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GOLD CREEK PROPERTY

**WORK REPORT OF THE
JULY & SEPTEMBER-OCTOBER 2020 EXPLORATION
PROGRAMS ON
THE GOLD CREEK PROJECT,
SHEBANDOWAN AREA, ONTARIO
For
PORTOFINO RESOURCES INC.**

NTS Map sheets 52B/09

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1.0 -SUMMARY-

In July and in late September to early October of 2020, two prospecting programs were carried out on the Portofino Resources Inc. (“Portofino”) Gold Creek claim group, see Figure 3.

The Gold Creek Property is located approximately 60 kilometres west – northwest of the city of Thunder Bay, 110 kilometres east-southeast of the town of Atikokan and approximately 6 kilometres southwest of the town of Shebandowan, see Figure 2.

Two hundred and eleven grab samples were collected on the Gold Creek cell-claims during the 2020 field programs. Historical zones were located and sampled, including the historical AH-AF-U Zones, the S1 Zone and the I Zone. Sampling confirmed anomalous to high-grade gold at each of these zones, up to **45.6gpt Au** at the I Zone, from north-south ladder veins in an east-west syenite dyke.

Additionally, a new zone, to the best of our knowledge untested by drilling (the New Road Zone) was outlined in the northeastern portion of the property, in the vicinity of the Crayfish Creek Fault, and returned up to **4.07gpt Au** from altered monzonite-syenite with pyrite and quartz stringers.

The results of the prospecting and sampling program are encouraging and warrant follow-up drilling and trenching.

2.0 -INTRODUCTION-

Portofino acquired the Gold Creek Property in May 2020. The main target mineral is gold based on previous discoveries made on the property. Details of the 2020 work program are presented below.

2.1 PROPERTY DESCRIPTION, PERMIT, LOCATION AND ACCESS

Portofino’s Gold Creek Project is located west of Lake Superior in northwestern Ontario. The property is situated approximately 60 kilometres west-northwest of the city of Thunder Bay and approximately 110km kilometres east-southeast of the town of Atikokan. The northeast boundary of the property is located approximately 6km southwest of the town of Shebandowan at the turnoff from Highway ON-11 onto the Shebandowan Mine Road (see Figure 2).

Access to the east-central part of the property is best achieved by truck as there are numerous logging roads criss-crossing this area. Access to the far western claims is best achieved by helicopter or float plane from the city of Thunder Bay, most likely landing on Dakota or Peewatai Lake if travelling by float plane. Access by logging road can be achieved by travelling west along Highway ON-11 / ON-17 from Thunder Bay, then turning off at Highway ON-11 west towards Atikokan and Fort Frances for 12.4km, then turning left onto the Shebandowan Mine Road. Two main north-south logging roads branch off to the left (south) 2.7km and 9.3km along the Mine Road, and connect to a network of old to more recent logging roads which lead to various parts of the property.

The Gold Creek Property is comprised of 15 cell-claims, including 6 Single-Cell Mining Claims and 9 Multi-cell Mining Claims, See Figure 3.

2.2 CLIMATE, RESOURCES, LOCAL INFRASTRUCTURE AND PHYSIOGRAPHY

The Gold Creek Project is located within the Canadian Shield, which is a major physiographic division of Canada. The property is situated in an area of swamps, small lakes, and moderate to steep hills, with scattered to locally moderate outcrop. Elevation across the project area ranges from 440 to 500 m.

The Property is covered with a thick growth of birch, balsam fir, black spruce, red cedar, jack pine, and poplar.

The Farwell Property is situated approximately 60 km west-northwest of the city of Thunder Bay, Ontario (population ~108,000), and approximately 6 km southwest of the town of Shebandowan. Access for the 2020 exploration program was by truck based out of a trailer on Shebandowan Lake, with one helicopter day trip. The helicopter was based in Thunder Bay and landed at the helipad off of Rossmere Bay Road off of Secondary Highway 586, which is the same road where the trailer was located.

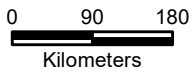
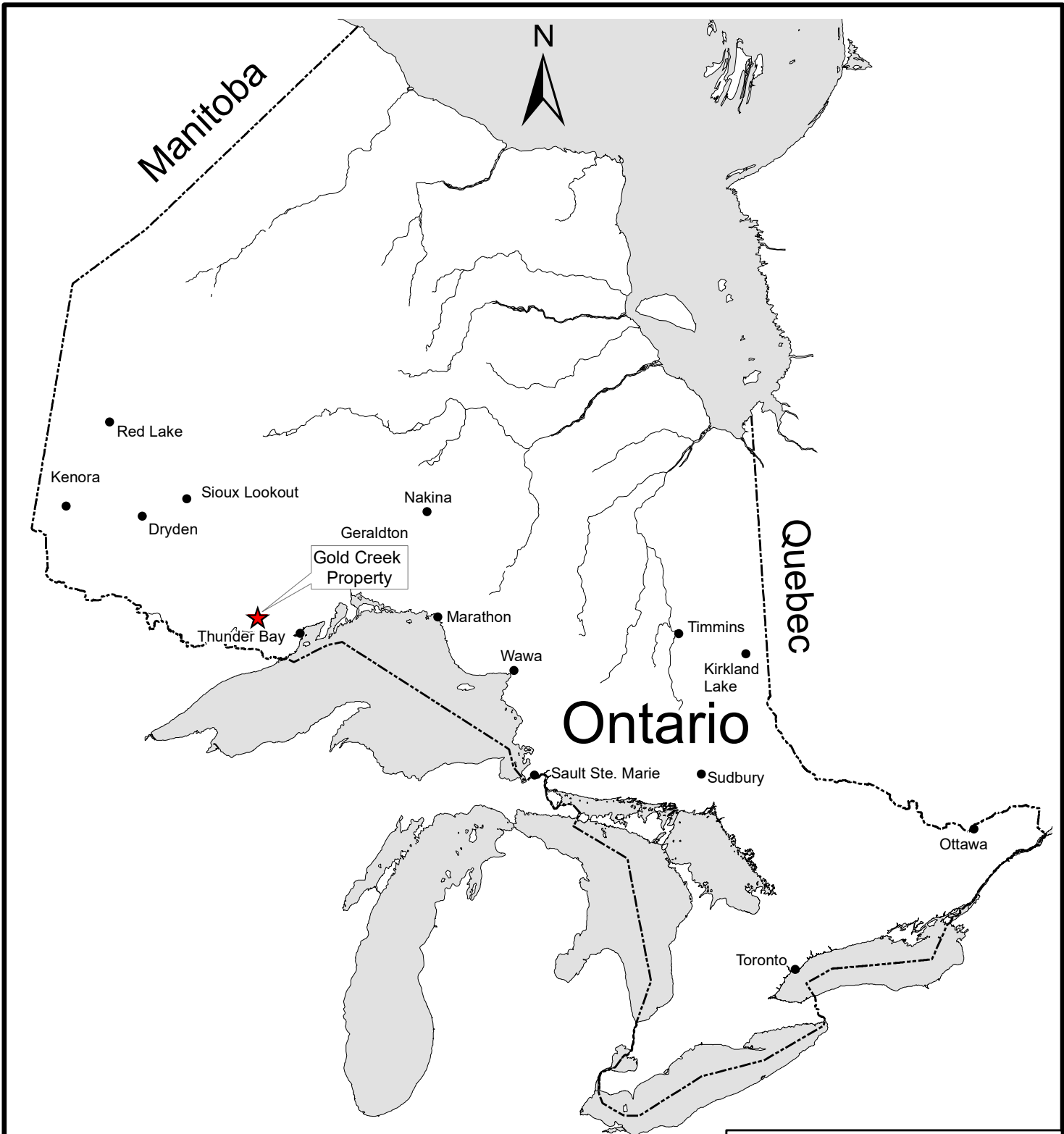
Thunder Bay is serviced by many airlines, with daily flights to major cities in Canada such as Toronto, allowing easy connections to other Canadian cities and international destinations.


Climate in the area is typical of Northern Ontario, with cold winters and warm summers. Average January minimum temperatures range from -18°C to -32°C, and average July temperatures are between 24°C and 32°C. Exploration work can be carried out (subject to snow and freezing) for most of the year. Certain mapping, mechanized stripping, and soil sampling activities are best performed in snow-free conditions, whereas drilling can occur any time of the year.

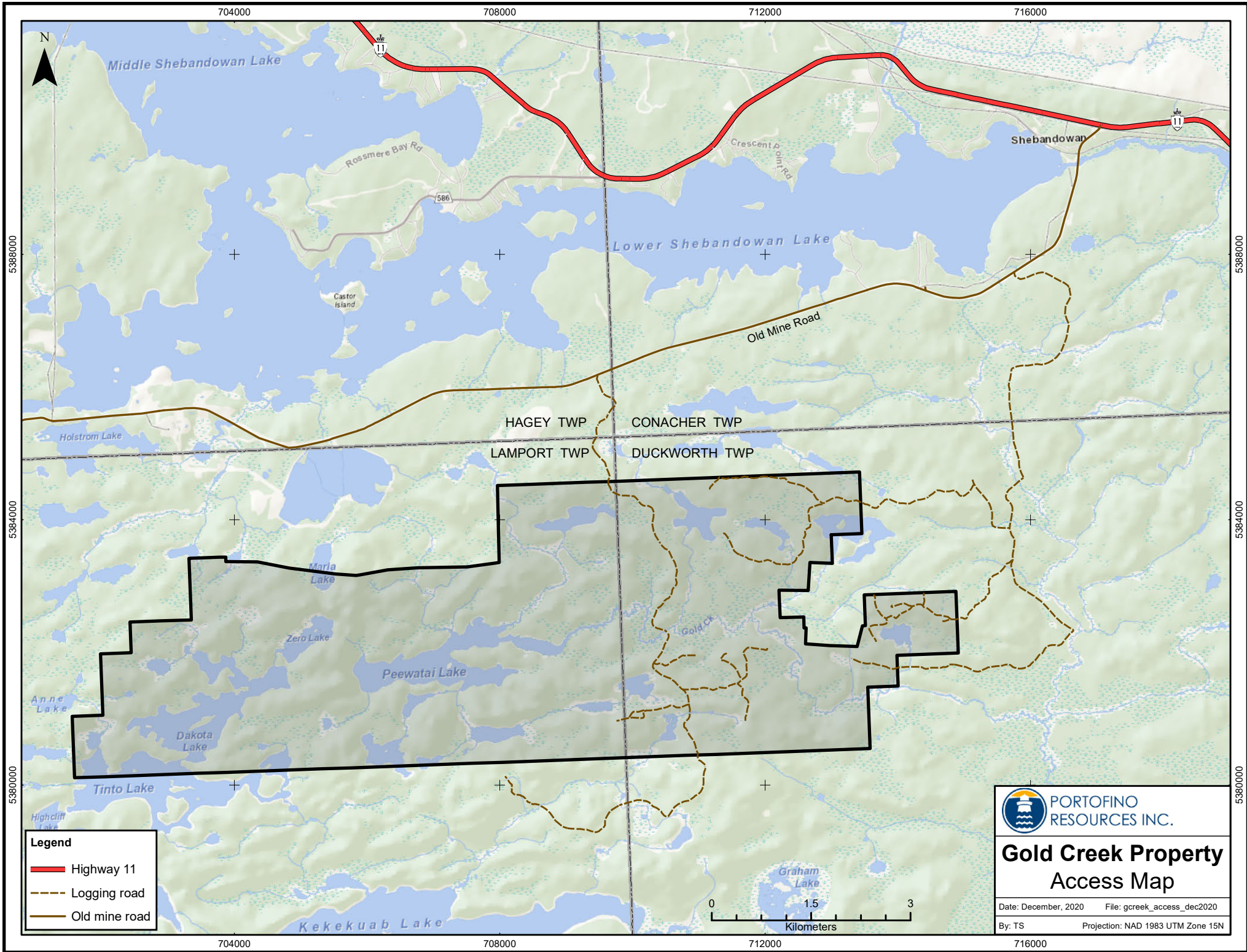
2.3 PERSONNEL

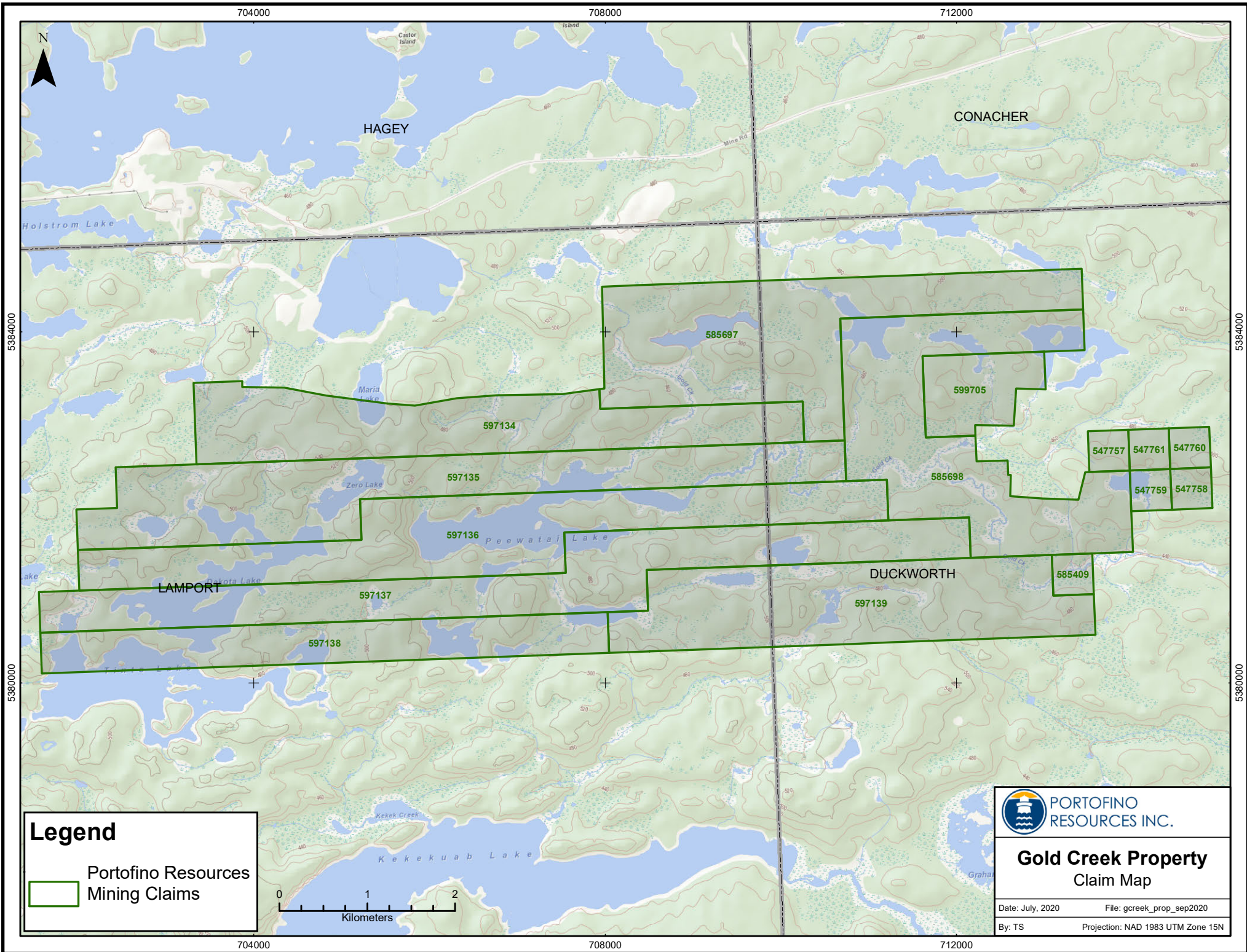
The 2020 field program was carried out by Bruce MacLachlan and Coleman Robertson of Emerald Geological Services (EGS) based at various locations on the Property.

Tom Savage of Superior Geospatial provided drafting and GIS support and helicopter support was provided by Wisk Air based out of Thunder Bay.



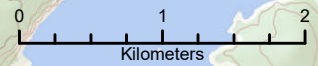
 PORTOFINO RESOURCES INC.	
Gold Creek Property General Location Map	
Date: December, 2020	
Name: TS	File: ontloc_GC_2020





Legend

- Portofino Resources Mining Claims



Gold Creek Property Claim Map

Date: July, 2020 File: gcreek_prop_sep2020
 By: TS Projection: NAD 1983 UTM Zone 15N

3.0 -GEOLOGY-

The following is per Giaro, 2007:

3.1 REGIONAL GEOLOGY

The Superior Province

"The Archean Superior Province represents the mining heartland of Canada, hosting major camps in the Abitibi district of Ontario-Quebec and Red Lake region of western Ontario. The Superior Province forms the core of the North American continent. Current views regard the Superior Province as a collage made up of small continental fragments of Mesoarchean age and Neoproterozoic oceanic plates, with a complex history of aggregation between 2.72 and 2.68 Ga and subsequent post-orogenic effects. Sedimentary rocks as old as 2.48 Ga unconformably overlie Superior Province granites, indicating that most erosion had occurred prior to ca. 2.5 Ga": (Percival, 2007).

Wawa Sub-province

Most workers accept a correlation between the Wawa and Abitibi sub provinces across the transverse Kapuskasing uplift. Within the Wawa subprovince, volcanism appears to have begun with the 2.89-2.88 Ga Hawk assemblage. The 2.775 Ga Hemlo-Black River, 2.745 Ga Wawa and 2.72 Ga Greenwater and Manitouwadge assemblages indicate an oceanic setting; the latter contains significant massive sulphide mineralization (Corfu and Stott, 1986; Sage et al., 1996a,b; Williams et al., 1991). Polat et al. (1999) reported a variety of oceanic magma types from the Schreiber belt, and interpreted the belt as a tectonic melange (Polat et al., 1998; Polat and Kerrich, 1999; 2001).

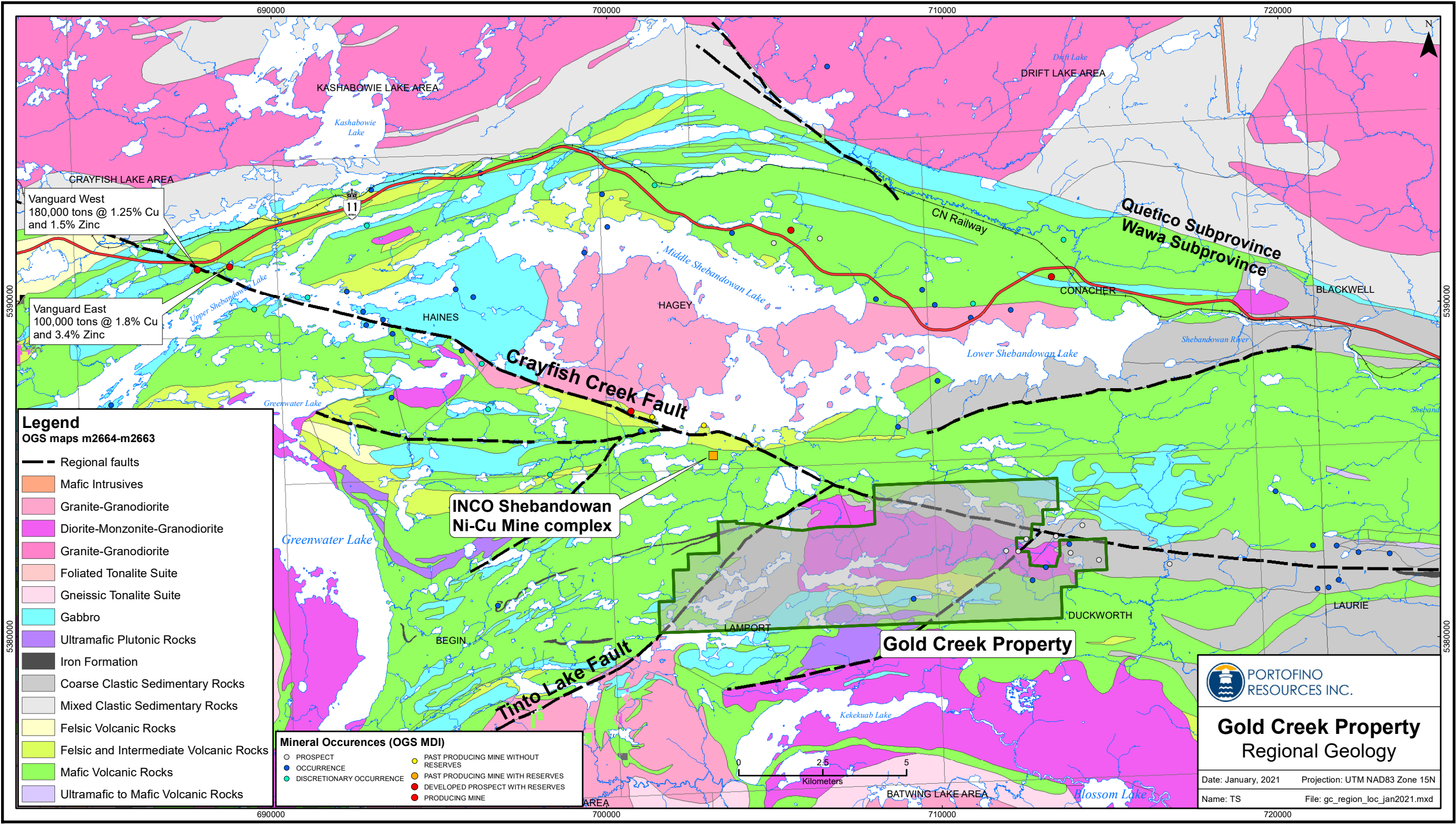
Relatively late-stage volcanism at ca. 2.695 Ga took place during D1 thrusting. Subsequent calc-alkalic to alkalic magmatism (ca. 2.689 Ga; Corfu and Stott, 1998b) and associated coarse clastic sedimentation (Timiskaming type; <2.689 Ga) was followed by emplacement of sanukitoid plutons (2.65-2.68 Ga) and dextral transpressive D2 deformation.

Mineralization occurs in two main regions: the Michipicoten-Mishubishu belt in the Wawa area, and the Shebandowan-Schreiber belt to the west.

The Shebandowan-Schreiber mineral belt hosts important gold, iron, volcanic hosted massive sulphide (e.g. Manitouwadge; Zaleski et al., 1999; Peterson and Zaleski, 1999) and intrusion hosted Ni deposits. The most significant is the Hemlo gold camp, a large disseminated deposit (Muir, 2003) in a strongly deformed, ca. 2.693-2.685 Ga volcano-sedimentary sequence of probable Timiskaming affinity (Davis and Lin, 2003). Gold was deposited during D2 sinistral wrench deformation between 2.680 and 2.677 Ga (op. cit.), likely from fluids derived from granitoid rocks (Percival, 2007).

3.2 LOCAL AND PROPERTY GEOLOGY

The Matawin Gold Belt is made up of two thick sequences of Timiskaming metasediments lying unconformably within Keewatin volcanic sequences. The sedimentary rocks comprise argillite, greywacke, quartzite and conglomerate forming shallowly east-plunging synforms marked by unconformable contacts. Rocks are predominantly non-to weakly foliated, displaying well-preserved primary structures. The Keewatin metavolcanics are made up primarily of well preserved mafic to felsic flows, with minor pyroclastic units. Regionally the metamorphic grade is greenschist facies, with amphibolite facies metamorphism occurring at the margins of larger intrusions. The Gold Creek Property occurs in the Shebandowan greenstone belt with mafic volcanic-tuffs and granodioritic intrusions in the center portion followed by Temiskaming sediments to the south.



Vanguard West
180,000 tons @ 1.25% Cu
and 1.5% Zinc

Vanguard East
100,000 tons @ 1.8% Cu
and 3.4% Zinc

INCO Shebandowan
Ni-Cu Mine complex


Gold Creek Property

Legend
OGS maps m2664-m2663

- Regional faults
- Orange square: Mafic Intrusives
- Pink square: Granite-Granodiorite
- Purple square: Diorite-Monzonite-Granodiorite
- Light pink square: Granite-Granodiorite
- Light orange square: Foliated Tonalite Suite
- Light pink square: Gneissic Tonalite Suite
- Light blue square: Gabbro
- Purple square: Ultramafic Plutonic Rocks
- Black square: Iron Formation
- Grey square: Coarse Clastic Sedimentary Rocks
- Light grey square: Mixed Clastic Sedimentary Rocks
- Yellow square: Felsic Volcanic Rocks
- Light green square: Felsic and Intermediate Volcanic Rocks
- Dark green square: Mafic Volcanic Rocks
- Light purple square: Ultramafic to Mafic Volcanic Rocks

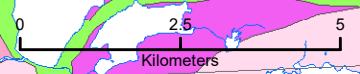
Mineral Occurrences (OGS MDI)

- PROSPECT
- OCCURRENCE
- DISCRETIONARY OCCURRENCE
- PAST PRODUCING MINE WITHOUT RESERVES
- PAST PRODUCING MINE WITH RESERVES
- DEVELOPED PROSPECT WITH RESERVES
- PRODUCING MINE

 PORTOFINO RESOURCES INC.

**Gold Creek Property
Regional Geology**

Date: January, 2021 Projection: UTM NAD83 Zone 15N
Name: TS File: gc_region_loc_jan2021.mxd



4.0 -EXPLORATION HISTORY-

4.1 GOLD CREEK CELLS-CLAIMS

Prior to Portofino Resources Inc.'s involvement, the Gold Creek Property has been moderately explored by various companies, operating on different part of the current property on which a number of historical zones have been consolidated, including the AH-AF-U Zones, S1 Zone, S3 Zone, and I Zone. To date, the I Zone has seen the most diamond drilling. Details of historical work are provided below.

4.2 DETAILED DESCRIPTION OF HISTORICAL WORK

Exploration history by Cullen, D., 2009 (file 20000004304) was used as a framework for the following information, with many additions and modifications.

1956 – 1957: Monpre Uranium Exploration Ltd., later called Monpre Mining Company Ltd. and then Monpre Iron Mines Ltd., explored a block of claims along the Matawin iron formation in Duckworth and Laurie townships. The westernmost part of the Monpre property covered part of the eastern portion of the current Gold Creek Property. Several kilometers east of the Gold Creek Property, ground geophysics, geological mapping and diamond drilling delineated 100 million tons of **30% Fe** and an open pit mining pre-feasibility plan was prepared (Cumco Corp Ltd., 1971, file 52A12SE8103; Premier Trust Co., 1974, file 52B09SE0058; file 52B09SE0055 contains drill logs).

1965: Canadian Nickel Co. Ltd. drilled one 306-foot diamond drill hole on claim 116494 in Lamport Township, close to the southeast shore of Tinto Lake. No assays are reported but the hole intersected gabbro, graphitic shale and intermediate to felsic volcanics (Canadian Nickel Co. Ltd., 1965, file 52B09SE0067).

1967: On the Gold Creek Property's AF-U zone area: The prospect was apparently discovered by Mr. Metro Penziwol in 1967. Mr. Penziwol carried out some trenching, sampling and minor pack-sack drilling, but no technical reports are available (DeQuadros, A.M., 1983, file 52B09SE0048).

1970: Krist Hackl had one 135-foot hole drilled on claim TB 222973 in Duckworth Township, which looks to be immediately west of a lake in the far northeast part of the current Gold Creek Property. No assays are reported but the hole intersected peridotite (Hackl, K., 1970, file 52B09SE0053).

1971: Sherritt Gordon Mines Ltd. conducted a geological mapping and geophysical survey over the Hedley Option and additional staked claims, totalling 98 claims, covering part of Tinto and Dakota Lakes and a swath of ground to the northwest, on part of the western claims of the current Gold Creek Property in the vicinity of Dakota Lake (Sherritt Gordon Mines Ltd., 1971, file 52B09SE9075).

1978: Noranda Exploration Co. conducted a geophysical survey on a block of claims in Lamport Township south of Peewatai Lake, covering part of the southern portion of the current Gold Creek Property (Charlton, J., 1977, file 52B09SE0064).

A follow-up geological survey was conducted on the claims, which located a felsic lapilli tuff unit with minor pyrite adjacent to a conductor (Metcalf, J., 1978¹, file 52B09SE0363).

A geological survey was also conducted on a claim block covering part of Tinto Lake and to the south. A narrow felsic unit associated with a CEM conductor was located (Metcalf, J., 1978², file 52B09SW0057).

1978: On the Gold Creek Property's AF-U zone area: UMEX Corporation drilled 1000 feet (328 m) in 2 holes in the Penziwol showing equivalent to the U-zone intrusive area of Inco. No assays reported (Umex Corp Ltd., 1978, file 52B09SE0050).

1982: Penziwol re-claimed what is now the east-central area of the current Gold Creek Property; at that time the U zone was known as the Penziwol Gold-Silver Showing.

1983: Geologist A.M. DeQuadros visited the Penziwol gold-silver property for John Woynarski. 14 samples were assayed from the Penziwol showing with anomalous values in copper, lead and gold. Sample 9008, of blast rubble, returned **1.128 oz/ton (38.7gpt) Au** and **11.70 oz/ton (401.1gpt) Ag**. Chip samples of **0.328 oz/ton (11.2gpt) Au** with **3.94 oz/ton (135gpt) Ag** over 5 feet, and **0.395 oz/ton (13.54gpt) Au** with **1.2 oz/ton (41.1gpt) Ag** over 1.8 feet were obtained from samples 9005 and 9009 respectively (DeQuadros, A.M., 1983, file 52B09SE0048).

1983: “Jalna Resources Ltd completed a significant exploration over a large area of Duckworth and Laurie Townships including ground and airborne surveys, geological mapping, geochemical surveys, trenching, sampling and overburden drilling. Prospecting verified earlier anomalous gold showings in the area of the I Zone” (Tims, A., MDI000000001999).

1984-85: “Anaconda Canada Exploration Ltd. (“Anaconda”) followed up the work completed by Jalna with 3,665 feet (1117 m) of diamond drilling, in 13 holes and confirmed the anomalous gold values over the I-Zone” (Tims, A., MDI000000001999).

1985: Metro Penziwol had 8.7km of linecutting, then ground magnetometer and VLF-EM surveys conducted on his property (Phantom Exploration Services Ltd., 1986, file 52B09SE0033).

1987: Canadian Nickel Co. Ltd. conducted a 6-hole diamond drilling program (holes 74877-0 to 74882-0) in the I Zone area, in the eastern portion of the current Gold Creek Property. Assays are not reported for most of the holes (Canadian Nickel Co. Ltd., 1987, file 52B09SE0037).

1988-1989: Canadian Nickel Co. Ltd. carried out diamond drilling on the Gold Creek property, in the I Zone area, as well as several kilometers to the southeast of the current property (Canadian Nickel Co. Ltd., 1989¹, file 52B09SE0016).

-Hole 78424-0 returned **700ppb Au** / 1m in granodiorite with quartz-tourmaline stringers, targeting Dyke #26 in the I Zone area.

-Hole 78419-0 also targeted Dyke #26 but the best assay was **105ppb Au** / 1.5m in iron formation.

-Hole 78420-0 targeted Dyke #8 north of Lily Lake and returned insignificant gold.

Detailed geology maps of Dyke #10a and Dyke #26 are provided in file 52B09SE0013 by Inco Gold Co.

1988: Noranda Exploration Company reported geological surveying, prospecting and soil sampling to locate gold occurrences on the Peewatai Lake project. The Noranda project was divided in three blocks; 1) the Lamport block (within the perimeter of the current Gold Creek Property, from the central to north areas); 2) the Peewatai block, in the south part of the property, and 3) the Duckworth block, completely east of the property. B horizon soil sample 9-45 on the Peewatai block returned the highest anomaly of **51ppb Au** (Thomas, G.M., 1988^{1,2,3}, files 52B09SE0017, 52B09SE9074, 52B09SE0022 – three separate filings were evidently made for the three blocks for administrative purposes, but contain mostly the same information).

In the same year, Noranda completed a geological mapping, chip sampling, humus sampling and a radiometric survey on the Penziwol claims (6 claims), corresponding to the AH to U Zone area of Inco. They observed variance in radiometric response from 100 to 500 counts per second largely reflecting outcrop exposure. The humus survey was unsuccessful, yielding values of only up to **10ppb Au** (Mackie, B., 1988, file 52B09SE0025; expanded report 52B09SE0026).

1988: Inco Gold Co. acquired the West Gold Creek Property, most of which appears to lie within the east-central part of the current Gold Creek Property (but not the AH to U Zones which were on Noranda's ground), and completed 33.5 line-km of magnetic survey. (Mooney, S.J., 1990², file 52B09SE0015).

1988: Inco Gold Co. reported geological and geophysical surveys, mostly east of the current Gold Creek Property, but covering the eastern claims around I Zone. Inco's zone A to O (except I Zone) are defined all east of the Property's perimeter (Debicki, E.J. & Berrer, E.K. 1988, file 52B09SE0032).

1988: M. Ogden visited the claims of Walter M. Cummings and Associates, the most westerly of which were located in the northern portion of the current Gold Creek Property, at that time adjoining Noranda's and Inco's claims to the northeast. He sampled a gold-bearing syenite dyke with ladder veins in the southeast corner of their property that had been exposed by Inco, off the current Gold Creek Property north of the I Zone area. He also examined and sampled showings to the south of the property, including the Penziwol showing, obtaining a **1oz/ton (~30gpt Au)** assay from that. Following this initial survey, a few test lines of Mag and VLF were run on the property. In an addendum to his first report, Ogden noted that Inco had expanded their showings to the south and east of W. Cummings property (Ogden, M., 1988^{1,2,3}, files 52B09SE0024; 52B09SE0023 (Mag-VLF survey); 52B09SE0021 (addendum)).

1989: Inco drilled 2 holes (78434-0, 78435-0) on the west block of the Gold Creek property in the U Zone area. Assays are not reported (Inco Ltd., 1989, file 52B09SE0012; 52B09SE007 – logs included as part of a much larger drilling report).

1989: Inco Exploration and Technical Services 1989 conducted a work program of line cutting, geological mapping, prospecting, stripping, trenching, detailed mapping and sampling, channel sampling and diamond drilling. The S1 and S3 zones were the primary areas of interest.

Mineralization at the S1 Zone is associated with quartz veins hosted in hematized, albitized and silicified granodiorite with iron carbonate, pyrite and galena. Grab samples assayed up to **13.2gpt Au**. Mineralization at the S3 Zone is associated with quartz veins hosted by hematized and silicified granodiorite containing 10 to 15% pyrite, 1% galena and visible gold. Grab samples assayed up to **64.2gpt Au** and channel samples assayed up to **8.11gpt Au** / 0.96m. Lithologies hosting the granodiorite dykes consist of Keewatin intermediate volcanics and sediments overlain unconformably by late Archean Timiskaming alkali volcanics and intercalated clastic and chemical sediments, locally in faulted contact. Two holes totalling 104.24m were drilled at the S3 Zone, returning up to **2.3gpt Au** / 1m in granodiorite with 1 to 3% quartz veinlets (Mooney, S.J., 1990¹, file 52B09SE0005).

1989: Canadian Nickel Co. Ltd. recorded 597.71 m of diamond drilling in 10 boreholes around the AF and U zones. At the AF Zone, hole 78441-0 returned **3.27gpt Au** / 0.82m, preceded by **685ppb Au** / 0.5m. Hole 78442-0 returned **3.87gpt Au** / 0.35m, and **1.68gpt Au** / 0.4m further downhole. Hole 78443-0 collared in gold-bearing rock, yielding **1.3gpt Au** / 0.7m. Further spikes downhole included **1.08gpt Au** / 0.5m, **1.69gpt Au** / 0.5m, and **8.06gpt Au** / 0.5m (Canadian Nickel Co. Ltd., 1989², file 52B09SE0008).

1990: Inco conducted trenching and diamond drilling on their Gold Creek property. On the Gold Creek West block, (now within the current Gold Creek Property, the East block is not within the current property) gold mineralization was restricted to quartz-carbonate ladder-type veining within granodiorite dykes. The highest gold value, from a grab sample of one of these veins, was **20gpt Au**. The West block was only stripped (apparently at the S1 Zone) and not drilled (McEachern, R.K., 1991, file 52B09SE0078; file 52B09SE0014 contains a map showing location of outcrop washing at the S1 Zone).

1990: Canadian Nickel Co. Ltd. conducted diamond drilling on the S1 zone. Neither the 80.47 m long borehole 78500-0 returned significant gold values, nor the 84.12m long borehole 78499-0 (Canadian Nickel Co. Ltd., 1990, file 52B09SE0006; file 52B09SE0002 by Inco Ltd. presents an expanded assay report for these holes).

1990: Mingold Resources Inc. conducted a regional till sampling program, which included an area south of Dakota Lake that covers part of the current Gold Creek Property. 29 bulk till samples were collected on this claim block, and mapping was carried out in this area as well. No significant alteration or mineralization was observed and none of the till samples produced anomalous results (Bidwell, G.E., 1990, file 52F04NE9650).

1995: Eveleigh, McKay and Maclean conducted work to assess the gold potential of areas around the Crayfish Creek Fault and the margins of the Peewatai lake Stock on the Duckworth property (covering parts of the north-northeastern portion of the current Gold Creek Property). A total of 18 samples were collected for gold analyses. The highest value obtained was **149ppb Au** from argillaceous metasediments. A 22 line-km magnetic survey indicated strong anomalies corresponding to the regional iron formation hosting the Monpre Iron Ore Deposit. A VLF anomaly, 'Anomaly B', is associated with the Crayfish Creek Fault and was considered a higher priority target (Maclean, D., Eveleigh, A., and McKay, D., 1996, file 52B09SE0004; Clark, G., 1995, file 52B09SE0001 (mag survey)).

1995: Elwood Fournier carried out some prospecting work in the U Zone area and north of Gold Creek in July of 1995, but was ordered out due to fire risk. No assays are reported. (Fournier, E., 1996¹, file 52B09SE0009).

Fournier returned to the property in September 1995 and carried out sampling. Visible gold and galena is reported. 16 grab sample assays are reported on the "A zone"; 4 grade better than **1.0 gpt Au**, (**1.92; 1.44; 1.58** and **2.04 gpt Au**). 9 grab sample assays are reported on the "B zone", 4 grade better than **1.0 gpt Au**, (**35.59; 1.91; 1.23** and **1.54 gpt Au**). 7 grab sample assays are reported on the "C zone", 6 grade more than **1.0 gpt Au**, (**15.77; 13.92; 18.79; 21.39; 15.84** and **180.62 gpt Au**). 8 more grab samples were sent to the assayer by Eugene Starr and Fournier; the best 2 returned **3.16gpt Au** and **1.19gpt Au** from claims 701852 and 701855 (Fournier, E., 1996², file 52B09SE0031).

1995-1996: Ovalbay Geological Services Inc. presents an evaluation of the gold and base metal potential for the Duckworth property of Laminco Exploration Ltd., which overlaps the southeastern area of the current Gold Creek Property. Holes AW-95-01 to AW-95-07 were drilled in the I Zone area in July of 1995. The I Zone was recommended to be pursued further, with the possibility that parallel syenite dykes with ladder veins may join up along strike, representing a greater mineralized volume (Lichtblau, A. and Larouche, C., 1995, file 52B09SE0041). Assays are presented in file 52B09SE0093. Highlights include **4.32gpt Au** / 134.5ft (41m) in hole 95-04; **4.36gpt Au** / 67ft (20.42m) in hole 95-05; and **4.53gpt Au** / 47.2ft (14.39m) in hole 95-01.

From July 1995 to April 1996 a ground geophysical and mapping program was carried out on the property. Numerous EM anomalies were located, believed to correspond to bedrock conductors (Larouche, C., 1996, file 52B09SE0060).

1997: From August to October 1997, Clark-Eveleigh Consulting was contracted by Yanks Peak Resources Ltd. to conduct geological mapping, litho-geochemical sampling and prospecting on the Duckworth Property, which covers ground in the north to northeast of the current Gold Creek Property, as well as ground further east. The author concludes that: "The geology observed during the present program is generally in good agreement with previous interpretations of the area (i.e.: Mooney, 1990; Rogers, 1995)." Grab samples returned gold assay values which varied from **<5 ppb** to **2579 ppb Au**, from an altered syenite dyke that is east of the current Gold Creek Property boundary. Background gold values are **<5 ppb** (McKay, D.B. and Eveleigh, A., 1997, file 52B09SE0097).

In November 1997, Clark-Eveleigh Consulting was again contracted by Yanks Peak Resources Ltd. to conduct a diamond drilling program on the Duckworth Property. Seven inclined holes (DW97-01 to DW97-06 and DW97-05A) totalling 873.46 m were drilled in the southeast corner of claim TB 1202313. These holes are east of the current Gold Creek Property boundary. The best intersection, obtained from hole DW97-03, was **6.18gpt Au** / 0.91 m from an altered granodiorite to syenite dyke with quartz-carbonate veins (McKay, D.B., 1998, file 52B09SE2001).

1997-1998: Landore Resources Ltd.'s Gold Creek Property covered part of the southeast area of the current Gold Creek property. Work was concentrated on the I zone and Sand lake extension east of the Property. From Sept 10th to 30th 1997, a small prospecting-mapping program was

initiated in the I Zone area (Larouche, C., 1998², file 52B09SE2007). 7 trenches were dug in the I Zone area from November 1997 to January 1998 (Larouche, C., 1998¹, file 52A12SW2006).

2000: Prospecting, trenching and rock sampling were carried out on the Gold Creek Property for Elwood Fournier, in the vicinity of the AF Zone on the current Gold Creek Property. One trench labelled F returned values in gold and silver from grab samples of a 2m wide quartz vein ranging from **6.79** to **150.04gpt Au** and **266** to **855gpt Ag** associated with minor galena, chalcopyrite and pyrite. The next trench labelled G returned values in gold and silver from one grab sample of a quartz-carbonate vein assaying **20.95gpt Au** and **3.30gpt Ag** associated with weak disseminated blebs of galena, chalcopyrite and pyrite (Sharpley, F.J., 2001, file 52B09SE2011).

2002: A gold prospecting program was carried out by Elwood Fournier on mining claim #1245777 during the fall of 2002. 19 chip samples of 1 ½ to 2 pounds each were obtained and brought in for analysis. 2 samples returned over an ounce per ton, **1.274 oz/ton Au (43.7gpt** sample #2451) and **1.766 oz/ton Au (60.5gpt**, sample #2456). Sample #2451 was collected in the southwest corner of the claim, which is located north of Gold Creek and the AF Zone on the current Gold Creek Property. Sample #2456 was collected in the southeast corner of the claim, which appears to be located in the vicinity of the S1 Zone (Fournier, E., Starr, E., and Nantel, M.E., 2003, file 52B09SE2017).

2002: Landore Resources Inc. drilled one hole (IZ-02-01) into the I Zone, which returned an anomalous zone from 10.8 to 20.8m, with values up to **1.48gpt Au / 1.5m** (Landore Resources Inc., 2002, file 52B09SE2014).

2003: A gold prospecting program consisting of stripping, trenching, and blasting was carried out by Elwood Fournier and hired help on mining claim #1245777, 1248271, 1248272, 1187631 and 701851 during the summer of 2003. 29 rock and chip samples of 1 ½ to 2 pounds each were obtained and brought in for analysis from 9 stripped and trenched areas, all of which are located on the current Gold Creek Property. 12 samples returned over **1gpt Au** from all 9 areas and up to **10.94gpt Au** from Work Area 4, which appears to be located in the general U Zone area. Blasting was carried out at areas 1 and 2 (Fournier, E., 2004, file 52B09SE2020).

2004: D. Hunt carried out a fall exploration program consisting of linecutting, prospecting and rock sampling in the northwest quarter of Elwood Fournier's property, in the northern portion of the current Gold Creek Property. The purpose of the program was to evaluate the area for high grade gold mineralization similar to that previously discovered in eastern portions of the property. The program produced no significant results (Hunt, D.S., 2004, file 52B09SE2021).

2006: Helm Exploration conducted a helicopter-borne VTEM – Mag survey on their Goldcreek Property, which included the I Zone on the current Gold Creek Property but which was located mainly to the southeast of the current property (Orta, M., 2006, file 20000001451).

2006: In March 2006, 6531199 Canada Inc. optioned the Elwood property from Golden Share Corp, which covers ground in the east-central part of the current Gold Creek Property, including the AF to U Zones and the S1 and S3 Zones. Within two weeks, a limited exploration program was completed to meet the requirements of assessment work. Two diamond drill holes were completed to test the S zone, DT-06-01 and DT-06-02. The results of the drilling were viewed as positive. DT-06-01 returned up to **226ppb Au / 1.5m** from granodiorite with quartz veinlets, and

DT-06-02 returned up to **341ppb Au** / 1.5m from syenite with up to 6% fine disseminated pyrite. The local geology was better defined. The gold assays confirmed the previous anomalous gold values published by Inco from previous diamond drilling. (C. Larouche, 2006, file 20000001398).

2006: Mengold Resources conducted a magnetic, electromagnetic and IP geophysical survey on their Gold Creek Property, which covers ground mostly to the east and southeast of the current Gold Creek Property but includes the I Zone (Abitibi Geophysics, 2007, file 20000002677). In the same year they conducted a reconnaissance geological and prospecting program on the property (Allard, P., 2007, file 20000002541).

2006-2007: In the fall of 2006 and winter of 2007, 6531199 Canada Inc. conducted some prospecting, line cutting (east-west), and some geophysical orientation works on their Elwood Property. Ground magnetics, HEM (Max-Min) and Induced Polarization orientation surveys were completed along east-west lines to measure possible signatures of the known NNE-SSW structures and to define new ones (Theberge, A., 2007, file 20000002002).

2007: Golden Share Mining Corporation and 6531199 Canada Inc. signed an agreement to reassign the Elwood Property to Golden Share. Philippe Giaro, P.Geo., president of Golden Share carried out a geological evaluation of the company's Elwood Property. Based on a field visit in August to principle zones of interest such as the AF Zone and U Zone, recommendations for future work were made. One recommendation was to evaluate the bulk tonnage potential of the Penziwol granodiorite body, as the author sampled auriferous silicified material within the stock (Giaro, P., 2007, file 20000000068).

In November, Abitibi Geophysics conducted 42.0km of magnetic surveying and 22.1km of IP surveying over the property. 19 chargeability trends were identified and prioritized (Rivest, H., 2007, file 20000002555).

2007: Mengold Resources conducted a beep-mat geophysical survey over the I Zone area (Allard, P., 2007, file 20000002517).

2008: Mr. Pierre Poisson from Muroc Inc., a geological consulting firm based in St-Adolphe d'Howard, Quebec was contracted by Golden Share Mining Corporation for the Elwood project. A first phase of work, executed during July 2008, consisted in a program of channel sampling in the Penziwol area (Inco's AF, AH & U Zones), prospecting and of follow-up of geophysical anomalies. 238 channel samples were collected in 25 cuts up to 33m in length. The AF Zone returned results of **1gpt Au** / 14m, including **1.64gpt Au** / 8m. The AH Zone returned up to **2.42gpt Au** / 2m, including **7.23gpt Au** / 1m. The U Zone returned up to **1.98gpt Au** / 7.8m, including **4.74gpt Au** / 3m (Poisson, P. & Huss, L., 2008, file 20000003644).

The company also analyzed a 75kg sample from channels at the U Zone on their Elwood Property, which covered much of the current Gold Creek Property, but not the I Zone area. 4 1kg charges averaged **0.61gpt Au** head grade (Huss, L., 2008, file 20000005508).

Between November 1st and November 15th, Golden Share Mining Corporation conducted a diamond drilling program at the U Zone, consisting of 8 holes totalling 485 meters. Assays of up to **2.38gpt Au** / 8.3m were obtained from hole EL-08-01 (Cullen, D., 2009, file 20000004304).

2008: Mengold Resources Inc. & Solomon Resources Inc. conducted a joint venture diamond drilling program on the Goldcreek Property, which included 8 holes on the I Zone and 5 holes on the Centre Zone, which is located several kilometers southeast of the current Property. The I Zone returned the best results, with **6.8gpt Au** / 4.3m in hole GC08-11 and **1.47gpt Au** / 12.5m in hole GC08-12. (Dufresne, R., 2009, file 20000003869).

2010: Late in the year, Insight Geophysics Inc. performed an Insight Section IP/Resistivity survey on the Elwood Project of Golden Share Mining Corp, in the immediate vicinity of the U Zone. Two main zones of resistivity were identified, one of which was interpreted to be the U Zone (Pawluk, C., 2010, file 20000005800).

5.0 -2019 EXPLORATION PROGRAM -

5.1 INTRODUCTION

Between July 13th and July 17th, and between September 21st and October 11th, 2020, two prospecting programs were carried out on the Gold Creek Property, located approximately 60 kilometers west-northwest of the city of Thunder Bay, approximately 110 kilometres east-southeast of the town of Atikokan and 6 kilometers southwest of the town of Shebandowan, see Figure 2.

All field work (except one day) was carried out by truck from a trailer on Rossmere Bay Road off of secondary highway 586, which connects to highway ON-11 West. One helicopter day trip to the Dakota Lake – Zero Lake area was conducted from the helipad on Rossmere Bay Road, using Wisk Air from Thunder Bay.

Prospecting was carried out at numerous locations targeting historical showings, prospective geology and alteration, and structural features identified from magnetic surveys and topographical features. The program resulted in a total of 48 man-days of field work.

All the work and sample locations were defined using a handheld Garmin GPS. The measurements were plotted using UTM: NAD 83 in Zone 15 metric coordinates. Foot traverses are collected by GPS, saved as separate files, and plotted on the various Figures. All samples were entered in an Excel database nightly then imported into MapInfo for reviewing current work and planning future programs.

All GPS tracks were downloaded daily. The tracks were saved by type (foot traverse, truck), date and labeled as such, then saved to a “Master” file in MapInfo for plotting and future planning.

A total of 211 rock-grab samples (56 in July, 155 in September-October) were collected for gold and multi-element ICP analyses. Samples collected were individually bagged and labeled; bagged samples were then put into rice bags and driven to Activation Labs (Actlabs) in Thunder Bay.

All 211 rock samples were photographed in the field and labeled by their sample number, direction the photo is taken and type (outcrop-frost heave-talus etc.). A representative rock sample “Rep” is labeled of every rock sample sent for analysis and kept for future reference. In addition to the grab sample photos, photos were collected and labeled of various outcrops and other features in the field.

During November 2020, 12 rock samples which had returned $>1.0\text{gpt}$ Au from the fall prospecting and sampling program were analyzed by Au Fire Assay – Metallic Screen to look for the possibility of “nugget effect” in the anomalous samples. An additional 7 rock samples from the July field program were also sent for Au Fire Assay – Metallic Screen analysis in early January 2021.

The Rock Sample Description Table is presented in Table 1, Appendix I, and Rock Assay Certificates are presented in Appendix II. The Point of Interest (POI – geological and non-geological observations) Table 2 is located in Appendix III. Descriptions of the Act Labs analytical

procedures and packages is presented in Appendix IV; and a list of the Gold Creek Cell-Claims is presented in Table 3 Appendix V. The Statement of Expenditures is presented in Appendix VI; daily logs are located in Table 4 Appendix VII; Photos are presented in Appendix VIII and Map sheets A-D display the locations of the grab samples and POIs in relation to the claim boundaries and are located in Appendix IX.

Results by target area are presented below.

5.2 RESULTS BY AREA

Work was carried out during two field programs; one in July and one in late September to early October of 2020. A total of 211 grab samples were collected.

July Program

AF Zone

Twelve (12) grab samples (A527867-A527875, A527881-A527883) were collected at the main AF Zone trench. Samples consisted of quartz veins with up to 5% pyrite from a northeast-trending vein system within monzonite to tonalite, returning up to **10.3** and **17.3 gpt Au**, **7.08gpt Ag** from samples A527871 and A527872 respectively, approximately 6m apart across strike. ~40m east of these samples on the same trench, a cluster of anomalous samples returned up to **4.89gpt Au**, **528ppm Pb**, **109ppm Bi** & **50ppm Te** from sample A527883.

Quartz veining at AF Zone look SE



Sample A527871 – 10.3gpt Au – look NE



Five (5) grab samples (A527876-A527880) were collected along the east extension of the AF Zone trench. These returned up to **1.62gpt Au & 71.9ppm Mo** (A527880) ~140m east-northeast of samples A527871 and A527872, and up to **10.2gpt Ag** (A527879), **476ppm Cu** (A527877), and **5260ppm Pb** (A527876). Samples A527876-A527878 were collected from an 80-90cm quartz vein or quartz rubble nearby with what was described as trace-0.5% molybdenite, but based on elevated lead results and low molybdenum results for these samples the mineral was likely galena.

U Zone

Four (4) grab samples (A527887-A527890) were collected At the Hackl Occurrence / U Zone. A good portion of this zone lies on a patent to the north-northeast. The zone at this location consists of an ~1.5m quartz vein in granodiorite, with pyrite and galena. This vein and smaller, parallel veins to the east trend 020-025 degrees. They returned up to **268ppb Au** from sample A527888, granodiorite with quartz stringers and pyrite on the east margin of the 1.5m vein.

1.5m quartz vein at U Zone look NNE



AD Zone

Sixteen (16) grab samples were collected at the AD Zone located ~700m west-southwest of Lily Lake, where several historical north-south trenches had been dug. Samples consisted of sheared argillite with quartz veins, felsic dykelets and up to 5% pyrite. These returned up to **16ppb Au, 17.4ppm As, 15.4% Fe & 7.54% S** (A527906).

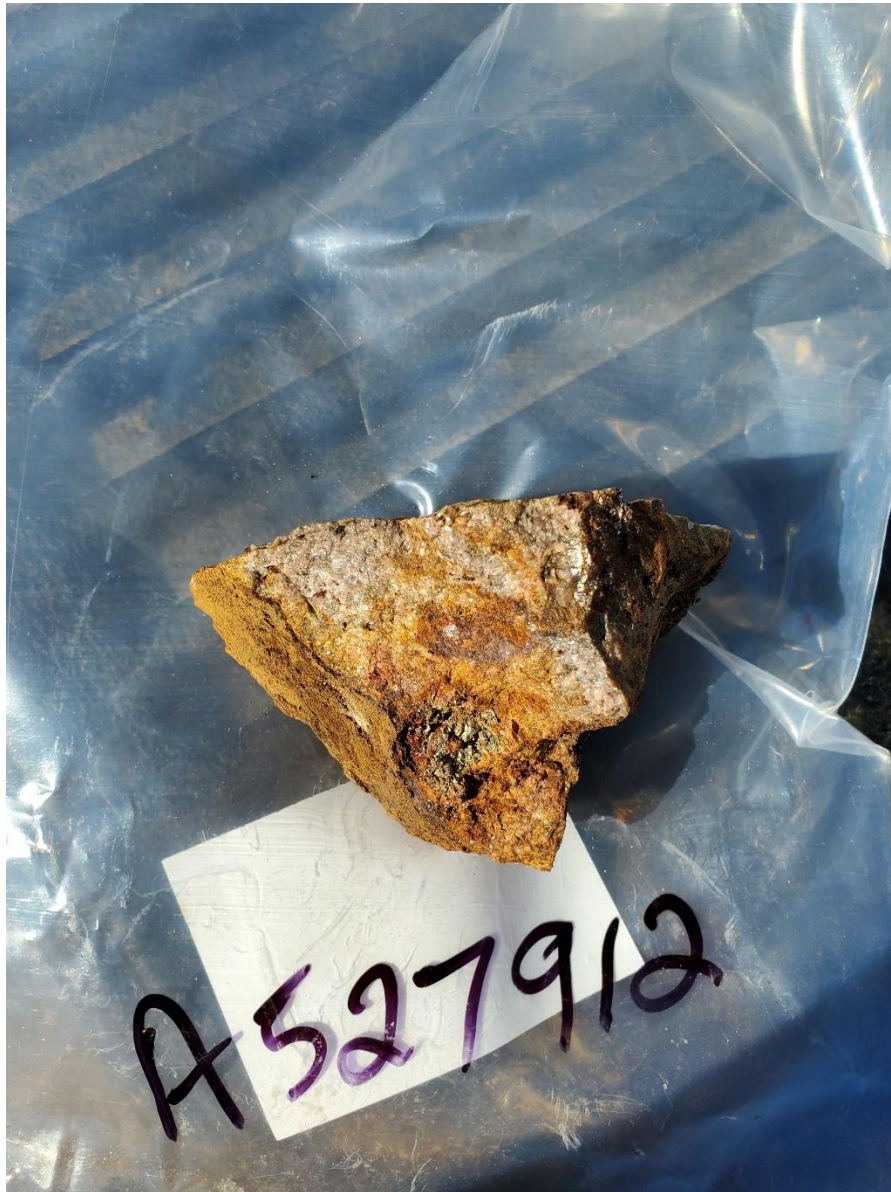
AH Zone

One (1) grab sample (A527884) was collected at the AH Zone trench west of the AF Zone trench, consisting of syenodiorite with minor kspar dykelets, patchy quartz-carbonate alteration and 1% coarse pyrite blebs. This sample returned **<5ppb Au**.

Other

Three (3) grab samples (A527851, A527911-A527912) were collected on a logging road in the northern part of the property, consisting, respectively, of a milky white quartz vein in mafic volcanics, a mafic volcanic boulder with minor quartz blebs and trace pyrite, and an angular boulder (possibly dug up by road-building) of altered syenite with 1-2% pyrite. Only sample A527912 returned gold of any significance: **161ppb Au**.

Sample A527912, altered monzonite/syenite with pyrite blebs – 161ppb Au



Six (6) grab samples (A527860-A527865) were collected on a logging road ~450m south of the AH Zone. They consisted of weakly to moderately silicified tonalite with quartz stringers, trace-1% pyrite and trace-0.5% galena specks, returning up to **49ppt Au, 1280ppm Pb, 6.62ppm Te & 144ppm Bi** (A527864), and **212ppm Mo** (A527860). While gold values were only somewhat elevated, other indicator minerals for orogenic gold systems such as Pb, Mo, Bi & Te were elevated. The silicified rock is also interesting to see here rather than just quartz veining.

One (1) grab sample (A527865) was collected ~80m south of the AF Zone trench and consisted of weakly silicified monzonite with minor-moderate quartz blebs/stringers, minor potassic alteration and trace pyrite. This sample returned **<5ppb Au**.

Four (4) grab samples (A527856-A527859) were collected on logging roads west of Lily Lake. These consisted of monzonite-syenite to syenodiorite with pyrite blebs and quartz stringers/stockwork, as well as one sample of mafic volcanic with potassic stringers and trace-0.5% pyrite. The monzonite-syenite was in contact with banded iron formation at one location. Samples returned up to **24ppb Au** (A527859) from monzonite/syenite with quartz stringers, minor mafic fragments and 1% pyrite.

Four (4) grab samples (A527852-A527855) were collected on logging roads in the far northeastern claims. These consisted of intermediate volcanics, conglomerate and what was believed to be a dolomite boulder. They returned up to **9ppb Au & 32.1ppm As** (A527855) from a sample of conglomerate.

September-October Program

I Zone North

Fourteen (14) grab samples (A685565-A685570, A685599-A685606) were collected at the I Zone North trench. These consisted of north-south to northeast-southwest-trending ladder veins within two east-west trending syenite dykes, or mineralized syenite with quartz veins. Pyrite content was up to 2% overall. They returned up to **45.6gpt Au** (A685565), averaging **9.73gpt Au**.

Sample A685565 – 45.6gpt Au



I Zone North trench look WSW



I Zone South

Eleven (11) grab samples (A685580-A685590) were collected at the I Zone South trench. These consisted largely of quartz veins or syenite with quartz veins and up to 0.5-1% pyrite, although 2 samples of iron formation were also collected. They returned up to **2.77gpt Au** (A685583) from a 355-degree-trending quartz vein with trace-0.5% pyrite. A sample of iron formation (A685586) with 5% pyrite overall from a <1cm pyrite stringer returned **859ppb Au & 31.4% Fe**. Samples at the I Zone South trench averaged **713ppb Au**.

