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# JEAN GOLD PROJECT OUTCROP MAPPING AND SAMPLING REPORT

Coucheemoskog Lake Area, Little Ochig Lake Area Patricia Mining District NW Ontario

NTS: 520/08B



# Prepared for:

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# **Summary**

The Property is situated within the Meen-Dempster greenstone belt of the Archean age Uchi Subprovince in northwest Ontario. The Uchi Subprovince is richly endowed with over 62 million ounces of gold. This includes over 38 million ounces of past production at 5-15 g/t gold and over 24 million ounces of gold in resources and reserves.

The Uchi Subprovince extends for over 800 km from Bisset in the Province of Manitoba, through Red Lake and Pickle Lake in the Province of Ontario. Ardiden Limited is focused on under-explored parts of the central Uchi near established towns that are serviced by all-weather highways. This Property is one of these areas of interest.

Ardiden Limited (Ardiden) sent up to three personnel (Project Geologist, Project Manager, and Exploration Manager) to perform outcrop mapping and sampling on an exposed roadcut on the Jean Property (Property). Additional outcrop identification was conducted during the summer months. Work was performed on three occasions: Nov 14–17 2021, Dec 3–7 2021, and June 28-29, 2022. A total of 24 field samples were collected from claim 574819 (Provincial Grid Cell No. 52008B164) to assist in developing a brief snapshot of a potential local controls on gold mineralisation and may assist in conducting further field programs and drilling.

Objectives of the mapping and sampling program are to:

- Record and map local structural trends and features
- Test noteworthy structures and veins for the presence of gold
- Define alteration zones within the outcropping rocks

The results for the sampling and mapping have shown gold in concentrations above crustal abundance. Additional work is required to understand the nature of present mineralisation, and whether it has the potential to appear in concentrations of economic interest. Although no significant results of Au mineralisation were recorded in the assays of this small program, the presence of sulphide mineralisation, and large structural shear zones warrants further investigation on the property.

All units in the report are in the SI system and all co-ordinates use the Universal Transverse Mercator with a datum of NAD83 in Zone 15N.

# Introduction

The Property offers significant gold discovery potential between Red Lake and Pickle Lake, Ontario within the richly endowed and under-explored Uchi Subprovince.

Ardiden conducted a brief mapping and sampling program at the Property near Pickle Lake, Ontario. A total of 24 field samples were collected as part of a brief exploratory mapping program to evaluate local structural trends and potential for gold mineralisation.

The mapping and sampling forms part of an early-stage exploration and due diligence program to evaluate mineralisation potential in very accessible zones close to highway 599 and regionally proximal to the major gold and base metal occurrences of Thierry Mine, Central Patricia, and Dona Lake. Past drilling, mapping, geophysical, and geochemical work on or including the Property was performed in the 1980s by Geocanex Ltd., Power Explorations Inc., Sunburst Exploration Ltd., Moss Resources Ltd., and the Ontario Geological Survey; and in the 1970s by UMEX and Inco.

Gold mineralisation in the region occurs within structurally controlled vein-type deposits or sulphide replacement bodies associated with magnetite which was historically was called 'iron formation'.

The Project consists of a contiguous block of 96 mineral claims totalling 19.39 km² situated in the Jean Lake Area.

Portions of this report have been copied from the NI 43-101 Technical Report titled "Technical Report on Three Gold Exploration Properties Pickle Lake Area, Ontario, Canada for Manicouagan Minerals Inc." written by G.A. Harron & Associates Inc. and dated August 31, 2009, and the Technical Report titled "Work Report of the 2010-2012 Exploration Activities, Dona Lake Project Pickle Lake Area, Ontario" written by Bruce Mackie Geological Consulting Services and dated September 2012.

# **Terms of Reference**

This Report was prepared in conjunction with and at the request of Ardiden for the purpose of filing assessment work as required under the Ontario Mining Act.

Map projections are in UTM, North American Datum 83, Zone 15 and all referenced UTM coordinates are in metres in this project unless stated otherwise. Contractions are "mm" = millimetre, "cm" = centimetre, "m" = metres, "km" = kilometres, "g" = gram, "kg" = kilogram, "in" = inch, "ft" = foot, "lb" = pound, "oz" = troy ounce, "oz/ton" = troy ounce per short ton, "g/t" is grams per metric tonne, and "ddh" = diamond drill hole.

# Disclaimer

The writer/s disclaims responsibility for portions of the current report that rely on information from historic assessment files and government maps and reports which may not have been prepared in compliance with modern standards.

# **Property Location and Description**

The Property is located in the Patricia Mining District in Northwestern Ontario approximately 23 kilometres south of the town of Pickle Lake (Figure 1), and directly bordering the Mishkeegogamang First Nation Community of New Osnaburgh. The geographic centre of the property is located at 69701mE, 5687791mN (UTM, Zone 15, NAD83). The project covers portions of National Topographic Sheet (NTS) 520/08.



Figure 1- Property Location Map (Natural Resources Canada, 2002)

As of the date of this report, the Project consists of a contiguous block of 96 mining claims totalling 1939.19 Ha (Table 1). The Project is part of a larger land package, the Pickle Lake Properties, held by Ardiden Limited known as the Pickle Lake Gold Project (Figure 2).

Table 1 – Jean Project Mineral Claims Cell Information

Area	Tenure ID	Cell ID	Tenure Type	Anniversary Date	Holder
COUCHEEMOSKOG LAKE AREA	574692	52O08B011	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574693	52O08B012	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574694	52O08B013	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574695	52008B030	SCMC	2023-02-02	100% (412507) ARDIDEN LTD

Area	Tenure ID	Cell ID	Tenure Type	Anniversary Date	Holder
COUCHEEMOSKOG LAKE AREA	574696	52O08B031	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574697	52O08B032	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574698	52O08B033	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574699	52O08B049	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574700	52O08B050	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574701	52O08B051	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574702	52O08B052	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574703	52O08B069	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574704	52O08B070	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574705	52O08B071	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574706	52O08B072	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574707	52O08B089	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574708	52O08B090	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574709	52O08B110	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574710	52008G340	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574711	52008G355	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574712	52008G356	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574713	52008G357	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574714	52008G358	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574715	52008G359	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574716	52008G360	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574717	52008G374	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574718	52008G375	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574719	52008G393	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574720	52008G394	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574721	52008G395	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574730	52008H264	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574734	52008H282	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574735	52008H283	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574736	52008H284	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574737	52008H301	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574738	52008H302	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574739	52008H321	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574740	52008H322	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574741	52008H341	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574792	52O08B048	SCMC	2023-02-02	100% (412507) ARDIDEN LTD

Area	Tenure ID	Cell ID	Tenure Type	Anniversary Date	Holder
COUCHEEMOSKOG LAKE AREA	574793	52O08B067	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574794	52O08B068	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574795	52O08B085	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574796	52O08B086	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574797	52O08B087	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574798	52O08B088	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574799	52008B104	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574800	52O08B105	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574801	52O08B106	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574802	52008B107	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574803	52O08B108	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574804	52O08B109	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574805	52O08B124	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574806	52O08B125	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574807	52O08B126	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574808	52O08B127	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574809	52O08B128	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574810	52O08B129	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574811	52008B144	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574812	52O08B145	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574813	52O08B146	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574814	52O08B147	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574815	52O08B148	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574816	52O08B149	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574817	52O08B150	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574818	52O08B163	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574819	52O08B164	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574820	52O08B165	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574821	52O08B166	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574822	52O08B167	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
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COUCHEEMOSKOG LAKE AREA	574824	52008B169	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574825	52008B170	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574826	52008B183	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574827	52008B184	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574828	52O08B185	SCMC	2023-02-02	100% (412507) ARDIDEN LTD

Area	Tenure ID	Cell ID	Tenure Type	Anniversary Date	Holder
COUCHEEMOSKOG LAKE AREA	574829	52008B186	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574830	52O08B187	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574831	52O08B188	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574832	52O08B189	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574833	52O08B190	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574834	52O08B203	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574835	52O08B204	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574836	52O08B205	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574837	52O08B206	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574838	52O08B207	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574839	52O08B208	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574840	52O08B209	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574841	52O08B210	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574864	52O08B123	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA, LITTLE OCHIG LAKE AREA	574865	52008B141	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574866	52O08B142	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574867	52O08B143	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA, LITTLE OCHIG LAKE AREA	574868	52008B161	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA	574869	52008B162	SCMC	2023-02-02	100% (412507) ARDIDEN LTD
COUCHEEMOSKOG LAKE AREA, LITTLE OCHIG LAKE AREA	574870	52008C180	SCMC	2023-02-02	100% (412507) ARDIDEN LTD

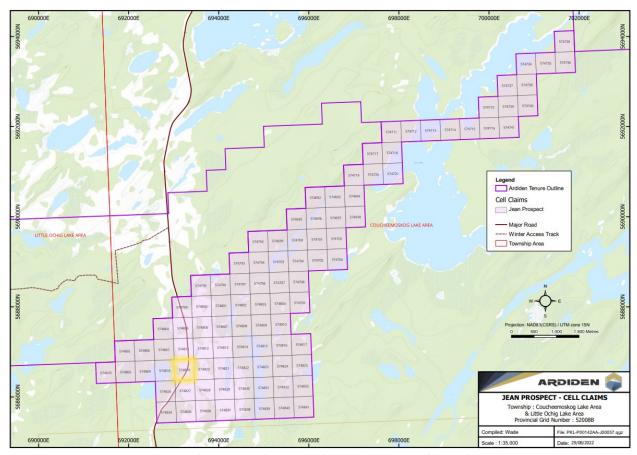


Figure 2 – Regional Location and Access to the Jean Project, Coucheemoskog Lake Area

# **Access Infrastructure and Resources**

The Project is located within the Mishkeegogamang First Nations traditional lands. The property falls within the taa shi kay win land use planning area.

This property is accessible by year-round access via Provincial Road 599, which runs between Ignace and Pickle Lake (Figure 2). Ardiden has utilised this road to complete the sampling and mapping work as described within the report.

The villages of Pickle Lake and neighbouring Central Patricia are the centre of commercial activity in the area. Amenities available in these villages include groceries, fuel, telecommunications, hotel accommodation, and regular charter aircraft services to Thunder Bay. The major population centre in the area is Thunder Bay, 235 km southeast of Ignace. This city provides significant cultural, social, commercial, educational, and medical facilities in Northwestern Ontario. Goods and services relevant to minerals exploration and mine production are readily available in Thunder Bay.

# Climate and Physiography

Elevations on the Project are generally within a 20 m range from 390 m to 410 m above sea level. The prevailing climatic conditions are typical of the northern Boreal Forest, with cold winter months and warm summer months lasting from June through September. Weather conditions allow exploration activities such as diamond drilling and geophysical surveys to be conducted year-round.

# **Geological Setting**

#### **Regional Geology**

The Project is located in the western part of the Pickle Lake Greenstone Belt situated within the Uchi Domain, located in the southern part of the North Caribou Terrane which in turn lies within the Uchi Subprovince of the Canadian Shield (Figure 3).

The Uchi Domain represents an area where significant Neoarchean volcanism and tectonism resulted in the production of new continental crust both prior and synchronous to collision with the Winnipeg River Terrane to the south. As a result, the Uchi Domain comprises Neoarchean volcanic dominated supracrustal rock sequences, locally significant sedimentary rock accumulations and associated plutons that were built upon, or adjacent to the earlier Mesoarchean crust.

The "Pickle Lake Greenstone Belt" has been divided by previous workers in the past into a western portion, the Meen-Dempster Greenstone Belt ("M-DGB") and an eastern portion, the Pickle Lake ("PLGB") Greenstone Belt. This two-fold subdivision will be kept for the description below.

