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# **Report of 2016 Diamond Drill Program on the Mishibishu (Mishi) Property**

Sault Ste. Marie Mining Division, Ontario  
(October 25 – November 9, 2016)

UTM: 5325240N / 613400E [NAD83] ZONE16

NTS: 42C/03SW

Worked Performed on Mining Claims: 3006841

**REPAIRED ON BEHALF OF TRELAWNEY MINING & EXPLORATION INC.**

2140 Regent Street, Unit 10  
Sudbury, Ontario  
Canada P 3E 5S8

*Prepared by:*  
*Stephen Roach, B.Sc*  
*Senior Geologist*

*Contributions by:*  
*Al Smith, M.Sc.P.Geo*  
*District Manager – Exploration*

*March 9, 2017*

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## SUMMARY

The Mishibishu (Mishi) Property is located 50 kilometers west of Wawa and 65 kilometers south of White River, Ontario. Access to the property can be attained by road and helicopter from Wawa, Ontario. The claims of the project are wholly owned by Trelawney Mining and Exploration Inc. (Trelawney) and consist of 208 units in 18 unpatented mining claims covering approximately 3328 hectares (41N14, 42C03, 42C04). Most of the historical exploration occurred in the 1980's and 1990's when production proceeded with the Magnacon and Mishi Mine pit, and the discovery of the Eagle River Deposit. Other than Wesdome Gold Mines, Trelawney has been the most active exploration company in the area in recent times, completing mapping, prospecting, airborne magnetic / EM surveying, and diamond drilling (53 DDH, 18,844m) from 2005-2013.

The Mishi Property is located in the Mishibishu Greenstone Belt (2670 to 2713 Ma), located in the Wawa Subprovince of the Superior Province. It consists of weakly to strongly metamorphosed metavolcanics and metasediments intruded by a variety of complex intrusives. The metavolcanic supracrustal rocks underlying the property are bimodal and classify as calc-alkaline rhyolite to dacite and magnesium to iron-rich tholeiitic basalt metavolcanics. The bimodal metavolcanics account for 75% of the rocks underlying the property, and consist of massive, pillow, to porphyritic mafic flows and felsic fragmentals. Clastic metasediments account for 20% of the exposed bedrock and generally become more prolific and thicker in the northern part of the property. They consist of interbedded greywacke, and argillaceous/arenaceous metasediments, with thin volcanoclastic inter-formational units within mafic metavolcanics. The remaining 5% part of the property is underlain by chemical metasediments which consist of silicate/oxide facies banded iron formation (BIF) with sulphide-rich exhalative cherty tuff, located in the central part of the property. This marks a general boundary between the felsic and mafic metavolcanics. A series of thin, discontinuous quartz-diorite to diorite/gabbro intrusives are located in the southern part of the property. The monzogranite and granodiorite intrusives (2673±12) of the Central Pluton, Mishibishu Lake Stock, and Bowman Batholith, and diabase dykes account for the remaining < 1%, cross-cutting and metamorphosing the supracrustal rocks. The rocks underlying the property have undergone regional greenschist metamorphism, with an upper greenschist to mid-amphibolite metamorphism in proximity to the Central Pluton and the Mishibishu Lake Stock.

The purpose of the 2016 diamond drill program on the Mishi Property was to evaluate historical, geological, and ground IP chargeability/resistivity targets within the Rook Lake Deformation Zone (RLDZ) for potential gold-bearing mineralization. Historical drill hole M88-15 returned up to 0.28 g/t Au over 56.7 meters. The 2016 diamond drill program was conducted from October 25 to November 9, 2016 by Forage Orbit Garant Inc., with the completion of 671 meters of drilling in two (2) NQ-size diamond drill holes. The drilling program was successful in establishing and outlining the down-dip and strike extension of the historically anomalous gold intercepts and both the Aquarius and Arrieta Zones. Thick quartz stockwork and quartz breccia intercepts hosting significant pyrite (5% to 20%) mineralization were intersected within the RLDZ. There is a good correlation between sulphide mineralization of the Arrieta Zone and the IP chargeability responses, particularly on MIS16-01. No significant gold values were returned from both drill holes, and drill hole MIS16-01 did not intersect the down-dip extension of historical gold-bearing intercept(s) in drill hole M88-15.

Although no significant gold values were returned from the 2016 drilling program and surface exploration, only 10% of the RLDZ on the Mishi Property has seen meaningful surface exploration over an 8 kilometer strike length on the Mishi Property.

## **1.0) Introduction**

### **1.1 General**

The Mishibishu (Mishi) Property is located 50 kilometers west of Wawa and 65 kilometers south of White River, Ontario (Figure 1). The purpose of the 2016 drilling program is to evaluate the Rook Lake Deformation Zone (RLDZ) at depth in an area where historical drilling returned up to 0.28 g/t Au over 56.7 meters.

The 2016 drilling program consisted of 671 meters of diamond drilling in two (2) drill holes. The drilling commenced on October 25, 2016 and ended November 9, 2016, covering one (1) mining claim, located in the Sault Ste. Marie Mining Division.

This report describes and interprets the geology and all geochemical results from the 2016 drilling exploration program.

## **2.0) Property Description and Location**

### **2.1) Location, Access, and Accommodation**

The Mishi Property is located 50 kilometers west of Wawa and 65 kilometers south of White River, Ontario (Figure 1). It is located in the Sault Ste. Marie Mining Division (NTS 42C/03SW and 41N/14NW).

The Mishi Property can be accessed by both road via the Paint Lake (Mine) Road from the Trans-Canada Highway 17 and by helicopter from Wawa. The Paint Lake (Mine) Road is approximately 48.8 kilometers northwest of Wawa along Highway 17, with access to the property between 58 KM and 68 KM along the Paint Lake (mine) Road. The Paint Lake (Mine) Road offers direct and easy access to most of the claim group, bisecting the claims in a north-south direction, and links Highway 17 to Wesdome's Eagle River Mine and Mishi Pit, with a security gate at KM 52. There are also a number of old, grown-over exploration and logging trails which can be used from the Paint Lake (Mine) Road, especially in the central part of the claim group east of the road.

A geological consultant supervisor (Scot Halladay), as well as the drillers, stayed in the town of Wawa, Ontario, and commuted on a daily basis to the drill site. The commute required a daily two hour drive from Wawa to the drill site.

### **2.2) Description of Mining Claims**

The Mishi Property consists of 208 units in 18 unpatented mining claims, covering approximately 3328 hectares (Figure 2). The claim distribution of the Mishi Property is summarized in Table 1, with the 2016 claim activities being highlighted. The mining claims are wholly owned by Trelawney Mining and Exploration Inc. (2140 Regent Street, Unit 10, Sudbury, Ontario P3E 5S8).

Figure 1 – Location Map of Mishibishu (Mishi) Property

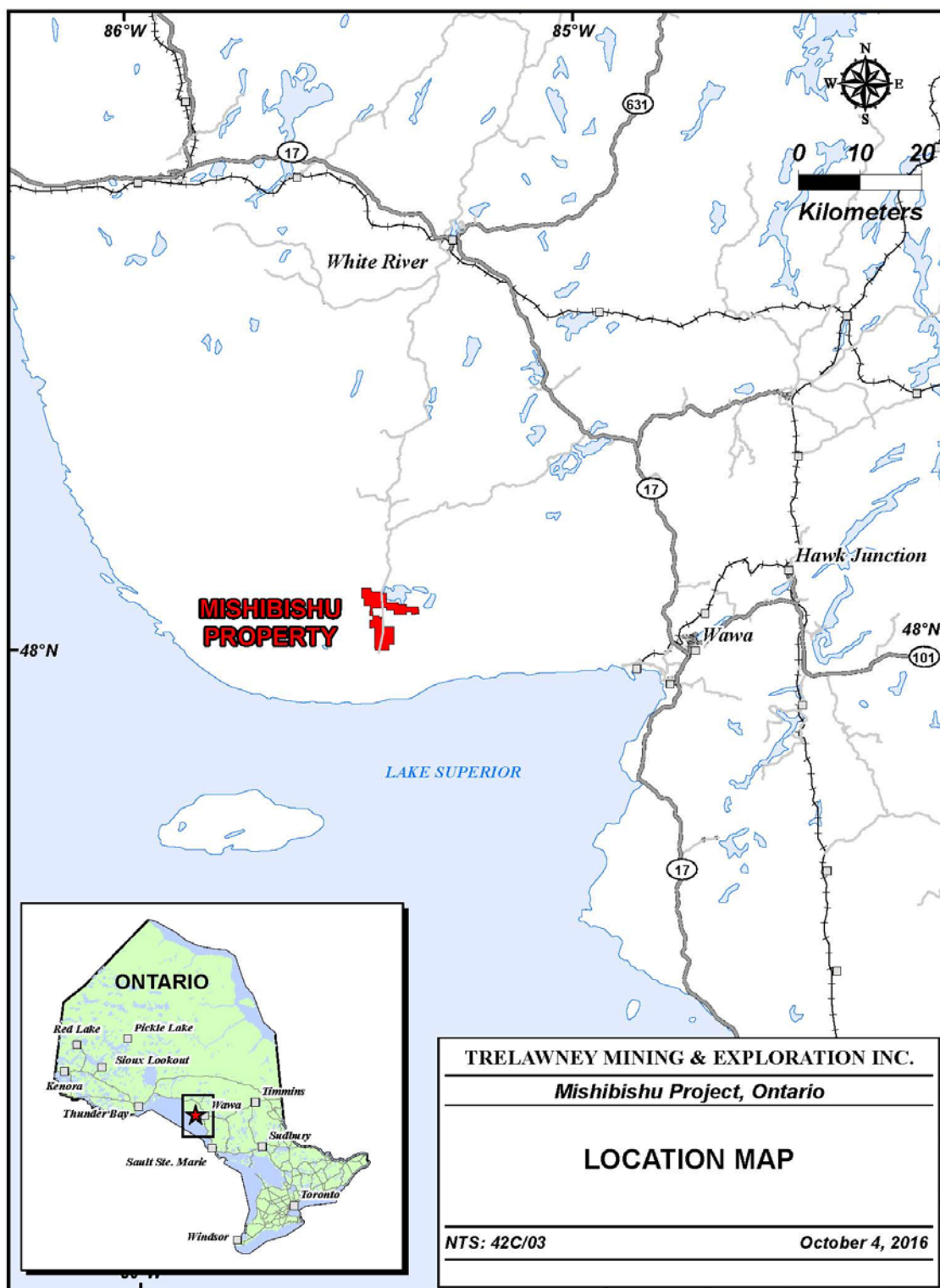


Figure 2 – Mishi Property Claim Map

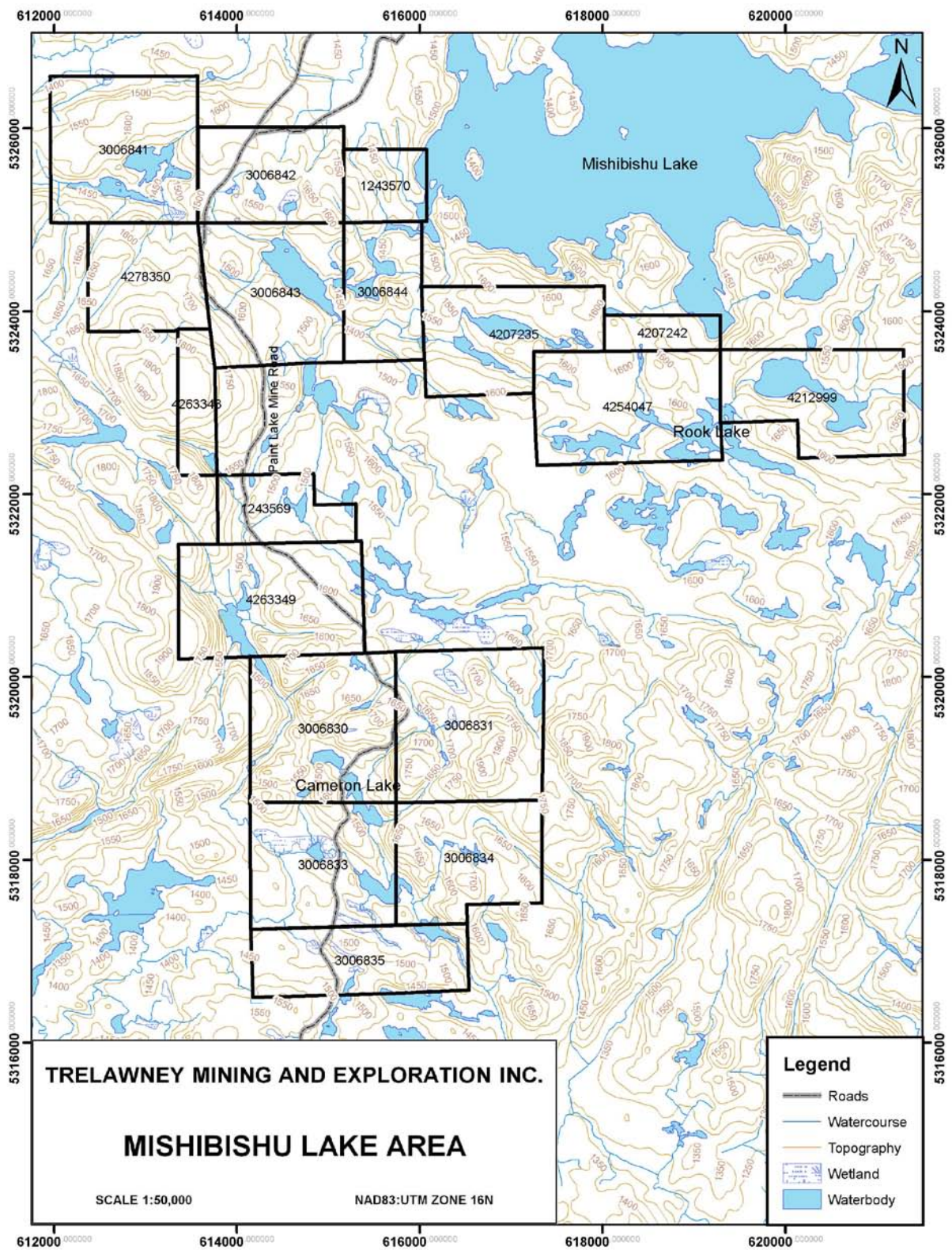


Table 1 – Mishi Property Claim Distribution

Claim Number	Units	Hectares	Area	Current Ownership (100%)	Due Date	Work Due	Reserve
3006830	16	256	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	January 26, 2018	\$6,400	\$0
3006831	16	256	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	January 26, 2017	\$6,400	\$0
3006833	16	256	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	January 26, 2018	\$6,400	\$0
3006834	12	192	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	January 26, 2017	\$4,800	\$0
3006835	12	192	Point Isacor (G-3778)	Trelawney Mining & Exploration Inc.	January 26, 2018	\$4,800	\$0
3006841	16	256	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	January 26, 2018	\$6,400	\$580
3006842	12	192	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	January 26, 2018	\$4,800	\$714
3006843	16	256	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	January 26, 2018	\$6,400	\$0
3006844	8	128	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	January 26, 2018	\$3,200	\$0
4207235	13	208	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	February 7, 2018	\$5,200	\$0
4207242	3	48	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	February 7, 2018	\$1,200	\$0
4212999	13	208	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	February 7, 2018	\$5,200	\$0
4254047	15	240	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	October 12, 2017	\$6,000	\$0
4263348	4	64	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	May 10, 2017	\$1,600	\$0
4263349	15	240	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	January 10, 2017	\$6,000	\$0
1243569	7	112	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	April 22, 2017	\$2,800	\$0
1243570	4	64	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	April 22, 2017	\$1,283	\$0
4278350	10	160	Mishibishu Lake (G-3772)	Trelawney Mining & Exploration Inc.	October 29, 2018	\$4,000	\$2,377
<b>18 claims</b>	<b>208</b>	<b>3328</b>				<b>\$82,883</b>	<b>\$3,671</b>

2016 Claim Activity is highlighted

### 3.0) Physiography and Vegetation

The Mishi Property lies within Mishibishu Lake area, with the southern-most claim boundary located 8 kilometers north of Lake Superior. This area lies within the Late Wisconsinan Substage (26 ka to 13.3 ka) of the Pleistocene Epoch, which is the last continental ice sheet. Ice direction advanced in a southwest direction (Reid et al – 1991). The height of land ranges from 360 meters above sea level (ASL) west of Mishibishu Lake to a maximum height of 565 meters ASL east of Cameron Lake in the central part of the property. Inferred thickness of overburden varies from bedrock exposure in the higher elevations of the southern part of the property, with a thicker overburden cover to the north and central part of the property. Limited historical drilling in the Rook Lake Grid area of the property reveals overburden thickness between 1.4 and 6.3 meters vertically. The overburden cover consists of unconsolidated pebbly, silty sand in the higher elevations with more clay and silty-clay along low-lying ravine, creeks/rivers, such as the Floating Heart and Eagle River areas. Loose bouldery talus and regolith characterize the terrain in higher relief slope areas with thick organic matter/moss covered areas on relatively gentler slopes. Local clay-rich soils are characteristic in relatively stagnant, poorly drained areas. There are numerous glacial lakes and ponds, particularly east and west of Rook Lake in the central part of the property. For the most part, the relief on the property has a moderate and rolling topography, with locally steep areas east of Cameron Lake.

The south-flowing Eagle River and Floating Heart Rivers are the two main river systems on the property, with the Pukaskwa River bordering the west part of the property. There are numerous other drainage systems, especially west and east of the Rook Lake area, in the central part of the property. There are a number of streams encountered in the Rook Lake grid area, generally flowing south to southeast. Mishibishu Lake is the major lake and located north of the property.

For the most part, the property is characterized by variable outcrop exposure with <1% in swampy areas to 70% in the higher terrain. Outcropping areas occur both as continuously exposed knob-like features and as topographical rolls/ledges in higher relief areas, as well as along lake shorelines. Intermittent exposures are characteristic in gently rolling and swampy areas. Vegetation in higher relief areas are characterized by a thin veneer of moss cover, relatively thin soil cover, reflected by loose bouldery-type colluvium. There is little tree cover along knob-like features in the higher elevations of the property. The moderate to lower elevations consist of spruce balsam, birch, poplar, and the occasional maple with willows and low lying alder and maple moose brush in local open areas and following drainage systems. The only logged areas near the Mishi Property bound the property south and west of Rook Lake, where thick brush, moose maple, and alder re-growth is present. No burn areas have been identified on the property.

#### **4.0) Historical Exploration**

There are many indications of historical exploration work, with the most extensive exploration campaigns in the 1980's and 1990's, leading to the discovery and production from the Magnacon and Mishi deposits, and discovery of the Eagle River deposit in the 1980's. Approximately 75% of the documented historical exploration occurred between the years 1980 and 2000. There have been numerous exploration programs completed over and outside the property, with the earliest documented account being in 1937 in the Magnacon and Mishi Pit Mine areas, located along the Mishibishu Deformation Zone (MDZ).

The earliest documented surface exploration was carried out by Sand River Gold Mining in 1957, with little documented exploration activity until the discovery of the Eagle River Deposit and the production activities of the Magnacon Mine and Mishi Mine pit in the mid 1980's. The three producers with current ownership and historical production are summarized as follows...

- 1) Eagle River Mine (Wesdome) - active with historical production (1990, 1995, 1996-2015) of 1,051,357 oz Au from 3,254,157 tonnes @ 9.26 g/t Au
- 2) Mishi Pit (Wesdome) - active with historical production (2002-04, 2007, 2012-15) of 37,148 oz Au from 422,534 tonnes @ 3.08 g/t Au
- 3) Magnacon Mine (Wesdome) - inactive with historical production from Muscocho-Flanagan-McAdam-Windarra JV (1989-90) of 12,058 oz Au from 189,000 tonnes @ 2.20 g/t Au

Most of the documented surface exploration programs conducted within/nearby the Mishi Property was completed by a variety of companies from 1979 to 1990. Exploration work consisted line-cutting, geological mapping, prospecting and rock sampling, soil sampling, ground

geophysical surveys, and some small diamond drill programs (up to 1002 meters in 7 DDH's). Within the Rook Lake Grid area, Muscocho Exploration Ltd carried out line-cutting, geological mapping, prospecting, and local ground VLF-EM/magnetic surveys in 1987. This was followed up by 793.05 meters of diamond drilling in 1988 with the completion of six (6) drill-holes, highlighted by drill hole M88-15, which intersected up to 0.28 g/t Au over 56.7 meters (Table 2).

Numerous airborne surveys were carried out by a variety of companies with airborne VLF-EM and magnetic surveys being the most predominant type of survey. In 1987, the Ontario Geological Survey commissioned an electromagnetic and magnetic airborne survey to Dighem Surveys and Processing Inc. in the Mishibishu Lake area as part of a broader airborne survey covering the Wawa-Renabie areas. As well, in 1969, a regional geochemical (cold extractable total heavy metals in stream and spring sediments) reconnaissance survey was carried out. Only Cu, Zn, Pb, Mn, Ni, and Co elements were analyzed.

The following tables summarize the various documented historical exploration activities in the area;

Table 2 - Historical exploration activity carried out on the Mishi Property from 1957 to 2006

Table 3 - Airborne Surveys from 1983 to 2013

Table 2 – Summary of Historical Exploration in Immediate Area of Targets

<b>Company/Individual</b>	<b>Year</b>	<b>Area</b>	<b>File No</b>	<b>Description of Work</b>
Wesdome Mines Ltd	2006	Eagle River Deformation Zone (ERDZ) – Eagle River Mine area	2005197 & 2005199	4135 meters of drilling in 11 diamond drill holes
Murgor Resources Inc.	1997	Dorset Shear, Floating Heart River & Aylen Showing	42C03SW2007	Geological mapping, prospecting, and trenching – up to 129 g/t Au grab at Dorset and up to 8.1 g/t Au, 0.54% Mo, and 0.22% Pb in grabs at Floating Heart/ Aylen Showing areas
Murgor Resources Inc.	1996	ERDZ, Cameron Lake, & Dorset Shear	42C03SW0049	Prospecting and sampling with gold grab highlights... Marten Shear - <5 to 4300 ppb Au Dorset Shear - <5 to 2300 ppb Au Floating Heart - < 5 to 241 ppb Au Cameron Lake - <5 to 1500 ppb Au Birch Vein - < 5 to 51400 ppb Au
Murgor Resources Inc.	1996	Cameron and Rook Lake areas	42C03SW0011	100 km of line-cutting and ground magnetic survey
Murgor Resources Inc.	1996	Macassa Creek Option	42C04SE0025	19 km of line-cutting and VLF-EM/magnetic survey – in 1998, document IP/resistivity at Dorset
Noranda Exploration Ltd	1990	ERDZ – Eagle Mine area	41N14NW0025	652.2 meters of drilling in 5 diamond drill holes and 127.9 meters in 9 RC drill holes
Muscocho Exploration Ltd	1988	Rook Lake Deformation Zone (RLDZ) – west of mine road, Aylen Showing, Shaft area, & Dorset	42C03SW0057	798.3 meters of drilling in 7 diamond drill holes with anomalous values up to 0.28 g/t Au over approximately 56.7 meters across the RLDZ

<b>Company/Individual</b>	<b>Year</b>	<b>Area</b>	<b>File No</b>	<b>Description of Work</b>
Muscocho Exploration Ltd	1988	Rook Lake Deformation Zone RLDZ – west of mine road, Aylen Showing, Shaft area, & Dorset	42C03SW0050	1002.4 meters of drilling in 7 diamond drill holes – no significant assays
Muscocho Exploration Ltd	1987	RLDZ & Dorset area	42C03SW0063	136 km line-cutting, geological mapping, prospecting & sampling highlighted by 4.8 g/t Au in East Creek Showing & 0.75 g/t Au in RLDZ. Local VLF-EM/magnetic survey across portions of the RLDZ to confirm airborne VLF-EM anomaly
Dominion Explorers Inc. & Wasabi Resources Ltd	1987	Missing Lake Area	42C03SW0068	Soil Sampling (1617 samples)
Dominion Explorers Inc. & Wasabi Resources Ltd	1987	Missing Lake Area	42C03SW0127	Geological mapping
Noranda Exploration	1986	ERDZ – discovery of Eagle River Mine area	41N14NW0039	112 km of line-cutting and geological mapping/sampling and WRA, and 2056 soil samples. Highlights include rock grab samples up 4.11 g/t Au and a 700 meters long soil gold anomaly with values up to 4110 ppb Au
Wasabi Resources Inc.	1986	Cameron Lake (west side) & Missing Lake area	42C03SW8770	271.6 meters of drilling in 4 diamond drill holes – no assays reported
Wasabi Resources Inc., Chavin of Canada Ltd, O'Brien Energy & Resources Ltd	1984	Missing Lake area	42C03SW0096	44.24 km of line-cutting, geological mapping & sampling, soil sampling with 465 samples, and 14.4 km of MaxMin 11 HLEM survey
Wasabi Resources Inc., Chavin of Canada Ltd, O'Brien Energy & Resources Ltd	1984	Missing Lake area	42C03SW0098	Prospecting and sampling, 40 km of ground magnetics, 9.8 km of Crone Radem VLF-EM
Amoco Canada Petroleum Company Ltd – Mining Division	1980	Cameron Lake area	42C03SW0118	380.3 meters of drilling in 4 diamond drill holes – no significant Au assays
Amoco Canada Petroleum Company Ltd – Mining Div.	1979	Cameron Lake area	42C03SW0117	Geological mapping
ASARCO Exploration Ltd	1972	Mishibishu and Cameron Lake area	42C03SW0122	299.7 meters of drilling in 4 diamond drill holes – no significant Au, Ag, Cu, Zn assays returned
Sand River Gold Mining	1957	Missing Lake & west of Cameron Lake	42C03SW8778	Dip needle survey and 248.3 meters of drilling in 2 diamond drill holes – no Au assays reported

Table 3 – Historical Airborne Surveys

<i>Company</i>	<i>Airborne Survey</i>	<i>Year</i>	<i>AFRI File Number</i>	<i>Area</i>	<i>Type of Airborne Survey</i>
Trelawney Mining & Exploration Inc.	Eon Geosciences Inc.	2013		Mishibishu, Rook, and Cameron Lake	996 line km of high resolution magnetic survey
Upper Canada Inc.	Terraquest Ltd	2007	20000003098	David Lakes & SE of Pukaskwa River	35.3 line km of magnetic gradient & XDS VLF-EM
TEREX Resources Inc.	McPhar Geosciences Inc	2005	20000001024	Mishibishu, Rook, and Cameron Lake	372.2 line km of helicopter magnetics/TDEM
Villeneuve Resources Ltd	H. Ferderber Geophysics Ltd	1989	42C03SW0306	No Name Lake in Eagle River Deformation Zone	178.4 line km magnetics/VLF-EM
San Paulo Explorations Inc.	Terraquest Ltd	1987	42C03SW0080	Mishibishu & Rook Lake	150 line km of magnetics/VLF-EM
Muscocho Explorations Ltd	Dighem Surveys & Processing Inc.	1987	42C03SW0069	Rook Lake and Dorset	520 line km of EM/resistivity/magnetics/VLF-EM
Wasabi Resources Ltd	Terraquest Ltd	1985	42C04SE0052	Macassa Creek - West and SW of Mishibishu Lake	445 line km of magnetics/VLF-EM
Central Crude Ltd	Aerodat Ltd	1983	42C03SW0115	No Name Lake in Eagle River Deformation Zone	505.6 line km of helicopter magnetics/VLF-EM
Harbinson Mining and Oil Group	Aerodat Ltd	1983	42C03SW0066 & 42C03SW0114	Cameron Lake and Dorset	507.2 line km of magnetics/EM/VLF-EM

#### 4.1) Trelawney Mining and Exploration Inc. Activities

Trelawney Mining and Exploration carried out the most comprehensive exploration programs in recent times, with the completion of mapping, prospecting, rock and soil sampling, and three (3) test lines of a ground VLF-EM survey in the summer of 2016. Other surface exploration work consisted of ground pole-dipole induced polarization (IP) survey in 2015, as well as mapping, prospecting, rock sampling, airborne magnetic / EM surveying, and diamond drilling (18,844 meters in 53 drill holes) from 2005-2014 (Table 4). The exploration work is highlighted by 9.6 km of diamond drilling in 48 drill holes from 2006-08 in the Dorset Zone area, with mapping, prospecting/sampling, and a small drill program in subsequent years on various parts of the Mishi Property. The Dorset Zone has an indicated resource (0.5 g/t Au cut-off) of 780,000 tonnes @ 1.42 g/t Au for 40,000 oz Au (Cavey and Giroux of Orequest – 2007). The Dorset Zone area is currently not part of the Mishi Property. In 2013, Eon Geosciences Inc. carried out a high resolution magnetic survey over the Mishi Property in the Cameron and Rook Lake areas covering 996 line kilometers.