S1 Zone West End

Thirty-nine (39) grab samples were collected in total at the S1 Zone.

Of these, thirty (30) grab samples (A685762-A685778, A685793-A685800, A685851-A685855) were collected at the west end of the zone, which had the best exposure due to historical stripping. It consisted of a shear zone in mafic to intermediate tuff intruded by monzonite-syenite dykes with iron carbonate alteration, quartz veins and pyrite. The shear strikes an average of about 300 degrees. Intense veining in a syenite dyke at the southern end of the zone generally strikes northeast, though approaches stockwork locally. Sampling of quartz veins within this dyke returned up to **5.12gpt Au, 2450ppm Pb & 10.4ppm Te** (A685800); however, no other samples in this area exceeded **170ppb Au** (A685794 – with **1170ppm Mo**. Several other samples contained elevated Mo). Sample A685770 of a quartz vein in sheared mafic rock returned **109ppb Au, 500ppm Cr & 345ppm Ni** and a few other samples ran in the 100s of ppm Cr & Ni.

Quartz vein at S1 Zone West look NE



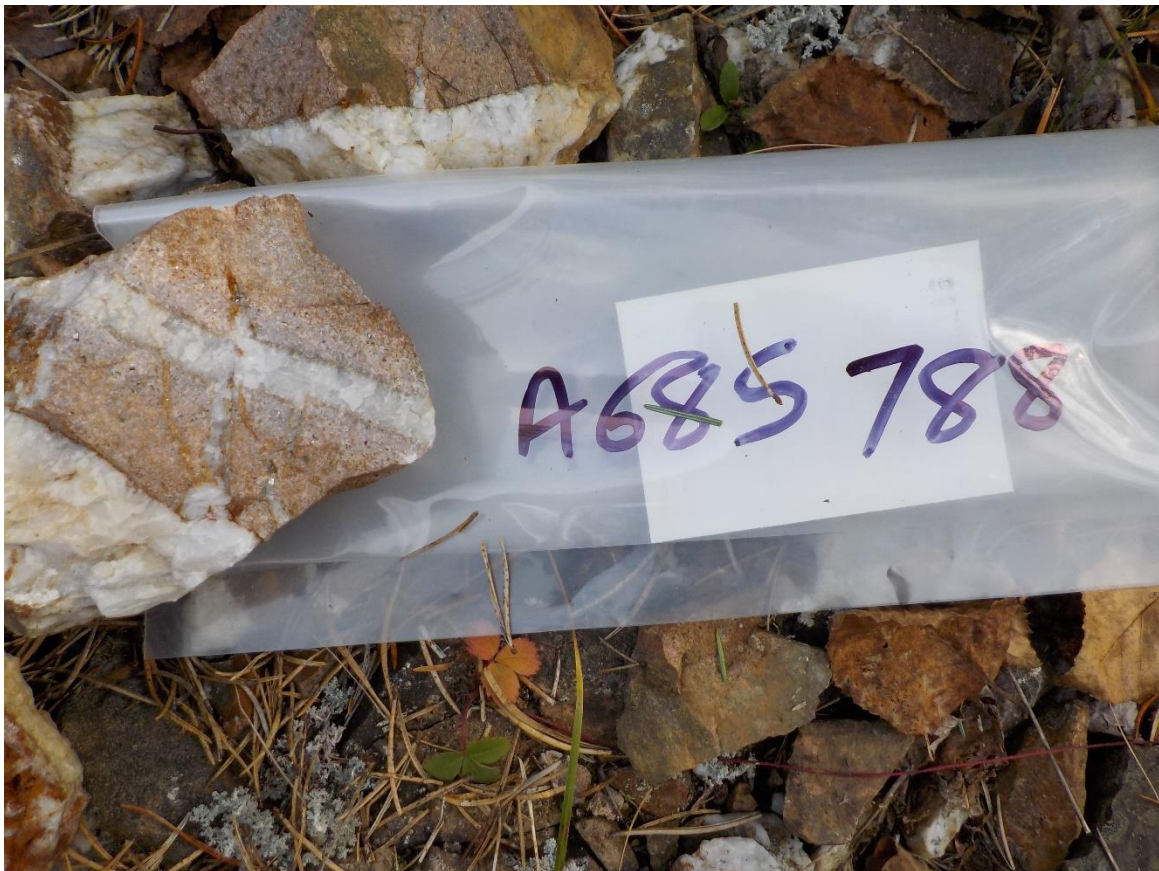
S1 Zone Central

Two (2) grab samples (A685791-A685792) were collected in the central area of the S1 Zone, which was least exposed. These samples consisted of monzonite with minor iron carbonate alteration, minor quartz stringers and minor disseminated pyrite, trending 005 degrees. These samples returned **597ppb Au & 1.08ppm Sb**, and **753ppb Au & 3.24ppm Sb**, respectively.

S1 Zone East

Seven (7) grab samples (A685784-A685790) were collected in the eastern area of the S1 Zone, which was not very well exposed. Nevertheless, all samples were anomalous, returning up to **1.13gpt Au** (A685787) and averaging **517ppb Au**. They consisted of monzonite with minor iron carbonate alteration, minor specular hematite, minor to moderate glassy white quartz stringers, and up to 1% pyrite disseminated within the monzonite or as blebs in quartz stringers. Stringers trend 355 to 020 degrees here.

Monzonite with quartz stringers, pyrite at S1 Zone East



New Road Zone

Fourteen (14) grab samples (A685612-A685625) were collected at the New Road Zone, a zone of rusty, strongly fractured to weakly sheared monzonite to syenite with up to 5% blebby to disseminated pyrite and quartz stringers with pyrite. Limited sampling seems to have taken place in this area in the past; however, it appears that the adjacent logging road is relatively recent and may have exposed the zone better. The Crayfish Creek Fault is thought to pass through this area. Sampling returned up to **4.07gpt Au** with **0.87ppm Sb & 255ppm Cu** (A685618) from monzonite/syenite with quartz stringers and 1% pyrite. The 14 samples averaged **549ppb Au**. There are no known historical drill holes here. Samples also returned up to **720ppm Cu** with **73ppb Au** (A685616).

Two (2) grab samples (A685626-A685627) were collected 110-120 meters west of the New Road Zone, also along the logging road. They consisted of syenite with up to 0.5% pyrite blebs and returned **242ppb** and **32ppb Au**, respectively. Sample A527912 from July, which returned **161ppb Au** from altered syenite with 1-2% pyrite, is located ~200m west-northwest of this location, suggesting that the mineralized zone in this area may be at least 300m long.

New Road Zone look NW



Altered syenite with pyrite blebs at New Road Zone, Sample A685622 – 400ppb Au



Monzonite with quartz stringers and pyrite at New Road Zone, sample A685618 – 4.07gpt Au



Other

Three (3) grab samples (A685628-A685629, A685647) were collected along logging roads in the far northeastern claims of the property. They consisted of quartz vein rubble with trace pyrite or weakly silicified, fractured mafic volcanic rubble with 0.5% pyrite. Sample A685628 (quartz vein rubble) returned **174ppb Au** with **6.65ppm Te**. There are some quartz veins nearby in fairly massive outcrop, but it is uncertain where exactly the block came from. The mafic volcanic sample (A685647) returned **24ppb Au & 14.6% Fe** and is associated with an east-southeast trending linear magnetic high at this location.

Five (5) grab samples (A685562-A685564, A685610-A685611) were collected on logging roads northwest of Lily Lake. These consisted of quartz stringers or syenite with quartz stringers and up to 3-4% pyrite. They returned up to **153ppb Au** with **32.5gpt Ag, 84.8ppm Mo, 2120ppm Pb, 82.5ppm Bi, & 7.96ppm Te** (A685563) from a quartz stringer with trace-0.5% pyrite, trace galena and possible trace chalcopyrite, hosted in an east-west-trending syenite dyke.

Three (3) grab samples (A685650, A685751-A685752) were collected in a logged area 160-190m east of the New Road Zone, consisting of silicified mafic volcanics with trace-0.5% pyrite. These samples returned up to **7ppb Au** (A685751).

Two (2) grab samples (A685753-A685754) were collected in a logged area 160m northwest of the New Road Zone, consisting of strongly silicified felsic intrusive with minor <1cm quartz stringers and trace-0.5% pyrite specks. These samples returned up to **17ppb Au** (A685754).

Two (2) grab samples (A685648-A685649) were collected on the logging road 220-270m northeast of the New Road Zone, consisting, respectively, of silicified intermediate intrusive float (or dug up rubble) with 0.5% fine disseminated pyrite, and coarse-grained gabbro outcrop with trace pyrite. These returned **16ppb Au** and **<5ppb Au** with **341ppm Ni & 1320ppm Cr**, respectively.

Five (5) grab samples (A685779-A685783) were collected ~60m west of the New Road Zone, also along the logging road. They consisted of fractured to weakly sheared mafic volcanics with up to 0.5% disseminated to blebby pyrite with 1-2cm quartz-carbonate veinlets and syenite dykelets. Shearing/fracturing at 342/77 degrees E and stronger shearing/fracturing at 307/77 degrees NE were noted. These samples returned up to **8ppb Au** with **1080ppm Cr** (A685783), and up to **657ppm Ni** (A685781), with several samples in the hundreds of ppm Ni.

One (1) grab sample (A685630) was collected in a logged area in the north-central part of the property. It consisted of a 5cm quartz vein with minor syenite component adjacent to BIF outcrop. It returned **<5ppb Au**.

Ten (10) grab samples (A685631-A685640) were collected adjacent to a north-south logging road west of sample A685630. These consisted of quartz blocks with minor syenitic component, minor magnetic sedimentary wall rock and trace-0.5% pyrite. A medium-coarse-grained ~3m wide syenite dyke is in outcrop nearby, trending ~115 degrees along the foliation of the host sediments. These samples returned up to **12ppb Au** (A685634).

Eighteen (18) grab samples (A685865, A685571-A685579, A685591-A685598) were collected on logging roads northeast of Lily Lake. These largely consisted of locally sheared banded iron formation or glassy white quartz veins within iron formation. One measurement of 135 degrees was obtained for an outcrop of sheared iron formation. These samples returned up to **7ppb Au** (A685571) and up to **24.6% Fe** (A685577).

Three (3) grab samples (A685607-A685609) were collected in a logged area northwest of Lily Lake, consisting of quartz stringers or syenite with quartz stringers. These samples returned **<5ppb Au**.

Ten (10) grab samples (A685551-A685560) were collected in the west-central claims of the property at a single location. These consisted of silicified intermediate intrusive with minor quartz stringers and minor pyrite. It is not entirely certain if samples were in bedrock – it may have been a very large angular boulder sticking out of the hillside. These samples returned up to **12ppb Au** (A685552, A685557) and up to **26.2ppm As** (A685559).

Six (6) grab samples (A685756-A685761) were collected in the far western claims west of Dakota Lake and southwest of Zero Lake. Sampled lithologies include mafic volcanics, sediments and iron formation. There were also two samples of quartz veins in weakly foliated syenite trending 035 degrees. Samples returned up to **14ppb Au** from a sample of mafic volcanics with 0.5% pyrite (A685757) and up to **622ppm Cr** (A685756) from mafic volcanic with moderate parallel quartz-carb stringers.

Seven (7) grab samples (A685641-A685646, A685755) were collected near logging roads in the south-central claims. Lithologies sampled included granodiorite with quartz stringers and minor pyrite, intermediate tuff, and rusty fragments within intermediate tuff. These samples returned up to **15ppb Au** (A685646) from a rusty fragment within intermediate tuff.

Samples sent for Au Fire Assay - Metallic Screen

Five samples from the July field program as well as twelve rock samples from the Fall program were analysed by Au Fire Assay – Metallic Screen to test for nugget effect, see below.

Report Number: A21-00419								
Report Date: 13/1/2021								
Analyte Symbol	Au + 150 mesh	Au - 150 mesh (A)	Au - 150 mesh (B)	Total Au	+ 150 mesh	- 150 mesh	Total Weight	
Unit Symbol	g/m t	g/m t	g/m t	g/m t	g	g	g	
Detection Limit	0.03	0.03	0.03	0.03				
Analysis Method	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	
A527871	4.43	10	9.34	9.47	9.7	221	230.7	
A527873	5.93	2.71	2.77	2.91	18.22	323.32	341.54	
A527880	1.18	1.9	1.84	1.82	14.4	163.22	177.62	
A527882	< 0.03	4.29	4.94	4.17	16.61	155.82	172.43	
A527883	4.86	4.62	3.67	4.18	11.72	248.24	259.96	

Report Number: A20-15191							
Report Date: 24/12/2020							
Analyte Symbol	Au + 150 mesh	Au - 150 mesh (A)	Au - 150 mesh (B)	Total Au	+ 150 mesh	- 150 mesh	Total Weight
Unit Symbol	g/mt	g/mt	g/mt	g/mt	g	g	g
Detection Limit	0.03	0.03	0.03	0.03			
Analysis Method	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT
A685618	2.54	6.09	5.97	5.89	18.65	431.94	450.59
A685787	0.86	0.93	0.89	0.91	14.98	275.54	290.52
A685800	1.38	4.81	6.3	5.06	17.88	132.12	150
A685565	34.3	37.4	37.2	36.9	19.44	159.34	178.78
A685570	5.23	13	11.8	12	16.7	281.06	297.76
A685583	3.74	4.95	5.26	5.04	17.77	345.2	362.97
A685584	0.38	0.67	0.58	0.61	18.41	289.78	308.19
A685587	0.88	0.95	1.07	1	15.98	184.27	200.25
A685601	99.2	30.4	29	35.4	21.72	241.76	263.48
A685602	0.22	1.87	2.27	1.87	22.32	180.49	202.81
A685603	3.4	10.3	11.3	9.67	16.56	92.76	109.32
A685605	67.6	14.3	13.9	20	21.87	176.43	198.3

6.0 -DISCUSSION OF RESULTS AND RECOMMENDATIONS-

6.1 DISCUSSION OF RESULTS

The 2020 prospecting and sampling program was successful in locating and confirming the presence of anomalous gold at several historical showings, including the AF Zone, U Zone, S1 Zone and I Zone. The program was also successful in outlining the New Road Zone in the vicinity of the Crayfish Creek Fault, which to the best of our knowledge has never been drill tested, although it may have been sampled to a limited degree in the past before it was better exposed by the relatively recent logging road.

Results from the samples sent for Metallic Screen appear to suggest that there are no significant issues related to “nugget effect” (coarse gold).

To date, 3 important environments for gold mineralization have been documented:

- 1) Ladder veins and stockworks in monzonite-syenite dykes (I Zone, S1 Zone).
- 2) En-echelon quartz veins in brittle fracture systems within a larger monzonite-granodiorite-tonalite stock (AH, AF, U Zones).
- 3) Strongly fractured to weakly sheared monzonite-syenite with disseminated pyrite and quartz stringers (New Road Zone).

Gold also appears to be associated with different elements depending on the environment. In environment 1, elevated Ag & Sb have been noted at the I Zone, and in addition to those elements, elevated Pb, Te & Mo occur locally at the S1 Zone. In environment 2, elevated Ag, Pb, Bi, Te, Mo & Cu have been noted in varying proportions depending on the sample. In environment 3, elevated Cu and slightly elevated Sb have been noted.

Environments 1 and 2 have so far demonstrated the potential for high-grade gold mineralization in quartz veins, although Giaro (2007) mentioned that he had also obtained up to **301ppb Au** from silicified granodiorite within the ‘Penziwol’ granodiorite (hosting the AH-AF-U Zones),

and that the stock should be evaluated for a bulk tonnage potential. The extent of the I Zone and S1 Zone dykes is unknown, although at both the I Zone and S1 Zone about 250-300 meters of mineralized dyke has been delineated on surface or in core. At the I Zone there is a suggestion that the dyke may continue towards the west side of Lily Lake, since there are gold-bearing quartz veins in an east-west syenite dyke along strike from the I Zone there. However, it may be a completely separate dyke, as there are several parallel dykes in the area. If it is continuous with the I Zone, it would represent 900+ meters of strike length.

Environment 3 has so far only returned up to **4.07gpt Au** from a sample with quartz veining; however, the intrusive itself is mineralized and gold-bearing, not just quartz veins. There is a suggestion that the mineralized syenite may continue along strike for at least 300 meters to the west-northwest.

Previous workers have commented on the similarities between the Gold Creek Property and the Kirkland Lake Area, with Temiskaming-type sediments, proximity to a major fault (in this case the Crayfish Creek Fault), and gold associated with syenite intrusions.

6.2 RECOMMENDATIONS

- Carry out a property wide compilation of historical drill hole, geochemistry and geological exploration work.
- Integrate the compilation data with the current field work and with the airborne magnetic survey carried during the last half of August 2020.
- Present a list of targets which warrant follow up exploration including mechanical stripping and or diamond drilling.


7.0 -STATEMENT OF QUALIFICATIONS-

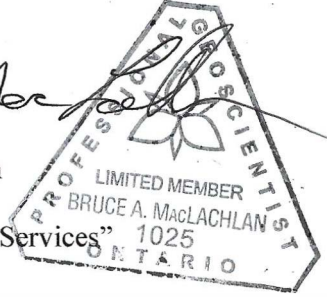
I, Bruce A. MacLachlan P. Geo (Limited), residing at 222 Emerald St., Timmins, Ontario, do hereby certify that:

- 1) Portofino Resources Inc. currently contracts me as a consulting Geological Technician and Prospector.
- 2) I am a P. Geo (Limited), registered in the province of Ontario (APGO No. 1025).
- 3) I have continuously practiced my profession as a Geological Technician and Prospector for over 36 years. I have prepared reports, conducted, supervised and managed exploration programs for several major and junior mining companies including Noranda Exploration Company Limited, CanAlaska Uranium Ltd., Noront Resources Ltd., Bold Ventures Inc., GoldON Resources Inc., and others.
- 4) I am responsible for the preparation of this report titled 'Work Report of the Fall 2020 Exploration Program on the Gold Creek Claim Group, Shebandowan Area, Ontario.'
- 5) I have worked extensively across the Property.

Dated at Timmins, Ontario, this 5th day of February 2021.

"Bruce A. MacLachlan" P. Geo (Limited) APGO No. 1025
(Signed and Sealed)


Bruce A. MacLachlan
2099840 Ontario Inc.
"Emerald Geological Services"



8.0 - REFERENCES-

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APPENDIX I

Rock-Grab Sample Descriptions (Table 1)

Table 1													
Gold Creek Rock Sample Descriptions													
Sample	Easting	Northing	Elevation	Date	Area	Project	Claim	Sample Type	Rock Type	Rock Code	Description	Assay Certificate No.	Au_ppb_final
A527851	711379	5383799	470	14-Jul-20	Target C Eastern Logging Roads	Gold Creek	585698	Grab	Quartz Vein	QV	3-4cm milky white quartz vein in fine-grained mafic volcanic outcrop with minor rust. Trace pyrite. 076/80 degree dip to S or subvertical.	A20-07954	2.5
A527852	712662	5384144	471	14-Jul-20	Logging Roads in Northeastern Claims	Gold Creek	585698	Grab	Intermediate Volcanic	IV	Rusty intermediate volcanic with minor-moderate <1cm white quartz-carb stringers, trace visible pyrite. Angular rubble on side of logging road, similar outcrop nearby with pillows.	A20-07954	2.5
A527853	711201	5384497	482	14-Jul-20	Logging Roads in Northeastern Claims	Gold Creek	585697	Grab	Unknown	UNK	White-grey, cherty-textured rock with very rusty orange-brown rind, minor-moderate white quartz-carb stringers (almost stockwork) and trace pyrite. Subangular to angular float next to logging road.	A20-07954	2.5
A527854	712633	5384467	479	14-Jul-20	Logging Roads in Northeastern Claims	Gold Creek	585697	Grab	Intermediate Volcanic	IV	Rusty, weakly-moderately sheared intermediate volcanic with minor quartz-carb stringers containing minor epidote, trace visible pyrite. Orientation of shear approximately 120 degrees, although block is somewhat calved off of outcrop.	A20-07954	2.5
A527855	712638	5384478	477	14-Jul-20	Logging Roads in Northeastern Claims	Gold Creek	585697	Grab	Conglomerate	CONG	Very rusty conglomerate (rounded cobble-sized clasts stick out on boulder) with minor-moderate carbonate alteration, dark grey matrix. Large angular rubble on side of logging road.	A20-07954	9
A527856	713634	5382226	473	14-Jul-20	I Zone Area Logging Roads West of Lily Lake	Gold Creek	585698	Grab	Mafic Volcanic	MV	Mafic volcanic with minor-moderate <1mm potassic stringers, trace-0.5% pyrite as stringers or blebs. Angular rubble on side of logging road.	A20-07954	2.5
A527857	713631	5382226.5	473	14-Jul-20	I Zone Area Logging Roads West of Lily Lake	Gold Creek	585698	Grab	Syenodiorite	SYEDIO	Syenodiorite with 1% pyrite blebs. Angular rubble on side of logging road.	A20-07954	2.5
A527858	713547	5382346	476	14-Jul-20	I Zone Area Logging Roads West of Lily Lake	Gold Creek	585698	Grab	Monzonite	MONZ	Monzonite/syenite with minor white quartz stringers, minor mafic fragments and 1% fine disseminated pyrite. Outcrop next to logging road, in contact with banded iron formation with magnetite bands at 110 degrees.	A20-07954	14
A527859	713551	5382345	476	14-Jul-20	I Zone Area Logging Roads West of Lily Lake	Gold Creek	585698	Grab	Monzonite	MONZ	Monzonite/syenite with minor-moderate white quartz stockwork, minor mafic fragments, 1% disseminated pyrite. Outcrop 4m ESE of previous.	A20-07954	24
A527860	711848	5382071	456	14-Jul-20	Logging Road 450m S of AH Zone	Gold Creek	585698	Grab	Tonalite	TON	Weakly foliated, weakly-moderately silicified tonalite with minor rust patches, 0.5-1% pyrite, trace-0.5% galena specks. Outcrop next to logging road, some weak foliation at 175 degrees/subvertical dip.	A20-07954	6
A527861	711849	5382071	456	14-Jul-20	Logging Road 450m S of AH Zone	Gold Creek	585698	Grab	Tonalite	TON	Weakly silicified tonalite with rusty patches, trace-0.5% pyrite specks, sometimes within fractures. Frost heave or talus 1m E of previous sample.	A20-07954	2.5
A527862	711850	5382071.2	456	14-Jul-20	Logging Road 450m S of AH Zone	Gold Creek	585698	Grab	Tonalite	TON	Tonalite with rust patches, 2-3cm white quartz vein with minor pyrite and rust, trace-0.5% pyrite. Frost heave or talus 1m ENE of previous sample.	A20-07954	2.5
A527863	711851	5382071.4	456	14-Jul-20	Logging Road 450m S of AH Zone	Gold Creek	585698	Grab	Tonalite	TON	Tonalite with minor-moderate rust patches, minor quartz blebs and <1cm quartz stringer, trace pyrite specks. Fractured outcrop 1m ENE of previous sample.	A20-07954	2.5
A527864	711853	5382073.5	456	14-Jul-20	Logging Road 450m S of AH Zone	Gold Creek	585698	Grab	Tonalite	TON	Tonalite with 1-2cm rusty to white coarse-grained quartz vein, trace pyrite specks in tonalite and quartz, possible trace galena. Fractured outcrop 2m NE of previous sample.	A20-07954	49
A527865	711856	5382073.5	456	14-Jul-20	Logging Road 450m S of AH Zone	Gold Creek	585698	Grab	Tonalite	TON	Rusty, weakly silicified tonalite with trace pyrite specks/cubes. Outcrop 3m E of previous sample.	A20-07954	5

A527866	711937	5382430	461	15-Jul-20	80m South of AF Zone Trench	Gold Creek	585698	Grab	Monzonite	MONZ	Weakly silicified monzonite with minor-moderate grey-white quartz blebs to stringers with minor potassic alteration, trace pyrite specks. Fractured outcrop.	A20-07954	2.5
A527867	711933	5382512	460	15-Jul-20	AF Zone Trench and MDI	Gold Creek	585698	Grab	Monzonite	MONZ	Rusty monzonite to monzodiorite, trace pyrite overall, increase in small pyrite cubes in 1cm tonalite dykelet or on margins, minor Fe-carb alteration and stringers. Outcrop at west end of E-W trench (AF Zone?)	A20-07954	88
A527868	711949	5382511	462	15-Jul-20	AF Zone Trench and MDI	Gold Creek	585698	Grab	Tonalite	TON	Altered tonalite with rust patches, minor rusty fractures, 1cm sugary white quartz vein, trace visible pyrite. Outcrop 5m west of A527869, same trench as previous sample.	A20-07954	702
A527869	711954	5382511	462	15-Jul-20	AF Zone Trench and MDI	Gold Creek	585698	Grab	Tonalite	TON	Rusty, altered tonalite with 4-5% fine pyrite cubes. Same trench as previous, wall rock of 10cm quartz vein trending ~45-50 degrees, 2m west of POI_008.	A20-07954	484
A527870	711955.5	5382510.5	462	15-Jul-20	AF Zone Trench and MDI	Gold Creek	585698	Grab	Quartz Vein	QV	Glassy white quartz vein with rusty fractures and staining, contains tonalite fragments with pyrite, trace-0.5% py overall. Outcrop on same trench as previous, 0.7m SE of POI_008.	A20-07954	616
A527871	711957	5382516	462	15-Jul-20	AF Zone Trench and MDI	Gold Creek	585698	Grab	Quartz Vein	QV	Glassy white quartz vein with rusty fractures and staining, 1-2% pyrite in cubic 'aggregates.' Outcrop on same trench as previous, ~5m NNE of POI_008.	A20-07954	10300
A527872	711960	5382511	462	15-Jul-20	AF Zone Trench and MDI	Gold Creek	585698	Grab	Quartz Vein	QV	Glassy white quartz vein with minor-moderate rusty fractures and staining, trace pyrite within quartz, minor monzonite wall rock. Outcrop on same trench as previous, ~4m E of POI_008.	A20-07954	17300
A527873	711981	5382523	466	15-Jul-20	AF Zone Trench and MDI	Gold Creek	585698	Grab	Quartz Vein	QV	Glassy white quartz vein with minor-moderate rust, minor pyrite cubes. Outcrop on same trench as previous samples.	A20-07954	1010
A527874	711985	5382510	464	15-Jul-20	AF Zone Trench and MDI	Gold Creek	585698	Grab	Quartz Vein	QV	Glassy white quartz vein with minor rust and hematite staining, 1% pyrite cubes. Outcrop 2m NE of POI_009; veins trend NE.	A20-07954	150
A527875	711991	5382519	465	15-Jul-20	AF Zone Trench and MDI	Gold Creek	585698	Grab	Quartz Vein	QV	<10cm glassy white quartz vein with 5% pyrite in cubic 'aggregates.' Outcrop on same trench as previous.	A20-07954	2540
A527876	712047	5382537	462	15-Jul-20	AF Zone Trench East Extension	Gold Creek	585698	Grab	Quartz Vein	QV	~80-90cm glassy to sugary white-grey quartz vein with often coarse-grained quartz, some internal fabric parallel to vein walls, trace molybdenite, strikes 210 degrees with steep dip to west. Same series of E-W trenches as previous samples.	A20-07954	11
A527877	712047	5382534	462	15-Jul-20	AF Zone Trench East Extension	Gold Creek	585698	Grab	Quartz Vein	QV	White, locally coarse-grained quartz vein, trace chalcopyrite, trace molybdenite, possible minor kspars banding. Trench rubble 3m S of previous.	A20-07954	5
A527878	712041	5382525	463	15-Jul-20	AF Zone Trench East Extension	Gold Creek	585698	Grab	Quartz Vein	QV	Quartz vein with minor kspars and hematite alteration, trace-0.5% molybdenite. Trench rubble along strike from A527876 to SSW, adjacent to pit where quartz seems to have been excavated.	A20-07954	2.5
A527879	712089	5382540	465	15-Jul-20	AF Zone Trench East Extension	Gold Creek	585698	Grab	Tonalite	TON	Rusty tonalite with minor quartz, trace visible pyrite including some rusted out cubes. Trench rubble on same series of E-W trenches as previous samples.	A20-07954	819
A527880	712091	5382540	465	15-Jul-20	AF Zone Trench East Extension	Gold Creek	585698	Grab	Quartz Vein	QV	Rusty, glassy white quartz vein, 2-3% pyrite mainly as stringers along fractures. Trench rubble 2m E of previous sample.	A20-07954	1620
A527881	711999	5382515	462	15-Jul-20	AF Zone Trench and MDI	Gold Creek	585698	Grab	Quartz Vein	QV	Rusty, glassy white quartz vein with locally up to 0.5% pyrite, trace overall. Outcrop on same series of E-W trenches as previous samples.	A20-07954	259
A527882	711995	5382516	464	15-Jul-20	AF Zone Trench and MDI	Gold Creek	585698	Grab	Quartz Vein	QV	Rusty 3-4cm quartz stringer with 1% visible pyrite, trends 150 degrees. Same trench/area as previous sample.	A20-07954	4750

A527883	711992	5382516.5	464	15-Jul-20	AF Zone Trench and MDI	Gold Creek	585698	Grab	Quartz Vein	QV	White quartz vein with moderate rust and moderate rusty wall rock, 1% cubic pyrite overall in quartz and wall rock. Outcrop 3m WNW of previous sample.	A20-07954	4890
A527884	711855	5382540	455	16-Jul-20	AH Zone Trench	Gold Creek	585698	Grab	Syenodiorite	SYEDIO	Syenodiorite with minor kspat dykelets, minor-moderate patchy quartz-carb alteration, 1% coarse pyrite blebs. Trench rubble in NW-trending trench northwest of previous trenches.	A20-07954	2.5
A527887	712265	5382522	471	16-Jul-20	Hackl Occurrence Trench and MDI	Gold Creek	585698	Grab	Tonalite	TON	Silicified tonalite-granodiorite with minor glassy white quartz, trace-0.5% disseminated <1mm cubic pyrite, trace galena cubes, several parallel fractures. Outcrop on same trench as previous.	A20-07954	18
A527888	712268	5382524	471	16-Jul-20	Hackl Occurrence Trench and MDI	Gold Creek	585698	Grab	Granodiorite	GRANO	Strongly silicified granodiorite with minor-moderate glassy white quartz, some darker slips, trace-0.5% pyrite. Outcrop on east margin of ~1.5m quartz vein trending 20-25 degrees, same trench as previous.	A20-07954	268
A527889	712268.4	5382524	471	16-Jul-20	Hackl Occurrence Trench and MDI	Gold Creek	585698	Grab	Quartz Vein	QV	Glassy white-grey quartz vein, trace-0.5% fine pyrite cubes. Outcrop 0.4m E of previous sample.	A20-07954	57
A527890	712268.4	5382524.2	471	16-Jul-20	Hackl Occurrence Trench and MDI	Gold Creek	585698	Grab	Quartz Vein	QV	Moderate glassy white-grey quartz veining in monzonite-granodiorite, some thin chloritic (?) fractures in quartz and wall rock, trace fine pyrite cubes, trace galena. Outcrop 0.2m north of previous sample.	A20-07954	32
A527894	713054	5382064	467	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Granodiorite	GRANO	Weakly silicified granodiorite with trace pyrite. Rubble in old seemingly hand-dug ~N/S trench.	A20-07954	2.5
A527895	713054	5382064.5	467	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Argillite	ARG	Weakly foliated/bedded argillite with weak quartz-carb alteration, trace-0.5% pyrite stringers. Rubble 0.5m N of previous sample.	A20-07954	2.5
A527896	713050	5382087	457	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Argillite	ARG	Argillite with minor-moderate quartz-kspat stringers, trace-3% pyrite. Outcrop in continuation of previous trench to north.	A20-07954	7
A527897	713049.8	5382087	457	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Quartz Vein	QV	1-2cm quartz stringer with minor kspat, trace pyrite. Outcrop 0.2m W of previous sample, stringer may trend 15 degrees or so. Trench pauses here but continues a few m to north.	A20-07954	2.5
A527899	713050.5	5382090	457	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Quartz Vein	QV	1-2cm glassy white quartz veins (stockwork-like) in argillite, trace pyrite in wall rock. Rubble in same trench as previous.	A20-07954	2.5
A527900	713101	5382070	467	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Argillite	ARG	Weakly sheared argillite with moderate quartz veining and minor felsic dyke material, 0.5% pyrite overall, mainly in stringers within the argillite at margin of dyke/vein. Same general area as previous but different ~N/S trench, rubble 3m N of POI_027.	A20-07954	2.5
A527901	713101	5382066.6	467	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Argillite	ARG	Rusty, weakly sheared argillite, 1% pyrite. Rubble 0.4m S of previous sample.	A20-07954	12
A527902	713101	5382068	467	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Argillite	ARG	Rusty, weakly sheared argillite, minor-moderate syenite dyke material and quartz stringers, 0.5% fine pyrite cubes. Outcrop 1m N of POI_027.	A20-07954	6
A527903	713101	5382067.8	467	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Argillite	ARG	Rusty, weakly-moderately sheared argillite with 1% pyrite cubes, minor quartz along shear planes. Rubble or fractured outcrop 0.2m S of previous sample.	A20-07954	7
A527904	713101	5382067	467	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Quartz Vein	QV	Quartz vein with felsic dyke in weakly sheared argillite, trace-0.5% pyrite overall mainly as stringers in seds at margin of qv. Rubble 0.8m S of previous sample.	A20-07954	2.5
A527905	713100.5	5382066.5	467	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Quartz Vein	QV	Quartz vein in weakly sheared argillite, minor felsic dyke material, trace-0.5% pyrite overall mainly as stringers in seds at margin of qv. Rubble 0.5m SE of previous sample.	A20-07954	5
A527906	713101	5382067.1	467	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Argillite	ARG	Rusty, weakly-moderately sheared argillite with 4-5% pyrite cubes. Rubble 0.1m N of A527904.	A20-07954	16

A527907	713100.3	5382066.5	467	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Argillite	ARG	Rusty, weakly sheared argillite with moderate quartz veining, 3-4% pyrite. Rubble 0.2m W of A527905.	A20-07954	9
A527908	713099	5382067	467	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Quartz Vein	QV	Quartz vein in weakly-moderately sheared argillite, trace pyrite overall. Fractured outcrop 2m W of A527904 on opposite wall of trench.	A20-07954	5
A527909	713100	5382065	467	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Quartz Vein	QV	Quartz veining/stockwork in weakly sheared argillite, minor kspat/felsic dyke component, trace pyrite overall, generally 1-2cm veins. Rubble 1m E, 2m S of previous.	A20-07954	2.5
A527910	713100	5382062	467	17-Jul-20	AD Zone Trenches, MDI	Gold Creek	585698	Grab	Quartz Vein	QV	Quartz vein in argillite, minor kspat/felsic dyke component, 1-2% pyrite overall, more within the seds. Rubble 3m S of previous sample.	A20-07954	2.5
A527911	711612	5383360	472	17-Jul-20	Target C Eastern Logging Roads	Gold Creek	585698	Grab	Mafic Volcanic	MV	Altered mafic volcanic with minor quartz blebs, trace pyrite. Large 2 by 2 by 1m angular boulder close to logging road.	A20-07954	5
A527912	711993	5383382	473	17-Jul-20	Target C Eastern Logging Roads	Gold Creek	559705	Grab	Syenite	SYE	Very rusty, altered syenite with 1-2% coarse pyrite blebs. Angular rubble beside logging road, not far from conglomerate outcrop.	A20-07954	161
A685551	706541	5382649	463	27-Sep-20	Target B Western Claims	Gold Creek	597134	Grab	Intermediate Intrusive	ININ	Strongly silicified intermediate intrusive with minor <1mm pyrite cubes, minor-moderate rusty fractures. Some fractures trend 025 to 040 degrees. Fractured outcrop.	A20-12232	5
A685552	706541	5382649.5	463	27-Sep-20	Target B Western Claims	Gold Creek	597134	Grab	Intermediate Intrusive	ININ	Strongly silicified intermediate intrusive with minor <1cm quartz/quartz-feldspar stringers, minor green carb, minor Fe-carb, minor pyrite cubes. Same outcrop (or large boulder) 0.5m N of sample A685551.	A20-12232	12
A685553	706541.5	5382649.5	463	27-Sep-20	Target B Western Claims	Gold Creek	597134	Grab	Quartz Vein	QV	Glassy, white quartz vein. ~5-10cm bleb here although generally <1cm in outcrop, trending N/S. Fractures and stringers appear to dip moderately-steeply to W. Minor py cubes, minor strongly silicified wall rock. Outcrop 0.5 m E of sample A685552.	A20-12232	2.5
A685554	706541.5	5382650	463	27-Sep-20	Target B Western Claims	Gold Creek	597134	Grab	Intermediate Intrusive	ININ	Strongly silicified intermediate intrusive with minor-mod quartz veining, mod. frags with Fe-carb, minor green carb, minor pyrite cubes. One stringer with seeming comb texture perpendicular to frags. Fractured outcrop 0.5m N of sample A685553.	A20-12232	2.5
A685555	706540.5	5382651.5	463	27-Sep-20	Target B Western Claims	Gold Creek	597134	Grab	Intermediate Intrusive	ININ	Silicified intermediate intrusive with moderate glassy, white quartz veining, minor-moderate fractures with Fe-carb, minor pyrite. Outcrop 1.5m N, 1m W of sample A685554.	A20-12232	2.5
A685556	706540.2	5382651.2	463	27-Sep-20	Target B Western Claims	Gold Creek	597134	Grab	Quartz Vein	QV	~5cm glassy, white quartz vein, some intermediate intrusive wall rock, minor-moderate Fe-carb along fractures. Outcrop 0.3m SW of sample A685555.	A20-12232	2.5
A685557	706539.9	5382650.9	463	27-Sep-20	Target B Western Claims	Gold Creek	597134	Grab	Intermediate Intrusive	ININ	Silicified intermediate intrusive with minor quartz stringers, minor-moderate Fe-carb along fractures. Outcrop 0.3m SW of sample A685556.	A20-12232	12
A685558	706539.4	5382650.4	463	27-Sep-20	Target B Western Claims	Gold Creek	597134	Grab	Intermediate Intrusive	ININ	Strongly silicified intermediate intrusive with minor <1cm quartz/quartz-feldspar stringers, minor Fe-carb, minor green carb, minor pyrite. Outcrop 0.5m SW of sample A685557.	A20-12232	8
A685559	706539.7	5382650.1	463	27-Sep-20	Target B Western Claims	Gold Creek	597134	Grab	Intermediate Intrusive	ININ	Strongly silicified intermediate intrusive with minor green carb, minor blackish flecks, trace pyrite. Outcrop 0.3m SE of sample A685558.	A20-12232	2.5
A685560	706538.9	5382650.4	463	27-Sep-20	Target B Western Claims	Gold Creek	597134	Grab	Intermediate Intrusive	ININ	Strongly silicified intermediate intrusive with minor green carb, minor Fe-carb, trace pyrite. Fractured outcrop 0.5m W of sample A685558.	A20-12232	8
A685562	713839	5382487	462	28-Sep-20	I Zone Area Logging Roads Northwest of Lily Lake	Gold Creek	547757	Grab	Quartz Vein	QV	Glassy to sugary, white-grey quartz vein in syenite, trace pyrite in vein, wall rock. Fractured outcrop.	A20-12232	2.5

A685563	713835.5	5382485.5	462	28-Sep-20	I Zone Area Logging Roads Northwest of Lily Lake	Gold Creek	547757	Grab	Quartz Vein	QV	5cm glassy to sugary, white-grey quartz vein in syenite, trace-0.5% fine pyrite, trace galena, possible trace chalcocopyrite. Trends 103 degrees. Outcrop 3.5m W, 1.5m S of sample A685562.	A20-12232	153
A685564	713839	5382497	459	28-Sep-20	I Zone Area Logging Roads Northwest of Lily Lake	Gold Creek	547757	Grab	Syenite	SYE	Weakly-moderately silicified syenite with minor-moderate glassy, white-grey quartz veining, some rusty fractures, 3-4% py overall mainly as stringer associated with quartz vein as well as some up to 1cm blebs within quartz. Angular rubble next to trench.	A20-12232	50
A685565	714716.5	5382498	483	30-Sep-20	I Zone North Trench	Gold Creek	547760	Grab	Syenite	SYE	Weakly silicified syenite with 1cm white quartz vein, 1% pyrite as larger cubes/blebs in quartz, some disseminated <1mm cubes in syenite. Outcrop.	A20-12232	45600
A685566	714724	5382497	487	30-Sep-20	I Zone North Trench	Gold Creek	547760	Grab	Quartz Vein	QV	Glassy, grey-white quartz vein at contact between 2m syenite dyke and banded iron formation, minor-moderate Fe-carb, some fragments of wall rock, trace subhedral pyrite cubes. Outcrop.	A20-12232	355
A685567	714696	5382492	483	30-Sep-20	I Zone North Trench	Gold Creek	547760	Grab	Quartz Vein	QV	~15cm white quartz vein, rusty, minor-moderate Fe-carb. Trends 225 with steep dip NW. Outcrop.	A20-12232	142
A685568	714695	5382491	483	30-Sep-20	I Zone North Trench	Gold Creek	547760	Grab	Quartz Vein	QV	Same vein as previous, 1m SW of A685567, where it changes orientation to N/S. Bits of syenite wall rock, minor Fe-carb, 0.5% subhedral pyrite cubes.	A20-12232	6830
A685569	714694	5382491	483	30-Sep-20	I Zone North Trench	Gold Creek	547760	Grab	Syenite	SYE	Syenite with 1-2cm white quartz vein, minor Fe-carb, trace pyrite. Outcrop 1m W of sample A685568.	A20-12232	619
A685570	714687	5382495	485	30-Sep-20	I Zone North Trench	Gold Creek	547760	Grab	Syenite	SYE	Syenite with minor 1-2mm quartz stringers, minor Fe-carb, 1-2% pyrite as stringer on margin and some scattered in wall rock. Outcrop.	A20-12232	12300
A685571	714545	5382596	484	30-Sep-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Banded Iron Formation	BIF	Banded iron formation with moderate irregular, glassy, white quartz veining, minor silvery-green mica, minor Fe-carb, trace pyrite. Rubble in rubble field north of logging road.	A20-12232	7
A685572	714545	5382594	484	30-Sep-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Banded Iron Formation	BIF	Banded iron formation with moderate irregular, glassy, white quartz veining, minor kspars with the quartz, minor mica, minor Fe-carb, trace pyrite. Rubble.	A20-12232	2.5
A685573	714544	5382600	485	30-Sep-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Quartz Vein	QV	Glassy, white quartz vein in banded iron formation, minor-moderate mica, minor-moderate Fe-carb. Rubble.	A20-12232	6
A685574	714539	5382607	487	30-Sep-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Quartz Vein	QV	5cm glassy, white quartz vein in banded iron formation, minor mica. Rubble.	A20-12232	2.5
A685575	714535	5382604	486	30-Sep-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Quartz Vein	QV	5cm glassy, white quartz vein in banded iron formation, minor kspars with the quartz, minor mica. Rubble.	A20-12232	2.5
A685576	714532	5382610	487	30-Sep-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Banded Iron Formation	BIF	Banded iron formation with moderate 3-4cm glassy, white quartz veining, minor Fe-carb, minor mica. Rubble.	A20-12232	2.5
A685577	714525	5382613	488	30-Sep-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Banded Iron Formation	BIF	Banded iron formation with moderate glassy, white quartz veining, minor kspars with the quartz, minor mica. Rubble.	A20-12232	2.5
A685578	714499	5382634	490	30-Sep-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Banded Iron Formation	BIF	Banded iron formation with minor-moderate 1-2cm quartz stringer, trace-0.5% disseminated <1mm pyrite cubes. Rubble.	A20-12232	2.5

A685579	714493	5382637	488	30-Sep-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Banded Iron Formation	BIF	Banded iron formation with 1-2cm glassy, white quartz vein, minor kspar with vein. Rubble.	A20-12232	2.5
A685580	714788	5382424	495	01-Oct-20	I Zone South Trench	Gold Creek	547758	Grab	Iron Formation	IF	Iron formation with moderate 1-2cm quartz stringers, minor-moderate Fe-carb, rusty, outcrop at contact with syenite.	A20-12232	39
A685581	714787	5382421	495	01-Oct-20	I Zone South Trench	Gold Creek	547758	Grab	Quartz Vein	QV	5cm glassy, white quartz vein in syenite, may trend ~020 degrees. Outcrop 3m SSW of sample A685580.	A20-12232	137
A685582	714794	5382425	498	01-Oct-20	I Zone South Trench	Gold Creek	547758	Grab	Syenite	SYE	Syenite with trace pyrite, minor green mica, minor 1mm quartz stringer. Outcrop.	A20-12232	17
A685583	714794.5	5382424.5	498	01-Oct-20	I Zone South Trench	Gold Creek	547758	Grab	Quartz Vein	QV	3-4cm quartz vein with minor Fe-carb, minor kspar, trace-0.5% pyrite. 355 degree orientation. Outcrop 0.5m SE of sample A685582.	A20-12232	2770
A685584	714798.5	5382420.5	498	01-Oct-20	I Zone South Trench	Gold Creek	547758	Grab	Quartz Vein	QV	3-4cm quartz vein with minor syenite wall rock, minor Fe-carb, minor pyrite. Outcrop 4m SE of sample A685583.	A20-12232	1190
A685585	714815	5382419	500	01-Oct-20	I Zone South Trench	Gold Creek	547758	Grab	Syenite	SYE	Syenite with 1cm glassy, white quartz stringer, minor Fe-carb, trace pyrite. Outcrop adjacent to channel sample.	A20-12232	481
A685586	714815	5382416	500	01-Oct-20	I Zone South Trench	Gold Creek	547758	Grab	Iron Formation	IF	Rusty iron formation with <1cm pyrite stringer, 5% overall. Outcrop 3m S of sample A685585.	A20-12232	859
A685587	714824	5382415	499	01-Oct-20	I Zone South Trench	Gold Creek	547758	Grab	Syenite	SYE	Syenite with moderate 1-2cm glassy, white quartz stringers, minor Fe-carb, trace pyrite. Outcrop.	A20-12232	1440
A685588	714828	5382420	500	01-Oct-20	I Zone South Trench	Gold Creek	547758	Grab	Syenite	SYE	Syenite with moderate 1-2cm quartz stringer, minor-moderate Fe-carb staining, minor <1mm pyrite cubes in wall rock. Rubble.	A20-12232	274
A685589	714832	5382416	498	01-Oct-20	I Zone South Trench	Gold Creek	547758	Grab	Quartz Vein	QV	2-4cm glassy, white quartz vein in syenite, minor-moderate Fe-carb. Rubble adjacent to trench.	A20-12232	127
A685590	714849	5382416	501	01-Oct-20	I Zone South Trench	Gold Creek	547758	Grab	Quartz Vein	QV	2-3cm glassy, white quartz vein in syenite, minor wall rock, minor kspar, minor Fe-carb, minor pyrite in quartz and wall rock. Rubble adjacent to trench.	A20-12232	509
A685591	714764	5382512.3	488	01-Oct-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Quartz Vein	QV	Quartz gash vein in banded iron formation, minor Fe-carb, minor pyrite. Outcrop.	A20-12232	2.5
A685592	714596	5382550	477	01-Oct-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Quartz Vein	QV	~5cm quartz vein in banded iron formation, minor mica. Wall rock is somewhat sheared at ~100 degrees.	A20-12232	2.5
A685593	714595	5382550.3	477	01-Oct-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Quartz Vein	QV	~5cm white quartz vein with minor mica. Fractured outcrop 1m WNW of sample A685592.	A20-12232	2.5
A685594	714628	5382551	478	01-Oct-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Quartz Vein	QV	>5cm glassy, white quartz vein with minor kspar, minor silvery-green mica. Rubble.	A20-12232	2.5
A685595	714630	5382551	478	01-Oct-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Quartz Vein	QV	~5cm quartz vein in banded iron formation, minor kspar, minor mica. Rubble 2m E of sample A685594.	A20-12232	2.5
A685596	714632	5382551	478	01-Oct-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Quartz Vein	QV	~5cm glassy, white quartz vein with minor magnetite-rich wall rock. Fractured outcrop 2m E of sample A685595.	A20-12232	2.5
A685597	714632	5382552.5	478	01-Oct-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Quartz Vein	QV	5-10cm quartz vein in sheared BIF. Shear trends ~135 degrees unless mag affects reading, but vein trends more NNW with ~55 degree dip to ENE, x-cutting the shear and seeming to 'blow out' within the shear somewhat. 1.5m N of sample A685596.	A20-12232	2.5

A685598	714632	5382554.5	478	01-Oct-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Iron Formation	IF	Iron formation with minor quartz blebs. Rubble 2m N of sample A685597.	A20-12232	2.5
A685599	714718.5	5382498	483	02-Oct-20	I Zone North Trench	Gold Creek	547760	Grab	Quartz Vein	QV	5cm glassy, white to grey (on E margin) quartz stringer, minor Fe-carb, minor kspar 'streaks' within quartz, trace-1% pyrite blebs, more within grey quartz. Vein trends N/S. 2m E of sample A685565.	A20-12232	1310
A685600	714720.5	5382496	483	02-Oct-20	I Zone North Trench	Gold Creek	547760	Grab	Quartz Vein	QV	2-3cm glassy, white to locally smoky grey quartz stringer, minor-moderate Fe-carb, some rusty fractures, trace-0.5% pyrite often within grey quartz. N/S vein 2m SE of sample A685599.	A20-12232	975
A685601	714716.4	5382498	483	02-Oct-20	I Zone North Trench	Gold Creek	547760	Grab	Syenite	SYE	Syenite with moderate glassy, white quartz stringers, 1% pyrite, usually as cubes up to 0.5cm. Outcrop in ~same location as A685565.	A20-12232	33200
A685602	714747	5382495	497	02-Oct-20	I Zone North Trench	Gold Creek	547760	Grab	Quartz Vein	QV	5cm glassy, white quartz vein in syenite dyke, no pyrite observed. Trends N in outcrop.	A20-12232	5420
A685603	714694	5382491.5	483	02-Oct-20	I Zone North Trench	Gold Creek	547760	Grab	Syenite	SYE	Syenite with minor-moderate quartz stringers, 2% pyrite overall as blowout within stringer. Outcrop 0.5m N of sample A685569.	A20-12232	10900
A685604	714694	5382491.4	483	02-Oct-20	I Zone North Trench	Gold Creek	547760	Grab	Quartz Vein	QV	Glassy, white quartz vein with minor Fe-carb, up to 5% pyrite, 0.5% overall. Outcrop 0.1m S of sample A685603.	A20-12232	3080
A685605	714694	5382490.5	483	02-Oct-20	I Zone North Trench	Gold Creek	547760	Grab	Quartz Vein	QV	Rusty, fractured quartz from 5-15cm white-grey vein, minor Fe-carb, minor pyrite specks locally within grey quartz. Vein trends ~N/S, outcrop 1m S of A685603.	A20-12232	14800
A685606	714684	5382493	488	02-Oct-20	I Zone North Trench	Gold Creek	547760	Grab	Quartz Vein	QV	10cm glassy, white to locally smoky grey quartz vein in syenite, minor Fe-carb, rusty fractures, minor pyrite. Rubble in trench.	A20-12232	641
A685607	713684	5382499	463	02-Oct-20	I Zone Area Logged Area Northwest of Lily Lake	Gold Creek	547757	Grab	Quartz Vein	QV	Glassy, white-grey quartz stringer. Trends 120 degrees. Host is dark grey, fine-grained with 'blebs' of kspar, minor pyrite (none in sample however which is just quartz). Veins dwindle to SE and increase in concentration to NW.	A20-12232	2.5
A685608	713677	5382462	465	02-Oct-20	I Zone Area Logged Area Northwest of Lily Lake	Gold Creek	547757	Grab	Syenite	SYE	Syenite with 2-3cm glassy, white-grey quartz stringer. Outcrop.	A20-12232	2.5
A685609	713662	5382470	464	02-Oct-20	I Zone Area Logged Area Northwest of Lily Lake	Gold Creek	547757	Grab	Quartz Vein	QV	Glassy, white quartz stringer in fine-grained, dark grey rock. Outcrop.	A20-12232	2.5
A685610	713729	5382412	459	02-Oct-20	I Zone Area Logging Roads Northwest of Lily Lake	Gold Creek	547757	Grab	Quartz Vein	QV	10-15cm glassy, white quartz stringer with minor <1mm kspar stringer. Trends ~east-west in outcrop.	A20-12232	2.5
A685611	713744	5382423	462	02-Oct-20	I Zone Area Logging Roads Northwest of Lily Lake	Gold Creek	547757	Grab	Quartz Vein	QV	7cm quartz vein with iron formation fragments, trace-0.5% pyrite mainly within fragments. Rubble.	A20-12232	2.5
A685612	712298	5383335	456	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Granodiorite	GRANO	Rusty, altered granodiorite with 1-5% blebby pyrite. Fractured outcrop.	A20-12619	205
A685613	712297	5383334.7	456	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Granodiorite	GRANO	Granodiorite with 0.5cm glassy, white quartz stringer, 0.5% blebby pyrite. Fractured outcrop 1m WSW of sample A685612.	A20-12619	152
A685614	712300	5383331.7	456	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Syenite	SYE	Syenite with minor quartz blebs, 1-2% blebby pyrite. Rubble 3m SE of sample A685613.	A20-12619	30
A685615	712293.5	5383334.7	456	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Granodiorite	GRANO	Granodiorite with moderate 1cm or less sub-parallel glassy, white quartz stringers, 1% blebby pyrite. Fractured outcrop 3.5m W of sample A685613.	A20-12619	1030

A685616	712293	5383334.2	456	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Granodiorite	GRANO	Medium-grained granodiorite with 1-2% blebby pyrite. Fractured outcrop/talus 0.5m SW of sample A685615.	A20-12619	73
A685617	712291	5383334.2	456	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Granodiorite	GRANO	Medium-grained granodiorite with minor-moderate 1cm or less glassy, white quartz stringers, 1% blebby pyrite, some within quartz, trace chalcopyrite. Fractured outcrop/talus 2m W of sample A685616.	A20-12619	292
A685618	712285	5383336	456	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Monzonite	MONZ	Monzonite/syenite with moderate <1cm glassy, white sub-parallel quartz stringers, 1% pyrite as local blebby clusters, some in vein. Outcrop 4m WNW of sample A685620.	A20-12619	4070
A685619	712298.3	5383336	457	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Monzonite	MONZ	Weakly-moderately sheared, strongly fractured monzonite with minor quartz blebs, 1% blebby pyrite. Shear may strike 160-165 degrees but difficult to determine. Some 100-110 fracs nearby in outcrop as well. 1m NNE of sample A685612.	A20-12619	51
A685620	712289	5383334.8	456	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Granodiorite	GRANO	Medium-grained granodiorite/monzonite with moderate 1-2cm glassy, white-grey quartz stringer, trace-0.5% pyrite overall, 0.5% in wall rock and minor in quartz. Outcrop 2m WNW of sample A685617.	A20-12619	644
A685621	712291	5383339	458	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Quartz Vein	QV	2-3cm quartz vein in weakly silicified monzonite/syenite, 0.5% pyrite blebs. Sample mainly quartz. Frost heave on N side of previous sampled outcrop.	A20-12619	135
A685622	712293	5383341	458	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Syenite	SYE	Very rusty, altered syenite with 5% blebby pyrite. Frost heave 2m NE of sample A685621.	A20-12619	400
A685623	712295	5383341	458	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Monzonite	MONZ	Monzonite with 1% blebby pyrite. Frost heave 2m E of sample A685622.	A20-12619	174
A685624	712295	5383339	458	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Monzonite	MONZ	Rusty monzonite/granodiorite with 1-2% blebby pyrite. Frost heave 2m S of sample A685623.	A20-12619	212
A685625	712292	5383339	458	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Monzonite	MONZ	Very rusty, altered monzonite with 1-2% blebby pyrite. Outcrop 1m E of sample A685621.	A20-12619	216
A685626	712184	5383338	461	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Syenite	SYE	Syenite with 0.5% pyrite blebs with rusty haloes. Rubble on logging road in the vicinity of syenite outcrop.	A20-12619	242
A685627	712169	5383333	463	03-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Syenite	SYE	Syenite with moderate mafic fragments, 0.5% pyrite blebs. Rubble in vicinity of sample A685626.	A20-12619	32
A685628	712723	5384412	481	03-Oct-20	Logging Roads in Northeastern claims	Gold Creek	585697	Grab	Quartz Vein	QV	7cm+ glassy, white-grey quartz vein. Trace pyrite on margin in greyer quartz. Rubble on side of logging road, some veins in outcrop nearby but massive outcrop.	A20-12619	174
A685629	712724	5384411	481	03-Oct-20	Logging Roads in Northeastern claims	Gold Creek	585697	Grab	Quartz Vein	QV	6cm+ glassy, white-grey quartz vein. Trace pyrite on margin in greyer quartz. Rubble 1m SE of sample A685628.	A20-12619	11
A685630	710709	5383365	473	04-Oct-20	Target C Western Logged Area	Gold Creek	585698	Grab	Quartz Vein	QV	5cm glassy, white quartz vein with minor syenite component. Frost heave beneath tree roots adjacent to BIF with quartz veins which trends ~ESE.	A20-12619	2.5
A685631	710645	5383368	468	04-Oct-20	Target C Western Logging Roads	Gold Creek	585697	Grab	Quartz Vein	QV	10cm+ glassy, white-grey quartz vein in moderately magnetic, biotitic sediments, trace pyrite in wall rock. Rubble in vicinity of POI_078.	A20-12619	2.5
A685632	710646	5383368	468	04-Oct-20	Target C Western Logging Roads	Gold Creek	585697	Grab	Quartz Vein	QV	12cm+ glassy, white-grey quartz vein with minor thin syenite 'stringers', minor fractures, trace pyrite in patches of wall rock. Rubble 1m E of sample A685631.	A20-12619	2.5
A685633	710649	5383368	468	04-Oct-20	Target C Western Logging Roads	Gold Creek	585697	Grab	Quartz Vein	QV	13cm+ glassy, white-grey quartz vein, minor syenite along fractures, trace pyrite in wall rock. Rubble 3m E of sample A685632.	A20-12619	2.5
A685634	710648	5383367	468	04-Oct-20	Target C Western Logging Roads	Gold Creek	585697	Grab	Quartz Vein	QV	Glassy, white-grey quartz veining with minor syenite, trace-0.5% pyrite blebs. Rubble 1m SW of sample A685633.	A20-12619	12

