenite	0.18-0.25	712	132	345700	346000	20560	21480	1337	0.4	0.0506	153.6	1898	0.045	0.00121	0.0083	0.00149	0.012	0.0046	0.0029	0.016	0.00076	0.005	0.00042	0.0046	0.00048	0.0068	0.0027	5.92
Ilm16SUV023row4grain12 - 1	Mount3	177	ilmenite	ilmenite	0.18-0.25	646	-4	319500	319400	4.6	2.14	394	0.381	4.57	2230	306.9	0.053	0.002	0.071	0.0087	0.059	0.103	0.0051	0.216	0.081	0.66	0.207	1.04	0.29	3.22	0.627	64.3
Ilm16SUV023row4grain13 - 1	Mount3	178	ilmenite	ilmenite	0.18-0.25	1009	171	332900	334100	11910	12270	1036	0.425	0.0593	153.3	1674	0.099	0.00036	0.0094	0.0015	0.0154	-1.52E-06	0.00051	0.0052	0.00094	0.0074	0.00106	0.0062	0.00023	0.0062	0.0007	5.96
Ilm16SUV023row4grain14 - 1	Mount3	179	ilmenite	ilmenite	0.18-0.25	994	161	342000	338300	10540	10990	779	0.46	0.0597	159.4	1853	0.074	0.00075	0.0113	0.0025	0.0102	0.0028	0.00026	0.0055	0.00051	0.0032	0.00042	0.0098	0.00084	0.018	0.0084	5.73
Ilm16SUV023row4grain15 - 1	Mount3	180	ilmenite	ilmenite	0.18-0.25	887	108	306100	301200	11820	12140	632	0.41	0.0634	317	3575	-0.0021	0.00056	0.0062	0.00111	0.0052	0.0018	0.001	0.005	0.00019	0.004	0.0009	0.0049	-8.70E-06	0.0075	0.0021	10.65
Ilm16SUV023row4grain2 - 1	Mount3	167	ilmenite	ilmenite	0.18-0.25	836	175	351900	358300	23260	25850	1686	1.08	0.0478	169.2	1502	1.14	0.104	0.183	0.0222	0.072	0.0075	0.0015	0.0046	9.33E-08	0.0078	0.0013	0.0038	0.00074	0.013	0.0033	6.13
Ilm16SUV023row4grain3 - 1	Mount3	168	ilmenite	ilmenite	0.18-0.25	635	145	343400	349100	20620	22220	1362	0.331	0.12	161	1948	3	0.06	0.097	0.0256	0.059	0.0128	0.0066	0.028	0.0041	0.026	0.0061	0.0147	0.0016	0.013	0.0043	5.8
Ilm16SUV023row4grain4 - 1	Mount3	169	ilmenite	ilmenite	0.18-0.25	662	134	334900	335500	20200	22160	1224	0.313	0.0467	176.7	2213	0.097	0.00057	0.0058	0.0006	0.0038	0.0032	0.0016	0.0102	0.00134	0.0017	0.00054	0.0058	0.0017	0.0046	0.001	6.73
Ilm16SUV023row4grain5 - 1	Mount3	170	ilmenite	ilmenite	0.18-0.25	666	116	332800	331300	12120	13080	880	0.327	0.0473	163.1	1951	-0.01762	0.0026	0.0088	0.00039	0.0063	-3.17E-07	0.0012	0.0049	0.00016	0.0133	0.0011	0.0037	0.00074	0.03	0.0034	6.12
Ilm16SUV023row4grain6 - 1	Mount3	171	ilmenite	ilmenite	0.18-0.25	704	113	340100	343200	19930	21230	1380	0.364	0.0499	150.7	1862	0.122	9.00E-05	0.0054	0.00105	0.0049	0.0054	0.0011	0.0048	0.00015	0.0019	0.0013	0.0006	0.0035	0.014	-3.43E-05	5.51
Ilm16SUV023row4grain7 - 1	Mount3	172	ilmenite	ilmenite	0.18-0.25	864	120	332900	336900	14050	14640	950	0.385	0.0566	171	1795	0.1	0.00021	0.0072	0.00062	0.0048	-7.36E-07	0.0016	0.0056	0.00126	0.0099	0.00066	0.0041	-8.52E-06	0.0062	0.0058	6.56
Ilm16SUV023row4grain8 - 1	Mount3	173	ilmenite	ilmenite	0.18-0.25	737	70	321600	324100	4.12	2	22.66	0.384	3.565	2294	724	0.064	0.0003	0.0022	0.00169	0.0169	0.0162	0.0035	0.096	0.0371	0.488	0.166	1.021	0.238	2.63	0.542	73.6
Ilm16SUV023row4grain9 - 1	Mount3	174	ilmenite	ilmenite	0.18-0.25	805	158	349100	350100	11880	12350	886	0.411	0.0572	143	1837	0.085	0.00077	0.0056	0.0016	0.0077	0.0028	0.0014	0.0052	0.00035	0.0056	-1.91E-06	0.005	0.0012	0.0116	0.0016	5.56
Ilm16SUV023row8grai13 - 1	Mount 1	308	IM crustal	ilmenite	0.25-0.5	1034	-55	326400	321900	3.6	0.51	0.55	1.191	0.1064	112.1	421.7	0.026	0.0022	0.0064	0.00034	0.0058	-4.65E-05	0.0017	-0.0016	0.0001	0.0018	0.0018	0.0234	0.0116	0.198	0.0783	17.64
Ilm16SUV027row9grai1 - 1	Mount 1	427	IM crustal	ilmenite	0.25-0.5	1018	10	338200	339200	151	171.3	1.59	1.259	0.0925	21.33	310.7	0.116	0.0168	0.0439	0.0038	0.0131	0.0018	0.0014	-0.0006	0.00039	0.0011	0.00013	0.003	0.00227	0.0341	0.0226	1.25
Ilm16SUV027row9grain2 - 1	Mount 1	311	IM crustal	ilmenite	0.25-0.5	856	6	319800	319000	110.8	122.4	42.9	1.246	2.58	2060	313.9	0.148	0.155	0.235	0.0358	0.128	0.058	0.0068	0.125	0.0383	0.444	0.177	0.96	0.223	2.18	0.429	67.5
Ilm16SUV027row9grain3 - 1	Mount 1	312	IM crustal	ilmenite	0.25-0.5	960	71	331000	330300	645	733	64.4	1.294	0.117	33.2	67.6	0.34	0.03	0.072	0.0111	0.036	0.0058	0.0015	0.011	0.00102	0.0096	0.0028	0.0292	0.0226	0.465	0.1518	2.552
Ilm16SUV027row9grain4 - 1	Mount 1	313	IM crustal	ilmenite	0.25-0.5	745	49	320900	322400	18.3	15.46	0.09	1.292	0.212	9.86	754	0.25	0.0896	0.224	0.033	0.13	0.0278	0.0033	0.0242	0.0038	0.0299	0.0067	0.0388	0.013	0.225	0.0751	0.964
Ilm16SUV027row9grain5 - 1	Mount 1	314	IM crustal	ilmenite	0.25-0.5	1260	1	315800	323000	13.9	11.59	32.42	1.286	2.812	1729	204.1	0.83	0.0091	0.025	0.0033	0.0208	0.0189	0.0055	0.078	0.0374	0.46	0.1856	1.032	0.25	2.32	0.45	43.2
Ilm16SUV027row9grain6 - 1	Mount 1	315	IM crustal	ilmenite	0.25-0.5	997	67	274300	273300	12.4	7.98	2.28	1.08	2.825	1246	1265	0.074	0.0085	0.1403	0.0209	0.181	0.109	0.037	0.179	0.0507	0.512	0.1435	0.621	0.1284	1.253	0.253	24.32
Ilm16SUV027row9grain7 - 1	Mount 1	316	IM crustal	ilmenite	0.25-0.5	907	5	314400	317700	444.2	475	26.85	1.231	0.095	16.7	306.8	0.057	0.0109	0.0221	0.00116	0.0091	0.00025	0.0004	0.0006	0.00038	0.002	0.00119	0.014	0.0103	0.166	0.0665	1.01
Ilm16SUV027row9grain8 - 1	Mount 1	317	IM crustal	ilmenite	0.25-0.5	783	13	322300	318800	12.7	7.92	7.68	1.261	1.278	1052	400	0.003	0.00033	3.00E-05	0.00075	0.0048	0.0053	0.0018	0.0173	0.0129	0.187	0.1047	0.712	0.197	2.093	0.401	39.34
Ilm16SUV027row9grain9 - 1	Mount 1	318	IM crustal	ilmenite	0.25-0.5	861	55	318200	316200	2928	3175	382.7	1.209	0.1318	402.8	1356	0.055	0.00093	0.0064	0.00162	0.0058	0.0057	0.0009	0.0048	0.00149	0.0099	0.00269	0.0074	0.00202	0.0081	0.0041	13.88
Chr16SUV028row7grain7 - 1	Mount 2	178	chromite	ilmenite	0.25-0.5	1360	349	329700	328900	350	330	12.7	1.662	1.923	1165	84.1	0.24	0.0241	0.027	0.0032	0.0154	0.0056	0.0024	0.0384	0.0159	0.25	0.1457	1.045	0.29	3.16	0.645	24.45
Ilm16SUV028row9grain10 - 1	Mount 1	319	IM crustal	ilmenite	0.25-0.5	668	28	322100	322600	65.4	66.5	13.64	1.256	3.65	1176	387.5	0.005	2.00E-05	0.00154	0.00058	0.0049	0.0097	0.0001	0.09	0.0387	0.643	0.306	1.883	0.448	4.3	0.763	75.2
Ilm16SUV028row9grain11 - 1	Mount 1	320	IM crustal	ilmenite	0.25-0.5	787	95	327300	326300	162.9	176.4	38.7	1.304	3.29	1649	155.3	-0.008	0.0031	0.0065	0.00189	0.0159	0.012	0.0008	0.07	0.0301	0.422	0.217	1.468	0.433	4.84	1.146	21.03
Ilm16SUV028row9grain12 - 1	Mount 1	321	IM crustal	ilmenite	0.25-0.5	699	35	313300	314800	233.9	254.5	21.27	1.268	0.0901	5.6	552	0.044	0.0328	0.0424	0.0047	0.0124	0.0029	0.0019	0.0016	0.00023	0.0019	-3.87E-06	0.0032	0.00137	0.0209	0.0122	0.285
Ilm16SUV028row9grain13 - 1	Mount 1	322	IM crustal	ilmenite	0.25-0.5	868	20	324300	326600	79.9	83.2	16.11	1.356	0.0977	5.83	265.3	0.331	0.093	0.147	0.0131	0.0344	0.0055	0.0015	0.0025	0.00054	0.008	0.00076	0.0021	0.00133	0.0336	0.0196	0.451
Ilm16SUV014row8grai10 - 1	Mount 1	305	IM crustal	pseudorutile	0.25-0.5	3023	582	379700	385900	224.2	266.3	87.5	33.89	10.25	317.5	298.5	861	58.35	80.3	9.27	30.72	4.48	0.96	3.19	0.452	2.692	0.569	2.621	0.632	6.71	1.495	17.32
Ilm16SUV014row8grai4 - 1	Mount 1	299	IM crustal	pseudorutile	0.25-0.5	2280	368	365700	370200	874	1132	53.55	16.44	3.681	310.1	135.6	318.3	22.43	29.31	4.098	13.88	2.21	0.445	1.446	0.208	1.149	0.205	0.611	0.1114	1.008	0.193	7.81
Ilm16SUV023row8grai14 - 1	Mount 1	309	IM crustal	pseudorutile	0.25-0.5	3159	769	389000	391400	1588	1847	206.1	73.4	14.28	373.4	87.2	772	31.81	63.3	7.9	26.13	4.27	0.868	3.189	0.549	3.87	0.901	3.27	0.601	4.24	0.735	10.41
Ilm16SUV028row9grain14 - 1	Mount 1	323	IM crustal	pseudorutile	0.25-0.5	1671	659	418400	414700	183.8	211.5	18.47	68.41	39.58	897	808	326.6	71	156	12.22	37.42	5.58	1.258	5.26	0.989	7.35	1.687	5.49	0.827	5.48	0.813	16.41
Chr16SUV028row7grain1 - 1	Mount 2	173	chromite	pseudorutile	0.25-0.5	1050	512	359100	360600	271	540	11.4	20.44	3.862	51.8	498.7	458.1	17.39	24.92	2.691	8.93	1.445	0.312	1.146	0.1693	0.956	0.172	0.454	0.0639	0.44	0.0789	1.289
Chr16SUV028row7grain2 - 1	Mount 2	174	chromite	pseudorutile	0.25-0.5	35000	6700	367500	375300	2870	3930	303.8	25.7	5.99	602	352.1	435.8	28.21	43.1	5.37	17.84	2.96	0.585	2	0.303	1.719	0.334	1.348	0.308	3.08	0.623	30.66
Chr16SUV028row7grain9 - 1	Mount 2	180	chromite	pseudorutile	0.25-0.5	1153	336	352100	353500	1259	1610	323.4	11.1	8.26	144.2	499.7	157	34.2	43.3	6.32	21.72	3.21	0.618	2.2	0.317	1.891	0.431	1.699	0.349	3.19	0.639	4.31