Table 4 – Exploration Work by Trelawney Mining & Exploration Inc. from 2005-16

Year	Area	AFRI File Number	Description of Exploration Work
2016	Rook Lake Deformation Zone & ERDZ Splay		18.65 km of mapping and sampling, prospecting/sampling, 2.6 km of ground VLF-EM survey, and 400 meters of B-horizon and humus soil survey
2015	Rook Lake Deformation Zone - Paint Lake (Mine) Road Area		23.5 km of line-cutting and ground magnetic survey and 15 km of ground pole-dipole induced polarization (IP) with an A-spacing of 50m and N=107
2014	Rook Lake Deformation Zone – Paint Lake (Mine) Road Area		Re-logging and sampling drill hole M06-04
2014	1) Eagle Mine area 2) Cameron Lake 3) Rook Lake area		29.7 km of GPS mapping and sampling in three target areas: 1) Eagle River Deformation Zone RDZ Splay; 2) Cameron Lake; and 3) Rook Lake Deformation Zone (RLDZ) AREA
2013	Mishibishu, Rook, and Cameron Lake		996 line km of high resolution airborne magnetic survey by Eon Geosciences Inc.
2013	Cameron Lake		Geological mapping and sampling with gold values from rock grabs returning up to 2.51 g/t Au in the Cameron Lake area
2011	Cameron Lake (along mine road)		Diamond Drilling with 693 meters in 3 drill holes – pending assays at time of report
2011	Dorset Shear (near mine road)	20000007603	Diamond Drilling with 530 meters in 2 drill holes – pending assays at time of report
2011	Cameron Lake	20000006616	Prospecting highlighted by gold values from rock grabs returning up to 5.62 g/t Au and 12.34 g/t Au near the Eagle River Deformation Zone south of Cameron Lake
2010	Mine road – on Rook Lake Deformation Zone	20000004671	Prospecting and sampling with no significant assays in two (2) samples
2008	Mishi North & Murgor Resources option peripheral to Dorset Zone	20000003452	Diamond Drilling with 5691 meters in 26 drill holes – highlighted by 4.08 g/t Au / 2.3m. in MR-08-16 and 5.23 g/t Au / 1.1m. in MR-08-25
2006	Dorset Zone and Dorset/Marten Deformation Zone	20000001925	Diamond Drilling with 2929 meters in 18 drill holes – highlighted by 5.35 g/t Au / 1.6m. in MR-06-42, and 3.26 g/t Au / 12.5 m. in MR-06-51
2006	Mishibishu and Cameron, & near mine road on Rook Lake Deformation Zone	20000001179	Diamond Drilling with 1001 meters in 4 drill holes – pending assays at time of report
2005	Mishibishu, Rook, and Cameron Lake	20000001024	372.2 line km of helicopter magnetics/TDEM by McPhar Geosciences Inc.

## 5.0) Regional Geological Setting

The supracrustal rocks underlying the general the Mishibishu Greenstone Belt (2670 to 2713 Ma) forms part of the Wawa Subprovince of the Superior Province in Precambrian Shield (Figure 3). The Mishibishu Greenstone Belt forms a broad, arcuate shaped belt and consists predominantly of metamorphosed bimodal felsic and mafic metavolcanics with clastic and chemical metasediments, intruded by a variety of complex intrusives (Figure 3). It is bounded by the Pukaskwa Batholith to the north and the Floating Heart Batholith to the south (Reid et al – 1992). The supracrustal rocks have undergone greenschist facies metamorphism, with upper greenschist to lower amphibolite facies metamorphism near a suite of younger felsic to intermediate intrusions.

The rocks of the Mishibishu Greenstone Belt are characterized by extensive, bimodal metavolcanic assemblages, which account for 70% of the underlying supracrustal rock types. The metavolcanics have been outlined for approximately 40 kilometers, with thicknesses of up to 5 kilometers. The mafic metavolcanics are characterized by older, magnesium to iron-rich tholeiitic basalts, and the felsic metavolcanics are classified as calc-alkaline rhyolite to dacite (Figure 4). Andesitic rocks are not prominent. Clastic metasediments account for 25% of the supracrustal rocks underlying the area, and are concentrated north of Mishibishu Lake (Reid et al – 1991). They consist of well bedded, greywacke, arenaceous, and argillaceous metasediments (turbidite sequences), with polymictic conglomerates. It has been traced over 60 kilometers with thicknesses up to 6 kilometers. Chemical metasediments account for the remaining <5% of the underlying supracrustal rock types, and form primarily as silicate with oxide banded iron formation (BIF) and sulphide facies exhalative cherty tuff horizons. The most prominent BIF is located at Cameron Lake and forms a series of horizons with a strike of approximately 7 kilometers and thicknesses between <100 and 150 meters. There are a number of discrete intermediate (diorite) to mafic (gabbro) bodies, which may be in part synvolcanic to their metavolcanic equivalents. There are three major felsic to intermediate intrusives (2673±12 Ma), with the Central Pluton (monzogranite to granodiorite) being the largest body and occupying 125 km<sup>2</sup>. The monzonite to quartz-monzonite Mishibishu Lake Stock (30 km<sup>2</sup>) and the granodiorite to granite Bowman Lake Batholith (60 km<sup>2</sup>) are located east and southeast of the Central Pluton, respectively. There are numerous northwest to northeast trending diabase dykes and are probably Keweenawan age.

There are four prominent deformation zones; 1) Mishibishu Deformation Zone (MDZ), 2) Rook Lake Deformation Zone (RLDZ), 3) Eagle River Deformation Zone (ERDZ), and 4) East Pukaskwa Deformation Zone (EPDZ). These deformation zones trend east to southeast and have overprinted all metavolcanic and metasedimentary rock types. The MDZ is the most extensive deformation zone, measuring approximately 40 kilometers in length and up to 1.5 kilometers wide (Reid et al – 1991). The Central Pluton is located in the central part of the belt and has provided a major arcuate-shaped strain aureole for several hundred meters. Repetition of supracrustal litho-stratigraphy indicates tight to isoclinal regional folding throughout the belt (Reid et al - 1991). Bennett and Thurston (1977) have identified an overturned synclinal structure to the northern portion of the belt.

There are three gold producing mines in the Mishibishu Greenstone Belt, with Wesdome Gold Mines' Eagle River Mine being the major, active producer. The ownership of each producing mine is summarized as follows...

- 1) Eagle River Mine (Wesdome) - active with historical production (1990, 1995, 1996-2015) of 1,051,357 oz Au from 3,254,157 tonnes @ 9.26 g/t Au
- 2) Mishi Pit (Wesdome) - active with historical production (2002-04, 2007, 2012-15) of 37,148 oz Au from 422,534 tonnes @ 3.08 g/t Au
- 3) Magnacon Mine (Wesdome) - inactive with historical production from Muscocho-Flanagan-McAdam-Windarra JV (1989-90) of 12,058 oz Au from 189,000 tonnes @ 2.20 g/t Au

Figure 3 – Regional & Mishi Property Geology (after GSC)

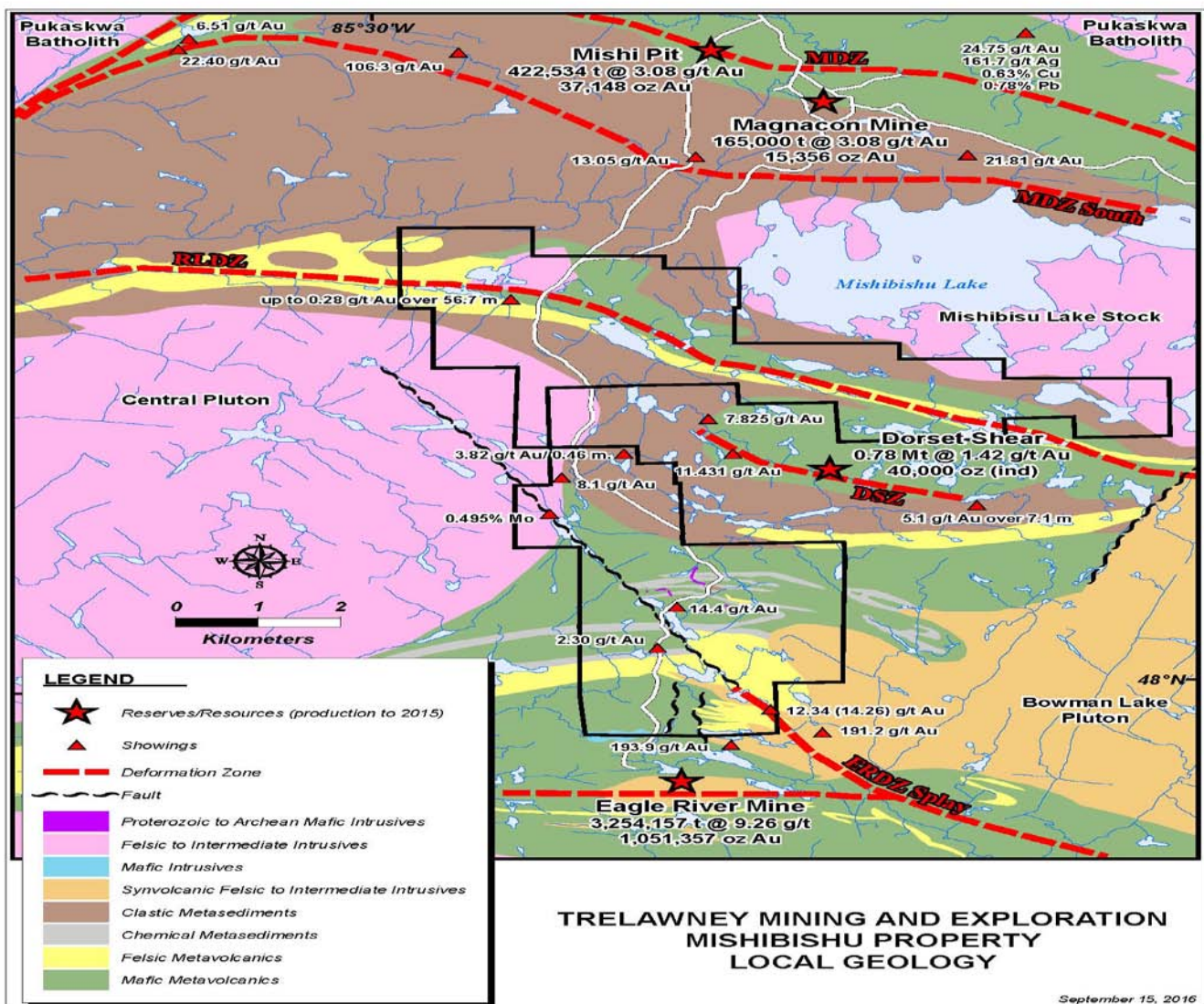
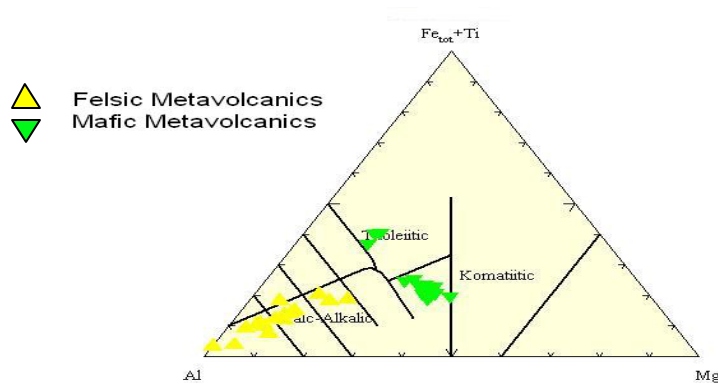


Figure 4 – Jensen Cation Plot of Normalized Metavolcanics



## 6.0) Property Geological Setting

The supracrustal rocks underlying the Mishi Property are characteristic of several sequences of bimodal metavolcanics, clastic metasediments, and banded iron formation (Figure 3). The mafic (50%) and felsic (20%) metavolcanics are part of an extensive, folded sequence that extends easterly for the entire length of the property. The thickest part of the mafic rocks is up to 2.0 km wide in the southern part of the property. The metavolcanics are bimodal with magnesium to iron-rich tholeiitic basalts and calc-alkaline rhyolite to dacite. Basaltic rocks consist of massive to pillow flows with volcanoclastics, with medium to coarse grained sub-volcanic gabbro and/or flows. There are numerous thin epiclastic/volcanoclastic interformational horizons within the mafic metavolcanics. The felsics are predominantly tuffaceous fragmental. Clastic metasediments account for 25% of the underlying rocks, and are part of a thicker 1 to 2 kilometer wide sequence on the property. The clastic metasediments define a turbidite sequence with well bedded greywacke and argillaceous rocks being prominent with arenaceous and lean BIF interbeds. Several sequences of thick and continuous BIF (<5%) mark a general boundary in the central part of the property in the Cameron Lake area, with felsic and mafic metavolcanics to the south and intercalated mafic metavolcanics and clastic metasediments to the north. The BIF are primarily silicate facies with the presence of both oxide and sulphide facies BIF. A series of thin discontinuous quartz-diorite to diorite/gabbro intrusives are located in the southern part of the property. Younger monzogranite and granodiorite felsic to intermediate intrusives and diabase dykes account for the remaining < 1%, intruding the metavolcanics and both clastic and chemical metasediments. The rocks underlying the property have undergone regional lower greenschist metamorphism, with an upper greenschist to misamphibolite metamorphism in proximity to the Central Pluton.

The major structures on the property are the Rook Lake Deformation (RLDZ) and the Eagle River Deformation Splay (ERDZ Splay). The RLDZ consists of an anastomosing high strain zone that trends the full length of the property for approximately 8 kilometers in an east-west direction, as part of a 20 kilometer long deformation zone. There has been no historical

production from within the RLDZ. However, a sub-parallel, gold-bearing Dorset Zone is located 1.5 kilometers to the south of the RLDZ, and hosts 40,000 oz Au as a low grade gold resource averaging 1.42 g/t Au (0.5 g/t Au cut-off) in 780,000 tonnes. Both the metavolcanics and metasediments have undergone extensive shearing and hydrothermal alteration in this sinistral, shear zone, altering the respective protolith to silicified-albite and chlorite-carbonate-(sericite). The other structure is a northwest splay (ERDZ Splay) from the Eagle River Deformation Zone and is located in the south part of the Mishi Property. This structure has been interpreted from geological mapping and airborne magnetics, and both the quartz diorite and felsic metavolcanics have undergone moderate to locally intense shearing and alteration in an area of northwest trending linear magnetic highs and breaks.

Both metavolcanics and metasediments have undergone extensive brittle-ductile deformation, similar to what has been described in other gold mining camps. There may be at least three major deformation/fold events, an older one trending north-south, and the other two younger in a west to northwest directions. Major structural lineaments have been interpreted in the western and central part of property, and appear to be axial planar to a series of parasitic fold features. These lineaments are associated with gold mineralization in quartz vein systems along these deformation zones.

This area remains an active area of mining with Wesdome Gold Mines mining activities at the Eagle River Mine and the Mishi Mine pit. The presence of gold-bearing mineralization on the property demonstrates the potential for gold-bearing mineralization. There are four potential gold-bearing areas; 1) Rook Lake Deformation Zone (RLDZ), 2) Cameron Lake Area, 3) Eagle River Deformation Zone Splay area, and 4) Aylen & Au-Mo Showing areas. The **RLDZ** on the Mishi Property has been outlined partially over 8 kilometers as part of a 20 kilometer long anastomosing shear zone which consists of strongly sheared and hydrothermally altered metavolcanics. Historical drill hole M-87-15 intersected over 80 meters of strong fractured and brecciated felsic/cherty tuff exhalative and strongly sheared chlorite-carbonate altered mafic metavolcanics with continuous anomalous gold values up to 0.28 g/t Au over 56.7 meters. Multiple BIF horizons in the **Cameron Lake** area nearly strike the entire length of the property for approximately up to 4 kilometers as part of a 7 kilometer regional trend. Historical values returned up to 14.4 g/t Au (not verified historically) by Noranda in the Clyde Showing and base/precious metal values of 4.72% Zn and 0.16 g/t Au by Wasabi Resources. Quartz diorite host rock with anomalous Au values up to 0.85 g/t Au were uncovered in the northwest splay of the **ERDZ** and is similar to the host rock in the Eagle River Mine area. There are numerous gold showings in the Au-Mo and Aylen Showing areas, highlighted by historical values of up to 8.1 g/t Au, 0.54% Mo, 0.22% Pb related to the Central Pluton. There are anomalous values of Ag-Bi-Te-Re spatially located in the contact metamorphic aureole of the Central Pluton.

Table 5 - Summary of Regional Structural Trends & Showings on the Mishi Property

Zone/Showing	Trend Length (km)	Au (g/t) – up to	Mineralization & Other Pathfinders	Alteration	Host Rock
Rook Lake Deformation Zone	8.0	0.75 (historic)	pyrite-chalcopyrite-galena (Cu-Pb)	silicified-albite-(sericite) & chlorite-carbonate	Felsic Tuff/Cherty tuff & Massive Mafic Flows and Volcaniclastics
Cameron Lake	4.0	14.4 (historic)	pyrite and pyrrhotite - S	silicification and sulphidation	Silicate-Oxide-Sulphide Facies Banded Iron Formation
Eagle River Deformation Zone Splay Area	Splay from ERDZ – ~4.0 km	0.85	pyrite-chalcopyrite-sphalerite - Cu-Zn-As-Te	silicified & chlorite-(carbonate)	Quartz-diorite and Felsic Tuff
Aylen & Au-Mo Showing	1.7	8.1(historic)	molybdenite-pyrite-galena – Mo-Pb-Ag-Bi-Te-Re	unknown	Aplite/Felsite Dykes and Metavolcanics

## 7.0) Deposit Types

The deposits in the Mishibishu Greenstone Belt include orogenic shear-hosted mesothermal lode-gold in an intermediate intrusive (Eagle River Mine) and in typical greenstone meta-sedimentary and metavolcanic rocks (Mishi Mine pit and the Magnacon Mine). They account for > 1.2 Moz Au historical gold production, with the Eagle River Mine and Mishi Mine pit being active mining operations. Gold mineralization in the Mishibishu Greenstone Belt shows evidence of a similar pattern of a diverse array of characteristics with the Mishi Project;

- 1) Orogenic lode-gold quartz vein and wallrock replacement in shear environment – e.g. RLDZ and splay of ERDZ similar to Eagle River Mine (quartz vein) and Mishi Mine pit (altered and mineralized shear)
- 2) Orogenic lode-gold quartz vein and sulphidation replacement in BIF along fold nose and shear stratabound contacts in a mesothermal gold environment – Clyde Showing (up to 14.4 g/t Au) in Cameron Lake area
- 3) Au-Mo with Ag-Bi-Te-Re in granitoid Central Pluton hosted mineralization and aureole of contact metamorphosed supracrustal metavolcanics and metasediments – e.g. Au-Mo Showing and Aylen Showing

Gold mineralization on Mishi Project is more typical of an orogenic-type mesothermal gold environment within shears of folded and faulted metavolcanics and clastic metasediments. There is also a spatial and genetic relationship between the gold mineralization and the Central Pluton intrusives, with anomalous Ag-Bi-Te-Re hosted in both the contact metamorphosed meta-volcanics and metasediments.

## 8.0) Summary of 2016 Mishi Property Diamond Drill Program

The late autumn 2016 diamond drill program was designed to follow up both positive historical exploration in the Rook Lake Deformation Zone, as well as Trelawney's 2016 mapping and prospecting results and 2015 ground IP chargeability and airborne/ground magnetic responses. Prior to the 2016 drill program, surface exploration work carried out by Trelawney consisted of line-cutting, pole-dipole IP survey, grid mapping, prospecting, and humus sampling. The ground IP work led to a range of weak to strong chargeability zones, and the discovery of two quartz stockwork zones (Aquarius and Arrieta) from the prospecting part of the surface program. Although no significant gold mineralization was returned from surface sampling, the IP chargeability responses for the most part have not been explained by surface mapping and prospecting.

The diamond drill program commenced October 25, 2016 and was completed on November 9, 2016 by Forage Orbit Garant Inc. (3200 Boulevard Jean-Jacques Cossette, Val D'Or, Quebec J9P 6Y6 ). The drilling program is located west of the Paint Lake Road (Mine Road) at approximately KM 58-59 in the northwestern part of the Mishi Property on claim 3006841 in the Mishibishu Lake area. A total of 671 meters of diamond drilling in two (2) diamond drill holes were completed during this time, with the size of core being NQ. This report describes and interprets the drilling results of the two (2) diamond drill holes, MIS16-01 and MIS16-02. Drill-hole survey data is presented in Table 5.

Drill logs and assay certificates are located in Appendix 1 and 2, respectively. A drill plan and two drill sections are presented in Appendix 3 and 4, respectively.

Table 5 - Drill Hole Survey Data

Drill Hole	Northing	Easting	Elevation (m)	Azimuth	Collar Dip	Depth (m)
	(Nad 83)	(Nad 83)				
MIS16-01	5325240	613426	457	206.3	-45.5	421
MIS16-02	5325247	613313	457	215.4	-45.2	250

Scot Halladay, senior consulting geologist, under the supervision of Stephen Roach (senior project geologist) supervised the overall diamond drill program in 2016. A GPS (Garmin GPS map 62S) was utilized to collect collar locations, as UTM co-ordinates. Accuracy is between 2 and 6 meters, with accuracy declining in heavily tree cover areas. Nad 83 in Zone 16T was used. With the use of a compass and cut line, both a collar and two foresight pickets were used to orient the drill.

Both Scot Halladay and Stephen Roach logged the core, with a thorough review of the core at the Cote Camp.

## **9.0) Analytical Quality Control and Quality Assurance**

A total of 383 samples were outlined from core logging (including standards and blanks). Samples were analyzed by Activation Laboratories (Actlabs – 1752 Riverside Drive, Timmins, Ontario P4R 1N1).

All samples were bagged, and secured with security twist tags in rice bags. The samples were delivered to the Actlabs laboratory in Timmins. All 383 core samples were analyzed by Actlabs for gold by fire assay/AA and 184 samples were analyzed by a 61 element ICP-OES and ICP-MS rock package. All methods used, analyses, and detection limits are summarized in Appendix 2.

Activation Laboratories (Actlabs) is accredited by the Standards Council of Canada to ISO/IEC 17025 for specific registered tests or certification to ISO 9001:2008 certifications for accredited methods. Sample preparation, analytical and quality control procedures employed are mutually similar in procedure and are as follows:

### **9.1) Sample Preparation**

Once the samples have been received, they are entered into a Laboratory Information Management System (LIMS) and given an internal sample control number. The samples are then checked for dryness prior to any sample preparation and dried if needed. The rock samples are crushed up to 90% passing through a 2 mm and rifle split 250 g to 95% passing 105 microns using a Jones Rifler. The soil samples were dried to 60°C and screened to -180 microns. Silica cleaning between each sample is also performed to prevent any cross contamination. Random screen analysis is performed daily to check for attainable mesh size.

### **9.2) Gold Analyses**

A fire assay with an atomic absorption finish was used for gold analyses on the rocks. All Au analysis is performed at a 30g charge by fire assay using lead collection with a silver inquart. The beads are then digested and an atomic absorption finish is used. The detection limit is 5 ppb.

### **9.3) Multi Scan Analyses**

Multi scan analysis for rock (61element) was performed using a near total to total four acid digestion (hydrochloric, nitric, perchloric, hydrofluoric). It is then analyzed by ICP-OES and ICP-MS method. Detection limits are outlined in the assay certificates in Appendix 2.

#### **9.4) Laboratory and Company Quality Control / Quality Assurance (QC/QA)**

Certified standard and blank assays are usually run for each rack of samples. A non-reproducible check assay are an indication of nugget problems within the sample and both laboratories recommend that further analysis be performed to generate a better representation of the sample.

All standards run are graphed to monitor the performance of the laboratory. Actlabs warning limit is 2 times the standard deviation and our control limit is 3 times the standard deviation. Any work order with a standard running outside the warning limit will have selected re-assays performed, and any work order with a standard running outside the control limit will have the entire batch of samples re-analysed.

All QC/QA data run with each work order is kept with the clients file. If desired, the client may have all the blanks and certified standards reported on a certificate to correspond to the client's samples. All quality control graphs are available upon request.

The laboratory also keeps daily log books for the sample throughput. These logs record all information pertaining to; 1) who performed the analysis, 2) when the analysis was done, 3) how the analysis was performed, and 4) what other sample were analyzed at the same time. This is done to help eliminate the possibility of misrepresentation and cross-contamination of the client's samples.

Actlabs instruments are calibrated using ISO traceable calibration standards and our quality control standards are created from separate stock solutions. Their instruments are directly tied to their quality control program eliminating the need for manual data entry, hence, reducing human error.

Trelawney Mining and Exploration Inc. also inserted one standard and blank into every 12<sup>th</sup> alternating rock sample. No standards or blanks were used in the soil sequence. The author believes that the results of sampling and analysis of core samples collected during this program reliably reflect the nature of mineralization observed.