A685635	710648	5383366	468	04-Oct-20	Target C Western Logging Roads	Gold Creek	585697	Grab	Sediment	SED	Dark grey sediment with moderate quartz veining, minor syenite. Rubble 1m S of sample A685634.	A20-12619	2.5
A685636	710649	5383366	468	04-Oct-20	Target C Western Logging Roads	Gold Creek	585697	Grab	Quartz Vein	QV	15cm+ glassy, white-grey quartz vein with minor fractures, minor rust. Rubble 1m E of sample A685635.	A20-12619	2.5
A685637	710648	5383365	468	04-Oct-20	Target C Western Logging Roads	Gold Creek	585697	Grab	Quartz Vein	QV	10cm+ glassy, white-grey quartz vein with minor sediment wall rock, minor syenite, trace pyrite in wall rock. Rubble 1m SW of sample A685636.	A20-12619	2.5
A685638	710647.5	5383364.5	468	04-Oct-20	Target C Western Logging Roads	Gold Creek	585697	Grab	Quartz Vein	QV	12cm+ glassy, white-grey quartz vein with minor sediment wall rock, minor syenite, trace pyrite in wall rock. Rubble 0.5m S of sample A685637.	A20-12619	2.5
A685639	710647.5	5383363	468	04-Oct-20	Target C Western Logging Roads	Gold Creek	585697	Grab	Quartz Vein	QV	5cm glassy, white-grey quartz vein with minor sediment wall rock, minor syenite, trace pyrite in wall rock. Rubble 1.5m S of sample A685637.	A20-12619	2.5
A685640	710654	5383364	469	04-Oct-20	Target C Western Logging Roads	Gold Creek	585697	Grab	Quartz Vein	QV	10cm glassy, white-grey quartz gash vein in sediment outcrop, minor syenite.	A20-12619	2.5
A685641	710496	5381790	466	04-Oct-20	Target D Logging Road	Gold Creek	597137	Grab	Granodiorite	GRANO	Weakly silicified granodiorite with minor-moderate glassy, white quartz veining with fractures, minor pyrite. Fractured outcrop.	A20-12619	6
A685642	710495.5	5381791.5	466	04-Oct-20	Target D Logging Road	Gold Creek	597137	Grab	Granodiorite	GRANO	Weakly silicified granodiorite with minor-moderate glassy, white quartz veining with fractures, minor pyrite. Fractured outcrop 1.5m NNW of sample A685641.	A20-12619	6
A685643	710504	5381809	464	04-Oct-20	Target D Logging Road	Gold Creek	597137	Grab	Intermediate Tuff	ITUFF	Rusty, silicified intermediate tuff (? - dark grey matrix, white phenocrysts), trace-0.5% pyrite blebs. Fractured outcrop.	A20-12619	6
A685644	710476	5381792	467	04-Oct-20	Target D Logging Road	Gold Creek	597137	Grab	Granodiorite	GRANO	Granodiorite with 1cm glassy, white quartz stringer, trace pyrite cubes. Fractured outcrop.	A20-12619	5
A685645	710389	5381853	467	04-Oct-20	Target D Logging Road	Gold Creek	597136	Grab	Iron Formation	IF	Very rusty, strongly magnetic fragment (probable iron formation) in possible intermediate tuff outcrop.	A20-12619	9
A685646	710391	5381852.5	467	04-Oct-20	Target D Logging Road	Gold Creek	597136	Grab	Sediment	SED	Very rusty, non-magnetic fragment (sediment?) in intermediate tuff outcrop 2m ESE of sample A685645.	A20-12619	15
A685647	712650	5384020	474	05-Oct-20	Logging Roads in Northeastern claims	Gold Creek	585698	Grab	Mafic Volcanic	MV	Rusty, weakly silicified mafic volcanic with minor quartz blebs, 0.5% blebby pyrite. Rubble on side of logging road, numerous blocks.	A20-12619	24
A685648	712516	5383487	472	05-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Intermediate Intrusive	ININ	Rusty, fine-grained, weakly-moderately silicified intermediate intrusive with quartz eyes, 0.5% fine disseminated pyrite. Angular float or rubble next to logging road.	A20-12619	16
A685649	712493	5383439	470	05-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Gabbro	GAB	Coarse-grained gabbro with trace pyrite blebs. Fractured outcrop.	A20-12619	2.5
A685650	712481	5383335	469	05-Oct-20	Target C Eastern Logged Areas	Gold Creek	599705	Grab	Mafic Volcanic	MV	Rusty, very fine-grained, weakly silicified mafic volcanic with trace-0.5% disseminated pyrite. Outcrop.	A20-12619	2.5
A685751	712471	5383327	466	05-Oct-20	Target C Eastern Logged Areas	Gold Creek	599705	Grab	Mafic Volcanic	MV	Rusty, silicified mafic volcanic with minor pyrite. Outcrop.	A20-12619	7
A685752	712458	5383324	465	05-Oct-20	Target C Eastern Logged Areas	Gold Creek	599705	Grab	Mafic Volcanic	MV	Strongly silicified mafic volcanic with minor rust. Talus block.	A20-12619	5
A685753	712153	5383422	470	05-Oct-20	Target C Eastern Logged Areas	Gold Creek	599705	Grab	Felsic Intrusive	FI	Strongly silicified felsic intrusive with minor <1cm quartz stringers, trace pyrite specks overall, some in quartz. Somewhat rusty surface. Outcrop.	A20-12619	2.5
A685754	712148	5383412	474	05-Oct-20	Target C Eastern Logged Areas	Gold Creek	599705	Grab	Felsic Intrusive	FI	Strongly silicified felsic intrusive with minor quartz stringers, trace-0.5% pyrite specks. Outcrop.	A20-12619	17
A685755	710948	5381977	462	06-Oct-20	Target D Logging Road	Gold Creek	597136	Grab	Granodiorite	GRANO	Weakly silicified granodiorite with minor 1cm quartz stringer, minor rust patches. Stringer trends 010 degrees, some perpendicular stringers in outcrop as well (ladder veining?).	A20-12619	2.5
A685756	702993	5382188	495	07-Oct-20	Target A West of Dakota Lake	Gold Creek	597135	Grab	Mafic Volcanic	MV	Mafic volcanic with moderate parallel quartz-carb stringers averaging 0.5cm, somewhat rusty. Frost heave.	A20-12619	11

A685757	703404	5382156	481	07-Oct-20	Target A West of Dakota Lake	Gold Creek	597135	Grab	Mafic Volcanic	MV	Rusty mafic volcanic with 0.5% pyrite as stringers/cubes. Frost heave.	A20-12619	14
A685758	703208	5381847	493	07-Oct-20	Target A West of Dakota Lake	Gold Creek	597135	Grab	Quartz Vein	QV	~6cm glassy to sugary, grey-white quartz vein in syenite (bit more mafic than usual syenite). Vein trends 035 degrees, appears to dip N somewhat. Syenite has some weak fabric at 035 degrees as well.	A20-12619	2.5
A685759	703208.5	5381849	493	07-Oct-20	Target A West of Dakota Lake	Gold Creek	597135	Grab	Quartz Vein	QV	Same vein as sample A685758, 2m to NNE. Glassy to sugary, white-grey quartz vein in syenite.	A20-12619	5
A685760	704616	5382025	487	07-Oct-20	Target A Southwest of Zero Lake	Gold Creek	597135	Grab	Iron Formation	IF	Rusty iron formation with moderate quartz veining, 1% visible pyrite in wall rock and some in quartz. Fractured outcrop/talus.	A20-12619	5
A685761	704719	5381972	481	07-Oct-20	Target A Southwest of Zero Lake	Gold Creek	597135	Grab	Sediment	SED	Dark grey, fine-grained sediment (?) with moderate glassy, white quartz veining/blebs, trace pyrite in quartz. Fractured outcrop.	A20-12619	2.5
A685762	712423	5383045	449	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Intermediate Tuff	ITUFF	Massive, medium-grained, grey, intermediate-mafic tuff (?) with feldspar-quartz phenocrysts, minor 1mm qtz-kspars stringer, minor pyrite overall, rusty rind. Large angular rubble at trench.	A20-12619	6
A685763	712423	5383044.5	449	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	6cm+ glassy, white quartz vein, minor kspars, minor fractures, minor Fe-carb, trace pyrite cubes/blebs. Large angular rubble 0.5m S of sample A685762.	A20-12619	164
A685764	712423	5383043.5	449	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	9cm+ glassy, white to greyish quartz vein, minor-moderate fracturing, minor Fe-carb, some bits of wall rock. Large angular rubble 1m S of sample A685763.	A20-12619	2.5
A685765	712427	5383047	447	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Mafic Tuff	MTUFF	Rusty mafic tuff with minor quartz, rusty rind, possible minor Fe-carb. Outcrop.	A20-12619	36
A685766	712426.8	5383046.8	447	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	Glassy, white-grey quartz vein with minor Fe-carb. Outcrop 0.2m SW of A685765.	A20-12619	2.5
A685767	712423	5383041.5	449	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	Glassy, white quartz vein in sheared rock, minor Fe-carb, trace chalcopyrite. Outcrop 2m S of sample A685764.	A20-12619	14
A685768	712426	5383041.5	449	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	2-4cm glassy, white-grey quartz vein with syenite dyke, minor-moderate Fe-carb, trace-0.5% pyrite mainly within syenite. Both trend ~300 degrees along shear.	A20-12619	6
A685769	712429	5383048	448	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Syenite	SYE	Syenite with minor 1-2mm glassy, white-grey quartz stringers, 1% disseminated pyrite. Outcrop 4m N of POI_098.	A20-12619	146
A685770	712432	5383043	448	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	2-3cm glassy, white quartz vein in sheared mafic tuff. Trace pyrite, some contorted quartz banding in wall rock. Fractured outcrop 3m ESE of POI_098.	A20-12619	109
A685771	712431	5383039	448	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Mafic Tuff	MTUFF	Sheared mafic tuff with minor-moderate quartz blebs along shear planes, 0.5% fine disseminated pyrite. Outcrop 2m E of POI_097.	A20-12619	12
A685772	712431	5383033	448	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Monzonite	QMONZ	Silicified quartz monzonite with minor Fe-carb patches, 0.5% disseminated pyrite. Some 020 degree fractures in outcrop.	A20-12619	7
A685773	712430.5	5383032.5	448	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Monzonite	QMONZ	Silicified quartz monzonite with minor-moderate Fe-carb patches, 0.5% disseminated pyrite. Outcrop 0.5m SW of sample A685772.	A20-12619	46
A685774	712433	5383031	448	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Monzonite	QMONZ	Silicified quartz monzonite with minor Fe-carb patches, 0.5% disseminated pyrite. Outcrop 2m SE of sample A685772.	A20-12619	12
A685775	712430.5	5383031	448	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Monzonite	QMONZ	Silicified quartz monzonite with minor Fe-carb patches, 0.5% disseminated pyrite. Outcrop 1.5m S of sample A685773.	A20-12619	98
A685776	712430.2	5383029	448	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Monzonite	QMONZ	Silicified quartz monzonite with minor-moderate Fe-carb patches, 0.5% disseminated pyrite. Outcrop 2m S and 0.3m W of sample A685775.	A20-12619	10

A685777	712430.2	5383027.5	448	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Monzonite	QMONZ	Silicified quartz monzonite with minor-moderate Fe-carb patches or in fractures, 0.5% disseminated pyrite. Outcrop 1.5m S of sample A685776.	A20-12619	22
A685778	712432.2	5383027.5	448	08-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Monzonite	QMONZ	Silicified quartz monzonite with minor Fe-carb patches, 0.5% disseminated pyrite. Outcrop 2m E of sample A685777.	A20-12619	75
A685779	712228	5383333	467	09-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Mafic Volcanic	MV	Weakly sheared, rusty mafic volcanic with 0.5% disseminated to blebby pyrite. Shear/fracturing at 342/77 degrees E; just above there is stronger shearing/fracturing at 307/77 degrees E.	A20-12619	5
A685780	712232	5383333	467	09-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Mafic Volcanic	MV	Weakly sheared, rusty mafic volcanic with 0.5% disseminated pyrite cubes. Outcrop 4m E of sample A685779.	A20-12619	2.5
A685781	712232.7	5383332.9	467	09-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Mafic Volcanic	MV	Weakly sheared, rusty mafic volcanic with 0.5% disseminated pyrite cubes. Outcrop 0.7m E, 0.1m S of sample A685780.	A20-12619	2.5
A685782	712234	5383332.5	467	09-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Mafic Volcanic	MV	Mafic volcanic with minor-moderate 1-2cm quartz-carb veins with syenite dykelets, minor pyrite, some fracturing at 140 degrees. Outcrop 1.5m ESE of sample A685781.	A20-12619	5
A685783	712235	5383332.5	467	09-Oct-20	Target C Eastern Logging Roads	Gold Creek	599705	Grab	Mafic Volcanic	MV	Mafic volcanic with minor-moderate irregular 1-2cm quartz-carb veins with syenite dykelets, minor pyrite. Outcrop 1m E of sample A685782.	A20-12619	8
A685784	712645	5383009	459	09-Oct-20	S1 Zone Eastern Trench	Gold Creek	599705	Grab	Monzonite	MONZ	Monzonite with minor 1cm quartz stringer, minor Fe-carb in patches or in fractures, 1% disseminated pyrite in monzonite, trace in quartz. Angular rubble 3m SW of sample A685785.	A20-12619	218
A685785	712647	5383011	459	09-Oct-20	S1 Zone Eastern Trench	Gold Creek	599705	Grab	Monzonite	MONZ	Monzonite with minor 1cm glassy white quartz stringer, 0.5% fine disseminated pyrite in monzonite, minor Fe-carb, possible minor specular hematite. Veining at 355 to 020 degrees, fracturing at 055 degrees, x-cutting stringers. Fractured outcrop.	A20-12619	362
A685786	712650	5383014	459	09-Oct-20	S1 Zone Eastern Trench	Gold Creek	599705	Grab	Monzonite	MONZ	Monzonite with minor 1-2mm glassy white quartz stringers, minor Fe-carb, minor specular hematite, 1% disseminated pyrite. Rubble 3m NW of sample A685785.	A20-12619	107
A685787	712637	5383017	454	09-Oct-20	S1 Zone Eastern Trench	Gold Creek	599705	Grab	Monzonite	MONZ	Monzonite with minor-moderate 1cm or less glassy, white qtz stringers, some thinner stringers offshooting from the 1cm vein, minor Fe-carb, minor specular hematite, 0.5% pyrite overall disseminated in monzonite or as blebs in stringers. Fractured outcrop.	A20-12619	1130
A685788	712637.2	5383017	454	09-Oct-20	S1 Zone Eastern Trench	Gold Creek	599705	Grab	Monzonite	MONZ	Monzonite with min.-mod. 1-2cm or less glassy, white qs, some thinner stringers offshooting from the 1-2cm vein, minor Fe-carb, minor specular hematite, 0.5% py overall diss. in monz. or as blebs in stringers. Fractured outcrop 0.2cm E of sample A685787.	A20-12619	563
A685789	712635	5383017.5	454	09-Oct-20	S1 Zone Eastern Trench	Gold Creek	599705	Grab	Monzonite	MONZ	Monzonite with minor-moderate <1cm glassy white quartz stringers, minor Fe-carb, minor specular hematite, trace-0.5% pyrite, some large blebs within quartz. Fractured outcrop 2m WNW of sample A685787.	A20-12619	864
A685790	712636	5383018.5	454	09-Oct-20	S1 Zone Eastern Trench	Gold Creek	599705	Grab	Quartz Vein	QV	1-2cm glassy, white quartz stringer in monzonite, minor Fe-carb, minor hematite staining and specular hematite, trace-1% pyrite as local blebby clusters. Fractured outcrop 1m NE of sample A685789.	A20-12619	372
A685791	712525	5383016	449	09-Oct-20	S1 Zone Central Trench	Gold Creek	599705	Grab	Monzonite	MONZ	Monzonite with minor <1cm glassy, white quartz stringers, minor disseminated pyrite and some in stringers. Trends 005 degrees subvertical, with offshooting vein dipping shallowly to moderately to the west. Outcrop.	A20-12619	597

A685792	712527.5	5383016	449	09-Oct-20	S1 Zone Central Trench	Gold Creek	599705	Grab	Monzonite	MONZ	Monzonite with minor <1cm quartz stringers, minor Fe-carb, minor disseminated pyrite. Rubble or fractured outcrop 2.5m E of sample A685791.	A20-12619	753
A685793	712428	5383020	444	09-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	5cm+ glassy, white quartz vein, minor monzonite wallrock, minor pyrite overall in bits of wall rock. 012 degree trend to vein in outcrop.	A20-12619	8
A685794	712427	5383017.5	444	09-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	3-5cm glassy, white to locally grey quartz vein with minor Fe-carb, minor specular hematite. 015 degree fractures x-cutting. Outcrop 2.5m SSW of sample A685793.	A20-12619	170
A685795	712425	5383019.5	444	09-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	20cm+ glassy, white quartz vein, somewhat rusty, trace pyrite. 017 degree fractures in quartz. Outcrop 2m NW of sample A685794.	A20-12619	11
A685796	712423.5	5383021	444	09-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	Up to 60cm wide quartz vein with minor Fe-carb, trace pyrite. Appears to trend ~055 degrees. Outcrop 1.5m NW of sample A685795.	A20-12619	20
A685797	712423	5383019	444	09-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	1-2cm glassy, white quartz vein in monzonite, minor Fe-carb, minor pyrite cubes/blebs. Fractured outcrop 2m SSW of sample A685796, adjacent stringers in outcrop appear to trend 0-10 degrees.	A20-12619	10
A685798	712421	5383019.5	444	09-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Monzonite	MONZ	Monzonite with moderate glassy, white quartz veining, trace-0.5% pyrite overall in monzonite and quartz. Quartz vein offshoots from same vein as sample A685796. Fractured outcrop 2m WNW of sample A685797.	A20-12619	90
A685799	712421	5383021	444	09-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Monzonite	MONZ	Monzonite with minor 1-3mm quartz stringers, minor Fe-carb, minor kspars within qtz. 045 degree offshoot of 5cm+ 020 degree vein, 357 degree fractures x-cutting. 1.5m N of sample A685798.	A20-12619	10
A685800	712421	5383022	444	09-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	2-3cm glassy, white quartz vein in monzonite, minor pyrite in quartz. Variable orientation of veining, 357 degree fractures. 1m N of sample A685799.	A20-12619	5120
A685851	712420	5383022	444	09-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	Glassy, white to locally grey quartz veins with minor pyrite in the quartz and in minor monzonite wall rock. Appears to be intersection of 015 degree and 060 degree veins here. 1m W of sample A685800.	A20-12619	8
A685852	712419.5	5383020.5	444	09-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	2-3cm quartz vein with some monzonite wall rock, minor-moderate Fe-carb, minor pyrite. 030 degree/subvertical vein, although some offshoots dip moderately to the SE. 1.5m SSW of sample A685851.	A20-12619	12
A685853	712417.5	5383020.5	444	09-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	Quartz veining in monzonite from 10cm+ glassy, white to locally grey quartz vein, minor-moderate Fe-carb, minor pyrite. Outcrop 2m W of sample A685852.	A20-12619	12
A685854	712417.5	5383022	444	09-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Quartz Vein	QV	1-2cm glassy, white quartz stringer in monzonite, minor pyrite overall, some <1cm cubes in quartz. Veins trend N/S here, fairly steep dip to E. 140 degree fractures x-cutting. 1.5m N of sample A685853.	A20-12619	21
A685855	712415.5	5383024	444	09-Oct-20	S1 Zone Western Trench	Gold Creek	599705	Grab	Monzonite	MONZ	Monzonite with minor-moderate quartz veining in different orientations, minor Fe-carb, 0.5% pyrite overall, some in quartz. Fractured outcrop 2m NW of sample A685854.	A20-12619	7
A685865	714447	5382672	490	28-Sep-20	I Zone Area Logging Roads Northeast of Lily Lake	Gold Creek	547760	Grab	Quartz Vein	QV	3-4cm glassy white quartz vein/band in magnetic iron formation (minor wall rock). Rubble next to logging road.	A20-13449	2.5

APPENDIX II

Rock Assay Certificates (Act Labs)



Report No.: A20-12619
Report Date: 26-Nov-20
Date Submitted: 13-Oct-20
Your Reference: GOLD

Portofino Resources
Suite 520-470 Granville St
Vancouver BC V6C1V5
Canada

ATTN: David Tafel

CERTIFICATE OF ANALYSIS

94 Rock samples were submitted for analysis.

Table with 3 columns: The following analytical package(s) were requested, Testing Date, and sample details. Rows include 1A2-50-Tbay and 1A3-50-Tbay with their respective test types and dates.

REPORT A20-12619

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Handwritten signature of Emmanuel Esemé

Emmanuel Esemé, Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Report No.: A20-12619
Report Date: 26-Nov-20
Date Submitted: 13-Oct-20
Your Reference: GOLD

Portofino Resources
Suite 520-470 Granville St
Vancouver BC V6C1V5
Canada

ATTN: David Tafel

CERTIFICATE OF ANALYSIS

94 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
UT-6M	QOP Total/QOP Ultratrace- 4acid Digest (Total Digestion ICPOES/ICPMS)	2020-11-05 11:38:31

REPORT A20-12619

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:



Emmanuel Esemé , Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
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E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Results

Activation Laboratories Ltd.

Report: A20-12619

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit	5	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01
Method Code	FA-AA	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP
A685612	205	0.48	8.29	3.2	60	2.76	0.24	0.87	0.11	64.1	9.9	7	1.00	98.9	5.04	17.7	< 0.05	3.2	0.012	1.87	26.2	8.0	0.59
A685613	152	0.46	8.98	2.3	260	2.51	0.18	2.05	0.16	60.3	7.8	11	1.43	454	3.26	16.1	< 0.05	3.0	0.025	1.88	28.6	10.2	0.75
A685614	30	0.33	8.45	4.0	60	1.90	0.26	2.96	1.44	62.0	13.3	5	1.92	256	4.66	15.7	0.07	3.0	0.015	2.28	28.9	11.8	0.65
A685615	1030	0.54	6.62	1.9	390	1.41	0.17	0.91	0.05	53.2	3.7	12	1.08	93.0	2.20	13.2	0.12	1.8	0.011	1.00	24.4	7.1	0.41
A685616	73	0.54	8.79	2.4	70	3.53	0.22	3.09	0.08	55.6	17.7	14	1.30	720	4.71	18.1	0.05	2.7	0.042	2.38	24.1	19.3	1.09
A685617	292	0.61	7.69	2.3	70	3.14	0.27	3.15	0.04	54.3	17.8	12	0.99	520	4.65	15.6	< 0.05	2.4	0.034	1.93	24.4	12.9	0.91
A685618	4070	2.73	7.96	3.1	180	2.43	0.05	3.15	0.05	44.1	9.8	6	0.79	141	2.59	14.4	< 0.05	2.9	0.015	1.99	20.6	13.9	0.72
A685619	51	0.29	8.89	2.3	80	2.49	0.21	0.93	0.06	76.2	12.5	9	1.56	255	3.42	15.6	< 0.05	3.3	0.021	2.37	34.1	16.3	0.80
A685620	644	1.24	4.46	1.8	310	2.02	0.10	1.97	0.07	37.8	19.0	82	0.69	117	3.25	8.81	< 0.05	< 0.1	0.014	1.12	16.2	20.1	1.01
A685621	135	0.10	0.87	2.6	30	0.29	< 0.01	0.32	< 0.02	6.79	3.7	4	0.09	20.1	1.65	2.00	< 0.05	0.2	< 0.005	0.09	3.0	1.1	0.07
A685622	400	0.61	7.16	4.4	50	2.19	0.42	0.84	< 0.02	65.6	43.4	6	0.96	452	12.1	12.0	0.08	3.6	0.028	1.57	26.9	15.3	0.87
A685623	174	0.34	7.58	4.1	40	2.54	0.36	2.94	0.05	56.3	31.2	4	0.70	85.3	8.24	13.1	< 0.05	2.5	0.011	1.63	25.1	10.2	0.76
A685624	212	0.27	9.35	3.4	60	2.93	0.25	0.92	0.04	71.9	22.5	6	0.70	56.3	6.19	15.0	< 0.05	4.2	0.018	1.79	32.3	10.1	0.48
A685625	216	0.20	9.25	2.8	110	2.54	0.24	0.71	< 0.02	64.6	11.9	62	0.57	27.9	4.11	13.3	< 0.05	3.8	0.011	1.54	29.9	5.1	0.27
A685626	242	0.11	9.28	1.8	390	2.33	< 0.01	0.75	< 0.02	89.3	1.2	2	0.30	8.0	1.41	16.0	< 0.05	5.5	0.016	0.92	44.7	2.1	0.10
A685627	32	0.43	8.21	2.6	560	0.80	0.16	1.87	0.05	31.2	21.5	118	0.78	168	5.16	16.2	0.05	2.2	0.033	2.33	12.1	12.0	1.67
A685628	174	0.52	0.19	6.8	< 10	0.86	5.65	0.10	< 0.02	0.84	6.5	8	0.06	80.5	1.19	0.62	< 0.05	< 0.1	0.009	0.04	< 0.5	0.9	0.05
A685629	11	0.01	0.07	1.9	< 10	< 0.05	< 0.01	0.03	< 0.02	0.44	0.8	5	0.07	6.9	1.03	0.34	< 0.05	< 0.1	< 0.005	0.03	< 0.5	0.3	< 0.01
A685630	< 5	0.01	0.80	1.6	90	0.13	0.10	1.85	< 0.02	4.31	1.5	10	0.17	7.8	1.38	2.63	< 0.05	< 0.1	< 0.005	0.34	2.4	8.5	0.18
A685631	< 5	0.04	1.06	2.7	80	0.22	0.12	1.26	< 0.02	28.7	3.8	22	0.40	26.4	2.67	3.53	< 0.05	0.2	0.006	0.11	13.0	5.7	0.41
A685632	< 5	0.02	0.56	2.2	30	0.07	0.03	0.41	< 0.02	1.52	1.0	8	0.19	14.5	1.06	1.47	< 0.05	< 0.1	< 0.005	0.15	0.7	3.8	0.15
A685633	< 5	0.09	1.23	2.4	130	0.16	0.10	0.49	< 0.02	5.53	5.7	29	0.65	61.3	3.45	3.67	< 0.05	0.6	0.006	0.20	2.4	10.0	0.60
A685634	12	0.21	3.49	4.9	180	0.51	0.20	0.52	< 0.02	5.14	11.4	50	0.81	144	4.58	7.99	< 0.05	0.9	0.009	0.30	2.1	16.1	0.90
A685635	< 5	0.08	5.13	2.4	690	1.13	0.13	2.15	< 0.02	35.5	15.1	142	1.43	31.9	4.89	8.77	< 0.05	0.9	0.019	0.80	15.0	20.6	0.97
A685636	< 5	0.11	3.91	3.2	400	0.50	0.16	1.32	< 0.02	27.1	10.1	37	1.57	75.8	6.17	9.41	< 0.05	0.3	0.016	0.67	12.1	18.6	1.17
A685637	< 5	0.03	1.66	1.7	120	0.22	0.03	0.33	< 0.02	5.94	4.4	90	0.37	23.0	2.18	3.68	< 0.05	0.4	< 0.005	0.27	2.8	6.5	0.39
A685638	< 5	0.02	1.74	1.7	280	0.31	0.02	0.62	< 0.02	5.52	1.8	20	0.49	11.4	1.18	2.43	< 0.05	< 0.1	< 0.005	0.74	2.5	3.8	0.22
A685639	< 5	0.05	1.91	2.5	70	0.42	0.16	1.91	0.03	6.83	4.3	27	0.27	32.2	3.42	6.55	< 0.05	0.2	0.013	0.36	3.4	14.6	0.79
A685640	< 5	0.02	2.14	1.8	240	0.41	0.12	1.93	< 0.02	15.6	3.5	15	0.42	4.6	2.29	5.47	< 0.05	0.2	0.018	0.56	7.4	13.5	0.63
A685641	6	0.14	7.53	2.1	500	1.28	0.13	0.49	< 0.02	61.4	3.7	10	0.28	23.7	2.11	19.1	0.08	3.5	0.025	1.21	27.3	9.4	0.47
A685642	6	0.11	7.27	1.7	260	1.42	0.10	0.43	< 0.02	40.1	3.4	6	0.18	34.5	1.78	19.0	0.06	3.1	0.008	0.50	17.4	8.5	0.44
A685643	6	0.09	0.41	3.7	< 10	0.38	0.04	0.92	0.39	5.18	7.8	6	0.32	51.1	6.42	1.46	< 0.05	0.2	0.006	0.01	2.7	1.1	0.78
A685644	5	0.05	5.65	1.9	250	0.85	0.11	0.33	< 0.02	49.6	3.2	5	0.17	5.7	1.73	15.7	< 0.05	2.5	0.011	0.71	22.9	4.0	0.22
A685645	9	0.62	0.67	1.9	30	0.16	0.42	1.65	0.96	7.56	22.5	13	0.46	118	32.1	4.24	0.16	0.4	0.084	0.01	3.7	0.6	2.97
A685646	15	0.33	3.51	2.2	10	0.32	0.20	2.71	0.68	29.7	51.7	21	0.57	48.3	27.1	10.0	0.11	1.5	0.038	0.04	13.9	3.1	2.65
A685647	24	0.09	5.55	0.9	120	0.31	0.02	2.44	0.06	23.0	42.0	2	16.2	101	14.6	21.9	0.21	3.6	0.145	0.29	7.2	16.5	1.52
A685648	16	0.54	8.07	11.7	460	0.51	0.14	1.49	0.79	31.7	9.6	75	2.00	41.6	3.51	18.2	0.05	2.4	0.092	1.52	13.5	24.6	0.92
A685649	< 5	0.02	2.64	1.6	270	0.69	0.05	5.65	0.07	17.1	85.4	1320	2.77	54.7	7.67	3.80	0.17	0.8	0.036	0.74	6.6	14.8	12.7
A685650	< 5	0.09	7.96	5.9	860	1.01	0.21	0.90	0.02	40.4	24.0	155	1.68	38.0	5.04	16.2	< 0.05	3.2	0.035	2.17	17.1	27.5	2.42
A685751	7	0.09	8.17	4.6	200	0.54	0.11	0.79	0.12	21.1	7.0	16	0.32	54.3	1.80	14.2	< 0.05	1.9	0.016	1.24	8.9	9.5	0.74
A685752	5	0.03	6.09	2.0	190	0.47	0.03	0.44	0.06	11.8	2.2	12	0.31	9.5	0.90	6.67	< 0.05	< 0.1	0.008	0.68	5.5	2.3	0.13
A685753	< 5	0.09	7.71	4.1	390	0.61	0.05	1.93	0.10	14.5	4.5	15	1.10	21.3	1.32	15.5	< 0.05	1.2	0.015	0.98	6.1	8.9	0.36
A685754	17	0.16	8.86	6.5	650	1.03	0.32	0.45	0.05	6.83	5.8	23	1.49	12.6	1.95	27.4	< 0.05	1.5	0.020	2.28	2.5	12.8	0.72
A685755	< 5	0.13	6.56	0.9	580	1.52	1.10	0.56	0.04	18.8	2.8	8	0.63	9.0	1.08	14.9	< 0.05	1.7	0.009	1.50	8.1	6.7	0.26
A685756	11	0.02	5.02	1.3	60	0.40	0.01	10.3	0.08	4.52	38.1	622	0.20	4.9	6.40	8.36	0.40	0.7	0.047	0.32	1.6	25.3	4.97
A685757	14	0.06	7.15	1.3	80	0.65	0.08	1.24	0.03	27.4	19.6	107	1.03	79.1	8.74	15.3	0.25	1.7	0.019	1.38	11.4	25.2	2.82
A685758	< 5	< 0.01	0.66	0.6	30	0.19	0.01	0.17	0.02	2.66	2.3	20	0.09	53.2	1.16	2.26	< 0.05	< 0.1	< 0.005	0.16	1.0	82.9	0.56
A685759	5	< 0.01	0.53	0.7	20	0.13	< 0.01	0.37	< 0.02	1.24	2.0	15	0.09	40.0	0.95	1.50	< 0.05	0.1	< 0.005	0.12	0.5	69.3	0.43
A685760	5	0.33	4.20	3.2	110	0.69	0.51	1.84	0.07	6.44	22.3	69	1.59	135	12.0	10.5	0.06	0.8	0.011	0.31	3.0	12.3	1.08
A685761	< 5	0.08	5.74	2.3	440	1.76	0.14	4.92	0.14	16.4	19.4	232	0.91	102	8.64	12.5	0.08	0.9	0.058	0.78	6.5	17.7	1.89
A685762	6	0.08	4.01	1.6	720	1.39	0.47	6.99	0.10	332	42.7	157	6.02	31.6	5.56	9.40	< 0.05	0.5	0.056	3.51	127	38.1	7.02

Results

Activation Laboratories Ltd.

Report: A20-12619

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit	5	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01
Method Code	FA-AA	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP
A685763	164	0.03	1.46	1.7	290	13.5	0.03	4.52	0.09	7.01	10.8	266	0.19	39.9	2.24	2.20	< 0.05	0.2	0.018	0.42	2.5	5.3	2.42
A685764	< 5	0.03	0.65	1.8	50	2.10	0.02	2.21	0.06	3.01	6.3	163	0.24	10.6	1.58	1.95	< 0.05	0.1	0.007	0.24	1.2	5.6	1.30
A685765	36	0.05	4.93	1.4	520	1.04	0.15	6.40	0.06	413	45.1	237	3.42	14.5	6.87	13.5	< 0.05	0.7	0.047	3.54	164	33.6	5.65
A685766	< 5	0.02	0.90	2.8	320	0.12	0.04	1.03	0.02	21.1	8.3	141	0.58	12.1	1.70	0.33	< 0.05	< 0.1	0.009	0.59	8.0	7.1	0.98
A685767	14	0.03	2.82	3.0	100	4.03	0.03	4.97	0.09	3.60	19.4	345	2.01	41.9	3.63	8.00	< 0.05	0.3	0.021	1.01	1.3	24.5	4.18
A685768	6	0.04	1.97	2.2	940	0.46	0.20	1.03	0.06	73.3	16.7	50	0.43	4.7	1.92	0.84	< 0.05	< 0.1	0.013	0.40	33.4	3.0	0.59
A685769	146	0.26	7.91	2.1	180	2.35	1.62	1.05	0.06	206	18.5	79	0.98	5.6	3.89	19.8	< 0.05	0.1	0.034	1.90	81.9	16.7	1.09
A685770	109	0.12	4.09	6.7	390	11.3	0.14	9.37	0.30	63.1	35.5	500	2.61	6.4	5.59	12.4	< 0.05	2.1	0.048	1.36	24.9	65.0	6.43
A685771	12	0.90	5.71	1.9	100	1.21	4.46	1.49	0.07	136	16.4	62	1.91	3.6	3.03	16.8	< 0.05	0.1	0.020	1.16	55.6	12.5	1.55
A685772	7	0.08	8.04	< 0.2	410	2.12	0.28	0.74	0.04	56.6	5.5	6	0.09	3.9	1.75	16.3	< 0.05	2.8	0.007	0.99	22.2	0.7	0.26
A685773	46	0.09	8.74	0.6	470	1.61	0.22	0.35	0.07	108	6.6	9	0.08	5.9	1.64	17.6	< 0.05	3.3	0.011	0.65	43.1	1.1	0.10
A685774	12	0.08	8.49	0.7	140	1.02	0.22	0.32	0.03	76.6	7.1	7	< 0.05	2.8	1.85	16.8	< 0.05	3.1	0.007	0.86	29.9	0.6	0.09
A685775	98	0.28	9.10	1.4	400	1.21	2.91	0.27	< 0.02	84.3	7.5	6	< 0.05	3.2	1.55	16.4	< 0.05	3.0	0.011	0.98	35.0	0.7	0.08
A685776	10	0.06	9.39	< 0.2	640	1.09	0.18	0.94	0.08	74.8	5.4	20	< 0.05	2.4	1.28	12.8	< 0.05	3.0	0.007	0.76	27.4	0.3	0.22
A685777	22	0.08	8.44	0.6	100	1.11	0.25	0.97	0.08	66.1	7.5	5	0.06	4.5	1.64	13.4	< 0.05	3.2	0.007	1.19	23.5	0.7	0.32
A685778	75	0.11	8.46	0.6	190	1.17	0.29	0.69	0.06	76.1	7.5	3	0.05	4.6	1.65	12.4	< 0.05	3.4	0.012	1.19	28.9	0.7	0.21
A685779	5	0.33	7.62	3.0	110	1.03	0.73	4.25	0.12	58.6	38.7	135	4.35	216	7.74	12.4	< 0.05	3.1	0.071	3.24	20.4	45.1	4.20
A685780	< 5	0.09	4.48	1.7	80	0.85	0.24	6.05	0.10	11.8	54.8	843	1.85	46.7	8.33	9.45	0.10	1.1	0.044	0.39	4.3	47.1	11.3
A685781	< 5	0.11	4.06	1.6	90	0.66	0.23	6.38	0.08	9.59	51.8	737	2.30	45.3	7.70	8.48	< 0.05	1.0	0.034	0.51	3.5	34.7	11.3
A685782	5	0.09	5.53	3.2	310	0.39	0.15	11.4	0.09	5.35	60.1	1000	0.87	59.8	6.97	8.70	0.09	0.8	0.035	3.34	2.2	23.6	4.05
A685783	8	0.05	5.44	2.6	420	0.44	0.11	9.66	0.06	4.75	48.8	1080	0.63	55.1	7.48	7.22	0.06	0.8	0.029	2.85	2.2	13.4	4.30
A685784	218	0.33	6.53	1.5	110	0.94	1.06	0.79	0.05	71.5	14.9	16	< 0.05	10.2	3.65	11.5	< 0.05	1.4	0.011	0.29	30.4	1.1	0.23
A685785	362	0.51	7.91	0.7	170	1.47	1.07	2.02	0.07	78.6	8.7	20	0.08	89.3	2.72	17.4	0.09	2.4	0.022	0.52	32.7	2.0	0.73
A685786	107	0.65	7.24	1.1	190	1.01	1.58	1.29	0.08	85.7	9.6	14	< 0.05	4.6	2.86	13.3	< 0.05	3.6	0.008	0.35	35.5	0.6	0.41
A685787	1130	0.21	7.03	1.2	240	1.11	0.46	1.06	0.05	78.9	11.1	34	0.06	137	2.68	16.6	< 0.05	3.1	0.018	0.49	33.5	2.2	0.40
A685788	563	0.35	5.09	1.1	400	0.98	0.32	0.47	0.04	52.3	5.7	16	0.05	55.0	1.78	12.0	0.07	2.5	0.014	0.33	22.1	1.9	0.20
A685789	864	0.52	6.16	0.5	490	0.95	1.22	1.76	0.09	65.3	7.9	15	< 0.05	98.5	1.96	9.53	< 0.05	2.9	0.021	0.36	27.2	0.8	0.70
A685790	372	0.50	2.83	1.5	130	0.57	2.12	0.56	0.03	28.3	10.7	7	< 0.05	4.8	2.11	3.75	< 0.05	1.2	< 0.005	0.14	12.3	0.5	0.20
A685791	597	0.10	6.47	0.6	400	1.22	0.24	1.25	0.09	76.8	7.9	20	0.12	82.7	2.38	14.8	0.08	2.4	0.016	1.79	32.3	2.1	0.30
A685792	753	0.07	7.24	1.4	770	1.23	0.20	1.19	0.07	86.6	8.1	20	0.19	22.0	2.67	15.8	< 0.05	3.2	0.026	2.18	34.3	4.8	0.56
A685793	8	0.04	1.63	0.5	170	0.41	0.35	0.07	< 0.02	9.49	2.5	14	< 0.05	3.5	0.90	1.09	< 0.05	0.4	< 0.005	0.16	4.1	0.4	0.02
A685794	170	0.22	0.60	0.8	130	0.33	3.71	0.03	< 0.02	3.19	2.3	8	< 0.05	2.8	0.84	< 0.05	0.13	0.1	< 0.005	0.10	1.3	0.3	0.01
A685795	11	0.04	0.26	2.5	240	< 0.05	0.64	0.02	< 0.02	0.97	0.8	6	< 0.05	2.3	0.78	< 0.05	0.06	< 0.1	< 0.005	0.04	< 0.5	0.3	< 0.01
A685796	20	0.12	0.11	1.2	80	0.51	0.59	0.05	< 0.02	1.94	1.0	21	< 0.05	7.3	0.64	< 0.05	< 0.05	< 0.1	< 0.005	0.02	0.9	0.4	0.02
A685797	10	0.03	3.13	1.1	330	0.53	0.18	0.10	< 0.02	18.7	1.8	7	< 0.05	3.2	1.25	0.91	< 0.05	0.8	< 0.005	0.23	7.9	0.3	0.01
A685798	90	0.23	3.56	0.6	180	0.41	1.96	0.11	< 0.02	22.3	5.4	7	< 0.05	5.4	1.31	4.27	< 0.05	1.1	< 0.005	0.23	8.7	0.4	0.01
A685799	10	0.08	6.87	0.3	340	1.27	0.24	0.30	0.19	55.7	5.8	5	0.06	4.5	1.24	13.2	< 0.05	2.3	0.009	0.78	21.3	1.2	0.09
A685800	> 5000	23.5	4.18	0.7	360	0.79	63.9	0.27	0.24	28.5	4.8	10	< 0.05	5.2	1.16	3.73	< 0.05	1.3	< 0.005	0.44	11.2	0.5	0.07
A685851	8	0.07	3.14	0.3	650	0.61	0.23	0.23	0.04	23.2	3.1	8	< 0.05	3.7	0.89	< 0.05	< 0.05	0.9	< 0.005	0.39	9.2	0.9	0.08
A685852	12	0.08	4.43	0.5	260	0.65	0.28	0.28	< 0.02	32.3	4.7	10	< 0.05	7.4	0.98	3.78	< 0.05	1.4	< 0.005	0.42	12.6	0.3	0.06
A685853	12	0.10	4.19	0.3	110	0.73	0.38	0.17	0.03	30.3	6.0	6	< 0.05	2.4	1.28	7.30	< 0.05	1.3	< 0.005	0.41	11.1	0.4	0.02
A685854	21	0.09	4.23	1.2	160	0.66	0.60	0.16	< 0.02	26.2	4.1	6	< 0.05	2.2	1.34	10.1	< 0.05	1.2	< 0.005	0.48	9.8	0.9	0.06
A685855	7	0.07	5.61	1.2	210	1.27	0.30	1.16	0.08	40.1	3.7	5	< 0.05	8.7	1.55	11.9	< 0.05	1.8	0.010	0.55	15.8	0.8	0.37

Results

Activation Laboratories Ltd.

Report: A20-12619

Analyte Symbol	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1	1	0.1
Method Code	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS
A685612	214	8.67	4.36	4.4	5.7	1010	17.2	74.5	0.005	2.71	0.38	2.9	2	0.8	621	0.26	0.16	2.91	0.208	0.30	1.2	52	4.2
A685613	270	5.62	3.95	4.0	5.6	910	17.7	78.0	< 0.002	1.17	0.35	4.1	< 1	0.7	743	0.28	0.07	4.13	0.199	0.31	1.2	57	3.3
A685614	332	8.44	3.41	3.4	4.1	790	48.0	105	0.007	3.52	0.72	3.2	2	0.8	560	0.23	0.09	3.59	0.196	0.64	1.5	44	1.1
A685615	257	3.38	4.02	1.3	5.8	1110	6.8	50.7	< 0.002	0.15	0.33	3.6	< 1	< 0.2	291	< 0.05	0.15	3.27	0.156	0.18	0.7	36	5.9
A685616	420	8.47	3.51	5.8	8.9	1430	13.2	82.4	0.007	2.32	0.44	6.2	2	0.9	672	0.22	0.08	2.93	0.263	0.35	1.2	80	5.5
A685617	379	21.8	3.13	5.5	9.0	1240	12.2	65.6	0.016	2.70	0.38	5.2	2	0.8	687	0.22	0.17	2.71	0.232	0.26	1.0	68	8.3
A685618	319	0.48	4.14	2.4	8.5	1290	5.0	61.2	< 0.002	1.08	0.39	5.9	< 1	0.6	548	0.12	0.11	2.99	0.193	0.25	1.5	54	11.8
A685619	267	3.56	4.02	5.5	7.0	1040	15.4	87.3	< 0.002	1.68	0.87	4.6	2	0.9	530	0.37	0.08	4.46	0.229	0.42	1.3	66	2.7
A685620	582	2.76	1.70	1.1	46.9	1580	3.6	40.9	< 0.002	0.87	0.40	8.3	< 1	0.5	160	< 0.05	1.41	1.91	0.184	0.14	0.6	75	13.0
A685621	136	0.91	0.57	0.4	3.5	400	1.0	3.2	< 0.002	0.32	0.20	1.0	< 1	< 0.2	53.5	< 0.05	0.07	0.44	0.034	< 0.02	0.1	7	1.6
A685622	403	0.89	3.30	5.6	6.2	1320	20.3	55.5	0.004	7.45	0.82	7.9	7	1.1	457	0.45	0.15	3.95	0.314	0.20	1.8	67	7.1
A685623	254	0.14	3.77	2.8	5.4	1740	12.0	52.5	0.003	7.17	0.48	7.4	4	0.6	638	0.17	0.17	3.26	0.217	0.20	1.2	61	4.3
A685624	156	2.15	5.42	4.6	3.1	1270	23.2	56.5	0.004	3.56	0.49	4.0	3	0.8	720	0.36	0.13	4.09	0.223	0.21	1.7	52	2.2
A685625	157	4.25	6.09	4.2	3.7	1350	15.9	45.9	0.003	1.95	0.43	3.4	2	0.8	546	0.37	0.13	5.49	0.212	0.16	1.5	41	5.1
A685626	187	0.18	7.33	5.8	0.8	110	9.2	25.8	< 0.002	0.37	0.13	0.3	< 1	0.5	540	0.41	< 0.05	5.35	0.079	0.08	3.2	21	5.6
A685627	835	0.34	3.81	3.0	71.5	550	6.9	68.9	< 0.002	0.64	0.19	15.2	1	0.6	539	0.20	< 0.05	1.96	0.346	0.42	0.6	131	0.6
A685628	109	0.26	0.05	0.1	2.8	20	10.7	1.1	< 0.002	0.18	0.08	0.8	< 1	< 0.2	5.3	< 0.05	6.65	0.09	0.018	< 0.02	< 0.1	6	0.3
A685629	131	0.35	0.03	< 0.1	0.9	< 10	< 0.5	0.7	< 0.002	0.01	0.07	0.1	< 1	< 0.2	2.5	< 0.05	0.07	0.03	< 0.005	< 0.02	< 0.1	1	0.1
A685630	244	0.49	0.03	< 0.1	5.6	40	7.2	14.2	< 0.002	< 0.01	0.14	1.0	< 1	< 0.2	443	< 0.05	< 0.05	0.07	0.009	0.05	< 0.1	27	0.3
A685631	309	3.47	0.16	0.6	15.0	310	1.8	6.1	< 0.002	0.07	0.09	3.8	< 1	0.2	157	< 0.05	< 0.05	0.82	0.053	< 0.02	0.1	23	0.3
A685632	142	0.24	0.13	0.1	3.6	90	0.9	7.0	< 0.002	0.01	< 0.05	0.7	< 1	< 0.2	71.6	< 0.05	< 0.05	0.09	0.011	< 0.02	< 0.1	7	< 0.1
A685633	359	2.10	0.23	1.0	16.3	610	2.2	11.1	< 0.002	0.22	0.05	3.2	< 1	< 0.2	81.6	0.05	0.07	0.66	0.089	0.05	0.2	31	0.2
A685634	400	0.54	1.46	1.1	35.6	270	7.7	15.0	< 0.002	0.63	0.05	4.7	< 1	0.3	146	0.06	0.17	0.73	0.096	0.06	0.3	49	0.3
A685635	579	0.89	1.80	2.0	65.8	490	8.3	43.7	< 0.002	0.11	0.07	8.8	< 1	0.6	490	< 0.05	0.09	2.34	0.208	0.17	0.6	67	0.5
A685636	639	1.21	1.09	1.7	33.0	660	3.5	38.9	< 0.002	0.22	0.07	7.0	< 1	0.5	273	< 0.05	0.10	1.54	0.179	0.15	0.3	60	1.0
A685637	216	1.26	0.72	0.5	15.9	120	1.3	13.0	< 0.002	0.06	< 0.05	2.4	< 1	< 0.2	73.0	< 0.05	< 0.05	0.35	0.048	0.04	0.1	22	0.2
A685638	157	1.62	0.36	0.3	8.5	120	1.8	47.4	< 0.002	0.03	0.06	1.3	< 1	< 0.2	344	< 0.05	< 0.05	0.42	0.034	0.14	< 0.1	8	0.2
A685639	546	1.98	0.13	0.6	15.9	70	1.6	15.0	< 0.002	0.07	0.07	3.5	< 1	0.3	241	< 0.05	< 0.05	0.16	0.045	0.05	< 0.1	29	0.4
A685640	448	0.72	0.23	0.7	9.1	230	3.3	28.4	< 0.002	0.01	0.09	2.5	< 1	0.4	212	< 0.05	< 0.05	0.52	0.054	0.09	0.2	24	0.9
A685641	215	1.22	4.59	1.6	5.2	740	28.9	28.8	< 0.002	0.09	0.07	2.1	< 1	0.2	392	< 0.05	0.07	5.84	0.275	0.12	1.3	32	0.3
A685642	208	6.41	4.89	3.1	4.8	710	27.6	13.9	< 0.002	0.13	0.12	1.9	< 1	0.8	381	0.10	0.07	5.27	0.254	0.05	1.3	31	1.1
A685643	1290	0.31	0.05	0.3	29.2	250	17.9	0.8	< 0.002	0.29	0.09	0.9	< 1	< 0.2	14.5	< 0.05	0.06	0.19	0.014	0.03	< 0.1	6	0.1
A685644	164	0.47	3.70	3.1	3.3	540	8.6	17.9	< 0.002	0.07	0.08	1.5	< 1	0.6	261	0.13	0.06	4.07	0.198	0.07	1.2	22	1.2
A685645	17500	3.98	0.02	0.8	66.2	110	3.0	1.7	< 0.002	2.08	0.05	7.0	2	0.3	6.9	< 0.05	0.27	0.29	0.028	0.03	0.2	25	0.4
A685646	15500	1.94	0.13	2.3	282	200	2.5	1.7	< 0.002	1.64	0.05	20.9	< 1	0.8	12.9	0.18	0.21	1.76	0.104	0.07	0.4	63	0.4
A685647	1980	2.52	1.03	4.2	2.8	950	3.8	26.6	< 0.002	1.11	0.13	24.9	3	0.8	67.7	0.18	< 0.05	0.82	0.815	0.41	0.2	74	0.1
A685648	831	0.92	2.60	4.1	19.4	410	9.0	40.4	< 0.002	0.39	0.67	8.9	< 1	1.8	502	0.23	0.11	2.11	0.285	0.42	0.6	63	0.3
A685649	1440	0.21	0.31	< 0.1	341	430	3.0	40.4	< 0.002	0.03	0.10	36.1	< 1	< 0.2	223	< 0.05	< 0.05	0.79	0.136	0.21	0.3	90	< 0.1
A685650	694	0.85	3.05	1.7	92.4	790	10.1	70.5	< 0.002	0.16	< 0.05	17.3	< 1	0.9	276	< 0.05	< 0.05	7.85	0.362	0.51	2.1	133	0.4
A685751	385	0.84	5.22	1.9	13.2	430	5.9	26.8	< 0.002	0.20	0.37	4.9	< 1	0.4	160	0.11	0.10	2.70	0.178	0.17	0.6	46	2.2
A685752	168	0.40	4.26	0.5	5.5	150	2.4	18.1	< 0.002	0.02	0.09	1.6	< 1	< 0.2	145	< 0.05	< 0.05	1.19	0.078	0.10	0.3	12	1.0
A685753	243	0.37	4.73	1.3	8.8	350	4.2	29.0	< 0.002	0.05	0.18	3.1	< 1	0.3	229	0.06	< 0.05	0.69	0.125	0.18	0.2	29	1.9
A685754	168	0.65	4.36	1.9	9.9	540	12.0	63.2	< 0.002	0.33	0.67	3.7	< 1	0.5	235	0.08	0.12	0.90	0.175	0.41	0.3	65	5.5
A685755	116	14.4	3.82	1.6	4.8	340	12.0	35.2	< 0.002	0.19	0.47	1.8	< 1	0.5	316	0.08	0.14	2.83	0.119	0.19	1.0	22	2.3
A685756	1490	0.28	0.43	0.4	126	150	2.4	5.5	< 0.002	0.02	< 0.05	24.2	< 1	< 0.2	50.2	< 0.05	< 0.05	0.28	0.205	0.05	< 0.1	154	< 0.1
A685757	829	0.19	2.57	1.4	57.0	830	3.2	37.0	< 0.002	1.77	0.06	14.1	1	0.5	221	< 0.05	< 0.05	1.64	0.260	0.18	0.5	108	0.1
A685758	182	0.31	0.06	0.3	6.4	210	< 0.5	2.6	< 0.002	0.02	0.06	1.7	< 1	< 0.2	10.3	< 0.05	< 0.05	0.29	0.028	< 0.02	< 0.1	21	0.1
A685759	157	0.18	0.05	0.2	4.8	100	< 0.5	2.1	< 0.002	0.02	0.05	1.3	< 1	< 0.2	13.2	< 0.05	< 0.05	0.14	0.016	< 0.02	< 0.1	13	< 0.1
A685760	677	2.44	0.39	1.5	21.3	220	6.8	13.4	< 0.002	1.48	0.25	7.7	1	0.5	51.2	0.07	0.27	1.34	0.118	0.16	0.3	72	0.2
A685761	1310	0.92	1.27	1.5	76.7	600	6.0	24.8	< 0.002	0.11	0.13	17.8	< 1	0.8	1110	0.06	0.07	0.94	0.235	0.11	0.3	128	0.7
A685762	1210	0.28	0.58	0.8	156	2760	6.8	121	< 0.002	0.12	< 0.05	34.7	< 1	< 0.2	658	< 0.05	0.25	7.02	0.186	0.72	1.9	134	0.9

Analyte Symbol	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1	1	0.1
Method Code	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS
A685763	633	0.32	0.83	0.5	96.9	160	4.2	6.6	< 0.002	0.10	0.09	7.1	< 1	0.3	235	0.12	6.18	0.19	0.054	0.03	0.2	34	2.6
A685764	407	0.20	0.26	0.3	60.9	150	2.2	5.7	< 0.002	0.02	0.09	3.7	< 1	< 0.2	115	< 0.05	0.22	0.13	0.035	0.03	0.1	23	1.9
A685765	1440	0.24	1.33	0.8	189	4090	7.4	89.2	< 0.002	0.19	< 0.05	16.6	< 1	< 0.2	383	< 0.05	0.09	7.48	0.193	0.48	2.8	176	2.5
A685766	304	0.59	0.20	0.8	52.9	510	2.0	13.7	< 0.002	0.05	0.13	3.3	< 1	< 0.2	74.3	< 0.05	< 0.05	0.56	0.061	0.10	0.2	32	1.0
A685767	872	0.33	1.41	0.5	181	220	5.3	32.4	< 0.002	0.04	0.16	9.8	< 1	0.3	309	< 0.05	0.12	0.17	0.082	0.24	0.1	76	1.7
A685768	493	0.36	1.28	0.6	41.7	910	9.8	11.8	< 0.002	0.42	0.18	3.9	< 1	0.2	188	< 0.05	0.13	3.92	0.088	0.09	0.9	30	2.2
A685769	649	6.24	4.80	4.2	80.9	2410	26.0	38.7	< 0.002	0.83	0.35	8.8	< 1	1.0	748	< 0.05	0.64	9.31	0.297	0.23	2.4	79	8.7
A685770	1400	3.08	1.78	1.3	345	1660	14.4	57.6	< 0.002	0.40	0.47	20.1	< 1	0.5	736	0.06	1.29	3.41	0.185	0.33	1.0	139	15.8
A685771	437	5.03	3.66	2.4	71.6	1850	46.6	37.1	< 0.002	1.02	0.24	5.8	< 1	0.7	497	< 0.05	0.25	6.74	0.198	0.24	1.3	70	0.9
A685772	243	1.14	6.26	3.5	3.4	670	10.0	12.0	< 0.002	0.97	0.23	2.0	< 1	0.6	291	0.16	0.20	2.21	0.204	0.07	0.6	17	15.4
A685773	266	2.03	7.57	5.7	5.9	960	6.5	8.7	< 0.002	0.77	0.20	2.0	< 1	0.5	171	0.26	0.13	3.74	0.192	0.05	0.6	19	20.1
A685774	225	4.27	7.34	5.1	6.0	900	5.4	10.3	< 0.002	1.14	0.21	1.6	< 1	0.5	183	0.26	0.19	2.69	0.220	0.05	0.5	22	32.4
A685775	128	154	7.31	4.9	5.2	800	19.2	11.9	0.009	0.72	0.27	1.4	< 1	0.5	191	0.18	0.90	3.20	0.182	0.09	0.6	17	17.6
A685776	366	5.52	7.26	2.7	3.3	700	5.0	9.7	< 0.002	0.43	0.18	2.9	< 1	0.3	192	0.08	0.16	2.66	0.199	0.06	0.5	19	19.4
A685777	398	3.28	6.87	3.7	7.4	850	6.1	14.1	< 0.002	0.73	0.19	2.6	< 1	0.5	155	0.23	0.17	2.13	0.209	0.07	0.5	17	20.6
A685778	380	5.15	6.78	3.8	3.9	880	7.1	15.5	< 0.002	0.80	0.18	2.8	< 1	0.5	165	0.29	0.11	2.75	0.180	0.09	0.8	15	13.8
A685779	986	0.35	1.88	4.4	88.7	2750	17.0	107	< 0.002	3.22	0.26	25.3	3	1.1	1890	0.20	0.18	2.34	0.461	0.74	1.0	178	0.9
A685780	1290	0.34	0.44	1.9	611	1030	3.1	13.2	< 0.002	0.82	0.10	26.7	1	0.5	130	0.10	0.06	0.55	0.330	0.14	0.2	155	0.4
A685781	1270	0.76	0.45	1.6	657	830	2.9	17.5	< 0.002	0.66	0.10	22.7	< 1	0.4	131	0.08	0.07	0.49	0.284	0.19	0.2	147	0.3
A685782	1700	3.38	0.45	1.0	506	160	4.4	91.0	< 0.002	0.34	0.25	26.6	< 1	0.3	630	0.06	0.06	0.30	0.249	0.58	< 0.1	163	0.9
A685783	1640	1.33	0.93	1.0	325	180	3.5	63.2	< 0.002	0.23	0.26	27.1	< 1	0.3	616	0.06	< 0.05	0.22	0.278	0.42	< 0.1	175	1.1
A685784	231	3.26	4.91	3.3	11.1	1190	62.0	3.9	< 0.002	1.40	0.30	3.3	3	0.6	429	< 0.05	0.29	3.65	0.271	0.03	1.0	25	8.9
A685785	369	1.95	5.85	2.1	12.3	1320	79.7	6.0	< 0.002	0.31	0.34	4.2	< 1	0.5	460	< 0.05	0.16	3.51	0.299	0.05	0.9	54	3.2
A685786	260	4.34	5.72	4.0	10.3	1500	93.4	4.5	< 0.002	2.07	0.28	3.2	3	0.6	323	0.17	0.26	3.68	0.263	0.04	0.9	20	13.0
A685787	323	1.15	5.12	4.0	15.5	1190	20.9	6.3	< 0.002	0.74	0.37	3.6	< 1	0.6	331	0.18	0.16	3.32	0.284	0.04	0.7	48	7.5
A685788	185	1.50	3.80	2.9	10.5	910	16.6	4.4	< 0.002	0.52	0.47	2.0	< 1	0.5	208	0.12	0.12	2.67	0.228	0.03	0.6	35	11.9
A685789	367	1.30	4.97	5.8	13.2	1280	57.8	3.6	< 0.002	0.86	0.36	3.4	1	0.6	332	0.21	0.23	2.83	0.245	0.03	0.7	21	17.4
A685790	131	5.18	2.16	1.4	11.2	500	87.7	1.9	< 0.002	1.02	0.31	1.3	2	0.3	161	0.06	0.45	1.37	0.096	0.02	0.3	20	4.0
A685791	328	0.29	3.80	1.3	8.9	920	13.0	20.2	< 0.002	0.25	1.08	3.7	< 1	0.3	303	< 0.05	0.12	3.56	0.262	0.09	0.7	47	7.5
A685792	315	0.20	3.72	1.2	9.1	790	14.9	25.4	< 0.002	0.28	3.24	4.1	< 1	< 0.2	371	< 0.05	0.09	3.78	0.280	0.14	0.8	60	7.0
A685793	72	15.9	1.22	0.4	2.5	180	4.3	2.2	< 0.002	0.27	0.14	0.3	< 1	< 0.2	75.5	< 0.05	0.09	0.49	0.032	< 0.02	< 0.1	3	2.0
A685794	59	1170	0.40	0.2	3.1	40	47.9	1.4	0.070	0.40	0.11	0.3	< 1	< 0.2	24.0	< 0.05	0.63	0.18	0.014	< 0.02	< 0.1	1	0.9
A685795	82	57.0	0.19	< 0.1	0.8	30	6.2	0.7	< 0.002	0.07	0.13	0.2	< 1	< 0.2	27.8	< 0.05	0.07	0.07	< 0.005	< 0.02	< 0.1	1	0.2
A685796	84	92.3	0.07	< 0.1	2.4	20	19.3	0.4	0.005	0.05	0.06	0.4	< 1	< 0.2	18.7	< 0.05	0.09	0.11	0.005	< 0.02	< 0.1	1	0.3
A685797	104	7.91	2.36	0.8	1.3	230	6.7	3.3	< 0.002	0.42	0.11	0.8	< 1	0.3	89.1	< 0.05	< 0.05	0.87	0.077	0.02	0.2	7	4.4
A685798	79	608	2.57	1.2	3.6	300	64.4	3.4	0.045	0.71	0.15	0.9	< 1	0.3	234	0.07	0.36	1.00	0.078	0.03	0.3	6	6.2
A685799	198	14.3	5.33	2.1	6.1	680	8.1	11.3	< 0.002	0.52	0.20	1.7	< 1	0.4	333	0.06	0.11	2.52	0.158	0.09	0.7	14	12.6
A685800	105	72.5	3.06	1.5	6.5	370	2450	6.0	0.003	0.78	0.14	1.0	9	0.3	158	0.09	10.4	1.27	0.096	0.08	0.3	7	7.1
A685851	167	5.79	2.24	0.9	2.8	270	11.1	5.9	< 0.002	0.25	0.18	1.1	< 1	0.2	686	< 0.05	0.12	1.00	0.067	0.03	0.2	6	6.7
A685852	130	9.29	3.33	1.4	7.2	370	8.2	5.4	< 0.002	0.52	0.18	1.2	< 1	0.3	175	0.09	0.10	1.38	0.097	0.03	0.3	8	6.7
A685853	149	5.91	3.29	1.1	5.6	450	77.1	5.7	< 0.002	0.70	0.13	0.9	< 1	0.3	1090	< 0.05	0.13	1.19	0.077	0.04	0.3	6	5.7
A685854	108	54.7	3.39	1.6	2.1	390	11.7	6.4	< 0.002	0.89	0.17	1.1	< 1	0.4	172	0.06	0.09	1.15	0.109	0.04	0.2	9	8.4
A685855	240	15.5	4.11	1.9	4.2	460	10.4	7.1	< 0.002	0.75	0.21	2.0	< 1	0.4	310	0.10	0.10	1.73	0.130	0.04	0.4	12	8.3