The Pickle Crow Assemblage is the oldest (>2860 Ma) lithologic sequence identified in the two greenstone belts. It is composed of mainly massive to pillowed basalt intercalated with thin laterally continuous banded iron formation and small discontinuous lenses of intermediate volcanic rocks. All of these lithologies are intruded by quartz-feldspar porphyry sills, and mafic to ultramafic intrusions. The Pickle Crow Assemblage is interpreted as being deposited in a back-arc to emergent arc setting prior to ~2860 Ma. The isotopically enriched tholeiitic lower sequence may represent deposition on or near a thinned or juvenile continental margin. The compositionally diverse rocks of the upper sequence are interpreted as originating in a transitional arc to back-arc setting.

Rocks of the overlying Kaminiskag Assemblage (2842-2836 Ma) have been identified along the northern margin of the M-DGB and along the south-eastern margin of the PLGB. Similar to the Pickle Crow Assemblage, massive to pillowed basalt lithologies dominate, and at least two interflow banded iron formations are also present. In the M-DGB the Kaminiskag Assemblage also includes a number of thin discontinuous units of dacite to rhyolitic tuff, whereas in the PLGB the felsic unit is thicker and continuous over 8 km.

The Kaminiskag Assemblage is characterized by LREE depleted tholeiitic basalt and calc-alkaline dacite to rhyolite with radiogenic Nd isotopic compositions. These petrochemical characteristics are typical of immature Archean arc related rocks that occur in younger convergent margin settings.

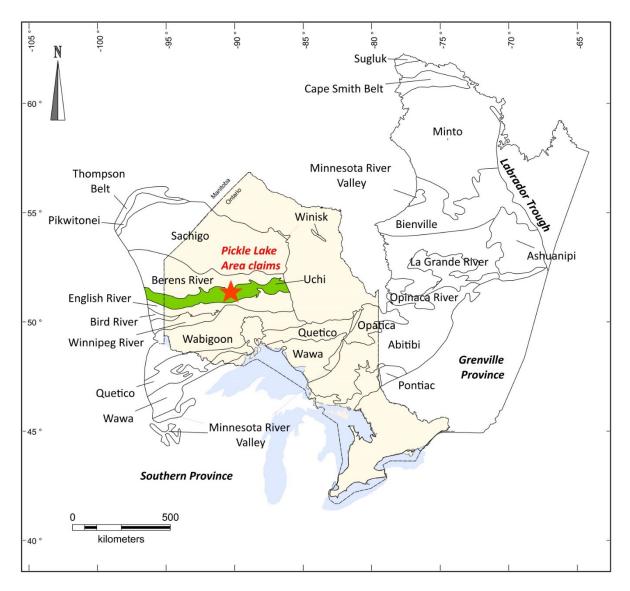


Figure 3 – Geological Subprovinces

The Meen Assemblage (2825 Ma) occurs exclusively in the M-DGB. This assemblage faces southwest, immediately overlying rocks of the Kaminiskag Assemblage and underlying a sequence of Confederation Assemblage rocks that are located to the southwest. The Meen Assemblage occurs as a tabular sheet with a 40 km strike length composed of monolithic pyroclastic rocks that are dominantly dacitic in composition with minor rhyolite. The upper portion of the assemblage locally contains sedimentary rocks (chert, marble, arenite, and pyrite-graphite schist).

Confederation Assemblage rocks (2744-2730 Ma) are found in both the M-DGB and the PLGB. Most of the northeast portion of the Confederation Assemblage is composed of intercalated mafic and intermediate volcanic rocks, which are best exposed in the south-eastern part of the PLGB, where the facing direction is to the southeast. In the eastern part of the PLGB the basal contact of the Confederation Assemblage with the underlying Pickle Crow assemblage is marked by abundant fragmental rocks. In the M-DGB the Confederation Assemblage consists of two bimodal volcanic cycles. Each cycle is composed of pillowed to massive volcanic

flows overlain by dacitic pyroclastic rocks. One of these cycles can be correlated between the M-DGB and the PLGB.

## Geology of the Pickle Lake Greenstone Belt

The PLGB is an approximately 70 km long by 25 km wide area of supracrustal rocks and internal granitoid plutons surrounded by large granitoid batholiths (Figure 4). The supracrustal rocks have been deformed and metamorphosed to greenschist facies with amphibolite facies occurring as thermal areoles surrounding younger plutons. A recent revised interpretation of the regional geology forms the basis of the following description of the PLGB.

The PLGB is subdivided into three (tectono-stratigraphic) assemblages (Pickle Crow, > 2860 Ma; Kaminiskag, ~2836 Ma; and Confederation ~2744 Ma). The northwest-facing Pickle Crow Assemblage dominates the Northwestern part of the PLGB. It comprises mainly massive to pillowed basalt flows intercalated with thin laterally continuous banded iron formation and small discontinuous lenses of intermediate volcanic rocks, all of which are intruded by semi-concordant quartz-feldspar porphyry dykes of various ages. On the basis of geochemical characteristics, the Pickle Crow Assemblage can be subdivided into a lower and an upper sequence. The lower sequence consists of tholeitic basalt and rare calc-alkaline andesite which is spatially associated with iron formation. The upper sequence also consists of tholeitic basalt intercalated with rare lenses of calc-alkaline andesite to dacite but is distinguished from the lower sequence by a centrally located alkaline basalt unit.

Rocks of the PLGB are affected by three episodes of folding and regional metamorphism.

The McCullah Creek-First Loon Lake area of the PLGB is underlain by supracrustal rocks of three distinct tectonostratigraphic assemblages (Pickle Crow, Confederation and Kaminiskag).

The northern portion of the PLGB is underlain by a northeast-striking sequence of supracrustal rocks defined as the Pickle Crow Assemblage (Figure 4). This assemblage is dominated by massive and pillowed mafic volcanic flows with subordinate gabbroic sills. The mafic volcanic rocks are intercalated with thin laterally continuous banded iron formation and small discontinuous lenses of intermediate volcanic rocks. All lithologies are intruded by semi concordant feldspar porphyry dykes. Stratigraphy generally faces toward the northwest, except in areas of asymmetric folding. The minimum age of this assemblage is estimated to be 2860 Ma.

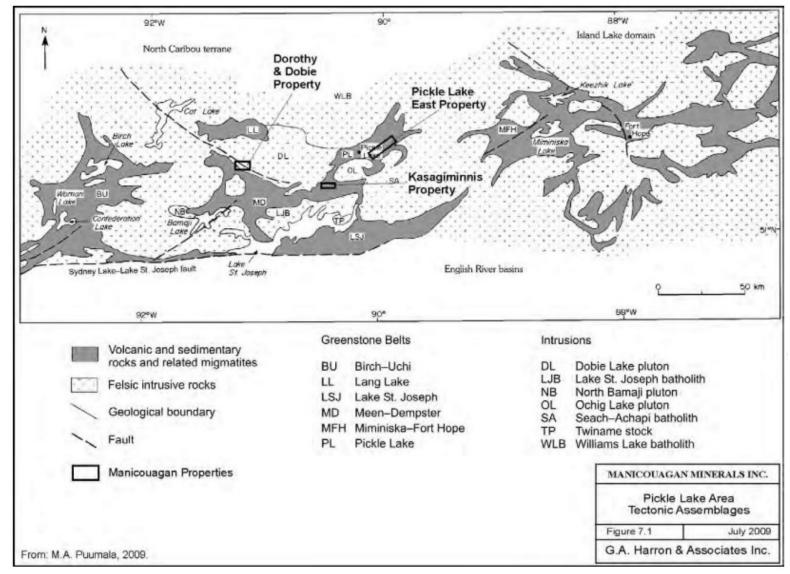


Figure 4 – Pickle Lake Area Tectonic Assemblages (Herron, 2009)

Rocks of the Kaminiskag Assemblage (circa 2836 Ma) outcrop to the southeast of the Confederation Assemblage. The Kaminiskag Assemblage is dominated by mafic volcanic flows, with significant layers of felsic to intermediate volcanic ash flows. The mafic volcanic rocks are generally strongly foliated massive amphibolites, although minor amounts of ultramafic material have been reported. Minor amounts of banded iron formation are interbedded with the mafic volcanic rocks and thin layers of fine-grained clastic sediments are locally interbedded with the felsic to intermediate volcanic rocks. The main felsic to intermediate volcanic unit is a quartz-phyric dacite tuff that can be traced over a strike length of 8 km. This unit locally contains thin pyrrhotite rich massive sulphide lenses in chert.

The Kaminiskag Assemblage is bounded to the southeast by granitic rocks of the Second Loon pluton, which imposes a contact strain and metamorphic aureole upon the adjacent supracrustal rocks. Generally, stratigraphy and foliation in the area are sub parallel, strike northeast and dip steeply to the northwest.

Strongly deformed rocks that exhibit extensive silica and carbonate alteration occur in the Northwestern portion of the area, near the Kawinogans River. This deformation zone extends toward the southwest into the Pickle Crow Mine area. This deformation event may also be linked to the creation of the anticline-syncline pair in the Central Patricia and Pickle Crow areas. Axial surfaces strike southwest and dip steeply to the northwest, with moderate to steep northeast- plunging hinge lines.

The boundary between the Confederation (2744 Ma) and the Pickle Crow (2860 Ma) Assemblages has been interpreted to occur northeast of First Loon Lake. A major structural discontinuity separates an "S" fold from a sequence of less deformed lithologies to the southeast, and south facing directions indicate Confederation Assemblage lying unconformably on Pickle Crow Assemblage rocks.

#### Jean Project Geology

The general geology of the Pickle Lake area is best documented by Young et al (2006). The Property is underlain primarily by the Confederation Assemblage, with rocks of the Pickle Crow Assemblage brushing the very north edge of the Property. These groups of rocks have been intruded by diabase, diorite, and lamprophyre dykes. In the Property area, volcanic rocks of the Pickle Crow Assemblage have been intruded by two late granitic stocks known as the Ochig Lake Pluton and Quarrier Tonalite Gneiss Intrusion (Figure 5).

The Ochig Lake Stock (~2741 Ma) is a large intrusive body. It consists of homogenous granodiorite to trondhjemite. This stock primarily exists in the northern portion of the Property.

The Project is located near the contact of the Pickle Crow Assemblage and consists of intercalated mafic to intermediate volcanic rocks. The bulk of this assemblage occurs across the property with the assemblage being deposited unconformably on the overturned Pickle Crow Assemblage to the north. The Dempster-Pickle Lake greenstone belt which trends roughly east-west and joins the Pickle Lake belt to the east, and the Meen-Dempster Lakes belt to the west. The Project is underlain by a complex sequence of southward younging mafic-to-intermediate flows, mafic-to-felsic pyroclastics, sediments and iron formation. This sequence has been intruded by numerous small gabbroic bodies, granite pegmatite dykes and minor felsite dykes. The portion of the belt exposed on the property has been compressed between two intrusive bodies, the Ochig Lake Pluton and Quarrier Tonalite Gneiss Intrusion, to the east and west respectively, resulting in a narrowing of the belt to approximately three kilometres in width. High angle faults, interpreted from geological and geophysical data, crosscut the volcano-sedimentary sequence and trend northeast-southwest and northwest-southeast. Pervasive shearing and small-scale folding are probably related to a regional tectonic event in the western region of the property.