#### **10.0) Discussion of Results from 2016 Diamond Drill Program**

The following briefly summarizes the geological descriptions and gold assay results of each drill hole, MIS16-01 and MIS16-02. A drill plan is presented in Appendix 3 and each hole is illustrated in a drill section in Appendix 4.

The following is a summary of each drill-hole highlighting the geology and significant sulphide intercepts.

## 10.1) MIS16-01

This diamond drill hole is located west of the Paint Lake Road (KM58-59), on the western part of the Rook Lake Grid on L 101+00E. This hole is designed to test the down-dip extension of a number of anomalous gold-bearing intercepts in M88-15 (up to 0.28 g/t Au / 56.7m) and a moderate chargeability (10.29 mV/v) with a strong resistivity low from the IP survey. Anticipated intersections are between 90 meters and in excess of 120 meters vertically below surface. This also reflects the western-most extension of the pyritic quartz stockwork of the Aquarius and possibly the Arrieta Zone (Roach – 2016).

Felsic metavolcanics in the form of felsic tuff are the predominant rock type intersected in this drill hole. These rocks are typically gray to bleached creamy white, having undergone strong intense silicification and possibly albite alteration. These highly altered rocks are cherty-like and found at the top of the drill hole, as from 38.45 to 46.6. Primary relict fragmental textures are not well preserved as there is a well-developed penetrative foliation. There are thin inter-formational chert bands midway through the drill hole up to 5 cm wide, as from 150.1 to 164.2. The felsic rocks have undergone weak to moderate silicification and sericite alteration with variable chlorite.

Chemical metasediments (exhalative) is the other major rock type intersected in this drill hole, with the most prolific unit intersected between 164.2 to 191.75, with creamy white chert accounting for 70% to 80% of the interval with felsic tuff. The chert is mainly composed of quartz and sericite with local fuschite alteration. Primary laminated textures are well preserved locally within this unit. Chert shows well developed folding features, such as interference fold patterns and parasitic/drag folds.

A lean silicate and carbonate facies banded iron formation (BIF) intercalated mafic volcanoclastic is recognized from 97.5 to 109.45 and consists of magnetite-rich bands and laminations with chlorite and carbonate. Magnetite-bearing bands and laminations are up to 4 cm wide. There are local inter-beds of chert. Arenaceous and reworked felsic metavolcanics are at the contact between HW felsics and FW mafics, between 257.4 and 293.20, and show well developed primary banding and laminations.

Mafic metavolcanic rocks have been recognized in the latter part of the drill hole, with massive to pillowed mafic flow sequences. Mafic volcanoclastics interbedded with greywacke with chert have also been recognized between 59.0 and 72.3. This interval is dirty grayish green with creamy white chert bands, and intermediate to mafic composition with variable weak to moderate to strongly silicified cherty bands/beds up to 23 cm wide. There is weak to locally moderate carbonate (calcite) in the more cherty bands with variable carbonate in the greywacke and reworked mafics. It gradually becomes more magnetic towards 72.3 and shows well developed primary bedding/banding.

All rock types have been cross cut by lamprophyre and diabase dykes. A quartz monzonite body was intersected at the collar. Major fault contacts with gouge and broken core are typically recognized at the dyke contacts and reflect the RLDZ.

MIS 16-01 intersected both the strike extension of the Aquarius and Arrieta Zone in the form of quartz stockwork and quartz breccia. The Aquarius Zone has an aggregate drill width of 29.45 meters (Table 7). The more mineralized section of Aquarius consists of 10% to 20% pyrite for 5.1 meters in a weak quartz stockwork which has undergone intermediate argillic alteration. The more silicified-(albite altered) section of the quartz stockwork in the upper part of the interval consists of <1% pyrite. The interpreted extension of the Arrieta Zone is from 206.15 to 217.0 and is summarized in Table 7.

Drilling results from the Aquarius and Arrieta Zones did not return significant precious and base results (Table 7). Also, MIS 16-01 failed to intersect a down-dip extension of the gold-bearing mineralization intersected in historical drill hole M88-15.

Table 7 – Summary of MIS16-01 Significant Sulphide Intercepts

Drill Hole	Final Depth (m)	From	To	Width (m)	Zone	Au (g/t)	Significant Intercepts
MIS16-01	421	67.8	69.7	1.9		NSV	Mafic Volcaniclastic & Greywacke – 5% diss pyrite
		117.0	129.3	12.3	Aquarius	NSV	Quartz Stockwork - strong sil; 5% to 25% qs, <0.5% py (diabase dyke-out)
		132.95	145	12.05	Aquarius	NSV	Quartz Breccia and Quartz Stockwork – strong sil-(ab), 5% to 25% qs with <1% to 5% py (2% to 4% py from 139.0 to 145.0)
		145.0	150.1	5.1	Aquarius	NSV	Pyritic and Weak Quartz Stockwork – mod sil-chl-(ser) intermediate argillic alteration, 7% to 10% qs/qcs, 10% to 20% pyrite
		206.15	217.0	10.85	Arrieta	NSV	Quartz Stockwork - 15% to 20% qs and 2% py
		330.0	330.1	0.10		NSV	Graphitic Shear in Felsic to Intermediate Tuffs

## 10.2) MIS16-02

This diamond drill hole is located west of the Paint Lake Road (KM58-59), on the western part of the Rook Lake Grid on L 100+00E. This hole is designed to test the strike extension of both the Aquarius and Arrieta Zone 100 meters from MIS16-01 and surface.

Felsic metavolcanics are the predominant rock type and account for approximately 60% of the rocks. They consist mainly of felsic tuff/volcaniclastics to tuff breccia with flow banded autoclastic breccias at both the top and near the bottom of the drill hole. These rocks range from gray, bleached creamy white, and pinkish white in color. The more bleached colored felsic rocks have undergone strong and intense silicification and albite alteration and are cherty-like. They are typically recognized in the upper part of the drill hole, with numerous intervals from 6.1 to 55.0. Primary relict fragmental textures are well preserved near the bottom part of the drill-hole, with mono-lithological flow banded felsic fragments (up to 13 cm in size) in a very-fine to fine-grained tuffaceous matrix. The coarser fragmentals are generally fragment supported. There are thin inter-formational chert bands midway throughout the drill hole up to 10 cm wide, as from 120.5 to 153.5. The felsic rocks in the lower part of the drill-hole have undergone weak chlorite, sericite, and biotite alteration.

Mafic metavolcanic rocks in the form of pillow flows have been recognized in the upper part of the drill hole from 55.0 to 73.7 and accounts for 10%. The mafics are typically dirty dark grayish green to green color with reddish creamy white chert bands, and mafic in composition with weak to moderate chlorite-(epidote) alteration and weak carbonate (calcite). Reddish creamy white colored cherty bands show moderate to strong hematite dusting with a recognizable specular hematite in fracture at 62.5. Localized well developed deformed pillows (i.e. at 62) varying <5 to 15 cm wide with massive/foliated sections.

Chemical metasediments have been recognized in a series of intervals in MIS16-02 and account for 10% of the rocks intersections. The most notable intercept is from 75.2 to 87.8 and is described as a lean silicate and carbonate facies banded iron formation (BIF) intercalated with mafic volcaniclastics, similar to what is described in MIS16-01. It consists magnetite-rich bands and laminations with chlorite and carbonate. Magnetite-bearing bands and laminations are up to 5 cm wide. There are local inter-beds of chert.

Diabase accounts for the remaining 20% of the intersections with a quartz monzonite body intersected at the collar. Major fault contacts with gouge and broken core are recognized in both the felsic rocks and more importantly in the diabase cross-cutting the mineralized quartz stockwork of the Aquarius Zone.

MIS 16-02 intersected both the strike extension of the Aquarius and Arrieta Zone in the form of a quartz stockwork. The extension of the both zones have been significantly faulted with possible strike-slip sinistral movement to the south. The Aquarius Zone has an aggregate drill width of 10.95 meters (Table 8). The more mineralized section of Aquarius consists of 5% to 10% disseminated pyrite for 5.2 meters in a weak quartz stockwork which has undergone intermediate argillic alteration. The more silicified-(albite altered)

section of the quartz stockwork in the upper part of the interval consists of <1% pyrite-chalcopyrite. An 8.7 meter wide mineralized footwall zone from 120.5 to 129.2 hosts weakly chloritic felsic volcanoclastics with 1% to 3% pyrite and local 5% to 10% pyrite. The interpreted extension of the Arrieta Zone is from 153.5 to 155.1 and consists of a weak quartz stockwork hosted in cherty felsic volcanoclastics. It is smoky grayish white chert and dark gray volcanoclastics, having undergone weak to moderate silicification associated with quartz vein fracturing (10% to 15%). There are two (2) very fine-grained, aphanitic siliceous cherty bands at 30 to 35 cm width account for 40% of the unit. Sulphide mineralization consists of very fine grained scattered pyrite-(pyrrhotite) up to 1%, scattered in cherty tuff and associated with the quartz stringers in felsic volcanoclastic. Drilling results from the Aquarius and Arrieta Zones did not return significant precious and base metal values, as well as in other mineralized/structural zones (Table 8).

Table 8 –Summary of MIS16-02 Significant Sulphide Intercepts

Drill Hole	Final Depth (m)	From	To	Width (m)	Zone	Au (g/t)	Significant Intercepts
MIS16-02	250	71.5	73.5	2.0		NSV	Mafic Pillow Flows – strong cb & 5% py & <1% cpy
		73.7	75.2	1.5		NSV	Quartz Stockwork - strong sil; 15% qs, 5% disseminated py with local 10% py, < 1% cpy
		75.2	87.8	22.6		NSV	Silicate & Carbonate BIF – strong cb near lower contact, local 3% to 6% py (up to 10%) and < 1% splashes of cpy
		100.05	101.8	1.75	Aquarius	NSV	Quartz Stockwork – strong sil, 20% qs/qcs, up to 1% cpy>py (diabase/flt dyke-out)
		111.3	115.3	4.0	Aquarius	NSV	Quartz Stockwork - strong sil-(ab), 5% to 25% qs, <1% cpy>py
		115.3	120.5	5.2	Aquarius	NSV	Pyritic Weak Quartz Stockwork – moderate chl-(sil-cb), 5% qs, 5% to 10% disseminated py with local 20% to 25% py
		120.5	129.2	8.7	Aquarius	NSV	Felsic Volcanoclastic – wk chl, 1% to 3% py and local 5% to 10% py
		153.5	155.1	1.6	Arrieta	NSV	Weak Quartz Stockwork & Exhalative Chert (40%) - strong sil as bands, 10% to 15% qs, < 1% py-(po)

## **11.0) Conclusions**

The drilling program was successful in establishing better continuity of the Aquarius and Arrieta Zone with mineralized intercepts along strike in the down-dip and plunge direction. Despite the lack of anomalous precious and base metal values returned from assay samples, the observation of significant alteration, sulphide mineralization, and structure within an under-explored regional deformation zone warrants future exploration in other parts of the RLDZ. This drilling program also confirmed that sulphide mineralization is only spatially associated with the IP chargeability responses of the Arrieta Zone, and did not confirm the significant sulphide intercepts associated with IP chargeability responses of the Aquarius Zone.

The regional RLDZ has been confirmed and broadly delineated over an 8 kilometer strike length on the Mishi Property with its pervasive silicified-albite alteration core. The 2016 drill program did not intersect any significant precious and base metal mineralization in close proximity to historical drill-hole M88-15, which reportedly intersected 0.28 g/t Au over a 56.7 meter intercept in strongly silicified zones, quartz breccia, and brecciated/fractured felsic metavolcanics.

Host rock, geometry, and structure along the RLDZ is analogous to greenstone hosted, shear zone related quartz and quartz-carbonate gold deposits, particularly along the Mishibishu Lake Deformation Zone which hosts Wesdome's Mishi Pit. Folding, faults, and fractures along the RLDZ provide pathways and traps for auriferous hydrothermal fluid movement. The presence of lean iron formation in the RLDZ provides the chemical trap for gold to potentially precipitate in the formation of pyrite in veined and silica-'flooded' structures.

## **12.0) Recommendations**

Further evaluation is required on other parts of the RLDZ, particularly in the Rook Lake area. Additional rock property analyses on selected 2016 drill core intervals may assist in this evaluation of future surface geophysical surveys and to determine if the favorable mineralization is detectable by geophysical methods.

### 13.0) References

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## STATEMENT OF QUALIFICATIONS

I, Stephen Roach, of 47 Crantham Crescent, Stittsville, Ontario K2S 1R2, certify that;

1. I obtained a Bachelor degree in Geology from Concordia University in 1977. In addition, I attended Carleton University from 1981-83 in a Graduate Program.
2. I have worked as a geologist for more than 36 years since my graduation from university been in the practice of my profession as Exploration Geologist since 1977.
3. I am responsible for this report entitled, Addendum to Report of 2016 Diamond Drill Program on the Mishibishu (Mishi) Project, Sault Ste. Marie Mining Division, Central Ontario (October 25 – November 9, 2016)
4. I have no beneficial interest, direct or indirect in the Mishi Project that is the subject of this report.

Dated March 9, 2017

A handwritten signature in cursive script that reads "Stephen Roach". The signature is written in dark ink on a light-colored background.

---

Stephen Roach, B.Sc.

## STATEMENT OF QUALIFICATIONS – ALAN SMITH

I, Alan Smith, do hereby certify that:

1. I have been the District Manager – Exploration for Trelawney Mining and Exploration Inc., a wholly-owned subsidiary of IAMGOLD, since February, 2013.
2. I graduated with an Honors Bachelor of Science Degree in Geology from the University of Western Ontario in 1984. I completed an M.Sc. Degree in Geology at the University of Western Ontario in 1987.
3. I am a practicing member in good standing with the Association of Professional Geoscientists of Ontario (Membership Number 0201). I am also a Member of the PDAC, CIM, and OPA.
4. I have worked as a Geologist for more than 30 years since graduation from University.
5. I am responsible for the supervision of the Addendum to 2016 Diamond Drill Program on the Mishi Property, and have reviewed the contents of this assessment report.
6. I have been involved in the Trelawney Mining and Exploration Inc. Ontario Exploration program since February of 2013.

Dated March 9, 2017



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Alan Smith

# APPENDIX 1



DRILL HOLE REPORT

Hole Number: MIS16-01			Project: MISHI			Project Number: 243		
Drilling			Casing			Core		
Azimuth: 213.2			Length: 5			Dimension: NQ		
Dip: -45.4			Pulled: no			Diam Chang: no		
Length: 421			Capped: yes			Storage: Klondike Lodge		
Started: 25-Oct-16			Cemented: no			Hole Type DDH		
Completed: 05-Nov-16			Left in hole: no			Logged by: Scot Halladay		
Logged: 30-Oct-16			Making water: no			Relog by: Stephen Roach		
Township: MISHIBISHU			Plugged: no			Location		
Target: Dn-dip on M88-15 (0.28 gpt Au) at 150m depth						Claim No.: 3006841		
Comment: long initial setup from Oct.25-29 delays from Orbit						NTS: 42C-03SW		
						Hole: SURFACE		
						Section:		
						Zone: 16		
						NAD: NAD83		
						Other		
						Company: IAMGOLD		
						Contractor: Orbit Garant		
						Spotted by: Scot Halladay		
						Surveyed: yes		
						Surveyed by:		
						Multi shot su yes		
						Coordinate - Gemcom		
						Coordinate - UTM		
						Coordinate - Local		
						East: 613426		
						East: 613426		
						East: 0		
						North: 5325240		
						North: 5325240		
						North: 0		
						Elev.: 448		
						Elev.: 448		
						Elev.: 0		

Deviation Tests										Density Tests									
Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments										
0.00	213.20	-45.40	0	0	0	0	C	☑											
16.00	206.10	-45.40				59104	C	☑											
19.00	206.50	-45.40				57497	C	☑											
22.00	206.10	-45.50				56875	C	☑											
25.00	206.10	-45.40				56548	C	☑											
28.00	205.90	-45.50				56352	C	☑											
31.00	206.70	-44.90				56229	C	☑											
34.00	205.50	-45.50				56176	C	☑											
37.00	205.50	-45.40				56091	C	☑											
40.00	205.00	-45.50				55975	C	☑											
43.00	205.00	-45.50				55927	C	☑											
46.00	205.10	-45.50				55996	C	☑											
49.00	206.50	-45.50				56480	C	☑											
52.00	206.20	-45.50				56801	C	☑											
55.00	204.20	-45.50				57521	C	☑											



DRILL HOLE REPORT

Hole Number: MIS16-01			Project: MISHI			Project Number: 243		
Drilling			Casing			Core		
Azimuth: 213.2			Length: 5			Dimension: NQ		
Dip: -45.4			Pulled: no			Diam Chang: no		
Length: 421			Capped: yes			Storage: Klondike Lodge		
Started: 25-Oct-16			Cemented: no			Hole Type DDH		
Completed: 05-Nov-16			Left in hole: no			Logged by: Scot Halladay		
Logged: 30-Oct-16			Making water: no			Relog by: Stephen Roach		
Township: MISHIBISHU			Plugged: no			Location		
Target: Dn-dip on M88-15 (0.28 gpt Au) at 150m depth						Claim No.: 3006841		
Comment: long initial setup from Oct.25-29 delays from Orbit						NTS: 42C-03SW		
						Hole: SURFACE		
						Section:		
						Zone: 16		
						NAD: NAD83		
						Other		
						Company: IAMGOLD		
						Contractor: Orbit Garant		
						Spotted by: Scot Halladay		
						Surveyed: yes		
						Surveyed by:		
						Multi shot su yes		
						Coordinate - Gemcom		
						East: 613426		
						North: 5325240		
						Elev.: 448		
						Coordinate - UTM		
						East: 613426		
						North: 5325240		
						Elev.: 448		
						Coordinate - Local		
						East: 0		
						North: 0		
						Elev.: 0		

Deviation Tests										Density Tests									
Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments										
58.00	208.00	-45.50				57611	C	✓											
61.00	211.70	-45.50				57229	C	✓											
64.00	210.50	-45.60				57035	C	✓											
67.00	209.40	-45.70				56750	C	✓											
70.00	208.60	-45.70				57784	C	✓											
73.00	207.10	-45.80				56564	C	✓											
76.00	211.50	-45.80				57479	C	✓											
79.00	206.90	-45.80				57400	C	✓											
85.00	209.40	-45.80				54311	C	✓											
88.00	211.30	-45.80				56174	C	✓											
94.00	213.10	-45.80				55576	C	✓											
97.00	204.60	-45.80				57130	C	✓											
#####	197.30	-45.80				56657	C	✓											
#####	205.50	-45.70				55290	C	✓											
#####	208.50	-45.80				55859	C	✓											



DRILL HOLE REPORT

Hole Number: MIS16-01

Project: MISHI

Project Number: 243

Drilling		Casing		Core		Location		Other	
Azimuth:	213.2	Length:	5	Dimension:	NQ	Claim No.:	3006841	Company:	IAMGOLD
Dip:	-45.4	Pulled:	no	Diam Chang:	no	NTS:	42C-03SW	Contractor:	Orbit Garant
Length:	421	Capped:	yes	Storage:	Klondike Lodge	Hole:	SURFACE	Spotted by:	Scot Halladay
Started:	25-Oct-16	Cemented:	no	Hole Type	DDH	Section:		Surveyed:	yes
Completed:	05-Nov-16	Left in hole:	no	Logged by:	Scot Halladay	Zone:	16	Surveyed by:	
Logged:	30-Oct-16	Making water:	no	Relog by:	Stephen Roach	NAD:	NAD83	Multi shot su	yes
Township:	MISHIBISHU	Plugged:	no						
Target:	Dn-dip on M88-15 (0.28 gpt Au) at 150m depth					Coordinate - Gemcom	Coordinate - UTM	Coordinate - Local	
Comment:	long initial setup from Oct.25-29 delays from Orbit					East:	613426	East:	613426
						North:	5325240	North:	5325240
						Elev.:	448	Elev.:	448
								East:	0
								North:	0
								Elev.:	0

Deviation Tests										Density Tests									
Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments										
#####	199.70	-45.90				57106	C	✓											
#####	198.10	-45.90				57767	C	✓											
#####	201.90	-45.90				57119	C	✓											
#####	206.00	-45.90				55585	C	✓											
#####	205.60	-45.90				55701	C	✓											
#####	205.10	-45.90				55684	C	✓											
#####	204.20	-46.10				55750	C	✓											
#####	204.80	-46.00				55871	C	✓											
#####	205.50	-46.00				56008	C	✓											
#####	203.90	-46.00				54482	C	✓											
#####	206.90	-46.10				55987	C	✓											
#####	206.20	-46.00				56004	C	✓											
#####	206.20	-46.00				55997	C	✓											
#####	206.10	-46.00				56001	C	✓											
#####	205.80	-46.10				55987	C	✓											

Hole Number: **MIS16-01**Project: **MISHI**

Project Number: 243

Deviation Tests							Density Tests		
Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments
#####	205.80	-45.90				56036	C	<input checked="" type="checkbox"/>	
#####	206.00	-45.90				56083	C	<input checked="" type="checkbox"/>	
#####	206.20	-45.90				56092	C	<input checked="" type="checkbox"/>	
#####	206.30	-45.90				56130	C	<input checked="" type="checkbox"/>	
#####	206.10	-45.80				56118	C	<input checked="" type="checkbox"/>	
#####	206.50	-45.80				56102	C	<input checked="" type="checkbox"/>	
#####	206.20	-45.80				56102	C	<input checked="" type="checkbox"/>	
#####	206.30	-45.80				56107	C	<input checked="" type="checkbox"/>	
#####	206.40	-45.80				56090	C	<input checked="" type="checkbox"/>	
#####	206.40	-45.80				56104	C	<input checked="" type="checkbox"/>	
#####	206.50	-45.80				56116	C	<input checked="" type="checkbox"/>	
#####	206.50	-45.90				56110	C	<input checked="" type="checkbox"/>	
#####	206.70	-45.80				56112	C	<input checked="" type="checkbox"/>	
#####	206.60	-45.90				56125	C	<input checked="" type="checkbox"/>	
#####	206.80	-45.90				56119	C	<input checked="" type="checkbox"/>	



DRILL HOLE REPORT

Hole Number: MIS16-01			Project: MISHI			Project Number: 243		
Drilling			Casing			Core		
Azimuth: 213.2			Length: 5			Dimension: NQ		
Dip: -45.4			Pulled: no			Diam Chang: no		
Length: 421			Capped: yes			Storage: Klondike Lodge		
Started: 25-Oct-16			Cemented: no			Hole Type DDH		
Completed: 05-Nov-16			Left in hole: no			Logged by: Scot Halladay		
Logged: 30-Oct-16			Making water: no			Relog by: Stephen Roach		
Township: MISHIBISHU			Plugged: no			Location		
Target: Dn-dip on M88-15 (0.28 gpt Au) at 150m depth						Claim No.: 3006841		
Comment: long initial setup from Oct.25-29 delays from Orbit						NTS: 42C-03SW		
						Hole: SURFACE		
						Section:		
						Zone: 16		
						NAD: NAD83		
						Other		
						Company: IAMGOLD		
						Contractor: Orbit Garant		
						Spotted by: Scot Halladay		
						Surveyed: yes		
						Surveyed by:		
						Multi shot su yes		
						Coordinate - Gemcom		
						East: 613426		
						North: 5325240		
						Elev.: 448		
						Coordinate - UTM		
						East: 613426		
						North: 5325240		
						Elev.: 448		
						Coordinate - Local		
						East: 0		
						North: 0		
						Elev.: 0		

Deviation Tests										Density Tests									
Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments										
#####	206.70	-45.90				56116	C	✓											
#####	206.80	-45.90				56156	C	✓											
#####	206.80	-45.90				56115	C	✓											
#####	206.80	-45.90				56123	C	✓											
#####	207.00	-45.90				56144	C	✓											
#####	207.00	-45.90				56164	C	✓											
#####	207.20	-45.90				56173	C	✓											
#####	207.00	-45.90				56155	C	✓											
#####	207.20	-45.90				56164	C	✓											
#####	207.40	-45.80				56169	C	✓											
#####	207.40	-45.80				56152	C	✓											
#####	207.40	-45.80				56156	C	✓											
#####	207.50	-45.80				56152	C	✓											
#####	207.40	-45.70				56161	C	✓											
#####	207.40	-45.70				56184	C	✓											



DRILL HOLE REPORT

Hole Number: MIS16-01			Project: MISHI			Project Number: 243		
Drilling			Casing			Core		
Azimuth: 213.2			Length: 5			Dimension: NQ		
Dip: -45.4			Pulled: no			Diam Chang: no		
Length: 421			Capped: yes			Storage: Klondike Lodge		
Started: 25-Oct-16			Cemented: no			Hole Type DDH		
Completed: 05-Nov-16			Left in hole: no			Logged by: Scot Halladay		
Logged: 30-Oct-16			Making water: no			Relog by: Stephen Roach		
Township: MISHIBISHU			Plugged: no			Location		
Target: Dn-dip on M88-15 (0.28 gpt Au) at 150m depth						Claim No.: 3006841		
Comment: long initial setup from Oct.25-29 delays from Orbit						NTS: 42C-03SW		
						Hole: SURFACE		
						Section:		
						Zone: 16		
						NAD: NAD83		
						Other		
						Company: IAMGOLD		
						Contractor: Orbit Garant		
						Spotted by: Scot Halladay		
						Surveyed: yes		
						Surveyed by:		
						Multi shot su yes		
						Coordinate - Gemcom		
						East: 613426		
						North: 5325240		
						Elev.: 448		
						Coordinate - UTM		
						East: 613426		
						North: 5325240		
						Elev.: 448		
						Coordinate - Local		
						East: 0		
						North: 0		
						Elev.: 0		

Deviation Tests										Density Tests									
Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments										
#####	207.60	-45.70				56194	C	✓											
#####	207.60	-45.70				56179	C	✓											
#####	207.70	-45.60				56198	C	✓											
#####	207.70	-45.60				56210	C	✓											
#####	207.70	-45.60				56208	C	✓											
#####	207.80	-45.60				56204	C	✓											
#####	207.80	-45.50				56188	C	✓											
#####	207.70	-45.50				56194	C	✓											
#####	207.90	-45.50				56207	C	✓											
#####	207.60	-45.40				56299	C	✓											
#####	207.90	-45.40				56240	C	✓											
#####	208.30	-45.40				56242	C	✓											
#####	207.20	-44.80				56251	C	✓											
#####	208.40	-45.40				56186	C	✓											
#####	208.60	-45.40				56179	C	✓											