Analyte Symbol	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	ppm	g/tonne
Lower Limit	0.1	2	0.5	0.02
Method Code	TD-MS	TD-ICP	TD-MS	FA- GRA
A685612	10.4	28	140	
A685613	12.3	32	132	
A685614	12.7	37	135	
A685615	9.2	21	84.9	
A685616	12.2	41	117	
A685617	11.5	35	101	
A685618	9.6	26	132	
A685619	12.6	24	141	
A685620	9.0	43	7.8	
A685621	2.1	7	11.3	
A685622	14.9	27	159	
A685623	11.3	25	112	
A685624	11.7	17	189	
A685625	7.7	13	178	
A685626	12.2	9	281	
A685627	9.7	69	76.8	
A685628	0.4	4	2.6	
A685629	0.1	2	0.9	
A685630	1.7	9	1.8	
A685631	5.2	13	8.0	
A685632	1.0	6	3.1	
A685633	2.2	19	24.1	
A685634	3.5	31	35.5	
A685635	8.2	36	46.7	
A685636	6.5	37	5.8	
A685637	1.9	15	16.9	
A685638	1.1	6	3.9	
A685639	8.2	21	8.6	
A685640	4.8	15	8.5	
A685641	5.7	24	156	
A685642	4.3	24	138	
A685643	2.5	82	12.1	
A685644	3.0	15	110	
A685645	12.0	346	26.6	
A685646	17.2	230	72.0	
A685647	47.1	104	127	
A685648	7.9	271	109	
A685649	6.0	61	33.3	
A685650	11.3	71	144	
A685751	3.9	64	85.3	
A685752	2.0	21	11.1	
A685753	2.4	38	42.8	
A685754	3.1	24	56.4	
A685755	2.2	26	75.0	
A685756	8.4	60	24.5	
A685757	8.2	68	73.6	
A685758	1.3	12	1.1	
A685759	0.6	7	4.9	
A685760	4.7	53	35.5	
A685761	8.0	88	38.7	

Analyte Symbol	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	ppm	g/tonne
Lower Limit	0.1	2	0.5	0.02
Method Code	TD-MS	TD-ICP	TD-MS	FA- GRA
A685762	19.2	84	61.9	
A685763	4.3	29	9.7	
A685764	2.2	20	5.0	
A685765	22.5	98	87.5	
A685766	2.4	20	1.3	
A685767	4.2	74	11.7	
A685768	6.4	16	1.5	
A685769	12.9	74	18.3	
A685770	14.4	122	93.2	
A685771	9.2	58	17.7	
A685772	3.6	9	123	
A685773	4.1	11	136	
A685774	3.5	8	128	
A685775	3.6	6	122	
A685776	3.9	12	132	
A685777	3.6	13	126	
A685778	4.4	12	131	
A685779	17.5	89	127	
A685780	10.6	78	44.5	
A685781	9.3	71	38.4	
A685782	9.4	91	30.5	
A685783	10.0	66	28.6	
A685784	5.0	9	57.8	
A685785	6.3	24	126	
A685786	5.4	10	158	
A685787	5.3	16	135	
A685788	3.8	13	110	
A685789	5.5	11	129	
A685790	1.9	4	52.0	
A685791	5.4	26	120	
A685792	6.1	39	148	
A685793	0.8	< 2	17.4	
A685794	0.3	6	6.1	
A685795	0.1	< 2	1.8	
A685796	0.2	3	1.8	
A685797	1.3	4	34.0	
A685798	1.5	5	45.7	
A685799	3.6	19	102	
A685800	1.9	7	52.3	5.12
A685851	1.7	6	39.5	
A685852	2.3	6	55.1	
A685853	1.9	5	57.2	
A685854	1.6	7	46.9	
A685855	3.1	16	73.2	

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit	5	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01
Method Code	FA-AA	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP
SDC-1 Meas			8.51	0.5	700	2.87		1.10		95.2	18.7	49	4.15	31.3	4.95	20.5		1.2		2.14	43.8	36.1	1.02
SDC-1 Cert			8.34	0.220	630	3.00		1.00		93.00	18.0	64.00	4.00	30.000	4.82	21.00		8.30		2.72	42.00	34.0	1.02
SDC-1 Meas				< 0.2		2.48				90.2	16.6		4.43	28.6		13.4		1.0			38.3	34.8	
SDC-1 Cert				0.220		3.00				93.00	18.0		4.00	30.000		21.00		8.30			42.00	34.0	
SDC-1 Meas				< 0.2		2.91				99.2	18.0		4.20	31.4		21.2		1.3			43.7	38.6	
SDC-1 Cert				0.220		3.00				93.00	18.0		4.00	30.000		21.00		8.30			42.00	34.0	
Oreas 72a (4 Acid Digest) Meas				7.0							118	162		349	9.68								
Oreas 72a (4 Acid Digest) Cert				14.7							157	228		316	9.63								
Oreas 72a (4 Acid Digest) Meas				4.7							147			306									
Oreas 72a (4 Acid Digest) Cert				14.7							157			316									
OREAS 101b (4 Acid) Meas										> 500	47.0			414	10.3					2.29	723		1.20
OREAS 101b (4 Acid) Cert										1325	45			412	10.7					2.36	754		1.23
OREAS 101b (4 Acid) Meas										> 500	48.1			430	10.6					2.03	630		1.23
OREAS 101b (4 Acid) Cert										1325	45			412	10.7					2.36	754		1.23
OREAS 101b (4 Acid) Meas										> 500	48.4			433	10.1					2.26	626		1.19
OREAS 101b (4 Acid) Cert										1325	45			412	10.7					2.36	754		1.23
OREAS 101b (4 Acid) Meas										> 500	36.9			358								677	
OREAS 101b (4 Acid) Cert										1325	45			412								754	
OREAS 101b (4 Acid) Meas										> 500	44.5			414								812	
OREAS 101b (4 Acid) Cert										1325	45			412								754	
OREAS 98 (4 Acid) Meas		47.8					90.2				125			> 10000									
OREAS 98 (4 Acid) Cert		45.1					97.2				121			14800 0.0									
OREAS 98 (4 Acid) Meas		46.5					107				133			> 10000									
OREAS 98 (4 Acid) Cert		45.1					97.2				121			14800 0.0									
DNC-1a Meas					110			7.71			52.6	146		86.3	7.29	14.4					3.4	4.5	
DNC-1a Cert					118			8.21			57	270		100	6.97	15					3.6	5.2	
DNC-1a Meas											56.0			95.0		15.6					3.8	4.9	
DNC-1a Cert											57			100		15					3.6	5.2	
OREAS 13b (4-Acid) Meas		0.92		51.6							72.3	9770		1990									
OREAS 13b (4-Acid) Cert		0.86		57							75	8650.0 00		2327.0 000									
OREAS 13b (4-Acid) Meas		0.82		46.5							71.2	9440		2210									
OREAS 13b (4-Acid) Cert		0.86		57							75	8650.0 00		2327.0 000									
OREAS 13b (4-Acid) Meas		0.89		47.2							72.1			2200									
OREAS 13b		0.86		57							75			2327.0									

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit	5	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01
Method Code	FA-AA	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP
(4-Acid) Cert														000									
OREAS 904 (4 Acid) Meas		0.55	6.39	93.6	200	7.97	4.23	0.05		88.2	80.3	56	3.62	5410	6.77	15.4	0.21	1.4	0.226	2.63	44.6	15.2	0.57
OREAS 904 (4 Acid) Cert		0.551	6.30	98.0	194	7.86	4.05	0.0460		86.0	83.0	54.0	3.79	6120	6.68	16.7	0.180	5.00	0.220	3.31	43.2	16.7	0.556
OREAS 904 (4 Acid) Meas		0.59	6.47	104	220	8.12	4.50	0.05		92.9	92.5	55	3.83	5700	6.89	17.4	0.06	0.2	0.210	3.38	47.9	16.0	0.59
OREAS 904 (4 Acid) Cert		0.551	6.30	98.0	194	7.86	4.05	0.0460		86.0	83.0	54.0	3.79	6120	6.68	16.7	0.180	5.00	0.220	3.31	43.2	16.7	0.556
OREAS 904 (4 Acid) Meas		0.63		111		7.68	4.28			94.7	85.5		3.71	6270		18.7	0.11	5.1	0.211		45.7	17.1	
OREAS 904 (4 Acid) Cert		0.551		98.0		7.86	4.05			86.0	83.0		3.79	6120		16.7	0.180	5.00	0.220		43.2	16.7	
SBC-1 Meas				25.4	710	2.75	0.63		0.35	93.4	19.2	108	7.31	27.0		21.5		3.1			40.6	159	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	108.0	22.7	109	8.2	31.0		27.0		3.7			52.5	163	
SBC-1 Meas				30.4	550	2.77	0.71		0.37	112	22.5	86	8.40	34.1		25.6		3.6			50.8	174	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	108.0	22.7	109	8.2	31.0		27.0		3.7			52.5	163	
OREAS 45d (4-Acid) Meas			7.60	11.7	200	0.79	0.33	0.19		34.7	28.6	555	3.72	354	14.1	21.2		3.2	0.089	0.39	14.5	20.6	0.23
OREAS 45d (4-Acid) Cert			8.150	13.8	183.0	0.79	0.31	0.185		37.20	29.50	549	3.910	371	14.5	21.20		3.830	0.096	0.412	16.9	21.5	0.245
OREAS 45d (4-Acid) Meas			8.24	7.8	200	0.80	0.34	0.20		42.2	33.5	472	3.99	426	14.6	23.1		1.3	0.089	0.42	18.8	22.4	0.25
OREAS 45d (4-Acid) Cert			8.150	13.8	183.0	0.79	0.31	0.185		37.20	29.50	549	3.910	371	14.5	21.20		3.830	0.096	0.412	16.9	21.5	0.245
OREAS 45d (4-Acid) Meas			7.78	9.8	200	0.88	0.27	0.19		35.7	28.8	542	4.12	353	14.1	18.0		3.0	0.100	0.40	14.4	22.2	0.24
OREAS 45d (4-Acid) Cert			8.150	13.8	183.0	0.79	0.31	0.185		37.20	29.50	549	3.910	371	14.5	21.20		3.830	0.096	0.412	16.9	21.5	0.245
OREAS 45d (4-Acid) Meas				10.0		0.82	0.32			38.8	30.2		3.83	384		25.3		2.5	0.086		17.3	22.7	
OREAS 45d (4-Acid) Cert				13.8		0.79	0.31			37.20	29.50		3.910	371		21.20		3.830	0.096		16.9	21.5	
OREAS 96 (4 Acid) Meas		10.2					26.2				44.4			> 10000									
OREAS 96 (4 Acid) Cert		11.5					26.3				49.9			39300									
OREAS 96 (4 Acid) Meas		11.5					29.9				48.9			> 10000									
OREAS 96 (4 Acid) Cert		11.5					26.3				49.9			39300									
OREAS 923 (4 Acid) Meas		1.64	7.20	8.8	460	2.57	22.4	0.49	0.46	86.5	27.2	75	6.69	4150	6.39	20.1		3.8	0.531	2.43	44.1	33.8	1.70
OREAS 923 (4 Acid) Cert		1.60	7.29	7.61	434	2.42	21.4	0.473	0.420	83.0	23.1	71.0	6.70	4230	6.43	20.3		3.42	0.520	2.51	42.2	31.4	1.69
OREAS 923 (4 Acid) Meas		1.78	7.55	7.5	430	2.09	26.4	0.50	0.46	90.0	21.9	78	6.65	4280	6.75	19.7		3.8	0.577	2.02	44.0	33.0	1.76
OREAS 923 (4 Acid) Cert		1.60	7.29	7.61	434	2.42	21.4	0.473	0.420	83.0	23.1	71.0	6.70	4230	6.43	20.3		3.42	0.520	2.51	42.2	31.4	1.69
OREAS 923 (4 Acid) Meas			6.85		420			0.48				71			6.14					2.08			1.63
OREAS 923 (4 Acid) Cert			7.29		434			0.473				71.0			6.43					2.51			1.69
OREAS 621 (4 Acid) Meas		67.5	6.19	75.7		1.81	4.28	2.03	302	38.2	29.2	24	3.31	3350	3.70	25.6		4.6	1.82	2.13	13.6	13.9	0.51
OREAS 621 (4 Acid) Cert		69.0	6.40	77.0		1.69	3.93	1.97	284	46.6	29.3	37.1	3.28	3630	3.70	24.6		4.41	1.83	2.20	21.6	14.2	0.507
OREAS 621 (4 Acid) Meas		64.6	6.58	69.7		1.61	3.98	2.09	287	45.7	29.0	31	3.23	3190	3.85	24.6		4.4	1.82	2.22	19.3	14.0	0.53

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit	5	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01
Method Code	FA-AA	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP
Acid) Meas																							
OREAS 621 (4 Acid) Cert		69.0	6.40	77.0		1.69	3.93	1.97	284	46.6	29.3	37.1	3.28	3630	3.70	24.6		4.41	1.83	2.20	21.6	14.2	0.507
OREAS 621 (4 Acid) Meas		62.1		67.7		1.57	3.42		239	45.6	28.6		3.35	3620		8.92		4.1	1.75		18.3	15.0	
OREAS 621 (4 Acid) Cert		69.0		77.0		1.69	3.93		284	46.6	29.3		3.28	3630		24.6		4.41	1.83		21.6	14.2	
OREAS 522 (4 Acid) Meas		1.28	4.03	324		0.96	7.71	3.57		104	507	35	0.74	8070	23.7	12.2		2.5	0.257	2.66	66.0	14.7	1.10
OREAS 522 (4 Acid) Cert		1.31	3.95	490		0.700	8.72	3.65		148	550	29.6	0.640	9160	24.6	16.0		2.96	0.230	2.83	171	16.2	1.12
OREAS 522 (4 Acid) Meas		1.39	4.09	502		0.78	9.84	3.62		104	612	35	0.68	9660	24.1	19.5		3.0	0.236	2.72	65.4	16.4	1.12
OREAS 522 (4 Acid) Cert		1.31	3.95	490		0.700	8.72	3.65		148	550	29.6	0.640	9160	24.6	16.0		2.96	0.230	2.83	171	16.2	1.12
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas	3100																						
OREAS 238 (Fire Assay) Cert	3030																						
OREAS 238 (Fire Assay) Meas	3010																						
OREAS 238 (Fire Assay) Cert	3030																						
OREAS 238 (Fire Assay) Meas	3090																						
OREAS 238 (Fire Assay) Cert	3030																						
OREAS 238 (Fire Assay) Meas	3150																						
OREAS 238 (Fire Assay) Cert	3030																						
OREAS 257b (Fire Assay) Meas																							
OREAS 257b (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas	521																						
Oreas E1336 (Fire Assay) Cert	510																						
Oreas E1336 (Fire Assay) Meas	493																						
Oreas E1336 (Fire Assay) Cert	510																						
Oreas E1336 (Fire Assay) Meas	530																						
Oreas E1336 (Fire Assay) Cert	510																						
Oreas E1336 (Fire Assay) Meas	502																						
Oreas E1336 (Fire Assay) Cert	510																						
A685620 Orig	680	1.24	4.48	1.7	250	2.00	0.10	1.99	0.09	37.9	18.9	82	0.71	120	3.24	9.14	< 0.05	< 0.1	0.015	1.13	16.4	19.8	1.02
A685620 Dup	607	1.24	4.44	1.9	370	2.03	0.10	1.96	0.05	37.6	19.2	83	0.66	114	3.26	8.48	< 0.05	0.1	0.014	1.11	15.9	20.4	1.00
A685630 Orig	< 5																						

Analyte Symbol	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1	1	0.1
Method Code	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS
SDC-1 Meas	888		1.56	< 0.1	37.2	610	25.9	120			< 0.05	15.6		0.4	176	< 0.05		13.5	0.249	0.67	3.0	63	< 0.1
SDC-1 Cert	880.00		1.52	21.00	38.0	690	25.00	127.00			0.54	17.00		3.00	180.00	1.20		12.00	0.606	0.70	3.10	102.00	0.80
SDC-1 Meas				< 0.1	32.3		25.1	109			< 0.05	14.1		0.4	172	< 0.05		12.2			0.64	2.8	0.3
SDC-1 Cert				21.00	38.0		25.00	127.00			0.54	17.00		3.00	180.00	1.20		12.00			0.70	3.10	0.80
SDC-1 Meas				8.1	35.4		27.3	134			0.28	16.1		1.6	188	0.48		12.2			0.70	2.5	0.4
SDC-1 Cert				21.00	38.0		25.00	127.00			0.54	17.00		3.00	180.00	1.20		12.00			0.70	3.10	0.80
Oreas 72a (4 Acid Digest) Meas					5660					1.61													
Oreas 72a (4 Acid Digest) Cert					6930.000					1.74													
Oreas 72a (4 Acid Digest) Meas					7080																		
Oreas 72a (4 Acid Digest) Cert					6930.000																		
OREAS 101b (4 Acid) Meas	937	18.6			9.7	1140	23.9											39.9	0.319		357	74	
OREAS 101b (4 Acid) Cert	927	20.1			8.2	1118	23											36.4	0.35		387	77	
OREAS 101b (4 Acid) Meas	949	20.1			9.5	1120	22.5											35.8	0.350		286	78	
OREAS 101b (4 Acid) Cert	927	20.1			8.2	1118	23											36.4	0.35		387	77	
OREAS 101b (4 Acid) Meas	930	18.2			9.8	1100	23.6											37.6	0.301		307	69	
OREAS 101b (4 Acid) Cert	927	20.1			8.2	1118	23											36.4	0.35		387	77	
OREAS 101b (4 Acid) Meas		18.5			7.1		21.6											34.7			370		
OREAS 101b (4 Acid) Cert		20.1			8.2		23											36.4			387		
OREAS 101b (4 Acid) Meas		17.7			8.8		25.2											38.1			364		
OREAS 101b (4 Acid) Cert		20.1			8.2		23											36.4			387		
OREAS 98 (4 Acid) Meas							274			> 10.0	13.2		192	215									
OREAS 98 (4 Acid) Cert							345			15.5	20.1		158	206									
OREAS 98 (4 Acid) Meas							390			> 10.0	7.62		198	211									
OREAS 98 (4 Acid) Cert							345			15.5	20.1		158	206									
DNC-1a Meas			1.46	1.4	266		6.2	3.4			0.77	29.2			140				0.270			143	
DNC-1a Cert			1.40	3	247		6.3	4.50			0.96	31			144				0.29			148	
DNC-1a Meas				1.5	280		7.4	3.7			0.96	34.4			152								
DNC-1a Cert				3	247		6.3	4.50			0.96	31			144								
OREAS 13b (4-Acid) Meas		8.94			2030					1.17													
OREAS 13b (4-Acid) Cert		9.0			2247.000					1.2													
OREAS 13b (4-Acid) Meas		8.60			2220					1.12													
OREAS 13b (4-Acid) Cert		9.0			2247.000					1.2													
OREAS 13b (4-Acid) Meas		8.32			2300																		
OREAS 13b		9.0			2247.0																		

Analyte Symbol	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1	1	0.1
Method Code	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS
(4-Acid) Cert					000																		
OREAS 904 (4 Acid) Meas	426	1.98	0.04		43.0	970	11.6	134		0.06	0.63	9.8	2	2.8	26.3	0.12		15.8		0.56	9.1	83	1.4
OREAS 904 (4 Acid) Cert	410	2.12	0.0340		40.1	980	10.6	130		0.0630	1.48	11.2	3.30	2.83	27.2	0.540		14.3		0.520	8.43	76.0	2.12
OREAS 904 (4 Acid) Meas	439	2.29	0.04		46.1	1070	11.5	132		0.06	1.08	10.9	3	2.3	27.0	< 0.05		16.1		0.55	9.6	83	2.7
OREAS 904 (4 Acid) Cert	410	2.12	0.0340		40.1	980	10.6	130		0.0630	1.48	11.2	3.30	2.83	27.2	0.540		14.3		0.520	8.43	76.0	2.12
OREAS 904 (4 Acid) Meas		1.99			43.5		11.8	151			1.36	12.2	3	3.0	29.1	0.56		15.2		0.57	7.9		2.4
OREAS 904 (4 Acid) Cert		2.12			40.1		10.6	130			1.48	11.2	3.30	2.83	27.2	0.540		14.3		0.520	8.43		2.12
SBC-1 Meas		1.92		14.0	78.6		36.4	121			0.98	17.5		3.2	165	0.90		12.1	0.483	0.86	4.2	220	1.4
SBC-1 Cert		2.40		15.3	82.8		35.0	147			1.01	20.0		3.3	178.0	1.10		15.8	0.51	0.89	5.76	220.0	1.60
SBC-1 Meas		3.58		14.9	90.4		40.3	148			1.03	20.8		3.5	190	0.93		14.8	0.478	1.00	5.0	220	1.8
SBC-1 Cert		2.40		15.3	82.8		35.0	147			1.01	20.0		3.3	178.0	1.10		15.8	0.51	0.89	5.76	220.0	1.60
OREAS 45d (4-Acid) Meas	503	0.48	0.10	1.4	241	410	22.2	37.6		0.04	< 0.05	45.8		0.6	29.7	< 0.05		13.8	0.397	0.26	2.8	166	< 0.1
OREAS 45d (4-Acid) Cert	490.000	2.500	0.101	14.50	231.0	420.000	21.8	42.1		0.049	0.82	49.30		2.78	31.30	1.02		14.5	0.773	0.27	2.63	235.0	1.62
OREAS 45d (4-Acid) Meas	494	0.07	0.10	0.1	265	360	23.0	53.7		0.04	< 0.05	49.4		< 0.2	35.4	< 0.05		15.7	0.082	0.27	3.1	82	< 0.1
OREAS 45d (4-Acid) Cert	490.000	2.500	0.101	14.50	231.0	420.000	21.8	42.1		0.049	0.82	49.30		2.78	31.30	1.02		14.5	0.773	0.27	2.63	235.0	1.62
OREAS 45d (4-Acid) Meas	505	0.62	0.10	1.9	236	390	21.7	38.4		0.04	0.06	50.0		0.6	29.9	0.06		14.1	0.301	0.26	2.8	140	0.2
OREAS 45d (4-Acid) Cert	490.000	2.500	0.101	14.50	231.0	420.000	21.8	42.1		0.049	0.82	49.30		2.78	31.30	1.02		14.5	0.773	0.27	2.63	235.0	1.62
OREAS 45d (4-Acid) Meas		0.42		1.8	250		22.8	44.7			0.06	53.9		0.6	32.5	0.06		14.2		0.26	2.3		0.2
OREAS 45d (4-Acid) Cert		2.500		14.50	231.0		21.8	42.1			0.82	49.30		2.78	31.30	1.02		14.5		0.27	2.63		1.62
OREAS 96 (4 Acid) Meas							97.4			4.14	3.31		40	59.8									
OREAS 96 (4 Acid) Cert							101			4.19	5.09		40.7	65.6									
OREAS 96 (4 Acid) Meas							115			4.19	4.78		46	68.1									
OREAS 96 (4 Acid) Cert							101			4.19	5.09		40.7	65.6									
OREAS 923 (4 Acid) Meas	969	1.02	0.32	15.3	43.6	660	85.3	151		0.67	1.54	12.3	7	14.3	40.9	1.13		17.7	0.386	0.94	3.4	93	5.3
OREAS 923 (4 Acid) Cert	950	0.930	0.324	14.1	35.8	630	83.0	166		0.691	1.29	13.1	6.54	13.3	43.0	1.11		16.5	0.405	0.860	3.06	91.0	4.85
OREAS 923 (4 Acid) Meas	1010	0.87	0.33	14.4	36.6	690	97.5	148		0.70	1.33	13.4	7	14.2	43.5	1.09		16.5	0.400	0.92	2.8	96	5.2
OREAS 923 (4 Acid) Cert	950	0.930	0.324	14.1	35.8	630	83.0	166		0.691	1.29	13.1	6.54	13.3	43.0	1.11		16.5	0.405	0.860	3.06	91.0	4.85
OREAS 923 (4 Acid) Meas	935		0.30			620				0.65									0.376			91	
OREAS 923 (4 Acid) Cert	950		0.324			630				0.691									0.405			91.0	
OREAS 621 (4 Acid) Meas	498	13.7	1.32	10.1	29.8	380	> 10000	84.1		4.40	18.6	6.1	9	5.7	69.5			3.97	0.174	2.16	2.9	33	2.5
OREAS 621 (4 Acid) Cert	532	13.6	1.31	8.61	26.2	359	13600	84.0		4.48	139	6.24	5.64	5.25	91.0			7.48	0.149	1.96	2.83	31.8	2.35
OREAS 621 (4 Acid) Meas	523	13.3	1.37	9.3	27.7	400	> 10000	82.8		4.53	24.3	6.4	8	5.7	66.0			5.64	0.179	2.06	2.8	35	2.3

Analyte Symbol	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1	1	0.1
Method Code	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS
Acid) Meas																							
OREAS 621 (4 Acid) Cert	532	13.6	1.31	8.61	26.2	359	13600	84.0		4.48	139	6.24	5.64	5.25	91.0			7.48	0.149	1.96	2.83	31.8	2.35
OREAS 621 (4 Acid) Meas		14.5		10.5	27.2		> 10000	85.2			48.3	7.0	5	5.0	77.3			6.35		2.11	2.7		2.4
OREAS 621 (4 Acid) Cert		13.6		8.61	26.2		13600	84.0			139	6.24	5.64	5.25	91.0			7.48		1.96	2.83		2.35
OREAS 522 (4 Acid) Meas	3660	195	0.62	1.8	59.9	890	8.7	79.0	0.092	2.30	3.27	10.8	2	8.4	76.4	< 0.05	0.22	1.38	0.243	0.29	42.3	144	36.8
OREAS 522 (4 Acid) Cert	3970	206	0.633	5.66	70.0	890	12.5	82.0	0.0980	2.50	7.93	10.9	2.74	9.32	199	0.440	1.14	7.53	0.344	0.290	42.2	164	135
OREAS 522 (4 Acid) Meas	3730	213	0.63	4.1	75.0	920	9.2	95.8	0.097	2.35	5.12	12.6	3	9.3	94.5	0.10	0.42	1.65	0.304	0.32	39.9	156	86.6
OREAS 522 (4 Acid) Cert	3970	206	0.633	5.66	70.0	890	12.5	82.0	0.0980	2.50	7.93	10.9	2.74	9.32	199	0.440	1.14	7.53	0.344	0.290	42.2	164	135
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
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OREAS 238 (Fire Assay) Cert																							
OREAS 257b (Fire Assay) Meas																							
OREAS 257b (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
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Oreas E1336 (Fire Assay) Cert																							
A685620 Orig	584	2.82	1.71	1.1	47.6	1580	3.6	41.7	< 0.002	0.87	0.42	8.6	< 1	0.5	163	< 0.05	1.48	1.96	0.184	0.14	0.6	76	13.6
A685620 Dup	580	2.71	1.69	1.0	46.1	1580	3.5	40.2	< 0.002	0.87	0.38	8.0	< 1	0.5	158	< 0.05	1.33	1.86	0.183	0.14	0.6	75	12.4
A685630 Orig																							

Analyte Symbol	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	ppm	g/tonne
Lower Limit	0.1	2	0.5	0.02
Method Code	TD-MS	TD-ICP	TD-MS	FA- GRA
SDC-1 Meas		104	40.5	
SDC-1 Cert		103.00	290.00	
SDC-1 Meas			41.7	
SDC-1 Cert			290.00	
SDC-1 Meas			36.4	
SDC-1 Cert			290.00	
Oreas 72a (4 Acid Digest) Meas				
Oreas 72a (4 Acid Digest) Cert				
Oreas 72a (4 Acid Digest) Meas				
Oreas 72a (4 Acid Digest) Cert				
OREAS 101b (4 Acid) Meas	127			
OREAS 101b (4 Acid) Cert	133			
OREAS 101b (4 Acid) Meas	101			
OREAS 101b (4 Acid) Cert	133			
OREAS 101b (4 Acid) Meas	107			
OREAS 101b (4 Acid) Cert	133			
OREAS 101b (4 Acid) Meas	124			
OREAS 101b (4 Acid) Cert	133			
OREAS 101b (4 Acid) Meas	128			
OREAS 101b (4 Acid) Cert	133			
OREAS 98 (4 Acid) Meas		1310		
OREAS 98 (4 Acid) Cert		1360		
OREAS 98 (4 Acid) Meas		1290		
OREAS 98 (4 Acid) Cert		1360		
DNC-1a Meas	14.2	60	30.7	
DNC-1a Cert	18.0	70	38.0	
DNC-1a Meas	15.4		34.1	
DNC-1a Cert	18.0		38.0	
OREAS 13b (4-Acid) Meas		154		
OREAS 13b (4-Acid) Cert		133		
OREAS 13b (4-Acid) Meas		148		
OREAS 13b (4-Acid) Cert		133		
OREAS 13b (4-Acid) Meas				

Analyte Symbol	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	ppm	g/tonne
Lower Limit	0.1	2	0.5	0.02
Method Code	TD-MS	TD-ICP	TD-MS	FA- GRA
OREAS 13b (4-Acid) Cert				
OREAS 904 (4 ACID) Meas	30.3	26	89.7	
OREAS 904 (4 ACID) Cert	31.5	26.3	171	
OREAS 904 (4 ACID) Meas	33.9	26	27.4	
OREAS 904 (4 ACID) Cert	31.5	26.3	171	
OREAS 904 (4 ACID) Meas	30.9		162	
OREAS 904 (4 ACID) Cert	31.5		171	
SBC-1 Meas	24.8	186	103	
SBC-1 Cert	36.5	186	134.0	
SBC-1 Meas	29.5	186	108	
SBC-1 Cert	36.5	186	134.0	
OREAS 45d (4-Acid) Meas	10.8	44	116	
OREAS 45d (4-Acid) Cert	9.53	45.7	141	
OREAS 45d (4-Acid) Meas	13.0	47	51.1	
OREAS 45d (4-Acid) Cert	9.53	45.7	141	
OREAS 45d (4-Acid) Meas	10.4	45	121	
OREAS 45d (4-Acid) Cert	9.53	45.7	141	
OREAS 45d (4-Acid) Meas	10.7		85.3	
OREAS 45d (4-Acid) Cert	9.53		141	
OREAS 96 (4 Acid) Meas		441		
OREAS 96 (4 Acid) Cert		457		
OREAS 96 (4 Acid) Meas		447		
OREAS 96 (4 Acid) Cert		457		
OREAS 923 (4 Acid) Meas	27.9	343	134	
OREAS 923 (4 Acid) Cert	26.4	345	116	
OREAS 923 (4 Acid) Meas	24.6	354	118	
OREAS 923 (4 Acid) Cert	26.4	345	116	
OREAS 923 (4 Acid) Meas		341		
OREAS 923 (4 Acid) Cert		345		
OREAS 621 (4 Acid) Meas	12.2	> 10000	174	
OREAS 621 (4	11.1	52200	168	

Analyte Symbol	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	ppm	g/tonne
Lower Limit	0.1	2	0.5	0.02
Method Code	TD-MS	TD-ICP	TD-MS	FA- GRA
Acid) Cert				
OREAS 621 (4 Acid) Meas	11.8	> 10000	169	
OREAS 621 (4 Acid) Cert	11.1	52200	168	
OREAS 621 (4 Acid) Meas	12.0		181	
OREAS 621 (4 Acid) Cert	11.1		168	
OREAS 522 (4 Acid) Meas	16.8	28	114	
OREAS 522 (4 Acid) Cert	18.5	30.2	112	
OREAS 522 (4 Acid) Meas	18.9	29	115	
OREAS 522 (4 Acid) Cert	18.5	30.2	112	
OREAS 229b (Fire Assay) Meas				11.6
OREAS 229b (Fire Assay) Cert				11.9
OREAS 238 (Fire Assay) Meas				
OREAS 238 (Fire Assay) Cert				
OREAS 238 (Fire Assay) Meas				
OREAS 238 (Fire Assay) Cert				
OREAS 238 (Fire Assay) Meas				
OREAS 238 (Fire Assay) Cert				
OREAS 238 (Fire Assay) Meas				
OREAS 238 (Fire Assay) Cert				
OREAS 238 (Fire Assay) Meas				
OREAS 238 (Fire Assay) Cert				
OREAS 257b (Fire Assay) Meas				13.7
OREAS 257b (Fire Assay) Cert				14.2
Oreas E1336 (Fire Assay) Meas				
Oreas E1336 (Fire Assay) Cert				
Oreas E1336 (Fire Assay) Meas				
Oreas E1336 (Fire Assay) Cert				
Oreas E1336 (Fire Assay) Meas				
Oreas E1336 (Fire Assay) Cert				
Oreas E1336 (Fire Assay) Meas				
Oreas E1336 (Fire Assay) Cert				

Analyte Symbol	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	ppm	g/tonne
Lower Limit	0.1	2	0.5	0.02
Method Code	TD-MS	TD-ICP	TD-MS	FA- GRA
A685620 Orig	9.3	43	9.3	
A685620 Dup	8.7	42	6.2	
A685630 Orig				
A685630 Dup				
A685634 Orig				
A685634 Dup				
A685635 Orig	8.1	36	64.0	
A685635 Dup	8.3	36	29.4	
A685650 Orig	11.4	71	146	
A685650 Dup	11.2	71	142	
A685755 Orig				
A685755 Dup				
A685761 Orig	8.0	88	38.7	
A685761 Split PREP DUP	7.9	89	35.2	
A685762 Orig	19.5	86	73.3	
A685762 Dup	18.9	82	50.5	
A685764 Orig				
A685764 Dup				
A685768 Orig				
A685768 Dup				
A685784 Orig	4.9	8	80.6	
A685784 Dup	5.1	9	35.0	
A685793 Orig				
A685793 Dup				
A685799 Orig				
A685799 Dup				
A685800 Orig	1.9	7	51.8	5.14
A685800 Dup	1.9	7	52.9	5.11
A685853 Orig				
A685853 Dup				
Method Blank	< 0.1		< 0.5	
Method Blank	< 0.1	< 2	< 0.5	
Method Blank	< 0.1	< 2	< 0.5	
Method Blank	< 0.1	< 2	< 0.5	
Method Blank	< 0.1	< 2	< 0.5	
Method Blank		< 2		
Method Blank		< 2		
Method Blank	< 0.1	< 2	< 0.5	
Method Blank	< 0.1	< 2	1.2	
Method Blank		< 2		
Method Blank				
Method Blank				
Method Blank				
Method Blank				
Method Blank				
Method Blank				
Method Blank				
Method Blank				< 0.02
Method Blank				



Report No.: A20-12232
Report Date: 09-Dec-20
Date Submitted: 05-Oct-20
Your Reference: GOLD

Portofino Resources
Suite 520-470 Granville St
Vancouver BC V6C1V5
Canada

ATTN: David Tafel

CERTIFICATE OF ANALYSIS

61 Rock samples were submitted for analysis.

Table with 2 columns: The following analytical package(s) were requested: and Testing Date:
Row 1: UT-6M, QOP Total/QOP Ultratrace- 4acid Digest (Total Digestion ICPOES/ICPMS), 2020-11-02 16:08:19

REPORT A20-12232

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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

Footnote: sample A685561 has been discarded as per clients request.

CERTIFIED BY:

Handwritten signature of Emmanuel Esemé

Emmanuel Esemé, Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
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E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Report No.: A20-12232
Report Date: 09-Dec-20
Date Submitted: 05-Oct-20
Your Reference: GOLD

Portofino Resources
Suite 520-470 Granville St
Vancouver BC V6C1V5
Canada

ATTN: David Tafel

CERTIFICATE OF ANALYSIS

61 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-50-Tbay	QOP AA-Au (Au - Fire Assay AA)	2020-10-27 10:56:58
1A3-50-Tbay	QOP AA-Au (Au - Fire Assay Gravimetric)	2020-10-30 14:05:42

REPORT A20-12232

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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

Footnote: sample A685561 has been discarded as per clients request.

CERTIFIED BY:



Emmanuel Esemé, Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
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Results

Activation Laboratories Ltd.

Report: A20-1232

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit	5	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01
Method Code	FA-AA	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP
A685551	5	0.08	8.85	20.3	350	0.85	0.05	3.07	0.08	31.7	17.3	100	1.16	36.5	3.92	20.6	0.12	2.6	0.035	1.85	14.0	13.4	1.03
A685552	12	0.09	8.49	30.7	460	0.91	0.05	3.55	0.11	30.9	17.6	94	1.69	38.0	3.80	16.8	0.19	2.3	0.033	2.32	13.8	8.9	1.13
A685553	< 5	0.03	2.90	6.5	40	0.10	0.01	2.31	0.05	4.81	5.0	41	0.19	23.0	1.89	5.11	< 0.05	0.4	0.011	0.23	1.8	1.9	0.08
A685554	< 5	0.08	6.99	11.3	80	0.38	0.04	6.04	0.03	13.9	13.7	61	0.44	30.6	4.30	15.7	< 0.05	1.7	0.016	0.48	5.7	12.2	0.92
A685555	< 5	0.13	9.35	15.1	270	0.67	0.07	1.02	0.05	28.5	21.2	150	0.90	44.5	3.92	21.1	0.07	2.8	0.016	1.32	12.9	14.5	0.74
A685556	< 5	< 0.01	1.80	3.1	50	0.10	< 0.01	0.62	0.02	3.37	3.8	62	0.18	7.9	1.41	3.45	< 0.05	0.2	0.006	0.23	1.4	1.1	0.04
A685557	12	0.22	9.15	19.8	330	0.90	0.07	2.48	0.11	25.6	21.7	112	1.20	47.1	3.83	21.4	0.06	2.7	0.036	1.67	11.5	9.1	0.58
A685558	8	0.10	7.36	14.0	160	0.48	0.04	4.32	0.07	27.7	14.0	78	0.54	38.3	2.72	14.0	0.20	1.8	0.024	0.78	12.2	4.3	0.71
A685559	< 5	0.08	8.53	26.2	470	0.87	0.05	3.63	0.07	32.1	15.4	96	1.82	41.4	3.72	17.1	0.14	2.3	0.036	2.35	14.0	9.3	1.15
A685560	8	0.17	9.39	17.8	380	0.97	0.05	1.97	0.09	37.0	18.6	107	1.19	39.9	3.49	21.3	0.08	2.7	0.035	1.55	16.6	10.5	0.59
A685561																							
A685562	< 5	0.38	4.08	1.3	140	0.59	0.91	0.37	< 0.02	12.8	1.1	31	0.09	9.8	0.80	10.6	< 0.05	0.3	0.005	0.75	5.8	1.6	0.10
A685563	153	32.5	1.72	0.8	60	0.47	82.5	0.25	0.22	6.43	1.6	42	< 0.05	9.5	1.08	4.96	0.08	0.5	< 0.005	0.33	3.0	1.0	0.05
A685564	50	1.98	6.01	2.4	90	0.86	5.49	0.46	0.35	14.6	5.2	20	0.10	5.8	2.84	17.3	< 0.05	2.0	0.008	1.08	5.9	3.5	0.26
A685565	> 5000	3.93	6.13	2.2	40	1.24	0.27	1.26	0.04	94.9	11.6	35	0.18	22.2	2.77	18.7	< 0.05	< 0.1	0.011	1.54	45.4	3.5	0.41
A685566	355	0.05	2.16	1.9	1550	0.68	0.13	0.26	0.03	6.03	3.5	51	0.64	41.5	9.61	< 0.05	0.09	< 0.1	0.012	2.14	2.4	7.5	0.33
A685567	142	< 0.01	0.08	0.6	90	0.09	0.02	0.01	< 0.02	1.51	0.9	69	< 0.05	3.2	0.97	< 0.05	0.06	< 0.1	< 0.005	0.04	0.7	0.4	< 0.01
A685568	> 5000	0.26	1.91	1.3	230	0.40	0.30	0.16	< 0.02	23.8	4.9	59	0.06	3.6	1.50	2.54	< 0.05	0.8	< 0.005	0.48	11.9	0.3	0.03
A685569	619	0.16	6.06	1.8	650	2.75	0.05	1.28	0.06	78.9	4.5	43	0.14	6.1	1.49	6.38	0.06	0.4	0.015	1.06	39.7	1.3	0.31
A685570	> 5000	0.92	7.69	3.8	50	1.31	0.18	1.22	0.23	114	13.3	29	0.37	20.1	4.36	20.3	< 0.05	4.0	0.021	3.15	56.4	4.0	0.50
A685571	7	0.06	1.40	2.8	3670	0.61	0.16	0.52	0.04	7.93	4.0	70	0.81	46.0	12.3	< 0.05	0.10	< 0.1	0.008	0.86	3.2	8.5	0.87
A685572	< 5	0.04	1.15	2.6	2050	0.84	0.05	2.52	0.07	7.28	3.2	74	0.79	24.7	6.55	< 0.05	0.07	< 0.1	0.009	0.75	3.0	5.1	0.66
A685573	6	0.03	0.71	2.1	1070	0.25	0.02	0.40	< 0.02	7.18	1.2	60	0.14	15.6	2.91	< 0.05	0.07	< 0.1	< 0.005	0.45	3.4	1.2	0.06
A685574	< 5	0.03	0.66	3.8	3370	0.67	0.06	0.22	< 0.02	4.24	1.9	65	0.56	16.3	14.4	< 0.05	0.08	0.1	0.005	0.27	1.9	5.7	0.53
A685575	< 5	0.04	0.69	2.6	2150	0.39	0.07	0.17	0.02	2.68	2.0	76	0.29	27.2	4.69	< 0.05	0.09	< 0.1	< 0.005	0.21	1.0	5.7	0.55
A685576	< 5	0.04	1.07	2.3	2830	0.52	0.04	1.17	0.07	6.23	4.0	72	1.33	23.2	12.6	< 0.05	0.11	< 0.1	0.008	0.94	2.9	5.2	0.60
A685577	< 5	0.07	1.94	4.3	3400	1.15	0.09	0.43	0.06	11.3	7.1	80	2.19	41.8	24.6	< 0.05	0.37	0.1	0.019	1.07	5.3	12.2	0.87
A685578	< 5	0.08	5.40	3.8	160	1.30	0.10	1.56	0.03	24.9	15.7	100	7.50	52.9	15.0	8.80	1.04	1.7	0.025	2.01	11.6	15.2	1.49
A685579	< 5	0.03	2.18	4.9	3380	0.24	0.08	0.55	0.10	10.3	5.6	51	0.66	34.6	8.70	< 0.05	0.10	< 0.1	0.006	2.25	4.3	6.0	0.63
A685580	39	0.11	2.49	2.3	590	1.47	0.36	0.52	0.07	56.7	8.8	94	0.32	87.5	9.48	2.52	< 0.05	< 0.1	0.014	1.38	31.3	3.5	0.33
A685581	137	0.36	2.69	1.8	1500	0.92	0.91	1.21	0.07	52.7	4.4	67	0.39	13.2	1.28	5.86	< 0.05	< 0.1	0.010	1.31	23.8	2.6	0.43
A685582	17	0.05	7.00	3.2	2300	2.61	0.11	4.16	0.15	257	20.7	139	2.11	31.6	3.89	13.5	< 0.05	1.9	0.047	6.22	115	23.5	2.70
A685583	2770	0.36	2.85	3.0	230	1.41	0.22	3.32	0.24	75.8	7.2	61	0.11	12.2	1.86	6.73	< 0.05	< 0.1	0.025	0.73	36.6	1.5	1.25
A685584	1190	0.66	5.74	0.7	880	2.00	0.81	1.42	0.13	116	6.8	34	0.26	17.6	1.64	9.59	< 0.05	0.2	0.012	1.83	53.7	1.6	0.47
A685585	481	0.33	1.86	1.2	360	0.65	0.21	0.47	0.04	43.2	3.7	58	0.13	13.2	1.20	2.01	< 0.05	0.2	0.006	0.71	19.9	1.1	0.11
A685586	859	0.19	2.19	6.0	240	1.56	0.25	0.25	0.03	16.9	11.8	71	0.88	19.0	31.4	7.51	0.25	0.9	0.012	0.72	7.9	8.3	0.90
A685587	1440	0.17	4.12	1.3	760	1.66	0.32	1.98	0.12	99.6	6.6	47	0.34	18.9	1.78	4.12	< 0.05	< 0.1	0.015	1.02	47.7	3.6	0.86
A685588	274	0.16	3.76	7.6	1030	1.41	0.19	1.12	0.11	82.0	5.8	48	0.30	26.9	1.57	6.71	< 0.05	0.2	0.017	1.03	38.8	3.1	0.44
A685589	127	0.23	2.17	1.3	1090	0.88	0.41	0.37	0.04	61.3	3.5	68	0.16	10.2	1.08	3.38	< 0.05	< 0.1	0.011	0.61	29.5	1.7	0.21
A685590	509	0.07	1.55	4.4	1230	0.80	< 0.01	0.76	0.02		2.5	63		9.6	1.21	3.25				0.30	12.9	0.4	0.26
A685591	< 5	0.25	1.64	2.9	310	0.19	0.49	0.16	< 0.02	8.49	5.5	78	0.24	28.8	7.81	3.24	< 0.05	0.5	0.015	0.54	4.1	7.8	0.80
A685592	< 5	0.02	0.78	2.4	2570	0.42	0.03	0.37	< 0.02	2.99	1.3	74	0.51	8.3	7.39	< 0.05	0.12	< 0.1	< 0.005	0.37	1.3	4.0	0.46
A685593	< 5	0.03	0.39	1.7	880	0.16	0.02	0.35	< 0.02	4.17	1.5	82	0.73	18.6	4.10	< 0.05	< 0.05	< 0.1	< 0.005	0.18	1.5	3.7	0.46
A685594	< 5	0.04	0.69	2.9	2960	0.53	0.06	0.35	0.05	1.73	1.6	54	0.34	25.0	5.86	< 0.05	0.06	< 0.1	< 0.005	0.45	0.9	3.6	0.26
A685595	< 5	0.01	0.54	2.5	1440	0.37	0.02	0.41	0.05	0.94	0.6	57	0.15	10.0	1.66	< 0.05	0.07	< 0.1	< 0.005	0.37	< 0.5	2.1	0.10
A685596	< 5	0.06	1.33	2.0	1940	0.57	0.06	0.42	0.05	8.74	5.5	80	1.72	39.6	12.5	< 0.05	0.20	< 0.1	0.015	0.70	3.2	11.4	1.01
A685597	< 5	0.01	0.87	1.9	1330	0.22	0.02	0.03	0.03	0.53	1.4	65	0.85	10.3	2.94	< 0.05	0.10	< 0.1	< 0.005	0.40	< 0.5	7.6	0.64
A685598	< 5	0.04	5.07	1.9	3640	2.96	0.03	7.20	0.16	39.8	11.9	274	2.36	17.9	9.15	< 0.05	0.28	1.5	0.029	3.31	17.6	27.4	2.96
A685599	1310	0.09	0.24	2.1	40	0.26	0.06	0.02	< 0.02	21.1	2.1	67	0.05	13.9	2.30	0.67	< 0.05	0.8	< 0.005	0.09	8.9	0.3	0.02
A685600	975	0.05	1.89	3.4	1590	0.75	0.03	0.49	0.07	54.0	4.1	62	0.09	23.9	1.78	2.16	< 0.05	0.3	0.010	0.59	27.5	0.7	1.15
A685601	> 5000	1.46	5.43	3.1	50	0.89	0.32	1.14	0.05	80.7	10.3	35	0.20	18.8	2.99	14.6	< 0.05	0.4	0.013	1.71	40.5	3.5	0.39

Results

Activation Laboratories Ltd.

Report: A20-12232

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit	5	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01
Method Code	FA-AA	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP
A685602	> 5000	0.22	2.50	1.5	2450	1.03	0.01	0.09	0.04	30.8	2.4	60	0.08	6.9	0.84	1.03	< 0.05	0.2	0.005	0.57	13.1	0.7	0.01
A685603	> 5000	0.94	7.52	4.7	30	3.86	0.15	0.90	0.08	102	8.4	29	0.15	17.5	4.43	19.9	< 0.05	4.2	0.010	1.46	49.5	1.2	0.25
A685604	3240	0.15	0.72	1.6	70	0.59	0.02	0.05	0.04	11.0	1.9	61	< 0.05	8.8	1.04	2.06	0.18	0.3	< 0.005	0.14	5.3	< 0.2	< 0.01
A685605	> 5000	14.3	0.89	1.3	1680	0.15	0.02	0.29	0.05	6.00	1.1	67	< 0.05	5.3	1.05	0.92	< 0.05	0.3	< 0.005	0.22	2.7	0.3	0.05
A685606	641	0.06	1.86	2.1	1280	1.04	< 0.01	0.94	0.08	27.6	2.3	56	0.06	14.2	1.09	1.17	< 0.05	< 0.1	0.005	0.37	13.7	0.6	0.29
A685607	< 5	0.03	1.03	12.2	180	< 0.05	0.02	0.34	0.02	1.69	1.0	71	0.19	6.5	1.16	2.15	< 0.05	0.1	0.006	0.83	0.8	1.6	0.09
A685608	< 5	0.02	6.06	3.1	300	0.70	0.58	3.49	0.15	21.5	10.6	133	0.41	2.1	3.89	14.7	0.21	0.3	0.029	1.30	9.5	11.9	0.99
A685609	< 5	0.01	0.94	0.7	90	0.06	0.02	0.34	0.03	4.13	2.1	69	0.23	1.7	1.08	2.38	< 0.05	0.2	< 0.005	0.43	1.8	2.2	0.22
A685610	< 5	0.01	1.67	1.2	170	0.48	0.03	1.85	0.07	7.20	4.1	64	0.21	1.6	1.50	4.15	< 0.05	0.3	< 0.005	0.49	3.4	5.7	0.43
A685611	< 5	0.04	1.74	2.0	450	0.20	0.04	0.74	0.04	3.69	3.9	80	0.24	20.6	5.17	2.72	< 0.05	0.2	0.007	0.39	1.5	9.0	0.90

Results

Activation Laboratories Ltd.

Report: A20-12232

Analyte Symbol	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1	1	0.1
Method Code	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS
A685551	770	0.62	3.32	2.3	50.0	740	3.4	44.2	< 0.002	0.24	0.24	13.4	< 1	0.6	559	0.10	< 0.05	1.20	0.355	0.26	0.3	113	4.8
A685552	893	0.44	2.57	0.6	47.1	680	2.6	56.6	< 0.002	0.21	0.07	13.6	< 1	0.6	578	< 0.05	< 0.05	1.07	0.322	0.33	0.2	102	0.4
A685553	512	1.81	1.78	0.5	11.1	290	1.7	7.8	< 0.002	0.15	0.14	2.7	< 1	< 0.2	260	< 0.05	< 0.05	0.24	0.063	0.02	< 0.1	21	4.3
A685554	1300	0.48	3.87	1.5	30.5	680	5.2	14.2	< 0.002	0.27	0.24	8.2	< 1	0.3	832	0.07	< 0.05	0.75	0.196	0.06	0.2	48	9.2
A685555	330	0.70	4.50	2.1	55.5	770	3.4	35.1	< 0.002	0.46	0.40	11.3	< 1	0.5	398	0.09	< 0.05	1.25	0.384	0.19	0.3	101	15.6
A685556	419	2.77	1.01	0.3	6.7	160	0.9	6.9	< 0.002	0.05	0.14	1.8	< 1	< 0.2	97.8	< 0.05	< 0.05	0.15	0.047	0.03	< 0.1	14	3.4
A685557	711	0.79	4.10	2.7	52.3	690	5.1	39.4	< 0.002	0.51	0.65	14.9	< 1	0.7	441	0.17	< 0.05	1.19	0.381	0.23	0.3	112	13.9
A685558	909	0.88	4.19	1.1	28.6	600	3.8	24.1	< 0.002	0.21	0.17	9.6	< 1	0.5	621	0.06	< 0.05	0.86	0.241	0.11	0.2	43	5.7
A685559	885	0.47	2.45	1.4	40.5	710	2.4	64.6	< 0.002	0.13	0.05	12.4	< 1	0.7	594	0.05	< 0.05	1.13	0.320	0.34	0.2	93	1.5
A685560	732	0.38	4.22	2.7	43.5	740	4.1	40.7	< 0.002	0.34	0.50	12.8	< 1	0.7	466	0.18	< 0.05	1.25	0.367	0.24	0.3	100	11.9
A685561																							
A685562	97	6.67	2.47	0.9	1.5	170	26.3	11.4	< 0.002	0.10	0.09	0.7	< 1	0.5	98.7	< 0.05	0.14	1.81	0.075	0.06	0.7	9	1.2
A685563	82	84.8	1.13	0.5	1.7	90	2120	6.0	0.004	0.41	0.10	0.3	11	< 0.2	36.8	< 0.05	7.96	0.52	0.030	0.15	0.3	5	0.5
A685564	98	70.2	3.84	2.2	4.9	380	191	20.3	0.007	2.30	0.20	1.1	2	0.5	186	0.13	0.90	2.05	0.128	0.12	1.1	13	2.9
A685565	236	4.61	3.61	4.7	21.3	1110	28.5	44.9	< 0.002	1.67	1.09	3.2	< 1	0.8	397	< 0.05	0.22	5.14	0.308	0.12	1.3	38	30.0
A685566	619	3.69	0.16	0.7	13.5	1090	5.2	38.8	< 0.002	0.14	0.30	2.9	< 1	0.3	90.7	0.05	0.08	0.28	0.023	0.15	0.2	69	4.0
A685567	116	5.10	0.05	< 0.1	2.9	40	1.6	0.8	< 0.002	0.01	0.34	0.3	< 1	< 0.2	5.1	< 0.05	0.05	0.22	< 0.005	< 0.02	< 0.1	2	0.5
A685568	129	3.61	1.23	1.5	7.1	300	33.3	12.6	< 0.002	0.69	0.58	0.7	< 1	0.4	68.4	0.09	0.10	1.52	0.087	0.03	0.3	9	9.1
A685569	485	2.65	4.02	5.1	11.3	490	9.7	29.4	< 0.002	0.20	0.99	3.7	< 1	0.6	360	< 0.05	0.14	5.38	0.247	0.08	0.9	25	18.4
A685570	341	1.25	3.78	6.2	31.5	1050	26.3	68.8	< 0.002	2.79	1.33	3.9	< 1	0.8	427	0.32	0.64	5.56	0.362	0.21	1.3	51	36.9
A685571	1480	4.03	0.05	0.7	16.3	1850	6.0	19.3	< 0.002	0.08	0.14	3.2	< 1	0.4	177	< 0.05	< 0.05	0.28	0.026	< 0.02	0.1	20	5.7
A685572	1810	3.96	0.05	0.7	14.5	1690	2.9	18.1	< 0.002	0.08	0.08	2.6	< 1	0.2	265	< 0.05	< 0.05	0.21	0.020	< 0.02	< 0.1	14	6.5
A685573	466	4.12	0.19	0.4	4.0	1420	2.9	8.6	< 0.002	0.03	< 0.05	1.1	< 1	< 0.2	63.2	< 0.05	< 0.05	0.24	0.011	< 0.02	< 0.1	7	3.4
A685574	302	3.94	0.01	0.5	9.9	730	2.1	9.5	< 0.002	0.10	0.43	1.2	< 1	< 0.2	187	< 0.05	< 0.05	0.23	0.025	< 0.02	< 0.1	18	6.1
A685575	225	5.22	0.06	0.5	8.3	690	2.4	5.5	< 0.002	0.06	0.06	1.4	< 1	< 0.2	112	< 0.05	0.07	0.08	0.008	< 0.02	< 0.1	10	3.3
A685576	1100	3.74	0.10	0.6	19.6	670	5.1	21.4	< 0.002	0.05	0.13	2.4	< 1	< 0.2	1180	< 0.05	< 0.05	0.45	0.035	< 0.02	0.1	21	1.7
A685577	750	2.54	0.14	1.7	34.4	650	4.7	31.7	< 0.002	0.09	0.28	4.3	< 1	0.3	127	< 0.05	< 0.05	1.16	0.121	< 0.02	0.7	45	3.4
A685578	869	7.18	2.77	1.3	72.0	390	5.3	77.4	0.004	0.51	0.13	8.1	< 1	0.4	349	0.06	0.05	2.06	0.171	0.15	0.4	51	0.5
A685579	1980	3.21	0.10	0.4	15.5	1800	6.1	18.7	< 0.002	0.07	0.11	3.6	< 1	< 0.2	168	< 0.05	< 0.05	0.50	0.035	0.04	< 0.1	14	3.3
A685580	1270	4.19	0.98	0.7	30.3	2150	20.5	30.8	< 0.002	0.34	0.46	5.7	< 1	0.4	114	< 0.05	0.06	1.50	0.038	0.11	0.5	84	13.0
A685581	368	4.99	1.29	1.6	15.5	660	91.5	38.9	< 0.002	0.12	0.35	2.5	< 1	0.3	231	< 0.05	0.13	8.25	0.067	0.11	1.7	15	2.9
A685582	905	0.40	1.30	0.5	168	2990	29.3	138	< 0.002	0.05	0.10	12.2	< 1	< 0.2	1220	< 0.05	0.31	20.0	0.303	0.78	4.1	99	3.7
A685583	612	3.29	1.77	3.9	33.4	1000	33.6	25.3	< 0.002	0.32	0.49	5.8	< 1	0.5	563	< 0.05	1.08	13.3	0.102	0.05	3.2	17	13.8
A685584	458	3.89	3.33	1.1	21.3	1080	92.5	52.8	< 0.002	0.27	0.52	4.5	< 1	< 0.2	511	< 0.05	0.22	15.3	0.100	0.14	2.8	21	7.2
A685585	275	4.37	1.01	2.9	12.8	430	21.2	26.0	< 0.002	0.33	0.38	1.5	< 1	0.3	224	< 0.05	0.11	6.80	0.056	0.04	1.2	9	5.2
A685586	204	0.57	0.86	1.3	59.2	1070	6.4	25.7	< 0.002	0.87	0.40	4.9	< 1	0.4	54.0	0.07	0.12	1.26	0.101	0.06	0.3	101	2.3
A685587	437	3.90	2.39	2.7	28.1	1080	31.9	33.5	< 0.002	0.30	0.50	3.9	< 1	0.5	464	< 0.05	0.42	29.0	0.110	0.09	3.4	21	11.5
A685588	395	3.06	2.16	1.8	22.2	1040	24.9	34.6	< 0.002	0.19	0.53	3.0	< 1	0.3	391	< 0.05	0.18	10.4	0.100	0.09	2.0	19	6.5
A685589	284	5.34	1.30	0.9	14.6	610	41.9	22.6	< 0.002	0.09	0.39	2.3	< 1	< 0.2	200	< 0.05	0.14	11.3	0.063	0.04	1.6	12	4.7
A685590	235	4.07	1.09		11.4	320	25.6			0.20	0.73	1.8		0.4	855		5.86	24.7	0.048	< 0.02	0.9	7	7.6
A685591	1430	3.87	0.26	0.6	21.3	190	26.6	13.4	< 0.002	0.45	0.07	3.2	< 1	< 0.2	48.8	0.06	0.05	0.85	0.047	< 0.02	0.2	19	0.4
A685592	831	4.12	0.17	0.1	6.0	910	2.1	9.0	< 0.002	0.07	< 0.05	0.8	< 1	< 0.2	149	< 0.05	< 0.05	0.09	0.007	< 0.02	< 0.1	7	1.4
A685593	374	4.92	0.01	0.4	7.8	1280	0.7	8.0	< 0.002	0.02	< 0.05	0.9	< 1	< 0.2	67.2	< 0.05	< 0.05	0.07	0.007	< 0.02	< 0.1	7	2.4
A685594	2290	3.40	0.03	0.3	6.4	100	2.6	9.9	< 0.002	0.07	0.05	2.1	< 1	< 0.2	156	< 0.05	< 0.05	0.10	0.009	< 0.02	< 0.1	9	9.0
A685595	1200	4.70	0.01	0.1	1.8	< 10	1.2	7.9	< 0.002	0.03	< 0.05	0.9	< 1	< 0.2	47.8	< 0.05	< 0.05	0.04	< 0.005	< 0.02	1.3	4	1.9
A685596	468	3.38	0.04	1.0	20.6	1660	1.2	25.3	< 0.002	0.05	0.05	3.4	< 1	0.2	185	< 0.05	< 0.05	0.42	0.043	< 0.02	< 0.1	40	1.2
A685597	480	5.38	0.01	0.2	8.0	100	0.7	14.3	< 0.002	0.03	< 0.05	1.2	< 1	< 0.2	91.8	< 0.05	< 0.05	0.03	< 0.005	< 0.02	< 0.1	8	2.6
A685598	5060	1.39	0.29	1.1	62.4	290	8.1	82.5	< 0.002	0.06	0.07	20.4	< 1	0.4	578	< 0.05	< 0.05	2.94	0.143	0.09	0.5	41	3.5
A685599	153	3.71	0.13	1.8	4.0	30	2.7	2.4	< 0.002	1.24	0.38	0.7	< 1	0.4	91.6	< 0.05	0.32	2.36	0.090	< 0.02	0.4	22	14.7
A685600	381	4.45	1.09	2.2	13.0	250	8.2	16.2	< 0.002	0.09	0.47	2.3	< 1	0.2	159	< 0.05	0.16	6.12	0.084	0.02	0.5	13	7.7
A685601	270	4.15	2.99	4.3	20.0	900	28.0	47.9	< 0.002	1.82	0.95	2.7	< 1	0.7	340	< 0.05	0.47	4.61	0.269	0.12	1.1	35	22.9

Results

Activation Laboratories Ltd.