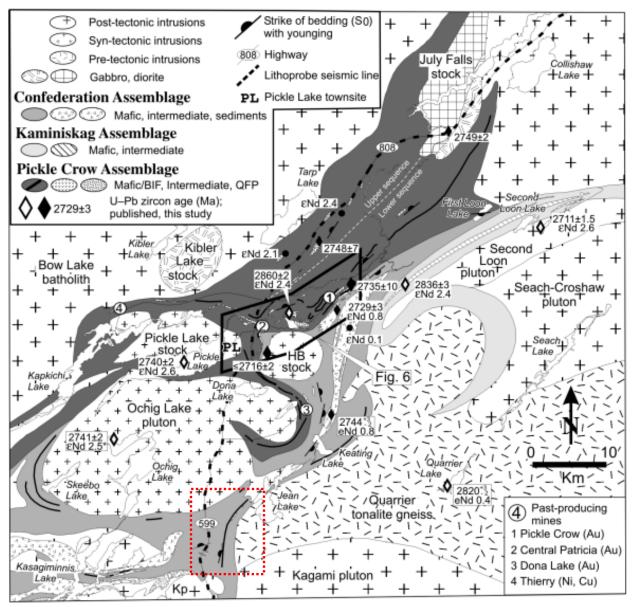


Figure 5 – Jean Lake Project (red dashed area) and Regional Geology (Young et al, 2006)

The Jean Lake Project is underlain by the Confederation Assemblage of the Pickle Lake greenstone belt. The nearby formerly producing Dona Lake mine is located within the Pickle Crow Assemblage, near the contact with the Confederation Assemblage.

# **Deposit Type**

The nearest deposit of significance in the Confederation formation is the Kasagiminnis deposit, towards the southeast. The following description of the Kasagiminnis deposit is from Janes, Seim, and Storey (1989), based largely on previous work conducted by Moss Resources and Power Explorations Inc. between 1985 and 1988.

The Kasagiminnis Lake prospect is situated within a 1.6 km wide east-trending segment of greenstone belt sandwiched between the Kasagiminnis Lake Pluton to the north and the Carting Lake Batholith to the south. The segment of greenstone belt consists of a sequence of south-facing, slightly overturned, mafic metavolcanic flows interlayered with mafic-to felsic pyroclastics, metasediments, and lean oxide-facies iron formation with possible local silicate-facies iron formation. Gabbroic amphibolites, pegmatites, and the occasional felsic dyke are intrusive to the volcanic-sedimentary sequence.

The internal structure of the segment of greenstone belt is not well understood, due to a scarcity of outcrop. Faults can be interpreted from magnetic surveys, and a few of these interpretations have been supported by mylonites and fault breccias intersected by diamond drilling. The faults trend northeast and northwest and are possibly a conjugate fracture system developed in response to the surrounding granitoid plutons. North-trending faults, perpendicular to the strike of the greenstones, are also suggested by magnetic surveys. The deposit geology, due to the scarcity of outcrop, is interpreted for the most part from diamond-drill core. The rock sequence through the gold deposit from the hanging wall on the north to the footwall on the south, is as follows:

- 1. Interlayered mafic metavolcanics and felsic pyroclastics
- 2. Intermediate to felsic tuffs and crystal tuffs
- 3. Mafic metavolcanic tuff and (or) amphibolite
- 4. The mineralised zone
- 5. Footwall quartz-carbonate veinlet zone
- 6. Footwall mafic metavolcanics

#### Intermediate to Felsic Tuffs and Crystal Tuffs

The hanging wall unit is identified as a fine-grained dacite to rhyodacite tuff. Silicification (bleaching) and sericitization make the unit appear rhyolitic. The intensity of shearing within this unit is variable, as is the degree of alteration. A characteristic of this unit is the presence of minor, disseminated, red biotite. It is presumably a by-product of a potassium metasomatism. Only minor, barren sulphide is found in this unit.

# Mafic Metavolcanic Tuff and (or) Amphibolite

This unit may be a sill-like intrusion, or a thin mafic tuff. It exhibits a uniform, weak to moderately sheared, fine-to-medium-grained crystalloblastic texture, and contains 1 to 3 percent fine, disseminated, acicular magnetite. The unit grades into the mineralised zone where it is interlayered with lean chert-magnetite iron formation. The unit is auriferous where the magnetite is replaced by pyrrhotite. Magnetite and pyrrhotite are mutually exclusive of one another.

#### The Mineralised Zone

The mineralised zone is a 10-to-13-metre-wide interval of mafic metavolcanic tuffs interlayered with lean iron formation. The zone is sheared and silicified and contains varying concentrations of secondary pyrrhotite. It is commonly garnetiferous. The gold content appears to be directly related to the pyrrhotite concentration, which varies from 1 to 5 percent, but is locally greater than 50 percent of the rock. The pyrrhotite is disseminated and has a feather texture. Occasionally quartz-carbonate veinlets, rimmed by amphibole and grunerite, also carry gold. A few specks of visible gold have been observed along the vein let contacts. Grunerite is common throughout the mineralised section.

## Footwall Quartz-Carbonate Veinlet Zone

This zone usually occurs within mafic metavolcanics, but locally incorporates minor iron formation. The quartz-calcite veinlets are similar to those that carry gold in the mineralised zone. The footwall zone contains minor, secondary pyrrhotite and subeconomic concentrations of gold.

#### **Footwall Mafic Metavolcanics**

These are tuffs and (or) flows, which appear to be similar to the mafic metavolcanic tuffs and (or) amphibolites of the hanging wall rocks, are foliated with a fine-to-medium-grained crystalloblastic texture but are otherwise featureless. To date, 25 diamond drill holes have intersected the mineralised zone. (Janes, Seim, and Storey; 1989).

This situation should be contrasted with the other gold deposits in the Pickle Lake camp where vein quartz was usually the immediate host and arsenopyrite was often the main sulphide (Cahoon 1986).

# History of Exploration on the Property

Mineral exploration in the central part of the Uchi sub-province began in 1928 with the discovery of Pickle Crow and Central Patricia Gold Deposits near Pickle Lake. In 1933 prospecting in the Meen and Kasagiminnis Lake areas discovered minor quantities of visible gold. In the 1940s through the 1960s minimal exploration is recorded in the area, except for the discovery of the Koval-Ohman gold deposit at Bancroft Lake. Hasaga Gold Mines Ltd optioned the property and drill defined a small potentially economic gold deposit. In the late 1960s and early 1970s the area was subject to a period of base metal exploration with the discovery of the Thierry Ni-Cu deposit at Pickle Lake, and the Mattabi base metal massive sulphide deposit at Sturgeon Lake. Union Miniere Explorations ("UMEX") completed airborne geophysical surveys over a large area, including the current Drum Lake Project with follow-up diamond drilling.

Interest in gold mineralisation in the area was in the 1980s and resulted in the discovery of the Golden Patricia and Dona Lake Deposits. Since the early 1990s, the level of interest diminished and only a few exploration companies remained active in the area. Since 2019 there has been a renewed interest in the region, with several exploration companies (Ardiden Ltd, AuTeco, Commander Resources Ltd, Metals Creek Resources Corp, New Origin Ltd) becoming newly active in the area.

Exploration has been documented in the Jean Property area since 1967 as follows:

- 1967 C Huston & Associates performed a ground magnetic survey and VLF-EM survey on the property. 3 VLF anomalies were reported, but no further work was undertaken.
- 1971 Canadian Nickel Company Ltd drilled one hole (#49217). No assay values reported.
- 1972 Union Miniere Explorations and Mining Corporation (UMEX) drilled 2 holes in the area (C-57 & C-58). No Assay values reported.
- 1985 Moss Resources Ltd flew a large airborne magnetic survey and VLF-EM survey that encompassed Kasagiminnis Lake to the southwest, Jean Lake, and up past the northeast of the property.
- 1986 Power Explorations and Geocanex Ltd drilled a total of 22 boreholes on the property, as well as contracted JVX to fly newer magnetic and VLF-EM surveys. They also carried out significant mapping, prospecting, and soil geochemistry programs in the area. A few assays indicated the presence of gold slightly higher than crustal abundance, but nothing in economic concentrations.
- The Ontario Geological Survey releases a series of 1:20000 scale airborne EM and total intensity survey maps of the Meen-Dempster-Pickle Lake area.
- 1986-87 Sunburst Exploration Ltd performs a large-scale magnetometer and VLF-EM survey in the area, followed by 10 boreholes. No assay values reported.

# Mapping and Sampling Program

On 14-17 November 2021, 3-7 December 2021, and 28-29 June 2022, Ardiden conducted mapping and sampling activities on a roadcut on the Jean Lake Project (PR-20-000168) near Pickle Lake, Ontario, see detailed filed log in appendices. In total, eleven days were spent in the field and twenty-four (24) samples were collected along with a brief mapping program on the outcropping sections of mafic rocks at the Jean Prospect from claim 574819 (Figure 6-7). This work forms part of an early-stage evaluation and due diligence program to assess the economic potential of the Jean Lake Gold Prospect.

#### Personnel

Field operations were conducted by Ardiden Ltd with employees of the company on each field mapping program. Sampling was conducted by Haydn Daxter, Exploration Manager (MAIG), Harrison Reid (GIT), and assisted by the Angelo Falduzzi (Project Manager). Mapping was also conducted by Harrison Reid and Haydn Daxter.

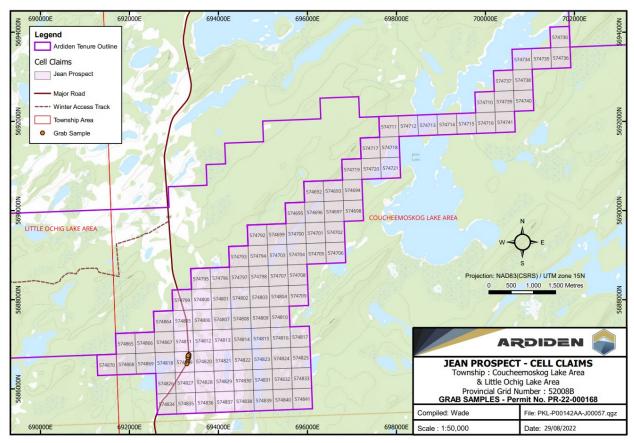


Figure 6 - Jean Prospect Claim Cells and Sample Locations

# Sampling and Field Data

Samples were taken based upon review of prior assessment reports and a general understanding of structural controls on local gold mineralisation. Quartz veins, shear zones, and fractures showing significant sulphide mineralisation were targeted, and collected with a geologist's hammer and numbered sample bags. Sample location coordinates were taken using a Garmin handheld GPS.

Structural data with strike and dip was recorded where possible on outcropping basalts along with orientation of quartz veins and fracture zones. Sample location information can be found in Appendix IV along with a geological description, and weight of each sample.



Figure 7 – Sampling Map at Jean in Cell 574819

# **Sampling and Analytical Methods**

## Sampling Method and QA/QC

All field samples were transported from site to a storage facility in Pickle Lake prior to transportation to Thunder Bay. Field samples were weighed and bagged in Thunder Bay in preparation for analysis. A total of 31 samples were analysed across the prospect with all samples located within claim 574819 (Table 2), which included 24 samples, two standards, three duplicate samples and two blank standards. The average weight for all rock samples was 2,828 grams.

All individual sample bags were labelled and put into rice bags where they were transported to ActLabs in Thunder Bay via Ardiden personnel. There were two standards analyses within the sample stream for all field samples 704001-704022 and 20220601-20220609. One standard type was used, a low Au-bearing certified reference material from OREAS (Ore Research and Exploration P/L), OREAS 231.

No analysis was conducted on the distribution of standard deviation against the certified value. Overall, no standards returned either low-level or high-level non-compliance failures exceeding two standard deviations. Blank sample analysis totalled two assays with no returning anomalous Au values above detection.

A series of three duplicated assays were conducted with a satisfactory result represented across the majority of Au values, certain samples reported either an increase or decrease in Au that is attributed to the distribution of free gold within the rock sample.