DRILL HOLE REPORT

Hole Number: MIS16-01			Project: MISHI			Project Number: 243		
Drilling			Casing			Core		
Azimuth: 213.2			Length: 5			Dimension: NQ		
Dip: -45.4			Pulled: no			Diam Chang: no		
Length: 421			Capped: yes			Storage: Klondike Lodge		
Started: 25-Oct-16			Cemented: no			Hole Type DDH		
Completed: 05-Nov-16			Left in hole: no			Logged by: Scot Halladay		
Logged: 30-Oct-16			Making water: no			Relog by: Stephen Roach		
Township: MISHIBISHU			Plugged: no			Location		
Target: Dn-dip on M88-15 (0.28 gpt Au) at 150m depth						Claim No.: 3006841		
Comment: long initial setup from Oct.25-29 delays from Orbit						NTS: 42C-03SW		
						Hole: SURFACE		
						Section:		
						Zone: 16		
						NAD: NAD83		
						Other		
						Company: IAMGOLD		
						Contractor: Orbit Garant		
						Spotted by: Scot Halladay		
						Surveyed: yes		
						Surveyed by:		
						Multi shot su yes		
						Coordinate - Gemcom		
						East: 613426		
						North: 5325240		
						Elev.: 448		
						Coordinate - UTM		
						East: 613426		
						North: 5325240		
						Elev.: 448		
						Coordinate - Local		
						East: 0		
						North: 0		
						Elev.: 0		

Deviation Tests										Density Tests									
Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments										
#####	208.70	-45.40				56192	C	✓											
#####	208.60	-45.40				56189	C	✓											
#####	208.50	-45.40				56213	C	✓											
#####	208.80	-45.30				56216	C	✓											
#####	208.60	-45.30				56182	C	✓											
#####	208.80	-45.30				56233	C	✓											
#####	208.80	-45.30				56232	C	✓											
#####	208.90	-45.30				56275	C	✓											
#####	209.00	-45.20				56238	C	✓											
#####	209.20	-45.20				56237	C	✓											
#####	209.10	-45.20				56269	C	✓											
#####	209.10	-45.20				56246	C	✓											
#####	209.30	-45.20				56270	C	✓											
#####	209.10	-45.20				56284	C	✓											
#####	209.10	-45.20				56283	C	✓											



DRILL HOLE REPORT

Hole Number: MIS16-01

Project: MISHI

Project Number: 243

Drilling		Casing		Core		Location		Other	
Azimuth:	213.2	Length:	5	Dimension:	NQ	Claim No.:	3006841	Company:	IAMGOLD
Dip:	-45.4	Pulled:	no	Diam Chang:	no	NTS:	42C-03SW	Contractor:	Orbit Garant
Length:	421	Capped:	yes	Storage:	Klondike Lodge	Hole:	SURFACE	Spotted by:	Scot Halladay
Started:	25-Oct-16	Cemented:	no	Hole Type	DDH	Section:		Surveyed:	yes
Completed:	05-Nov-16	Left in hole:	no	Logged by:	Scot Halladay	Zone:	16	Surveyed by:	
Logged:	30-Oct-16	Making water:	no	Relog by:	Stephen Roach	NAD:	NAD83	Multi shot su	yes
Township:	MISHIBISHU	Plugged:	no						
Target:	Dn-dip on M88-15 (0.28 gpt Au) at 150m depth					Coordinate - Gemcom	Coordinate - UTM	Coordinate - Local	
Comment:	long initial setup from Oct.25-29 delays from Orbit					East:	613426	East:	613426
						North:	5325240	North:	5325240
						Elev.:	448	Elev.:	448

Deviation Tests										Density Tests									
Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments										
#####	209.10	-45.20				56383	C	✓											
#####	209.10	-45.20				56309	C	✓											
#####	208.90	-45.20				56260	C	✓											
#####	209.70	-45.20				56371	C	✓											
#####	208.50	-45.10				56280	C	✓											
#####	209.60	-45.20				56161	C	✓											
#####	209.20	-45.10				56282	C	✓											
#####	209.30	-45.10				56241	C	✓											
#####	209.40	-45.10				56257	C	✓											
#####	209.60	-45.10				56269	C	✓											
#####	208.20	-45.10				56516	C	✓											
#####	209.20	-45.10				56212	C	✓											
#####	209.40	-45.10				56349	C	✓											
#####	209.50	-45.10				56316	C	✓											
#####	209.70	-45.00				56321	C	✓											



DRILL HOLE REPORT

Hole Number: MIS16-01

Project: MISHI

Project Number: 243

Drilling		Casing		Core		Location		Other	
Azimuth:	213.2	Length:	5	Dimension:	NQ	Claim No.:	3006841	Company:	IAMGOLD
Dip:	-45.4	Pulled:	no	Diam Chang:	no	NTS:	42C-03SW	Contractor:	Orbit Garant
Length:	421	Capped:	yes	Storage:	Klondike Lodge	Hole:	SURFACE	Spotted by:	Scot Halladay
Started:	25-Oct-16	Cemented:	no	Hole Type	DDH	Section:		Surveyed:	yes
Completed:	05-Nov-16	Left in hole:	no	Logged by:	Scot Halladay	Zone:	16	Surveyed by:	
Logged:	30-Oct-16	Making water:	no	Relog by:	Stephen Roach	NAD:	NAD83	Multi shot su	yes
Township:	MISHIBISHU	Plugged:	no						
Target:	Dn-dip on M88-15 (0.28 gpt Au) at 150m depth					Coordinate - Gemcom	Coordinate - UTM	Coordinate - Local	
Comment:	long initial setup from Oct.25-29 delays from Orbit					East:	613426	East:	613426
						North:	5325240	North:	5325240
						Elev.:	448	Elev.:	448
								East:	0
								North:	0
								Elev.:	0

Deviation Tests

Density Tests

Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments
#####	209.60	-45.00				56337	C	✓	
#####	209.60	-45.00				56355	C	✓	
#####	209.80	-45.00				56339	C	✓	
#####	209.80	-44.90				56345	C	✓	
#####	210.00	-44.90				56346	C	✓	
#####	210.00	-44.90				56361	C	✓	
#####	210.10	-44.90				56355	C	✓	
#####	209.90	-44.90				56354	C	✓	
#####	209.80	-44.90				56365	C	✓	
#####	209.90	-44.90				56362	C	✓	
#####	209.70	-44.90				56346	C	✓	
#####	209.70	-45.00				56352	C	✓	
#####	209.80	-45.10				56365	C	✓	
#####	209.60	-45.20				56352	C	✓	
#####	209.70	-45.40				56352	C	✓	

# LITHOLOGY REPORT

## - Detailed -

Hole Number: MIS16-01

Project: MISHI

Project Number: 243

From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
0.00	5.00	Overburden Overburden - sandy silt and boulders	3	3	CR									
5.00	9.75	Fresh Rock Monzonite-Quartz Monzonite Monzonite-Quartz Monzonite - pink to greyish pink, felsic in composition being vfg and massive with kspar-rich matrix with 15% to 25% disseminated and fracture-fill pistacho green epidote, wk to moderate pervasive hem stain/dusting.  - vfg, aphanitic and massive to blocky (locally micro brecciated and infilled with 5% hairline to sub cm qtz-carb ff's in 2 dominant sets (CA 5-20 and 40-60 dtca cross-cutting w nil sulphides observed. Unit contain greater than 90% vfg-fg sugary qtz on fresh surface, <5% ep-rich altered wallrock inclusions (<0.5 cm to 1 cm in size) and weakly foliated 60dtca.  Mineralization - occasional py < 1% Contact - sharp broken contact with wr inclusion far ct CA 70. RQD is approx 10 to 7m, then approx 45 to last 50cm where RQD=0	3	1	PI									
Alteration Maj:		Type/Style/Intensity	Comment											
5.00 - 9.75		HM PV 2	Hematization, Pervasive, Weak to Moderate											
5.00 - 9.75		EP DISS 3	Epidotization, Disseminated, Moderate 15% to 25%											
Mineralization Maj. :		Type/Style/%Mineral	Comment											
5.00 - 9.75		Py BLB 1	<1% occasional py											
Structure Maj.:		Inte/Type/Core Angle	Comment											
5.00 - 9.75		JNT 50	Jointed, 50° CA											
Texture Maj:		Type	Comment											
5.00 - 9.75		AP	Aphanitic to crystalline											

# LITHOLOGY REPORT

## - Detailed -

Hole Number: MIS16-01

Project: MISHI

Project Number: 243

From (m)	To (m)	Lithology			Weathering Oxidation Colour			Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
9.75	10.70	Fresh Rock	3F	Felsic Tuff	1	1	CR									
Felsic Tuff - creamy white color, felsic composition being weakly siliciified, vfg and massive with weakly foliated 75 to 90 from C.A., occasional qs/qcs < 1%																
Mineralization - barren to <1% py																
Contact - sharp contact 82 frpm C.A.																
		Alteration Maj:	Type/Style/Intensity			Comment										
		9.75 - 10.70	SI   MX   1			Silicification, Matrix, Very weak										
		Mineralization Maj. :	Type/Style/%Mineral			Comment										
		9.75 - 10.70	Py   BLB   1			<1% occasional pyrite, Blebs										
10.70	15.10	Fresh Rock	8D	Monzonite-Quartz Monzonite	1	1	PI									
Monzonite/Quartz Monzonite - Similar in description to section from 5.0 to 9.75 with....																
1) decrease in epidote from 13.2 to 15.1 and subsequent relative increase in sil from 13.2 to 15.1 with increased qs 2% to 4% ( up to 2 cm wide)																
2) a number of felsic tuff inclusions up to 20 cm wide from 11.7 to 12.5 ranging 80 to 90 from C.A.																
Mineralization - occasional to widely scattered py <1% with slight increase in py associated with sil and qs but still < 1%																
Contact - sharp contact with 20 cm wide vfg diabase dyke (14.9 to 15.1) ranging 0 to 60 from C.A.																
		Mineralization Maj. :	Type/Style/%Mineral			Comment										
		10.70 - 15.10	Py   BLB			< 1% occasional pyrite blebs										

## LITHOLOGY REPORT

### - Detailed -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
15.10	15.75	<b>Fresh Rock</b> <b>3F</b> <b>Felsic Tuff</b> Felsic Tuff - creamy white and pinkish white color, felsic composition being moderately silicified and cherty-like, vfg/aphanitic with numerous microfractures giving a brecciated texture with and foliated/banded 60 from C.A., occasional qs/qcs < 1%  Mineralization - barren to <1% py Contact - sharp irregular contact 60 from C.A.  <b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b> 15.10 - 15.75    SI   PV   3    Silicification, Pervasive, Moderate  <b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b> 15.10 - 15.75    Py   BLB    <1% Pyrite, Blebs	1	1	CR	282240	15.25	15.75	0.50	0	-	0.01	-	-
15.75	18.80	<b>Fresh Rock</b> <b>9A</b> <b>Diabase Dyke</b> Diabase Dyke - greenish black with pinkish gray inclusions at upper interval, mafic composition being vfg and massive representing the upper chilled contact of the diabase, pink and fractured monzonite/quartz monzonite from....  16.6 to 17.0 - Quartz Stockwork (Monzonite) - pink color, felsic composition being mod sil, strongly fractured with 20% to 30% qs/qcs, up to 1% py, sharp upper broken contact and sharp lower contact 20 from C.A.  17.4 to 17.6 0 - Monzonite/Quartz Monzonite (Inclusion) - pinkish gray to gray color, felsic composition with mod to strong sil, 5% qs/qcs with numerous hairline fractures, < 1% py, sharp broken upper contact and sharp lower contact 70 from C.A.  Mineralization - barren to < 1% py and weakly magnetic Contact - broken contact  <b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b> 15.75 - 18.80    Py   BLB    < 1% pyrite blebs	1	1	GREBL	282241	15.75	16.60	0.85	0	-	0.01	-	-
						282242	16.60	17.00	0.40	0	-	0.02	-	-
						282243	17.00	17.60	0.60	0	-	0.01	-	-
						282244	17.60	18.20	0.60	0	-	0.01	-	-

# LITHOLOGY REPORT

## - Detailed -

Hole Number: MIS16-01				Project: MISHI				Project Number: 243						
From (m)	To (m)	Lithology		Weathering Oxidation Colour		Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
		Structure Maj.:		Inte/Type/Core Angle		Comment								
		15.75 - 18.80		M JNT 25		Jointed, 25° CA, chl'c coated slicks, minor carb								
Minor Interval:														
16.60	17.00	Fresh Rock	QTS W	Quartz Stockwork (Monzonite)		1								
		Quartz Stockwork (Monzonite) - pink color, felsic composoition beong mod sil, strongly fractured with 20% to 30% qs/qcs, up to 1% py, sharp upper broken contact and sahrp lower contact 20 from C.A.												
18.80	19.00	Fresh Rock	FLTg	Fault Gouge/Diabase		1	1		GREBL					
		Fault Gouge/ Diabase - FZ<1cm in width CA 5-10, open fracture w milled gouge, most washed away, some lost core(5cm?).												
		Mineralization Maj. :		Type/Style/%Mineral		Comment								
		18.80 - 19.00		Py BLB		<1% pyrite blebs								
		Structure Maj.:		Inte/Type/Core Angle		Comment								
		18.80 - 19.00		I GOUGE 5		Fault Gouge, 5° CA, <5mm width								
19.00	33.10	Fresh Rock	9A	Diabase Dyke		1	1		GREBL					
		Diabase Dyke - mafic composition with vfg to fg light green sauss altered felspar to ep-ab, blocky upper 3m,mod jointed CA 40-60 w local chl slicks on open jnts, chilled cts, fg to 21m, then more mg to 28.7m then finer grained to 32.5m and then chilled ct to 33.1m.												
		Mineralization - barren to < 1% py and weakly magnetic												
		Contact - Sharp lower contact 80 from C.A. and gradationally finer grained towards the lower contact												
		Alteration Maj:		Type/Style/Intensity		Comment								
		19.00 - 33.10		EP DISS 4		Epidotization, Disseminated, Strong								

LITHOLOGY REPORT  
- Detailed -

Hole Number: MIS16-01

Project: MISHI

Project Number: 243

From (m)	To (m)	Lithology			Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)	
		<b>Mineralization Maj. :</b>		<b>Type/Style/%Mineral</b>	<b>Comment</b>												
		19.00 - 33.10		Py INT 0.1	Pyrite, Interstitial, 0.1%												
		<b>Texture Maj:</b>		<b>Type</b>	<b>Comment</b>												
		19.00 - 33.10		PO	Porphyritic, fg whitish fsp in dark mafic pyroxene groundmass												
33.10	38.45	<b>Fresh Rock</b>	<b>1B</b>	<b>Mafic Massive Flow with Chert Interbeds</b>		1	1	GREBL	282245	37.95	38.45	0.50	0	-	0.01	-	-
		Mafic Massive Flow with Interbeds of Chert - dark greenish black to greenish black color, mafic composition with moderate chl and wk-(locally moderate) carbonate in the form of calcite, numerous bands/beds (<0.5 cm to 40 cm) of grayish-white chert with decrease in bands from 37.0 to 38.45.....accounts for 20% to 25% of the interval															
		- well developed inter-formational cherty units varying from 20 to 85 from C.A. (typically 70 to 85 from C.A.), cherty units are contorted and folded showing drag folds and local interference fold noses (as per at 34.55), occasional to widely scattered qs/qcs < 1%															
		Mineralization - barren to occasional py < 1%															
		Contact - sharp contact															
		<b>Alteration Maj:</b>		<b>Type/Style/Intensity</b>	<b>Comment</b>												
		33.10 - 38.45		CB MX 2	Carbonatization, Matrix, Weak												
		33.10 - 38.45		CL MX 3	Chloritization, Matrix, Moderate												
		<b>Mineralization Maj. :</b>		<b>Type/Style/%Mineral</b>	<b>Comment</b>												
		33.10 - 38.45		Py BLB	<1% pyrite blebs												

# LITHOLOGY REPORT

## - Detailed -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From</i> <i>(m)</i>	<i>To</i> <i>(m)</i>	<i>Lithology</i>			<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> <i>(ppm)</i>	<i>AV</i> <i>Au</i> <i>(ppm)</i>	<i>FA</i> <i>Au</i> <i>(ppm)</i>	<i>FA2</i> <i>Au</i> <i>(ppm)</i>	<i>FA3</i> <i>Au</i> <i>(ppm)</i>
38.45	40.15	<b>Fresh Rock</b>	<b>4B</b>	<b>Chert-Cherty Tuff</b>	1	1	WH	282246	38.45	39.00	0.55	0	-	0.01	-	-
		Cherty Tuff - white to creamy white color, very siliceous/silicified-sericitic composition with strong sericite, vfg and aphanitic with well developed fine laminations 75 to 85 from C.A., occasional qs < 1%						282247	39.00	39.60	0.60	0	-	0.01	-	-
		39.6 to 39.8 - Sheared and Carbonate-Altered Mafic Flow (Shear) - green and white color, altered mafic with moderate to strong chl and strong cb along sh, strongly sh 80 to 90 from C.A., 20% cb bands and/or calcite veinlets parallel to sh, 1% to 2% scattered py						282249	39.60	40.15	0.55	0	-	0.01	-	-
		Miineralization occasional bleb of py and aspy < 1%														
		Contact - sharp contact 65 from C.A.														
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>			<b>Comment</b>										
		38.45 - 39.60	SR	MX	3	Sericitization, Matrix, Moderate										
		38.45 - 39.60	SI	MX	4	Silicification, Matrix, Strong										
		39.60 - 39.85	CB	SP	4	Carbonatization, Along Shear Planes, Strong										
		39.60 - 39.85	CL	SP	4	Chloritization, Along Shear Planes, Moderate to Strong										
		39.85 - 40.15	SR	MX		Sericitization, Matrix										
		39.85 - 40.15	SI	MX		Silicification, Matrix										
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>			<b>Comment</b>										
		39.60 - 39.80	Aspy	BLB		<1% occasional arsenopyrite blebs										
		39.60 - 39.80	Py	DIS	2	Pyrite, Disseminated, 1% to 2%										
<b>Minor Interval:</b>																
39.60	39.80	Fresh Rock	SH	Shear/Shear Zone			1									
		39.6 to 39.8 - Sheared and Carbonate-Altered Mafic Flow (Shear) - green and white color, altered mafic with moderate to strong chl and strong cb along sh, strongly sh 80 to 90 from C.A., 20% cb bands and/or calcite veinlets parallel to sh, 1% to 2% scattered py														

## LITHOLOGY REPORT

### - Detailed -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
40.15	41.50	<b>Fresh Rock</b> <b>SH</b> <b>Chlorite-Carbonate Shear</b> Chlorite-Carbonate Shear (Mafic Volcaniclastic) - green and white color, altered mafic composition with strong carbonate parallel to sh and mod to strong chl, presence of cherty > mafic bands from 41.0 to 41.5, strongly sheared and banded (bedded) 70 to 76 from C.A. with contorted chert bands up to 6 cm wide, < 1% to local 5% qcs/cs parallel to sh and more prominent from 40.15 to 41.0 above the cherty banded section.  Mineralization - <1% to local 2% scattered py with increase in sulphide in the more chl-cb sheared section from 40.15 to 41.5 Contact - sharp contact 70 from C.A.	1	1	GR	282250	40.15	40.75	0.60	0	-	0.01	-	-
						282251	40.75	41.50	0.75	0	-	0.01	-	-
<p><b>Alteration Maj:</b>                      <b>Type/Style/Intensity</b>                      <b>Comment</b></p> <p>40.15 - 41.50                      CL   SP   3                      Chloritization, Along Shear Planes, Moderate to Strong</p> <p>40.15 - 41.50                      CB   SP   4                      Carbonatization, Along Shear Planes, Strong</p> <p><b>Mineralization Maj. :</b>                      <b>Type/Style/%Mineral</b>                      <b>Comment</b></p> <p>40.15 - 41.50                      Py   DIS   1                      Pyrite, Disseminated, 1%</p>														
41.50	46.60	<b>Fresh Rock</b> <b>4B</b> <b>Chert-Cherty Tuff</b> Cherty Tuff/Feslic Tuff - creamy white and pinkish-reddish white color, strongly siliceous/silicified from 41.5 to 42.45 with more banded strong silicification to 44.2, increase in hem from 44.2 to 46.6 with intense pervasive hem from 45.6 to 46.6  - well developed banding/bedding 60 to 85 from C.A., occasional qs/qcs (<1%) with increased qcs associated with strong pervasive hem near lower contact up to 5%.  Mineralization - <1% to local 2% to 4% vfg to fg scattered py...more associated with sil banded section from 42.45 to 44.2 Contact - sharp contact 77 from C.A.	1	1	WH	282252	41.50	42.45	0.95	0	-	0.01	-	-
						282253	42.45	43.00	0.55	0	-	0.01	-	-
						282254	43.00	43.50	0.50	0	-	0.01	-	-
						282255	43.50	44.20	0.70	0	-	0.01	-	-
						282256	44.20	44.70	0.50	0	-	0.01	-	-
						282257	44.70	45.20	0.50	0	-	0.01	-	-
<p><b>Alteration Maj:</b>                      <b>Type/Style/Intensity</b>                      <b>Comment</b></p> <p>41.50 - 46.60                      HM   PV   3                      Hematization, Pervasive, Moderate w 20% Q-C filled flat fractures and jnts, nil sulf</p>														

# LITHOLOGY REPORT

## - Detailed -

Hole Number: MIS16-01

Project: MISHI

Project Number: 243

From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
	41.50 - 46.60	SI FRC 2			Silicification, Along Fractures, Weak									
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>										
	41.50 - 46.60	Py DIS 1			Pyrite, Disseminated, < 1% to local 2% to 4%									
46.60	50.80	<b>Fresh Rock</b>	<b>7E</b>	<b>Lamprophyre Dikes-Sills</b>	1	1								
		Lamprophyre Dyke - black to greenish black color, mafic to ultramafic composition with 10% to 20% f.g. to m.g black biotite giving a sub-porphyritic texture, grain size decreases to upper and lower contacts becoming more diabasic/ophitic and vfg to fg in texture.												
		Mineralization - occasional py <0.5% and weakly magnetic up to 1% magnetite												
		Contact - broken faulted lower contact with the last 50cm is broken and blocky leading up to intense fault gouge												
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>										
	46.60 - 50.80	Py DIS 0.1			Pyrite, Disseminated, 0.1%, speck									
		<b>Structure Maj.:</b>	<b>Inte/Type/Core Angle</b>	<b>Comment</b>										
	46.60 - 50.80	W JNT 65			Jointed, 65° CA									
		<b>Texture Maj:</b>	<b>Type</b>	<b>Comment</b>										
	46.60 - 50.80	MAS			Massive									
50.80	52.15	<b>Fresh Rock</b>	<b>FLTg</b>	<b>Fault Gouge and Breccia</b>	1	1								
		50.8 to 51.15 - Fault Gouge (Lamprophyre/Diabase) - black color, with strong black intense fault gouge 50% washed away, vfg paste and milled <1mm in lamprophre extreme broken core												
		51.15 to 52.2 - Fault Breccia (Arenite) - pinkish red color, siliceous arenaceous composition and strong pinkish-red hem stain/dusting, well banded 70 to 90 from C.A., brecciated with numerous microfractures and annealed gouge												

# LITHOLOGY REPORT

## - Detailed -

Hole Number: MIS16-01

Project: MISHI

Project Number: 243

From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>										
		51.15 - 52.15	SI	MX	3	Silicification, Matrix, Moderate								
		51.15 - 52.15	HM	PV	4	Hematization, Pervasive, Strong								
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>										
		50.80 - 52.15	Py	BLB	<1% occasional pyrite blebs									
		<b>Structure Maj.:</b>	<b>Inte/Type/Core Angle</b>	<b>Comment</b>										
		50.80 - 52.15		GOUGE	55	Fault Gouge, 55° CA?								
		<b>Texture Maj:</b>	<b>Type</b>	<b>Comment</b>										
		50.80 - 52.15	SCH	Schistose										
52.15	53.70	<b>Fresh Rock</b>	<b>7E</b>	<b>Lamprophyre Dyke xcutting Chlorite-Ca</b>		1		1		BLK				
		Lamprophyre Dyke xcut Chlorite-Carbonate Shear - similar in description from 46.6 to 50.8 being vfg and massive with broken core and.												
		52.7 to 53.2 - Chlorite-Carbonate Shear - strong pervasive shear controlled chl and cb, strongly sheared 55 to 65 from C.A., <5% qcs/cs lenses with numerous cb bands, strongly folded/intensely folded, <1% py, sharp upper and lower contacts 47 and 90 from C.A., respectively												
		Mineralization - generally < 1% py with up to 1% vfg py at upper contact in lamprophyre, < 0.5% py in chl-cb shear												
		Contact - sharp and broken												
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>										
		52.70 - 53.20	CL	SP	4	Chloritization, Along Shear Planes, Strong								
		52.70 - 53.20	CB	SP	4	Carbonatization, Along Shear Planes, Strong								
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>										
		52.15 - 53.70	Py	BLB	0.5	Pyrite, Blebs, <0.5%								

Minor Interval:

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## - Detailed -

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From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
52.70	53.20	Fresh Rock SH Chlorite- Carbonate Shear/Shear Zone 2.7 to 53.2 - Chlorite-Carbonate Shear - strong pervasive shear controlled chl and cb, strongly sheared 55 to 65 from C.A., <5% qcs/cs lenses with numerous cb bands, strongly folded/intensely folded, <1% py, sharp upper and lower contacts 47 and 90 from C.A., respectively	1											
53.70	59.00	<b>Fresh Rock 4B Chert-Cherty Tuff with minor Mafic Volc</b> Cherty Tuff (Silicified Felsic Tuff) with minor Mafic Volcaniclastics-Epiclastics - creamy white, white, and greenish black/black colors, siliceous vfg apahnaitic creamy white cherty bands and beds with 25% to 35% reworked mafic volcaniclastic-epiclastic beds up to 0.65 meters wide, where sheared strong sh-controlled chl-cb (56.4 to 56.95), otherwise weakly cb,  - well developed banding bedding ranging from 60 to 85 from C.A. with local contortions and folding where strongly sheared (56.4 to 56.95 - strongly sh 35 to 45 from C.A.), scattered qs/qcs <5% with local 10% near upper part of the interval  Mineralization - <1% py in cherty tuffs with increase py in mafic volcaniclastic bands ranging from 2% to 5%, sulphides occurs as disseminated grains Contact - sharp contact 55 from C.A.	1	1	CR	282258	55.30	56.40	1.10	0	-	0.01	-	-
						282259	56.40	56.95	0.55	0	-	0.01	-	-
						282261	56.95	57.45	0.50	0	-	0.01	-	-
						282262	57.45	57.85	0.40	0	-	0.01	-	-
						282263	57.85	58.75	0.90	0	-	0.01	-	-
						282264	58.75	59.00	0.25	0	-	0.01	-	-
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>			<b>Comment</b>								
		53.70 - 56.40	SI	MX	4	Silicification, Matrix, Strong								
		56.40 - 56.95	CB	SP		Carbonatization, Along Shear Planes								
		56.40 - 56.95	CL	SP		Chloritization, Along Shear Planes								
		56.95 - 59.00	SI	MX	4	Silicification, Matrix, Strong								
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>			<b>Comment</b>								
		53.70 - 59.00	Py	DIS	1	< 1% pyrite in chert and 2% to 5% disseminated pyrite in mafic volcaniclastics								

# LITHOLOGY REPORT

## - Detailed -

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
59.00	72.30	<b>Fresh Rock</b> <b>1L</b> <b>Mafic Volcaniclastic-Epiclastic/Greywac</b>	1	1	GR	282265	59.00	59.40	0.40	0	-	0.01	-	-
		Mafic Volcaniclastic/Greywacke with Chert - dirty grayish green and creamy white bands, both intermediate to mafic composition with variable wk to mod sil with creamy whie siliceous/silicified cherty bands/beds up to 23cm wide, wk to locally mod cb (calcite) in the more cherty bands with variable weak to (moderate) in the greywacke and reworked mafics; gradually more chloritic (more mafic? From 71.2 to 72.3) and magnetic (weakly) with depth.				282266	59.40	60.00	0.60	0	-	0.01	-	-
						282267	66.10	66.60	0.50	0	-	0.01	-	-
						282268	66.60	67.45	0.85	0	-	0.01	-	-
						282269	67.45	67.80	0.35	0	-	0.01	-	-
		- well developed banding/bedding 60 to 85 from C.A. with increasing core angles from about 64.65 ranging from 67 to 85 from C.A., shearing parallel to bnding/bedding, occasional to locally scattered qs/qcs/cs up to 4 cm wide generally < 1% to locally 5%.				282270	67.80	68.80	1.00	0	-	0.01	-	-
						282271	68.80	69.70	0.90	0	-	0.01	-	-
		63.75 to 64.6 Diabase - green color, mafic composition and vfg chilled massive texture, xcut wallrock at low angles with irregular chilled lower contact 30 from C.A., weakly magnetic				282273	69.70	70.60	0.90	0	-	0.01	-	-
						282274	70.60	71.20	0.60	0	-	0.01	-	-
		Mineralization - variable < 1% to 5% disseminated py with increasing pyrite (5%) from 67.8 to 69.7 Contact - sharp contact 5 from C.A.				282275	71.20	71.70	0.50	0	-	0.01	-	-
		<b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b>												
		59.00 - 72.30    SI    BNDS    3    Silicification, Bands/Banded, Moderate												
		<b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b>												
		67.80 - 69.70    Py    DIS    5    Pyrite, Disseminated, 5%												
<b>Minor Interval:</b>														
63.75	64.60	<b>Fresh Rock</b> <b>9A</b> <b>Diabase</b>	1											
		63.75 to 64.6 Diabase - green color, mafic composition and vfg chilled massive texture, xcut wallrock at low angles with irregular chilled lowe contact 30 from C.A., weakly magnetic												
72.30	88.45	<b>Fresh Rock</b> <b>9A</b> <b>Diabase</b>	1	1	GREBL									
		Diabase - greenish black to black color, mafic composition being ferromagnesian-rich mineralogy, vfg and aphanitic with massive appearance, broken core from 72.3 to 78.8<1% qcs/qs.												