Report: A20-12232

Analyte Symbol	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1	1	0.1
Method Code	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS
A685602	329	4.12	1.59	3.2	5.7	300	6.1	16.7	< 0.002	0.06	0.35	1.0	< 1	< 0.2	86.0	< 0.05	0.07	3.27	0.093	< 0.02	0.5	10	2.6
A685603	483	1.18	4.89	21.2	21.1	980	18.1	41.2	< 0.002	3.25	0.95	3.5	2	0.8	288	0.33	1.22	8.81	0.355	0.09	2.0	35	21.5
A685604	139	4.37	0.51	1.0	4.2	120	1.6	3.7	0.002	0.46	0.39	0.6	< 1	< 0.2	18.5	< 0.05	0.08	1.21	0.026	< 0.02	0.1	3	1.9
A685605	147	4.51	0.60	0.4	2.5	290	2.2	5.9	< 0.002	0.14	0.43	0.9	< 1	0.2	96.9	< 0.05	0.13	0.67	0.036	< 0.02	0.1	7	6.9
A685606	360	4.25	1.24	1.9	7.1	210	4.9	10.6	< 0.002	0.11	0.45	2.1	< 1	0.2	198	< 0.05	0.07	2.38	0.086	< 0.02	0.3	9	5.1
A685607	137	4.89	0.07	0.1	2.9	40	2.3	23.8	< 0.002	0.15	0.33	0.6	< 1	< 0.2	114	< 0.05	< 0.05	0.08	0.015	0.11	< 0.1	24	0.2
A685608	521	3.02	1.48	1.3	39.0	530	13.4	27.2	< 0.002	< 0.01	0.79	12.2	< 1	0.6	684	< 0.05	< 0.05	1.28	0.155	0.13	0.8	101	0.2
A685609	165	3.74	0.19	0.3	5.7	100	2.2	15.0	< 0.002	< 0.01	< 0.05	1.7	< 1	< 0.2	129	< 0.05	< 0.05	0.28	0.035	0.03	0.1	21	0.2
A685610	246	3.50	0.25	0.2	11.1	110	2.2	17.3	< 0.002	< 0.01	0.08	2.4	< 1	< 0.2	238	< 0.05	< 0.05	0.29	0.042	0.06	0.1	34	0.2
A685611	695	4.78	0.08	0.6	16.9	440	2.0	9.2	< 0.002	0.09	< 0.05	2.8	< 1	< 0.2	87.6	< 0.05	< 0.05	0.18	0.038	< 0.02	< 0.1	21	0.9

Analyte Symbol	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	ppm	g/tonne
Lower Limit	0.1	2	0.5	0.02
Method Code	TD-MS	TD-ICP	TD-MS	FA- GRA
A685551	7.1	73	87.8	
A685552	7.4	78	81.0	
A685553	2.3	32	14.0	
A685554	5.5	78	58.0	
A685555	5.6	79	98.8	
A685556	1.2	21	6.8	
A685557	6.6	123	93.8	
A685558	6.1	61	64.8	
A685559	6.8	60	82.5	
A685560	6.9	104	97.3	
A685561				
A685562	1.3	11	14.8	
A685563	0.7	20	16.6	
A685564	2.0	52	73.9	
A685565	5.9	15	18.7	45.6
A685566	4.2	29	2.8	
A685567	0.2	6	0.9	
A685568	1.4	10	31.3	6.83
A685569	5.0	28	32.3	
A685570	6.0	66	179	12.3
A685571	6.6	17	1.1	
A685572	5.1	7	1.4	
A685573	3.1	4	0.7	
A685574	2.4	9	6.5	
A685575	2.2	10	2.5	
A685576	2.8	13	2.3	
A685577	3.6	18	6.4	
A685578	5.6	36	60.4	
A685579	6.8	11	1.3	
A685580	12.0	29	2.7	
A685581	6.5	32	10.6	
A685582	26.0	76	126	
A685583	9.8	46	2.7	
A685584	12.3	29	15.7	
A685585	4.2	16	10.9	
A685586	6.2	40	33.1	
A685587	9.7	46	5.5	
A685588	8.4	42	17.2	
A685589	5.4	21	3.1	
A685590	4.1	40	23.4	
A685591	2.3	20	19.6	
A685592	2.4	6	1.8	
A685593	3.5	7	1.4	
A685594	2.0	4	2.7	
A685595	1.7	3	< 0.5	
A685596	5.5	19	4.4	
A685597	0.8	11	0.6	
A685598	12.0	29	51.0	
A685599	1.3	5	29.7	
A685600	2.9	42	24.8	

Analyte Symbol	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	ppm	g/tonne
Lower Limit	0.1	2	0.5	0.02
Method Code	TD-MS	TD-ICP	TD-MS	FA- GRA
A685601	5.6	13	48.8	33.2
A685602	2.2	10	9.1	5.42
A685603	8.7	37	182	10.9
A685604	0.8	5	10.8	3.08
A685605	1.4	7	10.9	14.8
A685606	2.1	23	5.5	
A685607	0.5	5	3.8	
A685608	7.8	29	18.5	
A685609	1.0	9	7.1	
A685610	1.5	13	8.8	
A685611	2.9	22	6.7	

Analyte Symbol	Al	Ba	Co	Cr	Fe	K	Mg	Mn	Na	P	Re	S	Sr	Te	Ti	V	Zn	Au	Au	Ag	As	Be	Bi
Unit Symbol	%	ppm	ppm	ppm	%	%	%	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppb	g/tonne	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.1	1	0.01	0.01	0.01	5	0.01	10	0.002	0.01	0.2	0.05	0.005	1	2	5	0.02	0.01	0.2	0.05	0.01
Method Code	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP	FA-AA	FA- GRA	TD-MS	TD-MS	TD-MS	TD-MS
SDC-1 Meas	8.23	630	18.5	51	4.85	2.48	1.02	852	1.50	580			191		0.081	33	106				< 0.2	3.32	
SDC-1 Cert	8.34	630	18.0	64.00	4.82	2.72	1.02	880.00	1.52	690			180.00		0.606	102.00	103.00				0.220	3.00	
SDC-1 Meas	8.10	620	18.8	48	4.83	2.63	1.01	851	1.48	570			166		0.166	50	106				0.5	2.85	
SDC-1 Cert	8.34	630	18.0	64.00	4.82	2.72	1.02	880.00	1.52	690			180.00		0.606	102.00	103.00				0.220	3.00	
SDC-1 Meas	7.78	640	17.2	54	4.65	2.29	1.01	867	1.49	560			158		0.114	41	105				0.8	2.70	
SDC-1 Cert	8.34	630	18.0	64.00	4.82	2.72	1.02	880.00	1.52	690			180.00		0.606	102.00	103.00				0.220	3.00	
SDC-1 Meas			17.2										176								< 0.2	2.89	
SDC-1 Cert			18.0										180.00								0.220	3.00	
SDC-1 Meas			17.8										171								< 0.2	3.02	
SDC-1 Cert			18.0										180.00								0.220	3.00	
SDC-1 Meas			18.3										176								0.3	3.08	
SDC-1 Cert			18.0										180.00								0.220	3.00	
SDC-1 Meas			19.0										169								0.9	2.82	
SDC-1 Cert			18.0										180.00								0.220	3.00	
SDC-1 Meas			17.4										172								< 0.2	2.91	
SDC-1 Cert			18.0										180.00								0.220	3.00	
Oreas 72a (4 Acid Digest) Meas			142	174	9.87							1.72									2.8		
Oreas 72a (4 Acid Digest) Cert			157	228	9.63							1.74									14.7		
Oreas 72a (4 Acid Digest) Meas			146	172	9.90							1.73									4.7		
Oreas 72a (4 Acid Digest) Cert			157	228	9.63							1.74									14.7		
Oreas 72a (4 Acid Digest) Meas			156	170	9.45							1.65									3.6		
Oreas 72a (4 Acid Digest) Cert			157	228	9.63							1.74									14.7		
Oreas 72a (4 Acid Digest) Meas			149																		2.6		
Oreas 72a (4 Acid Digest) Cert			157																		14.7		
Oreas 72a (4 Acid Digest) Meas			152																		2.9		
Oreas 72a (4 Acid Digest) Cert			157																		14.7		
Oreas 72a (4 Acid Digest) Meas			143																		3.3		
Oreas 72a (4 Acid Digest) Cert			157																		14.7		
Oreas 72a (4 Acid Digest) Meas			152																		4.1		
Oreas 72a (4 Acid Digest) Cert			157																		14.7		
Oreas 72a (Fusion) Meas			144	209	9.66							1.60									0.2		
Oreas 72a (Fusion) Cert			176	273	9.54							1.67									13.6		
OREAS 101b (Fusion) Meas			45.5		8.43	2.87	1.32	1000		1080					0.246	66							
OREAS 101b (Fusion) Cert			47.0		10.8	2.42	1.23	931		1200					0.386	80							
OREAS 101b (4 Acid) Meas			45.5		10.4	2.55	1.21	930		1140					0.366	77							
OREAS 101b (4			45		10.7	2.36	1.23	927		1118					0.35	77							

Analyte Symbol	Al	Ba	Co	Cr	Fe	K	Mg	Mn	Na	P	Re	S	Sr	Te	Ti	V	Zn	Au	Au	Ag	As	Be	Bi
Unit Symbol	%	ppm	ppm	ppm	%	%	%	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppb	g/tonne	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.1	1	0.01	0.01	0.01	5	0.01	10	0.002	0.01	0.2	0.05	0.005	1	2	5	0.02	0.01	0.2	0.05	0.01
Method Code	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP	FA-AA	FA- GRA	TD-MS	TD-MS	TD-MS	TD-MS
Acid) Cert																							
OREAS 101b (4 Acid) Meas			42.8		10.8	2.38	1.21	939		1210					0.363	81							
OREAS 101b (4 Acid) Cert			45		10.7	2.36	1.23	927		1118					0.35	77							
OREAS 101b (4 Acid) Meas			46.4		10.7	2.49	1.24	960		1130					0.344	75							
OREAS 101b (4 Acid) Cert			45		10.7	2.36	1.23	927		1118					0.35	77							
OREAS 101b (4 Acid) Meas			47.7		10.6	2.46	1.22	948		1130					0.353	77							
OREAS 101b (4 Acid) Cert			45		10.7	2.36	1.23	927		1118					0.35	77							
OREAS 101b (4 Acid) Meas			41.2																				
OREAS 101b (4 Acid) Cert			45																				
OREAS 101b (4 Acid) Meas			49.1																				
OREAS 101b (4 Acid) Cert			45																				
OREAS 101b (4 Acid) Meas			40.0																				
OREAS 101b (4 Acid) Cert			45																				
OREAS 101b (4 Acid) Meas			50.5																				
OREAS 101b (4 Acid) Cert			45																				
OREAS 101b (4 Acid) Meas			45.5																				
OREAS 101b (4 Acid) Cert			45																				
OREAS 101b (4 Acid) Meas			45.9																				
OREAS 101b (4 Acid) Cert			45																				
OREAS 101b (4 Acid) Meas			47.2																				
OREAS 101b (4 Acid) Cert			45																				
OREAS 98 (4 Acid) Meas			122									> 10.0					1330			44.4			11.7
OREAS 98 (4 Acid) Cert			121									15.5					1360			45.1			97.2
OREAS 98 (4 Acid) Meas			127									> 10.0					1340			48.3			90.4
OREAS 98 (4 Acid) Cert			121									15.5					1360			45.1			97.2
OREAS 98 (4 Acid) Meas			129									> 10.0					1310			42.0			96.3
OREAS 98 (4 Acid) Cert			121									15.5					1360			45.1			97.2
OREAS 98 (4 Acid) Meas			127									> 10.0					1290			43.7			90.5
OREAS 98 (4 Acid) Cert			121									15.5					1360			45.1			97.2

Analyte Symbol	Al	Ba	Co	Cr	Fe	K	Mg	Mn	Na	P	Re	S	Sr	Te	Ti	V	Zn	Au	Au	Ag	As	Be	Bi
Unit Symbol	%	ppm	ppm	ppm	%	%	%	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppb	g/tonne	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.1	1	0.01	0.01	0.01	5	0.01	10	0.002	0.01	0.2	0.05	0.005	1	2	5	0.02	0.01	0.2	0.05	0.01
Method Code	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP	FA-AA	FA- GRA	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 98 (4 Acid) Meas			125																	44.2			87.2
OREAS 98 (4 Acid) Cert			121																	45.1			97.2
OREAS 98 (4 Acid) Meas			132																	45.4			101
OREAS 98 (4 Acid) Cert			121																	45.1			97.2
OREAS 98 (4 Acid) Meas			132																	44.2			101
OREAS 98 (4 Acid) Cert			121																	45.1			97.2
OREAS 98 (4 Acid) Meas			126																	41.0			98.5
OREAS 98 (4 Acid) Cert			121																	45.1			97.2
OREAS 98 (4 Acid) Meas			118																	43.9			92.5
OREAS 98 (4 Acid) Cert			121																	45.1			97.2
OREAS 98 (4 Acid) Meas			118																	47.2			96.5
OREAS 98 (4 Acid) Cert			121																	45.1			97.2
OREAS 98 (4 Acid) Meas			117																	42.1			84.3
OREAS 98 (4 Acid) Cert			121																	45.1			97.2
DNC-1a Meas		100	56.3	150	7.31				1.45				149		0.286	154	64						
DNC-1a Cert		118	57	270	6.97				1.40				144		0.29	148	70						
DNC-1a Meas		100	63.3	158	7.35				1.45				146		0.283	153	65						
DNC-1a Cert		118	57	270	6.97				1.40				144		0.29	148	70						
DNC-1a Meas		100	57.8	162	7.08				1.39				142		0.271	135	59						
DNC-1a Cert		118	57	270	6.97				1.40				144		0.29	148	70						
DNC-1a Meas			55.2										153										
DNC-1a Cert			57										144										
DNC-1a Meas			56.0										143										
DNC-1a Cert			57										144										
DNC-1a Meas			60.4										143										
DNC-1a Cert			57										144										
DNC-1a Meas			61.3										150										
DNC-1a Cert			57										144										
DNC-1a Meas			55.3										133										
DNC-1a Cert			57										144										
DNC-1a Meas			55.0										144										
DNC-1a Cert			57										144										
OREAS 13b (4-Acid) Meas			80.7	> 10000								1.23					148			0.99	54.5		
OREAS 13b (4-Acid) Cert			75	8650.00								1.2					133			0.86	57		
OREAS 13b (4-Acid) Meas			71.6																	0.87	56.2		
OREAS 13b (4-Acid) Cert			75																	0.86	57		
OREAS 13b			74.5																	0.90	65.6		

Analyte Symbol	Al	Ba	Co	Cr	Fe	K	Mg	Mn	Na	P	Re	S	Sr	Te	Ti	V	Zn	Au	Au	Ag	As	Be	Bi
Unit Symbol	%	ppm	ppm	ppm	%	%	%	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppb	g/tonne	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.1	1	0.01	0.01	0.01	5	0.01	10	0.002	0.01	0.2	0.05	0.005	1	2	5	0.02	0.01	0.2	0.05	0.01
Method Code	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP	FA-AA	FA- GRA	TD-MS	TD-MS	TD-MS	TD-MS
(4-Acid) Meas																							
OREAS 13b (4-Acid) Cert			75																	0.86	57		
OREAS 13b (4-Acid) Meas			75.8																	0.94	69.7		
OREAS 13b (4-Acid) Cert			75																	0.86	57		
OREAS 13b (4-Acid) Meas			72.1																	0.83	40.5		
OREAS 13b (4-Acid) Cert			75																	0.86	57		
OREAS 13b (4-Acid) Meas			72.7																	0.87	47.9		
OREAS 13b (4-Acid) Cert			75																	0.86	57		
OREAS 13b (4-Acid) Meas			71.1																	0.84	48.9		
OREAS 13b (4-Acid) Cert			75																	0.86	57		
OREAS 13b (4-Acid) Meas			74.5																	0.97	54.5		
OREAS 13b (4-Acid) Cert			75																	0.86	57		
OREAS 904 (4 ACID) Meas	6.38	200	93.3	59	6.78	3.54	0.59	426	0.04	1050		0.06	28.1			85	28			0.63	85.2	9.59	4.17
OREAS 904 (4 ACID) Cert	6.30	194	83.0	54.0	6.68	3.31	0.556	410	0.0340	980		0.0630	27.2			76.0	26.3			0.551	98.0	7.86	4.05
OREAS 904 (4 ACID) Meas	6.74	210	81.9	61	6.98	3.08	0.59	433	0.04	920		0.07	25.9			79	28			0.61	99.1	8.42	3.94
OREAS 904 (4 ACID) Cert	6.30	194	83.0	54.0	6.68	3.31	0.556	410	0.0340	980		0.0630	27.2			76.0	26.3			0.551	98.0	7.86	4.05
OREAS 904 (4 ACID) Meas			90.8										29.5							0.57	122	9.58	4.22
OREAS 904 (4 ACID) Cert			83.0										27.2							0.551	98.0	7.86	4.05
OREAS 904 (4 ACID) Meas			84.5										28.5							0.60	115	9.46	4.25
OREAS 904 (4 ACID) Cert			83.0										27.2							0.551	98.0	7.86	4.05
OREAS 904 (4 ACID) Meas			88.9										26.3							0.67	91.6	8.59	3.94
OREAS 904 (4 ACID) Cert			83.0										27.2							0.551	98.0	7.86	4.05
OREAS 904 (4 ACID) Meas			84.3										27.0							0.62	93.4	8.00	4.15
OREAS 904 (4 ACID) Cert			83.0										27.2							0.551	98.0	7.86	4.05
OREAS 904 (4 ACID) Meas			78.1										23.1							0.51	78.7	8.09	4.08
OREAS 904 (4 ACID) Cert			83.0										27.2							0.551	98.0	7.86	4.05
OREAS 904 (4 ACID) Meas			86.1										24.7							0.58	96.5	7.36	4.09
OREAS 904 (4 ACID) Cert			83.0										27.2							0.551	98.0	7.86	4.05
OREAS 904 (4 ACID) Meas			86.3										27.8							0.52	89.1	8.44	3.95

Analyte Symbol	Al	Ba	Co	Cr	Fe	K	Mg	Mn	Na	P	Re	S	Sr	Te	Ti	V	Zn	Au	Au	Ag	As	Be	Bi	
Unit Symbol	%	ppm	ppm	ppm	%	%	%	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppb	g/tonne	ppm	ppm	ppm	ppm	
Lower Limit	0.01	10	0.1	1	0.01	0.01	0.01	5	0.01	10	0.002	0.01	0.2	0.05	0.005	1	2	5	0.02	0.01	0.2	0.05	0.01	
Method Code	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP	FA-AA	FA- GRA	TD-MS	TD-MS	TD-MS	TD-MS	
OREAS 904 (4 ACID) Cert			83.0										27.2							0.551	98.0	7.86	4.05	
OREAS 904 (4 ACID) Meas			89.1										28.4							0.61	116	8.06	4.00	
OREAS 904 (4 ACID) Cert			83.0										27.2							0.551	98.0	7.86	4.05	
SBC-1 Meas		680	23.6	105									138		0.344	219	193					7.9	2.96	< 0.01
SBC-1 Cert		788.0	22.7	109									178.0		0.51	220.0	186					25.7	3.20	0.70
SBC-1 Meas		550	22.4	101									187		0.498	223	197					28.4	2.69	0.69
SBC-1 Cert		788.0	22.7	109									178.0		0.51	220.0	186					25.7	3.20	0.70
SBC-1 Meas		660	21.5	100									179		0.491	209	192					30.4	3.31	0.70
SBC-1 Cert		788.0	22.7	109									178.0		0.51	220.0	186					25.7	3.20	0.70
SBC-1 Meas			23.0										181									28.6	3.02	0.67
SBC-1 Cert			22.7										178.0									25.7	3.20	0.70
SBC-1 Meas			22.6										179									23.5	3.25	0.71
SBC-1 Cert			22.7										178.0									25.7	3.20	0.70
SBC-1 Meas			22.8										179									24.8	3.36	0.69
SBC-1 Cert			22.7										178.0									25.7	3.20	0.70
SBC-1 Meas			24.7										172									29.1	3.26	0.73
SBC-1 Cert			22.7										178.0									25.7	3.20	0.70
SBC-1 Meas			21.5										172									26.9	3.12	0.66
SBC-1 Cert			22.7										178.0									25.7	3.20	0.70
SBC-1 Meas			21.5										179									25.4	3.08	0.64
SBC-1 Cert			22.7										178.0									25.7	3.20	0.70
OREAS 45d (4-Acid) Meas	7.58	170	30.4	550	14.2	0.41	0.23	499	0.10	360		0.04	31.5		0.462	177	45					9.5	0.75	1.74
OREAS 45d (4-Acid) Cert	8.150	183.0	29.50	549	14.5	0.412	0.245	490.000	0.101	420.000		0.049	31.30		0.773	235.0	45.7					13.8	0.79	0.31
OREAS 45d (4-Acid) Meas	8.12	180	25.6	538	14.3	0.43	0.24	506	0.09	370		0.05	28.2		0.519	173	44					11.9	0.66	0.30
OREAS 45d (4-Acid) Cert	8.150	183.0	29.50	549	14.5	0.412	0.245	490.000	0.101	420.000		0.049	31.30		0.773	235.0	45.7					13.8	0.79	0.31
OREAS 45d (4-Acid) Meas			30.2										32.4									5.8	0.87	0.33
OREAS 45d (4-Acid) Cert			29.50										31.30									13.8	0.79	0.31
OREAS 45d (4-Acid) Meas			30.6										31.0									10.4	0.73	0.31
OREAS 45d (4-Acid) Cert			29.50										31.30									13.8	0.79	0.31
OREAS 45d (4-Acid) Meas			29.4										31.8									7.2	0.89	0.37
OREAS 45d (4-Acid) Cert			29.50										31.30									13.8	0.79	0.31
OREAS 45d (4-Acid) Meas			30.2										30.5									10.3	0.83	0.32
OREAS 45d (4-Acid) Cert			29.50										31.30									13.8	0.79	0.31
OREAS 45d (4-Acid) Meas			31.9										29.4									13.7	0.78	0.33
OREAS 45d (4-Acid) Cert			29.50										31.30									13.8	0.79	0.31
OREAS 45d (4-Acid) Meas			29.3										28.7									5.5	0.64	0.30
OREAS 45d			29.50										31.30									13.8	0.79	0.31

Analyte Symbol	Al	Ba	Co	Cr	Fe	K	Mg	Mn	Na	P	Re	S	Sr	Te	Ti	V	Zn	Au	Au	Ag	As	Be	Bi
Unit Symbol	%	ppm	ppm	ppm	%	%	%	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppb	g/tonne	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.1	1	0.01	0.01	0.01	5	0.01	10	0.002	0.01	0.2	0.05	0.005	1	2	5	0.02	0.01	0.2	0.05	0.01
Method Code	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP	FA-AA	FA- GRA	TD-MS	TD-MS	TD-MS	TD-MS
(4-Acid) Cert																							
OREAS 45d (4-Acid) Meas			29.7										31.5								10.7	0.62	0.33
OREAS 45d (4-Acid) Cert			29.50										31.30								13.8	0.79	0.31
OREAS 45d (4-Acid) Meas			28.8										31.5								5.8	0.86	0.31
OREAS 45d (4-Acid) Cert			29.50										31.30								13.8	0.79	0.31
OREAS 45d (4-Acid) Meas			31.6										35.2								13.3	0.82	0.33
OREAS 45d (4-Acid) Cert			29.50										31.30								13.8	0.79	0.31
OREAS 96 (4 Acid) Meas			53.0									4.18					452			11.9			27.7
OREAS 96 (4 Acid) Cert			49.9									4.19					457			11.5			26.3
OREAS 96 (4 Acid) Meas			49.7																	11.2			28.3
OREAS 96 (4 Acid) Cert			49.9																	11.5			26.3
OREAS 96 (4 Acid) Meas			49.9																	11.6			26.4
OREAS 96 (4 Acid) Cert			49.9																	11.5			26.3
OREAS 96 (4 Acid) Meas			52.2																	11.1			29.8
OREAS 96 (4 Acid) Cert			49.9																	11.5			26.3
OREAS 96 (4 Acid) Meas			52.2																	11.1			29.2
OREAS 96 (4 Acid) Cert			49.9																	11.5			26.3
OREAS 96 (4 Acid) Meas			49.9																	10.4			27.5
OREAS 96 (4 Acid) Cert			49.9																	11.5			26.3
OREAS 96 (4 Acid) Meas			48.7																	10.3			27.5
OREAS 96 (4 Acid) Cert			49.9																	11.5			26.3
OREAS 96 (4 Acid) Meas			49.8																	11.3			27.1
OREAS 96 (4 Acid) Cert			49.9																	11.5			26.3
OREAS 96 (4 Acid) Meas			49.2																	11.5			27.5
OREAS 96 (4 Acid) Cert			49.9																	11.5			26.3
OREAS 923 (4 Acid) Meas	7.36	420	23.5	78	6.58	2.61	1.74	972	0.32	660		0.72	42.4		0.411	97	356			2.01	5.4	2.49	20.7
OREAS 923 (4 Acid) Cert	7.29	434	23.1	71.0	6.43	2.51	1.69	950	0.324	630		0.691	43.0		0.405	91.0	345			1.60	7.61	2.42	21.4
OREAS 923 (4 Acid) Meas	7.60	360	23.8	73	6.62	2.62	1.74	984	0.31	640		0.71	42.5		0.412	94	366			2.27	8.2	2.23	19.3
OREAS 923 (4 Acid) Cert	7.29	434	23.1	71.0	6.43	2.51	1.69	950	0.324	630		0.691	43.0		0.405	91.0	345			1.60	7.61	2.42	21.4

Analyte Symbol	Al	Ba	Co	Cr	Fe	K	Mg	Mn	Na	P	Re	S	Sr	Te	Ti	V	Zn	Au	Au	Ag	As	Be	Bi
Unit Symbol	%	ppm	ppm	ppm	%	%	%	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppb	g/tonne	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.1	1	0.01	0.01	0.01	5	0.01	10	0.002	0.01	0.2	0.05	0.005	1	2	5	0.02	0.01	0.2	0.05	0.01
Method Code	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP	FA-AA	FA- GRA	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 923 (4 Acid) Meas			23.6										45.2							1.83	7.8	2.67	24.7
OREAS 923 (4 Acid) Cert			23.1										43.0							1.60	7.61	2.42	21.4
OREAS 923 (4 Acid) Meas			22.9										43.2							1.76	6.6	2.48	24.3
OREAS 923 (4 Acid) Cert			23.1										43.0							1.60	7.61	2.42	21.4
OREAS 923 (4 Acid) Meas			24.1										40.6							2.01	6.2	2.50	21.4
OREAS 923 (4 Acid) Cert			23.1										43.0							1.60	7.61	2.42	21.4
OREAS 923 (4 Acid) Meas			21.6										37.9							1.76	6.9	2.46	18.7
OREAS 923 (4 Acid) Cert			23.1										43.0							1.60	7.61	2.42	21.4
OREAS 923 (4 Acid) Meas			22.2										41.2							1.61	6.5	2.17	21.0
OREAS 923 (4 Acid) Cert			23.1										43.0							1.60	7.61	2.42	21.4
OREAS 923 (4 Acid) Meas			22.6										39.8							1.68	8.2	1.95	17.8
OREAS 923 (4 Acid) Cert			23.1										43.0							1.60	7.61	2.42	21.4
OREAS 923 (4 Acid) Meas			22.3										44.2							1.69	6.8	2.34	20.9
OREAS 923 (4 Acid) Cert			23.1										43.0							1.60	7.61	2.42	21.4
OREAS 923 (4 Acid) Meas			22.2										43.3							1.88	8.0	2.51	20.5
OREAS 923 (4 Acid) Cert			23.1										43.0							1.60	7.61	2.42	21.4
OREAS 621 (4 Acid) Meas	6.50		28.0	36	3.72	2.30	0.52	524	1.27	370		4.49	84.6		0.184	34	> 10000			62.2	82.8	1.68	3.89
OREAS 621 (4 Acid) Cert	6.40		29.3	37.1	3.70	2.20	0.507	532	1.31	359		4.48	91.0		0.149	31.8	52200			69.0	77.0	1.69	3.93
OREAS 621 (4 Acid) Meas	6.43		29.5	31	3.68	2.24	0.52	499	1.26	380		4.45	60.8		0.181	34	> 10000			59.4	64.0	1.85	4.03
OREAS 621 (4 Acid) Cert	6.40		29.3	37.1	3.70	2.20	0.507	532	1.31	359		4.48	91.0		0.149	31.8	52200			69.0	77.0	1.69	3.93
OREAS 621 (4 Acid) Meas	6.58		30.5	33	3.83	2.32	0.54	526	1.32	390		4.67	78.0		0.187	36	> 10000			63.6	63.5	1.96	4.12
OREAS 621 (4 Acid) Cert	6.40		29.3	37.1	3.70	2.20	0.507	532	1.31	359		4.48	91.0		0.149	31.8	52200			69.0	77.0	1.69	3.93
OREAS 621 (4 Acid) Meas	6.29		30.6	36	3.82	2.30	0.51	541	1.31	360		4.63	66.5		0.186	34	> 10000			64.6	62.7	1.78	4.11
OREAS 621 (4 Acid) Cert	6.40		29.3	37.1	3.70	2.20	0.507	532	1.31	359		4.48	91.0		0.149	31.8	52200			69.0	77.0	1.69	3.93
OREAS 621 (4 Acid) Meas			29.3										66.2							71.3	71.0	1.61	3.88
OREAS 621 (4 Acid) Cert			29.3										91.0							69.0	77.0	1.69	3.93
OREAS 621 (4 Acid) Meas			28.2										53.6							66.3	66.9	1.54	3.91
OREAS 621 (4 Acid) Cert			29.3										91.0							69.0	77.0	1.69	3.93
OREAS 522 (4 Acid) Meas	3.95		561	35	23.5	2.88	1.12	3690	0.60	900	0.104	2.48	83.1	1.13	0.352	172	30			1.60	480	0.97	9.10

Analyte Symbol	Al	Ba	Co	Cr	Fe	K	Mg	Mn	Na	P	Re	S	Sr	Te	Ti	V	Zn	Au	Au	Ag	As	Be	Bi
Unit Symbol	%	ppm	ppm	ppm	%	%	%	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppb	g/tonne	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.1	1	0.01	0.01	0.01	5	0.01	10	0.002	0.01	0.2	0.05	0.005	1	2	5	0.02	0.01	0.2	0.05	0.01
Method Code	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP	FA-AA	FA- GRA	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 522 (4 Acid) Cert	3.95		550	29.6	24.6	2.83	1.12	3970	0.633	890	0.0980	2.50	199	1.14	0.344	164	30.2			1.31	490	0.700	8.72
OREAS 522 (4 Acid) Meas	3.93		582	37	23.9	2.79	1.11	3620	0.60	810	0.076	2.40	97.4	0.34	0.219	137	31			1.20	469	0.69	9.21
OREAS 522 (4 Acid) Cert	3.95		550	29.6	24.6	2.83	1.12	3970	0.633	890	0.0980	2.50	199	1.14	0.344	164	30.2			1.31	490	0.700	8.72
OREAS 522 (4 Acid) Meas			607							0.079			107	0.36						1.26	492	0.79	9.06
OREAS 522 (4 Acid) Cert			550							0.0980			199	1.14						1.31	490	0.700	8.72
OREAS 522 (4 Acid) Meas			672							0.080			79.5	0.16						1.29	305	0.83	9.52
OREAS 522 (4 Acid) Cert			550							0.0980			199	1.14						1.31	490	0.700	8.72
OREAS 522 (4 Acid) Meas			556							0.101			72.0	0.17						1.31	334	0.85	9.47
OREAS 522 (4 Acid) Cert			550							0.0980			199	1.14						1.31	490	0.700	8.72
OREAS 522 (4 Acid) Meas			609							0.100			83.8	0.36						1.34	401	0.66	8.92
OREAS 522 (4 Acid) Cert			550							0.0980			199	1.14						1.31	490	0.700	8.72
OREAS 522 (4 Acid) Meas			589							0.099			81.3	0.79						1.37	460	0.66	8.67
OREAS 522 (4 Acid) Cert			550							0.0980			199	1.14						1.31	490	0.700	8.72
Oreas 77b (4 Acid Digest) Meas	1.70	20	1500	262	27.2	0.33	2.36	590	0.38		0.021		34.8	1.24	0.056	33	183			1.59	1590	0.66	3.45
Oreas 77b (4 Acid Digest) Cert	1.94	118	1550	280	29.9	0.361	2.59	640	0.434		0.0220		34.4	1.35	0.0640	33.6	205			1.62	2050	0.470	3.44
OREAS 229b (Fire Assay) Meas																				11.6			
OREAS 229b (Fire Assay) Cert																				11.9			
OREAS 238 (Fire Assay) Meas																		2900					
OREAS 238 (Fire Assay) Cert																		3030					
OREAS 238 (Fire Assay) Meas																		3070					
OREAS 238 (Fire Assay) Cert																		3030					
OREAS 238 (Fire Assay) Meas																		3040					
OREAS 238 (Fire Assay) Cert																		3030					
OREAS 238 (Fire Assay) Meas																		3030					
OREAS 238 (Fire Assay) Cert																		3030					
OREAS 257b (Fire Assay) Meas																				13.7			
OREAS 257b (Fire Assay) Cert																				14.2			
Oreas E1336 (Fire Assay) Meas																		517					
Oreas E1336 (Fire Assay) Cert																		510					

Analyte Symbol	Al	Ba	Co	Cr	Fe	K	Mg	Mn	Na	P	Re	S	Sr	Te	Ti	V	Zn	Au	Au	Ag	As	Be	Bi
Unit Symbol	%	ppm	ppm	ppm	%	%	%	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppb	g/tonne	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.1	1	0.01	0.01	0.01	5	0.01	10	0.002	0.01	0.2	0.05	0.005	1	2	5	0.02	0.01	0.2	0.05	0.01
Method Code	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP	FA-AA	FA- GRA	TD-MS	TD-MS	TD-MS	TD-MS
Oreas E1336 (Fire Assay) Meas																		521					
Oreas E1336 (Fire Assay) Cert																		510					
Oreas E1336 (Fire Assay) Meas																		512					
Oreas E1336 (Fire Assay) Cert																		510					
Oreas E1336 (Fire Assay) Meas																		495					
Oreas E1336 (Fire Assay) Cert																		510					
A685559 Orig																		< 5					
A685559 Dup																		< 5					
A685564 Orig	6.02	80	5.2	19	2.81	1.08	0.26	103	3.83	380	0.007	2.28	187	0.91	0.129	13	52			2.04	2.2	0.96	5.54
A685564 Dup	6.01	90	5.2	21	2.88	1.08	0.26	93	3.86	380	0.008	2.32	186	0.88	0.128	13	52			1.91	2.6	0.76	5.44
A685570 Orig																		> 5000					
A685570 Dup																		> 5000					
A685572 Orig	1.18	4610	3.5	73	5.12	0.78	0.71	1970	0.06	1700	< 0.002	0.16	285	4.73	0.013	11	7			< 0.01	1.0	0.61	0.51
A685572 Dup	1.18	4910	3.2	74	5.30	0.78	0.72	1990	0.06	1730	0.002	0.16	287	4.07	0.013	11	8			0.02	< 0.2	0.62	0.15
A685572 Orig	1.15	2220	3.2	76	6.55	0.75	0.66	1820	0.05	1690		0.09	274	< 0.05	0.020	14	7			0.03	2.8	0.71	0.04
A685572 Dup	1.15	1890	3.3	71	6.56	0.76	0.66	1800	0.05	1700		0.08	255	< 0.05	0.020	14	7			0.04	2.4	0.97	0.05
A685573 Orig	0.71	1080	1.0	61	2.97	0.46	0.06	480	0.20	1450	< 0.002	0.03	63.7	< 0.05	0.011	7	5			0.04	1.8	0.34	0.02
A685573 Dup	0.70	1050	1.3	59	2.85	0.45	0.06	451	0.19	1400	< 0.002	0.03	62.8	< 0.05	0.011	8	3			0.02	2.5	0.16	0.02
A685574 Orig																		< 5					
A685574 Dup																		< 5					
A685595 Orig																		< 5					
A685595 Dup																		< 5					
A685600 Orig	1.89	1590	4.1	62	1.78	0.59	0.15	381	1.09	250	< 0.002	0.09	159	0.16	0.084	13	42	975		0.05	3.4	0.75	0.03
A685600 Split PREP DUP	1.89	1580	4.2	61	1.74	0.59	0.15	377	1.10	240	< 0.002	0.09	153	0.15	0.083	13	42	983		0.04	3.8	0.57	0.03
A685608 Orig																		< 5					
A685608 Dup																		< 5					
Method Blank	< 0.01	< 10		1	< 0.01	< 0.01	< 0.01	< 5	< 0.01	< 10		< 0.01			< 0.005	< 1	< 2						
Method Blank	< 0.01	< 10	< 0.1	4	< 0.01	< 0.01	< 0.01	< 5	< 0.01	< 10	< 0.002	< 0.01	< 0.2	< 0.05	< 0.005	< 1	< 2			< 0.01	0.4	< 0.05	< 0.01
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	< 0.2	< 0.05	< 0.01
Method Blank			< 0.1								< 0.002		< 0.2	0.06						< 0.01	0.2	< 0.05	< 0.01
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	3.9	< 0.05	< 0.01
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	0.4	0.05	< 0.01
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	< 0.2	< 0.05	< 0.01
Method Blank	< 0.01	< 10	< 0.1	4	< 0.01	< 0.01	< 0.01	5	< 0.01	< 10	< 0.002	< 0.01	< 0.2	< 0.05	< 0.005	< 1	< 2			< 0.01	1.1	< 0.05	< 0.01
Method Blank	< 0.01	< 10	< 0.1	2	< 0.01	< 0.01	< 0.01	8	< 0.01	< 10	< 0.002	< 0.01	< 0.2	< 0.05	< 0.005	< 1	< 2			< 0.01	< 0.2	0.11	< 0.01
Method Blank	< 0.01	< 10	< 0.1	4	< 0.01	< 0.01	< 0.01	< 5	< 0.01	< 10	< 0.002	< 0.01	< 0.2	< 0.05	< 0.005	< 1	< 2			< 0.01	< 0.2	0.10	< 0.01
Method Blank	< 0.01	< 10	< 0.1		< 0.01	< 0.01	< 0.01	9	< 0.01	< 10	< 0.002	< 0.01	< 0.2	< 0.05	< 0.005	< 1	< 2			< 0.01	0.7	< 0.05	< 0.01
Method Blank	< 0.01	< 10	< 0.1	3	< 0.01	< 0.01	< 0.01	< 5	< 0.01	< 10	< 0.002	< 0.01	< 0.2	< 0.05	< 0.005	< 1	< 2			< 0.01	1.0	0.06	< 0.01
Method Blank	< 0.01	< 10	< 0.1	4	< 0.01	< 0.01	< 0.01	< 5	< 0.01	< 10	< 0.002	< 0.01	< 0.2	< 0.05	< 0.005	< 1	< 2			< 0.01	0.9	0.06	< 0.01
Method Blank	< 0.01	< 10		2	< 0.01	< 0.01	< 0.01	< 5	< 0.01	< 10		< 0.01			< 0.005	< 1	< 2						
Method Blank	< 0.01	< 10		6	< 0.01	< 0.01	< 0.01	< 5	< 0.01	< 10		< 0.01			< 0.005	< 1	< 2						
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	< 0.2	< 0.05	0.02
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	< 0.2	< 0.05	< 0.01
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	0.4	< 0.05	< 0.01
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	< 0.2	< 0.05	< 0.01

Analyte Symbol	Al	Ba	Co	Cr	Fe	K	Mg	Mn	Na	P	Re	S	Sr	Te	Ti	V	Zn	Au	Au	Ag	As	Be	Bi
Unit Symbol	%	ppm	ppm	ppm	%	%	%	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppb	g/tonne	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.1	1	0.01	0.01	0.01	5	0.01	10	0.002	0.01	0.2	0.05	0.005	1	2	5	0.02	0.01	0.2	0.05	0.01
Method Code	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP	FA-AA	FA- GRA	TD-MS	TD-MS	TD-MS	TD-MS
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	0.7	< 0.05	< 0.01
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	< 0.2	< 0.05	< 0.01
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	< 0.2	0.06	< 0.01
Method Blank	< 0.01	< 10		8	< 0.01	< 0.01	< 0.01	< 5	< 0.01	< 10		< 0.01			< 0.005	< 1	< 2						
Method Blank																		< 5					
Method Blank																		< 5					
Method Blank																		< 5					
Method Blank																		< 5					
Method Blank																			< 0.02				
Method Blank																			< 0.02				
Method Blank																			< 5				
Method Blank																			< 5				
Method Blank	< 0.01	< 10	< 0.1	1	< 0.01	< 0.01	< 0.01	< 5	< 0.01	< 10	< 0.002	< 0.01	< 0.2	3.82	< 0.005	< 1	< 2			< 0.01	0.5	< 0.05	0.43
Method Blank			< 0.1										< 0.2	< 0.05						< 0.01	0.8	< 0.05	< 0.01
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	< 0.2	0.06	< 0.01
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	< 0.2	< 0.05	< 0.01
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	< 0.2	< 0.05	< 0.01
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	< 0.2	< 0.05	< 0.01
Method Blank			< 0.1								< 0.002		< 0.2	< 0.05						< 0.01	0.2	< 0.05	< 0.01
Method Blank	< 0.01	< 10	< 0.1	6	< 0.01	< 0.01	< 0.01	< 5	< 0.01	< 10	< 0.002	< 0.01	< 0.2	< 0.05	< 0.005	< 1	< 2			< 0.01	< 0.2	< 0.05	< 0.01
Method Blank			< 0.1										< 0.2	< 0.05						< 0.01	0.3	< 0.05	< 0.01

Analyte Symbol	Ca	Cd	Ce	Cu	Ge	Hf	In	La	Li	Mo	Nb	Pb	Rb	Sn	Ta	Th	Tl	W	Y	Zr	Cs	Ga	Ni
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.02	0.01	0.2	0.05	0.1	0.005	0.5	0.2	0.05	0.1	0.5	0.1	0.2	0.05	0.01	0.02	0.1	0.1	0.5	0.05	0.05	0.2
Method Code	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
SDC-1 Meas	1.07		97.0	30.5		0.8		43.8	34.4		< 0.1	25.4	129	0.3	< 0.05	12.1	0.64	< 0.1		24.8	4.05	19.5	33.4
SDC-1 Cert	1.00		93.00	30.000		8.30		42.00	34.0		21.00	25.00	127.00	3.00	1.20	12.00	0.70	0.80		290.00	4.00	21.00	38.0
SDC-1 Meas	1.07		92.9	30.4		0.9		40.8	36.4		0.2	23.6	128	0.3	< 0.05	11.3	0.63	< 0.1		29.9	3.88	22.2	33.7
SDC-1 Cert	1.00		93.00	30.000		8.30		42.00	34.0		21.00	25.00	127.00	3.00	1.20	12.00	0.70	0.80		290.00	4.00	21.00	38.0
SDC-1 Meas	1.05		81.1	30.7		0.9		36.0	36.2		0.2	26.1	101	< 0.2	< 0.05	11.6	0.63	< 0.1		25.9	3.61	15.7	32.8
SDC-1 Cert	1.00		93.00	30.000		8.30		42.00	34.0		21.00	25.00	127.00	3.00	1.20	12.00	0.70	0.80		290.00	4.00	21.00	38.0
SDC-1 Meas			88.8	29.2		0.8		39.3	32.2		< 0.1	24.7	69.7	0.2	< 0.05	12.5	0.66	< 0.1		24.6	3.90	20.4	33.9
SDC-1 Cert			93.00	30.000		8.30		42.00	34.0		21.00	25.00	127.00	3.00	1.20	12.00	0.70	0.80		290.00	4.00	21.00	38.0
SDC-1 Meas			90.8	31.8		0.8		39.8	36.0		< 0.1	24.4	75.1	0.2	< 0.05	12.2	0.60	< 0.1		28.5	3.82	15.6	35.0
SDC-1 Cert			93.00	30.000		8.30		42.00	34.0		21.00	25.00	127.00	3.00	1.20	12.00	0.70	0.80		290.00	4.00	21.00	38.0
SDC-1 Meas			89.3	25.9		0.9		39.9	36.1		0.2	24.4	117	0.3	< 0.05	12.2	0.62	< 0.1		31.2	3.88	17.9	36.0
SDC-1 Cert			93.00	30.000		8.30		42.00	34.0		21.00	25.00	127.00	3.00	1.20	12.00	0.70	0.80		290.00	4.00	21.00	38.0
SDC-1 Meas			90.2	39.2		0.9		43.1	35.6		< 0.1	25.4	105	< 0.2	< 0.05	12.4	0.66	< 0.1		31.8	3.96	19.6	39.1
SDC-1 Cert			93.00	30.000		8.30		42.00	34.0		21.00	25.00	127.00	3.00	1.20	12.00	0.70	0.80		290.00	4.00	21.00	38.0
SDC-1 Meas			86.2	30.3		0.8		39.1	34.5		< 0.1	24.7	124	< 0.2	< 0.05	11.5	0.63	< 0.1		25.8	3.79	17.6	32.9
SDC-1 Cert			93.00	30.000		8.30		42.00	34.0		21.00	25.00	127.00	3.00	1.20	12.00	0.70	0.80		290.00	4.00	21.00	38.0
Oreas 72a (4 Acid Digest) Meas				294																			6210
Oreas 72a (4 Acid Digest) Cert				316																			6930.00
Oreas 72a (4 Acid Digest) Meas				296																			6090
Oreas 72a (4 Acid Digest) Cert				316																			6930.00
Oreas 72a (4 Acid Digest) Meas				300																			6450
Oreas 72a (4 Acid Digest) Cert				316																			6930.00
Oreas 72a (4 Acid Digest) Meas				291																			6800
Oreas 72a (4 Acid Digest) Cert				316																			6930.00
Oreas 72a (4 Acid Digest) Meas				304																			7430
Oreas 72a (4 Acid Digest) Cert				316																			6930.00
Oreas 72a (4 Acid Digest) Meas				276																			7180
Oreas 72a (4 Acid Digest) Cert				316																			6930.00
Oreas 72a (4 Acid Digest) Meas				303																			6840
Oreas 72a (4 Acid Digest) Cert				316																			6930.00
Oreas 72a (Fusion) Meas				318																			5890
Oreas 72a (Fusion) Cert				333																			6920.00
OREAS 101b (Fusion) Meas				416				670		18.7		15.7				58.7			139				8.2
OREAS 101b (Fusion) Cert				416				789		20.9		18.0				37.1			178				9.0
OREAS 101b (4 Acid) Meas			> 500	416				746		18.9		24.1				75.3			142				10.5
OREAS 101b (4 Acid) Cert			1325	412				754		20.1		23				36.4			133				8.2

Analyte Symbol	Ca	Cd	Ce	Cu	Ge	Hf	In	La	Li	Mo	Nb	Pb	Rb	Sn	Ta	Th	Tl	W	Y	Zr	Cs	Ga	Ni
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.02	0.01	0.2	0.05	0.1	0.005	0.5	0.2	0.05	0.1	0.5	0.1	0.2	0.05	0.01	0.02	0.1	0.1	0.5	0.05	0.05	0.2
Method Code	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 101b (4 Acid) Meas			> 500	408				743		20.4		22.7				36.5			126				8.2
OREAS 101b (4 Acid) Cert			1325	412				754		20.1		23				36.4			133				8.2
OREAS 101b (4 Acid) Meas			> 500	427				762		21.0		22.2				36.2			126				9.3
OREAS 101b (4 Acid) Cert			1325	412				754		20.1		23				36.4			133				8.2
OREAS 101b (4 Acid) Meas			> 500	452				807		19.4		23.9				38.3			140				9.2
OREAS 101b (4 Acid) Cert			1325	412				754		20.1		23				36.4			133				8.2
OREAS 101b (4 Acid) Meas			> 500	379				745		15.9		21.9				34.8			121				7.7
OREAS 101b (4 Acid) Cert			1325	412				754		20.1		23				36.4			133				8.2
OREAS 101b (4 Acid) Meas			> 500	414				691		20.2		24.4				36.5			122				10.6
OREAS 101b (4 Acid) Cert			1325	412				754		20.1		23				36.4			133				8.2
OREAS 101b (4 Acid) Meas			> 500	345				687		16.7		20.9				33.4			114				8.1
OREAS 101b (4 Acid) Cert			1325	412				754		20.1		23				36.4			133				8.2
OREAS 101b (4 Acid) Meas			> 500	467				624		21.9		23.9				37.1			108				10.1
OREAS 101b (4 Acid) Cert			1325	412				754		20.1		23				36.4			133				8.2
OREAS 101b (4 Acid) Meas			> 500	434				792		18.6		23.2				36.8			122				9.5
OREAS 101b (4 Acid) Cert			1325	412				754		20.1		23				36.4			133				8.2
OREAS 101b (4 Acid) Meas			> 500	420				788		17.7		23.1				36.3			122				10.4
OREAS 101b (4 Acid) Cert			1325	412				754		20.1		23				36.4			133				8.2
OREAS 101b (4 Acid) Meas				414				717		23.2		23.7				36.4			123				10.3
OREAS 101b (4 Acid) Cert				412				754		20.1		23				36.4			133				8.2
OREAS 98 (4 Acid) Meas				> 10000								322		165									
OREAS 98 (4 Acid) Cert				14800 0.0								345		206									
OREAS 98 (4 Acid) Meas				> 10000								292		201									
OREAS 98 (4 Acid) Cert				14800 0.0								345		206									
OREAS 98 (4 Acid) Meas				> 10000								339		204									
OREAS 98 (4 Acid) Cert				14800 0.0								345		206									
OREAS 98 (4 Acid) Meas				> 10000								300		182									
OREAS 98 (4 Acid) Cert				14800 0.0								345		206									
OREAS 98 (4 Acid) Meas				> 10000								323		182									

Analyte Symbol	Ca	Cd	Ce	Cu	Ge	Hf	In	La	Li	Mo	Nb	Pb	Rb	Sn	Ta	Th	Tl	W	Y	Zr	Cs	Ga	Ni
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.02	0.01	0.2	0.05	0.1	0.005	0.5	0.2	0.05	0.1	0.5	0.1	0.2	0.05	0.01	0.02	0.1	0.1	0.5	0.05	0.05	0.2
Method Code	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 98 (4 Acid) Cert				14800 0.0								345		206									
OREAS 98 (4 Acid) Meas				> 10000								357		203									
OREAS 98 (4 Acid) Cert				14800 0.0								345		206									
OREAS 98 (4 Acid) Meas				> 10000								357		196									
OREAS 98 (4 Acid) Cert				14800 0.0								345		206									
OREAS 98 (4 Acid) Meas				> 10000								346		175									
OREAS 98 (4 Acid) Cert				14800 0.0								345		206									
OREAS 98 (4 Acid) Meas				> 10000								323		194									
OREAS 98 (4 Acid) Cert				14800 0.0								345		206									
OREAS 98 (4 Acid) Meas				> 10000								355		197									
OREAS 98 (4 Acid) Cert				14800 0.0								345		206									
OREAS 98 (4 Acid) Meas				> 10000								312		198									
OREAS 98 (4 Acid) Cert				14800 0.0								345		206									
DNC-1a Meas	7.84			95.9				3.9	4.3		1.4	6.8	3.3						16.9	38.6		13.8	255
DNC-1a Cert	8.21			100				3.6	5.2		3	6.3	4.50						18.0	38.0		15	247
DNC-1a Meas	7.87			100				3.7	4.8		1.4	6.0	2.7						15.6	37.7		14.3	281
DNC-1a Cert	8.21			100				3.6	5.2		3	6.3	4.50						18.0	38.0		15	247
DNC-1a Meas	7.48			103				3.1	4.7		1.5	6.9	1.8						13.7	35.8		12.6	267
DNC-1a Cert	8.21			100				3.6	5.2		3	6.3	4.50						18.0	38.0		15	247
DNC-1a Meas				93.8				3.9	4.3		1.6	6.0	3.7						16.3	37.6		13.7	250
DNC-1a Cert				100				3.6	5.2		3	6.3	4.50						18.0	38.0		15	247
DNC-1a Meas				90.1				3.7	4.7		1.3	6.6	4.2						16.0	39.5		13.8	273
DNC-1a Cert				100				3.6	5.2		3	6.3	4.50						18.0	38.0		15	247
DNC-1a Meas				95.6				3.6	4.8		1.3	6.3	4.2						15.6	39.2		14.5	292
DNC-1a Cert				100				3.6	5.2		3	6.3	4.50						18.0	38.0		15	247
DNC-1a Meas				124				3.9	4.8		1.6	6.4	3.7						18.2	38.3		14.1	286
DNC-1a Cert				100				3.6	5.2		3	6.3	4.50						18.0	38.0		15	247
DNC-1a Meas				97.3				2.9	4.4		1.4	6.1	0.9						12.8	36.3		12.8	258
DNC-1a Cert				100				3.6	5.2		3	6.3	4.50						18.0	38.0		15	247
DNC-1a Meas				97.2				3.1	4.2		1.4	6.1	2.0						12.9	33.5		14.5	252
DNC-1a Cert				100				3.6	5.2		3	6.3	4.50						18.0	38.0		15	247
OREAS 13b (4-Acid) Meas				2310						9.36													2140
OREAS 13b (4-Acid) Cert				2327.0 000						9.0													2247.0 000
OREAS 13b (4-Acid) Meas				2170						7.70													2060
OREAS 13b (4-Acid) Cert				2327.0 000						9.0													2247.0 000
OREAS 13b (4-Acid) Meas				2260						9.04													2140
OREAS 13b (4-Acid) Cert				2327.0 000						9.0													2247.0 000