Table 2 – Samples per Claim Table

JEAN CELL CLAIM NUMBER	574819	TOTAL
ROCK SAMPLES	24	24

## Sample Preparation and Analytical Methods

The samples were first analysed using standard fire assay procedures with an AA/ICP finish. Assay results greater than 2.50 gram per tonne were re-run using a gravimetric finish. In addition to the standard quality control of the laboratory, a series of blanks and standards are inserted in every shipment for quality control purposes as displayed in the Appendices of this report. A total of two standards were inserted in series to the rock samples being a low-grade Au standard (0.510 g/t Au). A total of two blanks of ¼" crushed silica were also added in series every 20 samples and a total of three duplicates were also added into the samples. The duplicate sample was taken by splitting the field sample in half and by inserting them into their own separate sample bag in sequence after one another.

Specific gravity was measured on site by company geologists for all samples sent to the lab and data was recorded into the company's data base.

# Results

Twenty-four grab and channel samples were collected on the Jean Prospect from claim number 574819. Lithologies sampled were predominantly mafic volcanics, quartz veins, and iron formation/sediments. Of those 24 grab samples, 17 samples returned gold assays of <0.05 g/t Au, 2 returned gold assays results of >0.05 g/t Au (samples 704013 and 704014).

The zone at the outcropping-road cutting region within the Jean Prospect displayed 150 m of mafic volcanics and meta-sedimentary rocks, with localised shearing and forming schistose textures within the mafic volcanics (Figure 8). The presence of 1 mm - 325 mm wide quartz veins were mapped on two distinct orientations along the weathered iron bearing mafic-meta sedimentary rocks. Pyrite mineralisation is between trace to 5% in samples collected during the program. Schistose zones displayed mineral elongation with dominant biotite and micaceous minerals present.

Localised shearing is believed to be present though additional mapping is required to confirm the presence and sense of direction from what has been updated to the historical geology map within the appendices. Structural measurements taken (Table 3) displayed a series of events consistent across the outcropping rocks, NW and NE dipping sequences are the conduit for quartz veins and postulated shear zones.



Figure 8 – Jean Sample Location Area, Pickle Lake Gold Project

Sample 20220602 is located on the east side of the outcropping-road cutting region at the Jean Prospect. Blocky mafic volcanics and minor meta-sedimentary rocks are present with vertically dipping 1-5 mm wide quartz veins, localised weathering is present with iron bearing mafic-meta sedimentary rocks. Pyrite mineralisation is between trace to 3% in this sample collected during the program (Figure 9).





Figure 9 – Sample # 20220602 Jean Prospect

Sample # 20220608, is located on the western side of the outcropping rocks at the Jean Prospect. Grey-blue mafic volcanics are present with vertically dipping 1-300 mm wide quartz veins. Veins display boudinage textures and the source of localised weathering from sulphide mineralisation. Pyrite and relic sulphide mineralisation is between trace to 3% in this sample collected during the program (Figure 10).





Figure 10 - Sample # 20220608 Jean Prospect

Sample # 20220603 is located on the east side of the outcropping-road cutting region at the Jean Prospect. This rock sample is to the north of sample # 20220602 and represented a transition zone between the blocky mafic volcanics and schistose meta-sedimentary rocks. Consistent with a vertically dipping sense and quartz veins of 1-3 mm, with these reduced in areas of increased schistosity. Weathering is localised with a reddish-brown taint on the rocks from sulphide minerals. Pyrite mineralisation is between trace to 2%, along with elongated biotite grains in this sample collected during the program (Figure 11).





Figure 11 - Sample # 20220603 Jean Prospect

Sample # 20220604 is located on the east side of the outcropping-road cutting region at the Jean Prospect. This rock sample is to the south of sample # 20220602/3 and represented a minor transition zone between the

blocky mafic volcanics and schistose meta-sedimentary rocks. Structures remain vertically dipping with quartz veins of 1-7 mm. Minor zones of schistosity are more prevalent to weathering due to the mineral assemblage present. Pyrite mineralisation is between trace to 2% in this sample collected during the program (Figure 12).



Figure 12 - Sample # 20220604 Jean Prospect

Sample # 20220608 is located on the west side of the outcropping-road cutting region at the Jean Prospect. This rock sample is a grey-blue blocky mafic volcanics and very minor and localised meta-sedimentary rocks within the mafic sequence. Quartz veins are between 1-325 mm and display an orientation 56-87° NE and ~80° NW within the outcropping structure. Minor boudinage textures and alteration halos are present on contact to the mafic rocks from the quartz veins with a postulated shear zone in significant quartz vein within outcropping rocks (Figure 13). Weathering is consistent and surficial with a reddish-brown taint on the rocks from sulphide minerals. Pyrite mineralisation is between trace to 5% in samples collected during the program.

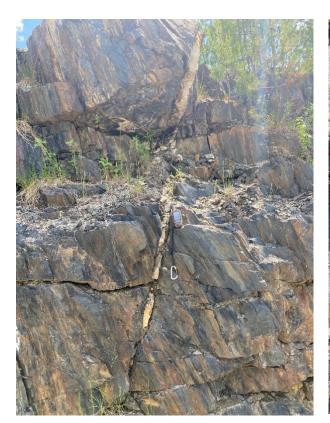




Figure 13 - Sample # 20220608 Jean Prospect

Sample # 20220606 is located on the west side of the outcropping-road cutting region at the Jean Prospect. This rock sample shows grey-blue blocky mafic volcanics and very minor and localised meta-sedimentary rocks within the mafic sequence. Quartz veins are between 1-312 mm and display an orientation 56-87° NE. Vertically dipping quartz veins of 1-212 mm are present along with a brecciated blowout of quartz ~365 mm in width. Weathering is localised with a reddish-brown taint on the rocks from sulphide minerals. Pyrite mineralisation is between trace to 5% in samples collected during the program (Figure 14).





Figure 14 – Sample # 20220606 Jean Prospect

Table 3 - Structural Measurements from Jean Field Mapping Programs

Sample No.	Strike	Dip	Dip Direction	Comments
704002	314	56	NE	Foliation south side, large quartz vein
704002	105	58	NE	Foliation north side
704003	285	87	NE	Shear zone, foliation
704004	315	85	NE	Jointed structure 1
704004	76	84	SE	Jointed structure 2
704006				Zone of silicification, possibly sheared veins?
704007				Quartz vein, significant deformation
704009	280	68	NE	Large quartz vein > 450mm
704010	314	39	NE	Jointed structure
704011				Zone of silicification; possibly sheared veins?
704012	298	80	NE	Hinge plane
704008	98	75	SE	Boudinage quartz vein, some shearing
704013	115	71	SW	Quartz vein
704014	285	90		Boudinage quartz vein, some shearing
704017				Fold hinge, shearing and quartz vein
704018	66	47		Quartz vein
704019	82	63		Quartz vein
704021	75	20		Fold hinge zone
704022	80	70		Quartz vein
704021	113	70	SW	Joint with quartz infill
704021	285	85	NW	Shear zone, foliation

# **Interpretations and Conclusions**

The results for the sampling and mapping have shown gold in concentrations above crustal abundance. Additional work is required to understand the nature of present mineralisation, and whether it has the potential to appear in concentrations of economic interest. Although no significant results of Au mineralisation were recorded in the assays of this small program, the presence of sulphide mineralisation, and large structural shear zones warrants further investigation on the property.

# Recommendations

Based on the results of the current exploration program, a further three-phase exploration program is warranted on the Jean Project.

## **Exploration Phase I**

Further exploration on the Jean Project should include a continuation of the 2021-2022 field sampling and mapping work performed to verify any additional outcropping regions.

#### **Exploration Phase II**

Cognisant on the results of Phase I, a low-level, close-spaced geophysical survey is warranted to define magnetic anomalies and structural controls across the Jean Prospect. Once completed this will be the basis to conduct a structural interpretation across the prospect and update the historical information collated in 1985 by Moss Resources.

#### **Exploration Phase III**

In conjunction with field work and a geophysical survey in Phases I and II, a maiden drilling program is warranted by Ardiden Limited to enable suitable analysis as part of developing the structural controls of a complex prospect such as Jean.

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# **Statement of Qualifications**

# Haydn Daxter, B.Sc. Mineral Deposits., MGIA

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# **Certificate of Author**

I, Haydn Daxter, do hereby certify that:

I am a direct employee of Ardiden Limited and Exploration Manager in charge of producing this report.

I am a graduate of the University of New England, NSW, Australia B.Sc., Mineral Deposits (2019).

I am a member of the Australian Institute of Geoscientists (MAIG No. 7595).

I have worked as a geologist for a total of 3 years since obtaining my B.Sc. degree and had an exposure to Archean gold systems in Australia and Canada.

I am responsible for the preparation of this report titled "Jean Gold Project Outcrop Mapping and Sampling Report, Jean Project, Pickle Lake Area, Ontario"

I have previously visited the Property and planned the exploration program.

I have had an involvement with the property that forms the subject of this report since field activities commenced in late 2021.

Dated 30 November 2022 "Haydn Daxter"

Haydn Daxter BSc MAIG

**Exploration Manager** 

Ardiden Limited

# 1 Appendix I Field Mapping Log-Assay Results

Sample-ID	Date	Easting (m)	NORTH (m)	Description	Weight (g)	Au (ppb)
704001		(,		OREAS-22h (Blank)		<2.5
704002	14-17 Nov-21	693317	5686728	Large, cloudy white quartz vein in heavy black (iron formation?) sulfidic basalt. 2-3cm black amphibolite zone with trace biotite. Oxide staining from weathering.	608	2.5
704003	14-17 Nov-21	693315	5686730	Heavy black sulfidic basalt showing strong cleavage, with large white, grey qtz vein on the edge of the sample.  Med black biotite at contact margin.	1708	2.5
704004	03-07 Dec-21	693325.26	5686691.06	Very large milky white qz vein with extremely coarse crystals. Strongly weathered, some iron staining. Minor host basaltic.	4166	2.5
704005	03-07 Dec-21	693325.26	5686691.06	DUPLICATE 704004	4413	2.5
704006	14-17 Nov-21	693317	5686741	Cloudy grey qtz vein with heavy iron staining and heavy black sulfidic basalt showing strong cleavage, and some boudinage texture. Minor biotite at margins.	1318	2.5
704007	14-17 Nov-21	693336	5686755	Cloudy white-orange-red stained qtz, showing significant Fe weathering. Minor pyrite clusters remain unoxidized. Pervasive biotite in basalt host.	1299	2.5
704008	03-07 Dec-21	693329.6	5686703.58	Heavy black sulfidic basalt with strong shear zone cleavage and 3-cm milky grey qtz boudins/augens.	1525	2.5
704009	03-07 Dec-21	693331.21	5686720.01	Heavily silicified zone, possibly extremely strained qtz vein. Not much material sampled. Weak weathering, fine grained.	516	2.5
704010	03-07 Dec-21	693332.27	5686725.17	Large white qtz vein, up to 10cm, infilling a major fracture/joint. Minor black sulfidic basalt host rock material.	1182	2.5
704011	03-07 Dec-21	693333.51	5686731.34	Heavy black sulfidic basalt, heavily ironstained/weathered. Taken from area along structural fracture, fine grained.	3408	2.5
704012	03-07 Dec-21	693333.44	5686736.79	Heavily silicified vein-like zone/fold in heavy black sulfidic basalt. Weakly weathered, fine grained.	2950	2.5