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From (m)	To (m)	Lithology	Weathering Oxidation Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
		Rafts from....										
		74.7 to 75.8 Mafic Pillow Flow/Magnetite BIF Interstices - greenish black and black color, mafic composition with mod chl and mod to strong pervasive cb, strongly sh pillows (up to 5 to 7 cm wide) with interstitial black magnetite (up to 0.5 cm wide) about pillows, stronglt sh/banded 70 from C.A., 5% qcs/cs and < 1% py, sharp upper and lower contacts 10 and 20 from C.A., respectively										
		87.6 to 87.8 - Greywacke - dirty dark gray color, intermediate in composition with moderate cb, well banded 52 from C.A., 5% to 10% qcs/cs, up to 1% to 2% vfg scattered py with increased py associated with qcs, sharp, broken, upper and lower contacts										
		Mineralization - occasional to locally patchy vfg pyrite < 1%, moderately magnetic with 1% to 2% vfg magnetite										
		Contact - sharp contact 30 from C.A.										
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>								
		74.70 - 75.80	CB PV 3	Carbonatization, Pervasive, Moderate								
		87.60 - 87.80	CB PV 3	Carbonatization, Pervasive, Moderate								
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>								
		72.30 - 88.45	Py CLS	up to 1% pyrite, clusters/aggregates								

Minor Interval:

74.70	75.80	Fresh Rock	1G	Mafic Pillow Flow/Magnetite BIF Interstices	1
Mafic Pillow Flow/Magnetite BIF Interstices - greenish black and black color, mafic composition with mod chl and mod to strong pervasive cb, strongly sh pillows (up to 5 to 7 cm wide) with interstitial black magnetite (up to 0.5 cm wide) about pillows, stronglt sh/banded 70 from C.A., 5% qcs/cs and < 1% py, sharp upper and lower contacts 10 and 20 from C.A., respectively					

Minor Interval:

87.60	87.80	Fresh Rock	5D	Greywacke	1
Greywacke - dirty dark gray color, intermediate in composition with moderate cb, well banded 52 from C.A., 5% to 10% qcs/cs, up to 1% to 2% vfg scattered py with increased py associated with qcs, sharp broken upper and lower contacts					

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<i>From</i> <i>(m)</i>	<i>To</i> <i>(m)</i>	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> <i>(ppm)</i>	<i>AV</i> <i>(ppm)</i>	<i>FA</i> <i>(ppm)</i>	<i>FA2</i> <i>(ppm)</i>	<i>FA3</i> <i>(ppm)</i>
88.45	89.30	<b>Fresh Rock</b> <b>1G</b> <b>Mafic Pillow Flow</b>  Mafic Pillow Flow - dark green to green color, mafic composition with moderate chlorite and moderate to strong carbonate, well developed pillow texture with mafic volcanoclastic about deformed pillows up to 10 cm wide, 5% qcs up to 5 cm wide parallel to shearing and strongly sheared 60 from C.A.  Mineralization - patchy < 1% to local 1% to 2% vfg dirty pyrite...generally associated with qcs/cs, weakly to moderately magnetic Contact - sharp sheared and fault gouged contact 55 from C.A.  <b>Mineralization Maj. :</b> 88.45 - 89.30  <b>Type/Style/%Mineral</b> Py CLS 1  <b>Comment</b> <1% to 2% patchy pyrite	1	1	DGR									
89.30	97.50	<b>Fresh Rock</b> <b>7E</b> <b>Lamprophyre</b>  Lamprophyre - greenish black to black in color, mafic to ultramafic in composition being strongly biotiferous with muscovite, biotite occurs as vfg to mg (<0.3 cm in size) 25% to 35% flake crystals in a vfg ferromagnesian-rich matrix, moderate pervasive carbonate in the form of calcite, scattered rounded white carbonate and feldspathoid "amygdale"-like features from 92.8 to 97.0...fg to mg (<0.2 to 0.3cm in size) and ranging <1% to 5%, possibly olivine and serpentine in matrix and serpentine fractures.  - sub-porphyritic texture, scattered white calcite stringers (up to 1 cm wide) up to 1%, wide range 0 to 45 from C.A.  96.8 to 97.0 - Fault Gouge -greenish black color, strongly chl-cb and gouge paste, < 1% cs/qcs, barren, gradational upper and lower contacts  Mineralization - vfg scattered py-po up to 1% and locally 2%, moderately to strongly magnetic Contact - sharp, sheared fault gouge and extremely broken up contact  6+-3cm chilled upper ct of mg dark grey black ultramafic or mafic volc., possible a Lamprophyre with approx. 20% 1-2mm black subangular to subrounded phenocrysts of hornblende?, 5-15% whitish subrounded felsic (carb-qtz) grains to 3mm in a brownish - black fg pervasively carbonate altered groundmass. Reacts strongly to acid. Mod. Magnetic w tr to <1% diss vfg py. Unit contains <5-10% white carb - qtz 2-10mm ff's and jnt coatings CA 25-30 and 60-70 tCA, locally concentrated and micro-brecciated	1	1	GREBL	282276	93.45	94.50	1.05	0	-	0.01	-	-
						282277	94.50	96.00	1.50	0	-	0.01	-	-
						282278	96.00	97.50	1.50	0	-	0.01	-	-

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		within 3 m of either ct. Not sampled but a WRA should be done. REP sample at 93.45-93.55m.												
		<i>Alteration Maj:</i>	<i>Type/Style/Intensity</i>			<i>Comment</i>								
		89.30 - 97.50	CB	PV	3	Carbonatization, Pervasive, Moderate								
		89.30 - 97.50	BIO	GM	4	Biotitization, Groundmass, Strong								
		<i>Mineralization Maj. :</i>	<i>Type/Style/%Mineral</i>			<i>Comment</i>								
		89.30 - 97.50	Po	DIS		up to 1% pyrrhotite, Disseminated								
		89.30 - 97.50	Py	DIS		up to 1% pyrite, Disseminated								
		<i>Structure Maj.:</i>	<i>Inte/Type/Core Angle</i>			<i>Comment</i>								
		97.45 - 97.50	I	GOUGE	60	Fault Gouge, 60° CA, soft intact gouge								
Minor Interval:														
96.80	97.00	Fresh Rock	FLTg	Fault Gouge										
		Fault Gouge -greenish black color, strongly chl-cb and gouge paste, < 1% cs/qcs, barren, gradational upper and lower contacts												
97.50	109.45	Fresh Rock	4E	Lean Banded Carbonate-Silicate BIF &		1	1	DGR						
		Lean Banded Carbonate-Silicate BIF & Mafic Volcaniclastics - dark green, dark gray, and greenish black color, alternating banded and laminated magnetiferous bands and laminations with mod chl and variable weak to locally moderate carbonate (calcite), localized cherty and silicified sections non to weakly magnetic as from 97.5 to 101.6 (mafic volcaniclastic with chert interbed), strongly magnetic from 101.6 to 109.45 with up to 4 cm wide semi-massive black magnetite bands in chl>cb matrix.												
		- vfg and well developed banding/lamainations (up to 4 cm wide) ranging from 55 to 81 from C.A. with strongly sheared section from 104.3 to 106.0 with moderate cb along sh planes, overall 47 to 75 from C.A, <1% to 5% qcs/cs generally parallel to sh/banding with increased cs along shearing												
		Mineralization - variable < 1% to locally 3% scattered vfg to fg pyrite with local spec of cpy < 0.5%												
		Contact - gradational												
		<i>Alteration Maj:</i>	<i>Type/Style/Intensity</i>			<i>Comment</i>								
		97.50 - 109.45	CB	FRC	3	Carbonatization, Along Fractures, Moderate								

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## - Detailed -

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From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
	97.50 - 109.45	CL PV 1	Chloritization, Pervasive, Very weak			282289	108.50	109.45	0.95	0	-	0.01	-	-
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>										
	97.50 - 109.45	Py DIS 1	<1% to local 3% pyrite, Disseminated											
		<b>Structure Maj.:</b>	<b>Inte/Type/Core Angle</b>	<b>Comment</b>										
	97.50 - 106.10	M FAC 75	Fractured, 75° CA, along upper ct near faults											
109.45	117.00	<b>Fresh Rock 3F Felsic Tuff</b>	1	1	GY	282290	109.45	110.00	0.55	0	-	0.01	-	-
		Felsic Tuff - dark gray to greenish gray color, felsic composition with a gradual decrease in chl from 109.45 with weak to (moderate) ser and cb, vfg to fg showing well developed crenulation cleavage and shearing 63 to 90 from C.A., scattered qcs/qs up to 3 cm wide with slight increase in qs (5%) towards 117.0				282291	110.00	111.40	1.40	0	-	0.01	-	-
						282292	111.40	111.65	0.25	0	-	0.01	-	-
		111.4 to 111.65 - Cherty Tuff - strongly sil and banded 90 from C.A., 5% to qcs/cs, < 1% py				282293	111.65	113.00	1.35	0	-	0.01	-	-
		Mineralization - overall < 1% py with local increase at top of interval 2% to 3% scattered py cubes				282294	113.00	114.50	1.50	0	-	0.01	-	-
		Contact - gradational increase in silicification and quartz veining				282295	114.50	115.90	1.40	0	-	0.01	-	-
						282004	115.90	117.00	1.10	0	-	0.01	-	-
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>										
	109.45 - 117.00	CB MX 2	Carbonatization, Matrix, Weak											
	109.45 - 117.00	SR MX 2	Sericitization, Matrix, Weak											
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>										
	109.45 - 117.00	Py DIS	<1% with 1% to 2% disseminated py at top interval											
<b>Minor Interval:</b>														
111.40	111.65	Fresh Rock 4B Chert-Cherty Tuff			1									
		111.4 to 111.65 - Cherty Tuff - strongly sil and banded 90 from C.A., 5% to qcs/cs, < 1% py												

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
117.00	129.30	<b>Fresh Rock</b> <b>QTS</b> <b>Quartz Stockwork</b> Quartz Stockwork - gray, light gray, to bleached grayish white color, altered felsic composition (felsic tuff) with strong fracture-controlled silicification, increased pervasive and intense sil flooding where an increasing in quartz veining, particularly from 126.0 to 129.3, local cherty-like sil flooding  - strongly fractured in local sections ranging from 5% to 25% with increased quartz vein fracturing from 125.0 to 128.0, variable quartz veining (up to 5 cm wide) ranging 45 to 90 from C.A. with criss-crossing quartz stringers and veinlets  Mineralization - occasional to locally widely scattered vfg py <0.5% Contact - sharp fault and broken contact  <b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b> 117.00 - 129.30    AB   FRC   5    Albitization, Along Fractures, Intense 117.00 - 129.30    SI   FRC   5    Silicification, Along Fractures, Intense  <b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b> 117.00 - 129.30    Py   BLB    <1% occasional pyrite bleb	1	1	GY	282005	117.00	118.00	1.00	0	-	0.01	-	-
						282006	118.00	119.00	1.00	0	-	0.01	-	-
						282007	119.00	120.00	1.00	0	-	0.01	-	-
						282008	120.00	121.00	1.00	0	-	0.01	-	-
						282009	121.00	122.00	1.00	0	-	0.01	-	-
						282010	122.00	123.00	1.00	0	-	0.01	-	-
						282011	123.00	124.00	1.00	0	-	0.01	-	-
						282012	124.00	125.00	1.00	0	-	0.01	-	-
						282013	125.00	126.00	1.00	0	-	0.01	-	-
						282014	126.00	127.00	1.00	0	-	0.01	-	-
						282015	127.00	128.00	1.00	0	-	0.01	-	-
129.30	132.95	<b>Fresh Rock</b> <b>FLTb</b> <b>Fault Breccia</b> in black vfg magnetic Diabase cts CA 80 and 85 dtca with strong sheared gouge 5cm along upper ct, 5-10cm internal and 10cm along far ct. Core recovery 30% from 129.3 - 132.3m is completely broken and drillers reported at least 30-40cm lost core due to grinding, and remaining Diabase core is highly tension fractured infilled w carb minor qtz and red hematite wisps, ffs and bxd sections RQD =5 overall. Last 40cm of Diabase is non-magnetic.  <b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b> 129.30 - 132.95    SPHM   FRC   2    Specular Hematization, Along Fractures, Weak	3	2	BLK	282298	129.30	130.00	0.70	0	-	0.01	-	-
						282299	130.00	131.50	1.50	0	-	0.01	-	-
						282300	131.50	132.95	1.45	0	-	0.01	-	-

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From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
	129.30 - 132.95	CB FRC 3	Carbonatization, Along Fractures, Moderate											
<b>Mineralization Maj. :</b>		<b>Type/Style/%Mineral</b>	<b>Comment</b>											
	129.30 - 132.95	Py BLB	< 1% occasional pyrite											
<b>Structure Maj.:</b>		<b>Inte/Type/Core Angle</b>	<b>Comment</b>											
	129.30 - 132.95	GOUGE 80	Fault Gouge, 80° CA 5cm i/c, 10cm far ct CA 85											
	129.30 - 132.95	FLTZN 80	Fault Zone, 80° CA											
132.95	139.00	<b>Fresh Rock</b>	<b>QTS</b>	<b>Quartz Breccia</b>	1	1	WH							
		Quartz Breccia - bleached white to smokey grayish white color, strong intense and pervasive sil-(ab) flooding (cherty-like) of altered wallrock matrix, well developed breccia texture with up to 2 to 6 cm in size sil wallrock fragments (angular to sub-angular in shape), up to 5% thin criss-crossing qs veinlets and stringers at varying core angles.				282301	132.95	134.00	1.05	0	-	0.01	-	-
						282303	134.00	135.00	1.00	0	-	0.01	-	-
						282304	135.00	136.00	1.00	0	-	0.01	-	-
						282305	136.00	137.00	1.00	0	-	0.01	-	-
		Mineralization - occasional to widely scattered py < 1% to locally up to 1%				282306	137.00	138.00	1.00	0	-	0.01	-	-
		Contact - gradational increase in quartz veining				282307	138.00	139.00	1.00	0	-	0.01	-	-
<b>Alteration Maj:</b>		<b>Type/Style/Intensity</b>	<b>Comment</b>											
	132.95 - 139.00	AB PV 5	Albitization, Pervasive, Intense											
	132.95 - 139.00	SI PV 5	Silicification, Pervasive, Intense											
<b>Mineralization Maj. :</b>		<b>Type/Style/%Mineral</b>	<b>Comment</b>											
	132.95 - 139.00	Py BLB	up to 1% pyrite blebs											
<b>Structure Maj.:</b>		<b>Inte/Type/Core Angle</b>	<b>Comment</b>											
	132.95 - 139.00	WM JNT 45	Jointed, 45° CA and 60											
	132.95 - 139.00	WM BX	Brecciated											

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Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
139.00	145.00	<b>Fresh Rock</b> <b>QTS</b> <b>Quartz Stockwork/Quartz Breccia</b>	1	1	GY	282308	139.00	140.00	1.00	0	-	0.01	-	-
		Quartz Stockwork/Quartz Breccia - smokey grayish white and bleached white color, strong intense and pervasive sil-(ab) alteration of the wallrock matrix, increased fracturing from the above interval with 10% to 25% qs (up to 2 cm in size) ranging 60 to 90 from C.A., well developed breccia texture with smokey gray sil wr fragments up to 2 to 3 cm in size (clast supported).				282309	140.00	141.00	1.00	0	-	0.01	-	-
						282310	141.00	142.00	1.00	0	-	0.01	-	-
						282311	142.00	143.00	1.00	0	-	0.01	-	-
		Mineralization - <1% to 5% vfg disseminated py averaging 2% to 4% vfg py, possible aspy < 1%, sulphides are very fine grained found mostly in sil-flooded matrix and occasionally in qs				282313	143.00	144.00	1.00	0	-	0.01	-	-
		Contact - gradational decrease in quartz veinlet and increase in chlorite/decrease in si-(ab)				282016	144.00	145.00	1.00	0	-	0.01	-	-
		<b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b>												
		139.00 - 145.00    AB   PV   5    Albitization, Pervasive, Intense												
		139.00 - 145.00    SI   PV   5    Silicification, Pervasive, Intense												
		<b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b>												
		139.00 - 145.00    Py   DIS    averages 2% to 4% disseminated pyrite												
145.00	150.10	<b>Fresh Rock</b> <b>QTS</b> <b>Pyritic Weak Quartz Stockwork</b>	1	1	GG	282018	145.00	146.00	1.00	0	-	0.01	-	-
		Pyritic Weak Quartz Stockwork - altered felsic to intermediate composition with local mod sil flooding, but overall mod chl-(ser) and weak to mod cb fractures/shears >matrix, increased in ser alteration towards 150.1, <5% to 15% qcs averaging 7% to 10% qcs...occur as thin qcs fractures up to <5 cm wide, qs/qcs are 65 to 90 from C.A. with moderately sh foliated/shearing 55 to 65 from C.A., well developed crenulation cleavage with chl-ser altered matrix with contorted/folding 0 to 45 from C.A.				282019	146.00	147.00	1.00	0	-	0.01	-	-
						282020	147.00	148.00	1.00	0	-	0.01	-	-
						282021	148.00	149.50	1.50	0	-	0.01	-	-
		Mineralization - averages 10% to 20% vfg to fg disseminated py as 3mm cubic grains, generally found in altered matrix with < 1% py in qs/qcs as rare to trace in the cross-cutting qcs, occasional open, ruff and jagged joint 25 from C.A.				282022	149.50	150.10	0.60	0	-	0.01	-	-
		Contact - significant decrease in pyrite at 150.1												
		<b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b>												
		145.00 - 150.10    SR   SP   2    Sericitization, Along Shear Planes, Weak												
		145.00 - 150.10    CL   SP   3    Chloritization, Along Shear Planes, Moderate												

# LITHOLOGY REPORT

## - Detailed -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)		
	145.00 - 150.10	AB PV 3			Albitization, Pervasive, Moderate											
	145.00 - 150.10	SI PV 3			Silicification, Pervasive, Moderate											
<b>Mineralization Maj. :</b>		<b>Type/Style/%Mineral</b>	<b>Comment</b>													
	145.00 - 150.10	Py DIS	10% to 20% disseminated pyrite													
150.10	164.20	<b>Fresh Rock</b>	<b>3F</b>	<b>Felsic Tuff with minor Chert Bands</b>		1	1	GY								
		Felsic with minor Chert Bands - dirty gray and beige/gray colors, felsic composition with weak to moderate sil and ser, scattered chert bands (up to 5 cm wide) with increasing chert from 162.65 to 164.2														
		- weakly to moderately foliated (crenulation and folded/contorted) 48 to 65 from C.A., scattered qs/qcs (up to 3.5 cm wide) with increased qs/qcs fracturing (5% to 15%) from 151.0 to 155.5....ranges 65 to 77 from C.A.														
		Mineralization - <1% to 4% vfg scattered pyrite														
		Contact - sharp contact with chert at 73 from C.A.														
		<10% Qtz veining in reworked MSSEDs with increase in subparallel 65-75 deg beds(?) of felsic aphanitic buff brownish grey siliceous or cherty bands to 10% which are xcut by the Q-C ff's CA 40-65 very similar to above w tr to 3% fg diss py. Sampled on 1.5m intervals. Blank inserted at sample 282030 at 160m.														
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>												
	150.10 - 164.20	SR PV 2	Sericitization, Pervasive, Weak to Moderate													
	150.10 - 164.20	SI PV 2	Silicification, Pervasive, Weak to Moderate													
<b>Mineralization Maj. :</b>		<b>Type/Style/%Mineral</b>	<b>Comment</b>													
	150.10 - 164.20	Py DIS	<1% to 4% disseminated pyrite													

# LITHOLOGY REPORT

## - Detailed -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
164.20	187.10	<b>Fresh Rock</b> <b>4B</b> <b>Chert-Cherty Tuff and Felsic Tuff</b>	1	1	WH	282034	164.20	166.00	1.80	0	-	0.01	-	-
		Chert-Cherty Tuff (70%) and Felsic Tuff (30%) - creamy white chert and gray to dark dirty gray felsic bands, approximately 70% chert and 30% felsics, creamy white to white chert is strongly siliceous and moderate sericite/fuschite and vfg/aphanitic forming as folded and contorted bands/beds up to 2.45 meters wide with the felsics up to 0.8 meters wide, felsics are felsic in composition with mod ser>sil with wk cb				282035	166.00	167.50	1.50	0	-	0.01	-	-
						282036	167.50	169.00	1.50	0	-	0.01	-	-
						282037	169.00	170.00	1.00	0	-	0.01	-	-
		- well developed banding/bedding with a series of chert and felsic tuff contacts 45 to 86 from C.A. with highly variable core angles 0 to 60 from C.A. from 164.8 to 169.5 with folding (parasitic and drag), contorted/flexure bands highlighted by a series of interference folds at 166 parallel to C.A., scattered qs/qcs < 1% to locally 5% to 10%				282038	170.00	170.80	0.80	0	-	0.01	-	-
						282040	170.80	171.70	0.90	0	-	0.01	-	-
						282314	171.70	172.50	0.80	0	-	0.01	-	-
		Mineralization - occasional < 1% to patchy 5% vfg scattered py; generally 1% to 3% in felsics and < 1% vfg py in cherty bands, increase in disseminated py ranging 2% to 5% from 169.0 to 170.8. 177.35 to 179.7, and from 181.5 to 183.0...found primarily in the felsics				282315	172.50	173.25	0.75	0	-	0.01	-	-
						282316	173.25	173.90	0.65	0	-	0.01	-	-
						282317	173.90	174.60	0.70	0	-	0.01	-	-
		Contact - gradational				282318	174.60	175.10	0.50	0	-	0.01	-	-
		<b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b>				282319	175.10	175.75	0.65	0	-	0.01	-	-
		164.20 - 187.10    CB   PV   2    Carbonatization, Pervasive, Weak				282320	175.75	176.50	0.75	0	-	0.01	-	-
		164.20 - 187.10    SI   PV   2    Silicification, Pervasive, Weak				282321	176.50	177.35	0.85	0	-	0.01	-	-
		164.20 - 187.10    SR   PV   3    Sericitization, Pervasive, Moderate				282322	177.35	178.25	0.90	0	-	0.01	-	-
		<b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b>				282323	178.25	179.00	0.75	0	-	0.01	-	-
		164.20 - 187.10    Py   DIS    <1% to 5% patchy pyrite				282325	179.00	179.70	0.70	0	-	0.01	-	-
						282326	179.70	180.50	0.80	0	-	0.01	-	-
						282327	180.50	181.50	1.00	0	-	0.01	-	-
						282328	181.50	182.50	1.00	0	-	0.01	-	-
						282329	182.50	183.00	0.50	0	-	0.01	-	-
						282330	183.00	183.60	0.60	0	-	0.01	-	-
						282331	183.60	184.50	0.90	0	-	0.01	-	-
						282332	184.50	185.40	0.90	0	-	0.01	-	-

# LITHOLOGY REPORT

## - Detailed -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From</i> <i>(m)</i>	<i>To</i> <i>(m)</i>	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> <i>(ppm)</i>	<i>AV</i> <i>Au</i> <i>(ppm)</i>	<i>FA</i> <i>Au</i> <i>(ppm)</i>	<i>FA2</i> <i>Au</i> <i>(ppm)</i>	<i>FA3</i> <i>Au</i> <i>(ppm)</i>
						282333	185.40	186.00	0.60	0	-	0.01	-	-
						282041	186.00	187.10	1.10	0	-	0.01	-	-
187.10	188.65	<b>Fresh Rock</b>	<b>3F</b>	<b>Felsic Tuff</b>										
		Felsic Tuff - dark gray to gray color, felsic to intermediate in composition with weak to (moderate) sil in the matrix, local chert bands (1% to 2%) up to 3 cm wide towards the lower contact				282042	187.10	188.00	0.90	0	-	0.01	-	-
		188.0 to 188.3 - Quartz-Carbonate Shear - strong sh controlled sil and moderate to strong cb, strongly sh				282043	188.00	188.65	0.65	0	-	0.01	-	-
		50 from C.A., 5% to 10% qs/qcs parallel to sh, up to 1% py, sharp upper and lower contacts 60 and 50 from C.A., respectively												
		- generally vfg massive felsic tuff with chert bnds 60 to 65 from C.A., scattered 1% to 5% qs/qcs with increased qs/qcs in 33 cm wide shear												
		Mineralization - variable sulphide < 1% to 10% with significant increase in 10% disseminated py from 187.1 to 188.0												
		Contact - sharp lower contact with chert band 40 from C.A.												
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>			<b>Comment</b>								
		187.10 - 188.00	SI	MX	2	Silicification, Matrix, Weak								
		188.00 - 188.30	CB	SP	4	Carbonatization, Along Shear Planes, Strong								
		188.00 - 188.30	SI	SP	4	Silicification, Along Shear Planes, Strong								
		188.30 - 188.65	SI	MX	2	Silicification, Matrix, Weak								
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>			<b>Comment</b>								
		187.10 - 188.00	Cpy	BLB	0.1	Chalcopyrite, Blebs, 0.1% vfg up to 1mm								
		187.10 - 188.00	Py	DIS	10	Pyrite, Disseminated, 10%								
		188.00 - 188.65	Py	BLB		<1% Pyrite, Blebs								
		<b>Structure Maj.:</b>	<b>Inte/Type/Core Angle</b>			<b>Comment</b>								
		187.10 - 188.65		QVN		Quartz Vein								
<b>Minor Interval:</b>														
188.00	188.30	Fresh Rock	SH	Quartz-Carbonate Shear/Shear Zone										
		Quartz-Carbonate Shear - strong sh controlled sil and moderate to strong cb, strongly				1								