Analyte Symbol	Ca	Cd	Ce	Cu	Ge	Hf	In	La	Li	Mo	Nb	Pb	Rb	Sn	Ta	Th	Tl	W	Y	Zr	Cs	Ga	Ni
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.02	0.01	0.2	0.05	0.1	0.005	0.5	0.2	0.05	0.1	0.5	0.1	0.2	0.05	0.01	0.02	0.1	0.1	0.5	0.05	0.05	0.2
Method Code	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 13b (4-Acid) Meas				2390						9.45													2190
OREAS 13b (4-Acid) Cert				2327.0000						9.0													2247.0000
OREAS 13b (4-Acid) Meas				2160						9.09													2390
OREAS 13b (4-Acid) Cert				2327.0000						9.0													2247.0000
OREAS 13b (4-Acid) Meas				2180						9.38													2420
OREAS 13b (4-Acid) Cert				2327.0000						9.0													2247.0000
OREAS 13b (4-Acid) Meas				2270						8.17													2260
OREAS 13b (4-Acid) Cert				2327.0000						9.0													2247.0000
OREAS 13b (4-Acid) Meas				2380						9.26													2300
OREAS 13b (4-Acid) Cert				2327.0000						9.0													2247.0000
OREAS 904 (4 ACID) Meas	0.05		97.1	6490	< 0.05	0.2	0.197	46.7	17.3	2.22		11.7	166	2.7	< 0.05	15.8	0.57	2.6	35.6	22.6	4.40	17.5	43.2
OREAS 904 (4 ACID) Cert	0.0460		86.0	6120	0.180	5.00	0.220	43.2	16.7	2.12		10.6	130	2.83	0.540	14.3	0.520	2.12	31.5	171	3.79	16.7	40.1
OREAS 904 (4 ACID) Meas	0.05		93.3	6160	0.08	0.4	0.204	44.4	16.5	2.46		11.2	114	2.9	< 0.05	15.3	0.53	2.0	31.4	50.3	3.96	16.9	40.7
OREAS 904 (4 ACID) Cert	0.0460		86.0	6120	0.180	5.00	0.220	43.2	16.7	2.12		10.6	130	2.83	0.540	14.3	0.520	2.12	31.5	171	3.79	16.7	40.1
OREAS 904 (4 ACID) Meas			99.9	6760	0.06	0.6	0.229	46.7	16.2	2.07		11.8	148	2.7	0.11	16.3	0.58	2.5	35.0	48.3	3.83	17.8	42.8
OREAS 904 (4 ACID) Cert			86.0	6120	0.180	5.00	0.220	43.2	16.7	2.12		10.6	130	2.83	0.540	14.3	0.520	2.12	31.5	171	3.79	16.7	40.1
OREAS 904 (4 ACID) Meas			97.0	6260	< 0.05	0.5	0.208	47.6	15.4	1.96		13.7	129	2.7	0.08	16.1	0.57	2.7	33.5	49.4	3.87	16.3	38.7
OREAS 904 (4 ACID) Cert			86.0	6120	0.180	5.00	0.220	43.2	16.7	2.12		10.6	130	2.83	0.540	14.3	0.520	2.12	31.5	171	3.79	16.7	40.1
OREAS 904 (4 ACID) Meas			93.5	6290	0.14	4.9	0.210	44.8	16.1	2.12		11.0	155	2.9	0.76	15.3	0.54	2.3	30.8	188	3.59	16.4	38.0
OREAS 904 (4 ACID) Cert			86.0	6120	0.180	5.00	0.220	43.2	16.7	2.12		10.6	130	2.83	0.540	14.3	0.520	2.12	31.5	171	3.79	16.7	40.1
OREAS 904 (4 ACID) Meas			80.6	5980	0.09	5.3	0.185	40.9	16.3	2.25		11.8	112	2.8	0.35	15.4	0.54	2.2	30.7	183	3.52	14.7	43.7
OREAS 904 (4 ACID) Cert			86.0	6120	0.180	5.00	0.220	43.2	16.7	2.12		10.6	130	2.83	0.540	14.3	0.520	2.12	31.5	171	3.79	16.7	40.1
OREAS 904 (4 ACID) Meas			79.6	5590	< 0.05	< 0.1	0.190	38.9	14.9	1.83		10.2	75.8	1.8	< 0.05	14.2	0.51	1.9	27.4	12.0	3.20	14.4	39.6
OREAS 904 (4 ACID) Cert			86.0	6120	0.180	5.00	0.220	43.2	16.7	2.12		10.6	130	2.83	0.540	14.3	0.520	2.12	31.5	171	3.79	16.7	40.1
OREAS 904 (4 ACID) Meas			83.7	5200	0.29	4.8	0.206	42.1	15.6	2.10		10.6	132	3.0	0.64	14.6	0.53	2.6	31.7	174	3.50	15.1	42.6
OREAS 904 (4 ACID) Cert			86.0	6120	0.180	5.00	0.220	43.2	16.7	2.12		10.6	130	2.83	0.540	14.3	0.520	2.12	31.5	171	3.79	16.7	40.1
OREAS 904 (4 ACID) Meas			83.0	6300	0.34	4.0	0.232	41.4	16.6	1.67		11.0	127	2.4	< 0.05	14.6	0.51	0.4	28.9	142	3.56	16.9	39.3
OREAS 904 (4 ACID) Cert			86.0	6120	0.180	5.00	0.220	43.2	16.7	2.12		10.6	130	2.83	0.540	14.3	0.520	2.12	31.5	171	3.79	16.7	40.1
OREAS 904 (4 ACID) Meas			87.6	6450	0.18	5.0	0.213	44.0	16.7	2.45		11.9	162	3.0	0.80	15.4	0.56	2.2	31.3	187	3.75	17.3	46.2

Analyte Symbol	Ca	Cd	Ce	Cu	Ge	Hf	In	La	Li	Mo	Nb	Pb	Rb	Sn	Ta	Th	Tl	W	Y	Zr	Cs	Ga	Ni
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.02	0.01	0.2	0.05	0.1	0.005	0.5	0.2	0.05	0.1	0.5	0.1	0.2	0.05	0.01	0.02	0.1	0.1	0.5	0.05	0.05	0.2
Method Code	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 904 (4 ACID) Cert			86.0	6120	0.180	5.00	0.220	43.2	16.7	2.12		10.6	130	2.83	0.540	14.3	0.520	2.12	31.5	171	3.79	16.7	40.1
SBC-1 Meas		0.24	105	29.2		3.7		25.4	177	2.11	16.5	31.9	147	4.8	1.14	22.4	0.51	3.1	18.8	93.1	8.25	24.8	81.7
SBC-1 Cert		0.40	108.0	31.0		3.7		52.5	163	2.40	15.3	35.0	147	3.3	1.10	15.8	0.89	1.60	36.5	134.0	8.2	27.0	82.8
SBC-1 Meas		0.36	106	34.0		3.3		50.7	157	2.47	14.4	34.9	133	3.6	1.06	14.9	0.90	1.8	30.6	126	7.80	23.1	86.5
SBC-1 Cert		0.40	108.0	31.0		3.7		52.5	163	2.40	15.3	35.0	147	3.3	1.10	15.8	0.89	1.60	36.5	134.0	8.2	27.0	82.8
SBC-1 Meas		0.38	90.0	31.7		3.6		47.1	154	2.17	16.7	36.8	140	3.6	0.94	13.2	0.95	1.7	30.5	116	7.71	24.6	78.1
SBC-1 Cert		0.40	108.0	31.0		3.7		52.5	163	2.40	15.3	35.0	147	3.3	1.10	15.8	0.89	1.60	36.5	134.0	8.2	27.0	82.8
SBC-1 Meas		0.36	113	44.1		3.2		42.1	167	2.28	10.4	38.3	163	3.3	0.65	13.6	0.90	1.6	28.6	124	8.10	23.0	88.9
SBC-1 Cert		0.40	108.0	31.0		3.7		52.5	163	2.40	15.3	35.0	147	3.3	1.10	15.8	0.89	1.60	36.5	134.0	8.2	27.0	82.8
SBC-1 Meas		0.40	109	32.0		3.5		50.6	168	2.20	14.2	36.8	171	3.1	1.20	16.1	0.90	1.3	31.1	126	8.13	24.7	88.4
SBC-1 Cert		0.40	108.0	31.0		3.7		52.5	163	2.40	15.3	35.0	147	3.3	1.10	15.8	0.89	1.60	36.5	134.0	8.2	27.0	82.8
SBC-1 Meas		0.40	103	29.8		3.5		48.8	170	2.16	15.6	37.0	151	3.5	1.20	15.7	0.91	1.6	30.1	126	8.12	19.7	91.2
SBC-1 Cert		0.40	108.0	31.0		3.7		52.5	163	2.40	15.3	35.0	147	3.3	1.10	15.8	0.89	1.60	36.5	134.0	8.2	27.0	82.8
SBC-1 Meas		0.37	91.7	38.4		3.3		49.8	174	2.41	15.1	37.5	133	3.6	1.13	15.9	0.96	1.8	33.1	125	7.45	24.2	95.6
SBC-1 Cert		0.40	108.0	31.0		3.7		52.5	163	2.40	15.3	35.0	147	3.3	1.10	15.8	0.89	1.60	36.5	134.0	8.2	27.0	82.8
SBC-1 Meas		0.37	89.9	31.4		3.3		42.5	167	2.59	15.0	36.8	128	3.0	1.06	14.4	0.91	1.5	27.2	120	7.55	24.5	81.3
SBC-1 Cert		0.40	108.0	31.0		3.7		52.5	163	2.40	15.3	35.0	147	3.3	1.10	15.8	0.89	1.60	36.5	134.0	8.2	27.0	82.8
SBC-1 Meas		0.44		30.4				41.8	163	2.53		35.8		3.3		12.5	0.88	1.6	25.5	109		22.1	80.8
SBC-1 Cert		0.40		31.0				52.5	163	2.40		35.0		3.3		15.8	0.89	1.60	36.5	134.0		27.0	82.8
OREAS 45d (4-Acid) Meas	0.19		33.1	372		3.3	0.079	15.2	21.4	1.35	4.7	22.4	36.8	1.3	0.22	57.4	1.87	4.7	11.8	143	3.41	19.7	236
OREAS 45d (4-Acid) Cert	0.185		37.20	371		3.830	0.096	16.9	21.5	2.500	14.50	21.8	42.1	2.78	1.02	14.5	0.27	1.62	9.53	141	3.910	21.20	231.0
OREAS 45d (4-Acid) Meas	0.19		40.6	331		1.3	0.107	14.3	18.6	0.74	0.5	20.6	42.4	0.9	< 0.05	13.2	0.25	0.3	9.2	113	3.82	18.8	193
OREAS 45d (4-Acid) Cert	0.185		37.20	371		3.830	0.096	16.9	21.5	2.500	14.50	21.8	42.1	2.78	1.02	14.5	0.27	1.62	9.53	141	3.910	21.20	231.0
OREAS 45d (4-Acid) Meas			39.5	381		3.4	0.089	18.3	21.1	0.39	3.3	22.9	44.6	0.5	0.14	15.9	0.27	0.1	11.6	44.6	3.77	21.6	221
OREAS 45d (4-Acid) Cert			37.20	371		3.830	0.096	16.9	21.5	2.500	14.50	21.8	42.1	2.78	1.02	14.5	0.27	1.62	9.53	141	3.910	21.20	231.0
OREAS 45d (4-Acid) Meas			34.4	372		2.3	0.082	17.8	21.4	0.74	0.7	22.1	45.3	0.8	< 0.05	15.3	0.26	0.1	10.8	130	3.65	21.6	225
OREAS 45d (4-Acid) Cert			37.20	371		3.830	0.096	16.9	21.5	2.500	14.50	21.8	42.1	2.78	1.02	14.5	0.27	1.62	9.53	141	3.910	21.20	231.0
OREAS 45d (4-Acid) Meas			36.2	369		3.9	0.089	15.6	23.1	0.32	7.7	23.3	49.3	0.4	0.45	14.8	0.25	< 0.1	10.7	80.9	3.64	18.8	246
OREAS 45d (4-Acid) Cert			37.20	371		3.830	0.096	16.9	21.5	2.500	14.50	21.8	42.1	2.78	1.02	14.5	0.27	1.62	9.53	141	3.910	21.20	231.0
OREAS 45d (4-Acid) Meas			31.6	348		4.5	0.091	16.3	21.7	1.76	12.0	20.9	31.8	1.3	0.95	14.6	0.24	0.4	10.5	157	3.26	21.9	244
OREAS 45d (4-Acid) Cert			37.20	371		3.830	0.096	16.9	21.5	2.500	14.50	21.8	42.1	2.78	1.02	14.5	0.27	1.62	9.53	141	3.910	21.20	231.0
OREAS 45d (4-Acid) Meas			35.3	385		1.9	0.085	12.7	21.8	2.03	0.3	22.2	42.5	2.2	< 0.05	12.0	0.25	0.8	9.8	158	3.50	20.7	248
OREAS 45d (4-Acid) Cert			37.20	371		3.830	0.096	16.9	21.5	2.500	14.50	21.8	42.1	2.78	1.02	14.5	0.27	1.62	9.53	141	3.910	21.20	231.0
OREAS 45d (4-Acid) Meas			37.1	371		3.5	0.091	16.6	21.3	0.33	2.3	22.0	43.2	0.6	0.05	16.0	0.25	< 0.1	10.4	76.4	3.64	21.0	231
OREAS 45d (4-Acid) Cert			37.20	371		3.830	0.096	16.9	21.5	2.500	14.50	21.8	42.1	2.78	1.02	14.5	0.27	1.62	9.53	141	3.910	21.20	231.0
OREAS 45d (4-Acid) Meas			36.2	382		2.1	0.090	17.4	21.8	0.98	0.4	23.0	44.4	0.8	< 0.05	15.0	0.24	0.3	11.1	118	3.71	21.1	227
OREAS 45d (4-Acid) Cert			37.20	371		3.830	0.096	16.9	21.5	2.500	14.50	21.8	42.1	2.78	1.02	14.5	0.27	1.62	9.53	141	3.910	21.20	231.0

Analyte Symbol	Ca	Cd	Ce	Cu	Ge	Hf	In	La	Li	Mo	Nb	Pb	Rb	Sn	Ta	Th	Tl	W	Y	Zr	Cs	Ga	Ni
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.02	0.01	0.2	0.05	0.1	0.005	0.5	0.2	0.05	0.1	0.5	0.1	0.2	0.05	0.01	0.02	0.1	0.1	0.5	0.05	0.05	0.2
Method Code	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 45d (4-Acid) Meas			39.4	357		3.4	0.103	16.7	19.9	0.35	4.6	22.3	49.0	0.6	0.15	15.0	0.26	< 0.1	10.1	70.6	3.89	21.9	222
OREAS 45d (4-Acid) Cert			37.20	371		3.830	0.096	16.9	21.5	2.500	14.50	21.8	42.1	2.78	1.02	14.5	0.27	1.62	9.53	141	3.910	21.20	231.0
OREAS 45d (4-Acid) Meas				382				18.0	22.9	0.91		23.8		0.7		15.6	0.26	0.2	11.2	131		22.5	255
OREAS 45d (4-Acid) Cert				371				16.9	21.5	2.500		21.8		2.78		14.5	0.27	1.62	9.53	141		21.20	231.0
OREAS 96 (4 Acid) Meas				> 10000									94.2		61.4								
OREAS 96 (4 Acid) Cert				39300									101		65.6								
OREAS 96 (4 Acid) Meas				> 10000									103		66.7								
OREAS 96 (4 Acid) Cert				39300									101		65.6								
OREAS 96 (4 Acid) Meas				> 10000									100		64.9								
OREAS 96 (4 Acid) Cert				39300									101		65.6								
OREAS 96 (4 Acid) Meas				> 10000									105		63.4								
OREAS 96 (4 Acid) Cert				39300									101		65.6								
OREAS 96 (4 Acid) Meas				> 10000									105		64.3								
OREAS 96 (4 Acid) Cert				39300									101		65.6								
OREAS 96 (4 Acid) Meas				> 10000									93.7		63.3								
OREAS 96 (4 Acid) Cert				39300									101		65.6								
OREAS 96 (4 Acid) Meas				> 10000									101		56.0								
OREAS 96 (4 Acid) Cert				39300									101		65.6								
OREAS 96 (4 Acid) Meas				> 10000									103		61.8								
OREAS 96 (4 Acid) Cert				39300									101		65.6								
OREAS 96 (4 Acid) Meas				> 10000									109		60.2								
OREAS 96 (4 Acid) Cert				39300									101		65.6								
OREAS 923 (4 Acid) Meas	0.48	0.30	85.0	4400		3.9	0.465	41.0	30.4	0.93	11.3	95.9	169	14.1	0.52	17.0	0.89	5.3	26.3	146	6.94	18.2	37.1
OREAS 923 (4 Acid) Cert	0.473	0.420	83.0	4230		3.42	0.520	42.2	31.4	0.930	14.1	83.0	166	13.3	1.11	16.5	0.860	4.85	26.4	116	6.70	20.3	35.8
OREAS 923 (4 Acid) Meas	0.50	0.36	88.8	4460		3.8	0.497	42.8	32.2	1.09	15.2	85.5	183	14.0	1.10	17.1	0.87	5.3	26.6	142	6.78	19.9	39.1
OREAS 923 (4 Acid) Cert	0.473	0.420	83.0	4230		3.42	0.520	42.2	31.4	0.930	14.1	83.0	166	13.3	1.11	16.5	0.860	4.85	26.4	116	6.70	20.3	35.8
OREAS 923 (4 Acid) Meas		0.45	89.3	4530		3.6	0.531	45.5	31.0	0.96	15.2	94.4	168	14.4	1.26	17.3	0.95	5.1	27.0	129	6.71	17.8	35.2
OREAS 923 (4 Acid) Cert		0.420	83.0	4230		3.42	0.520	42.2	31.4	0.930	14.1	83.0	166	13.3	1.11	16.5	0.860	4.85	26.4	116	6.70	20.3	35.8
OREAS 923 (4 Acid) Meas		0.42	85.7	4390		3.6	0.515	42.5	32.7	1.03	13.5	85.9	125	13.2	1.25	17.5	0.89	4.8	25.9	138	6.52	17.1	37.8

Analyte Symbol	Ca	Cd	Ce	Cu	Ge	Hf	In	La	Li	Mo	Nb	Pb	Rb	Sn	Ta	Th	Tl	W	Y	Zr	Cs	Ga	Ni
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.02	0.01	0.2	0.05	0.1	0.005	0.5	0.2	0.05	0.1	0.5	0.1	0.2	0.05	0.01	0.02	0.1	0.1	0.5	0.05	0.05	0.2
Method Code	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 923 (4 Acid) Cert		0.420	83.0	4230		3.42	0.520	42.2	31.4	0.930	14.1	83.0	166	13.3	1.11	16.5	0.860	4.85	26.4	116	6.70	20.3	35.8
OREAS 923 (4 Acid) Meas		0.46	86.1	4560		3.7	0.475	42.6	32.5	0.98	13.6	90.9	203	13.3	1.29	17.5	0.88	5.6	24.8	137	6.43	17.8	40.9
OREAS 923 (4 Acid) Cert		0.420	83.0	4230		3.42	0.520	42.2	31.4	0.930	14.1	83.0	166	13.3	1.11	16.5	0.860	4.85	26.4	116	6.70	20.3	35.8
OREAS 923 (4 Acid) Meas		0.29	81.8	3620		3.6	0.468	41.3	31.1	0.90	13.5	83.0	151	13.3	1.07	16.3	0.87	5.1	25.1	122	6.16	16.2	38.2
OREAS 923 (4 Acid) Cert		0.420	83.0	4230		3.42	0.520	42.2	31.4	0.930	14.1	83.0	166	13.3	1.11	16.5	0.860	4.85	26.4	116	6.70	20.3	35.8
OREAS 923 (4 Acid) Meas		0.41	80.2	4400		3.4	0.505	40.9	31.0	0.89	13.8	88.4	171	11.6	1.16	18.1	0.85	4.2	23.9	127	6.18	19.0	35.6
OREAS 923 (4 Acid) Cert		0.420	83.0	4230		3.42	0.520	42.2	31.4	0.930	14.1	83.0	166	13.3	1.11	16.5	0.860	4.85	26.4	116	6.70	20.3	35.8
OREAS 923 (4 Acid) Meas		0.45	82.1	4030		3.7	0.561	41.9	31.5	0.92	14.4	92.5	127	13.4	1.16	16.8	0.91	5.0	26.2	127	6.25	18.2	35.8
OREAS 923 (4 Acid) Cert		0.420	83.0	4230		3.42	0.520	42.2	31.4	0.930	14.1	83.0	166	13.3	1.11	16.5	0.860	4.85	26.4	116	6.70	20.3	35.8
OREAS 923 (4 Acid) Meas		0.36	81.5	4480		3.6	0.527	41.7	31.9	0.85	14.9	90.2	175	13.1	1.13	16.8	0.88	4.7	23.0	121	6.45	17.0	35.0
OREAS 923 (4 Acid) Cert		0.420	83.0	4230		3.42	0.520	42.2	31.4	0.930	14.1	83.0	166	13.3	1.11	16.5	0.860	4.85	26.4	116	6.70	20.3	35.8
OREAS 923 (4 Acid) Meas		0.41	82.8	4470		3.7	0.522	42.3	30.2	0.86	14.2	85.4	176	12.7	1.11	16.7	0.87	4.4	22.9	119	6.37	17.7	34.8
OREAS 923 (4 Acid) Cert		0.420	83.0	4230		3.42	0.520	42.2	31.4	0.930	14.1	83.0	166	13.3	1.11	16.5	0.860	4.85	26.4	116	6.70	20.3	35.8
OREAS 621 (4 Acid) Meas	2.10	282	50.2	3600		4.3	1.69	21.7	12.1	12.9	9.8 > 10000		83.2	5.5		6.43	2.10	2.4	12.1	171	3.16	17.6	24.3
OREAS 621 (4 Acid) Cert	1.97	284	46.6	3630		4.41	1.83	21.6	14.2	13.6	8.61	13600	84.0	5.25		7.48	1.96	2.35	11.1	168	3.28	24.6	26.2
OREAS 621 (4 Acid) Meas	2.08	256	41.4	3290		4.6	1.37	16.1	15.4	12.7	9.4 > 10000		76.7	4.7		4.04	2.01	1.9	9.5	158	3.01	21.9	28.0
OREAS 621 (4 Acid) Cert	1.97	284	46.6	3630		4.41	1.83	21.6	14.2	13.6	8.61	13600	84.0	5.25		7.48	1.96	2.35	11.1	168	3.28	24.6	26.2
OREAS 621 (4 Acid) Meas	2.11	285	50.2	3700		4.5	1.75	22.4	14.5	14.0	9.0 > 10000		84.6	5.5		6.80	2.08	2.3	12.5	186	3.18	16.0	29.0
OREAS 621 (4 Acid) Cert	1.97	284	46.6	3630		4.41	1.83	21.6	14.2	13.6	8.61	13600	84.0	5.25		7.48	1.96	2.35	11.1	168	3.28	24.6	26.2
OREAS 621 (4 Acid) Meas	2.08	283	50.4	3770		4.5	1.69	21.1	14.8	13.9	9.1 > 10000		96.4	5.7		6.31	2.08	2.1	12.4	186	3.28	24.1	30.2
OREAS 621 (4 Acid) Cert	1.97	284	46.6	3630		4.41	1.83	21.6	14.2	13.6	8.61	13600	84.0	5.25		7.48	1.96	2.35	11.1	168	3.28	24.6	26.2
OREAS 621 (4 Acid) Meas		302	46.2	3770		4.4	1.83	18.3	14.1	13.4	10.0 > 10000		92.7	5.4		4.31	2.03	2.1	11.3	162	3.39	27.9	28.7
OREAS 621 (4 Acid) Cert		284	46.6	3630		4.41	1.83	21.6	14.2	13.6	8.61	13600	84.0	5.25		7.48	1.96	2.35	11.1	168	3.28	24.6	26.2
OREAS 621 (4 Acid) Meas		297	42.3	3590		4.5	1.72	16.0	13.1	12.2	8.5 > 10000		66.3	5.3		4.09	2.06	1.9	9.3	155	3.19	27.8	26.2
OREAS 621 (4 Acid) Cert		284	46.6	3630		4.41	1.83	21.6	14.2	13.6	8.61	13600	84.0	5.25		7.48	1.96	2.35	11.1	168	3.28	24.6	26.2
OREAS 522 (4 Acid) Meas	3.54		68.0	9220		3.2	0.255	54.7	15.9	227	7.1	9.7	97.7	10.7	0.49	2.62	0.30	141	20.5	145	0.67	18.9	70.3
OREAS 522 (4 Acid) Cert	3.65		148	9160		2.96	0.230	171	16.2	206	5.66	12.5	82.0	9.32	0.440	7.53	0.290	135	18.5	112	0.640	16.0	70.0
OREAS 522 (4 Acid) Meas	3.54		96.0	9180		2.8	0.215	60.8	14.2	188	2.9	8.6	86.9	8.7	0.07	1.83	0.29	53.3	18.9	121	0.61	16.6	64.9
OREAS 522 (4 Acid) Cert	3.65		148	9160		2.96	0.230	171	16.2	206	5.66	12.5	82.0	9.32	0.440	7.53	0.290	135	18.5	112	0.640	16.0	70.0

Analyte Symbol	Ca	Cd	Ce	Cu	Ge	Hf	In	La	Li	Mo	Nb	Pb	Rb	Sn	Ta	Th	Tl	W	Y	Zr	Cs	Ga	Ni
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.02	0.01	0.2	0.05	0.1	0.005	0.5	0.2	0.05	0.1	0.5	0.1	0.2	0.05	0.01	0.02	0.1	0.1	0.5	0.05	0.05	0.2
Method Code	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 522 (4 Acid) Meas			107	9550		2.9	0.226	76.8	15.0	198	3.0	9.5	90.8	8.8	0.07	2.19	0.31	58.9	19.8	128	0.65	18.3	69.5
OREAS 522 (4 Acid) Cert			148	9160		2.96	0.230	171	16.2	206	5.66	12.5	82.0	9.32	0.440	7.53	0.290	135	18.5	112	0.640	16.0	70.0
OREAS 522 (4 Acid) Meas			103	9610		2.8	0.220	74.2	15.8	197	1.2	10.7	103	8.9	< 0.05	1.83	0.30	22.5	18.5	129	0.66	17.6	76.9
OREAS 522 (4 Acid) Cert			148	9160		2.96	0.230	171	16.2	206	5.66	12.5	82.0	9.32	0.440	7.53	0.290	135	18.5	112	0.640	16.0	70.0
OREAS 522 (4 Acid) Meas			100.0	8630		2.9	0.236	74.6	15.8	177	0.9	7.0	76.0	8.1	< 0.05	1.92	0.28	17.0	19.0	111	0.65	16.1	70.6
OREAS 522 (4 Acid) Cert			148	9160		2.96	0.230	171	16.2	206	5.66	12.5	82.0	9.32	0.440	7.53	0.290	135	18.5	112	0.640	16.0	70.0
OREAS 522 (4 Acid) Meas			99.8	9390		2.9	0.223	67.6	13.6	206	3.0	9.2	90.6	8.5	0.07	1.67	0.30	59.8	17.9	122	0.63	18.0	71.3
OREAS 522 (4 Acid) Cert			148	9160		2.96	0.230	171	16.2	206	5.66	12.5	82.0	9.32	0.440	7.53	0.290	135	18.5	112	0.640	16.0	70.0
OREAS 522 (4 Acid) Meas			68.4	9440		2.9	0.222	54.8	13.2	216	6.4	8.1	89.6	8.7	0.42	3.00	0.29	131	16.7	118	0.60	17.1	70.4
OREAS 522 (4 Acid) Cert			148	9160		2.96	0.230	171	16.2	206	5.66	12.5	82.0	9.32	0.440	7.53	0.290	135	18.5	112	0.640	16.0	70.0
Oreas 77b (4 Acid Digest) Meas	2.68	1.34	27.5	3100		1.1	0.105	15.6	16.7		2.9	59.4	18.1	1.5	0.28	6.25	1.40	2.6	7.0	36.5	2.09	4.37	> 10000
Oreas 77b (4 Acid Digest) Cert	3.06	1.20	27.7	3430		1.15	0.112	15.8	18.8		3.26	61.0	19.1	1.59	0.280	6.61	1.37	3.07	6.55	37.9	2.32	4.61	113000
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
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OREAS 257b (Fire Assay) Meas																							
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Oreas E1336 (Fire Assay) Meas																							
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Analyte Symbol	Ca	Cd	Ce	Cu	Ge	Hf	In	La	Li	Mo	Nb	Pb	Rb	Sn	Ta	Th	Tl	W	Y	Zr	Cs	Ga	Ni
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.02	0.01	0.2	0.05	0.1	0.005	0.5	0.2	0.05	0.1	0.5	0.1	0.2	0.05	0.01	0.02	0.1	0.1	0.5	0.05	0.05	0.2
Method Code	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
A685559 Orig																							
A685559 Dup																							
A685564 Orig	0.46	0.37	15.1	5.1	< 0.05	2.0	0.011	6.2	3.6	70.8	2.2	193	21.9	0.5	0.16	2.04	0.12	2.9	2.0	75.0	0.10	17.4	4.2
A685564 Dup	0.47	0.34	14.1	6.5	< 0.05	2.0	0.005	5.7	3.5	69.7	2.1	188	18.6	0.5	0.11	2.05	0.12	2.8	2.0	72.9	0.09	17.1	5.7
A685570 Orig																							
A685570 Dup																							
A685572 Orig	2.59	0.05	7.13	24.0	0.06	< 0.1	0.007	2.7	4.8	4.03	0.7	3.4	18.2	< 0.2	< 0.05	12.7	< 0.02	2.3	5.2	12.8	0.79	1.36	14.4
A685572 Dup	2.61	0.14	7.42	25.3	0.08	< 0.1	0.010	2.7	4.9	3.97	0.7	5.8	17.9	0.5	< 0.05	12.7	< 0.02	3.0	5.3	13.3	0.79	1.57	15.1
A685572 Orig	2.52	0.08		43.1				2.9	5.2	4.05		2.9		0.2		0.21	< 0.02	6.4	5.2	1.9		< 0.05	14.1
A685572 Dup	2.52	0.07		28.0				3.1	5.0	3.86		2.9		0.2		0.22	< 0.02	6.6	5.0	0.9		< 0.05	14.9
A685573 Orig	0.41	< 0.02	7.48	14.4	0.06	< 0.1	< 0.005	3.6	1.1	4.03	0.6	3.0	8.7	< 0.2	< 0.05	0.25	< 0.02	3.5	3.2	0.7	0.15	< 0.05	4.3
A685573 Dup	0.39	0.05	6.87	16.7	0.07	< 0.1	0.006	3.3	1.2	4.20	0.3	2.8	8.4	< 0.2	< 0.05	0.23	< 0.02	3.4	3.1	0.6	0.13	< 0.05	3.6
A685574 Orig																							
A685574 Dup																							
A685595 Orig																							
A685595 Dup																							
A685600 Orig	0.49	0.07	54.0	23.9	< 0.05	0.3	0.010	27.5	0.7	4.45	2.2	8.2	16.2	0.2	< 0.05	6.12	0.02	7.7	2.9	24.8	0.09	2.16	13.0
A685600 Split PREP DUP	0.49	0.09	52.1	22.4	< 0.05	0.1	0.017	26.7	0.7	4.31	1.7	8.2	16.0	0.2	< 0.05	6.19	0.02	7.4	2.8	13.2	0.08	4.23	12.7
A685608 Orig																							
A685608 Dup																							
Method Blank	< 0.01																						
Method Blank	< 0.01	< 0.02	< 0.01	0.7	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.11	< 0.2
Method Blank		< 0.02	0.01	1.2	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	0.1	< 0.1	< 0.5	< 0.05	0.11	< 0.2
Method Blank		< 0.02	< 0.01	1.2	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	0.06	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.09	< 0.2
Method Blank		< 0.02	< 0.01	1.5	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	0.07	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	0.1	< 0.1	< 0.5	< 0.05	0.08	< 0.2
Method Blank		< 0.02	< 0.01	0.2	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	0.06	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.09	< 0.2
Method Blank		< 0.02	< 0.01	0.3	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	0.14	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.07	< 0.2
Method Blank	< 0.01	< 0.02	< 0.01	1.8	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	0.9	< 0.05	0.07	< 0.2
Method Blank	< 0.01	< 0.02	0.09	1.4	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	0.15	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.14	< 0.2
Method Blank	< 0.01	0.02	< 0.01	1.0	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	1.2	< 0.05	0.21	< 0.2
Method Blank	< 0.01	< 0.02	< 0.01	1.2	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	0.06	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.14	< 0.2
Method Blank	< 0.01	< 0.02	< 0.01	1.9	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.13	< 0.2
Method Blank	< 0.01	< 0.02	< 0.01	1.3	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.14	< 0.2
Method Blank	< 0.01																						
Method Blank	< 0.01																						
Method Blank		< 0.02	< 0.01	1.8	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.21	< 0.2
Method Blank		< 0.02	0.02	< 0.2	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.16	< 0.2
Method Blank		< 0.02	< 0.01	0.2	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.17	< 0.2
Method Blank		< 0.02	0.06	< 0.2	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	0.7	< 0.05	0.19	< 0.2
Method Blank		< 0.02	< 0.01	0.3	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.17	< 0.2
Method Blank		< 0.02	< 0.01	< 0.2	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.17	< 0.2
Method Blank		< 0.02	< 0.01	1.4	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.17	< 0.2
Method Blank	< 0.01																						
Method Blank																							
Method Blank																							

Analyte Symbol	Ca	Cd	Ce	Cu	Ge	Hf	In	La	Li	Mo	Nb	Pb	Rb	Sn	Ta	Th	Tl	W	Y	Zr	Cs	Ga	Ni	
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.02	0.01	0.2	0.05	0.1	0.005	0.5	0.2	0.05	0.1	0.5	0.1	0.2	0.05	0.01	0.02	0.1	0.1	0.5	0.05	0.05	0.2	
Method Code	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank	< 0.01	< 0.02	< 0.01	< 0.2	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	0.25	0.2	< 0.1	< 0.5	< 0.05	< 0.05	< 0.2	
Method Blank		0.02		0.5				< 0.5	< 0.2	< 0.05		< 0.5		< 0.2		< 0.01	< 0.02	< 0.1	< 0.1	1.0		0.14	< 0.2	
Method Blank		< 0.02	< 0.01	0.3	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	0.06	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.10	< 0.2	
Method Blank		< 0.02	< 0.01	< 0.2	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	0.06	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.12	< 0.2	
Method Blank		< 0.02	0.02	0.4	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	0.06	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.15	< 0.2	
Method Blank		< 0.02	0.01	< 0.2	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.17	0.9	
Method Blank		< 0.02	< 0.01	0.7	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	0.09	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.14	< 0.2	
Method Blank		< 0.02	< 0.01	< 0.2	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	< 0.05	< 0.1	0.5	< 0.1	< 0.2	< 0.05	< 0.01	< 0.02	< 0.1	< 0.1	< 0.5	< 0.05	0.12	< 0.2	
Method Blank	< 0.01	< 0.02	0.03	< 0.2	< 0.05	< 0.1	< 0.005	< 0.5	< 0.2	0.07	< 0.1	< 0.5	< 0.1	< 0.2	< 0.05	0.08	< 0.02	0.4	< 0.1	5.5	< 0.05	< 0.05	< 0.2	
Method Blank		< 0.02		0.6				< 0.5	< 0.2	< 0.05		< 0.5		< 0.2		0.02	< 0.02	< 0.1	< 0.1	< 0.5		0.12	< 0.2	

Analyte Symbol	Sb	Sc	Se	U
Unit Symbol	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS
SDC-1 Meas	< 0.05	16.7		2.6
SDC-1 Cert	0.54	17.00		3.10
SDC-1 Meas	< 0.05	13.6		2.4
SDC-1 Cert	0.54	17.00		3.10
SDC-1 Meas	< 0.05	14.4		2.8
SDC-1 Cert	0.54	17.00		3.10
SDC-1 Meas	< 0.05	14.7		2.6
SDC-1 Cert	0.54	17.00		3.10
SDC-1 Meas	< 0.05	13.9		2.7
SDC-1 Cert	0.54	17.00		3.10
SDC-1 Meas	< 0.05	14.8		2.7
SDC-1 Cert	0.54	17.00		3.10
SDC-1 Meas	< 0.05	13.8		2.9
SDC-1 Cert	0.54	17.00		3.10
SDC-1 Meas	< 0.05	15.0		2.7
SDC-1 Cert	0.54	17.00		3.10
Oreas 72a (4 Acid Digest) Meas				
Oreas 72a (4 Acid Digest) Cert				
Oreas 72a (4 Acid Digest) Meas				
Oreas 72a (4 Acid Digest) Cert				
Oreas 72a (4 Acid Digest) Meas				
Oreas 72a (4 Acid Digest) Cert				
Oreas 72a (4 Acid Digest) Meas				
Oreas 72a (4 Acid Digest) Cert				
Oreas 72a (4 Acid Digest) Meas				
Oreas 72a (4 Acid Digest) Cert				
Oreas 72a (4 Acid Digest) Meas				
Oreas 72a (4 Acid Digest) Cert				
Oreas 72a (4 Acid Digest) Meas				
Oreas 72a (4 Acid Digest) Cert				
Oreas 72a (4 Acid Digest) Meas				
Oreas 72a (4 Acid Digest) Cert				
Oreas 72a (Fusion) Meas				
Oreas 72a (Fusion) Cert				
OREAS 101b (Fusion) Meas				358
OREAS 101b (Fusion) Cert				396
OREAS 101b (4 Acid) Meas				364
OREAS 101b (4 Acid) Cert				387

Analyte Symbol	Sb	Sc	Se	U
Unit Symbol	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 101b (4 Acid) Meas				366
OREAS 101b (4 Acid) Cert				387
OREAS 101b (4 Acid) Meas				347
OREAS 101b (4 Acid) Cert				387
OREAS 101b (4 Acid) Meas				386
OREAS 101b (4 Acid) Cert				387
OREAS 101b (4 Acid) Meas				353
OREAS 101b (4 Acid) Cert				387
OREAS 101b (4 Acid) Meas				347
OREAS 101b (4 Acid) Cert				387
OREAS 101b (4 Acid) Meas				370
OREAS 101b (4 Acid) Cert				387
OREAS 101b (4 Acid) Meas				292
OREAS 101b (4 Acid) Cert				387
OREAS 101b (4 Acid) Meas				397
OREAS 101b (4 Acid) Cert				387
OREAS 101b (4 Acid) Meas				396
OREAS 101b (4 Acid) Cert				387
OREAS 101b (4 Acid) Meas				356
OREAS 101b (4 Acid) Cert				387
OREAS 98 (4 Acid) Meas	3.39		171	
OREAS 98 (4 Acid) Cert	20.1		158	
OREAS 98 (4 Acid) Meas	6.37		171	
OREAS 98 (4 Acid) Cert	20.1		158	
OREAS 98 (4 Acid) Meas	5.03		148	
OREAS 98 (4 Acid) Cert	20.1		158	
OREAS 98 (4 Acid) Meas	5.10		154	
OREAS 98 (4 Acid) Cert	20.1		158	
OREAS 98 (4 Acid) Meas	9.32		186	

Analyte Symbol	Sb	Sc	Se	U
Unit Symbol	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 98 (4 Acid) Cert	20.1		158	
OREAS 98 (4 Acid) Meas	13.5		178	
OREAS 98 (4 Acid) Cert	20.1		158	
OREAS 98 (4 Acid) Meas	5.83		165	
OREAS 98 (4 Acid) Cert	20.1		158	
OREAS 98 (4 Acid) Meas	4.46		166	
OREAS 98 (4 Acid) Cert	20.1		158	
OREAS 98 (4 Acid) Meas	5.87		172	
OREAS 98 (4 Acid) Cert	20.1		158	
OREAS 98 (4 Acid) Meas	5.65		176	
OREAS 98 (4 Acid) Cert	20.1		158	
OREAS 98 (4 Acid) Meas	6.47			
OREAS 98 (4 Acid) Cert	20.1			
DNC-1a Meas	0.38	33.5		
DNC-1a Cert	0.96	31		
DNC-1a Meas	0.73	28.9		
DNC-1a Cert	0.96	31		
DNC-1a Meas	0.83	25.5		
DNC-1a Cert	0.96	31		
DNC-1a Meas	0.78	29.4		
DNC-1a Cert	0.96	31		
DNC-1a Meas	0.64	28.9		
DNC-1a Cert	0.96	31		
DNC-1a Meas	0.82	29.9		
DNC-1a Cert	0.96	31		
DNC-1a Meas	0.85	28.1		
DNC-1a Cert	0.96	31		
DNC-1a Meas	0.79	25.1		
DNC-1a Cert	0.96	31		
DNC-1a Meas	0.92	25.5		
DNC-1a Cert	0.96	31		
OREAS 13b (4-Acid) Meas				
OREAS 13b (4-Acid) Cert				
OREAS 13b (4-Acid) Meas				
OREAS 13b (4-Acid) Cert				
OREAS 13b (4-Acid) Meas				
OREAS 13b (4-Acid) Cert				

Analyte Symbol	Sb	Sc	Se	U
Unit Symbol	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 13b (4-Acid) Meas				
OREAS 13b (4-Acid) Cert				
OREAS 13b (4-Acid) Meas				
OREAS 13b (4-Acid) Cert				
OREAS 13b (4-Acid) Meas				
OREAS 13b (4-Acid) Cert				
OREAS 13b (4-Acid) Meas				
OREAS 13b (4-Acid) Cert				
OREAS 13b (4-Acid) Meas				
OREAS 13b (4-Acid) Cert				
OREAS 13b (4-Acid) Meas				
OREAS 13b (4-Acid) Cert				
OREAS 904 (4 ACID) Meas	1.03	11.7	2	8.6
OREAS 904 (4 ACID) Cert	1.48	11.2	3.30	8.43
OREAS 904 (4 ACID) Meas	0.69	11.7	3	9.2
OREAS 904 (4 ACID) Cert	1.48	11.2	3.30	8.43
OREAS 904 (4 ACID) Meas	1.04	12.7	3	8.9
OREAS 904 (4 ACID) Cert	1.48	11.2	3.30	8.43
OREAS 904 (4 ACID) Meas	0.92	11.5	2	8.9
OREAS 904 (4 ACID) Cert	1.48	11.2	3.30	8.43
OREAS 904 (4 ACID) Meas	1.26	10.6	2	8.4
OREAS 904 (4 ACID) Cert	1.48	11.2	3.30	8.43
OREAS 904 (4 ACID) Meas	1.45	10.6	2	9.2
OREAS 904 (4 ACID) Cert	1.48	11.2	3.30	8.43
OREAS 904 (4 ACID) Meas	0.57	8.8	2	8.1
OREAS 904 (4 ACID) Cert	1.48	11.2	3.30	8.43
OREAS 904 (4 ACID) Meas	1.38	10.2	3	8.6
OREAS 904 (4 ACID) Cert	1.48	11.2	3.30	8.43
OREAS 904 (4 ACID) Meas	0.71	11.1	2	8.5
OREAS 904 (4 ACID) Cert	1.48	11.2	3.30	8.43
OREAS 904 (4 ACID) Meas	1.35	12.0	3	9.2
OREAS 904 (4 ACID) Cert				

Analyte Symbol	Sb	Sc	Se	U
Unit Symbol	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 904 (4-ACID) Cert	1.48	11.2	3.30	8.43
SBC-1 Meas	< 0.05	14.6		2.9
SBC-1 Cert	1.01	20.0		5.76
SBC-1 Meas	1.19	19.8		5.6
SBC-1 Cert	1.01	20.0		5.76
SBC-1 Meas	1.06	19.0		5.1
SBC-1 Cert	1.01	20.0		5.76
SBC-1 Meas	1.12	19.2		5.4
SBC-1 Cert	1.01	20.0		5.76
SBC-1 Meas	0.99	18.6		5.8
SBC-1 Cert	1.01	20.0		5.76
SBC-1 Meas	1.09	18.7		5.6
SBC-1 Cert	1.01	20.0		5.76
SBC-1 Meas	1.01	19.6		5.8
SBC-1 Cert	1.01	20.0		5.76
SBC-1 Meas	1.01	18.8		5.4
SBC-1 Cert	1.01	20.0		5.76
SBC-1 Meas	1.19	17.1		5.1
SBC-1 Cert	1.01	20.0		5.76
OREAS 45d (4-Acid) Meas	0.66	47.7		1.5
OREAS 45d (4-Acid) Cert	0.82	49.30		2.63
OREAS 45d (4-Acid) Meas	0.09	44.5		2.4
OREAS 45d (4-Acid) Cert	0.82	49.30		2.63
OREAS 45d (4-Acid) Meas	< 0.05	52.2		2.8
OREAS 45d (4-Acid) Cert	0.82	49.30		2.63
OREAS 45d (4-Acid) Meas	0.08	47.5		2.6
OREAS 45d (4-Acid) Cert	0.82	49.30		2.63
OREAS 45d (4-Acid) Meas	< 0.05	49.8		2.9
OREAS 45d (4-Acid) Cert	0.82	49.30		2.63
OREAS 45d (4-Acid) Meas	0.08	45.2		2.7
OREAS 45d (4-Acid) Cert	0.82	49.30		2.63
OREAS 45d (4-Acid) Meas	0.39	40.6		2.7
OREAS 45d (4-Acid) Cert	0.82	49.30		2.63
OREAS 45d (4-Acid) Meas	< 0.05	50.2		2.8
OREAS 45d (4-Acid) Cert	0.82	49.30		2.63
OREAS 45d (4-Acid) Meas	< 0.05	50.9		2.7
OREAS 45d (4-Acid) Cert	0.82	49.30		2.63

Analyte Symbol	Sb	Sc	Se	U
Unit Symbol	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 45d (4-Acid) Meas	< 0.05	46.6		2.8
OREAS 45d (4-Acid) Cert	0.82	49.30		2.63
OREAS 45d (4-Acid) Meas	0.07	53.9		2.9
OREAS 45d (4-Acid) Cert	0.82	49.30		2.63
OREAS 96 (4 Acid) Meas	3.28		41	
OREAS 96 (4 Acid) Cert	5.09		40.7	
OREAS 96 (4 Acid) Meas	3.15		41	
OREAS 96 (4 Acid) Cert	5.09		40.7	
OREAS 96 (4 Acid) Meas	4.75		42	
OREAS 96 (4 Acid) Cert	5.09		40.7	
OREAS 96 (4 Acid) Meas	4.53		45	
OREAS 96 (4 Acid) Cert	5.09		40.7	
OREAS 96 (4 Acid) Meas	3.50		44	
OREAS 96 (4 Acid) Cert	5.09		40.7	
OREAS 96 (4 Acid) Meas	3.20		41	
OREAS 96 (4 Acid) Cert	5.09		40.7	
OREAS 96 (4 Acid) Meas	2.58		39	
OREAS 96 (4 Acid) Cert	5.09		40.7	
OREAS 96 (4 Acid) Meas	3.50		41	
OREAS 96 (4 Acid) Cert	5.09		40.7	
OREAS 96 (4 Acid) Meas	3.61		42	
OREAS 96 (4 Acid) Cert	5.09		40.7	
OREAS 923 (4 Acid) Meas	1.29	12.5	6	2.9
OREAS 923 (4 Acid) Cert	1.29	13.1	6.54	3.06
OREAS 923 (4 Acid) Meas	1.34	13.7	7	3.2
OREAS 923 (4 Acid) Cert	1.29	13.1	6.54	3.06
OREAS 923 (4 Acid) Meas	1.33	14.1	7	3.0
OREAS 923 (4 Acid) Cert	1.29	13.1	6.54	3.06
OREAS 923 (4 Acid) Meas	1.19	12.0	7	3.1

Analyte Symbol	Sb	Sc	Se	U
Unit Symbol	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 923 (4 Acid) Cert	1.29	13.1	6.54	3.06
OREAS 923 (4 Acid) Meas	1.33	12.5	7	3.2
OREAS 923 (4 Acid) Cert	1.29	13.1	6.54	3.06
OREAS 923 (4 Acid) Meas	1.26	11.4	6	3.1
OREAS 923 (4 Acid) Cert	1.29	13.1	6.54	3.06
OREAS 923 (4 Acid) Meas	1.20	13.0	6	3.1
OREAS 923 (4 Acid) Cert	1.29	13.1	6.54	3.06
OREAS 923 (4 Acid) Meas	1.18	12.0	6	3.1
OREAS 923 (4 Acid) Cert	1.29	13.1	6.54	3.06
OREAS 923 (4 Acid) Meas	1.49	13.0	6	3.1
OREAS 923 (4 Acid) Cert	1.29	13.1	6.54	3.06
OREAS 923 (4 Acid) Meas	1.43	12.2	5	3.1
OREAS 923 (4 Acid) Cert	1.29	13.1	6.54	3.06
OREAS 621 (4 Acid) Meas	58.1	6.6	7	2.5
OREAS 621 (4 Acid) Cert	139	6.24	5.64	2.83
OREAS 621 (4 Acid) Meas	21.8	4.9	4	2.8
OREAS 621 (4 Acid) Cert	139	6.24	5.64	2.83
OREAS 621 (4 Acid) Meas	64.5	6.2	6	2.9
OREAS 621 (4 Acid) Cert	139	6.24	5.64	2.83
OREAS 621 (4 Acid) Meas	34.7	6.3	6	2.9
OREAS 621 (4 Acid) Cert	139	6.24	5.64	2.83
OREAS 621 (4 Acid) Meas	23.7	5.9	6	2.8
OREAS 621 (4 Acid) Cert	139	6.24	5.64	2.83
OREAS 621 (4 Acid) Meas	20.8	5.1	6	2.7
OREAS 621 (4 Acid) Cert	139	6.24	5.64	2.83
OREAS 522 (4 Acid) Meas	7.08	11.9	3	43.7
OREAS 522 (4 Acid) Cert	7.93	10.9	2.74	42.2
OREAS 522 (4 Acid) Meas	4.75	12.0	3	41.3
OREAS 522 (4 Acid) Cert	7.93	10.9	2.74	42.2

Analyte Symbol	Sb	Sc	Se	U
Unit Symbol	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 522 (4 Acid) Meas	4.86	12.4	3	41.4
OREAS 522 (4 Acid) Cert	7.93	10.9	2.74	42.2
OREAS 522 (4 Acid) Meas	4.36	11.1	2	45.0
OREAS 522 (4 Acid) Cert	7.93	10.9	2.74	42.2
OREAS 522 (4 Acid) Meas	5.72	11.3	2	41.5
OREAS 522 (4 Acid) Cert	7.93	10.9	2.74	42.2
OREAS 522 (4 Acid) Meas	7.12	10.9	2	43.9
OREAS 522 (4 Acid) Cert	7.93	10.9	2.74	42.2
OREAS 522 (4 Acid) Meas	5.97	10.5	2	43.3
OREAS 522 (4 Acid) Cert	7.93	10.9	2.74	42.2
Oreas 77b (4 Acid Digest) Meas	6.89	3.4		1.7
Oreas 77b (4 Acid Digest) Cert	9.100	3.51		1.71
OREAS 229b (Fire Assay) Meas				
OREAS 229b (Fire Assay) Cert				
OREAS 238 (Fire Assay) Meas				
OREAS 238 (Fire Assay) Cert				
OREAS 238 (Fire Assay) Meas				
OREAS 238 (Fire Assay) Cert				
OREAS 238 (Fire Assay) Meas				
OREAS 238 (Fire Assay) Cert				
OREAS 238 (Fire Assay) Meas				
OREAS 238 (Fire Assay) Cert				
OREAS 257b (Fire Assay) Meas				
OREAS 257b (Fire Assay) Cert				
Oreas E1336 (Fire Assay) Meas				
Oreas E1336 (Fire Assay) Cert				
Oreas E1336 (Fire Assay) Meas				
Oreas E1336 (Fire Assay) Cert				
Oreas E1336 (Fire Assay) Meas				

Analyte Symbol	Sb	Sc	Se	U
Unit Symbol	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS
Method Blank				
Method Blank				
Method Blank				
Method Blank				
Method Blank				
Method Blank				
Method Blank	0.49	< 0.1	< 1	< 0.1
Method Blank	< 0.05	< 0.1		< 0.1
Method Blank	< 0.05	< 0.1	< 1	< 0.1
Method Blank	< 0.05	< 0.1	< 1	< 0.1
Method Blank	< 0.05	< 0.1	< 1	< 0.1
Method Blank	< 0.05	0.1	< 1	< 0.1
Method Blank	< 0.05	0.1	< 1	< 0.1
Method Blank	< 0.05	< 0.1	< 1	< 0.1
Method Blank	0.18	< 0.1	< 1	< 0.1
Method Blank	< 0.05	< 0.1		< 0.1



Report No.: A20-07954
Report Date: 18-Sep-20
Date Submitted: 20-Jul-20
Your Reference:

Portofino Resources
Suite 520-470 Granville St
Vancouver BC V6C1V5
Canada

ATTN: David Tafel

CERTIFICATE OF ANALYSIS

62 Rock samples were submitted for analysis.

Table with 3 columns: Analytical package(s) requested, Test Name, and Testing Date. Rows include 1A2-50-Tbay, 1A3-50-Tbay, QOP AA-Au (Au - Fire Assay AA), and QOP AA-Au (Au - Fire Assay Gravimetric).

REPORT A20-07954

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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Handwritten signature of Emmanuel Esemé

Emmanuel Esemé, Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Report No.: A20-07954
Report Date: 18-Sep-20
Date Submitted: 20-Jul-20
Your Reference:

Portofino Resources
Suite 520-470 Granville St
Vancouver BC V6C1V5
Canada

ATTN: David Tafel

CERTIFICATE OF ANALYSIS

62 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
UT-6M	QOP Total/QOP Ultratrace- 4acid Digest (Total Digestion ICPOES/ICPMS)	2020-08-11 11:36:33

REPORT A20-07954

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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:



Emmanuel Esemé, Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
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E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Results

Activation Laboratories Ltd.