APPENDIX 7E

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); OLIVINE

Sample #	Mount	EPMA #	ODM Min ID	EPMA Min ID	Grain Size	Ca	Ti_m47	Ti_m49	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
Diop15SUV006row3grain1 - 1	2015_3	111	diopside	olivine	0.25-0.5	1702		69.6	1357		0.148	0.0359						6.27E-06	0.001	0.0019		0.00075	0.0116	0.0051	0.0199	0.0037	0.054	0.0123
Diop15SUV006row3grain1 - 2	2015_3	111_rpt	diopside	olivine	0.25-0.5	1707		61.9	1160	0.042	0.233	0.082	0.0029	0.105	0.043	0.19	0.0076	0.058	0.0073	0.0027	0.0127	0.002	0.031	0.0092	0.032	0.0065	0.075	0.0146
Olv15SUV030row3grain5 - 1	Mount 3	160	forsterite	olivine	0.18-0.25	146.7	4.8	-0.015	0.039	0.0006	0.036	0.0002	0.00067	0.0058	0.0034	0.0076	0.017	0.119	0.0039	0.0341	0.008							
Olv16SUV014row4grain7 - 1	Mount 1	260	forsterite	olivine	0.25-0.5	163.7	4	0.025	0.026	-0.0018	0.032	0.0022	0.00063	0.0008	0.003	0.0047	0.012	0.054	0.0045	0.0408	0.018							
Olv16SUV014row5grain1 - 1	Mount 1	262	fayalite	olivine	0.25-0.5	317.9	10	0.001	0.1	0.0016	0.038	0.0041	0.0011	0.014	0.0033	0.0168	0.035	0.399	0.0084	0.199	0.0037							
Olv16SUV014row5grain2 - 1	Mount 1	263	fayalite	olivine	0.25-0.5	603	22	0.02	0.13	0.0009	0.04	0.0031	0.00065	0.0008	0.0023	0.0175	0.037	0.409	0.011	0.16	0.01							
Olv16SUV014row5grain3 - 1	Mount 1	264	fayalite	olivine	0.25-0.5	318	9.3	0.037	0.11	0.0023	0.09	0.039	0.0025	0.045	0.0036	0.0307	0.042	0.458	0.012	0.128	0.0047							
Olv16SUV014row5grain4 - 1	Mount 1	265	fayalite	olivine	0.25-0.5	284.6	8.9	0.015	0.057	0.0012	0.033	-0.0015	0.00055	0.0005	0.0019	0.0131	0.026	0.276	0.0066	0.111	0.0072							
Olv16SUV014row5grain5 - 1	Mount 1	266	fayalite	olivine	0.25-0.5	569	19	0.068	0.1	0.0011	0.1	0.0138	0.0013	0.0185	0.003	0.0339	0.038	0.533	0.01	0.162	0.0062							
Olv16SUV016row5grain10 - 1	Mount 1	271	fayalite	olivine	0.25-0.5	347	14	-0.009	0.18	0.0002	0.035	0.0085	0.0014	0.027	0.0041	0.0254	0.036	0.599	0.014	0.265	0.013							
Olv16SUV016row5grain11 - 1	Mount 1	272	fayalite	olivine	0.25-0.5	163.9	6.5	-0.011	0.071	0.0001	0.061	0.0034	0.00068	0.019	0.0033	0.0148	0.035	0.206	0.0065	0.0482	0.0088							
Olv16SUV016row5grain12 - 1	Mount 1	273	fayalite	olivine	0.25-0.5	358.8	9.9	-0.018	0.082	-0.0004	0.032	0	0.00045	0.008	0.0021	0.0232	0.028	0.371	0.0097	0.119	0.0052							
Olv16SUV016row5grain6 - 1	Mount 1	267	fayalite	olivine	0.25-0.5	213.4	5.8	0.006	0.084	-0.0006	0.031	0.0058	0.0017	0.0096	0.0036	0.0226	0.031	0.282	0.0071	0.083	0.0028							
Olv16SUV016row5grain7 - 1	Mount 1	268	fayalite	olivine	0.25-0.5	166.6	4.9	0.002	0.032	0.0003	0.033	0.0024	0.001	-0.000191	0.003	0.0073	0.015	0.089	0.0042	0.0277	0.0057							
Olv16SUV016row5grain8 - 1	Mount 1	269	fayalite	olivine	0.25-0.5	478	14	0.031	0.079	0.0034	0.035	0.004	0.0009	0.0091	0.0036	0.0097	0.039	0.281	0.0081	0.09	0.007							
Olv16SUV016row5grain9 - 1	Mount 1	270	fayalite	olivine	0.25-0.5	329.2	9.8	0.004	0.11	0.0004	0.029	0.0077	0.00091	0.026	0.0033	0.0351	0.037	0.461	0.0095	0.114	0.0068							
Olv16SUV028row4grain8 - 1	Mount 1	261	forsterite	olivine	0.25-0.5	215.1	7.3	0.036	0.022	-0.0016	0.03	0.0009	0.00083	-0.0001721	0.0019	0.0032	0.0091	0.071	0.0037	0.0477	0.02							

APPENDIX 7F

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); CLINOPYROXENE (CPX)