# LITHOLOGY REPORT

## - Detailed -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>			<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
		sh 50 from C.A., 5% to 10% qs/qcs parallel to sh, up to 1% py, sharp upper and lower contacts 60 and 50 from C.A., respectively														
188.65	191.75	<b>Fresh Rock</b>	<b>4B</b>	<b>Chert-Cherty Tuff</b>	1	1	WH	282044	188.65	189.75	1.10	0	-	0.01	-	-
		Chert-Cherty Tuff with Felsic Tuff (20%) - dirty grayish white, white, and dark gray color, strong silicified-(albitized?) cherty wallrock with 20% felsic to intermediate bands with very weak carbonate in form of calcite with increased cb in strongly sheared bands up to 13 cm wide.						282045	189.75	191.00	1.25	0	-	0.01	-	-
								282046	191.00	191.35	0.35	0	-	0.01	-	-
		- well developed contacts between the chert and felsic tuffs 50 to 81 from C.A. with felsics up to 13 cm wide giving a brecciated/fragmented texture, local shearing 70 from C.A up to 13 cm wide in banded form, up to 5% qs/qcs						282047	191.35	191.75	0.40	0	-	0.01	-	-
		191.0 to 191.35 Quartz Vein - milky white to white color, quartz composition being weakly fractured, 5% sheared wallrock septae at both contact with up to 1% py...overall < 1% py, sharp upper and lower contacts 32 and 59 from C.A., respectively														
		Mineralization - < 1% to local 5% vfg disseminated py with generally incresed py in the the felsic tuff bands and seams, widely scattered py in quartz vein assocaited with wr septae														
		Contact - sharp 61 from C.A.														
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>			<b>Comment</b>										
		188.65 - 191.75	AB	PV	4	Albitization, Pervasive, Strong										
		188.65 - 191.75	SI	PV	4	Silicification, Pervasive, Strong										
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>			<b>Comment</b>										
		188.65 - 191.75	Py	DIS		< 1% to 5% disseminated pyrite										
<b>Minor Interval:</b>																
191.00	191.35	Fresh Rock	QV	Quartz Vein												1
		191.0 to 191.35 Quartz Vein - milky white to white color, quartz composition being weakly fractured, 5% sheared wallrock septae at both contact with up to 1% py...overall < 1% py, sharp upper and lower contacts 32 and 59 from C.A., respectively														

# LITHOLOGY REPORT

## - Detailed -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
191.75	206.15	<b>Fresh Rock</b> <b>3F</b> <b>Felsic Tuff with Minor Chert</b>	1	1	GY	282049	191.75	192.35	0.60	0	-	0.01	-	-
		Felsic Tuff with Minor Chert - dark gray to gray and white color, overall felsic to intermediate composition with a vfg weakly sheared mixture of fd-bio-chl-qtz, local grayish white, white, beige cherty bands varying < 1.5 to 27 cm wide, chert is strong sil-(ab) with moderate ser and localized weak fuschite, 20% to 25% chert bands from 192.35 to 194.4 amd 70% chert from 199.9 to 200.7				282050	192.35	193.35	1.00	0	-	0.01	-	-
						282334	193.35	194.40	1.05	0	-	0.01	-	-
						282335	194.40	195.50	1.10	0	-	0.01	-	-
		- well developed banding between chert and felsic tuff between...				282337	195.50	197.00	1.50	0	-	0.01	-	-
		191.75 to 193.95 - 45 to 60 from C.A.				282338	197.00	198.50	1.50	0	-	0.01	-	-
		199.9 to 200.7 - 70 to 90 from C.A.				282339	198.50	199.90	1.40	0	-	0.01	-	-
		- weakly foliated/sheared ranging from 70 to 85 from C.A. with the avarge of 78 from C.A.; scattered qs/qcs up to 10 cm wide with localized increased in qs/qcs ranging 10% to 15%...overall average 2% to 3%				282340	199.90	200.70	0.80	0	-	0.01	-	-
						282341	200.70	201.80	1.10	0	-	0.01	-	-
		Mineralization - patchy < 1% to localized 5% vfg disseminated py in wallrock with gradual decrease in py from 200.7 to 206.15 up to 1%; overall average up to 1% to 2%				282342	201.80	203.00	1.20	0	-	0.01	-	-
		Contact - sharp contact 62 from C.A.with 8 cm wide quartz veinlet				282343	203.00	204.00	1.00	0	-	0.01	-	-
						282344	204.00	205.00	1.00	0	-	0.01	-	-
						282051	205.00	206.15	1.15	0	-	0.01	-	-
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>										
		191.75 - 206.15	FU BNDS 2	Fuchsite, Bands/Banded, Weak										
		191.75 - 206.15	AB BNDS 4	Albitization, Bands/Banded, Strong										
		191.75 - 206.15	SI BNDS 4	Silicification, Bands/Banded, Strong										
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>										
		191.75 - 206.15	Py DIS	<1% to 5% patchy disseminated py averaging 1% to 2%										



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# LITHOLOGY REPORT

## - Detailed -

Hole Number: **MIS16-01**

Project: **MISHI**

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
213.85	254.60	<b>Fresh Rock</b> <b>3H</b> <b>Felsic Lapilli Tuff Tuff-Breccia</b>	1	1	GY	282061	213.85	215.20	1.35	0	-	0.01	-	-
		Felsic Lapilli Tuff Tuff-Breccia - light gray to gray color, felsic in composition with gradually more siliceous felsic from 249.0 to 254.6, increase in silicification with brecciation associated with sil/cherty bands or flooding from 252.8 to 254.6, fragmental supported with monolithological strongly foliated/sheared felsic fragments set in a vfg tuffaceous to crystal-tuff matrix; disseminated to widely scattered vfg to fg (up to 0.10 cm in size) sub-angular to sub-rounded quartz-feldspathic xtls or amygdules; sub-rounded to sub-elliptical shaped felsic clasts ranging from < 3 cm to 10 cm in diameter with a general increase in fragment size dn-hole.				282062	215.20	216.00	0.80	0	-	0.01	-	-
						282063	216.00	217.00	1.00	0	-	0.01	-	-
						282064	217.00	218.00	1.00	0	-	0.01	-	-
						282345	233.50	234.70	1.20	0	-	0.01	-	-
						282346	253.60	254.60	1.00	0	-	0.01	-	-
		215.2 to 216.0 - Quartz Stockwork - gray to light gray color, moderate to strongly sil and sheared and fractured, 20% qs parallel to 50 to 60 from C.A.with shearing, 1% to 2% scattered py, gradational upper and lower contacts.												
		- well developed fragmental texture with fragments extensively flattened and compressed forming a banded texture; strongly foliated/sheared ranging from 52 to 80 from C.A with average of 66.4, occasional qs/qcs (<1%) up to 3 cm wide; increase in brecciation associated with sil/cherty bands or flooding from 252.8 to 254.6												
		Mineralization - occasional vfg py < 1%												
		Contact - gradual increase in sil/cherty bands/flooding from 252.8 to 254.6												
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>										
		213.85 - 215.20	SI PV 2	Silicification, Pervasive, Weak										
		215.20 - 216.00	AB FRC 4	Albitization, Along Fractures, Strong										
		215.20 - 216.00	SI FRC 4	Silicification, Along Fractures, Strong										
		216.00 - 254.60	SI PV 2	Silicification, Pervasive, Weak										
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>										
		213.85 - 254.60	Py BLB	<1% occasional py bleb										

### Minor Interval:

215.20	216.00	Fresh Rock	QTS W	Quartz Stockwork	1
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# LITHOLOGY REPORT

## - Detailed -

Hole Number: MIS16-01

Project: MISHI

Project Number: 243

From (m)	To (m)	Lithology			Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)	
		Quartz Stockwork - gray to light gray color, moderate to strongly sil and sheared and fractured, 20% qs parallel to 50 to 60 from C.A.with shearing, 1% to 2% scattered py, gradational upper and lower contacts															
254.60	257.10	Fresh Rock	4B	Chert-Cherty Breccia	1	1	WH	282347	254.60	255.80	1.20	0	-	0.01	-	-	
		Chert-Cherty Breccia - bleached white to grayish white colors, strongly silicified-(albite-altered?) cherty-like bands up to 2 cm wide becoming more progressively sil and tightly packed to 257.1, siliceous bands are vfg and aphanitic and show disruption/brecciation from 255.9 to 257.1 with more intense silicification, increase in black carbonaceous / graphitic seams/fractures/slips in more bx/fragmented sil part of the interval from 255.8 to 257.1							282349	255.80	256.80	1.00	0	-	0.01	-	-
									282350	256.80	257.10	0.30	0	-	0.01	-	-
		- well developed banding ranging 25 to 70 from C.A., but more typical 55 to 65 from C.A., occasional qs < 1%															
		Mineralization - occasional py < 1% with slight increase in py (still < 1%) from 256.8 to 257.1 Contact - sharp contact 55 from C.A.															
		Alteration Maj:	Type/Style/Intensity			Comment											
		254.60 - 257.10	AB	PV	4	Albitization, Pervasive, Strong											
		254.60 - 257.10	SI	PV	4	Silicification, Pervasive, Strong											
		Mineralization Maj. :	Type/Style/%Mineral			Comment											
		254.60 - 257.10	Py	BLB	<1% occasional py												
257.10	257.40	Fresh Rock	3J	Graphitic-Cherty Felsic Volcaniclastic--E	1	1	BLK	282351	257.10	257.40	0.30	0	-	0.02	-	-	
		Graphitic-Cherty Felsic Volcaniclastic--Epilastic - black and dirty dark gray colors, strongly graphitic bands (up to 12 cm wide) with moderate to strongly sil/cherty-like felsic volcaniclastic bands (up to 3 cm wide), bands are strongly contorted with numerous parasitic folds 0 to 60 from C.A., < 1% qs at lower contact															
		Mineralization - 5% vfg to fg disseminated py with local 10% py in the more graphitic bands Contact - sharp contact with the presence of a thin qs 67 from C.A.															

# LITHOLOGY REPORT

## - Detailed -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV (ppm)	FA (ppm)	FA2 (ppm)	FA3 (ppm)
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>										
		257.10 - 257.40	SR BNDS 2	Sericitization, Bands/Banded, Weak, local white muscovite along fractures										
		257.10 - 257.40	SI PV 2	Silicification, Pervasive, Weak										
		257.10 - 257.40	SI FRC 2	Silicification, Along Fractures, Weak										
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>										
		257.10 - 257.40	Py DIS 5	avarge 5% disseminated py with 10% pyrite in more graphitic bands										
257.40	293.20	<b>Fresh Rock</b>	<b>5B</b>	<b>Arenaceous-Arenite/Felsic Volcaniclasti</b>			1	1	GG					
		Arenaceous-Arenite/Felsic Volcaniclastics with Minor Chert Interbeds - greenish gray to grayish green and white/pinkish white cherty intervals, overall felsic to intermediate in composition with cherty bands being more siliceous in the upper part of the interval to about 273.5, epidote more frequent from 278.5 to 293.2 as bands up to 5 cm wide.				282352	257.40	258.40	1.00	0	-	0.01	-	-
						282253	258.40	259.40	1.00	0	-	0.01	-	-
						282354	259.40	260.20	0.80	0	-	0.01	-	-
						282355	260.20	260.40	0.20	0	-	0.01	-	-
		- well developed banding/laminations up to 5 cm wide ranging from 67 to 82 from C.A. (average is 74 from C.A.), occasional qs/qcs < 1% with local increasing in fracturing from 258.4 to 259.4 with 10% to 15% qs/qcs.				282356	260.40	260.90	0.50	0	-	0.01	-	-
						282357	260.90	261.40	0.50	0	-	0.01	-	-
						282358	270.35	271.35	1.00	0	-	0.01	-	-
		- increase in cherty units (25%) from 280.65 to 283.65 varying 6 to 35 cm wide and interlaminated chert/arenite/volcaniclastic from 289.9 to 290.8 70 to 75 from C.A., pinkish-white chert is very siliceous, vfg, and aphanitic, Minor units from....				282359	271.35	272.05	0.70	0	-	0.01	-	-
						282361	272.05	273.10	1.05	0	-	0.01	-	-
		260.2 to 260.4 - Fractured Graphitic Arenite/Felsic Volcaniclastic - mod gf in sinuous seams/lam/bnds, fractured with 10% to 15% qs, 5% scattered py, sharp upper and lower contacts 55 and 67 from C.A., respectively.				282362	292.70	293.20	0.50	0	-	0.01	-	-
		271.35 to 272.05 - Chert - bleached white strong intense sil-(ab), vfg and aphanitic with lam/bnd, < 1% qs and py; sharp upper and lower contact 70 and 82 from C.A., respectively.												
		Mineralization - occasional to local vfg to fg py < 1% Contact - sharp contact with thin qs 80 from C.A.												

# LITHOLOGY REPORT

## - Detailed -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>			<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)		
		<i>Alteration Maj:</i>	<i>Type/Style/Intensity</i>			<i>Comment</i>												
		257.40 - 293.20	AB	BNDS	4	Albitization, Bands/Banded, Strong												
		257.40 - 293.20	SI	BNDS	4	Silicification, Bands/Banded, Strong												
		<i>Mineralization Maj. :</i>	<i>Type/Style/%Mineral</i>			<i>Comment</i>												
		257.40 - 293.20	Py	BLB		<1% pyrite bleb												
<b>Minor Interval:</b>																		
260.20	260.40	Fresh Rock	5B	Fractured Graphitic Arenite/Felsic Volcaniclastic			1											
		Fractured Graphitic Arenite/Felsic Volcaniclastic - mod gf in sinuous seams/lam/bnds, fractured with 10% to 15% qs, 5% scattered py, sharp upper and lower contacts 55 and 67 from C.A., respectively.																
<b>Minor Interval:</b>																		
271.35	272.05	Fresh Rock	4B	Chert-Cherty Tuff			1											
		Chert - bleached white strong intense sil-(ab), vfg and aphanitic with lam/bnd, < 1% qs and py; sharp upper and lower contact 70 and 82 from C.A., respectively.																
293.20	294.15	<b>Fresh Rock</b>	<b>6H</b>	<b>Quartz Feldspar to Feldspar Porphyry</b>			1	1	GY	282363	293.20	294.15	0.95	0	-	0.01	-	-
		Quartz-Feldspar to Feldspar Porphyry - gray color, felsic in composition with vfg to fg (up to 0.1 cm in size) 25% to 35% fd>qtz sub-rounded phenocrysts set in a vfg siliceous felsic matrix, well developed porphyritic texture, < 1% thin hairline qs																
		Mineralization - occasional py < 1% Contact - sharp contact 85 from C.A.																
		<i>Mineralization Maj. :</i>	<i>Type/Style/%Mineral</i>			<i>Comment</i>												
		293.20 - 294.15	Py	BLB		<1% py bleb												

# LITHOLOGY REPORT

## - Detailed -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From</i> <i>(m)</i>	<i>To</i> <i>(m)</i>	<i>Lithology</i>	<i>Weathering Oxidation Colour</i>			<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> <i>(ppm)</i>	<i>AV</i> <i>Au</i> <i>(ppm)</i>	<i>FA</i> <i>Au</i> <i>(ppm)</i>	<i>FA2</i> <i>Au</i> <i>(ppm)</i>	<i>FA3</i> <i>Au</i> <i>(ppm)</i>
294.15	329.80	<b>Fresh Rock 1B Mafic Massive Flow/Volcaniclastics</b>	1	1	GG	282364	294.15	294.80	0.65	0	-	0.01	-	-
		Massive Mfic Flow/Volcaniclastics - grayish green to greenish gray and light green color, mafic to (intermediate) in composition with wk chl- ep-(cb-ser) in a vfg wallrock matrix, increase to mod sil at upper interval between 294.15 and 294.8 associated with increased qs/qcs fracturing and pyrite, scattered to widely scattered fine to coarse (<0.1 cm to 0.5 cm in size) sub-elliptical to rounded quartz amygdules up to 1%...slight decrease with depth.				282365	294.80	295.80	1.00	0	-	0.01	-	-
						282366	328.80	329.80	1.00	0	-	0.01	-	-
		- scattered inter-flow mafic volcaniclastic units up to 20 cm wide from 294.15 to 308.0, weakly to moderately foliated with overall decrease in foliation with depth; varies from 50 to 90 from C.A. (average 66 from C.A.), banding/laminations vary from 58 to 90 from C.A. (average is 69 from C.A.), occasional to scattered qs/qcs/qfs up to 10 cm wide, increased qs (10% to 15%) from 294.15 to 294.8 associated with increased sil alteration and pyrite, as well, increase in veining from 314.4 to 323.5 (5% to 10%) ranging from 0-15 to 55 from C.A.												
		Mineralization - occasional to widely scattered py < 1%, local increase in sulphide with 2% to 3% py associated with 10% to 15% qs and increased moderate sil from 294.15 to 294.8												
		Contact - sharp Contact 55 from C.A.												
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>			<b>Comment</b>								
		294.15 - 329.80	SR	MX	1	Sericitization, Matrix, Very weak								
		294.15 - 329.80	CB	MX	2	Carbonatization, Matrix, Weak								
		294.15 - 329.80	EP	BNDS	3	Epidotization, Bands/Banded, Moderate								
		294.15 - 329.80	CL	MX	2	Chloritization, Matrix, Weak								
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>			<b>Comment</b>								
		294.15 - 294.80	Py	DIS	2	Pyrite, Disseminated, 2% to 3%								
		294.80 - 329.80	Py	BLB		occasional pyrite < 1%								
		<b>Structure Maj.:</b>	<b>Inte/Type/Core Angle</b>			<b>Comment</b>								
		294.15 - 329.80	W	QVN	40	Quartz Vein, 40° CA many random w carb, hairline to 5cm w insitu bxn, nil py.								
		294.15 - 329.80	W	BX	45	Brecciated, 45° CA w 20% vuggy carb - qtz veins and ff's blocky core RQD=5								
		294.15 - 329.80	W	JNT	70	Jointed, 70° CA								

# LITHOLOGY REPORT

## - Detailed -

Hole Number: MIS16-01

Project: MISHI

Project Number: 243

From (m)	To (m)	Lithology		Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)	
		Texture Maj:	Type	Comment												
		294.15 - 329.80	LAM	Laminated												
329.80	330.00	Fresh Rock	1L	Graphitic Mafic Volcaniclastic-Epiclastic	1	1	BLK	282367	329.80	330.00	0.20	0	-	0.01	-	-
		Graphitic Mafic Volcaniclastic-Epiclastic - black color, mostly strongly graphitic/carbonaceous with mafic composition of non-gf volcaniclastics (up to 4 cm wide), strongly sh/bnded 75 to 85 from C.A..														
		Mineralization - occasional vfg to fg py-(sp?) < 1%														
		Contact - sharp contact 90 from C.A.														
		Mineralization Maj. :	Type/Style/%Mineral	Comment												
		329.80 - 330.00	Sph BLB	< 1% sphalerite bleb												
		329.80 - 330.00	Py BLB	<1% pyrite bleb												
330.00	331.85	Fresh Rock	5E	Carbonaceous Argillite-Arkosic-Wacke (	1	1	GREBL	282368	330.00	331.00	1.00	0	-	0.01	-	-
		Carbonaceous Argillite-Arkosic-Wacke (Mafic Volcaniclastic) - alternating dark gray, greenish black, and black color, argillaceous with weak to moderate ser and thin carbonaceous laminations and bands up to 4 cm wide, weakly chl and no carbonate, scattered detrital qtz-fd grains (5% to 10%) up to 0.05 to 0.1 cm in size increasing dn-hole suggesting graded bedding and tops up-hole														
		- well developed laminations and banding 75 to 90 from C.A., < 1% qs/qcs														
		Mineralization - occasional py < 1%														
		Contact - sharp and gradational contact with no banding and less carbonaceous bands														
		Alteration Maj:	Type/Style/Intensity	Comment												
		330.00 - 331.85	SR BNDS 3	Sericitization, Bands/Banded, Weak to Moderate												
		Mineralization Maj. :	Type/Style/%Mineral	Comment												
		330.00 - 331.85	Py BLB	< 1% occasional pyrite bleb												

# LITHOLOGY REPORT

## - Detailed -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
331.85	342.20	<b>Fresh Rock</b> <b>1G</b> <b>Mafic Pillow Flows and Massive Flows</b>	1	1	GREBL	282370	335.00	335.50	0.50	0	-	0.01	-	-
		Mafic Pillow Flows and Massive Flows (Minor Mafic Volcaniclastics) - greenish black to dark green color, mafic composition being wk chl and cb with a more intermediate (altered?) composition from 331.85 to 336.1.				282371	335.50	336.10	0.60	0	-	0.01	-	-
						282373	336.10	337.00	0.90	0	-	0.01	-	-
		- moderately to strongly sheared 62 to 80 from C.A with bnading and laminations from the mafic volcaniclastics (inter-pillow flow) 60 to 90 from C.A., generally < 1% qs/qcs with localized 20% to 25% qcs from 338.0 to 338.4				282374	337.00	338.00	1.00	0	-	0.01	-	-
						282375	338.00	339.00	1.00	0	-	0.01	-	-
						282376	339.00	340.00	1.00	0	-	0.01	-	-
		Mineralization - occasional to disseminated/fracture-fill py-po-(cpy) with < 1% overall average in this interval, increase in sulphides from 335.5 to 340.0 with both py and po (1% to 4%) disseminations/fracture-filling/pillow interstices with local <0.5% cpy												
		Contact - sharp contact 55 from C.A.												
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>		<b>Comment</b>									
		331.85 - 342.20	CB	MX	2	Carbonatization, Matrix, Weak								
		331.85 - 342.20	CL	MX	2	Chloritization, Matrix, Weak								
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>		<b>Comment</b>									
		335.50 - 340.00	Cpy	BLB		<0.5% Chalcopyrite splash								
		335.50 - 340.00	Po	STG		<1% to 2% pyrrhotite fractures and disseminations								
		335.50 - 340.00	Py	STG		< 1% to 2% pyrite fractures and disseminations								
342.20	343.60	<b>Fresh Rock</b> <b>6H</b> <b>Quartz Feldspar to Feldspar Porphyry</b>	1	1	GY									
		Quartz Feldspar to Feldspar Porphyry - gray to dark gray color, felsic in composition with fg to mg (up to 0.2 cm) 25% to 35% fd and qtz phenocrysts set in a vfg felsic matriz, 5% to 10% chl-ser, well developed												

LITHOLOGY REPORT

- Detailed -

Hole Number: MIS16-01

Project: MISHI

Project Number: 243

From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
<div> <div> <div>porphyritic texture, scattered qs (5%) uo to 4 cm wide.</div> <div>Mineralization - occasional to scattered py (&lt;1%) generally near qs</div> <div>Contact - sharp contact 70 from C.A.</div> <div> <div>Mineralization Maj. :</div> <div>342.20 - 343.60</div> </div> <div> <div>Type/Style/%Mineral</div> <div>Py BLB</div> </div> <div> <div>Comment</div> <div>&lt;1% pyrite bleb</div> </div> </div> </div>														
343.60	388.25	<div>Fresh Rock</div> <div>1G Mafic Pillow Flow</div> <div>Mafic Pillow Flow - blackish green to greenish black colors, mafic composition (Mg-rich basalt) with weak to moderate chl and no cb except in occasional to frequent fractures.</div> <div>- tightly packed pillows up to 15 cm wide with thin chl-cb-ep-fd selvages up to 2 cm wide, moderately foliated/sheared ranging from 45 to 83 from C.A. (average 68 from C.A.), occasional to scattered qs/qcs up to 10 cm wide with increased veining from 347.5 to 350.0 (10%) and from 354.4 to 355.9 (5% to 10%)</div> <div>Mineralization - overall &lt; 1% py with increase in sulphides from 359.3 to 361.8 varying up to 1% to 4% po-py-(cpy) assocaited mainly with cs/qcs fractures (up to 5% to 10% po-py iup to 4 cm fractures</div> <div>Contact - sharp contact 85 frpm C.A.</div> <div> <div>Alteration Maj:</div> <div>343.60 - 388.25</div> </div> <div> <div>Type/Style/Intensity</div> <div>CB MX 1</div> </div> <div> <div>Comment</div> <div>Carbonatization, Matrix, Very weak</div> </div> <div> <div>Alteration Maj:</div> <div>343.60 - 388.25</div> </div> <div> <div>Type/Style/Intensity</div> <div>CL MX 2</div> </div> <div> <div>Comment</div> <div>Chloritization, Matrix, Weak to Moderate</div> </div> <div> <div>Mineralization Maj. :</div> <div>359.30 - 361.80</div> </div> <div> <div>Type/Style/%Mineral</div> <div>Cpy BLB</div> </div> <div> <div>Comment</div> <div>&lt;0.5% Chalcopyrite bleb</div> </div> <div> <div>Mineralization Maj. :</div> <div>359.30 - 361.80</div> </div> <div> <div>Type/Style/%Mineral</div> <div>Py STG</div> </div> <div> <div>Comment</div> <div>&lt; 1% to 2% pyrite fractures/disseminated</div> </div> <div> <div>Mineralization Maj. :</div> <div>359.30 - 361.80</div> </div> <div> <div>Type/Style/%Mineral</div> <div>Po STG</div> </div> <div> <div>Comment</div> <div>&lt;1% to 2% pyrrhotite fractures/disseminated</div> </div>	1	1	GREBL	282377	358.30	359.30	1.00	0	-	0.01	-	-
						282378	359.30	359.80	0.50	0	-	0.01	-	-
						282379	359.80	360.80	1.00	0	-	0.01	-	-
						282380	360.80	361.80	1.00	0	-	0.01	-	-
						282381	361.80	362.80	1.00	0	-	0.01	-	-