Sample-ID	Date	Easting (m)	NORTH (m)	Description	Weight (g)	Au (ppb)
704013	03-07 Dec-21	693332.87	5686740.78	Silicified heavy black sulfidic basalt from beside a qtz vein (unable to sample). Weak weathering, fine grained.	3390	8
704014	03-07 Dec-21	693333.13	5686745.02	Large qz eyes/boudins/veins (5 - 10 cm) from/including basalt shear zone, showing extremely strong cleavage/strain.	2690	7
704015	03-07 Dec-21	693332.75	5686749.57	Heavy black sulfidic basalt showing strong cleavage, plus milky large qtz vein, collected near a large (~1m) fold hinge. Moderate weathering, fine grained.	4230	2.5
704016	03-07 Dec-21	693332.97	5686752.81	Large qtz, epidote vein with significant, weathered out very coarse-grained sulphides. Heavy, dark, fine grained sulfidic host basalt.	6478	2.5
704017	03-07 Dec-21	693334.63	5686760.77	Heavily strained/folded milky white qz vein, fine to very coarse grained, in black, fine-grained basalt.	5558	2.5
704018	03-07 Dec-21	693334.63	5686760.77	Heavily strained/folded? milky white qz vein in heavy black basalt. Fine grained, moderately weathered.	826	2.5
704019	03-07 Dec-21	693334.79	5686765.79	Host basalt (some of what is closer to a biotite schist) from beside a large milky white qz vein. Fine to medium grained. Some vein material.	2152	2.5
704020				OREAS-231 (0.5g/t Standard)		531
704021	03-07 Dec-21	693334.91	5686768.02	Very large milky white qz vein, coarse- grained, some iron staining.	2006	2.5
704022	03-07 Dec-21	693335.34	5686771.38	Large qz vein and surrounding iron formation in basalt (black, highly sulfidic). Moderate - strong weathering/staining, fine - coarse grained.	6450	2.5
20220601				OREAS-22h (Blank)		<2.5
20220602	28-29 Jun-22	693307.00	5686603.00	Weathered metasediment, strong foliation with moderate to strong biotite alteration, trace quartz with oxide staining from relic sulphides. 1-2% pyrite fine grained. Very weak magnetic response.	1873	2.5

Sample-ID	Date	Easting (m)	NORTH (m)	Description	Weight (g)	Au (ppb)
20220603	28-29 Jun-22	693309.00	5686608.00	Contact zone with blocky metasediment and alteration zone, trace quartz veins with foliation of minerals in proximal contacts (Hornblende/Biotite). Trace relic garnets suggested increased metamorphic grade. 1-2% pyrite located within quartz halos.	2126	2.5
20220604	28-29 Jun-22	693291.00	5686563.00	Weathered metasediment, strong foliation with moderate to strong biotite alteration, minor quartz veins with oxide staining from relic sulphides. 2-4% pyrite fine grained. Very weak magnetic response.	5722	2.5
20220605	28-29 Jun-22	693291.00	5686563.00	DUPLICATE of 20220604	2611	2.5
20220606	28-29 Jun-22	693312.00	5686698.00	Weathered metasediment, moderate foliation with moderate to strong biotite alteration, trace saccharoidal quartz veins with oxide staining from relic sulphides. 1-2% pyrite fine grained. Very weak magnetic response.	3688	2.5
20220607	28-29 Jun-22	693312.00	5686698.00	DUPLICATE of 20220606	1644	2.5
20220608	28-29 Jun-22	693318.00	5686746.00	Heavily weathered metasediment, with strong oxide staining, saccharoidal quartz veins with 2-4% sulphides.  Moderate alteration with biotite in proximal halos.	1825	2.5
20220609				OREAS-231 (0.5g/t Standard)		536

# 2 Appendix II Field Mapping Daily Log

Date	Field Work	Rocks	Mineralisation	Comments
14/11/2021	Team of 3 spent a full day reviewing the western exposed mafic rocks within the target area. Work included structural measurements, photography and sample collection.	Predominantly basalt with minor metasediment rocks present. Alteration halos around quartz veining displayed a schistose texture.	Relic sulphides and pyrite.	Several quartz veining structures present.
15/11/2021	Team of 3 spent a second full day reviewing the remainder of the western exposed mafic rocks within the target area. Work included structural measurements, photography and sample collection.	Basalt with minor metasediment rocks present. Alteration halos around quartz veining displayed a schistose texture.	Relic sulphides and pyrite.	Two distinct structures hosting the quartz veining. Localised shear zones?
16/11/2021	Team of 3 spent a third full day reviewing the eastern exposed mafic rocks within the target area. Work included structural measurements, photography and sample collection.	Basalt with minor metasediment rocks present. Alteration halos around quartz veining displayed a schistose texture.	Relic sulphides and pyrite.	Quartz veining representative from western zone.
17/11/2021	Final day in the field the eastern exposed mafic rocks within the target area to finalise structural measurements, photography and sample collection. Data entry back in Pickle Lake for all samples collected with photography and structural details.	Basalt and metasediment rocks present. Alteration halos around quartz veining displayed a schistose texture.	Relic sulphides and pyrite.	Quartz veining representative from western zone.
3/12/2021	Full day to review additional sample areas on the western zone, samples collected along with structural data and several photos of each	Basalt and metasediments reviewed. Quartz boudinage zones.	Oxidised sulphides, pyrite.	Several areas of distinct sulphide mineralisation with quartz veining.

Date	Field Work	Rocks	Mineralisation	Comments
	quartz veining systems from north to south.			
4/12/2021	Second full day to review additional sample areas on the western zone, samples collected along with structural data and several photos of each quartz veining systems from north to south.	Basalt and metasediments reviewed. Quartz boudinage zones.	Oxidised sulphides, pyrite.	Continuation on western zone, will be completed today.
5/12/2021	Third full day to review additional sample areas on the eastern zone, samples collected along with structural data and several photos of each quartz veining systems from north to south.	Basalt and metasediments reviewed. Quartz boudinage zones.	Oxidised sulphides, pyrite.	Several areas of distinct sulphide mineralisation with quartz veining.
6/12/2021	Final day in the field the eastern zone. Finalise structural measurements, photography and sample collection.	Basalt and metasediments reviewed. Quartz boudinage zones.	Oxidised sulphides, pyrite.	Eastern zone will be completed today for field work.
7/12/2021	Data entry back in Pickle Lake for all samples collected with photography and structural details.	NA	NA	Completed all desktop work for report.
28/06/2022	Review distant outcropping structures on western side, collected samples and photography along with minor structural data. Conducted a field review for the day to confirm historical geological map with lithologies and outcropping rocks.	Basalt and metasediments. Schistose basalts with elongated mica minerals.	Relic sulphides and pyrite.	Shear zone present to the south within basalt rocks.
29/06/2022	Second field day to review the eastern zone, targeting unsampled zones with high strain areas. Field mapping to	Basalt and metasediments. Schistose basalts with elongated mica minerals.	Relic sulphides and pyrite.	Several minor outcrops to be reviewed.

Date	Field Work	Rocks	Mineralisation	Comments
	confirm historical geological map.			

# 3 Appendix III Assay Tables

Quality Analysis ...



### Innovative Technologies

 Report No.:
 A21-23577

 Report Date:
 02-Mar-22

 Date Submitted:
 23-Dec-21

Your Reference: Jean Prospect-Outcrop

Ardiden Canada Ltd. 684 Squire St. Thunder Bay ON Canada

ATTN: Harrison Reid

### CERTIFICATE OF ANALYSIS

22 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-Tbay	QOP AA-Au (Au - Fire Assay AA)	2022-01-11 17:15:17
1E3-Tbay	QOP AquaGeo (Aqua Regla ICPOES)	2022-02-28 22:33:49

REPORT A21-23677

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.

SOC Accredited

LAB

LAB

Accredité CCN

LabID: 673

ACTIVATION LABORATORIES LTD.

1201 Walsh Sheet West, Thurder Bay, Ortario, Canada, P7E 4X6
TELEPHONE + 805 2024/070 or 1388.228.527 FAX +1.005.848.9813
E-MAIL Teagglactists.com ACTLABS GROUP WEBSITE www.actists.com

CERTIFIED BY:

Emmanuel Eseme , Ph.D. Quality Control Coordinator

				Re	sults			Acti	vation	Labo	ratorie	s Ltd.			R	leport:	A21-2	23577					
Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	AI	As	В	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol				ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm		ppm	ppm	%	ppm	ppm		ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP									
704001	< 5	< 0.2	< 0.5	6	77	<1	3	<2	3	0.04	<2	< 10	< 10	< 0.5	<2	< 0.01	<1	6	0.36	< 10	<1	< 0.01	< 10
704002	< 5	< 0.2	< 0.5	8	551	2	10	2	40	1.23	< 2	< 10	33	< 0.5	<2	1.82	19	23	3.51	< 10	< 1	0.11	< 10
704003	< 5	< 0.2	< 0.5	32	861	< 1	15	<2	79	2.48	<2	< 10	253	< 0.5	<2	3.08	27	13	6.88	< 10	2	0.63	11
704004	< 5	< 0.2	< 0.5	5	272	4	4	<2	19	0.51	<2	< 10	70	< 0.5	3	0.41	6	35	1.73	< 10	<1	0.16	< 10
704005	< 5	< 0.2	< 0.5	33	659	5	8	<2	37	1.13	<2	< 10	117	< 0.5	<2	1.78	17	27	3.39	< 10	< 1	0.28	< 10
704006	< 5	< 0.2	< 0.5	9	1350	1	2	4	14	0.45	<2	13	16	< 0.5	2	> 10.0	4	13	1.66	< 10	<1	0.07	< 10
704007	< 5	< 0.2	< 0.5	34	551	3	5	3	32	0.92	<2	< 10	148	< 0.5	<2	2.12	16	29	2.81	< 10	< 1	0.36	< 10
704008	< 5	< 0.2	< 0.5	29	872	< 1	18	< 2	98	3.01	< 2	< 10	571	< 0.5	< 2	1.85	36	14	7.70	10	2	1.27	11
704009	< 5	< 0.2	< 0.5	67	828	<1	13	<2	75	2.22	<2	< 10	254	< 0.5	<2	2.99	29	12	6.62	< 10	3	0.79	< 10
704010	< 5	< 0.2	< 0.5	5	248	3	3	< 2	13	0.31	< 2	< 10	53	< 0.5	< 2	0.91	4	27	0.99	< 10	< 1	0.12	< 10
704011	< 5	< 0.2	< 0.5	77	988	<1	17	3	87	2.66	<2	< 10	178	0.5	<2	3.20	32	11	7.75	10	<1	0.45	10
704012	< 5	< 0.2	< 0.5	28	704	1	- 11	2	50	1.54	<2	< 10	15	< 0.5	<2	4.08	22	13	4.20	< 10	< 1	0.12	11
704013	8	< 0.2	< 0.5	51	793	< 1	14	2	64	1.67	<2	< 10	123	< 0.5		3.05	27	9	5.08	< 10	< 1	0.33	12
704014	7	< 0.2	< 0.5	42	831	1	13	<2	65	1.89	<2	< 10	243	< 0.5	<2	3.12	25	17	5.45	< 10	3	0.81	< 10
704015	< 5	< 0.2	< 0.5	120	1050	<1	21	<2	114	3.44	<2	< 10	60	< 0.5	<2	3.60	43	9	9.47	10	2	2.13	13
704016	< 5	< 0.2	0.5	12	907	1	7	2	39	1.51	<2	< 10	102	< 0.5	<2	5.21	17	11	3.59	< 10	<1	0.36	< 10
704017	< 5	< 0.2	< 0.5	8	844	<1	13	<2	68	2.21	<2	- 11	182	< 0.5	<2	2.68	23	13	5.73	< 10	3	0.76	10
704018	< 5	< 0.2	< 0.5	11	1340	< 1	8	5	41	1.34	<2	< 10	138	< 0.5	<2	> 10.0	19	8	3.69	< 10	< 1	0.52	< 10
704019	< 5	< 0.2	< 0.5	28	988	<1	10	3	47	1.46	<2	< 10	46	< 0.5	<2	6.76	21	7	4.38	10	<1	0.17	< 10
704020	531	0.2	< 0.5	162	719	< 1	61	9	87	3.81	26	28	20	< 0.5	< 2	3.56	27	19	5.91	< 10	1	0.08	< 10
704021	< 5	< 0.2	< 0.5	6	130	3	2	<2	6	0.11	<2	< 10	12	< 0.5	<2	0.34	2	27	0.66	< 10	< 1	0.02	< 10
704022	< 5	< 0.2	< 0.5	5	866	2	8	<2	43	1.35	<2	< 10	170	< 0.5	<2	3.58	17	21	3.73	< 10	<1	0.40	< 10