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Note	Mg	Si	Ca	Sc	Ti_47	Ti_49	V	Cr_52	Cr_53	Mn	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
Diop15SUV004row1grain3 - 1	2015_3	3-1_003	low-CR_DC	cpx		115500	230000	146700	48.23		2930	123.6	7070	7020	606.7	34.04	317.3	2.91	23.07	2.343		100.99	2.093	4.88	0.07	0.45	1.235	4.155	0.636	3.03	0.754	0.23	0.661	0.077	0.477	0.089	0.178	0.0283	0.154	0.0279	0.223	0.0024	0.066	0.004	0.00057
Diop15SUV004row1grain3 - 2	2015_3	3-1_003_rpt	low-CR_DC	cpx		117490	210000	146040	45.1		2330	89.3	8405	8350	533.4	30.84	326	2.97	17.1	1.705	0.0099	90.13	1.444	2.925	0.043	1.13	0.886	2.886	0.444	2.22	0.479	0.16	0.477	0.062	0.324	0.0502	0.121	0.0185	0.103	0.0182	0.158	0.001	0.096	0.0041	0.00027
Diop15SUV004row1grain4 - 1	2015_3	3-1_004	low-CR_DC	cpx		119280	233500	147200	44.94		2391	112.9	8777	8676	618.3	34.98	375.5	8.08	23.08	1.691	0.0115	83.35	1.487	3.23	0.0592	0.138	0.861	2.851	0.44	2.15	0.511	0.167	0.442	0.0593	0.381	0.0676	0.154	0.0171	0.129	0.0179	0.147	0.0022	0.0499	0.003	0.00015
Diop15SUV014row1grain1 - 1	2015_3	3-1_001	Cr-diopside	cpx		119200	223000	148300	74.17		740.8	203	6490	6391	681.8	22.36	382.4	0.786	11.96	2.41		251.6	11.69	29.08	0.387	0.08	8.556	32.5	4.858	22.38	4.58	1.451	3.4	0.435	2.412	0.437	1.088	0.161	0.978	0.127	0.578	0.0292	0.779	0.323	0.0611
Diop15SUV014row1grain1 - 2	2015_3	3-1_001_rpt	Cr-diopside	cpx		116330	221300	147410	74.13		770.9	204.1	6520	6490	669.3	21.97	379.1	0.746	11.11	2.327		250.5	11.91	30.59	0.407	0.088	8.504	32.76	4.856	22.53	4.62	1.468	3.41	0.426	2.57	0.45	1.139	0.158	1.017	0.1361	0.703	0.0272	0.677	0.336	0.0643
Diop15SUV018row3grain2 - 1	2015_3	112	Cr-diopside	cpx		80430	171000	179450	1.271		955	2.85	6.2	4.3	1597	4.82	0.787	0.087	9.04	6.24	0.102	14.15	2.96	192.6	4.34	4.3	8.14	13.5	1.33	4.71	0.786	0.107	0.546	0.0867	0.573	0.123	0.33	0.0492	0.35	0.0534	4.62	0.23	1.35	5.8	0.542
Diop15SUV018row3grain2 - 2	2015_3	112	Cr-diopside	cpx		50700	138000	178600	1.761		1370	4.22	7.9	5.89	1870	1.77	1.06	0.105	6.38	5.75	0.0307	4.42	13.8	361	12.2	2.06	6.7	19	2.93	13.3	2.41	0.349	1.67	0.276	1.99	0.458	1.55	0.251	1.99	0.322	7.35	0.93	1.362	6.1	2.97
Diop15SUV019row3grain7 - 1	Mount 3	162	low_Cr diop	cpx	Has cracks			1651		31	9.61						1.3					0.183	0.11	80	0.26	15.47	0.087	1.958	0.32	6.65	0.032	0.875	0.11												
Diop15SUV019row3grain8 - 1	Mount 3	missing	low-CR_DC	missing				4970		110	22.49						0.39					0.0578	0.033	4.08	0.031	2.21	0.033	0.515	0.12	2.06	0.013	0.239	0.06												
Diop15SUV019row3grain9 - 1	Mount 3	163	low-CR_DC	cpx				5370		120	21.18						0.4					0.0664	0.11	3.84	0.031	2.16	0.036	0.533	0.1	2.067	0.017	0.246	0.059												
Diop15SUV021row1grain5 - 1	2015_3	3-1_005	low-CR_DC	cpx		126400	226000	133400	108.08		3220	538.8	4216	4298	1422	50.8	318.1	2.86	36.6	6.96	1.54	12.06	12.04	16.54	0.297	7.5	1.304	4.3	0.713	4.07	1.57	0.431	1.99	0.351	2.331	0.511	1.381	0.187	1.283	0.178	0.782	0.0203	0.269	0.148	0.0321
Diop15SUV021row1grain5 - 2	2015_3	3-1_005_rpt	low-CR_DC	cpx		119300	220000	134080	76.83		1788	357.7	7729	7884	1130.6	43.42	315.8	0.951	26.32	4.45		8.75	7.09	5.36	0.0181	0.036	0.446	1.94	0.381	2.21	0.899	0.243	1.26	0.192	1.357	0.279	0.75	0.1014	0.698	0.0977	0.273	0.0016	0.154	0.0122	0.0027
Diop15SUV021row1grain6 - 1	2015_3	3-1_006	low-CR_DC	cpx		130570	227300	135510	83.64		1902	297.9	8976	8819	1237	45.91	330.6	2.44	28.69	4.9	0.29	8.75	7.75	7.23	0.0288	0.165	0.488	2.019	0.379	2.354	0.994	0.289	1.236	0.204	1.471	0.302	0.924	0.123	0.823	0.112	0.337		0.083	0.0415	0.0028
Diop15SUV024row1grain2 - 1	2015_3	3-1_002	Cr-diopside	cpx		115710	229500	160300	29.99		530.3	99.55	4020	3982	1300	45.76	812.5	0.141	53.56	5.44	0.0268	12.09	10.38	28.24	0.0298	1.22	15.2	55.64	6.761	22.71	3.33	1.115	2.026	0.312	1.99	0.368	1.085	0.155	1.066	0.15	0.91	0.0057	0.93	0.205	0.0577
Diop15SUV024row1grain2 - 2	2015_3	3-1_002_rpt	Cr-diopside	cpx		113030	223000	158900	29.68		489.1	97.15	4021	3972	1258.7	44.54	811.6	0.201	50.07	5.25		11.73	10.04	26.86	0.0258	0.029	14.24	52.4	6.379	21.73	3.11	1.065	1.855	0.299	1.842	0.373	1.086	0.168	0.995	0.148	0.815	0.0063	0.935	0.201	0.0491
Diop15SUV027row1grain7 - 1	2015_3	3-1_007	low-CR_DC	cpx		110230	241100	152700	50.86		168.9	166.1	2851	2791	1614	44.12	556.5	0.098	58.99	5		8.11	41.6	21.45	0.0252		15.94	59.12	7.074	25.96	6.26	0.774	5.57	1.038	7.28	1.448	4.19	0.638	4.33	0.602	1.285	0.0086	0.853	0.203	0.348
Diop15SUV027row1grain7 - 2	2015_3	3-1_007_rpt	low-CR_DC	cpx		110800	232000	153400	50.87		170.1	162.3	2842	2769	1612	44.48	559.9	0.146	57.5	4.92		7.9	43.13	21.52	0.0234		15.87	60.34	7.193	26.59	6.4	0.808	5.96	1.037	7.33	1.461	4.32	0.643	4.31	0.609	1.322	0.0141	0.864	0.206	0.339
Diop15SUV028row1grain8 - 1	2015_3	3-1_008	low-CR_DC	cpx		110440	201700	129130	95.64		2413	357.6	6452	6727	1023.4	40.62	306.6	2.75	23.86	5.5	0.05	9.67	8.54	9.14	0.0327	0.122	0.482	2.024	0.397	2.56	1.047	0.348	1.482	0.25	1.763	0.338	0.946	0.124	0.825	0.1072	0.44	0.004	0.095	0.0185	0.00182
Diop15SUV028row1grain8 - 2	2015_3	3-1_008_rpt	low-CR_DC	cpx		134400	240000	128260	73.3		1751	263.4	5207	5057	1347	50.01	366.4	3.91	31.42	3.85	0.102	7.14	6.2	4.91	0.024	0.206	0.302	1.29	0.256	1.71	0.724	0.229	0.991	0.166	1.289	0.255	0.653	0.101	0.666	0.091	0.242	0.0011	0.198	0.025	0.00198
Diop15SUV028row1grain9 - 1	2015_3	3-1_009	low-CR_DC	cpx		118230	213800	134040	94.88		2495	351.1	7881	8130	1100.5	43.21	330.3	1.57	25.25	5.64		9.66	8.68	9.09	0.0272		0.489	1.97	0.392	2.58	1.025	0.352	1.369	0.242	1.754	0.364	0.975	0.1235	0.862	0.115	0.498	0.0029	0.0339	0.0146	0.00125
Diop15SUV028row3grain10 - 1	Mount 3	164	low-CR_DC	cpx	Has cracks			2504		54	14.85						0.2					0.0372	0.03	0.78	0.01	0.772	0.02	0.242	0.085	1.035	0.012	0.118	0.036												
Diop15SUV032row2grain1 - 1	2015_3	3-2_001	low-CR_DC	cpx		116670	232000	140040	82.29		1392.1	191.7	6446	6248	964	38.7	279.6	2.21	22.01	4.39	0.361	7.85	4.673	3.083	0.0325	1.53	0.166	0.569	0.1126	0.773	0.404	0.189	0.66	0.1188	0.923	0.187	0.492	0.0715	0.436	0.0689	0.163	0.0043	0.361	0.005	0.00301
Diop15SUV032row2grain1 - 2	2015_3	3-2_001_rpt	low-CR_DC	cpx		116990	225000	139290	80.53		1732	215.1	5583	5415	990	41.6	277.5	0.392	21.89	4.83	0.52	7.69	5.71	4.34	0.018	0.97	0.128	0.64	0.141	1.035	0.518	0.203	0.863	0.156	1.107	0.237	0.623	0.0893	0.561	0.0749	0.219		0.0153	0.0014	0.00065
Diop15SUV032row2grain2 - 1	2015_3	3-2_002	low-CR_DC	cpx		130530	244800	140370	67.47		1544	240.7	5981	5790	1119	44	316.4	0.65	25.89	3.5		9.21	5.65	4.23	0.0178	0.188	0.413	1.605	0.298	1.865	0.655	0.215	0.96	0.162	1.173	0.212	0.618	0.0835	0.601	0.0833	0.215		0.0435	0.0041	0.00222
Diop15SUV032row2grain2 - 2	2015_3	3-2_002_rpt	low-CR_DC	cpx		121300	231000	140760	86		2064	315.1	8077	8020	1049	41.65	302.6	0.85	26.8	5.25	0.127	11.21	7.58	7.3	0.0277	2.99	0.688	2.375	0.419	2.434	0.995	0.302	1.274	0.208	1.518	0.301	0.855	0.115	0.756	0.1	0.386		0.54	0.0138	0.0057
Diop15SUV032row2grain3 - 1	2015_3	3-2_003	low-CR_DC	cpx		118600	230200	136430	85.23		2201	306.7	7555	7490	1040.4	41.84	328.6	2.565	24.3	5.23	0.028	10.4	7.8	6.99	0.0235	0.063	0.454	1.888	0.38	2.45	0.971	0.346	1.278	0.219	1.567	0.311	0.914	0.118	0.774	0.1154	0.366	0.0023	0.169	0.0141	0.00176
Diop15SUV032row2grain4 - 1	2015_3	3-2_004	low-CR_DC	cpx		131930	224000	135230	78.3		1874	266	6906	6610	1260	47.73	348.8	3.03	29.8	4.41	0.0103	8.57	6.61	5.01	0.0268	0.086	0.355	1.469	0.294	1.872	0.756	0.279	1.048	0.176	1.314	0.257	0.721	0.099	0.658	0.0955	0.271		0.185	0.021	0.00214
Diop15SUV032row2grain4 - 2	2015_3	3-2_004_rpt	low-CR_DC	cpx		121950	206300	135070	75.01		1869	261.6	6478	6319	1115.1	43.86	326.7	2.85	26.1	4.31		9.43	6.182	4.9	0.0208	0.0064	0.324	1.443	0.268	1.802	0.78	0.255	1.007	0.179	1.233	0.257	0.708	0.0858	0.61	0.0802	0.263		0.0266	0.0055	0.00097
Diop15SUV032row2grain5 - 1	2015_3	3-2_005	low-CR_DC	cpx		131000	211000	141980	66.54		1441	226.7	6606	6370	1103	43.69	338	0.536	25.97	3.581	0.0181	8.79	5.3	3.7	0.0166	0.06	0.351	1.469	0.269	1.746	0.697	0.211	0.877	0.145	1.015	0.218	0.588	0.082	0.446	0.0804	0.175		0.169	0.0085	0.00103
Diop15SUV032row2grain6 - 1	2015_3	3-2_006	low-CR_DC	cpx		122490	208200	138150	92.8		2221	360.4	7790	7850	1167.7	46.35	307.5	2.12	27.84	5.38	0.0204	10.14	8.14	7.41	0.0269	0.443	0.46	2.02	0.385	2.44	0.987	0.335	1.317	0.242	1.578	0.315	0.928	0.126	0.773	0.122	0.424	0.0022	0.092	0.0071	0.0031
Diop15SUV032row2grain6 - 2	2015_3	3-2_006_rpt	low-CR_DC	cpx		118800	206900	138290	83.06		2036	324.2	5770	5750	1101	44.82	287.1	0.817	26.12	4.49		10.64	6.86	5.59	0.0173	0.113	0.449	1.798	0.34	2.162	0.891	0.302	1.205	0.203	1.462	0.279	0.801	0.0937	0.668	0.0859	0.287		0.0371	0.008	0.00112
Diop15SUV032row2grain7 - 1	2015_3	3-2_007	low-CR_DC	cpx		116200	189000	141000	94.99		2558	381	7443	7506	1036	42.39	335.5	2.75	24.66	5.85	0.043	10.85	7.92	8.25	0.0266	0.23	0.406	1.814	0.377	2.308	0.988	0.351	1.39	0.238	1.596	0.324	0.83	0.116	0.792	0.0937	0.485	0.0036	0.154	0.0109	0.00085
Diop15SUV032row2grain8 - 1	2015_3	3-2_008	low-CR_DC	cpx		121440	211000	133530	64.81		1623	220.6	4506	4314	1044.6	41.8	396.2	0.641	24.39	3.471	0.0127	8.994	5.26	3.758	0.0099		0.311	1.282	0.263	1.565	0.666	0.228	0.867	0.1555	1.096	0.208	0.595	0.0743	0.513	0.0727	0.229		0.0257	0.0046	0.00032
Diop15SUV032row2grain9 - 1	2015_3	3-2_009	low-CR_DC	cpx		117300	205000	138550	89.96		2409	325.9	7440	7416	1070.1	42.93	333.2	2.04	24.84	5.58		10.69	8.46	7.75	0.0284		0.464	1.966	0.392	2.5	1.041	0.355	1.372	0.249	1.686	0.356	0.985	0.1268	0.831	0.123	0.41		0.0275	0.0064	0.00086
Diop15SUV052row2grain10 - 1	2015_3	3-2_010	Cr-diopside	cpx		117670	204700	134130	81.48		1856	278.5	8144	7831	1050.9	40.95	304.2	0.46	24.29	4.51		9.28	7.18	6.21	0.026		0.467	1.905	0.368	2.388	0.889	0.263	1.137	0.207	1.376	0.278	0.836	0.1024	0.785	0.1012	0.338		0.0367	0.0114	0.00176
Diop16SUV019row6grain1 - 1	Mount 1	274	Cr-diopside	cpx				802		57	79.4						0.36					2.74	0.66	26.1	0.16	2.24	0.041	0.288	0.11	1.08	0.021	0.19	0.11												
Diop16SUV019row6grain2 - 1	Mount 1	275	Cr-diopside	cpx				118.3		4.5	61.2						0.051					0.0005	0.038	3.001	0.026	0.471	0.014	0.0366	0.034	0.177	0.0071	0.068	0.041												