Report: A20-07954

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit	5	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01
Method Code	FA-AA	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP
A527851	< 5	0.05	3.86	2.7	470	0.50	0.06	0.82	< 0.02	9.75	8.3	105	6.52	14.5	3.09	9.02	0.10	0.4	0.020	1.23	4.0	29.0	1.06
A527852	< 5	0.04	7.10	10.1	40	0.55	0.01	6.50	0.08	12.9	43.8	199	0.20	76.3	7.04	13.9	0.20	0.7	0.075	0.11	4.7	15.6	3.74
A527853	< 5	0.05	3.59	4.5	20	0.25	< 0.01	13.3	0.15	10.7	25.5	28	0.75	72.4	8.65	8.71	0.38	1.5	0.047	0.15	4.1	11.2	3.93
A527854	< 5	0.05	7.26	1.3	30	0.21	0.01	1.78	0.06	18.9	53.1	152	0.23	115	12.1	16.6	0.45	0.9	0.059	0.06	5.9	31.7	3.96
A527855	9	0.17	7.12	32.1	50	0.22	0.13	6.59	0.95	14.5	46.2	222	0.20	175	6.49	17.1	0.71	1.7	0.151	0.15	6.0	6.7	3.19
A527856	< 5	0.15	8.09	11.6	300	0.97	0.23	1.74	< 0.02	49.8	20.2	81	1.65	71.0	9.21	21.7	0.22	3.0	0.049	2.64	23.9	42.3	2.56
A527857	< 5	0.21	8.11	27.7	230	0.91	0.10	2.89	0.04	42.7	13.9	41	1.56	22.3	5.04	21.3	0.11	2.0	0.030	2.26	17.8	13.2	1.48
A527858	14	0.56	7.60	2.3	170	0.77	2.17	0.52	< 0.02	63.0	7.8	16	0.22	4.6	2.56	17.1	0.05	3.0	0.013	2.26	28.3	3.5	0.44
A527859	24	0.35	6.63	2.2	570	0.76	0.84	0.61	< 0.02	53.9	5.3	22	0.22	23.1	1.65	14.4	< 0.05	2.5	0.009	1.74	23.6	2.8	0.34
A527860	6	0.55	8.23	1.4	390	1.60	2.26	0.16	< 0.02	21.3	3.5	13	1.53	25.5	1.28	21.3	0.07	2.7	0.020	2.45	9.0	11.5	0.26
A527861	< 5	0.09	7.78	1.0	720	1.62	0.15	0.45	< 0.02	25.3	3.8	15	1.59	33.4	1.34	18.1	0.07	2.6	0.015	2.09	9.8	14.7	0.44
A527862	< 5	0.69	7.06	1.3	700	1.77	1.65	0.38	< 0.02	30.9	4.0	17	1.45	89.4	1.47	16.0	0.09	2.3	0.016	1.91	13.5	10.9	0.42
A527863	< 5	0.45	8.24	1.5	740	1.46	2.66	0.19	< 0.02	8.88	1.4	14	1.15	28.9	1.37	18.5	0.13	2.6	0.006	2.27	3.8	9.9	0.29
A527864	49	34.5	6.95	1.0	590	1.26	144	0.37	< 0.02	11.4	2.3	21	1.34	39.1	1.54	15.4	0.13	2.2	0.006	1.79	5.2	8.7	0.31
A527865	5	0.26	8.16	1.1	1140	1.08	1.43	0.20	< 0.02	11.4	1.7	13	1.52	18.7	1.34	18.6	0.17	2.6	< 0.005	2.81	5.4	8.5	0.29
A527866	< 5	0.23	6.66	2.7	570	1.24	0.83	0.42	< 0.02	29.2	3.4	14	0.39	3.6	1.17	15.8	0.14	1.4	0.013	1.52	13.2	8.2	0.28
A527867	88	0.54	8.03	2.5	930	1.73	4.01	0.51	< 0.02	29.3	3.2	7	0.53	7.5	1.61	23.1	0.19	1.3	0.021	1.56	12.8	6.4	0.46
A527868	702	0.59	8.84	3.5	200	0.99	4.22	0.36	< 0.02	29.4	2.8	7	0.11	5.4	1.58	22.4	0.20	1.7	0.014	0.74	13.3	9.4	0.20
A527869	484	0.20	9.38	1.2	140	1.00	2.07	0.26	< 0.02	43.1	3.1	10	< 0.05	1.7	1.59	23.8	0.23	3.2	0.007	0.34	18.8	1.1	0.06
A527870	616	0.49	4.27	1.1	250	0.43	2.10	0.11	< 0.02	8.34	6.2	32	< 0.05	10.3	2.10	10.0	0.20	1.2	< 0.005	0.49	3.6	0.8	0.03
A527871	> 5000	4.83	1.18	1.9	30	0.08	29.4	0.05	0.15	3.20	2.9	38	< 0.05	21.8	2.03	2.98	0.20	0.3	0.012	0.11	1.4	0.8	0.03
A527872	> 5000	7.08	2.23	1.4	70	0.30	14.4	0.10	< 0.02	10.1	2.2	31	0.09	55.1	1.90	5.57	0.10	0.8	0.016	0.22	3.9	1.6	0.07
A527873	1010	0.92	0.63	1.0	150	0.06	17.1	0.05	< 0.02	2.23	2.1	49	< 0.05	5.1	1.49	1.91	0.12	0.2	< 0.005	0.06	1.0	0.4	0.01
A527874	150	0.06	0.02	1.3	< 10	< 0.05	1.10	0.03	< 0.02	0.16	0.4	47	< 0.05	5.6	1.04	0.42	0.10	< 0.1	0.006	< 0.01	< 0.5	< 0.2	< 0.01
A527875	2540	2.08	1.07	1.6	50	< 0.05	48.4	0.10	< 0.02	4.63	10.4	35	< 0.05	5.4	3.20	2.58	0.11	0.3	< 0.005	0.06	2.0	1.3	< 0.01
A527876	11	4.29	< 0.01	0.8	1660	< 0.05	7.40	34.1	1.50	5.11	0.1	9	< 0.05	19.1	0.03	22.7	< 0.05	< 0.1	0.011	< 0.01	2.9	0.6	< 0.01
A527877	5	1.35	0.01	1.0	640	< 0.05	2.63	26.7	0.34	0.60	< 0.1	8	< 0.05	476	0.22	11.3	< 0.05	< 0.1	< 0.005	< 0.01	< 0.5	5.2	< 0.01
A527878	< 5	3.80	0.01	1.1	650	0.06	8.14	29.1	0.43	16.6	< 0.1	3	< 0.05	15.7	0.05	9.32	< 0.05	< 0.1	0.009	< 0.01	7.0	1.5	< 0.01
A527879	819	10.2	9.66	2.3	490	1.45	18.2	0.57	0.18	36.4	1.6	5	0.10	23.5	1.91	27.2	0.09	3.5	0.012	0.49	15.3	5.5	0.29
A527880	1620	5.00	6.72	1.8	180	0.71	9.99	0.32	1.52	14.8	2.2	18	< 0.05	6.1	1.83	14.7	< 0.05	1.9	0.017	0.21	6.5	2.7	0.17
A527881	259	0.22	3.20	4.2	260	0.40	2.23	0.14	< 0.02	4.62	2.3	18	< 0.05	22.0	1.41	6.62	< 0.05	0.4	< 0.005	0.16	0.8	1.9	0.09
A527882	4750	1.83	6.74	1.2	200	1.06	17.8	0.24	< 0.02	25.2	3.2	15	0.38	24.0	2.20	14.1	< 0.05	2.2	< 0.005	0.67	11.7	3.4	0.15
A527883	4890	7.16	1.97	1.0	70	0.53	109	0.09	< 0.02	7.95	2.6	25	0.16	12.5	1.72	4.46	< 0.05	0.7	0.007	0.22	3.8	1.8	0.07
A527884	< 5	0.11	6.72	1.8	240	1.16	0.21	4.89	0.03	48.2	32.1	167	0.13	73.4	6.65	10.6	0.11	2.4	0.046	0.60	20.6	6.6	4.55
A527887	18	0.68	6.44	1.1	70	1.05	1.63	0.19	< 0.02	30.2	3.3	11	0.07	15.7	0.93	13.0	< 0.05	2.5	< 0.005	0.29	13.6	7.6	0.57
A527888	268	0.43	7.22	1.0	250	1.30	0.73	0.21	< 0.02	23.4	2.8	9	0.30	60.3	0.90	15.6	0.05	2.2	0.015	1.28	10.2	7.4	0.42
A527889	57	1.01	6.89	0.8	250	1.41	2.29	0.17	0.93	22.3	2.5	37	0.29	23.2	0.80	16.8	< 0.05	2.4	0.015	1.76	9.7	5.9	0.34
A527890	32	0.48	3.33	1.2	60	0.52	0.93	0.08	1.03	17.2	1.7	40	< 0.05	11.5	0.74	7.04	< 0.05	1.0	0.015	0.36	8.0	3.4	0.22
A527894	< 5	0.09	7.76	1.1	1080	1.31	0.14	1.21	0.24	31.8	3.2	15	1.30	4.5	1.28	17.3	0.08	2.4	0.016	2.10	14.6	6.2	0.43
A527895	< 5	0.08	8.64	4.5	830	1.62	0.13	0.92	< 0.02	48.5	27.5	94	3.68	84.6	6.18	19.3	0.24	2.5	0.060	2.65	21.3	33.6	2.52
A527896	7	0.15	4.68	13.1	30	0.87	0.52	2.26	0.07	20.3	15.6	95	1.76	78.0	13.2	13.9	0.09	1.1	0.039	1.41	7.7	19.4	2.16
A527897	< 5	0.01	0.20	0.9	30	< 0.05	0.02	5.43	0.08	2.71	1.1	25	0.12	2.5	0.66	0.81	0.05	< 0.1	< 0.005	0.07	1.1	0.9	0.07
A527899	< 5	0.07	3.64	6.3	250	0.31	0.08	2.53	< 0.02	5.90	16.2	252	0.21	17.8	3.62	7.14	0.08	0.6	0.017	0.51	2.7	10.7	1.37
A527900	< 5	0.13	4.51	3.3	190	0.54	0.16	4.67	0.13	13.1	8.2	101	0.23	37.2	5.47	9.05	0.05	1.1	0.027	0.53	5.6	10.3	1.17
A527901	12	0.21	5.93	2.8	40	0.64	0.38	0.39	< 0.02	23.7	13.2	89	0.31	128	15.0	16.1	0.10	1.5	0.010	0.52	10.5	28.4	2.72
A527902	6	0.22	5.13	6.6	40	1.08	0.46	2.45	0.09	12.9	11.2	85	0.63	43.6	6.25	10.0	0.06	1.1	0.018	1.30	5.5	12.0	1.00
A527903	7	0.21	5.82	4.1	20	0.97	0.39	1.12	0.10	14.1	13.0	109	0.55	72.7	9.68	13.0	0.06	1.1	0.025	1.11	5.7	18.4	1.61
A527904	< 5	0.08	1.47	2.4	190	0.22	0.22	1.20	< 0.02	4.80	3.0	62	0.20	23.9	2.86	3.65	0.08	0.3	0.010	0.42	2.1	4.0	0.38
A527905	5	0.12	1.33	3.4	160	0.26	0.38	0.88	< 0.02	7.22	4.9	64	0.22	38.5	4.00	4.00	0.07	0.3	0.013	0.32	3.1	5.0	0.45
A527906	16	0.43	5.67	17.4	10	0.98	1.22	0.46	0.03	13.7	14.7	65	0.61	160	15.4	13.5	0.12	1.2	0.039	1.09	5.1	18.9	1.76
A527907	9	0.27	3.62	14.1	30	0.77	0.65	0.76	0.04	11.7	17.4	95	0.39	55.0	10.6	10.1	0.08	0.9	0.016	0.90	4.9	14.6	1.17

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit	5	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01
Method Code	FA-AA	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP
A527908	5	0.12	3.94	2.3	110	0.50	0.18	2.19	< 0.02	11.3	7.4	74	0.16	20.5	4.63	7.50	0.07	0.5	0.021	0.35	5.0	8.8	1.24
A527909	< 5	0.10	2.03	1.7	110	0.29	0.13	1.85	< 0.02	10.9	4.8	80	0.18	13.9	1.93	4.12	0.06	0.6	0.006	0.28	5.1	4.6	0.51
A527910	< 5	0.17	2.83	4.4	40	0.31	0.37	1.18	< 0.02	10.7	5.7	84	0.16	42.1	6.19	6.76	0.06	0.6	0.011	0.72	4.8	12.5	0.85
A527911	5	0.13	7.48	15.1	980	0.57	0.09	0.29	< 0.02	7.07	8.5	55	0.85	9.1	2.70	14.5	0.08	1.3	0.010	1.56	1.7	23.9	1.20
A527912	161	0.25	9.74	6.9	100	3.85	0.11	1.32	< 0.02	34.0	2.9	17	0.48	28.2	2.98	11.8	0.07	3.4	0.005	1.95	11.2	3.3	0.12
A527885	891	6.74	0.03	1.1	< 10	< 0.05	6.32	0.26	< 0.02	0.24	2.6	31	< 0.05	8.0	0.85	0.58	0.10	< 0.1	< 0.005	< 0.01	< 0.5	0.4	0.01
A527886	448	4.10	0.44	1.3	30	0.09	4.62	0.14	< 0.02	0.77	3.8	83	0.05	5.1	1.10	3.11	0.12	< 0.1	< 0.005	0.13	< 0.5	8.4	0.43
A527891	< 5	0.15	0.45	1.0	20	< 0.05	0.96	0.02	< 0.02	0.85	0.4	39	< 0.05	4.0	0.84	1.30	0.07	0.2	0.006	0.05	< 0.5	0.3	< 0.01
A527892	9	0.41	2.11	1.5	150	0.21	1.78	0.29	< 0.02	17.7	1.8	48	0.09	9.2	0.71	4.81	0.09	0.4	< 0.005	0.58	8.4	1.3	0.04
A527893	620	6.08	7.27	1.4	240	1.69	13.5	0.22	< 0.02	28.8	2.5	28	0.54	27.9	1.04	17.9	0.10	0.3	0.011	1.42	13.6	8.6	0.57
A527898	5	0.11	3.26	7.7	430	0.33	0.21	1.36	< 0.02	23.0	10.3	115	0.28	24.0	3.80	7.50	0.10	1.0	0.032	0.72	11.5	14.6	0.83

Results

Activation Laboratories Ltd.

Report: A20-07954

Analyte Symbol	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.2	0.005	0.02	0.1	1	0.1
Method Code	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS
A527851	380	3.90	0.92	2.1	26.4	150	7.8	58.0	< 0.002	0.01	0.13	9.1	< 1	0.5	170	0.07	< 0.05	3.3	0.182	0.36	0.7	72	0.2
A527852	1260	0.07	2.33	< 0.1	97.5	390	1.1	2.9	< 0.002	0.06	0.06	38.0	< 1	< 0.2	121	< 0.05	< 0.05	0.5	0.143	< 0.02	0.1	105	< 0.1
A527853	1900	0.18	0.15	1.1	54.8	230	0.7	7.1	< 0.002	0.12	0.16	24.3	< 1	0.4	58.9	0.05	< 0.05	0.3	0.255	0.06	< 0.1	139	< 0.1
A527854	3140	0.41	0.95	0.6	105	310	0.8	1.9	< 0.002	0.16	0.37	37.4	< 1	0.2	74.4	< 0.05	< 0.05	0.6	0.433	0.02	< 0.1	224	< 0.1
A527855	1150	1.10	1.74	2.2	106	290	5.7	5.1	< 0.002	0.78	0.52	33.4	1	1.5	187	0.11	0.05	1.6	0.369	0.23	0.4	195	0.1
A527856	822	0.43	1.67	3.8	78.7	890	8.1	104	< 0.002	1.08	0.24	10.4	< 1	0.8	509	0.26	0.10	3.3	0.247	0.37	0.8	94	0.5
A527857	528	1.72	3.85	3.3	35.9	870	10.1	88.0	< 0.002	1.13	0.24	9.3	< 1	0.7	649	0.18	< 0.05	2.4	0.290	0.38	0.6	88	0.5
A527858	233	19.2	4.62	3.4	6.3	640	20.5	59.4	< 0.002	1.35	0.09	3.4	2	0.7	301	0.19	0.11	6.0	0.191	0.30	1.7	31	1.0
A527859	168	33.3	3.79	2.8	4.6	700	16.6	35.4	< 0.002	0.61	0.08	2.6	2	0.5	321	0.14	0.08	5.7	0.160	0.20	1.4	22	0.9
A527860	70	212	4.39	3.3	5.7	470	17.7	63.5	0.011	0.73	0.16	1.9	1	0.8	182	0.29	0.10	3.6	0.147	0.56	2.5	32	2.3
A527861	182	2.46	3.90	2.7	6.5	400	16.8	62.2	< 0.002	0.22	0.06	2.2	< 1	0.8	477	0.17	< 0.05	3.5	0.151	0.45	1.5	27	0.3
A527862	183	6.16	3.80	2.5	6.9	420	30.3	64.6	< 0.002	0.24	0.06	1.8	< 1	0.7	402	0.16	0.12	3.3	0.132	0.39	1.1	23	0.5
A527863	95	51.3	4.86	2.6	3.0	460	54.2	57.7	< 0.002	0.06	0.09	2.0	< 1	0.8	303	0.14	0.20	3.6	0.152	0.37	1.3	22	1.3
A527864	138	24.5	3.42	2.2	4.6	410	1280	51.0	< 0.002	0.15	0.08	1.8	6	0.6	348	0.14	6.62	3.3	0.118	0.44	1.2	20	0.6
A527865	101	36.1	3.69	2.0	3.7	500	20.5	72.6	< 0.002	0.03	0.10	2.2	< 1	0.6	339	0.11	0.12	3.5	0.114	0.80	1.3	16	0.9
A527866	104	2.22	3.68	1.6	3.7	360	18.2	43.8	< 0.002	0.11	0.10	1.4	< 1	0.6	292	< 0.05	0.15	2.8	0.132	0.25	0.9	20	0.6
A527867	147	38.3	4.91	1.6	2.9	630	20.6	32.6	< 0.002	0.08	0.12	2.0	< 1	0.7	414	< 0.05	0.65	3.4	0.195	0.22	1.1	31	1.9
A527868	95	1.31	6.00	1.9	2.9	590	103	21.5	< 0.002	0.12	0.21	2.2	< 1	0.6	164	< 0.05	0.88	2.7	0.177	0.09	0.7	18	4.8
A527869	57	2.92	6.93	3.3	2.6	620	23.1	9.0	< 0.002	0.45	0.11	1.1	1	0.9	263	0.14	0.97	3.1	0.206	0.03	0.6	10	6.9
A527870	65	3.74	2.94	1.9	3.5	270	24.5	13.4	< 0.002	0.93	0.07	0.4	1	0.5	114	0.10	1.01	0.8	0.081	0.05	0.4	6	2.2
A527871	106	3.06	0.78	0.3	9.4	60	174	2.8	< 0.002	0.66	0.09	0.2	< 1	< 0.2	33.7	< 0.05	18.1	0.3	0.021	< 0.02	< 0.1	4	0.6
A527872	90	2.82	1.43	0.7	5.6	150	19.1	7.2	< 0.002	1.16	0.11	0.5	1	0.3	69.7	< 0.05	12.7	0.8	0.053	0.03	0.2	9	3.9
A527873	84	3.37	0.41	0.3	2.3	60	23.5	2.8	< 0.002	0.46	0.05	0.2	1	< 0.2	30.4	< 0.05	9.10	0.3	0.018	< 0.02	< 0.1	3	0.9
A527874	98	4.26	0.02	< 0.1	1.7	< 10	2.4	0.1	< 0.002	0.16	0.07	< 0.1	< 1	< 0.2	5.4	< 0.05	0.55	< 0.2	< 0.005	< 0.02	< 0.1	1	< 0.1
A527875	85	3.59	0.74	2.2	6.8	90	106	1.9	< 0.002	2.16	0.09	< 0.1	5	0.4	43.4	0.06	19.9	0.5	0.035	< 0.02	0.3	4	1.4
A527876	724	0.18	< 0.01	< 0.1	< 0.2	< 10	5260	< 0.1	< 0.002	0.08	< 0.05	< 0.1	2	< 0.2	2000	< 0.05	0.18	< 0.2	< 0.005	< 0.02	< 0.1	< 1	< 0.1
A527877	358	0.37	< 0.01	< 0.1	< 0.2	< 10	829	0.1	< 0.002	0.17	< 0.05	< 0.1	1	< 0.2	2770	< 0.05	0.06	< 0.2	< 0.005	< 0.02	< 0.1	< 1	< 0.1
A527878	682	0.27	< 0.01	< 0.1	< 0.2	< 10	2800	< 0.1	< 0.002	0.30	0.06	< 0.1	< 1	< 0.2	3520	< 0.05	< 0.05	< 0.2	< 0.005	< 0.02	< 0.1	< 1	< 0.1
A527879	107	52.7	6.70	2.5	2.4	750	365	15.4	0.005	0.26	0.13	2.3	1	0.9	319	0.14	5.68	3.7	0.188	0.10	1.2	19	8.1
A527880	87	71.9	4.66	1.8	2.6	480	491	4.6	0.004	0.99	0.11	1.2	1	0.6	181	0.11	2.26	1.8	0.145	0.05	0.7	11	5.6
A527881	90	2.24	2.20	1.2	2.2	100	16.1	3.7	< 0.002	0.60	0.07	0.4	< 1	0.6	97.9	< 0.05	0.78	0.5	0.097	< 0.02	1.6	8	2.7
A527882	61	2.67	4.16	3.0	3.4	430	152	30.7	< 0.002	0.81	0.13	0.8	2	0.7	237	0.13	6.90	2.1	0.153	0.14	0.7	16	3.0
A527883	72	2.28	1.17	1.2	2.9	150	528	9.8	< 0.002	0.52	0.08	0.3	4	0.3	81.0	< 0.05	50.0	1.0	0.053	0.04	1.2	7	2.3
A527884	1060	0.96	3.64	3.5	61.3	1640	7.3	14.1	< 0.002	0.38	0.15	23.9	< 1	0.9	310	0.20	0.15	2.3	0.465	0.06	0.5	198	0.2
A527887	74	5.48	4.46	1.4	5.1	450	98.6	5.9	< 0.002	0.31	0.08	1.0	< 1	0.5	221	0.10	0.16	2.3	0.124	0.02	0.6	9	8.2
A527888	67	3.45	3.90	1.7	4.1	480	56.8	32.8	< 0.002	0.20	0.13	1.3	< 1	0.5	141	0.09	0.12	2.1	0.132	0.16	0.7	27	6.5
A527889	53	1.90	3.63	2.9	5.6	390	134	33.2	< 0.002	0.17	0.08	1.6	< 1	0.6	101	0.11	0.15	2.1	0.128	0.20	0.7	39	3.0
A527890	67	2.94	2.18	1.7	3.2	190	43.3	8.1	< 0.002	0.13	0.08	0.6	< 1	0.3	77.6	< 0.05	0.11	0.9	0.057	0.03	0.3	9	2.1
A527894	111	0.23	3.40	2.6	2.6	530	12.9	51.0	< 0.002	0.17	0.06	1.3	< 1	0.6	486	0.10	< 0.05	3.0	0.171	0.35	0.8	27	1.8
A527895	906	0.42	1.69	0.8	90.7	720	8.7	72.5	< 0.002	0.26	0.12	22.8	< 1	1.1	177	0.05	< 0.05	7.5	0.218	0.48	1.9	120	0.2
A527896	743	1.08	0.69	2.1	39.5	3560	9.5	44.9	< 0.002	3.43	0.07	12.3	1	0.5	327	0.10	0.16	0.9	0.207	0.20	0.3	159	0.6
A527897	491	1.01	0.03	0.7	1.9	280	2.8	2.7	< 0.002	0.06	< 0.05	0.7	< 1	< 0.2	253	< 0.05	< 0.05	< 0.2	0.010	< 0.02	< 0.1	8	0.1
A527899	490	1.10	1.16	2.4	60.1	190	9.7	12.3	< 0.002	0.27	< 0.05	6.7	< 1	0.4	214	0.07	0.06	0.4	0.156	0.04	0.2	67	0.9
A527900	768	1.13	1.79	3.3	28.4	440	6.1	14.4	< 0.002	1.28	< 0.05	10.9	< 1	0.3	625	0.11	0.07	0.8	0.107	0.04	0.2	69	0.5
A527901	689	0.77	1.03	1.5	39.9	840	7.4	15.3	< 0.002	3.03	0.05	8.6	1	0.3	117	0.12	0.13	1.4	0.162	0.05	0.3	113	0.8
A527902	541	1.12	1.44	2.1	28.7	450	6.8	40.7	< 0.002	2.33	0.06	7.6	< 1	0.4	306	0.07	0.16	0.7	0.123	0.13	0.2	88	1.1
A527903	649	0.37	1.34	2.8	49.3	570	8.3	35.9	< 0.002	3.36	< 0.05	10.7	< 1	0.4	147	0.09	0.15	0.6	0.182	0.12	0.3	109	1.1
A527904	312	0.97	0.35	1.6	9.6	180	3.2	12.7	< 0.002	0.91	< 0.05	3.2	< 1	0.2	133	< 0.05	< 0.05	0.3	0.043	0.03	< 0.1	42	0.4
A527905	334	0.87	0.22	1.7	12.2	340	5.3	11.8	< 0.002	1.32	0.05	4.6	< 1	0.2	109	< 0.05	0.13	0.4	0.054	0.03	0.1	42	0.4
A527906	605	1.14	1.07	2.2	28.8	580	23.1	33.6	< 0.002	7.54	0.07	8.5	2	0.5	103	0.09	0.18	0.7	0.113	0.10	0.3	131	1.2
A527907	606	0.74	0.23	2.2	25.5	530	10.7	29.2	< 0.002	4.56	0.06	7.7	< 1	0.3	88.7	0.08	0.15	0.7	0.131	0.08	0.2	103	1.1

Results

Activation Laboratories Ltd.

Report: A20-07954

Analyte Symbol	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.2	0.005	0.02	0.1	1	0.1
Method Code	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS
A527908	550	0.77	1.60	2.5	19.3	440	3.3	8.7	< 0.002	0.42	< 0.05	7.8	< 1	0.3	262	0.06	0.09	0.4	0.137	0.07	< 0.1	59	0.6
A527909	295	2.18	0.84	2.3	17.2	210	2.5	7.9	< 0.002	0.11	0.07	4.3	< 1	0.3	208	0.06	< 0.05	0.7	0.073	0.02	0.2	37	0.4
A527910	356	0.88	0.86	2.5	14.4	380	5.5	21.8	< 0.002	2.73	0.07	3.9	< 1	0.2	110	< 0.05	0.11	0.5	0.058	0.12	0.1	71	0.2
A527911	437	0.64	3.36	2.4	27.9	370	17.6	38.8	< 0.002	0.11	0.28	5.9	< 1	0.4	182	< 0.05	< 0.05	0.8	0.166	0.25	0.3	62	2.0
A527912	444	0.20	5.29	8.2	0.6	80	9.1	48.2	< 0.002	1.27	0.15	< 0.1	< 1	0.4	611	0.33	0.16	2.3	0.174	0.23	1.6	35	6.9
A527885	85	30.5	0.01	< 0.1	4.2	< 10	222	0.2	< 0.002	0.04	0.09	< 0.1	< 1	< 0.2	8.2	< 0.05	0.81	< 0.2	< 0.005	< 0.02	0.1	3	< 0.1
A527886	115	18.0	0.01	< 0.1	39.6	< 10	151	4.6	< 0.002	0.02	0.15	0.7	< 1	< 0.2	12.7	< 0.05	0.80	< 0.2	0.016	< 0.02	< 0.1	19	0.1
A527891	56	21.3	0.30	1.1	0.7	20	10.8	1.2	< 0.002	0.14	< 0.05	< 0.1	< 1	< 0.2	23.6	< 0.05	0.17	0.2	0.010	< 0.02	< 0.1	2	0.2
A527892	75	17.0	1.16	1.9	2.8	110	14.6	14.0	< 0.002	0.05	0.06	0.3	< 1	0.2	53.7	< 0.05	0.32	0.8	0.034	0.13	0.3	5	0.4
A527893	82	2.66	3.80	1.1	3.5	460	360	34.7	< 0.002	0.06	0.11	1.5	1	0.4	145	< 0.05	1.00	2.4	0.150	0.19	0.8	26	4.8
A527898	413	1.27	1.19	2.8	47.8	320	4.7	20.3	< 0.002	0.44	0.05	6.0	< 1	0.4	99.3	0.09	0.05	1.2	0.113	0.08	0.3	45	0.5

Analyte Symbol	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	ppm	g/tonne
Lower Limit	0.1	2	0.5	0.02
Method Code	TD-MS	TD-ICP	TD-MS	FA- GRA
A527851	3.2	35	20.6	
A527852	24.5	77	21.7	
A527853	20.2	90	56.7	
A527854	27.0	113	31.2	
A527855	15.0	260	56.8	
A527856	10.5	87	105	
A527857	9.9	69	73.9	
A527858	6.8	32	109	
A527859	5.8	22	87.7	
A527860	3.4	23	93.4	
A527861	2.7	44	94.1	
A527862	2.6	37	80.6	
A527863	2.6	21	98.0	
A527864	2.0	26	79.6	
A527865	2.8	24	95.2	
A527866	2.0	34	65.3	
A527867	2.6	59	74.2	
A527868	2.6	34	80.8	
A527869	1.9	9	121	
A527870	0.8	5	46.2	
A527871	0.3	27	11.0	10.3
A527872	0.8	11	28.2	17.3
A527873	0.2	3	8.3	
A527874	< 0.1	< 2	1.6	
A527875	0.4	2	13.3	
A527876	0.3	103	1.3	
A527877	0.1	37	2.1	
A527878	0.5	17	1.5	
A527879	3.6	75	124	
A527880	1.7	264	66.7	
A527881	0.8	17	16.7	
A527882	1.3	18	75.2	
A527883	0.8	7	22.8	
A527884	13.8	64	87.3	
A527887	1.6	30	83.9	
A527888	1.7	42	78.8	
A527889	1.6	128	77.0	
A527890	0.8	257	31.2	
A527894	2.4	55	89.4	
A527895	15.3	94	78.5	
A527896	8.6	97	42.0	
A527897	1.2	3	1.5	
A527899	3.6	44	20.9	
A527900	7.3	41	39.6	
A527901	5.2	91	54.6	
A527902	5.0	44	37.3	
A527903	6.2	64	37.4	
A527904	2.0	15	10.9	
A527905	2.5	18	11.6	
A527906	5.0	73	41.5	

Analyte Symbol	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	ppm	g/tonne
Lower Limit	0.1	2	0.5	0.02
Method Code	TD-MS	TD-ICP	TD-MS	FA- GRA
A527907	5.8	47	31.7	
A527908	4.6	45	16.6	
A527909	2.8	18	22.4	
A527910	4.1	25	19.6	
A527911	3.4	36	39.6	
A527912	15.4	11	151	
A527885	< 0.1	3	0.9	
A527886	0.2	36	2.3	
A527891	0.2	4	6.4	
A527892	0.6	11	17.5	
A527893	2.1	40	24.3	
A527898	4.7	36	36.7	

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit	5	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01
Method Code	FA-AA	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP
SDC-1 Meas			7.50	1.0	590	3.10		0.96		97.1	19.5	34	4.43	37.7	4.29	20.4		0.9		2.06	45.3	38.4	0.94
SDC-1 Cert			8.34	0.220	630	3.00		1.00		93.00	18.0	64.00	4.00	30.000	4.82	21.00		8.30		2.72	42.00	34.0	1.02
Oreas 72a (4 Acid Digest) Meas				4.2							161	140		360	9.47								
Oreas 72a (4 Acid Digest) Cert				14.7							157	228		316	9.63								
OREAS 101b (4 Acid) Meas										> 500	42.3			415	10.4					1.96	618		1.17
OREAS 101b (4 Acid) Cert										1325	45			412	10.7					2.36	754		1.23
OREAS 98 (4 Acid) Meas		38.6					85.7				107			> 10000									
OREAS 98 (4 Acid) Cert		45.1					97.2				121			14800 0.0									
DNC-1a Meas					100			7.58			64.1	163		111	6.82	12.9					3.8	5.0	
DNC-1a Cert					118			8.21			57	270		100	6.97	15					3.6	5.2	
DNC-1a Meas					100			7.81			61.7	127		116	7.05	12.9					4.0	4.8	
DNC-1a Cert					118			8.21			57	270		100	6.97	15					3.6	5.2	
OREAS 13b (4-Acid) Meas		0.88		44.4							75.4	9360		2110									
OREAS 13b (4-Acid) Cert		0.86		57							75	8650.0 00		2327.0 000									
OREAS 904 (4 ACID) Meas		0.55	6.68	103	210	9.03	4.28	0.05		90.1	90.4	54	3.78	6100	6.87	15.5	0.40	1.2	0.210	3.86	45.9	16.9	0.60
OREAS 904 (4 ACID) Cert		0.551	6.30	98.0	194	7.86	4.05	0.0460		86.0	83.0	54.0	3.79	6120	6.68	16.7	0.180	5.00	0.220	3.31	43.2	16.7	0.556
SBC-1 Meas				25.8	460	2.85	0.65		0.34	95.6	20.8	86	7.43	29.3		21.2		2.9			45.9	154	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	108.0	22.7	109	8.2	31.0		27.0		3.7			52.5	163	
OREAS 45d (4-Acid) Meas			8.35	12.1	200	0.82	0.33	0.20		41.7	32.1	527	4.22	425	15.9	21.1		3.0	0.092	0.42	18.8	23.7	0.26
OREAS 45d (4-Acid) Cert			8.150	13.8	183.0	0.79	0.31	0.185		37.20	29.50	549	3.910	371	14.5	21.20		3.830	0.096	0.412	16.9	21.5	0.245
OREAS 96 (4 Acid) Meas		9.92					26.3				45.3			> 10000									
OREAS 96 (4 Acid) Cert		11.5					26.3				49.9			39300									
OREAS 923 (4 Acid) Meas			7.23		380			0.46				68			6.09					2.07			1.63
OREAS 923 (4 Acid) Cert			7.29		434			0.473				71.0			6.43					2.51			1.69
OREAS 621 (4 Acid) Meas		65.0	6.67	76.4		1.87	4.18	2.13	292	52.8	29.5	27	3.47	3530	3.71	23.1		4.5	1.84	2.09	23.8	15.1	0.53
OREAS 621 (4 Acid) Cert		69.0	6.40	77.0		1.69	3.93	1.97	284	46.6	29.3	37.1	3.28	3630	3.70	24.6		4.41	1.83	2.20	21.6	14.2	0.507
OREAS 522 (4 Acid) Meas		1.25	3.70	386		0.69	8.97	3.46		84.4	472	28	0.65	8160	22.2	13.8		2.7	0.246	2.50	53.0	15.9	1.10
OREAS 522 (4 Acid) Cert		1.31	3.95	490		0.700	8.72	3.65		148	550	29.6	0.640	9160	24.6	16.0		2.96	0.230	2.83	171	16.2	1.12
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas	2950																						
OREAS 238 (Fire Assay) Cert	3030																						
OREAS 238 (Fire Assay) Meas	3130																						

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit	5	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01
Method Code	FA-AA	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP
Assay Meas																							
OREAS 238 (Fire Assay) Cert	3030																						
OREAS 257b (Fire Assay) Meas																							
OREAS 257b (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas	514																						
Oreas E1336 (Fire Assay) Cert	510																						
Oreas E1336 (Fire Assay) Meas	510																						
Oreas E1336 (Fire Assay) Cert	510																						
A527859 Orig	23																						
A527859 Dup	24																						
A527864 Orig		34.8	7.09	1.0	610	1.33	147	0.37	< 0.02	11.7	2.3	23	1.36	39.9	1.57	15.7	0.12	2.2	0.006	1.86	5.4	9.0	0.31
A527864 Dup		34.3	6.81	1.0	580	1.19	142	0.36	< 0.02	11.1	2.2	19	1.32	38.2	1.50	15.2	0.13	2.2	0.006	1.73	5.1	8.5	0.30
A527869 Orig	476																						
A527869 Dup	492																						
A527873 Orig	999																						
A527873 Dup	1020																						
A527874 Orig		0.06	0.02	1.2	< 10	< 0.05	1.13	0.03	< 0.02	0.17	0.5	50	< 0.05	5.8	1.02	0.42	0.08	< 0.1	0.007	< 0.01	< 0.5	< 0.2	< 0.01
A527874 Dup		0.06	0.03	1.3	< 10	< 0.05	1.07	0.03	< 0.02	0.16	0.4	45	< 0.05	5.3	1.07	0.41	0.11	< 0.1	0.005	< 0.01	< 0.5	< 0.2	< 0.01
A527887 Orig		0.67	6.55	1.4	80	1.07	1.63	0.19	< 0.02	30.8	3.3	11	0.08	17.5	0.94	13.0	< 0.05	2.4	< 0.005	0.30	13.8	7.7	0.58
A527887 Dup		0.69	6.33	0.8	70	1.03	1.63	0.18	< 0.02	29.7	3.3	11	0.07	14.0	0.92	12.9	< 0.05	2.5	0.012	0.29	13.3	7.6	0.57
A527900 Orig	< 5																						
A527900 Dup	< 5																						
A527904 Orig		0.08	1.49	2.4	190	0.23	0.22	1.21	0.03	4.80	2.9	60	0.21	20.6	2.88	3.62	0.09	0.3	0.014	0.43	2.1	4.0	0.38
A527904 Dup		0.08	1.45	2.4	190	0.22	0.22	1.19	< 0.02	4.81	3.1	63	0.19	27.3	2.83	3.69	0.07	0.3	0.006	0.42	2.1	4.0	0.37
A527906 Orig	16	0.43	5.67	17.4	10	0.98	1.22	0.46	0.03	13.7	14.7	65	0.61	160	15.4	13.5	0.12	1.2	0.039	1.09	5.1	18.9	1.76
A527906 Split PREP DUP	18	0.42	5.45	17.7	20	0.98	1.23	0.47	0.05	13.9	14.7	54	0.61	143	14.9	13.3	0.12	1.1	0.026	1.07	5.3	18.0	1.69
A527909 Orig	< 5																						
A527909 Dup	< 5																						
A527885 Orig	872																						
A527885 Dup	910																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank			0.01		< 10			< 0.01				2			< 0.01					< 0.01			< 0.01
Method Blank			< 0.01		< 10			< 0.01				2			< 0.01					< 0.01			< 0.01
Method Blank			< 0.01		< 10			< 0.01				< 1			< 0.01					< 0.01			< 0.01
Method Blank			< 0.01		< 10			< 0.01				2			< 0.01					< 0.01			< 0.01
Method Blank			< 0.01		< 10			< 0.01				5			< 0.01					< 0.01			< 0.01

Analyte Symbol	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.2	0.005	0.02	0.1	1	0.1
Method Code	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS
SDC-1 Meas	772		1.25	0.6	37.5	530	26.3	112			< 0.05	16.6		0.3	196	< 0.05		13.1	0.086	0.67	3.0	32	< 0.1
SDC-1 Cert	880.00		1.52	21.00	38.0	690	25.00	127.00			0.54	17.00		3.00	180.00	1.20		12.00	0.606	0.70	3.10	102.00	0.80
OREAS 72a (4 Acid Digest) Meas					6280					1.67													
OREAS 72a (4 Acid Digest) Cert					6930.000					1.74													
OREAS 101b (4 Acid) Meas	915	18.7			8.3	1200	21.9											33.1	0.318		287	75	
OREAS 101b (4 Acid) Cert	927	20.1			8.2	1118	23											36.4	0.35		387	77	
OREAS 98 (4 Acid) Meas							288			> 10.0	6.39		140	163									
OREAS 98 (4 Acid) Cert							345			15.5	20.1		158	206									
DNC-1a Meas			1.27	1.5	286		7.5	4.2			0.68	32.1			155				0.252			137	
DNC-1a Cert			1.40	3	247		6.3	4.50			0.96	31			144				0.29			148	
DNC-1a Meas			1.33	1.5	280		7.5	4.4			0.92	33.0			161				0.264			141	
DNC-1a Cert			1.40	3	247		6.3	4.50			0.96	31			144				0.29			148	
OREAS 13b (4-Acid) Meas		7.80			1980					1.21													
OREAS 13b (4-Acid) Cert		9.0			2247.0000					1.2													
OREAS 904 (4 ACID) Meas	430	2.13	0.03		43.4	1010	11.5	92.4		0.06	1.19	10.8	2	2.7	28.8	0.25		15.2		0.55	8.9	77	1.2
OREAS 904 (4 ACID) Cert	410	2.12	0.0340		40.1	980	10.6	130		0.0630	1.48	11.2	3.30	2.83	27.2	0.540		14.3		0.520	8.43	76.0	2.12
SBC-1 Meas		1.97		13.4	78.2		33.9	122			0.98	17.7		2.9	171	0.87		14.1	0.468	0.86	4.9	214	1.4
SBC-1 Cert		2.40		15.3	82.8		35.0	147			1.01	20.0		3.3	178.0	1.10		15.8	0.51	0.89	5.76	220.0	1.60
OREAS 45d (4-Acid) Meas	535	0.68	0.10	2.6	262	440	23.0	50.2		0.05	< 0.05	51.8		0.7	36.1	0.06		15.4	0.409	0.26	2.8	170	0.2
OREAS 45d (4-Acid) Cert	490.000	2.500	0.101	14.50	231.0	420.000	21.8	42.1		0.049	0.82	49.30		2.78	31.30	1.02		14.5	0.773	0.27	2.63	235.0	1.62
OREAS 96 (4 Acid) Meas							92.8				4.39		37	53.9									
OREAS 96 (4 Acid) Cert							101				5.09		40.7	65.6									
OREAS 923 (4 Acid) Meas	901		0.28			640				0.66									0.367				86
OREAS 923 (4 Acid) Cert	950		0.324			630				0.691									0.405				91.0
OREAS 621 (4 Acid) Meas	514	14.4	1.21	9.9	30.5	390	> 10000	89.8		4.49	41.6	6.2	4	5.4	82.1			6.3	0.175	2.12	2.9	33	2.4
OREAS 621 (4 Acid) Cert	532	13.6	1.31	8.61	26.2	359	13600	84.0		4.48	139	6.24	5.64	5.25	91.0			7.48	0.149	1.96	2.83	31.8	2.35
OREAS 522 (4 Acid) Meas	3600	193	0.53	2.6	71.0	880	10.3	87.3	0.097	2.36	5.17	10.8	3	7.8	64.9	< 0.05	0.40	1.3	0.260	0.27	39.8	146	53.4
OREAS 522 (4 Acid) Cert	3970	206	0.633	5.66	70.0	890	12.5	82.0	0.0980	2.50	7.93	10.9	2.74	9.32	199	0.440	1.14	7.53	0.344	0.290	42.2	164	135
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							

Analyte Symbol	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.2	0.005	0.02	0.1	1	0.1
Method Code	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS
Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 257b (Fire Assay) Meas																							
OREAS 257b (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
A527859 Orig																							
A527859 Dup																							
A527864 Orig	141	25.5	3.50	2.2	4.6	420	1310	52.4	< 0.002	0.15	0.08	1.9	6	0.6	355	0.15	6.70	3.1	0.121	0.45	1.2	20	0.6
A527864 Dup	136	23.4	3.35	2.2	4.6	410	1260	49.6	< 0.002	0.15	0.09	1.8	6	0.6	342	0.14	6.53	3.5	0.114	0.43	1.2	20	0.5
A527869 Orig																							
A527869 Dup																							
A527873 Orig																							
A527873 Dup																							
A527874 Orig	97	4.29	0.02	< 0.1	1.9	< 10	2.4	0.1	< 0.002	0.15	0.06	< 0.1	< 1	< 0.2	5.0	< 0.05	0.56	< 0.2	< 0.005	< 0.02	< 0.1	1	< 0.1
A527874 Dup	100	4.22	0.02	< 0.1	1.5	< 10	2.4	0.2	< 0.002	0.16	0.07	< 0.1	< 1	< 0.2	5.9	< 0.05	0.53	< 0.2	< 0.005	< 0.02	< 0.1	1	0.1
A527887 Orig	75	5.47	4.51	1.4	5.2	460	98.2	5.8	< 0.002	0.32	0.08	1.1	< 1	0.5	222	0.10	0.15	2.3	0.126	0.03	0.6	9	8.1
A527887 Dup	72	5.49	4.41	1.4	5.1	440	99.0	5.9	< 0.002	0.31	0.08	1.0	< 1	0.5	221	0.11	0.16	2.3	0.122	0.02	0.6	9	8.4
A527900 Orig																							
A527900 Dup																							
A527904 Orig	316	1.01	0.35	1.6	9.7	180	3.2	12.9	< 0.002	0.91	< 0.05	3.3	< 1	0.2	137	< 0.05	< 0.05	0.3	0.044	0.03	< 0.1	43	0.4
A527904 Dup	307	0.92	0.34	1.5	9.6	180	3.2	12.6	< 0.002	0.90	< 0.05	3.1	< 1	0.2	130	< 0.05	< 0.05	0.3	0.043	0.03	< 0.1	42	0.4
A527906 Orig	605	1.14	1.07	2.2	28.8	580	23.1	33.6	< 0.002	7.54	0.07	8.5	2	0.5	103	0.09	0.18	0.7	0.113	0.10	0.3	131	1.2
A527906 Split PREP DUP	573	1.23	1.05	1.8	27.4	560	23.0	34.2	< 0.002	7.34	0.08	8.3	2	0.5	104	0.09	0.15	0.6	0.109	0.10	0.3	130	1.3
A527909 Orig																							
A527909 Dup																							
A527885 Orig																							
A527885 Dup																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank	< 5		< 0.01			< 10				< 0.01									< 0.005			< 1	
Method Blank	< 5		< 0.01			< 10				< 0.01									< 0.005			< 1	
Method Blank	< 5		< 0.01			< 10				< 0.01									< 0.005			< 1	
Method Blank	< 5		< 0.01			< 10				< 0.01									< 0.005			< 1	
Method Blank	8		< 0.01			< 10				< 0.01									< 0.005			< 1	

Analyte Symbol	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	ppm	g/tonne
Lower Limit	0.1	2	0.5	0.02
Method Code	TD-MS	TD-ICP	TD-MS	FA- GRA
SDC-1 Meas		95	32.3	
SDC-1 Cert		103.00	290.00	
Oreas 72a (4 Acid Digest) Meas				
Oreas 72a (4 Acid Digest) Cert				
OREAS 101b (4 Acid) Meas	113			
OREAS 101b (4 Acid) Cert	133			
OREAS 98 (4 Acid) Meas		1200		
OREAS 98 (4 Acid) Cert		1360		
DNC-1a Meas	16.9	62	39.5	
DNC-1a Cert	18.0	70	38.0	
DNC-1a Meas	17.8	62	37.3	
DNC-1a Cert	18.0	70	38.0	
OREAS 13b (4-Acid) Meas		140		
OREAS 13b (4-Acid) Cert		133		
OREAS 904 (4 ACID) Meas	34.9	27	82.1	
OREAS 904 (4 ACID) Cert	31.5	26.3	171	
SBC-1 Meas	27.9	199	97.8	
SBC-1 Cert	36.5	186	134.0	
OREAS 45d (4-Acid) Meas	11.8	48	109	
OREAS 45d (4-Acid) Cert	9.53	45.7	141	
OREAS 96 (4 Acid) Meas				
OREAS 96 (4 Acid) Cert				
OREAS 923 (4 Acid) Meas		336		
OREAS 923 (4 Acid) Cert		345		
OREAS 621 (4 Acid) Meas	13.1	> 10000	170	
OREAS 621 (4 Acid) Cert	11.1	52200	168	
OREAS 522 (4 Acid) Meas	17.1	28	102	
OREAS 522 (4 Acid) Cert	18.5	30.2	112	
OREAS 229b (Fire Assay) Meas				12.5
OREAS 229b (Fire Assay) Cert				11.9
OREAS 238 (Fire Assay) Meas				
OREAS 238 (Fire Assay) Cert				

Analyte Symbol	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	ppm	g/tonne
Lower Limit	0.1	2	0.5	0.02
Method Code	TD-MS	TD-ICP	TD-MS	FA- GRA
OREAS 238 (Fire Assay) Meas				
OREAS 238 (Fire Assay) Cert				
OREAS 257b (Fire Assay) Meas				14.7
OREAS 257b (Fire Assay) Cert				14.2
Oreas E1336 (Fire Assay) Meas				
Oreas E1336 (Fire Assay) Cert				
Oreas E1336 (Fire Assay) Meas				
Oreas E1336 (Fire Assay) Cert				
A527859 Orig				
A527859 Dup				
A527864 Orig	2.0	27	81.7	
A527864 Dup	2.0	25	77.5	
A527869 Orig				
A527869 Dup				
A527873 Orig				
A527873 Dup				
A527874 Orig	< 0.1	4	1.0	
A527874 Dup	< 0.1	< 2	2.2	
A527887 Orig	1.6	31	82.9	
A527887 Dup	1.5	30	84.9	
A527900 Orig				
A527900 Dup				
A527904 Orig	2.0	15	11.4	
A527904 Dup	2.0	15	10.4	
A527906 Orig	5.0	73	41.5	
A527906 Split PREP DUP	5.0	68	41.7	
A527909 Orig				
A527909 Dup				
A527885 Orig				
A527885 Dup				
Method Blank				
Method Blank				
Method Blank				
Method Blank				
Method Blank				< 0.02
Method Blank		< 2		
Method Blank		< 2		
Method Blank		< 2		
Method Blank		< 2		
Method Blank		< 2		



Report No.: A20-13449
Report Date: 16-Dec-20
Date Submitted: 27-Oct-20
Your Reference: GOLD

Portofino Resources
Suite 520-470 Granville St
Vancouver BC V6C1V5
Canada

ATTN: David Tafel

CERTIFICATE OF ANALYSIS

1 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-50-Tbay	GOP AA-Au (Au - Fire Assay AA)	2020-11-10 07:24:10

REPORT **A20-13449**

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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
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Report No.: A20-13449
Report Date: 16-Dec-20
Date Submitted: 27-Oct-20
Your Reference: GOLD

Portofino Resources
Suite 520-470 Granville St
Vancouver BC V6C1V5
Canada

ATTN: David Tafel

CERTIFICATE OF ANALYSIS

1 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
UT-6M	QOP Total/QOP Ultratrace- 4acid Digest (Total Digestion ICPOES/ICPMS)	2020-11-24 13:04:41

REPORT A20-13449

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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:



Emmanuel Esemé, Ph.D.
Quality Control Coordinator

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Results

Activation Laboratories Ltd.

Report: A20-13449

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit	5	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01
Method Code	FA-AA	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP
A685865	< 5	0.03	1.50	1.6	2020	0.54	0.07	1.66	0.02	9.05	5.8	44	0.81	13.2	13.7	< 0.05	0.07	0.2	0.011	0.42	3.7	14.7	1.34

Results

Activation Laboratories Ltd.

Report: A20-13449

Analyte Symbol	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1	1	0.1
Method Code	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS
A685865	1210	1.34	0.03	0.8	22.7	430	2.5	11.8	< 0.002	0.08	0.12	4.3	< 1	< 0.2	273	< 0.05	< 0.05	0.52	0.052	< 0.02	0.2	26	1.1

Analyte Symbol	Y	Zn	Zr
Unit Symbol	ppm	ppm	ppm
Lower Limit	0.1	2	0.5
Method Code	TD-MS	TD-ICP	TD-MS
A685865	6.4	20	10.1

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit	5	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01
Method Code	FA-AA	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP
SDC-1 Meas			7.98	< 0.2	630	2.79		1.06		86.3	17.9	46	4.40	30.8	4.76	22.3		1.1		1.94	40.9	35.8	0.99
SDC-1 Cert			8.34	0.220	630	3.00		1.00		93.00	18.0	64.00	4.00	30.000	4.82	21.00		8.30		2.72	42.00	34.0	1.02
Oreas 72a (4 Acid Digest) Meas				5.1							143	165		281	9.79								
Oreas 72a (4 Acid Digest) Cert				14.7							157	228		316	9.63								
OREAS 101b (4 Acid) Meas										> 500	46.1			380	10.7					2.52	792		1.24
OREAS 101b (4 Acid) Cert										1325	45			412	10.7					2.36	754		1.23
OREAS 98 (4 Acid) Meas		41.1					83.9				112			> 10000									
OREAS 98 (4 Acid) Cert		45.1					97.2				121			14800 0.0									
DNC-1a Meas											55.8			110		15.0					4.1	4.8	
DNC-1a Cert											57			100		15					3.6	5.2	
OREAS 13b (4-Acid) Meas		0.87		49.0							75.8	8810		2230									
OREAS 13b (4-Acid) Cert		0.86		57							75	8650.0 00		2327.0 000									
OREAS 904 (4 ACID) Meas		0.67	6.64	93.4	210	9.00	4.39	0.05		87.4	84.4	59	3.75	6060	7.20	15.9	0.18	4.8	0.215	3.65	42.4	16.4	0.59
OREAS 904 (4 ACID) Cert		0.551	6.30	98.0	194	7.86	4.05	0.0460		86.0	83.0	54.0	3.79	6120	6.68	16.7	0.180	5.00	0.220	3.31	43.2	16.7	0.556
OREAS 904 (4 ACID) Meas		0.65		107		8.58	3.95			89.8	89.4		3.59	6440		17.4	0.19	4.9	0.197		43.1	16.7	
OREAS 904 (4 ACID) Cert		0.551		98.0		7.86	4.05			86.0	83.0		3.79	6120		16.7	0.180	5.00	0.220		43.2	16.7	
SBC-1 Meas					340							95											
SBC-1 Cert					788.0							109											
OREAS 45d (4-Acid) Meas			8.20	8.4	190	0.69	0.34	0.19		37.8	29.9	533	3.80	377	14.8	21.5		2.4	0.099	0.43	17.0	21.7	0.24
OREAS 45d (4-Acid) Cert			8.150	13.8	183.0	0.79	0.31	0.185		37.20	29.50	549	3.910	371	14.5	21.20		3.830	0.096	0.412	16.9	21.5	0.245
OREAS 45d (4-Acid) Meas				9.7		0.71	0.30			36.5	31.0		3.67	368		21.9		2.4	0.084		16.5	21.4	
OREAS 45d (4-Acid) Cert				13.8		0.79	0.31			37.20	29.50		3.910	371		21.20		3.830	0.096		16.9	21.5	
OREAS 96 (4 Acid) Meas		11.0					27.4				50.3			> 10000									
OREAS 96 (4 Acid) Cert		11.5					26.3				49.9			39300									
OREAS 923 (4 Acid) Meas			7.57		390			0.49				79			6.91					2.68			1.77
OREAS 923 (4 Acid) Cert			7.29		434			0.473				71.0			6.43					2.51			1.69
OREAS 621 (4 Acid) Meas			6.72					2.09				29			4.00					2.35			0.52
OREAS 621 (4 Acid) Cert			6.40					1.97				37.1			3.70					2.20			0.507
OREAS 522 (4 Acid) Meas		1.33	3.84	495		0.72	8.60	3.49		62.3	608	34	0.61	9090	24.6	15.4		2.9	0.231	2.93	53.1	16.2	1.13
OREAS 522 (4 Acid) Cert		1.31	3.95	490		0.700	8.72	3.65		148	550	29.6	0.640	9160	24.6	16.0		2.96	0.230	2.83	171	16.2	1.12
OREAS 238 (Fire Assay) Meas	3070																						
OREAS 238 (Fire Assay) Cert	3030																						

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit	5	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01
Method Code	FA-AA	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP
Oreas E1336 (Fire Assay) Meas	506																						
Oreas E1336 (Fire Assay) Cert	510																						
Method Blank	< 5																						
Method Blank		< 0.01	< 0.01	< 0.2	< 10	0.10	< 0.01	< 0.01	< 0.02	< 0.01	< 0.1	4	< 0.05	0.2	< 0.01	0.28	< 0.05	< 0.1	< 0.005	< 0.01	< 0.5	< 0.2	< 0.01
Method Blank		< 0.01	< 0.01	< 0.2	< 10	< 0.05	< 0.01	< 0.01	< 0.02	< 0.01	< 0.1		< 0.05	1.0	< 0.01	0.24	< 0.05	< 0.1	< 0.005	< 0.01	< 0.5	< 0.2	< 0.01
Method Blank		< 0.01	< 0.01	1.1	< 10	< 0.05	< 0.01	< 0.01	0.04	0.02	0.1	< 1	< 0.05	2.0	< 0.01	0.31	< 0.05	< 0.1	< 0.005	< 0.01	< 0.5	< 0.2	< 0.01
Method Blank		< 0.01		0.5		< 0.05	< 0.01		< 0.02	0.01	< 0.1		< 0.05	0.3		0.13	< 0.05	< 0.1	< 0.005		< 0.5	< 0.2	
Method Blank			< 0.01		< 10			< 0.01				2			< 0.01					< 0.01			< 0.01
Method Blank			< 0.01		< 10			< 0.01				3			< 0.01					< 0.01			< 0.01

Analyte Symbol	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1	1	0.1
Method Code	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS
SDC-1 Meas	857		1.45	0.7	34.2	550	26.2	66.6			< 0.05	14.7		0.3	174	< 0.05		11.4	0.123	0.63	2.7	42	< 0.1
SDC-1 Cert	880.00		1.52	21.00	38.0	690	25.00	127.00			0.54	17.00		3.00	180.00	1.20		12.00	0.606	0.70	3.10	102.00	0.80
Oreas 72a (4 Acid Digest) Meas					6310					1.67													
Oreas 72a (4 Acid Digest) Cert					6930.000					1.74													
OREAS 101b (4 Acid) Meas	952	19.2			8.9	1160	23.9											33.2	0.351		368	78	
OREAS 101b (4 Acid) Cert	927	20.1			8.2	1118	23											36.4	0.35		387	77	
OREAS 98 (4 Acid) Meas							319			> 10.0	4.74		147	172									
OREAS 98 (4 Acid) Cert							345			15.5	20.1		158	206									
DNC-1a Meas				1.4	252		7.1	3.7			1.05	28.4			150								
DNC-1a Cert				3	247		6.3	4.50			0.96	31			144								
OREAS 13b (4-Acid) Meas		8.55			2190					1.15													
OREAS 13b (4-Acid) Cert		9.0			2247.000					1.2													
OREAS 904 (4 ACID) Meas	445	2.24	0.04		42.3	1040	11.5	150		0.06	1.37	11.0	3	2.9	25.2	0.89		15.0		0.56	9.2	85	2.4
OREAS 904 (4 ACID) Cert	410	2.12	0.0340		40.1	980	10.6	130		0.0630	1.48	11.2	3.30	2.83	27.2	0.540		14.3		0.520	8.43	76.0	2.12
OREAS 904 (4 ACID) Meas		2.01			41.9		11.0	95.3			1.41	11.1	3	2.9	26.9	0.91		14.0		0.52	8.5		2.2
OREAS 904 (4 ACID) Cert		2.12			40.1		10.6	130			1.48	11.2	3.30	2.83	27.2	0.540		14.3		0.520	8.43		2.12
SBC-1 Meas																			0.499				214
SBC-1 Cert																			0.51				220.0
OREAS 45d (4-Acid) Meas	507	0.39	0.09	0.8	233	370	22.3	45.5		0.05	0.08	47.5		0.6	30.6	< 0.05		14.6	0.308	0.26	2.9	140	0.1
OREAS 45d (4-Acid) Cert	490.000	2.500	0.101	14.50	231.0	420.000	21.8	42.1		0.049	0.82	49.30		2.78	31.30	1.02		14.5	0.773	0.27	2.63	235.0	1.62
OREAS 45d (4-Acid) Meas		0.44		0.8	227		20.7	41.4			0.06	48.2		0.6	32.5	< 0.05		13.0		0.23	2.5		0.1
OREAS 45d (4-Acid) Cert		2.500		14.50	231.0		21.8	42.1			0.82	49.30		2.78	31.30	1.02		14.5		0.27	2.63		1.62
OREAS 96 (4 Acid) Meas							100			4.27	5.01		42	63.4									
OREAS 96 (4 Acid) Cert							101			4.19	5.09		40.7	65.6									
OREAS 923 (4 Acid) Meas	959		0.32			630				0.72										0.409			95
OREAS 923 (4 Acid) Cert	950		0.324			630				0.691										0.405			91.0
OREAS 621 (4 Acid) Meas	550		1.34			380				4.69										0.189			35
OREAS 621 (4 Acid) Cert	532		1.31			359				4.48										0.149			31.8
OREAS 522 (4 Acid) Meas	3670	208	0.61	6.1	67.6	860	10.1	80.2	0.100	2.39	7.88	10.9	2	9.4	68.6	0.48	1.11	2.68	0.351	0.29	39.6	159	127
OREAS 522 (4 Acid) Cert	3970	206	0.633	5.66	70.0	890	12.5	82.0	0.0980	2.50	7.93	10.9	2.74	9.32	199	0.440	1.14	7.53	0.344	0.290	42.2	164	135
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							

Analyte Symbol	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1	1	0.1
Method Code	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Method Blank																							
Method Blank	< 5	< 0.05	< 0.01	< 0.1	0.5	< 10	< 0.5	< 0.1	< 0.002	< 0.01	< 0.05	< 0.1	< 1	< 0.2	< 0.2	< 0.05	< 0.05	< 0.01	< 0.005	< 0.02	< 0.1	< 1	< 0.1
Method Blank	6	< 0.05	< 0.01	< 0.1	0.3	< 10	< 0.5	< 0.1	< 0.002	< 0.01	< 0.05	< 0.1	< 1	< 0.2	< 0.2	< 0.05	< 0.05	< 0.01	< 0.005	< 0.02	< 0.1	< 1	< 0.1
Method Blank	< 5	0.06	< 0.01	< 0.1	0.4	< 10	0.6	< 0.1	< 0.002	< 0.01	0.06	0.1	< 1	< 0.2	0.2	< 0.05	< 0.05	< 0.01	< 0.005	< 0.02	< 0.1	< 1	< 0.1
Method Blank		< 0.05		< 0.1	0.4		< 0.5	< 0.1	< 0.002		< 0.05	< 0.1	< 1	< 0.2	< 0.2	< 0.05	< 0.05	< 0.01		< 0.02	< 0.1		< 0.1
Method Blank			< 0.01			< 10				< 0.01									< 0.005			< 1	
Method Blank	9		< 0.01			< 10				< 0.01									< 0.005			< 1	

Analyte Symbol	Y	Zn	Zr
Unit Symbol	ppm	ppm	ppm
Lower Limit	0.1	2	0.5
Method Code	TD-MS	TD-ICP	TD-MS
SDC-1 Meas		106	39.7
SDC-1 Cert		103.00	290.00
Oreas 72a (4 Acid Digest) Meas			
Oreas 72a (4 Acid Digest) Cert			
OREAS 101b (4 Acid) Meas	132		
OREAS 101b (4 Acid) Cert	133		
OREAS 98 (4 Acid) Meas		1330	
OREAS 98 (4 Acid) Cert		1360	
DNC-1a Meas	16.5		40.1
DNC-1a Cert	18.0		38.0
OREAS 13b (4-Acid) Meas		119	
OREAS 13b (4-Acid) Cert		133	
OREAS 904 (4 ACID) Meas	32.5	28	178
OREAS 904 (4 ACID) Cert	31.5	26.3	171
OREAS 904 (4 ACID) Meas	31.0		166
OREAS 904 (4 ACID) Cert	31.5		171
SBC-1 Meas		195	
SBC-1 Cert		186	
OREAS 45d (4-Acid) Meas	11.5	48	93.5
OREAS 45d (4-Acid) Cert	9.53	45.7	141
OREAS 45d (4-Acid) Meas	10.6		86.0
OREAS 45d (4-Acid) Cert	9.53		141
OREAS 96 (4 Acid) Meas		454	
OREAS 96 (4 Acid) Cert		457	
OREAS 923 (4 Acid) Meas		367	
OREAS 923 (4 Acid) Cert		345	
OREAS 621 (4 Acid) Meas		> 10000	
OREAS 621 (4 Acid) Cert		52200	
OREAS 522 (4 Acid) Meas	17.6	29	110
OREAS 522 (4 Acid) Cert	18.5	30.2	112
OREAS 238 (Fire Assay) Meas			
OREAS 238 (Fire Assay) Cert			

Analyte Symbol	Y	Zn	Zr
Unit Symbol	ppm	ppm	ppm
Lower Limit	0.1	2	0.5
Method Code	TD-MS	TD-ICP	TD-MS
Oreas E1336 (Fire Assay) Meas			
Oreas E1336 (Fire Assay) Cert			
Method Blank			
Method Blank	< 0.1	< 2	< 0.5
Method Blank	< 0.1	< 2	< 0.5
Method Blank	< 0.1	< 2	< 0.5
Method Blank	< 0.1		< 0.5
Method Blank		< 2	
Method Blank		< 2	



Report No.: A20-15191
Report Date: 24-Dec-20
Date Submitted: 26-Nov-20
Your Reference: GOLD

Portofino Resources
Suite 520-470 Granville St
Vancouver BC V6C1V5
Canada

ATTN: David Tafel

CERTIFICATE OF ANALYSIS

16 Crushed Rock samples were submitted for analysis.

Table with 2 columns: The following analytical package(s) were requested, Testing Date. Row 1: 1A4-Tbay, QOP AA-Au (Au-Fire Assay-Metallic Screen-500g), 2020-12-22 15:25:11

REPORT A20-15191

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

A representative 500 gram split is sieved at 150 mesh (105 micron) with assays performed on the entire +150 mesh and 2 splits of the -150 mesh fraction. A final assay is calculated based on the weight of each fraction.