# LITHOLOGY REPORT

## - Detailed -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
388.25	390.20	<b>Fresh Rock</b> <b>6H</b> <b>Quartz Feldspar to Quartz Porphyry</b> Quartz-Feldsparto Quartz Porphyry - gray color, felsic in composition with 20% to 30% vfg to fg (up to 0.10 cm in size) qtz and fd phenocrysts set in a vfg siliceous felsic matrix, well developed porphyritic texture with chill margins on both upper and lower contact, scattered bleached white hairline fractures with < 1% to 2% qs  Mineralization - widely scattered vfg to fg py < 1% Contact - sharp chill zone contact 65 from C.A.	1	1	GY	282382	388.20	389.20	1.00	0	-	0.01	-	-
						282383	389.20	390.20	1.00	0	-	0.01	-	-
<b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b> 388.25 - 390.20     Py   BLB     <1% scattered py blebs														
390.20	421.00	<b>Fresh Rock</b> <b>1B</b> <b>Mafic Massive Flow</b> Mafic Massive Flow - green color, mafic composition with moderate chlorite with amphibole-epidote and weak to no carbonate in the form of calcite, local hem in joints and fractures from 398.9 to 419.3  - massive appearance with local flow breccias with variable foliation/sh 48 to 80 from C.A. from 390.2 to 403.0 with more consistent foliations from 403.0 to 421 varying 28 to 45 from C.A. (averaging 34 from C.A), scattered qcs/qs up to 10 cm wide ranging from 20 to 60 from C.A....averages approximately 5%  Mineralization - occasional py < 1%	1	1	GR									
<b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b> 390.20 - 421.00     CL   MX   3     Chloritization, Matrix, Moderate														
<b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b> 390.20 - 421.00     Py   BLB   1     Pyrite, Blebs, 1%														

LITHOLOGY REPORT

- Detailed -

Hole Number: MIS16-01

Project: MISHI

Project Number: 243

From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	AV	FA	FA2	FA3	
										Au	Au	Au	Au	Au
										(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
	Structure Maj.:	Inte/Type/Core Angle	Comment											
	390.20 - 403.00	M JNT 35	Jointed, 35° CA, 2-3/m											
	403.00 - 421.00	W FOL 25	Foliated, 25° CA, mod foln											
	403.00 - 421.00	W JNT 25	Jointed, 25° CA1-2/m											

## SAMPLE DESCRIPTION REPORT

### - Assay -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From (m)</i>	<i>To (m)</i>	<i>Length (m)</i>	<i>Sample #</i>	<i>Comments</i>
15.25	15.75	0.50	282240	Felsic Tuff - mod sil, vfg and wk-mod sh, numerous hairline fractures giving bx texture, < 1% qs, < 1% py
15.75	16.60	0.85	282241	Diabase - mafic composition with chill margin and edge of diabase contact, vfg and msv, <1% py and weakly magnetic
16.60	17.00	0.40	282242	Diabase - mafic composition with chill margin and edge of diabase contact, vfg and msv, <1% py and weakly magnetic
17.00	17.60	0.60	282243	Diabase - mafic composition with at margin of diabase contact, vfg and msv, 20 cm wr inclusion at 17.4 to 17.6, <1% py and weakly magnetic
17.60	18.20	0.60	282244	Diabase - mafic composition with margin of diabase contact, vfg and msv, <1% py and weakly magnetic
37.95	38.45	0.50	282245	Mafic Volcaniclastic with Chert - mafic composition with strong cb with chl, local chert at lower interval, mod sh, 1% to 2% qcs, < 1% py
38.45	39.00	0.55	282246	Laminated Chert - siliceous composition with mod to strong ser, laminated, < 1% qs, occasional < 1% py
39.00	39.60	0.60	282247	Laminated Chert - siliceous composition with mod to strong ser, laminated, < 1% qs, occasional < 1% py-aspy
39.60	40.15	0.55	282249	Laminated Chert and Chlorite-Carbonate Shear (39.6 to 39.8) - siliceous composition with strong sericitite, laminated/sheared with 20 cm wide chl-cb shear (5% py) and < 1% py in cherty tuff
40.15	40.75	0.60	282250	Chlorite-Carbonate Shear - strong sh-controlled chl-cb and strongly sh, numerous cb bnd, 5% qcs/qs lenses, occasional < 1% py
40.75	41.50	0.75	282251	Chlorite-Carbonate Shear and Cherty Tuff - both chl-cb altered shears (50%) and vfg, apanaitic siliceous chert with weak to moderate ser, bnded/sh texture, <1% qcs/qs and < 1% py
41.50	42.45	0.95	282252	Cherty Tuff/Felsic Tuff - felsic composition and mod-strong sil bands, bnded, <1% qcs/qs, occasional py < 1%
42.45	43.00	0.55	282253	Silicified Cherty Felsic Tuff - mod to strong pervasive sil, sil bnded form, <1% qs/qcs, 2% to locally 4% to 5% vfg disseminated py
43.00	43.50	0.50	282254	Silicified Cherty Felsic Tuff - mod to strong pervasive sil, sil bnded form, <1% qs/qcs, 3% to 5% vfg disseminated py
43.50	44.20	0.70	282255	Felsic Tuff - mod sil and patchy weak hem stain, <1% qcs/qs, scattered vfg 1% to 2% py
44.20	44.70	0.50	282256	Felsic Tuff - wk mod sil and mod hem stain, <1% qcs/qs, <1% py
44.70	45.20	0.50	282257	Felsic Tuff - wk mod sil and mod hem stain, <1% qcs/qs, <1% py
55.30	56.40	1.10	282258	Cherty Tuff - siliceous vfg aphanitic quartz, 5% to 10% felsic volcaniclastic bnds, bnded texture, 1% to 2% qs/qcs, scattered py <1%
56.40	56.95	0.55	282259	Chlorite-Carbonate Shear - strong sh controlled chl-cb and strongly sheared, <5% qcs/cs with numerous cb bnds, < 1% py
56.95	57.45	0.50	282261	Cherty Tuff - strong pervasive vfg siliceous/silicified, <1% qs and occasional py < 1%
57.45	57.85	0.40	282262	Mafic Volcaniclastic Bed - mafic composition with wk-mod sil and cb fractures, local chert bnds, frequent cs tension gashes, 3% to 5% disseminated py
57.85	58.75	0.90	282263	Cherty Tuff (Minor Diabase Chill) - strongly silicified with hem dusting at lower interval, 1% to 2% cs/qcs tension fractures, < 1% py
58.75	59.00	0.25	282264	Mafic Volcaniclastic and Chert - 50% ratio with 2% to 3% disseminated py in mafic and <1% py in chert
59.00	59.40	0.40	282265	Mafic Volcaniclastic with Minor Chert - mafic composition with mod sil and wk sil in fractures, local 8 cm wide chert band, <1% qcs, 2% to 3% vfg disseminated py
59.40	60.00	0.60	282266	Arenite/Chert Inter-Formational - dirty siliceous composition, finely laminated/banded, vfg, <1% qcs and py
66.10	66.60	0.50	282267	Interbedded Greywacke/Arenite & Chert - intermediate to mafic composition with siliceous vfg chert beds (50%), bnded/bedded texture, < 1% qcs and up to 1% scattered py

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<i>From (m)</i>	<i>To (m)</i>	<i>Length (m)</i>	<i>Sample #</i>	<i>Comments</i>
66.60	67.45	0.85	282268	Greywacke with mINor Chert - intermediate in composition with weak cb, laminated/banded texture, minor chert bnds, < 1% qcs/cs, scattered vfg 2% to 4% py
67.45	67.80	0.35	282269	Chert - siliceous/silicified composition with thin chl-(cb) shears, banded and broken core, 5% to 10% qs/qcs, <1% py
67.80	68.80	1.00	282270	Greywacke - intermediate composition with wk cb, massive with minor chert, <1% qcs, 5% vfg disseminated py
68.80	69.70	0.90	282271	Greywacke - intermediate composition with wk cb, increase to wk-mod chl, massive laminated texture, <1% qcs, 5% vfg disseminated py
69.70	70.60	0.90	282273	Chert - siliceous/silicified vfg and aphanitic quartz, wk-mod ser and chl-(cb) along sh slip planes, <5% qcs/qs, patchy < 1% to locally 2% to 3% disseminated py
70.60	71.20	0.60	282274	Chert - siliceous/silicified composition with chl-cb bnd/shears, bnded/sh, <1% qcs, 2% to 3% vfg scattered py
71.20	71.70	0.50	282275	Greywacke/Mafic Volcaniclastic - intermediate to mafic in composition with wk to mod chl and mod to strong cb in matrix, bnded/sh, <5% qcs/cs, up to 1% widely scattered py
93.45	94.50	1.05	282276	Lamprophyre - mafic/ultramafic composition, biotiferous and mod-strong pervasive cb, sub-porp texture, <1% cs, 1% to 2% vfg scattered py-po
94.50	96.00	1.50	282277	Lamprophyre - mafic/ultramafic composition, biotiferous and mod-strong pervasive cb, sub-porp texture, <1% cs, 1% to 2% vfg scattered py-po
96.00	97.50	1.50	282278	Lamprophyre - mafic/ultramafic composition, biotiferous and mod-strong pervasive cb, sub-porp texture, <1% cs, 1% to 2% vfg scattered py-po
97.50	98.50	1.00	282279	Lean Carbonate-Silicate Facies BIF - mod chl and strong cb, both disseminated magnetite and msv mag bnds, bnded/sh texture, <1% qcs/cs, 1% to 3% vfg scattered py
98.50	99.10	0.60	282280	Lean Carbonate-Silicate Facies BIF - mod chl and strong cb, more msv mag bnds>disseminated magnetite, bnded/sh texture, <1% qcs/cs, 2% to 3% vfg scattered py
99.10	99.95	0.85	282281	Lean Carbonate-Silicate Facies BIF - mod chl and strong cb, wk-mod magnetic bnded/sh texture, fractured with 5% to 10% qcs/cs, 5% vfg disseminated py
99.95	100.45	0.50	282001	Cherty Tuff - strongly sil bnded, 1% to 2% qs, <1% py
100.45	100.70	0.25	282002	Mafic Volcaniclastic/Greywacke - dirty intermediate composition and wk cb, bnded/sh, 1% to 2% qcs, 5% disseminated py
100.70	101.60	0.90	282003	Chert/Mafic Volcaniclastic - 50% chert and mafic with weak cb, 1% to 2% qcs/qs, bnded/sh, <1% py
101.60	103.00	1.40	282282	Lean Silicate-Carbonate BIF - mod cb, strongly bnded/sh with magnetiferous bands, sh, 1% to 2% qcs/cs, 2% to 3% scattered py
103.00	104.30	1.30	282283	Lean Silicate-Carbonate BIF - wk to mod cb, strongly bnded and wk sh with well developed magnetiferous bands, laminated, <1% qcs (hem margins), up to 1% scattered py
104.30	105.30	1.00	282285	Lean Silicate-Carbonate BIF - wk to mod cb-chl and strongly sh, magnetiferous with disseminated mag in bnds, <1% qcs/cs, up to 1% py
105.30	106.00	0.70	282286	Lean Silicate-Carbonate BIF - wk to mod cb-chl and strongly sh, magnetiferous with disseminated mag in bnds, <1% qcs/cs, up to 1% py
106.00	107.50	1.50	282287	Lean Silicate-Carbonate BIF - wk to mod cb-chl and well developed magnetite-rich bands, laminated, <1% qcs/cs, up to 1% py
107.50	108.50	1.00	282288	Lean Silicate-Carbonate BIF - mod chl>cb with strong cb fractures, frequent calcite fractures 5%, 1% to 2% py
108.50	109.45	0.95	282289	Lean Silicate-Carbonate BIF - mod chl>cb with strong cb fractures, frequent calcite fractures 5%, 1% to 3% py increasing towards 109.45 with spec of cpy <0.5%
109.45	110.00	0.55	282290	Felsic Tuff - altered felsic with mod chl-ser, strongly sh with well developed crn clvg, <1% qcs, 2% to 3% scattered py cubes
110.00	111.40	1.40	282291	Felsic Tuff - felsic composition, wk chl-ser-cb, mod to strongly sh with crn clvg, scattered qcs < 1% and < 1% py
111.40	111.65	0.25	282292	Cherty Tuff - strongly sil with banded of chert and minor felsic tuff (mod sil), bnded texture, 10% to 15% qcs/cs parallel to bnd, < 1% py

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111.65	113.00	1.35	282293	Felsic Tuff - felsic composition, wk chl-ser-cb, mod to strongly sh with crn clvg, scattered qcs 2% to 3% < 1% and < 1% py
113.00	114.50	1.50	282294	Felsic Tuff - felsic composition, wk chl-ser-cb, mod to strongly sh with crn clvg, scattered qcs 2% and < 1% py
114.50	115.90	1.40	282295	Felsic Tuff - felsic composition, wk chl-ser-cb, mod to strongly sh with crn clvg, scattered qcs 2% and widely scattered vfg py < 1%
115.90	117.00	1.10	282004	Felsic Tuff - felsic composition, wk chl-ser-cb, mod to strongly sh with crn clvg, scattered 5% qs/qcs and <1% py
117.00	118.00	1.00	282005	Weak QTSW - felsic composition being wk-(mod) sil-(ser), fractured with 10% qs, < 1% py
118.00	119.00	1.00	282006	Weak QTSW - strong pervasive sil flooding and cherty-like, fractured 5% to 10% qs, < 1% py
119.00	120.00	1.00	282007	QTSW - strong pervasive fracture-controlled sil with 20% qs, < 1% py
120.00	121.00	1.00	282008	Weak QTSW - locally strong sil about qs up to 10 cm wide, 10% qs, < 1% py
121.00	122.00	1.00	282009	QTSW - patchy strong fracture-controlled pervasive and intense sil, 15% to 20% qs, < 1% py
122.00	123.00	1.00	282010	QTSW - felsic composition with wk-mod sil, fractured with 20% qs, < 1% py
123.00	124.00	1.00	282011	Weak QTSW - felsic composition with wk-mod sil(ser), weakly fractured with about 5% xcutting qs, < 1% py
124.00	125.00	1.00	282012	QTSW - altered felsic with mod sil(ser), strongly fractured with 20% to 25% qs, < 1% py
125.00	126.00	1.00	282013	QTSW - altered felsic with wk to strong sil associated with qs, 20% to 25% qs/qsc fractures, <1% py
126.00	127.00	1.00	282014	QTSW - wk sil altered felsic, 10% to 15% qs/qcs, < 1% py
127.00	128.00	1.00	282015	QTSW - strong pervasive fracture-controlled pervasive and intense sil, 15% to 20% qs, < 1% py
129.30	130.00	0.70	282298	Fault Zone/Diabase - mafic composition with mod-chl-cb, local hem along the joints, extremely broken up core, vfg, <1% qcs and py, weakly magnetic
130.00	131.50	1.50	282299	Fault Zone/Diabase - mafic composition with mod-chl-cb, local hem along the joints, extremely broken up core, vfg, <1% qcs and py, weakly magnetic
131.50	132.95	1.45	282300	Fault Zone/Diabase - mafic composition with mod-chl-cb, local hem along the joints, extremely broken up core, vfg, <1% qcs and py, weakly magnetic
132.95	134.00	1.05	282301	QTBX - bleached white, strong intense sil flooding, 1% to 2% qs, bx texture, <1% py
134.00	135.00	1.00	282303	QTBX - bleached strong pervasive intense sil flooding, fractured with 5% to 10% qs with local tour, <1% py
135.00	136.00	1.00	282304	QTBX - bleached white strong intense sil flooding, <5% qs, up to 1% py
136.00	137.00	1.00	282305	QTBX - smokey gray/bleached white strong intense sil-(ab?)...cherty-like, 5% to 10% qs, vfg scattered py 1%
137.00	138.00	1.00	282306	QTBX - smokey gray/bleached white strong intense sil-(ab?)...cherty-like, 5% to 10% qs, vfg scattered py 1%
138.00	139.00	1.00	282307	QTBX - smokey gray/bleached white strong sil flooding, 5% qs, 1% to 2% vfg disseminated py
139.00	140.00	1.00	282308	QTBX/QTSW - smokey grayish white to bleached white, strong intense sil-(ab) flooding and strongly fractured 20% to 25% qs, 2% to 4% vfg disseminated py-(aspy?)
140.00	141.00	1.00	282309	QTBX/QTSW - smokey grayish white to bleached white, strong intense sil-(ab) flooding and strongly fractured 10% to 15% qs, 5% vfg disseminated py-(aspy?)

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141.00	142.00	1.00	282310	QTBX/QTSW - smokey grayish white to bleached white, strong intense sil-(ab) flooding and strongly fractured 10% to 15% qs, 2% to 3% vfg disseminated py-(aspy?)
142.00	143.00	1.00	282311	QTBX/QTSW - smokey grayish white to bleached white, strong intense sil-(ab) flooding and strongly fractured 10% qs, 2% to 5% vfg disseminated py-(aspy?)
143.00	144.00	1.00	282313	QTBX/QTSW - smokey grayish white to bleached white, strong intense sil-(ab) flooding and strongly fractured 10% to 15% qs, 2% to 3% vfg disseminated py-(aspy?)
144.00	145.00	1.00	282016	QTBX/QTSW - smokey grayish white to bleached white, strong intense sil-(ab) flooding and strongly fractured 10% to 15% qs, 1% to 2% vfg disseminated py-(aspy?)
145.00	146.00	1.00	282018	Pyritic Weak QTSW -banded alt with mod chl wk cb and mod to strong sil, mod sh, 6% to 8% qcs/qs, 10% to 20% vfg to fg disseminated py generally in chl-cb bnds
146.00	147.00	1.00	282019	Pyritic Weak QTSW - mod chl with wk to mod cb matrix/fractures, weakly fractured <5% qs/qcs, mod sh, 15% to 20% vfg to fg disseminated py
147.00	148.00	1.00	282020	Pyritic Weak QTSW - mod chl with wk cb matrix/fractures, local sil, fractured with 10% to 15% qcs/qs, , mod sh, 10% to 15% vfg to fg disseminated py
148.00	149.50	1.50	282021	Pyritic Weak QTSW - mod chl with mod cb matrix/fractures, increase in strong sil from 148.0 to 148.5, fractured with 10% to 12% qcs/qs, , mod sh, 10% to 20% vfg to fg disseminated py
149.50	150.10	0.60	282022	Pyritic Weak QTSW - mod chl with mod to strong cb matrix/fractures, fractured with 10% to 15% qcs/qs, , mod sh, 10% to 15% vfg to fg disseminated py
150.10	151.00	0.90	282023	Chloritic Felsic to Intermediate Tuff - mod to (strong) chl and wk cb, weakly fractured < 5% qcs/qs, up to 1% widely scattered py
151.00	152.50	1.50	282024	Felsic to Intermediate Tuff - gradational decrease in sil and wk sil, mod sh, 5% to 10% thin qcs/qs, patchy py with overall average 1% to 2% disseminated py
152.50	154.00	1.50	282025	Felsic to Intermediate Tuff (Minor Cherty Tuff) - wk to mod sil-(ser) with increase in sil with chrtly sil flooding from 150.4 to 151.0, wk chl, mod sh with folded sil cherty bnds, 5% to 10% qs/qcs, patchy 1% to 2% disseminated py
154.00	155.50	1.50	282026	Felsic to Intermediate Tuff - wk to mod sil with local wk- to locally mod cb fractures, wk ser-chl, mod sh, 10% to 15% qcs/qs and possible sil cherty flooding, patchy disseminated py <1% to locally 2%
155.50	157.00	1.50	282027	Felsic to Intermediate Tuff (Minor Cherty Tuff) - wk to mod sil with increase in sil with folded cherty tuff (up to 3 cm wide) , wk- to mod ser, mod sh with folded sil cherty bnds, 2% to 4% qs/qcs, patchy <1% to local 2% to 3% associated with cherty tuff bnds and local q
157.00	158.50	1.50	282028	Felsic to Intermediate Tuff - wk to mod ser with decreasing sil, wk-mod cb, mod sh, weakly fractured with <5% qcs, < 1% py
158.50	160.00	1.50	282029	Felsic to Intermediate Tuff - wk to mod ser with wk cb...mod cb fractures, mod sh, weakly fractured with 2% to 4% scattered thin qcs, 1% to 2% scattered vfg py
160.00	161.50	1.50	282031	Felsic to Intermediate Tuff - wk to mod ser with wk cb...mod cb fractures, mod sh, fractured with 5% to 10% qcs as scattered thin qcs, 2% to 3% vfg disseminated py
161.50	163.00	1.50	282032	Felsic to Intermediate Tuff - wk to mod ser-chl with mod to strong cb along fractures/shears, thin folded cherty bands towards 163.0 (<5%), mod sh, fractured with 5% qcs as scattered thin qcs, 2% to 4% vfg disseminated py
163.00	164.20	1.20	282033	Felsic to Intermediate with Chert Bands - wk to mod chl-ser with wk-mod cb along sh/fractures, 10% to 15% chert bands up to 11 cm wide, mod sh, 1% to 2% qcs/cs, 1% to 3% vfg scattered py
164.20	166.00	1.80	282034	Folded Chert and Felsic to Intermediate Tuff - massive dirty white chert comprising 50% of the sample interval and gray felsic tuff, intensely folded chert with F.A. (parallel to C.A.) nterference fold pattern, <1% qcs/cs, <1% to locally 5% (patchy) py
166.00	167.50	1.50	282035	Folded Chert with Felsic to Intermdaite Tuff - 70% chert and 30% felsic to intermediate tuff ( wk sil-chl-ser), complexly and intensely folded showing detached chert bns/beds, scattered thin cs 2% to 3%, < 1% to 2% to 4% vfg disseminated pyfrom 167.0 to 167.5
167.50	169.00	1.50	282036	Folded Chert & Felsic Tuff - 50:50 chert and felsic with well developed banding/bedding, chert is strong sil with fus and wk sil-ser in felsics, <5% qcs/qs, 2% to 3% vfg py mostly in felsics and <1%py in chert
169.00	170.00	1.00	282037	Felsic Tuff and Minor Chert (20%) - wk-mod sil-(ser) and strong sil in cherty band, <5% qcs/qs, 5% vfg disseminated py mainly in felsics

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170.00	170.80	0.80	282038	Banded Chert and Felsic Tuff - strong sil cherty bands with wk-mod sil-(ser) in felsic wallrock, up to 5% qcs/qs, 2% to 5% vfg disseminated py mainly in felsics and up to 1% to 2% in cherty tuff
170.80	171.70	0.90	282040	Chert - white color, strong silm and ser with local faint fus, fractured with 10% qs, <1% py
171.70	172.50	0.80	282314	Chert - white color, siliceous composition with strong sil-ser and local fus, well defined laminations, 5% qs, occasional py <1%
172.50	173.25	0.75	282315	Chert - white color, siliceous composition with strong sil-ser and local fus, well defined laminations, 5% qs, occasional py <1%
173.25	173.90	0.65	282316	Felsic Tuff - felsic composition with wk-mod sil-ser, mod sh, 2% to 3% thin qs, 25 to 3% vfg scattered py in wr and qs
173.90	174.60	0.70	282317	Chert with minor Felsic Tuff Band (20%) - strong sil-ser with fus composition of chert, vfg/aphanitic, <1% qs, <1% to local 2% to 3% scattered py mainly in felsic bnd
174.60	175.10	0.50	282318	Felsic Tuff with Minor Chert - felsic composition with wk sil and mod ser-(ank?), mod to strongly sh, <5% qs/qcs, 2% to 3% vfg disseminated py
175.10	175.75	0.65	282319	Banded Chert and Felsic Tuff - about 50:50 with well developed banding, strong sil-ser with local fus, <5% qs/qcs, <1% to 3% py with py mainly in felsics
175.75	176.50	0.75	282320	Chert with Minor Felsic Tuff - strongly sil-ser with fus, locally well defined lam, 2% to 3% qs, <1% py with 1% py in 2cm wide felsic bnd
176.50	177.35	0.85	282321	Banded Chert and Felsic Tuff - about 50:50 with well developed banding, strong sil-ser with local fus, <5% qs/qcs, <1% to 2% py with py mainly in felsics
177.35	178.25	0.90	282322	Felsic Tuff with Minor Chert - felsic composition with mod ser>sil, mod sh, minor bnd of chert, 1% qs, 3% to 5% vfg disseminated py
178.25	179.00	0.75	282323	Chert with Minor Felsic Tuff - strongly sil-ser with more fus, locally well defined lam, 1% qs, <1% py overall with small sliver of felsics with local 2% to 4% py
179.00	179.70	0.70	282325	Felsic Tuff with 15% Chert - felsic to intermediate in composition with 155 bleached white chert bnds, local fuschite in chert bnd, <1% qs/qcs, 5% disseminated py primarily in felsics
179.70	180.50	0.80	282326	Chert with Minor Sheared Felsic Tuff Bands/Seams - bleached white strong sil with ser with sh and strong cb felsic tuff bnds/seams, 1% qs, <1% py
180.50	181.50	1.00	282327	Chert with Minor Felsic Tuff - strong sil with ser bleached color, felsic seams/interstitial giving bx texture, <5% qcs/qs, occasional to widely scattered py < 1%...generally near qs/qcs
181.50	182.50	1.00	282328	Banded Felsic Tuff and Chert - 50:50 ratio of felsic to intermediate composition and strongly sil and vfg chert, folded features, 5% to 7% qs/qcs, 3% to 5% vfg disseminated py primarily in felsics
182.50	183.00	0.50	282329	Fractured Chert - bleached white with strong intense sil-(ab) with weak fus in matrix, local felsic bnds at lower contact, 5% to 10% qs/qcs, 2% to 4% py in seams/joints in chert and dissiminated in felsics
183.00	183.60	0.60	282330	Chert - grayish white to white color, strong vfg sil-(ser), aphanitic, minor felsic seams, msv, < 1% qs/qcs, <1% py
183.60	184.50	0.90	282331	Felsic Tuff & 20% Chert Band - felsic to intermediate in cmposition with wk chl-bio, local 20 cm chert bnd, 2% to 3% qs/qcs, < 1% py
184.50	185.40	0.90	282332	Chert - bleached white strong intense sil-(ab?) with wk diffuse fus in chert, tour fracture, 1% to 3% thin qs, up to 1% widely scattered vfg py
185.40	186.00	0.60	282333	Felsic Tuff and Chert - 50:50 ratio with felsic to intermediate composition and strong sil vfg aphanitic chert, wk fus in chert, bnded texture, <1% qs/qcs, ocassional to local py < 1% to 2%
186.00	187.10	1.10	282041	Chert and 305 Felsic Tuff - strong intense sil-(ab) with ser-fus, 30% felsics, 2% to 3% qs/qcs, < 1% py with local 1% py
187.10	188.00	0.90	282042	Felsic Tuff - wk to mod sil of felsic to intermediate composition, vfg and wk sh, 5% qs/qcs, 10% vfg disseminated pyc
188.00	188.65	0.65	282043	Felsic Tuff with Monor Chert Bands - felsic to intermediate in composition with local strongly sh sil-cb 33 cm shear, chert bnds up to 3 cm wide, 5% qcs/qs..mainly in sh, <1% py with 1% to 2% scattered py in shear
188.65	189.75	1.10	282044	Chert and Felsic Tuff - 50:50 ratio with silicified vfg and aphanitic cherty tuff, folded features/contacts, local wk cb shear at lower contact, 5% xcutting qs/qcs, 1% to 2% vfg scattered py
189.75	191.00	1.25	282045	Chert with minor Felsic Tuff - grayish white to bleached white sil-(ab) with ser, bx/fragmented appearance, <1% to 2% qs/qcs, <5% vfg disseminated py