APPENDIX 7G

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); RUTILE

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Grain Size	Ti_m47	Si	Ca	Ti_m49	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Rut16SUV013row1grain1 - 1	Mount 2	2_1_1	red rutile	rutile	0.25-0.5	4.12E+08	3600	470	593600	2.23	4.76	3.38	179.8	982	72.6	2.66	6.4	0.77	2.84	0.731	0.181	0.669	0.1207	0.763	0.149	0.419	0.0564	0.413	0.0553	8.38
Rut16SUV013row1grain2 - 1	Mount 2	2_1_2	red rutile	rutile	0.25-0.5	6.57E+08	1100	91	600100	0.05	2.094	0.528	2648	185.3	0.88	0.785	1.025	0.0933	0.3	0.0359	0.0347	0.061	0.0122	0.114	0.0276	0.105	0.0171	0.097	0.0154	107.6
Rut16SUV013row1grain3 - 1	Mount 2	2_1_3	red rutile	rutile	0.25-0.5	6.77E+08	800	146	600900	0.04	1.599	0.1011	33.1	1645	0.038	0.00095	0.0011	-0.00019	0.0036	0.0029	0.0019	0.0052	-0.00019	-0.00029	0.00038	0.00069	0.00015	0.0009	1.00E-05	1.44
Rut16SUV013row1grain4 - 1	Mount 2	2_1_4	red rutile	rutile	0.25-0.5	8.97E+08	200	160	602400	0.145	1.632	0.1092	1219	1330	0.038	0.00322	0.0027	6.00E-05	0.0062	0.002	0.00025	0.0034	0.00025	0.00095	0.00039	-1.22E-05	0.00029	-0.0014	8.00E-06	62.75
Rut16SUV013row1grain5 - 1	Mount 2	2_1_5	red rutile	rutile	0.25-0.5	6.79E+08	500	281	605600	0.05	1.653	0.1138	1143	757.5	0.087	0.0396	0.0844	0.0088	0.032	0.0041	0.0039	0.0044	0.00037	0.0023	0.00071	0.00017	-9.00E-05	-0.0003	-0.0004	54.13
Rut16SUV013row1grain6 - 1	Mount 2	2_1_6	red rutile	rutile	0.25-0.5	6.63E+08	-300	292	594000	0.05	1.667	0.1178	1297	1695	0.044	0.00078	0.00101	-0.00024	0.0057	0.0054	0.0001	0.0042	-0.00021	0.0033	3.00E-05	0.00128	5.00E-05	-0.0013	-0.00056	69.8
Rut16SUV013row1grain7 - 1	Mount 2	2_1_7	red rutile	rutile	0.25-0.5	7.81E+08	1100	128	602000	0.203	1.629	0.1172	1116	1986	0.135	0.00131	0.00166	0.00068	0.0016	0.001	0.0007	0.0018	0.0006	0.00094	0.00035	0.00092	0.00036	0.0015	6.00E-05	66.31
Rut16SUV013row1grain8 - 1	Mount 2	2_1_8	red rutile	rutile	0.25-0.5	6.45E+08	-500	211	596100	0.21	1.738	0.1216	824.9	3373	0.091	0.0052	0.0069	0.00135	0.0039	0.0029	0	-0.0027	0.0002	0.0009	7.00E-05	9.00E-05	0.00038	-0.0009	0.0012	50.58
Rut16SUV022row1grain9 - 1	Mount 2	2_1_9	red rutile	rutile	0.25-0.5	7.45E+08	200	237	591000	0.22	1.692	0.13	2445	4627	0.052	0.00106	0.00143	0.00072	0.0046	0.0041	0.0011	0.0043	4.00E-05	0.0015	0.00049	0.00094	-0.00011	-0.001	-0.00018	116.5
Rut16SUV022row1grain10 - 1	Mount 2	2_1_10	red rutile	rutile	0.25-0.5	6.32E+08	1300	660	588300	0.34	2.08	0.132	1279	2267	1.17	0.036	0.087	0.0129	0.038	0.0091	0.002	0.0061	0.00051	0.0047	0.00043	0.0017	0.00079	0.0039	0.00033	68.5
Rut16SUV022row1grain11 - 1	Mount 2	2_1_11	red rutile	rutile	0.25-0.5	6.97E+08	-800	315	597000	0.29	1.707	0.1208	1413	1618	0.063	0.0464	0.088	0.0109	0.052	0.0087	0.0002	0.0049	-1.00E-05	0.0012	0.00042	0.00031	0.00034	-0.001	0.00027	71.9
Rut16SUV023row2grain1 - 1	Mount 2	2_2_1	red rutile	rutile	0.25-0.5	8.09E+08	800	285	595500	0.32	1.7	0.1311	1257	1931	0.053	0.0072	0.0179	0.0039	0.0175	0.005	0.00051	0.0095	0.00059	0.0035	0.0007	0.0024	0.00051	0.0043	0.00075	52.12
Rut16SUV023row2grain2 - 1	Mount 2	2_2_2	red rutile	rutile	0.25-0.5	6.44E+08	100	126	601300	0.37	1.669	0.1191	260	1992	0.015	0.0032	0.0034	0.00064	0.0018	0.0026	0	-0.0028	0.00049	0.00035	0.0001	0.00022	0.00055	0.0002	-0.0004	6.15
Rut16SUV023row2grain3 - 1	Mount 2	2_2_3	red rutile	rutile	0.25-0.5	8.68E+08	-500	167	591800	0.213	1.735	0.1277	2081	3492	0.048	0.002	0.0051	0.00101	0.0034	0.0014	-0.00024	0.0039	0.00046	0.0009	0.00047	0.00128	0.00035	0.0013	0.00106	92.4
Rut16SUV023row2grain4 - 1	Mount 2	2_2_4	red rutile	rutile	0.25-0.5	9.04E+08	-200	212	593600	0.135	1.709	0.1196	1260	2446	0.077	3.00E-05	0.00027	0.00066	0.0046	0.0023	0.0004	0.0014	0.00047	0.0017	0.00039	0.00081	0.00043	0.0037	0.00256	54.43
Rut16SUV024row2grain6 - 1	Mount 2	2_2_6	red rutile	rutile	0.25-0.5	7.64E+08	300	313	597300	0.166	1.754	0.1282	997.4	2333	0.034	0.011	0.037	0.00295	0.0188	0.0025	0.0008	-0.0005	-0.00013	0.00077	0.00058	0.0018	0.00046	0.0028	0.00099	45.29
Rut16SUV024row2grain8 - 1	Mount 2	2_2_8	red rutile	rutile	0.25-0.5	7.69E+08	0	103	588800	0.1	1.85	0.1293	559.8	936	1.25	0.186	0.405	0.0356	0.099	0.0082	0.0024	0.0057	0.00103	0.0039	0.00034	0.0021	9.00E-05	0.0014	9.00E-05	28.77
Rut16SUV024row2grain9 - 1	Mount 2	2_2_9	red rutile	rutile	0.25-0.5	6.79E+08	1000	176	598000	0.018	1.76	0.1496	2366	1094	0.081	0.0413	0.096	0.0076	0.0285	0.007	0.0006	-0.0003	0.00143	0.0088	0.00166	0.0027	0.00057	0.0071	0.00039	75.2
Rut16SUV024row2grain10 - 1	Mount 2	2_2_10	red rutile	rutile	0.25-0.5	6.84E+08	4200	1360	598100	0.48	3.47	0.349	1021	1209	9.8	0.297	0.81	0.084	0.374	0.067	0.0163	0.046	0.0071	0.054	0.0098	0.0271	0.0042	0.0343	0.0055	37.15