Footnote: Samples A685615, A685568, A685599 and A685604 are insufficient

CERTIFIED BY:

[Handwritten signature]

Emmanuel Esemé, Ph.D.
Quality Control Coordinator

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Analyte Symbol	Au + 150 mesh	Au - 150 mesh (A)	Au - 150 mesh (B)	Total Au	+ 150 mesh	- 150 mesh	Total Weight
Unit Symbol	g/mt	g/mt	g/mt	g/mt	g	g	g
Lower Limit	0.03	0.03	0.03	0.03			
Method Code	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT
A685618	2.54	6.09	5.97	5.89	18.65	431.94	450.59
A685787	0.86	0.93	0.89	0.91	14.98	275.54	290.52
A685800	1.38	4.81	6.30	5.06	17.88	132.12	150.00
A685565	34.3	37.4	37.2	36.9	19.44	159.34	178.78
A685570	5.23	13.0	11.8	12.0	16.70	281.06	297.76
A685583	3.74	4.95	5.26	5.04	17.77	345.20	362.97
A685584	0.38	0.67	0.58	0.61	18.41	289.78	308.19
A685587	0.88	0.95	1.07	1.00	15.98	184.27	200.25
A685601	99.2	30.4	29.0	35.4	21.72	241.76	263.48
A685602	0.22	1.87	2.27	1.87	22.32	180.49	202.81
A685603	3.40	10.3	11.3	9.67	16.56	92.760	109.32
A685605	67.6	14.3	13.9	20.0	21.87	176.43	198.30

Analyte Symbol	Total Au	Total Weight
Unit Symbol	g/mt	g
Lower Limit	0.03	
Method Code	FA-MeT	FA-MeT
OREAS 229b (Fire Assay) Meas	12.2	
OREAS 229b (Fire Assay) Cert	11.9	
OREAS 257b (Fire Assay) Meas	14.9	
OREAS 257b (Fire Assay) Cert	14.2	
Method Blank	< 0.03	
Method Blank	< 0.03	



Report No.: A21-00419-ReAssay
Report Date: 13-Jan-21
Date Submitted: 08-Jan-21
Your Reference: GOLD

Portofino Resources
Suite 520-470 Granville St
Vancouver BC V6C1V5
Canada

ATTN: David Tafel

CERTIFICATE OF ANALYSIS

7 Crushed Rock samples were submitted for analysis.

Table with 2 columns: The following analytical package(s) were requested: and Testing Date:
1A4-Tbay | QOP AA-Au (Au-Fire Assay-Metallic Screen-500g) | 2021-01-12 16:23:34

REPORT A21-00419-ReAssay

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

A representative 500 gram split is sieved at 150 mesh (105 micron) with assays performed on the entire +150 mesh and 2 splits of the -150 mesh fraction. A final assay is calculated based on the weight of each fraction.

CERTIFIED BY:

[Handwritten signature]

Emmanuel Esemé, Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
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E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Results

Activation Laboratories Ltd.

Report: A21-00419

Analyte Symbol	Au + 150 mesh	Au - 150 mesh (A)	Au - 150 mesh (B)	Total Au	+ 150 mesh	- 150 mesh	Total Weight
Unit Symbol	g/mt	g/mt	g/mt	g/mt	g	g	g
Lower Limit	0.03	0.03	0.03	0.03			
Method Code	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT
A527871	4.43	10.0	9.34	9.47	9.700	221.00	230.70
A527873	5.93	2.71	2.77	2.91	18.22	323.32	341.54
A527880	1.18	1.90	1.84	1.82	14.40	163.22	177.62
A527882	< 0.03	4.29	4.94	4.17	16.61	155.82	172.43
A527883	4.86	4.62	3.67	4.18	11.72	248.24	259.96

Analyte Symbol	Total Au	Total Weight
Unit Symbol	g/mt	g
Lower Limit	0.03	
Method Code	FA-MeT	FA-MeT
OREAS 229b (Fire Assay) Meas	11.7	
OREAS 229b (Fire Assay) Cert	11.9	
OREAS 257b (Fire Assay) Meas	14.2	
OREAS 257b (Fire Assay) Cert	14.2	
Method Blank	< 0.03	

APPENDIX III

Points of Interest (Table 2)

Gold Creek Property Point of Interest Table 2

POI_#	Date	UTM Zone	Easting	Northing	Elevation	Description	Photo(s)
1	14-Jul-20	15	711504	5383643	465	Fine-grained mafic volcanic outcrop, patches of rust, lots of fractures and some fabric at 008 degrees. Some carb stringers at 100 degrees and thinner 'wispiers' carb stringers (?) at 150 degrees, which offset the 100 degree stringers locally. The 008 degree fabric appears to be overprinted by both sets of fractures/stringers. Photo W.	yes
2	14-Jul-20	15	711993	5383382	473	Very rusty felsic intrusive blocks with coarse pyrite on south side of logging road.	
3	14-Jul-20	15	712611	5383847	479	Strongly fractured/weakly sheared mafic to intermediate volcanic at 110 degrees/subvertical dip. Photo SE. Possible old sample, faded pink flag.	yes
4	14-Jul-20	15	711259	5384507	491	Rusty shear in mafic to intermediate volcanic. Shear is weak-moderate, trends ~90 degrees. Photo E.	yes
5	14-Jul-20	15	711303	5384633	492	Pillows with rusty selvages in intermediate volcanic. Photo NE.	yes
6	14-Jul-20	15	710425	5381989	460	Shear in intermediate volcanics at 075 degrees/subvertical. Rusty but dry. Photo WSW.	yes
7	14-Jul-20	15	710582	5383456	477	Syenite (south) and banded iron formation (north) contact area. Syenite has minor epidote and qtz-carb stringers. Photo N.	yes
8	15-Jul-20	15	711956	5382511	462	Historical AF Zone trench and location of historical channel sample 0935560. There is a vein system here within monzonite which trends at an average of ~055 degrees, with moderate dip to NW being most common. Veins are up to 45cm and appear to be offset by a sinistral fault plane at generally 120 degrees (with one measurement of 285/70 degrees N obtained), with veining on SW side of fault plane picking up on S margin of trench. Numerous 005 degree fractures x-cut veins and intrusive. Fairly decent vein density (20% ?) across about 6.5m and may not be cut off to S. Several photos of trench and vein system from different vantage points, NW, NNW, NE, SE, SW.	yes
9	15-Jul-20	15	711983	5382508	464	DDH collar at 055/50 degrees, 8.5cm diameter.	
10	15-Jul-20	15	712005	5382518	459	Ice striations at 010 degrees.	
11	16-Jul-20	15	711867	5382525	449	~6 by 3m trench with channels. Weak N/S foliation/fractures and 22 degree fractures and stringers.	
12	16-Jul-20	15	711855	5382538	448	Some weak 120/75 degrees S foliation/fabric in syenodiorite.	
13	16-Jul-20	15	711853	5382549	455	South end of larger stripped area of monzonite. About 8m north there are fractures at 190/85 degrees W, of which there is a photo looking N. Also a photo looking NNW for the larger stripped area.	yes

14	16-Jul-20	15	711822	5382590	453	Channel sample tag 0935715, corresponding to ~40cm of increased quartz veining at 356 degrees/moderate dip to E. Photo E.	yes
15	16-Jul-20	15	711959	5382532	464	012 degree subvertical fabric in monzonite/tonalite. Photo S.	yes
16	16-Jul-20	15	711974	5382512	457	Channel sample tag 0935581, NW end of channel.	
17	16-Jul-20	15	711995	5382515	464	Channel sample tag 0935625.	
18	16-Jul-20	15	712179	5382588	475	DDH collar 143/48 degrees. Photo NW.	yes
19	16-Jul-20	15	712274	5382529	467	Quartz veins trending 025 degrees. Photo SW.	yes
20	16-Jul-20	15	712267	5382520	471	Location of channel sample 0935729, photo NE of 1.4m wide quartz vein trending 020-025 degrees. Numerous fractures in the quartz at 210/65 degrees NW.	yes
21	16-Jul-20	15	712232	5382492	461	Old drill pad, possibly drilled at 355 degrees perpendicular to the two logs.	
22	17-Jul-20	15	713049	5382051	462	South end of old possibly hand-dug trench trending ~N/S. Photo N.	yes
23	17-Jul-20	15	713055	5382071	462	North end of POI_022 trench where it intersects an old road which is not too grown in. The trench continues on the north side of the road.	
24	17-Jul-20	15	713107	5382056	455	South end of old possibly hand-dug trench trending ~N/S. Some outcrop and old samples within.	
25	17-Jul-20	15	713109	5382071	459	North end of POI_024 trench.	
26	17-Jul-20	15	713052	5382082	458	Old faded pink sample flag within trench, "RX-151011."	
27	17-Jul-20	15	713101	5382067	467	Series of old flags in trench from POI_024 and POI_025, "RX-153637 Au/89" and "RX-153639."	
28	17-Jul-20	15	713206	5382085	474	Syenite dyke in weakly sheared sediments, appears to be some weak foliation in both at 070 degrees. Both x-cut by white qvs. Photo ENE.	yes
29	17-Jul-20	15	711905	5383370	470	Conglomerate on north side of logging road. Photo N.	yes
30	26-Sep-20	15	706759	5382948	460	Red syenite outcrop with larger feldspar phenocrysts. Photo W.	yes
31	27-Sep-20	15	706857	5383089	449	Quad parked at these coordinates.	
32	28-Sep-20	15	713817	5382477	450	Conglomerate with angular-subangular clasts, in contact with fine-grained dark grey sediments to S. May grade somewhat into these finer-grained sediments. Photos S.	yes
33	28-Sep-20	15	713817	5382480	450	Syenite outcrop, minor rusty quartz stringers. Photo N.	yes
34	28-Sep-20	15	713842	5382496	460	Northwest end of 10m+ long trench.	
35	28-Sep-20	15	713967	5382508	470	Conglomerate with round cobbles. Photo E.	yes
36	28-Sep-20	15	714382	5382730	478	Large outcrop of diabase dyke.	
37	28-Sep-20	15	714400	5382826	479	Fine-grained, dark grey rock (sediment?) with ~east-west foliation though somewhat variable.	
38	28-Sep-20	15	714408	5382911	477	Dark grey, very fine-grained rock with 297/subvertical foliation or steep dip north. Quartz veins x-cut foliation, curve from 055 degrees in north part of outcrop to ~360 degrees in south part. Photo E.	yes
39	28-Sep-20	15	714401	5382703	482	Banded iron formation, bands/foliation at ~075 degrees. Photo E.	yes

40	28-Sep-20	15	714364	5382694	483	Centre of ~20m wide outcrop of banded iron formation, strikes ~080 degrees. Photo E.	yes
41	28-Sep-20	15	714372	5382689	482	Diabase x-cutting perpendicular to foliation of previous banded iron formation. Photo N.	yes
42	28-Sep-20	15	714402	5382685	485	East contact of previous diabase dyke, same orientation of dyke and BIF.	
43	28-Sep-20	15	714418	5382667	487	Banded iron formation with some quartz stringers along foliation. Photo E.	yes
44	28-Sep-20	15	714434	5382662	490	Banded iron formation with bleb of quartz.	
45	28-Sep-20	15	714459	5382666	492	Banded iron formation with quartz veins, seems to be folded along ~east-west axis. Photos E.	yes
46	30-Sep-20	15	714783	5382500	492	Folded banded iron formation, axis ~east-west, plunge of fold may be shallow to southeast. Photo SE.	yes
47	30-Sep-20	15	714724	5382499	487	I Zone trench featuring two ~east-west syenite dykes at least 1.5m in width (southern at least 2m wide) and 1.5m apart intruding banded iron formation. Dykes contain north-south trending ladder veins up to about 10cm wide, which have been channel sampled, and the BIF contains some contorted veining. There are joints in the BIF dipping moderately to the east, and some shallow-dipping joints in the southern syenite dyke to the northeast. Coordinate is ~5m west of east end of trench, photo SW.	yes
48	30-Sep-20	15	714719	5382494	486	North-south ladder veins up to 9cm wide in the southern 2m+ wide syenite dyke from the previous trench. Numerous joints in the banded iron formation dipping 45 degrees E. Photos N.	yes
49	30-Sep-20	15	714716	5382494	486	3m west of previous POI of syenite dyke, photo E.	yes
50	30-Sep-20	15	714714	5382498	483	West end of previous trench, photo E.	yes
51	30-Sep-20	15	714716	5382498	483	2m east of previous POI, quartz vein with heavy pyrite, rust. Photo N.	yes
52	30-Sep-20	15	714716.5	5382500	483	Same trench as previous POI, some joints in Banded Iron Formation striking ~N/20 degrees E and NNE/64 degrees E. Bands trend east to east-southeast with steep dip. Photo N.	yes
53	30-Sep-20	15	714701	5382493	484	Second I Zone trench, ~4m wide syenite dyke with up to 20cm ladder veins. Photo W.	yes
54	30-Sep-20	15	714683	5382497	487	West end of previous trench, weakly sheared banded iron formation trending ESE with subvertical dip.	
55	30-Sep-20	15	714584	5382484	475	North side of ~10m deep, 2m across pit.	

APPENDIX IV

Act Labs Analytical Descriptions

Sample Preparation Packages

To obtain meaningful analytical results, it is imperative that sample collection and preparation be done properly. Actlabs can advise on sampling protocol for your field program if requested. Once the samples arrive in the laboratory, Actlabs will ensure that they are prepared properly. As a routine practice with rock and core, the entire sample is crushed to a nominal -2 mm, mechanically split to obtain a representative sample and then pulverized to at least 95% -105 microns (μm). All of our steel mills are now mild steel and do not introduce Cr or Ni contamination. Quality of crushing and pulverization is routinely checked as part of our quality assurance program. Samples submitted in an unorganized fashion will be subject to a sorting surcharge and may substantially slow turnaround time. Providing an accurate detailed sample list by e-mail will also aid in improving turnaround time and for Quality Control purposes.

Rock, Core and Drill Cuttings

Code RX1	Crush (< 7 kg) up to 80% passing 2 mm, riffle split (250 g) and pulverize (mild steel) to 95% passing 105 μm included cleaner sand	\$11.75
Code RX1-ORE	Crush up to 90% passing 2 mm	add \$2.10
Code RX1+500	500 grams pulverized	add \$1.25
Code RX1+800	800 grams pulverized	add \$2.25
Code RX1+1000	1000 grams pulverized	add \$2.75
Code RX1-SD	Crush (< 7 kg) up to 80% passing 2 mm, rotary split (250 g) and pulverized (mild steel) to 95% passing 105 μm	\$10.75
Code RX1-SD-ORE	Crush up to 90% passing 2 mm	add \$2.10
Code RX3	Oversize charge per kilogram for crushing	\$1.25
Code RX4	Pulverization only (mild steel) (coarse pulp or crushed rock) (< 800 g)	\$7.50
Code RX5	Pulverize ceramic (100 g)	\$18.75
Code RX6	Hand pulverize small samples (agate mortar & pestle) (<5g)	\$18.75
Code RX7	Crush and split (< 5 kg)	\$5.50
Code RX8	Sample prep only surcharge, no analyses	\$4.75
Code RX9	Compositing (per composite) dry weight	\$2.75
Code RX10	Weight (kg) as received	\$2.25
Code RX11	Checking quality of pulps or rejects prepared by other labs and issuing report	\$10.00
Code RX12	Ball Mill preparation	on request
Code RX13	Rod Mill preparation	on request
Code RX14	Core cutting	on request
Code RX15	Special Preparation/Hour	\$68.25
Code RX16	Specific Gravity on Core	\$14.00
Code RX16-W	Specific Gravity (WAX) on friable samples	\$18.00
Code RX17	Specific Gravity on the pulp	\$17.00
Code RX17-GP	Specific Gravity on the pulp by gas pycnometer	\$18.00

Note: Larger sample sizes than listed above can be pulverized at additional cost.

Soils, Stream and Lake Bottom Sediments, and Heavy Minerals

Code S1	Drying (60°C) and sieving (-177 μm) save all portions	\$4.25
Code S1 DIS	Drying (60°C) and sieving (-177 μm), discard oversize	\$3.75
Code S1-230	Drying (60°C) and sieving (-63 μm), save oversize	\$5.75
Code S1-230 DIS	Drying (60°C) and sieving (-63 μm), discard oversize	\$5.25
Code S2	Lake bottom sediment preparation crush & sieve (-177 μm)	\$9.00
Code S3	Alternate size fractions and bracket sieving, add	\$2.75
Code S4	Selective Extractions or SGH drying (40°C) & sieving (-177 μm)	\$4.25
Code S5	Wet or damp samples submitted in plastic bags, add	\$2.10
Code S6	Separating -2 micron material	\$28.25
Code S7mi	Methylene iodide heavy mineral separation specific gravity can be customized (100 grams)	\$73.75
Code S7w	Sodium polytungstate heavy mineral separation specific gravity can be customized (100 grams)	\$73.75
Code S8	Sieve analysis (4 sieve sizes) coarser than 53 μm	\$40.00
Code S9	Particle size analysis (laser)	\$102.00

Our Sample Preparation pricing is all-inclusive including: sorting, drying, labeling, new reject bags, using cleaner sand between each sample and crushing samples up to 7 kg (for RX1 and RX1-SD).



Riffle Splitting



Sample Pulverizers

Gold and Silver Analyses

Gold and Silver Analyses - Geochem

Code	Method	Sample Weight (g)	Metric Range	Price
1A1	Au Fire Assay - INAA	30	1 - 20,000 ppb	\$20.50
1A2	Au Fire Assay - AA	30	5 - 5,000 ppb	\$17.00
1A2B-30	Au Fire Assay - AA	30	5 - 10,000 ppb	\$17.50
1A2-50	Au Fire Assay - AA	50	5 - 5,000 ppb	\$19.50
1A2B-50	Au Fire Assay - AA	50	5 - 10,000 ppb	\$20.00
1A2-ICP	Au Fire Assay - ICP-OES	30	2 - 30,000 ppb	\$18.00
1A2-ICP-50	Au Fire Assay - ICP-OES	50	2 - 30,000 ppb	\$20.25
1A2-ICPMS	Au Fire Assay - ICP-MS	30	0.5 - 30,000 ppb	\$26.25
1A6	Au BLEG - ICP-MS	1,000	0.1 - 10,000 ppb	\$40.00
1A6-50	Au Cyanide Extraction - ICP-MS	50	0.02 - 1,000 ppb	\$15.00
	Ag or Cu add-on, for each additional, add			\$5.00
1A8	Au Aqua Regia - ICP-MS	30	0.2 - 2,000 ppb	\$18.00
1E-Ag	Ag Aqua Regia - ICP-OES	0.5	0.2 - 100 ppm	\$6.75



Gold and Silver Analyses - Assay

Code	Method	Sample Weight (g)	Metric Range	Price
1A3-30	Au Fire Assay - Gravimetric	30	0.03 - 10,000 g/T	\$22.75
1A3-50	Au Fire Assay - Gravimetric	50	0.02 - 10,000 g/T	\$24.00
1A3-Ag (Au,Ag)	Au, Ag Fire Assay - Gravimetric	30	0.03 - 10,000 g/T (Au) 3 - 10,000 g/T (Ag)	\$26.25
1A4 *	Au Fire Assay - Metallic Screen	500	0.03 g/T	\$79.50
1A4-1000 *	Au Fire Assay - Metallic Screen	1,000	0.03 g/T	\$90.75
8-Ag	Ag Fire Assay - Gravimetric	30	3 - 10,000 g/T	\$25.50

When submitting samples for Au and Ag analysis, or Au, Pt Pd and Rh analysis, please try to ensure you send two-times the listed weight.

Gold, Platinum, Palladium and Rhodium

Code	Method	Sample Weight (g)	Range (ppb)				Price
			Au	Pt	Pd	Rh	
1C-Exploration	Fire Assay - ICP-MS	30	2 - 30,000	1 - 30,000	1 - 30,000		\$22.75
1C-EXP 2	Fire Assay - ICP-MS	30	1 - 30,000	0.5 - 30,000	0.5 - 30,000		\$25.00
1C-research	Fire Assay - ICP-MS	30	1 - 30,000	0.1 - 30,000	0.1 - 30,000		\$36.25
1C-Rhodium	Fire Assay - ICP-MS	30	-	-	-	5 - 10,000	\$34.25
1C-OES	Fire Assay - ICP-OES	30	2 - 30,000	5 - 30,000	5 - 30,000		\$20.75
8 Au Pt Pd	Fire Assay - ICP-OES	30	0.001 - 1000 g/T	0.001 - 1000 g/T	0.001 - 1000 g/T		\$51.25

Platinum Group Elements

Code	Method	Sample Weight (g)	Range (ppb)							Price
			Os	Ir	Ru	Rh	Pt	Pd	Au	
1B1	NiS Fire Assay - INAA	25	2	0.1	5	0.2	5 †	2	0.5	1-2 samples \$363.25 3+ samples \$181.75
1B2	NiS Fire Assay - ICP-MS	50	-	1	1	1	1	1	1	1-2 samples \$363.25 3+ samples \$181.75

Organic Sample Surcharge - \$1.25/sample for Fire Assay packages

Notes:

Use of 50 gram sample for fire assay may not provide optimum recovery.

For proper fire assay fusion, Actlabs may reduce the sample weights to 15 g or smaller at its discretion.

* A representative 500 gram or 1000 gram (or customized) sample split is sieved at 149µm, with assays performed on the entire +149 µm fraction and two splits of the -149 µm fraction. It is important not to overpulverize the sample too finely; as tests have shown gold will plate out on the mill and be lost. When assays have been completed on the coarse and fine portions of the bulk sample, a final assay is calculated based on the weight of each fraction.

† Detection limits for Pt are increased with high Au/Pt ratios and limits for other elements will be affected by abnormally high Au, Sb and Cu content.

Samples with high Au can be reanalyzed by Code 1C exploration or research. Zn concentrates are not amenable to the nickel sulphide fire assay. Au results by Code 1B1 or 1B2 can be low by nickel sulphide fire assay. For accurate Au values, please request Code 1C-exploration.

Trace Element Geochemistry & Digestion Specific Assays

4-Acid "Near Total" Digestion

This acid attack is the most vigorous digestion used in geochemistry. It will employ hydrochloric, nitric, perchloric and hydrofluoric acids. Even with this digestion, certain minerals (barite, gahnite, chromite, cassiterite, etc.) may only be partially dissolved or stable in solution. Other minerals including zircon, sphene and magnetite may not be totally dissolved. Most other silicates will be dissolved, however some elements will be erratically volatilized, including As, Sb, Cr, U and Au.

Near-Total digestion **cannot** be used to obtain accurate determinations of REE, Ta, Nb, As, Sb, Sn, Hg, Cr, Au and U.

NOTE: Results from acid digestions may be lab dependent or lab operator dependent. Actlabs has automated this aspect of digestion using a microprocessor designed hotbox to accurately reproduce digestion conditions every time.

Hg add-on by cold vapour FIMS

Code 1G (5 ppb) add \$10.25

Assays

Package	Code 8 - 4 Acid ICP-OES	Code 8 - 4 Acid ICP-MS
Ag	3 ppm	1 - 10,000 ppm
Bi	-	0.0001 - 1 %
Cd	0.003 %	0.0001 - 1 %
Co	0.003 %	0.0001 - 1 %
Cu	0.001 %	0.0001 - 1 %
Li	0.001 %	-
Mo	0.003 %	0.0001 - 1 %
Ni	0.003 %	0.0001 - 1 %
Pb	0.003 %	0.0001 - 1 %
Se	-	0.0001 - 1 %
Sn	-	0.0001 - 1 %
Tl	-	0.0001 - 1 %
U	-	0.0001 - 1 %
Zn	0.001 %	0.0001 - 1 %
One Element	\$14.75	\$17.00
Each Additional Element	\$2.25	\$2.25
All Elements	\$20.50	\$22.75

Package	ICP-OES	ICP-MS		ICP-OES + ICP-MS	
	1F2	UT-4M	Ultratrace 4	Ultratrace 6	UT-6M
Ag	0.3 - 100 ppm	0.1 - 100 ppm	0.05 - 100 ppm	0.05 - 100 ppm	0.01 - 100 ppm
Al	0.01 - 50 %	0.01 - 20 %	0.01 - 10 %	0.01 - 10 %	0.01 - 50 %
As	3 - 5,000 ppm	1 - 10,000 ppm	0.1 - 10,000 ppm	0.1 - 10,000 ppm	0.2 - 10,000 ppm
B	-	-	20 - 6,000 ppm	-	-
Ba	7 - 1,000 ppm	1 - 10,000 ppm	1 - 5,000 ppm	1 - 5,000 ppm	10 - 10,000 ppm
Be	1 - 10,000 ppm	1 - 1,000 ppm	0.1 - 1,000 ppm	0.1 - 1,000 ppm	0.05 - 1,000 ppm
Bi	2 - 10,000 ppm	0.1 - 4,000 ppm	0.02 - 2,000 ppm	0.02 - 2,000 ppm	0.01 - 10,000 ppm
Ca	0.01 - 70 %	0.01 - 40 %	0.01 - 50 %	0.01 - 50 %	0.01 - 50 %
Cd	0.3 - 2,000 ppm	0.1 - 4,000 ppm	0.1 - 1,000 ppm	0.1 - 1,000 ppm	0.02 - 1,000 ppm
Ce	-	1 - 2,000 ppm	0.1 - 10,000 ppm	0.1 - 10,000 ppm	0.01 - 500 ppm
Co	1 - 10,000 ppm	0.2 - 4,000 ppm	0.1 - 500 ppm	0.1 - 500 ppm	0.1 - 10,000 ppm
Cr	1 - 10,000 ppm	1 - 10,000 ppm	1 - 5,000 ppm	1 - 5,000 ppm	1 - 10,000 ppm
Cs	-	0.1 - 10,000 ppm	0.05 - 100 ppm	0.05 - 100 ppm	0.05 - 500 ppm
Cu	1 - 10,000 ppm	0.1 - 10,000 ppm	0.2 - 10,000 ppm	0.2 - 10,000 ppm	0.2 - 10,000 ppm
Dy	-	-	0.1 - 5,000 ppm	0.1 - 5,000 ppm	-
Er	-	-	0.1 - 1,000 ppm	0.1 - 1,000 ppm	-
Eu	-	-	0.05 - 100 ppm	0.05 - 100 ppm	-
Fe	0.01 - 50 %	0.01 - 60 %	0.01 - 50 %	0.01 - 50 %	0.01 - 50 %
Ga	1 - 10,000 ppm	-	0.1 - 500 ppm	0.1 - 500 ppm	0.05 - 10,000 ppm
Gd	-	-	0.1 - 5,000 ppm	0.1 - 5,000 ppm	-
Ge	-	-	0.1 - 500 ppm	0.1 - 500 ppm	0.05 - 500 ppm
Hf	-	0.1 - 1,000 ppm	0.1 - 500 ppm	0.1 - 500 ppm	0.1 - 500 ppm
Hg	1	-	10 - 10,000 ppb	10 - 10,000 ppb	-
Ho	-	-	0.1 - 1,000 ppm	0.1 - 1,000 ppm	-
In	-	-	0.1 - 100 ppm	0.1 - 100 ppm	0.005 - 500 ppm
K	0.01 - 10 %	0.01 - 10 %	0.01 - 5 %	0.01 - 5 %	0.01 - 10 %
La	-	0.1 - 2,000 ppm	0.1 - 10,000 ppm	0.1 - 10,000 ppm	0.5 - 10,000 ppm
Li	1 - 10,000 ppm	0.1 - 2,000 ppm	0.5 - 400 ppm	0.5 - 400 ppm	0.2 - 10,000 ppm
Lu	-	-	0.1 - 100 ppm	0.1 - 100 ppm	-
Mg	0.01 - 50 %	0.01 - 30 %	0.01 - 50 %	0.01 - 50 %	0.01 - 50 %
Mn	1 - 100,000 ppm	1 - 10,000 ppm	1 - 10,000 ppm	1 - 10,000 ppm	5 - 100,000 ppm
Mo	1 - 10,000 ppm	0.1 - 4,000 ppm	0.05 - 10,000 ppm	0.1 - 10,000 ppm	0.05 - 10,000 ppm
Na	0.01 - 10 %	0.001 - 10 %	0.01 - 3 %	0.01 - 3 %	0.01 - 10 %
Nb	-	0.1 - 2,000 ppm	0.1 - 500 ppm	0.1 - 500 ppm	0.1 - 500 ppm
Nd	-	-	0.1 - 10,000 ppm	0.1 - 10,000 ppm	-
Ni	1 - 10,000 ppm	0.1 - 10,000 ppm	0.5 - 5,000 ppm	0.5 - 5,000 ppm	0.2 - 10,000 ppm
P	0.001 - 10 %	0.001 - 5 %	-	0.001 - 10 %	10 - 10,000 ppm
Pb	3 - 5,000 ppm	0.1 - 5,000 ppm	0.5 - 5,000 ppm	0.5 - 5,000 ppm	0.5 - 10,000 ppm
Pr	-	-	0.1 - 5,000 ppm	0.1 - 1,000 ppm	-
Rb	-	0.1 - 2,000 ppm	0.2 - 500 ppm	0.2 - 5,000 ppm	0.1 - 10,000 ppm
Re	-	-	0.001 - 100 ppm	0.001 - 100 ppm	0.002 - 50 ppm
S +	0.01 - 20 %	1 - 10 %	-	0.01 - 20 %	0.01 - 10 %
Sb	5 - 10,000 ppm	0.1 - 4,000 ppm	0.1 - 500 ppm	0.1 - 500 ppm	0.05 - 10,000 ppm
Sc	4 - 10,000 ppm	1 - 200 ppm	-	1 - 5,000 ppm	0.1 - 10,000 ppm
Se	-	-	0.1 - 1,000 ppm	0.1 - 1,000 ppm	1 - 1,000 ppm
Sm	-	-	0.1 - 100 ppm	0.1 - 100 ppm	-
Sn	-	0.1 - 2,000 ppm	1 - 200 ppm	1 - 200 ppm	0.2 - 500 ppm
Sr	1 - 10,000 ppm	1 - 10,000 ppm	0.2 - 10,000 ppm	0.2 - 1,000 ppm	0.2 - 10,000 ppm
Ta	-	0.1 - 2,000 ppm	0.1 - 1,000 ppm	0.1 - 1,000 ppm	0.05 - 100 ppm
Tb	-	-	0.1 - 100 ppm	0.1 - 100 ppm	-
Te	2 - 10,000 ppm	-	0.1 - 500 ppm	0.1 - 500 ppm	0.05 - 500 ppm
Th	-	0.1 - 4,000 ppm	0.1 - 500 ppm	0.1 - 500 ppm	0.2 - 10,000 ppm
Ti	0.01 - 10 %	0.001 - 10 %	-	0.0005 - 10 %	0.005 - 10 %
Tl	5 - 10,000 ppm	0.05 - 10,000 ppm	0.05 - 500 ppm	0.05 - 500 ppm	0.02 - 10,000 ppm
Tm	-	-	0.1 - 1,000 ppm	0.1 - 1,000 ppm	-
U	10 - 10,000 ppm	0.1 - 4,000 ppm	0.1 - 10,000 ppm	0.1 - 10,000 ppm	0.1 - 10,000 ppm
V	2 - 10,000 ppm	4 - 10,000 ppm	1 - 10,000 ppm	1 - 1,000 ppm	1 - 10,000 ppm
W	5 - 10,000 ppm	0.1 - 200 ppm	0.1 - 200 ppm	0.1 - 200 ppm	0.1 - 10,000 ppm
Y	1 - 1,000 ppm	0.1 - 2,000 ppm	0.1 - 10,000 ppm	0.1 - 10,000 ppm	0.1 - 500 ppm
Yb	-	-	0.1 - 5,000 ppm	0.1 - 5,000 ppm	-
Zn	1 - 10,000 ppm	1 - 10,000 ppm	0.2 - 10,000 ppm	0.2 - 10,000 ppm	2 - 10,000 ppm
Zr	5 - 10,000 ppm	0.1 - 2,000 ppm	1 - 5,000 ppm	1 - 5,000 ppm	0.5 - 500 ppm
Price:	\$17.00	\$21.25	\$24.00	\$35.00	\$28.50

Extraction of each element by 4-Acid Digestion is dependent on mineralogy + Sulphide sulphur and soluble sulphates are extracted

APPENDIX V

List of Claims

Table 3

TENURE_NUM	TITLE_TY_1	ISSUE_DATE	ANNIVERSARY	HOLDER
585409	Single Cell Mining Claim	2020-04-22 0:00	2022-04-22 0:00	(100) Gravel Ridge Resources Ltd.
585697	Multi-cell Mining Claim	2020-04-25 0:00	2022-04-21 0:00	(100) Gravel Ridge Resources Ltd.
585698	Multi-cell Mining Claim	2020-04-25 0:00	2022-04-21 0:00	(100) Gravel Ridge Resources Ltd.
597139	Multi-cell Mining Claim	2020-07-01 0:00	2022-07-01 0:00	(100) Gravel Ridge Resources Ltd.
597135	Multi-cell Mining Claim	2020-07-01 0:00	2022-07-01 0:00	(100) Gravel Ridge Resources Ltd.
597136	Multi-cell Mining Claim	2020-07-01 0:00	2022-07-01 0:00	(100) Gravel Ridge Resources Ltd.
597137	Multi-cell Mining Claim	2020-07-01 0:00	2022-07-01 0:00	(100) Gravel Ridge Resources Ltd.
597138	Multi-cell Mining Claim	2020-07-01 0:00	2022-07-01 0:00	(100) Gravel Ridge Resources Ltd.
597134	Multi-cell Mining Claim	2020-07-01 0:00	2022-07-01 0:00	(100) Gravel Ridge Resources Ltd.
599705	Multi-cell Mining Claim	2020-07-18 0:00	2022-07-18 0:00	(100) Gravel Ridge Resources Ltd.
547759	Single Cell Mining Claim	2019-04-07 0:00	2021-04-07 0:00	(100) Portofino Resources Inc.
547760	Single Cell Mining Claim	2019-04-07 0:00	2021-04-07 0:00	(100) Portofino Resources Inc.
547761	Single Cell Mining Claim	2019-04-07 0:00	2021-04-07 0:00	(100) Portofino Resources Inc.
547758	Single Cell Mining Claim	2019-04-07 0:00	2021-04-07 0:00	(100) Portofino Resources Inc.
547757	Single Cell Mining Claim	2019-04-07 0:00	2021-04-07 0:00	(100) Portofino Resources Inc.

APPENDIX VI

Daily Log

Table 4 Daily Log Gold Creek Project July, September & October 2020

Date	B. Maclachlan days	Prospecting	Soil Sampling	Other	Activities	C. Robertson days	Prospecting	Soil Sampling	Other	Activities
July-13-2020	1			Travel	Picked up supplies, drove to Shebandowan, checked out logging roads later in the day	1			Travel	Picked up supplies, drove to Shebandowan, checked out logging roads later in the day
July-14-2020	1	Prospecting			Prospecting in the eastern portion of the property	1	Prospecting			Prospecting in the eastern portion of the property
July-15-2020	1	Prospecting			Prospecting in and around the AF Zone	1	Prospecting			Prospecting in and around the AF Zone
July-16-2020	1	Prospecting			Prospecting east and west of yesterday	1	Prospecting			Prospecting east and west of yesterday
July-17-2020	1	Prospecting			Prospecting in the southeastern portion of the property	1	Prospecting			Prospecting in the southeastern portion of the property
September-21-2020	0.5			Travel	Drive Marathon to Thunder Bay	0.5			Travel	Drive Marathon to Thunder Bay
September-23-2020	1			Organize gear	Prepare for field work, get gear ready etc.	1			Organize gear	Prepare for field work, get gear ready etc.
September-24-2020	1			Travel	Picked up supplies, drove to Shebandowan	1			Travel	Picked up supplies, drove to Shebandowan
September-25-2020	1	Prospecting			Checked out access along logging roads and trails, start prospecting	1	Prospecting			Checked out access along logging roads and trails, start prospecting
September-26-2020	1	Prospecting			Drove the ATV towards Target B, prospected further west	1				Drove the ATV towards Target B, prospected further west
September-27-2020	1	Prospecting			Prospecting in the western portion of the property	1				Prospecting in the western portion of the property
September-28-2020	1			Look at the I-Zone	Rain day, then checked out the I-Zone Target area	1			Look at the I-Zone	Rain day, then checked out the I-Zone Target area
September-29-2020	1			Rain day	Rain all day, organize data and maps for field work	1			Rain day	Rain all day, organize data and maps for field work
September-30-2020	1	Prospecting			Prospecting Target D	1	Prospecting			Prospecting Target D
October-01-2020	1	Prospecting			Sampling southeast of yesterday	1	Prospecting			Sampling southeast of yesterday
October-02-2020	1	Prospecting			Sampling at the I-Zone, prospecting the western portion of the I-Zone Target Area	1	Prospecting			Sampling at the I-Zone, prospecting the western portion of the I-Zone Target Area
October-03-2020	1	Prospecting			Prospecting at Target C	1	Prospecting			Prospecting at Target C
October-04-2020	1	Prospecting			Prospecting western portion of Target C & west of Target D	1	Prospecting			Prospecting western portion of Target C & west of Target D
October-05-2020	1	Prospecting			Prospecting at Target C	1	Prospecting			Prospecting at Target C
October-06-2020	1	Prospecting			Prospecting at Target D	1	Prospecting			Prospecting at Target D
October-07-2020	1	Prospecting			Dropped off by helicopter at two locations	1	Prospecting			Dropped off by helicopter at two locations
October-08-2020	1			Sampling	Sampling the western end of the I-Zone	1			Sampling	Sampling the western end of the I-Zone
October-09-2020	1	Prospecting			Prospecting along the S-1 Zone	1	Prospecting			Prospecting along the S-1 Zone
October-10-2020	1			Drive to Thunder Bay	Organizing gear, drop samples off at the lab	1			Drive to Thunder Bay	Organizing gear, drop samples off at the lab
October-11-2020	0				n/a	1			Enter data	Entering data
Total Days	23.5	16	0	7.5		24.5	16	0	8.5	

APPENDIX VII


Photos

AS27875



A photograph of a geological specimen AS27.883. The specimen is a light-colored, crystalline rock fragment with some darker inclusions, resting on a white plastic label. The label is placed on a bed of dark grey and brown rocks. A geological hammer with a wooden handle and a metal head is positioned vertically on the left side of the image. The background consists of a dense layer of dry pine needles and small rocks. A pink ribbon is tied around one of the specimen fragments.

AS27.883

A geological hammer with a wooden handle and a metal head is positioned vertically on the left side of the image. The hammer head is at the top, and the handle extends downwards. The hammer is resting on a surface covered with brown, dried leaves and small rocks. In the center of the image, a white plastic bag is partially open, revealing a small, irregularly shaped rock sample. The rock sample is light-colored with some darker, possibly mineral, inclusions. To the right of the rock sample, a white paper tag is attached to the bag with the handwritten text "A685601". Below the white bag, there is a pile of larger, light-colored rock fragments. One of these fragments is wrapped with a bright pink plastic strip, and a small pink tag with the handwritten text "A68" is attached to it. The background consists of a dense layer of brown, dried leaves and small rocks, suggesting a field or outdoor setting. The overall scene is a close-up view of geological fieldwork.

A685601

A68



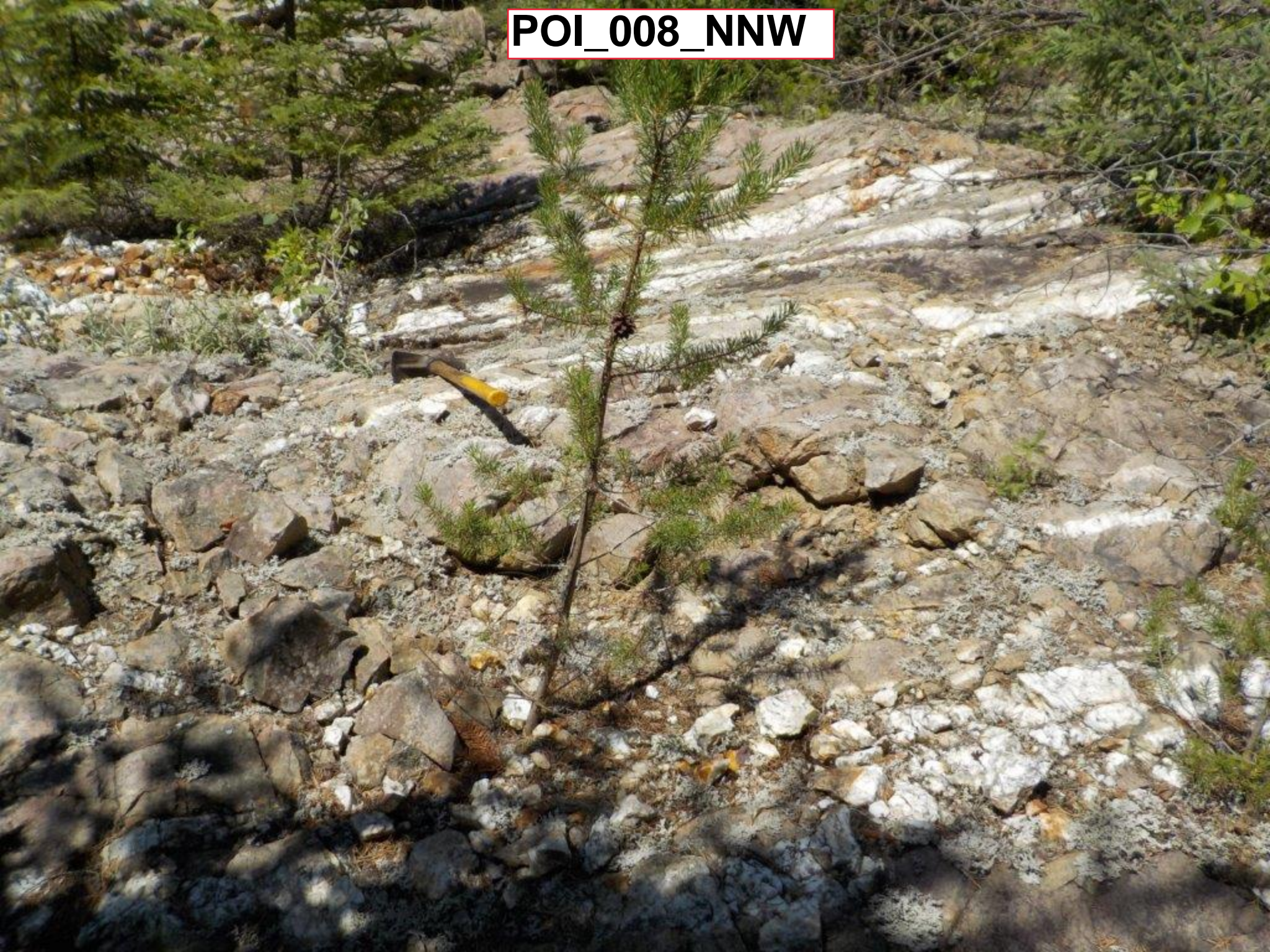
A685612

A685770

A685770



POI_008_NNW



POI_008_pyrite_2



POI_008_SE



POI_008_SE_2



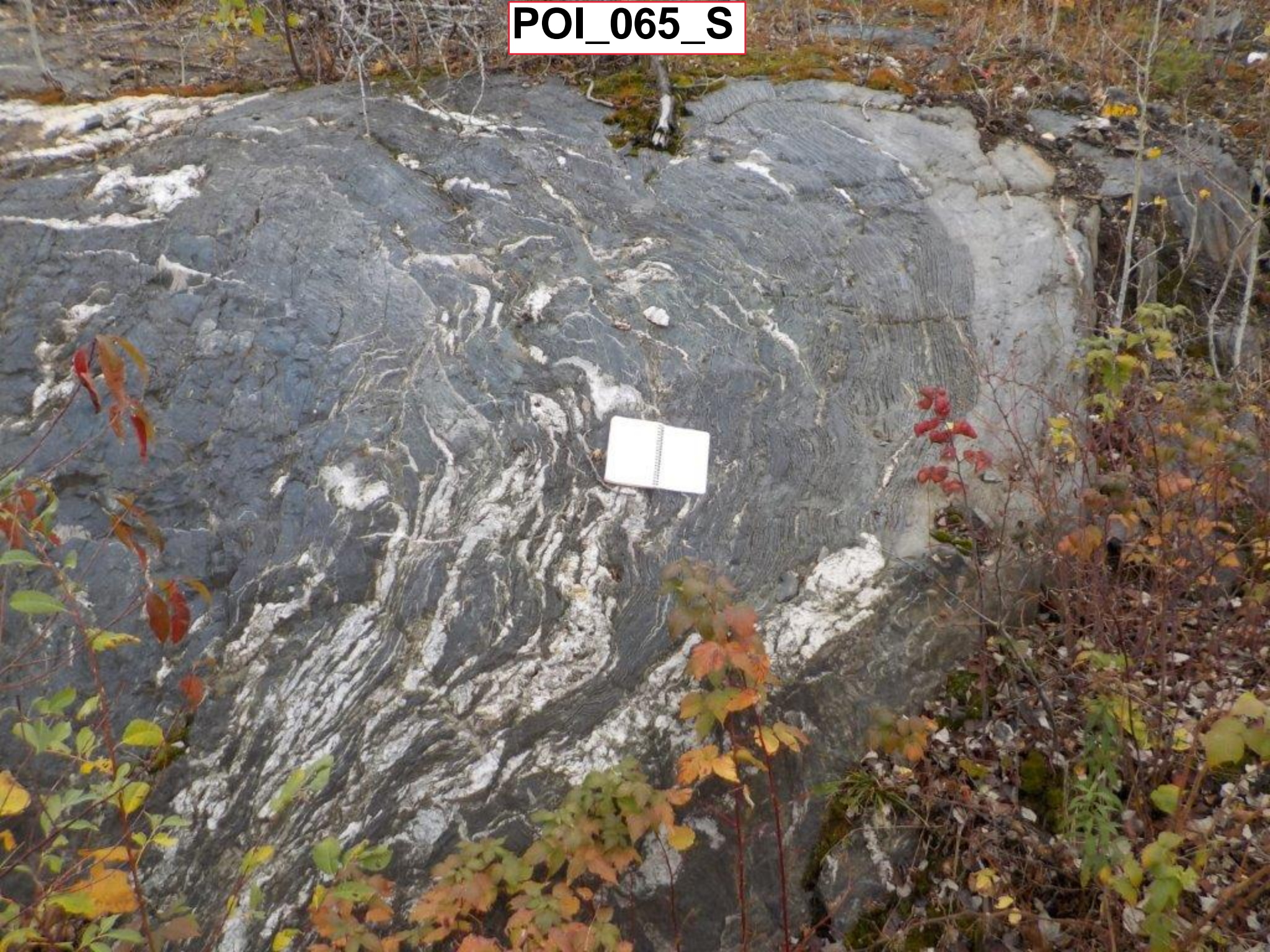
POI_050_E



POI_064_ESE



POI_065_S



POI_069_close1_SE



POI_076_W



POI_082_SSW

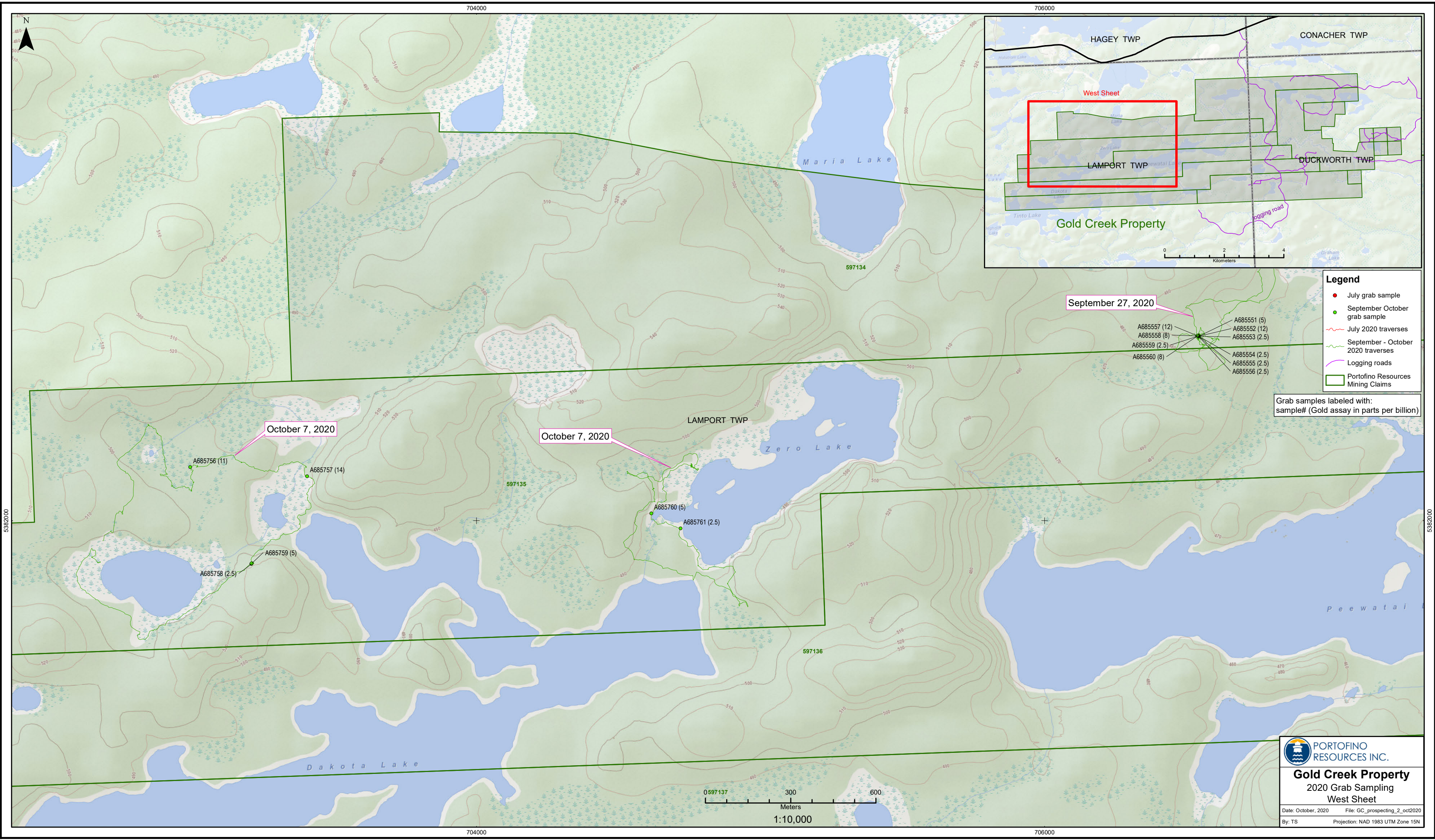


Gold Creek Logging Road



APPENDIX XIII

Map Sheets



September 27, 2020

October 7, 2020

October 7, 2020

- A685557 (12)
- A685558 (8)
- A685559 (2.5)
- A685560 (8)
- A685551 (5)
- A685552 (12)
- A685553 (2.5)
- A685554 (2.5)
- A685555 (2.5)
- A685556 (2.5)

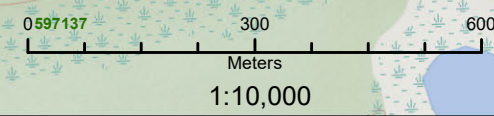
- Legend**
- July grab sample
 - September October grab sample
 - July 2020 traverses
 - September - October 2020 traverses
 - Logging roads
 - ▭ Portofino Resources Mining Claims

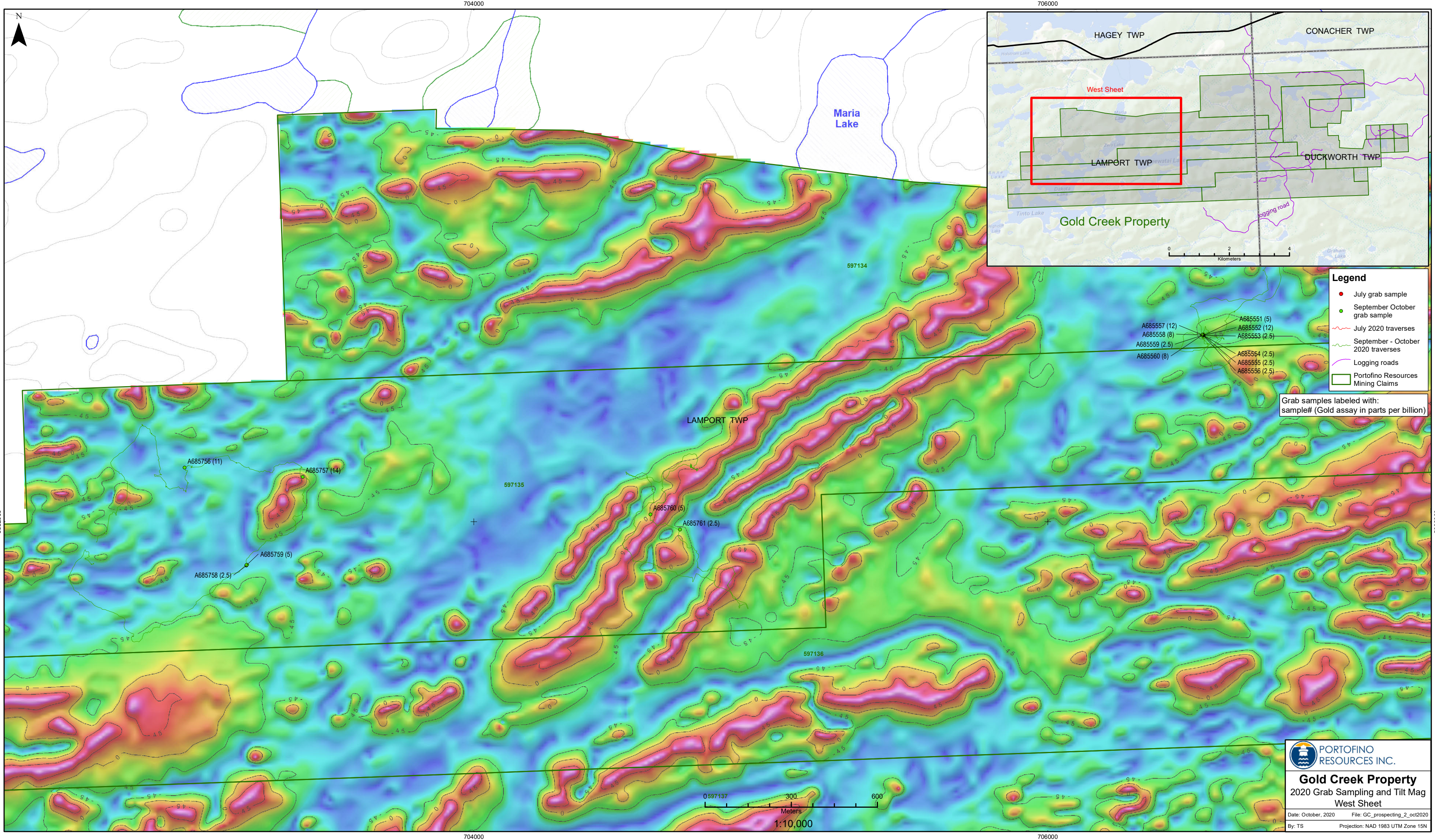
Grab samples labeled with:
sample# (Gold assay in parts per billion)

PORTOFINO RESOURCES INC.

Gold Creek Property
2020 Grab Sampling
West Sheet

Date: October, 2020 File: GC_prospecting_2_oct2020
By: TS Projection: NAD 1983 UTM Zone 15N





Maria Lake

HAGEY TWP

CONACHER TWP

West Sheet

LAMPONT TWP

DUCKWORTH TWP

Gold Creek Property



- Legend**
- July grab sample
 - September October grab sample
 - July 2020 traverses
 - September - October 2020 traverses
 - Logging roads
 - Portofino Resources Mining Claims

Grab samples labeled with:
sample# (Gold assay in parts per billion)

A685756 (11)

A685757 (14)

A685758 (2.5)

A685759 (5)

A685760 (5)

A685761 (2.5)

A685557 (12)

A685558 (8)

A685559 (2.5)

A685560 (8)

A685551 (5)

A685552 (12)

A685553 (2.5)

A685554 (2.5)

A685555 (2.5)

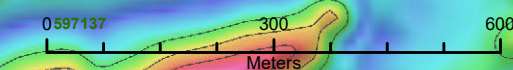
A685556 (2.5)

LAMPONT TWP

597135

597134

597136



1:10,000

PORTOFINO RESOURCES INC.

Gold Creek Property
2020 Grab Sampling and Tilt Mag
West Sheet

Date: October, 2020 File: GC_prospecting_2_oct2020
By: TS Projection: NAD 1983 UTM Zone 15N

Program Expenditures												
Portofino Resources												
Project: Gold Creek												
Expenditure Item	Date From	Date To	No of Units	Unit cost	Total Item Cost (incl. HST/GST)	HST/GST	Net Item Cost NO HST/GST	Invoice#	Supplier	Portofino Claims	Gravel Ridge Claims	
Labour												
Prospecting	1-Jul-20	31-Jul-20	5	\$1,075.00	\$5,375.00	\$698.75	\$6,073.75	729	Emerald Geological Services			
Prospecting	21-Sep-20	30-Sep-20	6	\$1,075.00	\$6,450.00	\$838.50	\$7,288.50	747	Emerald Geological Services			
Prospecting	1-Sep-20	31-Oct-20	10	\$1,075.00	\$10,750.00	\$1,397.50	\$12,147.50	750	Emerald Geological Services			
Subtotal					\$22,575.00	\$2,934.75	\$25,509.75			\$5,456.38	\$17,118.62	
Analytical (List lab and CoA number. Insert rows as required)												
A20-07954	20-Jul-20	5-Aug-20	1	\$3,450.10	\$3,450.10	\$448.51	\$3,898.61	A20-07954	ActLabs			
A20-12232	5-Oct-20	3-Nov-20	1	\$3,398.13	\$3,398.13	\$441.76	\$3,839.89	A20-12232	ActLabs			
A20-12619	5-Oct-20	3-Nov-20	1	\$5,186.90	\$5,186.90	\$674.30	\$5,861.20	A20-12619	ActLabs			
A20-13449	27-Oct-20	10-Nov-20	1	\$100.00	\$100.00	\$13.00	\$113.00	A20-13449	ActLabs			
A20-15191	26-Nov-20	8-Jan-21	1	\$858.60	\$858.60	\$111.62	\$970.22	A20-15191	ActLabs			
A21-00419	8-Jan-21	1-Feb-21	1	\$375.75	\$375.75	\$48.85	\$424.60	A21-00419	ActLabs			
Subtotal					\$13,369.48	\$1,738.03	\$15,107.51			\$3,231.40	\$10,138.08	
Personal Transportation (getting personnel to and from site)												
Mileage	1-Jul-20	31-Jul-20	808	\$0.80	\$646.40	\$84.03	\$730.43	729	Emerald Geological Services			
Travel	21-Sep-20	30-Sep-20	1.5	\$1,075.00	\$1,612.50	\$209.63	\$1,822.13	747	Emerald Geological Services			
Mileage	21-Sep-20	30-Sep-20	967	\$0.80	\$773.60	\$100.57	\$874.17	747	Emerald Geological Services			
Mileage	1-Sep-20	31-Oct-20	1324	\$0.80	\$1,059.20	\$137.70	\$1,196.90	750	Emerald Geological Services			
Helicopter	1-Oct-20	15-Nov-20	2.9	\$1,500.00	\$4,350.00	\$565.50	\$4,915.50	755	Emerald Geological Services			
Helicopter	1-Oct-20	15-Nov-20	1	\$26.00	\$26.00	\$3.38	\$29.38	755	Emerald Geological Services			
Subtotal					\$8,467.70	\$1,100.80	\$9,568.50			\$2,046.64	\$6,421.06	
Contractor Mob deMob												