				Re	sults			Acti	vation	Labo	ratorie	s Ltd.			F	leport
Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	TI	U	٧	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
704001	< 0.01	0.007	< 0.001	< 0.01	<2	<1	<1	< 0.01	< 20	<1	< 2	< 10	1	< 10	<1	<1
704002	0.68	0.238	0.156	0.01	< 2	12	18	0.11	< 20	2	< 2	< 10	106	< 10	8	3
704003	1.31	0.343	0.049	0.13	< 2	18	18	0.23	< 20	2	< 2	< 10	189	< 10	- 11	10
704004	0.28	0.071	0.016	< 0.01	<2	4	5	0.09	< 20	2	<2	< 10	38	< 10	2	3
704005	0.61	0.168	0.048	0.04	<2	- 11	18	0.15	< 20	- 1	< 2	< 10	91	< 10	7	7
704006	0.28	0.056	0.082	0.01	< 2	5	185	0.04	< 20	2	< 2	< 10	46	< 10	5	3
704007	0.48	0.100	0.022	0.09	< 2	5	54	0.12	< 20	<1	<2	< 10	65	< 10	3	3
704008	1.66	0.302	0.057	0.05	4	17	17	0.28	< 20	< 1	< 2	< 10	182	< 10	10	7
704009	1.29	0.321	0.057	0.17	3	17	19	0.25	< 20	<1	< 2	< 10	185	< 10	- 11	8
704010	0.16	0.065	0.013	< 0.01	< 2	<1	22	0.04	< 20	< 1	< 2	< 10	19	< 10	1	< 1
704011	1.46	0.471	0.077	0.18	< 2	22	- 11	0.22	< 20	3	<2	< 10	222	< 10	13	14
704012	0.87	0.278	0.061	0.07	< 2	14	24	0.16	< 20	< 1	< 2	< 10	138	< 10	9	6
704013	0.96	0.294	0.071	0.16	<2	17	16	0.18	< 20	2	< 2	< 10	166	< 10	10	10
704014	0.98	0.217	0.057	0.13	< 2	16	32	0.24	< 20	3	< 2	< 10	161	< 10	10	8
704015	1.96	0.212	0.076	0.32	3	14	60	0.37	< 20	<1	<2	< 10	181	< 10	- 11	7
704016	0.63	0.164	0.040	0.05	4	9	92	0.15	< 20	3	< 2	< 10	111	< 10	6	7
704017	1.13	0.288	0.064	0.02	2	17	33	0.23	< 20	2	< 2	< 10	170	< 10	10	9
704018	0.79	0.149	0.047	0.02	<2	8	168	0.12	< 20	1	<2	< 10	71	< 10	6	3
704019	0.78	0.270	0.054	0.05	<2	13	50	0.14	< 20	3	<2	< 10	137	< 10	9	7
704020	1.87	0.137	0.035	0.19	2	5	39	0.40	< 20	4	<2	< 10	149	< 10	8	11
704021	0.06	0.027	0.003	< 0.01	<2	<1	4	0.02	< 20	<1	< 2	< 10	9	< 10	<1	1
704022	0.70	0.205	0.040	< 0.01	< 2	10	57	0.16	< 20	4	< 2	< 10	99	< 10	7	6

					QC		-	Activa	tion L	aborat	ories	Ltd.			Rep	ort: A	21-23	577					
Analyte Symbol	Au	Aq	Cd	Cu	Mn	Mo	Ni	Pb	Zn	AI	As	В	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	oob	DOM	oom	oom	oom	oom	oom	oom	ppm	%	ppm	ppm	ppm	oom	oom	%	DOM	oom	%	ppm	DOM	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-6 Meas		0.4	< 0.5	70	981	<1	23	93	120	6.67	225	< 10	822	0.8	3	0.16	11	79	5.60	20	3	1.02	< 10
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9
GXR-6 Meas		0.3	< 0.5	71	992	1	24	94	119	6.85	228	< 10	855	0.8	2	0.16	11	79	5.69	20	2	0.99	< 10
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9
GXR-6 Meas		0.3	< 0.5	72	997	<1	24	94	120	6.86	241	< 10	839	0.8	3	0.15	- 11	79	5.79	20	3	1.02	< 10
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40		0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9
OREAS 98 (Aqua Regia) Meas		40.7		> 10000				266	1190						50		102						$\square$
OREAS 98 (Aqua Regia) Cert		42.8		147000				343	1300						93		111						Ш
OREAS 98 (Aqua Regia) Meas		40.6		> 10000				258	1170						54		101						Ш
OREAS 98 (Aqua Regia) Cert		42.8		147000				343	1300						93		111						Ш
OREAS 98 (Aqua Regia) Meas		41.8		> 10000				259	1180						25		103						
OREAS 98 (Aqua Regia) Cert		42.8		147000				343	1300						93		111						
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2200	748	<1	34	60	261	2.70	5		73	0.7	10	0.42	18	45	5.08	< 10		0.40	35
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 922 (AQUA REGIA) Meas		0.9	< 0.5	2280	755	<1	35	59	264	2.76	8		74	0.7	10	0.43	18	46	5.19	< 10		0.40	35
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 922 (AQUA REGIA) Meas		1.0	< 0.5	2280	748	<1	36	59	264	2.72	6		73	0.7	11	0.42	18	44	5.15	< 10		0.40	35
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 923 (AQUA REGIA) Meas		2.0	< 0.5	4300	830	<1	35	82	323	2.71	6		57	0.7	26	0.42	20	42	5.83	< 10		0.33	32
OREAS 923 (AQUA REGIA) Cert		1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01		0.322	30.0
OREAS 923 (AQUA REGIA) Meas		1.7	< 0.5	4390	850	<1	34	81	335	2.74	6		58	0.7	27	0.42	20	42	5.90	< 10		0.35	33
OREAS 923 (AQUA REGIA) Cert		1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01		0.322	30.0
OREAS 923 (AQUA REGIA) Meas		1.8	< 0.5	4350	835	<1	32	81	338	2.70	9		56	0.6	25	0.41	19	41	5.82	< 10		0.33	31
OREAS 923 (AQUA REGIA) Cert		1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01		0.322	30.0
Oreas 96 (Aqua Regia) Meas		11.4		> 10000				89	421						89		44						
Oreas 96 (Aqua Regia) Cert		11.50		39100. 00				100	448						27.9		49.2						
Oreas 96 (Aqua		11.7		> 10000				89	421						43		45						

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					QC		-	Activa	tion L	aborat	ories	Ltd.			Rep	ort: A	21-23	577					
Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	AI	As	В	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1		10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Regia) Meas		11.50		22122				100	448						27.9		49.2						
Oreas 96 (Aqua Regia) Cert		11.50		39100. 00 > 10000				90	420						73		49.2						
Oreas 96 (Aqua Regia) Meas																							Ш
Oreas 96 (Aqua Regia) Cert		11.50		39100. 00				100	448						27.9		49.2						
Oreas 621 (Aqua Regia) Meas		70.0	276	3410	501	13	24	> 5000	> 10000	1.63	79			0.6	5	1.77	31	28	3.18	< 10	3	0.31	18
Oreas 621 (Aqua Regia) Cert		68.0	278	3660	520	13.3	25.8	13600	51700	1.60	75.0			0.530	3.85	1.65	27.9	31.3	3.43	9.29	3.93	0.333	19.4
Oreas 621 (Aqua Regia) Meas		73.5	280	3470	509	14	26	> 5000	> 10000	1.62	83			0.6	14	1.80	30	32	3.23	< 10	4	0.31	18
Oreas 621 (Aqua Regia) Cert		68.0	278	3660	520	13.3	25.8	13600	51700	1.60	75.0			0.530	3.85	1.65	27.9	31.3	3.43	9.29	3.93	0.333	19.4
Oreas 621 (Aqua Regia) Meas		72.7	281	3550	501	14	24	> 5000	> 10000	1.60	83			0.6	8	1.78	31	29	3.22	< 10	4	0.32	19
Oreas 621 (Aqua Regia) Cert		68.0	278	3660	520	13.3	25.8	13600	51700	1.60	75.0			0.530	3.85	1.65	27.9	31.3	3.43	9.29	3.93	0.333	19.4
OREAS 45f (Aqua Regia) Meas				357	160	<1	232	8	25	6.57			132	1.0	<2	0.07	35	349	14.0	20	<1	0.10	< 10
OREAS 45f (Aqua Regia) Cert				336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341	13.7	20.3	0.0310	0.0820	10.7
OREAS 45f (Aqua Regia) Meas				367	156	<1	231	9	26	6.44			132	1.0	<2	0.07	35	352	14.2	20	<1	0.09	< 10
OREAS 45f (Aqua Regia) Cert				336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341	13.7	20.3	0.0310	0.0820	10.7
OREAS 45f (Aqua Regia) Meas				365	156	<1	238	9	25	6.46			132	1.0	3	0.07	34	354	14.2	20	<1	0.09	< 10
OREAS 45f (Aqua Regia) Cert				336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341	13.7	20.3	0.0310	0.0820	10.7
OREAS 238 (Fire Assay) Meas	2900																						$\Box$
OREAS 238 (Fire Assay) Cert	3030																						
Oreas E1336 (Fire Assay) Meas	491																						$\Box$
Oreas E1336 (Fire Assay) Cert	510.000																						
DMMAS 124 (Aqua Regia) Control Meas			0.5	237	1040	5	57	11	61	2.06	1780	< 10				3.28	46	74	7.97	< 10		0.55	< 10
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
DMMAS 124 (Aqua Regia) Control Meas			0.6	238	1030	5	60	12	61	2.08	1790	< 10				3.25	50	74	8.03	< 10		0.54	< 10
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
DMMAS 124 (Aqua Regia) Control Meas			< 0.5	243	1050	5	56	11	62	2.11	1840	< 10				3.33	48	74	8.17	< 10		0.56	< 10
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
DMMAS 124 (Aqua Regia)			< 0.5	239	1030	5	55	11	61	2.04	1780	< 10				3.27	46	74	8.00	< 10		0.55	< 10