APPENDIX 7H

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); VESUVIANITE

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Grain Size	Ca	Ti_m47	Ti_m49	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Ves15SUV001row8grain1 - 1	Mount 2	185	vesuvianite	garnet	0.25-0.5	534000	3600	3950	6.66	0.265	21.14	285	11.82	0.008	6.3	47.6	10.58	60.8	10.84	2.89	5.96	0.869	4.84	0.862	2.42	0.349	2.52	0.439	7.79
Ves15SUV001row8grain3 - 1	Mount 2	187	vesuvianite	vesuvianite	0.25-0.5	591000	9690	10660	0.96	204.8	20.21	334.8	35.1	0.034	40.8	85.7	9.87	38.6	7.19	1.147	5.48	0.761	4.38	0.833	2.17	0.32	1.88	0.278	9.37
Ves15SUV001row8grain4 - 1	Mount 2	188	vesuvianite	garnet	0.25-0.5	497000	4100	4470	2.02	0.149	27.5	47.8	11.01	0.146	1.428	9.78	2.197	15.79	6.84	4.8	7.44	1.016	5.78	0.998	2.512	0.311	1.74	0.257	1.255
Ves15SUV001row8grain5 - 1	Mount 2	189	vesuvianite	garnet	0.25-0.5	534000	4380	4720	1.43	0.189	26.87	137.7	232.4	0.029	6.26	57.1	13.18	74.2	14.28	4.72	7.69	0.935	5.04	0.954	2.64	0.376	2.4	0.363	3.59
Ves15SUV001row8grain6 - 1	Mount 2	190	vesuvianite	garnet	0.25-0.5	527000	1657	1780	17.69	0.671	44.4	3.94	32.9	0.073	19.53	37.3	2.69	10.52	3.06	1.516	3.96	0.788	6.23	1.492	5.06	0.836	5.48	0.704	0.101
Ves15SUV002row8grain8 - 1	Mount 2	191	vesuvianite	garnet	0.5-1.0	529000	17100	18350	1.3	0.626	23.9	190.4	7.71	0.193	5.33	40.2	8.24	47.4	15.29	3.54	14.21	1.526	6.7	0.853	1.72	0.173	1.12	0.159	4.18
Ves15SUV002row8grain9 - 1	Mount 2	192	vesuvianite	garnet	0.5-1.0	551000	28900	30200	3.41	0.684	27.7	232.1	83.1	0.075	10.15	82.5	15.65	69	8.98	2.66	6.51	0.956	5.73	1.086	2.87	0.389	2.57	0.368	8.35
Ves15SUV002row8grain10 - 1	Mount 2	193	vesuvianite	garnet	0.5-1.0	522000	14140	15080	0.78	0.18	60.6	202	163.6	0.077	11.41	71.9	14.72	90.3	27.4	8.99	21.3	2.83	15.4	2.68	6.51	0.805	4.43	0.544	5.48
Ves15SUV003row9grain1 - 1	Mount 2	196	vesuvianite	garnet	0.25-0.5	535000	3103	3320	1.28	0.199	37.9	71.3	36.1	0.146	9.16	78.3	17.69	97.1	19.76	5.34	11.97	1.451	8.05	1.434	3.87	0.517	3.3	0.449	1.84
Ves15SUV003row9grain2 - 1	Mount 2	198	vesuvianite	garnet	0.25-0.5	524000	2181	2276	9.17	0.391	21.22	1.386	10.98	0.106	4.92	26.56	4.48	21.04	4.74	1.664	4.65	0.693	4.38	0.84	2.35	0.309	1.84	0.222	0.0041
Ves15SUV003row9grain3 - 1	Mount 2	199	vesuvianite	garnet	0.25-0.5	548000	15470	16420	11.92	0.282	32.63	128.2	7.02	-0.001	2.27	15.39	3.08	17.28	4.58	2.366	5.32	0.919	6.22	1.297	3.75	0.503	3.27	0.432	4.75
Ves15SUV003row9grain4 - 1	Mount 2	200	vesuvianite	garnet	0.25-0.5	512000	2020	2130	1.22	0.166	447	0.542	15.08	0.039	1.812	12.87	3.29	29.4	24.5	6.31	52.1	10.51	75.3	15.2	40.8	5.08	27.3	2.88	0.0062
Ves15SUV003row9grain5 - 1	Mount 2	201	vesuvianite	garnet	0.25-0.5	532000	5780	6100	0.62	0.587	52.3	143.5	86.2	-0.009	7.08	57.1	11.85	64.6	14.49	2.78	11.01	1.569	9.39	1.83	5.28	0.83	5.63	0.786	2.66
Ves15SUV005row9grain6 - 1	Mount 2	202	vesuvianite	garnet	0.25-0.5	513000	4290	4510	-0.1	0.436	40.3	168.8	4.03	0.01	2.62	28.1	6.94	38.9	9.34	2.06	7.99	1.184	7.62	1.458	4.35	0.655	4.26	0.616	4.39
Ves15SUV010row9grain7 - 1	Mount 2	203	vesuvianite	garnet	0.5-1.0	549000	1981	2101	1.88	0.191	4.13	27.5	5.43	0.082	1.037	7.28	1.625	7.69	1.28	0.606	0.871	0.123	0.82	0.148	0.402	0.0571	0.39	0.06	0.869
Ves15SUV010row9grain8 - 1	Mount 2	204	vesuvianite	garnet	0.5-1.0	551000	4730	4950	17	2.02	13	11.1	0.961	3.9	3.8	17	2.65	12.07	2.48	1.35	2.79	0.419	2.67	0.463	1.18	0.149	0.99	0.111	0.185
Ves15SUV010row9grain9 - 1	Mount 2	206	vesuvianite	garnet	0.5-1.0	523000	2710	2834	0.15	2.6	37.5	123.8	7.35	0.143	10	48.5	10.45	53	9.95	1.84	7.16	1.063	6.83	1.408	4.22	0.618	4.03	0.548	3.6
Ves15SUV010row9grain10 - 1	Mount 2	207	vesuvianite	garnet	0.5-1.0	537000	5800	6100	15.78	0.901	20.13	7.16	105	0.03	4.06	27.11	5.61	32.7	7.62	3.52	6.52	0.789	4.09	0.701	1.624	0.209	1.21	0.164	0.082
Ves15SUV010row9grain11 - 1	Mount 2	208	vesuvianite	garnet	0.5-1.0	524000	16580	17380	21.93	0.84	90.3	27.46	43.1	0.9	4.69	27.79	4.9	23.31	4.64	2.7	6.22	1.298	12.04	3.08	11.13	1.864	13.44	1.997	0.27
Ves15SUV010row9grain12 - 1	Mount 2	209	vesuvianite	garnet	0.25-0.5	525000	801	828	0.45	0.507	26.99	1.106	15.66	0.079	3.21	21.61	4.85	34.6	9.6	3.09	5.63	0.757	4.5	0.872	2.51	0.369	2.57	0.389	0.017
Ves15SUV010row9grain13 - 1	Mount 2	210	vesuvianite	andradite	0.25-0.5	589000	370	361	0.36	0.207	24.6	57.7	0.806	0.045	6.6	54	8.05	24.62	2.69	1.291	2.82	0.485	3.62	0.779	2.61	0.46	3.72	0.663	1.55
Ves15SUV014row9grain14 - 1	Mount 2	211	vesuvianite	garnet	0.25-0.5	468000	3620	3800	1.13	0.276	18.53	52.6	7.35	-0.014	4.55	38.2	7.04	27.42	3.78	1.274	3.27	0.519	3.61	0.717	1.98	0.3	1.81	0.264	1.112
Ves15SUV015row10grain1 - 1	Mount 2	212	vesuvianite	vesuvianite	0.25-0.5	571000	5080	5290	0.71	329	1.92	544	41.5	0.66	1.85	6.5	0.88	3.24	0.369	0.071	0.164	0.0311	0.236	0.033	0.175	0.0375	0.254	0.0458	2.31
Ves15SUV021row10grain2 - 1	Mount 2	213	vesuvianite	andradite	0.25-0.5	514000	12980	13430	3.94	0.333	27.1	321	3.53	0.25	0.64	3.07	0.799	7.64	3.11	1.47	3.58	0.666	4.72	1	3.11	0.469	2.58	0.459	9.7
Ves15SUV024row10grain3 - 1	Mount 2	215	vesuvianite	garnet	0.25-0.5	513000	4970	5170	55.9	0.291	132.5	457	79.4	0.053	13.39	67.3	12.39	73.8	23.9	4.47	24.35	3.9	25.55	5.2	14.84	2.221	15.52	2.388	10.34
Ves15SUV024row10grain4 - 1	Mount 2	216	vesuvianite	andradite	0.25-0.5	553000	485	497	1.89	0.451	9.53	0.506	0.7	0.033	0.296	3.05	1.076	10.39	4.31	1.62	3.47	0.403	2.29	0.369	0.907	0.126	0.671	0.085	-0.0003
Ves15SUV024row10grain5 - 1	Mount 2	218	vesuvianite	garnet	0.25-0.5	518000	7630	7930	2.48	1.91	89	216.4	25.57	0.273	16.09	76.9	14.35	76.4	19.37	5.25	17.22	2.597	16.63	3.18	8.91	1.286	8.06	1.092	7.53
Ves15SUV024row10grain6 - 1	Mount 2	219	vesuvianite	talc?	0.25-0.5	588000	1084	1118	2.77	217	2.9	10.84	1.251	0.56	271	387	27	53.6	3.27	0.904	1.3	0.138	0.754	0.121	0.306	0.0348	0.146	0.0178	0.248
Ves15SUV026row10grain7 - 1	Mount 2	221	vesuvianite	garnet	0.5-1.0	561000	2710	2800	17.13	0.747	18.85	3.51	9.82	-0.051	11.63	51.4	6.63	26.3	4.56	1.9	3.66	0.529	3.4	0.731	2.14	0.378	2.91	0.488	0.036
Ves15SUV027row10grain8 - 1	Mount 2	222	vesuvianite	garnet	0.5-1.0	538000	15780	16170	0.4	1.59	52.3	90.1	12.19	1.9	4.45	25.1	5.05	29.6	9.58	3.29	9.88	1.576	10.27	2	5.51	0.777	5.05	0.642	1.03
Ves15SUV050row10grain9 - 1	Mount 2	223	vesuvianite	garnet	0.25-0.5	522000	5420	5590	2.75	35.7	41.6	56.8	23.4	19.9	2.83	12	3.23	22.5	7.63	1.475	7.87	1.207	7.88	1.552	4.43	0.647	4.08	0.565	1.043
Ves15SUV050row10grain10 - 1	Mount 2	224	vesuvianite	vesuvianite	0.25-0.5	517000	2004	2074	5.31	8.74	12.28	52.5	2.97	4.32	12.95	26.14	3.26	13.69	2.94	0.786	2.26	0.368	2.37	0.477	1.35	0.198	1.38	0.183	1.149
Ves15SUV050row10grain11 - 1	Mount 2	226	vesuvianite	garnet	0.25-0.5	414000	8930	9200	4.58	3.04	58.1	151.3	28.7	3.55	3.79	18.33	4.15	26.2	7.81	2.56	7.72	1.376	10.05	2.02	5.93	0.865	4.9	0.586	3.19
Ves15SUV050row10grain12 - 1	Mount 2	229	vesuvianite	garnet	0.25-0.5	539000	5970	6170	3.7	2.5	29.4	72.8	19.6	4.1	14.04	67.7	10.09	42.6	9	3.02	7.23	0.999	6.21	1.147	3.18	0.483	2.88	0.384	1.89
Ves16SUV013row10grain13 - 1	Mount 2	230	vesuvianite	garnet	0.25-0.5	469000	3850	3950	6.5	7.6	66.7	218.8	113.3	2.08	6.62	39.2	7.43	41	10.41	3.45	9.18	1.521	10.12	2.26	7.33	1.179	8.37	1.225	5.7