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					QC		-	Activa	tion L	aborat	ories	Ltd.			Rep	ort: A	21-23	577					
Analyte Symbol Au Ag Cd Cu Mn Mo Ni Pb Zn Al As B Ba Be Bi Ca Co Cr Fe Ga Hg K Unit Symbol ppb ppm ppm ppm ppm ppm ppm ppm ppm ppm													K	La									
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Control Meas																							
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
DMMAS 124 (Aqua Regia) Control Meas			0.7	243	1030	5	57	12	63	2.08	1810	< 10				3.28	49	74	8.06	< 10		0.55	< 10
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
DMMAS 124 (Aqua Regia) Control Meas			0.7	243	1020	5	57	12	62	2.07	1830	< 10				3.30	48	74	8.08	v 10		0.56	< 10
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
DMMAS 124 (Aqua Regia) Control Meas			0.6	239	1030	5	57	14	61	2.08	1820	< 10				3.24	49	74	8.06	< 10		0.54	< 10
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
DMMAS 124 (Aqua Regia) Control Meas			0.7	247	1020	5	60	11	60	2.09	1840	< 10				3.23	48	74	8.12	< 10		0.53	< 10
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
DMMAS 124 (Aqua Regia) Control Meas			0.6	242	1000	5	59	12	60	2.08	1830	< 10				3.20	47	73	8.13	< 10		0.53	< 10
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
DMMAS 124 (Aqua Regia) Control Meas			< 0.5	244	1010	5	60	11	61	2.09	1830	< 10				3.22	47	73	8.10	< 10		0.56	< 10
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
DMMAS 124 (Aqua Regia) Control Meas			< 0.5	242	986	5	56	18	71	2.03	1790	< 10				3.19	45	72	7.88	< 10		0.56	< 10
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
DMMAS 124 (Aqua Regia) Control Meas			< 0.5	245	991	5	59	12	61	2.05	1810	< 10				3.23	45	72	8.06	< 10		0.57	< 10
DMMAS 124 (Aqua Regia)			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
Control Cert DMMAS 124 (Aqua Regia)			< 0.5	6	403	1	15	<2	44	0.86	<2	< 10				2.80	10	7	2.02	< 10		0.17	14
Control Meas DMMAS 124 (Aqua Regia)			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
Control Cert DMMAS 124 (Aqua Regia) Control Meas			< 0.5	243	987	5	57	10	61	2.04	1800	< 10				3.23	46	73	7.98	< 10		0.58	< 10
	+	<del> </del>												<del>                                     </del>	<del>                                     </del>								

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				(	QC			Activat	tion L	aborat	ories	Ltd.			Rep	oort: A	21-23	577					
Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	AI	As	В	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol ppb ppm ppm ppm ppm ppm ppm ppm ppm ppm														%	ppm								
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP						
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
DMMAS 124 (Aqua Regia) Control Meas			0.6	243	960	5	57	11	61	2.01	1820	< 10				3.17	44	71	7.94	< 10		0.57	< 10
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
DMMAS 124 (Aqua Regia) Control Meas			0.6	243	986	5	57	10	61	2.05	1830	< 10				3.21	47	72	7.97	< 10		0.56	< 10
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
DMMAS 124 (Aqua Regia) Control Meas			< 0.5	248	972	5	56	16	63	2.02	1840	< 10				3.26	48	73	7.96	< 10		0.60	< 10
DMMAS 124 (Aqua Regia) Control Cert			0.435	234	1240	4.72	55.8	12.1	64.9	2.07	1670	9.26				3.05	48.1	75.9	8.26	0.701		0.517	7.09
704009 Orig	< 5																						
704009 Dup	< 5																						
704015 Orig		< 0.2	< 0.5	120	1070	< 1	21	< 2	114	3.49	< 2		72		3	_	44	_	9.55	10	1	2.15	13
704015 Dup		< 0.2	< 0.5	120	1040	< 1	21	< 2	114	3.40	< 2	< 10	48	< 0.5	<2	3.58	43	9	9.40	10	2	2.12	12
704019 Orig	< 5																						$\vdash$
704019 Dup	< 5																						
704022 Orig	< 5	< 0.2	< 0.5	5	866	2	8		43	1.35	< 2		170	< 0.5	< 2	3.58	17	_	3.73	< 10	<1	0.40	< 10
704022 Split PREP DUP	< 5	< 0.2	< 0.5	4	857	2	8	< 2	47	1.35	<2	< 10	168	< 0.5	<2	3.48	15	21	3.76	< 10	<1	0.40	< 10
Method Blank	< 5																						
Method Blank		< 0.2	< 0.5	< 1	v V	<1	<1	< 2	<2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	<1	<5	<1	<1	< 2	<2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	<1	<1	<2	<2	< 0.01	< 2	< 10	< 10	< 0.5	<2	< 0.01	< 1	< 1	< 0.01	< 10	<1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	<1	< 2	<2	< 0.01	< 2		< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	<1	< 5	<1	<1	<2	< 2	< 0.01	< 2		< 10	< 0.5	<2	< 0.01	<1	< 1	< 0.01	< 10	<1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	<1	< 5	<1	<1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	<1	<1	< 0.01	< 10	<1	< 0.01	< 10

					QC			Activa	tion La	aborat	ories	Ltd.			Re	oort: A
Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	TI	U	V	W	Υ	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP							
GXR-6 Meas	0.42	0.144	0.032	0.01	4	17	32		< 20	<1	3	< 10	157	< 10	4	7
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110
GXR-6 Meas	0.43	0.141	0.032	0.01	4	17	32		< 20	< 1	<2	< 10	153	< 10	4	7
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110
GXR-6 Meas	0.43	0.142	0.033	0.01	3	17	32		< 20	< 1	<2	< 10	154	< 10	4	8
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110
OREAS 98 (Aqua Regia) Meas					17											
OREAS 98 (Aqua Regia) Cert					15											
OREAS 98 (Aqua Regia) Meas					16											
OREAS 98 (Aqua Regia) Cert					15											
OREAS 98 (Aqua Regia) Meas					19											
OREAS 98 (Aqua Regia) Cert					15											
OREAS 922 (AQUA REGIA) Meas	1.46	0.028	0.061	0.33	2	4	16		< 20		<2	< 10	32	< 10	16	5
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 922 (AQUA REGIA)	1.48	0.030	0.062	0.34	2	4	16		< 20		<2	< 10	33	< 10	16	4
Meas OREAS 922 (AQUA REGIA)	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
Cert OREAS 922	1,47	0.033	0.063	0.34	<2	4	16		< 20		<2	< 10	32	< 10	15	3
(AQUA REGIA) Meas		0.000	0.000						- 20			0	32	- 10		
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 923 (AQUA REGIA) Meas	1.54		0.056	0.59	3	3	14		< 20		<2	< 10	31	< 10	14	5
OREAS 923 (AQUA REGIA)	1.43		0.061	0.684	0.58	3.09	13.6		14.3		0.12	1.80	30.6	1.96	14.3	22.5
OREAS 923 (AQUA REGIA)	1.57		0.058	0.61	2	3	14		< 20		<2	< 10	32	< 10	14	6
Meas OREAS 923 (AQUA REGIA)	1.43		0.061	0.684	0.58	3.09	13.6		14.3		0.12	1.80	30.6	1.96	14.3	22.5
Cert OREAS 923	1.54		0.058	0.60	3	3	14	<u> </u>	< 20		<2	< 10	31	< 10	14	4
(AQUA REGIA) Meas																
OREAS 923 (AQUA REGIA) Cert	1.43		0.061	0.684	0.58	3.09	13.6		14.3		0.12	1.80	30.6	1.96	14.3	22.5
Oreas 96 (Aqua Regia) Meas				3.49	6											
Oreas 96 (Aqua Regia) Cert				4.38	4.53											
Oreas 96 (Aqua				3.38	4											

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					QC			Activa	tion L	aborat	ories	Ltd.			Rep	oort: A
Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	TI	U	V	W	Υ	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Regia) Meas Oreas 96 (Agua				4.38	4.53											
Regia) Cert																
Oreas 96 (Aqua Regia) Meas				3.42	7											
Oreas 96 (Aqua Regia) Cert				4.38	4.53											
Oreas 621 (Aqua Regia) Meas	0.47	0.164	0.031	3.99	96	2	18		< 20		<2	< 10	11	< 10		
Oreas 621 (Aqua Regia) Cert	0.436	0.160	0.0335	4.50	107	2.20	18.9		5.91		0.770	1.63	10.9	1.00	6.87	55.0
Oreas 621 (Aqua Regia) Meas	0.47	0.170	0.032	4.10	103	2	18		< 20		< 2	< 10	12	< 10	6	53
Oreas 621 (Aqua Regia) Cert	0.436	0.160	0.0335	4.50	107	2.20	18.9		5.91		0.770	1.63	10.9	1.00	6.87	55.0
Oreas 621 (Aqua Regia) Meas	0.47	0.174	0.033	4.15	109	2	18		< 20		2	< 10	12	< 10	6	64
Oreas 621 (Aqua Regia) Cert	0.436	0.160	0.0335	4.50	107	2.20	18.9		5.91		0.770	1.63	10.9	1.00	6.87	55.0
OREAS 45f (Aqua Regia) Meas	0.19	0.050	0.021	0.02		25	13	0.13	< 20		< 2	< 10	196		4	19
OREAS 45f (Aqua Regia) Cert	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970	7.67		0.120	1.09	217		6.74	30.0
OREAS 45f (Aqua Regia) Meas	0.19	0.050	0.020	0.02		25	13	0.10	< 20		<2	< 10	195		4	13
OREAS 45f (Aqua Regia) Cert	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970	7.67		0.120	1.09	217		6.74	30.0
OREAS 45f (Agua	0.19	0.049	0.021	0.02		25	13	0.11	< 20		<2	< 10	197		4	16
Regia) Meas OREAS 45f (Aqua Regia) Cert	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970	7.67		0.120	1.09	217		6.74	30.0
OREAS 238 (Fire				$\vdash$												$\vdash$
Assay) Meas OREAS 238 (Fire																
Assay) Cert Oreas E1336 (Fire				$\vdash$			$\vdash$			$\vdash$						$\vdash$
Assay) Meas Oreas E1336 (Fire				$\vdash$			$\vdash$		$\vdash$	$\vdash$	$\vdash$					$\vdash$
Assay) Cert DMMAS 124	0.80	0.140	0.058	1.30	5	7	52	0.11	< 20	2	$\vdash$	12	81	< 10	6	9
(Aqua Regia) Control Meas																
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.80	0.136	0.057	1.37	5	7	53	0.12	< 20	<1		13	82	< 10	6	9
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.82	0.140	0.059	1.34	6	7	53	0.11	< 20	4		13	83	< 10	6	9
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia)	0.80	0.135	0.058	1.31	5	7	51	0.11	< 20	3		13	80	< 10	6	9

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					QC		-	Activa	tion La	aborat	ories	Ltd.			Rep	ort: A
Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	TI	U	V	W	Υ	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP								
Control Meas																
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.81	0.138	0.058	1.35	6	7	53	0.12	< 20	2		13	82	< 10	6	9
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.81	0.137	0.059	1.33	5	7	52	0.11	< 20	3		13	81	< 10	6	9
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.80	0.133	0.058	1.33	5	7	53	0.11	< 20	4		13	80	< 10	6	9
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.82	0.131	0.058	1.34	6	7	53	0.12	< 20	4		13	81	< 10	6	9
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.81	0.131	0.057	1.36	5	7	53	0.11	< 20	2		13	79	< 10	6	8
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.81	0.137	0.058	1.39	5	7	53	0.11	< 20	2		13	81	< 10	6	9
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.79	0.140	0.059	1.35	6	7	52	0.12	< 20	4		13	80	< 10	6	9
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.80	0.139	0.060	1.36	4	7	53	0.11	< 20	3		13	81	< 10	6	9
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.82	0.060	0.045	0.13	<2	1	28	0.02	< 20	2		< 10	6	33	3	5
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.80	0.141	0.060	1.36	6	7	52	0.11	< 20	3		13	82	< 10	6	9