APPENDIX 8 Ni-in-Garnet Geothermometry

GEOLOGICAL SURVEY OF CANADA
Banks Island G9, G10, G11 and G12 Garnets

				Notes:	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
								T°C Ni-in-Garnet	T°C Ni-in-Garnet	T°C Ni-in-Garnet	T°C Ni-in-Garnet	Projections to Modelled Geotherms in P (kbar)									Conversions to Depth (km) of Projections to Modelled Geotherms in P (kbar)								
GSC Sample #	Lab Sample #	Mount	Sample Material	Grain Size	G-Class	Ni_ppm	D=Ni(grt)/Ni(ol)	(Griffin_et_al.,1989) [±50]	(Ryan_et_al.,1996) [±50]	(Canil,1999) [±50]	(Average)	P(kbar)[35mW]	P(kbar)[36mW]	P(kbar)[38mW]	P(kbar)[40mW]	P(kbar)[42mW]	P(kbar)[44mW]	P(kbar)[45mW]	P(kbar)[46mW]	P(kbar)[50mW]	Depth(km)[35mW]	Depth(km)[36mW]	Depth(km)[38mW]	Depth(km)[40mW]	Depth(km)[42mW]	Depth(km)[44mW]	Depth(km)[45mW]	Depth(km)[46mW]	Depth(km)[50mW]
Lab Standard	4_055				G9	70.64	0.023547	1223.5	1152.9	1123.9	1173.7	69.6	64.6	57.0	51.1	46.1	42.0	40.2	38.6	33.0	217.4	201.8	178.0	159.6	143.9	131.2	125.7	120.6	103.0
15SUV014	Gar15SUV014row2grain3 - 1	2015_1	stream sediments	0.25-0.5	G10D	47.8	0.015933	1074.7	1017.1	1042.1	1058.4	60.3	56.2	49.7	44.6	40.3	36.7	35.1	33.7	28.8	188.3	175.6	155.3	139.4	125.9	114.7	109.8	105.3	89.9
15SUV014_rpt	Gar15SUV014row2grain3 - 2	2015_1	stream sediments	0.25-0.5	G10D	44.4	0.014800	1049.9	994.3	1027.7	1038.8	58.7	54.8	48.5	43.5	39.3	35.8	34.3	32.9	28.0	183.5	171.2	151.5	136.0	122.8	111.9	107.1	102.7	87.6
15SUV014_rpt	Gar15SUV014row2grain3 - 3	2015_1	stream sediments	0.25-0.5	G10D	42.1	0.014033	1032.5	978.4	1017.5	1025.0	57.6	53.8	47.6	42.7	38.6	35.2	33.7	32.3	27.5	180.1	168.1	148.8	133.6	120.7	110.0	105.3	100.9	86.1
15SUV014_AVG	Gar15SUV014row2grain3	2015_1	stream sediments	0.25-0.5	G10D	44.8	0.014922	1052.6	996.8	1029.3	1041.0	58.9	54.9	48.6	43.6	39.4	35.9	34.4	33.0	28.1	184.0	171.7	151.9	136.3	123.2	112.2	107.4	103.0	87.9
15SUV014	Gar15SUV014row2grain4 - 1	2015_1	stream sediments	0.25-0.5	G10D	46.3	0.015433	1063.9	1007.2	1035.9	1049.9	59.6	55.6	49.2	44.1	39.9	36.3	34.8	33.3	28.4	186.2	173.7	153.6	137.9	124.5	113.5	108.7	104.2	88.9
16SUV023	Gar16SUV023row1grain14 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G10D	59.9	0.019967	1156.9	1092.2	1088.2	1122.5	65.4	60.8	53.7	48.2	43.5	39.7	38.0	36.4	31.1	204.4	190.1	167.9	150.6	135.9	123.9	118.6	113.8	97.2
16SUV023	Gar16SUV023row2grain1 - 1	Mount 1	Beaufort Fm.	0.25-0.5	G10D	70.2	0.023400	1220.9	1150.5	1122.5	1171.7	69.4	64.4	56.8	51.0	46.0	41.9	40.1	38.5	32.9	216.9	201.3	177.6	159.2	143.6	130.9	125.4	120.3	102.7
16SUV023	Gar16SUV023row2grain5 - 1	Mount 3	Beaufort Fm.	0.18-0..25	G10D	85.4	0.028467	1308.4	1229.7	1167.5	1237.9	74.9	69.3	61.0	54.7	49.3	44.9	43.0	41.3	35.3	233.9	216.6	190.8	170.9	153.9	140.4	134.5	129.0	110.3
16SUV025	Gar16SUV025row3grain6 - 1	Mount 1	stream sediments	0.25-0.5	G10D	38.8	0.012933	1006.7	954.7	1002.2	1004.5	56.0	52.3	46.3	41.6	37.6	34.2	32.8	31.4	26.8	175.1	163.5	144.8	130.0	117.5	107.0	102.4	98.2	83.7
15SUV026	Gar15SUV026row2grain9 - 1	2015_1	stream sediments	0.25-0.5	G10	23	0.007667	863.1	821.8	912.1	887.6	47.0	44.1	39.1	35.1	31.7	28.9	27.6	26.5	22.5	147.0	137.8	122.2	109.7	99.2	90.3	86.4	82.7	70.4
15SUV026_rpt	Gar15SUV026row2grain9 - 2	2015_1	stream sediments	0.25-0.5	G10	22	0.007333	852.4	811.8	905.0	878.7	46.4	43.5	38.6	34.6	31.3	28.5	27.3	26.1	22.2	144.9	135.8	120.5	108.2	97.8	89.0	85.2	81.5	69.4
15SUV026_AVG	Gar15SUV026row2grain9	2015_1	stream sediments	0.25-0.5	G10	22.5	0.007500	857.8	816.9	908.6	883.2	46.7	43.8	38.8	34.9	31.5	28.7	27.5	26.3	22.4	145.9	136.8	121.3	109.0	98.5	89.7	85.8	82.1	69.9
16SUV023	Gar16SUV023row1grain12 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G10	31.8	0.010600	948.0	900.5	966.4	957.2	52.4	49.0	43.4	39.0	35.2	32.1	30.7	29.4	25.1	163.6	153.0	135.6	121.8	110.1	100.3	95.9	91.9	78.3
16SUV023	Gar16SUV023row2grain4 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G10	71.7	0.023900	1229.9	1158.6	1127.3	1178.6	70.0	64.9	57.3	51.3	46.3	42.2	40.4	38.8	33.1	218.6	202.9	179.0	160.4	144.7	131.9	126.3	121.2	103.5
16SUV023	Gar16SUV023row2grain7 - 1	Mount 1	Beaufort Fm.	0.25-0.5	G10	22.66	0.007553	859.5	818.5	909.7	884.6	46.8	43.9	38.9	35.0	31.6	28.8	27.5	26.3	22.4	146.3	137.1	121.6	109.2	98.7	89.9	86.0	82.3	70.1
16SUV023	Gar16SUV023row2grain10 - 1	Mount 1	Beaufort Fm.	0.25-0.5	G10	26.7	0.008900	900.7	856.7	936.5	918.6	49.4	46.3	41.0	36.8	33.3	30.3	29.0	27.8	23.7	154.3	144.6	128.1	115.1	104.0	94.7	90.6	86.8	73.9
16SUV028	Gar16SUV028row3grain9 - 1	Mount 1	stream sediments	0.25-0.5	G10	22.99	0.007663	863.0	821.7	912.0	887.5	47.0	44.1	39.1	35.1	31.7	28.9	27.6	26.5	22.5	147.0	137.8	122.2	109.7	99.2	90.3	86.4	82.7	70.4
15SUV019	Gar15SUV019row1grain1 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G11	179.3	0.059767	1758.5	1630.8	1367.3	1562.9	103.0	94.0	82.1	73.2	65.5	59.8	57.3	55.1	47.1	322.0	293.9	256.6	228.7	204.8	186.9	179.1	172.0	147.3
15SUV019	Gar15SUV019row1grain2 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G11	139.6	0.046533	1580.5	1473.5	1294.0	1437.2	91.9	84.3	73.9	66.0	59.2	54.1	51.8	49.7	42.5	287.1	263.5	230.9	206.2	185.1	168.9	161.8	155.4	133.0
15SUV019	Gar15SUV019row2grain5 - 1	2015_1	Beaufort Fm.	0.25-0.5	G11	89.2	0.029733	1329.2	1248.6	1177.8	1253.5	76.2	70.5	62.0	55.6	50.0	45.7	43.7	42.0	35.9	238.0	220.2	193.9	173.6	156.4	142.7	136.6	131.1	112.1
15SUV019_rpt	Gar15SUV019row2grain5 - 2	2015_1	Beaufort Fm.	0.25-0.5	G11	88.2	0.029400	1323.8	1243.6	1175.1	1249.5	75.8	70.2	61.8	55.3	49.8	45.5	43.5	41.8	35.7	236.9	219.2	193.1	172.9	155.7	142.1	136.1	130.6	111.6
15SUV019_rpt	Gar15SUV019row2grain5 - 3	2015_1	Beaufort Fm.	0.25-0.5	G11	87.3	0.029100	1318.8	1239.2	1172.7	1245.8	75.5	69.9	61.5	55.1	49.7	45.3	43.4	41.6	35.6	236.0	218.4	192.3	172.3	155.2	141.5	135.6	130.1	111.2
15SUV019_AVG	Gar15SUV019row2grain5	2015_1	Beaufort Fm.	0.25-0.5	G11	88.2	0.029411	1323.9	1243.8	1175.2	1249.6	75.8	70.2	61.8	55.3	49.8	45.5	43.5	41.8	35.7	237.0	219.3	193.1	172.9	155.8	142.1	136.1	130.6	111.6
15SUV028	Gar15SUV028row1grain4 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G11	259	0.086333	2092.4	1921.1	1488.5	1790.4	124.1	112.1	97.3	86.4	76.9	70.2	67.3	64.7	55.4	387.9	350.4	304.1	269.9	240.3	219.5	210.3	202.1	173.1
15SUV028	Gar15SUV028row2grain11 - 1	2015_1	Beaufort Fm.	0.25-0.5	G11	77.1	0.025700	1261.5	1187.3	1143.7	1202.6	71.9	66.7	58.8	52.7	47.5	43.3	41.5	39.8	34.0	224.8	208.4	183.7	164.7	148.4	135.4	129.6	124.4	106.3
16SUV023	Gar16SUV023row2grain12 - 1	Mount 1	Beaufort Fm.	0.25-0.5	G11	78.3	0.026100	1268.4	1193.6	1147.2	1207.8	72.4	67.1	59.1	53.0	47.8	43.6	41.7	40.0	34.2	226.1	209.6	184.8	165.6	149.2	136.1	130.4	125.1	106.9
16SUV023	Gar16SUV023row2grain13 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G11	148.2	0.049400	1620.1	1508.7	1310.9	1465.5	94.4	86.5	75.7	67.6	60.6	55.4	53.0	50.9	43.6	294.9	270.3	236.7	211.3	189.5	173.0	165.7	159.2	136.2
16SUV023	Gar16SUV023row2grain2 - 1	Mount 1	Beaufort Fm.	0.25-0.5	G11	56.5	0.018833	1134.6	1071.9	1075.9	1105.3	64.0	59.6	52.6	47.2	42.6	38.9	37.2	35.7	30.5	200.0	186.2	164.5	147.6	133.2	121.4	116.3	111.5	95.2
16SUV023	Gar16SUV023row2grain3 - 1	Mount 1	Beaufort Fm.	0.25-0.5	G11	58	0.019333	1144.5	1081.0	1081.4	1113.0	64.6	60.1	53.1	47.7	43.0	39.2	37.5	36.0	30.7	202.0	187.9	166.0	148.9	134.4	122.5	117.3	112.5	96.1
16SUV023	Gar16SUV023row2grain9 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G11	145.5	0.048500	1607.8	1497.7	1305.6	1456.7	93.6	85.8	75.2	67.1	60.2	55.0	52.6	50.6	43.3	292.4	268.2	234.9	209.7	188.1	171.7	164.5	158.0	135.2
16SUV023	Gar16SUV023row2grain6 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G12	36.4	0.012133	987.3	936.7	990.5	988.9	54.8	51.2	45.4	40.7	36.8	33.5	32.1	30.8	26.2	171.3	160.1	141.8	127.3	115.0	104.8	100.3	96.1	81.9
16SUV023	Gar16SUV023row2grain11 - 1	Mount 1	Beaufort Fm.	0.25-0.5	G12	25.42	0.008473	888.0	845.0	928.4	908.2	48.6	45.5	40.4	36.3	32.8	29.8	28.5	27.3	23.3	151.9	142.3	126.1	113.3	102.4	93.2	89.2	85.4	72.8
15SUV001	Gar15SUV001row3grain1 - 1	2015_1	stream sediments	0.25-0.5	G9	0.77	0.000257	384.1	369.9	539.2	461.7	16.8	15.5	13.5	11.9	10.4	9.4	8.9	8.4	7.0	52.5	48.4	42.2	37.1	32.6	29.3	27.9	26.3	22.0
15SUV001_rpt	Gar15SUV001row3grain1 - 2	2015_1	stream sediments	0.25-0.5	G9	0.85	0.000283	392.2	377.7	546.7	469.5	17.3	16.0	14.0	12.3	10.8	9.7	9.3	8.8	7.3	54.1	50.0	43.7	38.4	33.8	30.5	29.0	27.4	22.9
15SUV001_AVG	Gar15SUV001row3grain1	2015_1	stream sediments	0.25-0.5	G9	0.8	0.000270	388.2	373.9	543.1	465.6	17.1	15.7	13.7	12.1	10.6	9.6	9.1	8.6	7.2	53.3	49.2	43.0	37.8	33.2	29.9	28.5	26.9	22.4
15SUV001	Gar15SUV001row3grain2 - 1	2015_1	stream sediments	0.25-0.5	G9	13.8	0.004593	750.6	716.9	835.4	793.0	40.0	37.5	33.3	29.9	27.0	24.6	23.5	22.5	19.1	124.9	117.3	104.1	93.4	84.4	76.8	73.4	70.2	59.7
15SUV019	Gar15SUV019row2grain5 - 1	2015_1	Beaufort Fm.	0.25-0.5	G9	89.2	0.029733	1329.2	1248.6	1177.8	1253.5	76.2	70.5	62.0	55.6	50.0	45.7	43.7	42.0	35.9	238.0	220.2	193.9	173.6	156.4	142.7	136.6	131.1	112.1
15SUV019_rpt	Gar15SUV019row2grain5 - 2	2015_1	Beaufort Fm.	0.25-0.5	G9	88.2	0.029400	1323.8	1243.6	1175.1	1249.5	75.8	70.2	61.8	55.3	49.8	45.5	43.5	41.8	35.7	236.9	219.2	193.1	172.9	155.7	142.1	136.1	130.6	111.6
15SUV019_rpt	Gar15SUV019row2grain5 - 3	2015_1	Beaufort Fm.	0.25-0.5	G9	87.3	0.029100	1318.8	1239.2	1172.7	1245.8	75.5	69.9	61.5	55.1	49.7	45.3	43.4	41.6	35.6	236.0	218.4	192.3	172.3	155.2	141.5	135.6	130.1	111.2
15SUV019_AVG	Gar15SUV019row2grain5	2015_1	Beaufort Fm.	0.25-0.5	G9	88.2	0.029411	1323.9	1243.8	1175.2	1249.6	75.8	70.2	61.8	55.3	49.8	45.5	43.5	41.8	35.7	237.0	219.3	193.1	172.9	155.8	142.1	136.1	130.6	111.6
15SUV019	Gar15SUV019row2grain6 - 1	2015_1	Beaufort Fm.	0.25-0.5	G9	19.2	0.006400	820.7	782.4	883.9	852.3	44.4	41.6	36.9	33.2	30.0	27.3	26.1	25.0	21.3	138.7	130.1	115.4	103.6	93.7	85.2	81.5	78.0	66.4
15SUV019_rpt	Gar15SUV019row2grain6 - 2	2015_1	Beaufort Fm.	0.25-0.5	G9	18.3	0.006100	810.0	772.4	876.6	843.3	43.7	41.0	36.4	32.7	29.5	26.9	25.7	24.6	20.9	136.6	128.1	113.7	102.1	92.3	84.0	80.3	76.8	65.4
15SUV019_AVG	Gar15SUV019row2grain6	2015_1	Beaufort Fm.	0.25-0.5	G9	18.8	0.006250	815.4	777.4	880.3	847.8	44.0	41.3	36.7	32.9	29.7	27.1	25.9	24.8	21.1	137.6	129.1	114.6	102.9	93.0	84.6	80.9	77.4	65.9
15SUV020	Gar15SUV020row2grain7 - 1	2015_1	stream sediments	0.25-0.5	G9	73.1	0.024367	1238.2	1166.2	1131.6	1184.9	70.5	65.4	57.7	51.7	46.6	42.5	40.7	39.0	33.4	220.2	204.3	180.2	161.5	145.7	132.8	127.2	122.0	104.2
15SUV020_rpt	Gar15SUV020row2grain7 - 2	2015_1	stream sediments	0.25-0.5	G9	67.8	0.022600	1206.4	1137.3	1114.9	1160.6	68.5	63.6	56.1	50.3	45.4	41.4	39.6	38.0	32.5	214.0	198.8	175.4	157.3	141.9	129.4	123.9	118.8	101.5
15SUV020_rpt	Gar15SUV020row2grain7 - 3	2015_1	stream sediments	0.25-0.5	G9	71.7	0.023900	1229.9	1158.6	1127.3	1178.6	70.0	64.9	57.3	51.3	46.3	42.2	40.4	38.8	33.1	218.6	202.9	179.0	160.4	144.7	131.9	126.3	121.2	103.5
15SUV020_AVG	Gar15SUV020row2grain7	2015_1	stream sediments	0.25-0.5	G9	70.9	0.023622	1224.9	1154.1	1124.7	1174.8	69.6	64.6	57.0	51.1	46.1	42.0	40.3	38.6	33.0	217.6	202.0	178.2	159.8	144.1	131.4	125.8	120.7	103.1
15SUV024	Gar15SUV024row1grain1 - 1	2015_1	glaciofluvial	0.25-0.5	G9	44.7	0.014900	1052.1	996.3	1029.0	1040.6	58.9	54.9	48.6	43.6	39.4	35.9	34.4	32.9	28.1	183.9	171.6	151.8	136.3	123.1	112.2	107.4	102.9	87.8
15SUV024	Gar15SUV024row2grain8 - 1	2015_1	glaciofluvial	0.25-0.5	G9	51.7	0.017233	1102.2	1042.3	1057.8	1080.0	62.0	57.7	51.0	45.8	41.4	37.7	36.1	34.6	29.5	193.7	180.4	159.5	143.2	129.3	117.8	112.8	108.2	92.3
15SUV024_rpt	Gar15SUV024row2grain8 - 2	2015_1	glaciofluvial	0.25-0.5	G9	50.4	0.016800	1093.1	1034.0	1052.7	1072.9	61.4	57.2	50.6	45.4	41.0	37.4	35.8	34.3	29.3	191.9	178.9	158.1	141.9	128.1	116.8	111.8	107.2	91.5
15SUV024_AVG	Gar15SUV024row2grain8	2015_1	glaciofluvial	0.25-0.5	G9	51.1	0.017017	1097.7	1038.1	1055.2	1076.4	61.7	57.5	50.8	45.6	41.2	37.5	35.9	34.5	29.4	192.8	179.7	158.8	142.5	128.7	117.3	112.3	107.7	91.9
15SUV025	Gar15SUV025row3grain3 - 1	2015_1	stream sediments	0.25-0.5	G9	1.0	0.000320	402.6	387.6	556.2	479.4	18.0	16.6	14.6	12.8	11.3	10.2	9.7	9.2	7.7	56.1	52.0	45.5	40.1	35.4	31.9	30.3	28.7	24.0
15SUV028	Gar15SUV028row1grain3 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G9	168.8	0.056267	1712.5	1590.3	1349.0	1530.8	100.2	91.5	80.0	71.3	63.9	58.3	55.9	53.7	46.0	313.0	286.0	250.0	222.9	199.7	182.3	174.7	167.8	143.6
15SUV028	Gar15SUV028row2grain10 - 1	2015_1	Beaufort Fm.	0.5-1.0	G9	30.9	0.010300	940.0	893.1	961.4	950.7	51.8	48.5	43.0	38.6	34.9	31.8	30.4	29.1	24.8	162.0	151.6	134.3	120.7	109.0	99.3	95.0	91.0	77.6
15SUV028_rpt	Gar15SUV028row2grain10 - 2	2015_1	Beaufort Fm.	0.5-1.0	G9	30.2	0.010067	933.6	887.2	957.4	945.5	51.5	48.2	42.7	38.3	34.6	31.5	30.2	28.9	24.6	160.8	150.5	133.3	119.8	108.2	98.6	94.3	90.4	77.0
15SUV028_rpt	Gar15SUV028row2grain10 - 3	2015_1	Beaufort Fm.	0.5-1.0	G9	30	0.010000	931.8	885.5	956.3	944.0	51.3	48.0	42.6	38.2	34.6	31.5	30.1	28.9	24.6	160.4	150.1	133.1	119.5	108.0	98.4	94.1	90.2	76.8
15SUV028_rpt	Gar15SUV028row2grain10 - 4	2015_1	Beaufort Fm.	0.5-1.0	G9	30.4	0.010133	935.5	888.9	958.5	947.0	51.6	48.3	42.8	38.4	34.7	31.6	30.3	29.0	24.7	161.1	150.8	133.6	120.0	108.5	98.8	94.5	90.6	77.2
15SUV028_AVG	Gar15SUV028row2grain10	2015_1	Beaufort Fm.	0.5-1.0	G9	30.4	0.010125	935.2	888.7	958.4	946.8	51.6	48.2	42.8	38.4	34.7	31.6	30.2	29.0	24.7	161.1	150.8	133.6	120.0	108.4	98.8	94.5	90.5	77.2
15SUV028	Gar15SUV028row2grain11 - 1	2015_1	Beaufort Fm.	0.25-0.5	G9	77.1	0.025700	1261.5	1187.3	1143.7	1202.6	71.9	66.7	58.8	52.7	47.5	43.3	41.5	39.8	34.0	224.8	208.4	183.7	164.7	148.4	135.4	129.6	124.4	106.3
15SUV030	Gar15SUV030row2grain12 - 1	2015_1	Beaufort Fm.	0.25-0.5	G9	32.9	0.010967	957.7	909.4	972.4	965.0	53.0	49.5	43.9	39.4	35.6	32.4	31.0	29.7	25.4	165.5	154.8	137.1	123.1	111.3	101.4	97.0	92.9	79.2
15SUV030_rpt	Gar15SUV030row2grain12 - 2	2015_1	Beaufort Fm.	0.25-0.5	G9	32.1	0.010700	950.7	902.9	968.0	959.3	52.5	49.1	43.5	39.1	35.3	32.2	30.8	29.5	25.1	164.1	153.5	136.0	122.2	110.4	100.6	96.2	92.2	78.6
15SUV030_AVG	Gar15SUV030row2grain12	2015_1	Beaufort Fm.	0.25-0.5	G9	32.5	0.010833	954.2	906.2	970.2	962.2	52.7	49.3	43.7	39.2	35.5	32.3	30.9	29.6	25.3	164.8	154.1	136.6	122.6	110.8	101.0	96.6	92.6	78.9
15SUV051	Gar15SUV051row2grain13 - 1	2015_1	stream sediments	0.25-0.5	G9	58.5	0.019500	1147.8	1083.9	1083.2	1115.5	64.8	60.3	53.3	47.8	43.1	39.3	37.7	36.1	30.8	202.6	188.5	166.5	149.4	134.8	122.9	117.7	112.9	96.4
15SUV051_rpt	Gar15SUV051row2grain13 - 2	2015_1	stream sediments	0.25-0.5	G9	60.6	0.020200	1161.4	1096.3	1090.6	1126.0	65.7	61.1	53.9	48.4	43.7	39.8	38.1	36.6	31.2	205.3	190.9	168.6	151.2	136.4	124.4	119.1	114.2	97.5
15SUV051_AVG	Gar15SUV051row2grain13	2015_1	stream sediments	0.25-0.5	G9	59.6	0.019850	1154.6	1090.2	1086.9	1120.8	65.3	60.7	53.6	48.1	43.4	39.6	37.9	36.3	31.0	203.9	189.7	167.5	150.3	135.6	123.7	118.4	113.5	97.0
16SUV015	Gar16SUV015row1grain6 - 1	Mount 1	stream sediments	0.25-0.5	G9	73.2	0.024400	1238.7	1166.7	1131.9	1185.3	70.5	65.4	57.7	51.7	46.6	42.5	40.7	39.1	33.4	220.3	204.4	180.3	161.6	145.7	132.9	127.3	122.1	104.3
16SUV023	Gar16SUV023row1grain6 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G9	41.4	0.013800	1027.1	973.4	1014.4	1020.8	57.3	53.5	47.3	42.5	38.4	35.0	33.5	32.1	27.4	179.1	167.2	148.0	132.8	120.0	109.3	104.7	100.3	85.6
16SUV023	Gar16SUV023row1grain8 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G9	110.8	0.036933	1441.8	1349.7	1231.8	1336.8	83.2	76.7	67.4	60.3	54.2	49.5	47.4	45.5	38.9	260.0	239.6	210.6	188.4	169.4	154.6	148.1	142.1	121.5
16SUV023	Gar16SUV023row1grain9 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G9	145.8	0.048600	1609.1	1498.9	1306.2	1457.7	93.7	85.9	75.2	67.2	60.3	55.0	52.7	50.6	43.3	292.7	268.4	235.1	209.9	188.3	171.9	164.7	158.1	135.3
16SUV023	Gar16SUV023row1grain10 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G9	184.4	0.061467	1780.6	1650.2	1376.0	1578.3	104.4	95.2	83.1	74.1	66.3	60.5	58.0	55.7	47.7	326.4	297.6	259.8	231.5	207.2	189.1	181.2	174.1	149.0
16SUV023	Gar16SUV023row1grain11 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G9	107.5	0.035833	1425.1	1334.8	1224.1	1324.6	82.2	75.8	66.6	59.6	53.6	48.9	46.8	45.0	38.4	256.7	236.8	208.1	186.2	167.5	152.8	146.4	140.5	120.1
16SUV023	Gar16SUV023row2grain1 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G9	95.3	0.031767	1361.9	1278.1	1193.9	1277.9	78.2	72.3	63.6	56.9	51.3	46.8	44.8	43.0	36.7	244.4	225.9	198.8	177.9	160.2	146.1	140.0	134.3	114.8
16SUV023	Gar16SUV023row2grain2 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G9	181.2	0.060400	1766.8	1638.0	1370.5	1568.7	103.6	94.5	82.5	73.5	65.8	60.1	57.6	55.3	47.3	323.6	295.3	257.8	229.7	205.7	187.8	179.9	172.8	147.9
16SUV023	Gar16SUV023row2grain3 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G9	89.7	0.029900	1331.9	1251.0	1179.2	1255.6	76.3	70.6	62.2	55.7	50.1	45.7	43.8	42.0	35.9	238.5	220.6	194.3	174.0	156.7	142.9	136.9	131.4	112.3
16SUV023	Gar16SUV023row2grain4 - 1	Mount 1	Beaufort Fm.	0.25-0.5	G9	58.4	0.019467	1147.1	1083.3	1082.8	1115.0	64.8	60.3	53.3	47.8	43.1	39.3	37.6	36.1	30.8	202.5	188.4	166.4	149.3	134.7	122.8	117.6	112.8	96.3
16SUV023	Gar16SUV023row2grain5 - 1	Mount 1	Beaufort Fm.	0.25-0.5	G9	76.2	0.025400	1256.3	1182.6	1141.0	1198.6	71.6	66.4	58.5	52.5	47.3	43.1	41.3	39.6	33.9	223.8	207.5	182.9	164.0	147.8	134.8	129.1	123.9	105.8
16SUV023	Gar16SUV023row2grain6 - 1	Mount 1	Beaufort Fm.	0.25-0.5	G9	62.5	0.020833	1173.5	1107.4	1097.2	1135.3	66.4	61.8	54.5	48.9	44.1	40.2	38.5	37.0	31.6	207.6	193.0	170.4	152.8	137.9	125.7	120.4	115.5	98.6
16SUV023	Gar16SUV023row2grain7 - 1	Mount 3	Beaufort Fm.	0.18-0.25	G9	160.8	0.053600	1677.0	1559.0	1334.6	1505.8	97.9	89.6	78.4	69.9	62.7	57.2	54.8	52.6	45.0	306.0	280.0	244.9	218.5	195.8	178.8	171.3	164.5	140.8

16SUV023	**Gar16SUV023row2grain8 - 1**	**Mount 3**	**Beaufort Fm.**	**0.18-0.25**	**G9**	**104.4**	**0.034800**	**1409.3**	**1320.7**	**1216.6**	**1313.0**	**81.2**	**74.9**	**65.9**	**58.9**	**53.0**	**48.4**	**46.3**	**44.5**	**38.0**	**253.6**	**234.0**	**205.8**	**184.1**	**165.7**	**151.2**	**144.8**	**139.0**	**118.8**
16SUV023	**Gar16SUV023row2grain9 - 1**	**Mount 1**	**Beaufort Fm.**	**0.25-0.5**	**G9**	**79.7**	**0.026567**	**1276.4**	**1200.8**	**1151.3**	**1213.9**	**72.9**	**67.5**	**59.5**	**53.3**	**48.1**	**43.8**	**42.0**	**40.3**	**34.4**	**227.7**	**211.0**	**186.0**	**166.6**	**150.2**	**137.0**	**131.2**	**125.9**	**107.5**
16SUV023	**Gar16SUV023row2grain10 - 1**	**Mount 3**	**Beaufort Fm.**	**0.18-0.25**	**G9**	**111.6**	**0.037200**	**1445.8**	**1353.3**	**1233.7**	**1339.7**	**83.4**	**76.9**	**67.6**	**60.4**	**54.4**	**49.6**	**47.5**	**45.6**	**39.0**	**260.8**	**240.3**	**211.2**	**188.9**	**169.9**	**155.0**	**148.5**	**142.5**	**121.9**
16SUV023	**Gar16SUV023row2grain11 - 1**	**Mount 3**	**Beaufort Fm.**	**0.18-0.25**	**G9**	**120.8**	**0.040267**	**1491.1**	**1393.9**	**1254.5**	**1372.8**	**86.3**	**79.4**	**69.7**	**62.3**	**56.0**	**51.1**	**49.0**	**47.0**	**40.2**	**269.6**	**248.2**	**217.8**	**194.7**	**175.0**	**159.7**	**153.0**	**146.9**	**125.6**
16SUV023	**Gar16SUV023row2grain12 - 1**	**Mount 3**	**Beaufort Fm.**	**0.18-0.25**	**G9**	**91.8**	**0.030600**	**1343.3**	**1261.2**	**1184.8**	**1264.0**	**77.0**	**71.2**	**62.7**	**56.2**	**50.6**	**46.1**	**44.2**	**42.4**	**36.2**	**240.7**	**222.6**	**196.0**	**175.5**	**158.0**	**144.2**	**138.1**	**132.5**	**113.3**
16SUV023	**Gar16SUV023row2grain13 - 1**	**Mount 1**	**Beaufort Fm.**	**0.25-0.5**	**G9**	**61.7**	**0.020567**	**1168.4**	**1102.7**	**1094.5**	**1131.4**	**66.1**	**61.5**	**54.3**	**48.7**	**43.9**	**40.1**	**38.4**	**36.8**	**31.4**	**206.6**	**192.1**	**169.6**	**152.2**	**137.3**	**125.2**	**119.9**	**115.0**	**98.2**
16SUV023	**Gar16SUV023row2grain14 - 1**	**Mount 3**	**Beaufort Fm.**	**0.18-0.25**	**G9**	**143.6**	**0.047867**	**1599.0**	**1490.0**	**1301.9**	**1450.5**	**93.0**	**85.3**	**74.8**	**66.7**	**59.9**	**54.7**	**52.4**	**50.3**	**43.0**	**290.7**	**266.7**	**233.6**	**208.6**	**187.2**	**170.8**	**163.7**	**157.2**	**134.5**
16SUV023	**Gar16SUV023row3grain1 - 1**	**Mount 1**	**Beaufort Fm.**	**0.25-0.5**	**G9**	**46.6**	**0.015533**	**1066.0**	**1009.2**	**1037.1**	**1051.6**	**59.7**	**55.7**	**49.3**	**44.2**	**39.9**	**36.4**	**34.8**	**33.4**	**28.5**	**186.7**	**174.1**	**154.0**	**138.2**	**124.8**	**113.8**	**108.9**	**104.4**	**89.1**
16SUV023	**Gar16SUV023row3grain2 - 1**	**Mount 1**	**Beaufort Fm.**	**0.25-0.5**	**G9**	**80.8**	**0.026933**	**1282.6**	**1206.5**	**1154.5**	**1218.6**	**73.3**	**67.9**	**59.8**	**53.6**	**48.3**	**44.0**	**42.2**	**40.5**	**34.6**	**228.9**	**212.1**	**186.9**	**167.5**	**150.9**	**137.7**	**131.8**	**126.5**	**108.1**
16SUV023	**Gar16SUV023row3grain3 - 1**	**Mount 1**	**Beaufort Fm.**	**0.25-0.5**	**G9**	**65.7**	**0.021900**	**1193.5**	**1125.6**	**1108.0**	**1150.7**	**67.7**	**62.9**	**55.5**	**49.8**	**44.9**	**40.9**	**39.2**	**37.6**	**32.1**	**211.5**	**196.5**	**173.5**	**155.5**	**140.3**	**127.9**	**122.5**	**117.5**	**100.4**
16SUV023	**Gar16SUV023row3grain4 - 1**	**Mount 1**	**Beaufort Fm.**	**0.25-0.5**	**G9**	**47.4**	**0.015800**	**1071.8**	**1014.5**	**1040.5**	**1056.2**	**60.1**	**56.0**	**49.6**	**44.5**	**40.2**	**36.6**	**35.0**	**33.6**	**28.7**	**187.8**	**175.1**	**154.9**	**139.0**	**125.5**	**114.4**	**109.5**	**105.0**	**89.6**
16SUV023	**Gar16SUV023row3grain4 - 1**	**Mount 3**	**Beaufort Fm.**	**0.18-0.25**	**G9**	**0.82**	**0.000273**	**389.2**	**374.9**	**544.0**	**466.6**	**17.1**	**15.8**	**13.8**	**12.1**	**10.7**	**9.6**	**9.2**	**8.6**	**7.2**	**53.5**	**49.4**	**43.1**	**37.9**	**33.4**	**30.0**	**28.6**	**27.0**	**22.5**
16SUV023	**Gar16SUV023row3grain5 - 1**	**Mount 1**	**Beaufort Fm.**	**0.25-0.5**	**G9**	**59.6**	**0.019867**	**1154.9**	**1090.5**	**1087.1**	**1121.0**	**65.3**	**60.7**	**53.6**	**48.1**	**43.4**	**39.6**	**37.9**	**36.3**	**31.0**	**204.0**	**189.7**	**167.6**	**150.3**	**135.7**	**123.7**	**118.4**	**113.6**	**97.0**
16SUV025	**Gar16SUV025row3grain7 - 1**	**Mount 1**	**stream sediments**	**0.25-0.5**	**G9**	**42.5**	**0.014167**	**1035.6**	**981.2**	**1019.3**	**1027.5**	**57.8**	**54.0**	**47.8**	**42.9**	**38.7**	**35.3**	**33.8**	**32.4**	**27.6**	**180.7**	**168.7**	**149.3**	**134.0**	**121.0**	**110.3**	**105.6**	**101.2**	**86.3**
16SUV028	**Gar16SUV028row3grain8 - 1**	**Mount 1**	**stream sediments**	**0.5-1.0**	**G9**	**76.7**	**0.025567**	**1259.2**	**1185.2**	**1142.5**	**1200.8**	**71.8**	**66.6**	**58.7**	**52.6**	**47.4**	**43.2**	**41.4**	**39.7**	**33.9**	**224.3**	**208.0**	**183.4**	**164.3**	**148.1**	**135.1**	**129.4**	**124.1**	**106.1**
16SUV030	**Gar16SUV030row3grain10 - 1**	**Mount 1**	**stream sediments**	**0.5-1.0**	**G9**	**67.2**	**0.022400**	**1202.7**	**1134.0**	**1112.9**	**1157.8**	**68.3**	**63.4**	**56.0**	**50.2**	**45.3**	**41.3**	**39.5**	**37.9**	**32.4**	**213.3**	**198.1**	**174.9**	**156.8**	**141.4**	**129.0**	**123.5**	**118.4**	**101.2**