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					QC		-	Activa	tion L	aborat	ories	Ltd.			Rep	ort: A
Analyte Symbol	Mg	Na	P	s	Sb	Sc	Sr	Ti	Th	Te	TI	U	V	W	Υ	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm							
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.79	0.137	0.059	1.36	6	7	52	0.11	< 20	2		14	80	< 10	6	9
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.80	0.136	0.058	1.37	6	7	53	0.12	< 20	<1		13	81	< 10	6	9
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
DMMAS 124 (Aqua Regia) Control Meas	0.80	0.148	0.061	1.38	7	7	52	0.12	< 20	3		13	84	< 10	6	9
DMMAS 124 (Aqua Regia) Control Cert	0.747	0.126	0.0610	1.39	2.66	7.43	55.9	0.114	1.24	1.18		13.6	85.0	3.94	8.05	8.68
704009 Orig																
704009 Dup																
704015 Orig	1.98	0.218	0.076	0.32	3	14	61	0.38	< 20	5	<2	< 10	184	< 10	11	8
704015 Dup	1.95	0.207	0.075	0.32	2	14	59	0.36	< 20	<1	< 2	< 10	179	< 10	- 11	6
704019 Orig																
704019 Dup																
704022 Orig	0.70	0.205	0.040	< 0.01	< 2	10	57	0.16	< 20	4	< 2	< 10	99	< 10	7	6
704022 Split PREP DUP	0.71	0.220	0.042	< 0.01	<2	10	52	0.14	< 20	2	<2	< 10	99	< 10	7	5
Method Blank																
Method Blank	< 0.01	0.007	< 0.001	< 0.01	< 2	<1	<1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	<1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.008	< 0.001	< 0.01	< 2	<1	<1	< 0.01	< 20	<1	<2	< 10	< 1	< 10	< 1	<1
Method Blank	< 0.01	0.007	< 0.001	< 0.01	< 2	<1	<1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.008	< 0.001	< 0.01	< 2	< 1	<1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.009	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1



To: ARDIDEN CANADA LTD. 684 SQUIER STREET THUNDER BAY ON P78 4A8 Page: 1 Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 20-SEP-2022 Account: ARDNCNL

### CERTIFICATE TB22240570

	Project: Jean
	This report is for 9 samples of Rock submitted to our lab in Thunder Bay, ON, Canada on 25-AUG-2022.
ı	The following have access to data associated with this certificate:
ı	HAYDN DAXTER ROB LONGLEY
1	

	SAMPLE PREPARATION	
ALS CODE	DESCRIPTION	
WEI-21	Received Sample Weight	
LOG-24	Pulp Login - Rcd w/o Barcode	
CRU-QC	Crushing QC Test	
PUL-QC	Pulverizing QC Test	
LOG-22	Sample login – Rcd w/o BarCode	
CRU-31	Fine crushing - 70% <2mm	
SPL-21	Split sample - riffle splitter	
PUL-31	Pulverize up to 250q 85% <75 um	

	ANALYTICAL PROCEDURE	S
ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
Au-AA23	Au 30g FA-AA finish	AAS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*

Signature:

Saa Traxler, Director, North Vancouver Operations



To: ARDIDEN CANADA LTD. 684 SQUIER STREET THUNDER BAY ON P7B 4A8 Page: 2 - A Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 20-SEP-2022 Account: ARDNCNL

								110	cc. jeun							
									(	CERTIFI	CATE O	F ANAL	YSIS	TB2224	40570	
Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-AA23 Au ppm 0.005	ME-ICP41 Ag ppm 0.2	ME-ICP41 AI % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01
20220601 20220602 20220603 20220604 20220605		0.07 2.09 2.21 3.88 2.92	<0.005 <0.005 <0.005 <0.005 <0.005	<0.2 <0.2 <0.2 <0.2 <0.2	0.04 2.73 1.90 2.54 1.96	<2 <2 <2 <2 <2 <2	<10 <10 <10 <10 <10	<10 590 100 530 310	<0.5 <0.5 <0.5 <0.5 <0.5	2 2 2 2	0.01 2.18 1.37 1.63 1.87	<0.5 <0.5 <0.5 <0.5 <0.5	<1 37 23 31 27	7 8 14 7 7	6 14 10 21 19	0.34 6.82 4.29 6.79 5.29
20220606 20220607 20220608 20220609		2.57 2.89 2.79 0.07	<0.005 <0.005 <0.005 <0.005 0.536	<0.2 <0.2 <0.2 <0.2 0.2	1.94 1.71 1.61 3.71	2 2 2 2 27	<10 <10 <10 <10 <10	220 200 80 20	-0.5 -0.5 -0.5 -0.5 -0.5	2 2 2	3.84 3.80 1.71 2.90	<0.5 <0.5 <0.5 <0.5 <0.5	25 24 22 30	8 8 7 18	26 22 45 164	5.40 4.91 4.43 5.84

<sup>\*\*\*\*\*</sup> See Appendix Page for comments regarding this certificate \*\*\*\*\*



To: ARDIDEN CANADA LTD. 684 SQUIER STREET THUNDER BAY ON P7B 4A8 Page: 2 - B Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 20-SEP-2022 Account: ARDNCNL

							-	ect: Jean							
								(	CERTIFI	CATE O	F ANAL	YSIS	TB2224	40570	
Method Analyte Units LOD	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Li ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1
20220601 20220602 20220603 20220604 20220605	<10 10 10 10 10	<1 <1 <1 <1 <1	<0.01 1.58 0.46 1.32 0.82	<10 10 10 10 10	<10 20 10 20 10	0.01 1.39 0.93 1.27 0.97	62 824 356 778 764	1 41 41 41 1	<0.01 0.17 0.26 0.22 0.21	6 21 16 16 15	10 770 870 740 720	-2 -2 -2 -2 -2	<0.01 0.01 <0.01 0.03 0.03	2 2 2 2 2	<1 15 16 13 13
20220606 20220606 20220607 20220608 20220609	10 10 10 10 10	त त त त	0.83 0.70 0.25 0.09	10 10 10 10 <10	10 10 10 10	0.96 0.86 0.71 1.73	958 882 772 738	1 d d d d	0.21 0.21 0.22 0.14	13 12 13 61	770 660 530 400	-22 -22 -22 -14	0.07 0.06 0.07 0.23	2 2 2 2	13 12 14 5

<sup>\*\*\*\*\*</sup> See Appendix Page for comments regarding this certificate \*\*\*\*\*



To: ARDIDEN CANADA LTD. 684 SQUIER STREET THUNDER BAY ON P7B 4A8 Page: 2 - C Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 20-SEP-2022 Account: ARDNCNL

										CERTIFICATE OF ANALYSIS	TB22240570
ample Description	Method Analyte Units LOD	ME-ICP41 Sr ppm 1	ME-ICP41 Th ppm 20	ME-ICP41 Ti % 0.01	ME-ICP41 TI ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP4 Zn ppm 2	п	
20220601 20220602 20220603 20220604 20220605		<1 29 8 14 20	<20 <20 <20 <20 <20	<0.01 0.32 0.17 0.31 0.24	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	1 200 169 166 148	<10 <10 <10 <10 <10	2 101 56 83 66		
20220606 20220607 20220608 20220609		69 49 17 34	<20 <20 <20 <20	0.23 0.22 0.15 0.37	<10 <10 <10 <10	<10 <10 <10 <10	145 137 145 146	<10 <10 10	63 59 51 99		

<sup>\*\*\*\*\*</sup> See Appendix Page for comments regarding this certificate \*\*\*\*\*



To: ARDIDEN CANADA LTD. 684 SQUIER STREET THUNDER BAY ON P78 4A8 Page: Appendix 1 Total # Appendix Pages: 1 Finalized Date: 20-SEP-2022 Account: ARDNCNL

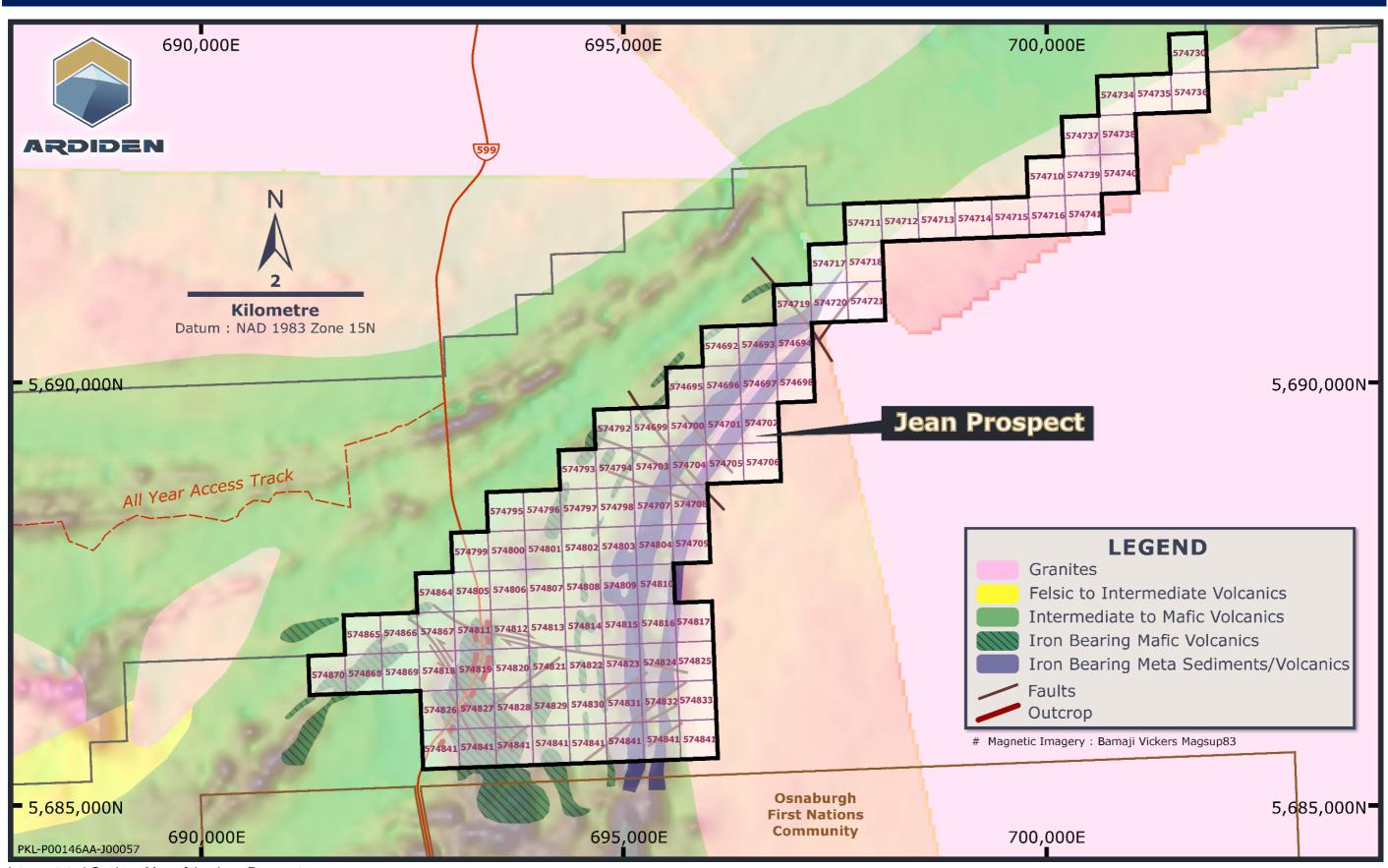
		[	CERTIFICATE OF ANALYSIS	TB22240570									
	CER	RTIFICATE CO	MMENTS										
	LABORATORY ADDRESSES												
Applies to Method:	Processed at ALS Thunder Bay located at 64 CRU-31 CRU- PUL-31 PUL-	-QC	, Thunder Bay, ON, Canada LOG-22 SPL-21	LOG-24 WEI-21									
Applies to Method:	Processed at ALS Vancouver located at 2103 Au-AA23 ME-R	3 Dollarton Hwy, N ICP41	North Vancouver, BC, Canada.										

# 4 Appendix IV Sample Locations Map



Sample Locations at Jean Prospect

# 5 Appendix V Geology Map



Interpretated Geology Map of the Jean Prospect