Notes

1 Grütter et al. (2004) garnet classification

2 Assume constant Ni-in-Olivine of 3000 ppm (typically 2900-3200)

3 Griffin et al. (1989): =(1000/((-0.435*(LOG10(Ni ppm/30)))+0.83))-273

4 Ryan et al. (1996): =(1000/(1.506-(0.189*LN(Ni ppm))))-273

5 Canil (1999): =(8772/(2.53-(LN(D))))-273.15 ;where D=Ni(grt)/Ni(ol) and Ni(ol) is assumed to be 3000 ppm

6 T-Ni (average) = Griffin et al. (1989) + Canil (1999) / 2

7 P(kbar)[35mW] = (0.00001082*((TNi(avg))^2))+(0.05641974*(TNi(avg)))-11.56674451 ;where Tni(avg) = (T-Ni(Griffin et al. (1989)) + T-Ni(Canil (1999)))/2

8 P(kbar)[36mW] = (0.000006185*((TNi(avg))^2))+(0.058815136*(TNi(avg)))-12.98946931 ;where Tni(avg) = (T-Ni(Griffin et al. (1989)) + T-Ni(Canil (1999)))/2

9 P(kbar)[38mW] = (0.000003312*((TNi(avg))^2))+(0.055599376*(TNi(avg)))-12.859965371 ;where Tni(avg) = (T-Ni(Griffin et al. (1989)) + T-Ni(Canil (1999)))/2

10 P(kbar)[40mW] = (0.000001639*((TNi(avg))^2))+(0.052362061*(TNi(avg)))-12.652294442 ;where Tni(avg) = (T-Ni(Griffin et al. (1989)) + T-Ni(Canil (1999)))/2

11 P(kbar)[42mW] = (0.050026706*(TNi(avg))-12.666727951 ;where Tni(avg) = (T-Ni(Griffin et al. (1989)) + T-Ni(Canil (1999)))/2

12 P(kbar)[44mW] = (0.04579219*(TNi(avg))-11.75176172 ;where Tni(avg) = (T-Ni(Griffin et al. (1989)) + T-Ni(Canil (1999)))/2

13 P(kbar)[45mW] = (0.04393264*(TNi(avg))-11.349806601 ;where Tni(avg) = (T-Ni(Griffin et al. (1989)) + T-Ni(Canil (1999)))/2

14 P(kbar)[46mW] = (0.04233845*(TNi(avg))-11.11616535 ;where Tni(avg) = (T-Ni(Griffin et al. (1989)) + T-Ni(Canil (1999)))/2

15 P(kbar)[50mW] = (0.03640732*(TNi(avg))-9.77956544 ;where Tni(avg) = (T-Ni(Griffin et al. (1989)) + T-Ni(Canil (1999)))/2

16 Depth(km)[35mW] = P(kbar)[35mW]*3.125

17 Depth(km)[36mW] = P(kbar)[36mW]*3.125

18 Depth(km)[38mW] = P(kbar)[38mW]*3.125

19 Depth(km)[40mW] = P(kbar)[40mW]*3.125

20 Depth(km)[42mW] = P(kbar)[42mW]*3.125

21 Depth(km)[44mW] = P(kbar)[44mW]*3.125

22 Depth(km)[45mW] = P(kbar)[45mW]*3.125

23 Depth(km)[46mW] = P(kbar)[46mW]*3.125

24 Depth(km)[50mW] = P(kbar)[50mW]*3.125