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Project: **MISHI**

Project Number: **243**

<i>From (m)</i>	<i>To (m)</i>	<i>Length (m)</i>	<i>Sample #</i>	<i>Comments</i>
191.00	191.35	0.35	282046	Quartz Vein quartz composition being weakly fractured, 5% local wr septae at uc and lc with up to 1% py...overall < 1% occasional py
191.35	191.75	0.40	282047	Chert - bleached white and strong sil-(ab) with ser, 2% to 4% qs/qcs, up to 1% vfg py
191.75	192.35	0.60	282049	Felsic Tuff - felsic to intermediate in composition, msv and vfg, fractured with 10% to 15% qs, 25 to 4% disseminated vfg py
192.35	193.35	1.00	282050	Felsic Tuff with 20% Chert - felsic to intermediate in composition with 20% sil and vfg aphanitic chert bsands up to 13 cm wide, 1% to 2% qs/qcs, < 1% to local 5% disseminated py with 1% to 2% overall average
193.35	194.40	1.05	282334	Felsic Tuff with 25% Chert - felsic to intermediate in composition with 20% sil and vfg aphanitic chert bsands up to 14 cm wide, 10% to 15% qs/qcs up to 10 cm wide, < 1% to 2% widely scattered to local py
194.40	195.50	1.10	282335	Felsic Tuff - felsic to intermediate in composition, vfg and msv/wk sh, 1% to 2% thin qcs/qs, < 1% py
195.50	197.00	1.50	282337	Felsic Tuff - felsic to intermediate in composition, vfg and msv/wk sh, 5% thin qcs/qs, < 1% py to local 1% to 3% vfg disseminated py
197.00	198.50	1.50	282338	Felsic Tuff - felsic to intermediate in composition, vfg and msv/wk sh, 2% to 4% thin qcs/qs, 1% to 2% scattered vfg py
198.50	199.90	1.40	282339	Felsic Tuff - felsic to intermediate in composition, vfg and msv/wk sh, 1% to 2% thin qcs/qs, <2% vfg scattered py
199.90	200.70	0.80	282340	Cherty Tuff & 30% Felsic Tuff - strong sil and vfg/aphanitic chert, banded with 30% felsic tuff up to 18 cm wide, 5% qs/qcs, <1% to 5% vfg scattered py with increased py in upper contact
200.70	201.80	1.10	282341	Felsic Tuff - felsic to intermediate in composition, vfg and msv/wk sh, 2% to 3% qs/qcs, up to 1% widely scattered py
201.80	203.00	1.20	282342	Felsic Tuff - felsic to intermediate in composition, vfg and msv/wk sh, 2% to 4% qs/qcs, up to 1% widely scattered py
203.00	204.00	1.00	282343	Felsic Tuff - felsic to intermediate in composition, vfg and msv/wk sh, 1% to 3% qs/qcs, < 1% widely scattered py
204.00	205.00	1.00	282344	Felsic Tuff - felsic to intermediate in composition, vfg and msv/wk sh, 1% to 3% qs/qcs, <1% widely scattered py
205.00	206.15	1.15	282051	Felsic Tuff - felsic to intermediate in composition, vfg and msv/wk sh, 2% to 3% qs/qcs, up to 1% widely scattered py
206.15	207.30	1.15	282052	Quartz Stockwork - wk to mod sil of felsic composition, fractured with 15% to 20% qs/qcs, 2% to 3% py
207.30	208.00	0.70	282053	Felsic Tuff - felsic to intermediate in composition, vfg and msv with wk-mod sh, <25 to 3% qs/qcs, widely scattered 1% py
208.00	209.00	1.00	282054	Quartz Srockwork - mod sil particularly adjacent to 20% qs, 5% to 7% vfg to fg disseminated py in wallrock
209.00	210.00	1.00	282056	Weak Quartz Stockwork - altered felsic composition with mod to stronger sil (cherty-like locally), weakly fractured with 5% to 10% qs/qcs, 5% vfg disseminated py with increased py in cherty sections
210.00	211.00	1.00	282057	Weak Stockwork - mod to strongly sil with 10% to 15% qs/qcs, 5% vfg disseminated py associated with strong sil cherty-like alteration
211.00	212.00	1.00	282058	Weakly Fractured Felsic Crystal Tuff - mod sil and ser, strongly sheared, wk fractured with 5% qs/qcs, 2% to 3% vfg py
212.00	213.00	1.00	282059	Weak Quartz Stockwork - mod to strong sil in a xtl tuff matrix, fractured with 10% to 15% qs/qcs, up to 1% py
213.00	213.85	0.85	282060	Silicified-Fuschite Altered Felsic Tuff/Cyystal Tuff - strong bleached sil-9ab) with fus, sil flooded/bx texture with < 5% qs, <1% to locally 2% to 3% vfg py at upper contact area
213.85	215.20	1.35	282061	Felsic Lapilli Tuff - felsic composition with wk-mod ser, 10% to 20% vfg to fg qtz-fd xtls, strongly sh, 1% to 2% qs/qcs, < 1% py
215.20	216.00	0.80	282062	Quartz Stockwork - mod to strong sil with ser, strongly fractured with 20% qs, strongly sh, 1% to 2% scattered py
216.00	217.00	1.00	282063	Felsic Crystal Tuff-Lapilli Tuff - mod to strong ser and sh, 1% to 2% qs/qcs, scattered < 1% py

## SAMPLE DESCRIPTION REPORT

### - Assay -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From (m)</i>	<i>To (m)</i>	<i>Length (m)</i>	<i>Sample #</i>	<i>Comments</i>
217.00	218.00	1.00	282064	Felsic Crystal Tuff-Lapilli Tuff - mod to strong ser and sh, 1% to 2% qs/qcs, scattered < 1% py
233.50	234.70	1.20	282345	Felsic Tuff Breccia - felsic in composition with well developed fragmental textures with monolithological clasts up to 6 cm in size, fragment supported with 25% to 35% clasts set in a vfg tuffaceous matrix, strongly foliated/sheared, < 1% qcs/qs, < 1% py
253.60	254.60	1.00	282346	Strongly Sheared Felsic Tuff Breccia - felsic in composition with gradational increase in cherty clasts, fragment supported, strongly sh/foliated, <1% qs/qcs, < 1% py
254.60	255.80	1.20	282347	Cherty-Cherty Tuff Breccia - mod to strongly sil with increase in sil in banded form...fragments and/or cherty bands, banded texture, <1% qs/qcs, <1% py
255.80	256.80	1.00	282349	Cherty Breccia - strong sil with well developed bnded texture, black carbonaceous or gf seams/fractures/slips parallel to bnds, local bx texture, <1% qs, < 1% occasional py
256.80	257.10	0.30	282350	Chert Breccia - strong intense and pervasive sil-(ab) with carboaceous/gf seams/fractures/slips, bx/bnded texture, < 1% qs, occasional py < 1%
257.10	257.40	0.30	282351	Graphitic-Cherty Felsic Volcaniclastic--Epiclastic - strongly graphitic bands (up to 12 cm wide) with moderate to strongly sil/cherty-like felsic volcaniclastic bands (up to 3 cm wide), contorted & folded, 1% to 2% qs, overall 5% disseminated py with 10% local py in more gf bands
257.40	258.40	1.00	282352	Arenite/Felsic Volcaniclastics - siliceous in composition and well defined laminations/bands, local chert lam, 5% qs/qcs, < 1% py
258.40	259.40	1.00	282253	Arenite/Felsic Volcaniclastics - siliceous in composition and well defined laminations/bands, local chert lam, fractured with 5% to 10% qs/qcs, widely scattered py up to 1%
259.40	260.20	0.80	282354	Arenite/Felsic Volcaniclastics - siliceous in composition and well defined laminations/bands, 1% to 2% qs/qcs, 1% to 3% py with up to 55 py at upper interval
260.20	260.40	0.20	282355	Fractured Graphitic Arenite/Felsic Volcaniclastic - mod gf in sinuous seams/lam/bnds, fractured with 10% to 15% qs, 5% scattered py
260.40	260.90	0.50	282356	Arenite/Arkose/Felsic Vo;caniclastic - siliceous/felsic in composition with 5% qtz-fd reworked xtls/detrital, lam/bnded, <1% qs, occasional py < 1%
260.90	261.40	0.50	282357	Arenite/Arkose/Felsic Vo;caniclastic - siliceous/felsic in composition with 5% qtz-fd reworked xtls/detrital, lam/bnded, <1% qs, occasional py < 1%
270.35	271.35	1.00	282358	Arenite/Felsic Volcaniclastic - felsic to (intermediate) composition, vfg and msv with occasional lam/bnd, 1% to 2% qs/qcs, <1% py
271.35	272.05	0.70	282359	Chert - bleached white strong intense sil-(ab), vfg and aphanitic with lam/bnd, < 1% qs and py
272.05	273.10	1.05	282361	Arenite/Felsic Volcaniclastic - felsic to (intermediate) composition, lam/bnd texture, <1% qs/qcs, widely scattered < 1% py
292.70	293.20	0.50	282362	Arenite/Felsic Volcaniclastic - felsic to intermediate in composition, vfg and msv, < 1% qs/qcs with scattered hairline calcite fractures, <1% py
293.20	294.15	0.95	282363	Feldspar Porphyry - felsic in composition with 25% to 35% fd>qtz phenocrysts, porp texture, < 1% qs/qcs and py
294.15	294.80	0.65	282364	Fractured Mafic Flow - wk to mod sil and 10% qs fracturing, 2% to 3% vfg to fg py with < 1% sp
294.80	295.80	1.00	282365	Mafic Flow - mafic composition with wk chl-cb, vfg and msv, 5% to 7% qcs/qs, widely scattered py < 1%
328.80	329.80	1.00	282366	Mafic Flow - mafic composition with weak chl-cb, vfg and msv, 2% to 3% qcs/cs, < 1% py
329.80	330.00	0.20	282367	Graphitic Mafic Volcaniclastic - strong gf with mafic volcaniclastic, sh/bnded, 1% to 2% qs/qs, <1% py-sp
330.00	331.00	1.00	282368	Argillite-Arkosic Wacke - intermediate in composition with mod ser with <5 cm carbonaceous lam, bnded texture, <1% qs/qcs, occasional py < 1%
331.00	331.85	0.85	282369	Argillite-Arkosic Wacke - intermediate in composition with mod ser with <5 cm carbonaceous lam, bnded texture, <1% qs/qcs, occasional py < 1%
335.00	335.50	0.50	282370	Mafic to Intermediate Flow - mafic to intermediate composition, wk chl, vfg and msv, <1% qs/qcs and py

## SAMPLE DESCRIPTION REPORT

### - Assay -

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>From (m)</i>	<i>To (m)</i>	<i>Length (m)</i>	<i>Sample #</i>	<i>Comments</i>
335.50	336.10	0.60	282371	Mafic Volcaniclastic - mafic to intermediate in composition; strongly sh/bnded, interflow-sed??, <1% qcs, 2% to 4% vfg disseminated/fract-fill po>py following sh and qcs hairline fractures
336.10	337.00	0.90	282373	Mafic Pillow Flow - mafic composition with wk chl and no cb, strongly sh, <1% qcs, < 1% to 2% py>po disseminated with fracture-filling
337.00	338.00	1.00	282374	Mafic Pillow Flow - mafic composition with wk chl and no cb, strongly sh, <1% qcs, 2% to 3% py-po fracture filling>disseminations
338.00	339.00	1.00	282375	Mafic Pillow Flow - mafic composition with wk chl and no cb, strongly sh, 5% to 10% qcs, 2% to 3%% py-po disseminated & fracture-filling, < 0.5% cpy
339.00	340.00	1.00	282376	Mafic Pillow Flow - mafic composition with wk chl-cb, mod sh, <1% qs/qcs, up to 1% py-po disseminated and fracture-filling
358.30	359.30	1.00	282377	Mafic Pillow Flow - mafic composition with wk chl-cb, 25 qs/qcs with numerous hairline fractures, sh, <1% py local in qs
359.30	359.80	0.50	282378	Mafic Pillow Flow - mafic composition with wk chl-cb, numerous qcs/cs fractures 10% with 2% to 4% po-py-(cpy) associated with cs/qcs fractures
359.80	360.80	1.00	282379	Mafic Pillow Flow - mafic composition with wk chl-cb, numerous qcs/cs fractures 10% with average of localized 1% to 3% po-py-(cpy)associated with cs/qcs fractures...up to 5% to 10% po-py in 4 cm fractures
360.80	361.80	1.00	282380	Mafic Pillow Flow - mafic composition with wk chl-cb, sh, 5% to 10% qcs/cs with up to 1% py>po fractures
361.80	362.80	1.00	282381	Mafic Pillow Flow - mafic composition with wk chl-cb, sh, 2%% to 3 qcs/cs with <1% py>po as occasional fracture
388.20	389.20	1.00	282382	QFP - felsic in composition, porp texture, 1% to 2% qs, occasional py < 1%
389.20	390.20	1.00	282383	QFP - felsic in composition, porp texture, <1% qs and scattered bleached hairline fractures, occasional py < 1%

## QUALITY CONTROL REPORT

Hole Number: **MIS16-01**

Project: **MISHI**

Project Number: **243**

<i>Sample #</i>	<i>Sample Type</i>	<i>Duplicate of</i>	<i>Standard name</i>	<i>Laboratory</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)	<i>FA4</i> <i>Au</i> (ppm)	<i>FA5</i> <i>Au</i> (ppm)	<i>SFA</i> <i>Au</i> (ppm)	<i>SFA2</i> <i>Au</i> (ppm)	<i>SFA3</i> <i>Au</i> (ppm)	<i>GA</i> <i>Au</i> (ppm)	<i>GA2</i> <i>Au</i> (ppm)	<i>GA3</i> <i>Au</i> (ppm)	<i>GA4</i> <i>Au</i> (ppm)	<i>GA5</i> <i>Au</i> (ppm)	<i>AR</i> <i>Au</i> (ppm)	<i>AR2</i> <i>Au</i> (ppm)	<i>AR3</i> <i>Au</i> (ppm)	<i>Wt</i> (kg)
282017	STANDARD		OREAS 522	ActLabs	1	-	0.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282030	BLKDIA			ActLabs	0	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282039	STANDARD		OREAS 206	ActLabs	2	-	2.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282055	BLKDIA			ActLabs	0	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282248	BLKDIA			ActLabs	0	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282260	STANDARD		OREAS 501	ActLabs	0	-	0.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282272	BLKDIA			ActLabs	0	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282284	STANDARD		OREAS 504	ActLabs	2	-	1.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282296	BLKDIA			ActLabs	0	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282312	STANDARD		OREAS 522	ActLabs	1	-	0.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282324	BLKDIA			ActLabs	0	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282336	STANDARD		OREAS 206	ActLabs	2	-	2.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282348	BLKDIA			ActLabs	0	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282360	STANDARD		OREAS 501	ActLabs	0	-	0.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282372	BLKDIA			ActLabs	0	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282384	STANDARD		OREAS 504	ActLabs	2	-	1.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



DRILL HOLE REPORT

Hole Number: MIS16-02			Project: MISHI			Project Number: 243		
Drilling			Casing			Core		
Azimuth: 209.9			Length: 3			Dimension: NQ		
Dip: -45.2			Pulled: no			Diam Chang: no		
Length: 250			Capped: yes			Storage: Klondike Lodge		
Started: 06-Nov-16			Cemented: no			Hole Type DDH		
Completed: 09-Nov-16			Left in hole: no			Logged by: Scot Halladay		
Logged: 08-Nov-16			Making water: no			Relog by: Stephen Roach		
Township: MISHIBISHU			Plugged: no			Location		
Target: Multiple wk-mod chargeability zones and pyritic cherty BIF						Claim No.: 3006841		
Comment: Logged at site to 86m then quick log as drill equipment move out. Hole intersected several QTSW zones with better inc'd minzn and minor base metals minerals (chalcopyrite, magnetite, sphalerite, pyrite)						Company: IAMGOLD		
						Contractor: Orbit Garant		
						Spotted by: Scot Halladay		
						Surveyed: yes		
						Section: L100E		
						Zone: 16		
						NAD: NAD83		
						Multi shot su yes		
						Coordinate - Gemcom		
						Coordinate - UTM		
						Coordinate - Local		
						East: 613313		
						East: 613313		
						North: 5325247		
						North: 5325247		
						Elev.: 457		
						Elev.: 457		
						Elev.: 0		
						Elev.: 0		
						Elev.: 0		

Deviation Tests

Density Tests

Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments
0.00	209.90	-45.20	0	0	0	0	C	☑	
16.00	202.80	-45.10				59040	M	☑	
19.00	204.30	-45.10				57439	M	☑	
22.00	204.70	-45.10				56650	M	☑	
25.00	204.00	-45.00				57391	M	☑	
28.00	207.40	-45.00				57171	M	☑	
31.00	205.00	-44.90				56003	M	☑	
34.00	204.60	-44.80				55894	M	☑	
37.00	205.10	-44.80				55870	M	☑	
40.00	204.70	-44.70				55845	M	☑	
43.00	204.80	-44.70				55813	M	☑	
46.00	204.50	-44.70				55827	M	☑	
49.00	204.70	-44.60				55790	M	☑	
52.00	204.80	-44.50				55788	M	☑	
55.00	204.80	-44.50				55797	M	☑	



DRILL HOLE REPORT

Hole Number: MIS16-02			Project: MISHI			Project Number: 243		
Drilling			Casing			Core		
Azimuth: 209.9			Length: 3			Dimension: NQ		
Dip: -45.2			Pulled: no			Diam Chang: no		
Length: 250			Capped: yes			Storage: Klondike Lodge		
Started: 06-Nov-16			Cemented: no			Hole Type DDH		
Completed: 09-Nov-16			Left in hole: no			Logged by: Scot Halladay		
Logged: 08-Nov-16			Making water: no			Relog by: Stephen Roach		
Township: MISHIBISHU			Plugged: no			Location		
Target: Multiple wk-mod chargeability zones and pyritic cherty BIF						Claim No.: 3006841		
Comment: Logged at site to 86m then quick log as drill equipment move out. Hole intersected several QTSW zones with better inc'd minzn and minor base metals minerals (chalcopyrite, magnetite, sphalerite, pyrite)						Company: IAMGOLD		
						NTS: 42C-03SW		
						Hole: SURFACE		
						Section: L100E		
						Zone: 16		
						NAD: NAD83		
						Contractor: Orbit Garant		
						Spotted by: Scot Halladay		
						Surveyed: yes		
						Surveyed by:		
						Multi shot su yes		
						Coordinate - Gemcom		
						Coordinate - UTM		
						Coordinate - Local		
						East: 613313		
						East: 613313		
						East: 0		
						North: 5325247		
						North: 5325247		
						North: 0		
						Elev.: 457		
						Elev.: 457		
						Elev.: 0		

Deviation Tests										Density Tests									
Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments										
58.00	204.90	-44.40				55893	M	✓											
61.00	205.20	-44.50				56072	M	✓											
64.00	205.80	-44.40				56927	M	✓											
67.00	203.10	-44.40				57013	M	✓											
70.00	202.90	-44.40				58309	M	✓											
73.00	206.90	-44.40				55549	M	✓											
76.00	202.90	-44.40				56732	M	✓											
79.00	206.30	-44.40				55780	M	✓											
82.00	206.20	-44.40				56045	M	✓											
85.00	202.30	-44.50				57795	M	✓											
88.00	203.90	-44.40				56860	M	✓											
91.00	203.80	-44.60				56483	M	✓											
94.00	207.30	-44.60				55800	M	✓											
97.00	207.10	-44.70				55755	M	✓											
#####	207.20	-44.70				55735	M	✓											



DRILL HOLE REPORT

Hole Number: MIS16-02		Project: MISHI		Project Number: 243	
Drilling		Casing		Core	
Azimuth: 209.9		Length: 3		Dimension: NQ	
Dip: -45.2		Pulled: no		Diam Chang: no	
Length: 250		Capped: yes		Storage: Klondike Lodge	
Started: 06-Nov-16		Cemented: no		Hole Type DDH	
Completed: 09-Nov-16		Left in hole: no		Logged by: Scot Halladay	
Logged: 08-Nov-16		Making water: no		Relog by: Stephen Roach	
Township: MISHIBISHU		Plugged: no		Location	
Target: Multiple wk-mod chargeability zones and pyritic cherty BIF				Other	
Comment: Logged at site to 86m then quick log as drill equipment move out. Hole intersected several QTSW zones with better inc'd minzn and minor base metals minerals (chalcopyrite, magnetite, sphalerite, pyrite)				Claim No.: 3006841	
				Company: IAMGOLD	
				NTS: 42C-03SW	
				Contractor: Orbit Garant	
				Hole: SURFACE	
				Spotted by: Scot Halladay	
				Section: L100E	
				Surveyed: yes	
				Zone: 16	
				Surveyed by:	
				NAD: NAD83	
				Multi shot su yes	
				Coordinate - Gemcom	
				Coordinate - UTM	
				Coordinate - Local	
				East: 613313	
				East: 613313	
				East: 0	
				North: 5325247	
				North: 5325247	
				North: 0	
				Elev.: 457	
				Elev.: 457	
				Elev.: 0	

Deviation Tests

Density Tests

Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments
#####	207.10	-44.70				55719	M	✓	
#####	207.10	-44.70				55714	M	✓	
#####	203.60	-44.70				53822	M	✓	
#####	204.40	-44.70				55562	M	✓	
#####	204.80	-44.80				55210	M	✓	
#####	207.50	-44.80				55997	M	✓	
#####	207.70	-44.70				55911	M	✓	
#####	207.70	-44.60				55921	M	✓	
#####	207.60	-44.60				55930	M	✓	
#####	207.50	-44.60				55937	M	✓	
#####	207.50	-44.60				55969	M	✓	
#####	207.50	-44.60				55961	M	✓	
#####	208.70	-44.30				55974	M	✓	
#####	207.50	-44.60				55969	M	✓	
#####	207.40	-44.60				56006	M	✓	



DRILL HOLE REPORT

Hole Number: MIS16-02		Project: MISHI		Project Number: 243	
Drilling		Casing		Core	
Azimuth: 209.9		Length: 3		Dimension: NQ	
Dip: -45.2		Pulled: no		Diam Chang: no	
Length: 250		Capped: yes		Storage: Klondike Lodge	
Started: 06-Nov-16		Cemented: no		Hole Type DDH	
Completed: 09-Nov-16		Left in hole: no		Logged by: Scot Halladay	
Logged: 08-Nov-16		Making water: no		Relog by: Stephen Roach	
Township: MISHIBISHU		Plugged: no		Location	
Target: Multiple wk-mod chargeability zones and pyritic cherty BIF				Other	
Comment: Logged at site to 86m then quick log as drill equipment move out. Hole intersected several QTSW zones with better inc'd minzn and minor base metals minerals (chalcopyrite, magnetite, sphalerite, pyrite)				Claim No.: 3006841	
				Company: IAMGOLD	
				NTS: 42C-03SW	
				Contractor: Orbit Garant	
				Hole: SURFACE	
				Spotted by: Scot Halladay	
				Section: L100E	
				Surveyed: yes	
				Zone: 16	
				Surveyed by:	
				NAD: NAD83	
				Multi shot su yes	
				Coordinate - Gemcom	
				Coordinate - UTM	
				Coordinate - Local	
				East: 613313	
				East: 613313	
				East: 0	
				North: 5325247	
				North: 5325247	
				North: 0	
				Elev.: 457	
				Elev.: 457	
				Elev.: 0	

Deviation Tests

Density Tests

Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments
#####	207.40	-44.60				55989	M	✓	
#####	207.50	-44.60				56006	M	✓	
#####	207.60	-44.50				56011	M	✓	
#####	207.10	-44.70				56025	M	✓	
#####	207.50	-44.50				56024	M	✓	
#####	207.60	-44.50				56052	M	✓	
#####	207.50	-44.50				56071	M	✓	
#####	207.50	-44.50				56051	M	✓	
#####	207.50	-44.50				56038	M	✓	
#####	207.30	-44.50				56079	M	✓	
#####	207.30	-44.50				56065	M	✓	
#####	207.40	-44.50				56086	M	✓	
#####	207.20	-44.50				56100	M	✓	
#####	207.20	-44.50				56067	M	✓	
#####	207.10	-44.50				56093	M	✓	



DRILL HOLE REPORT

Hole Number: MIS16-02

Project: MISHI

Project Number: 243

Drilling		Casing		Core		Location		Other	
Azimuth:	209.9	Length:	3	Dimension:	NQ	Claim No.:	3006841	Company:	IAMGOLD
Dip:	-45.2	Pulled:	no	Diam Chang:	no	NTS:	42C-03SW	Contractor:	Orbit Garant
Length:	250	Capped:	yes	Storage:	Klondike Lodge	Hole:	SURFACE	Spotted by:	Scot Halladay
Started:	06-Nov-16	Cemented:	no	Hole Type	DDH	Section:	L100E	Surveyed:	yes
Completed:	09-Nov-16	Left in hole:	no	Logged by:	Scot Halladay	Zone:	16	Surveyed by:	
Logged:	08-Nov-16	Making water:	no	Relog by:	Stephen Roach	NAD:	NAD83	Multi shot su	yes
Township:	MISHIBISHU	Plugged:	no						
Target:	Multiple wk-mod chargeability zones and pyritic cherty BIF					Coordinate - Gemcom		Coordinate - UTM	
Comment:	Logged at site to 86m then quick log as drill equipment move out. Hole intersected several QTSW zones with better inc'd minzn and minor base metals minerals (chalcopyrite, magnetite, sphalerite, pyrite)					East:		East:	
						North:		North:	
						Elev.:		Elev.:	

Deviation Tests										Density Tests									
Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments										
#####	207.30	-44.50				56094	M	✓											
#####	207.40	-44.50				56116	M	✓											
#####	207.20	-44.60				56102	M	✓											
#####	207.20	-44.60				56116	M	✓											
#####	207.30	-44.60				56103	M	✓											
#####	207.60	-44.50				56113	M	✓											
#####	207.60	-44.50				56119	M	✓											
#####	207.70	-44.50				56134	M	✓											
#####	207.50	-44.50				56139	M	✓											
#####	207.50	-44.50				56177	M	✓											
#####	207.70	-44.50				56176	M	✓											
#####	207.80	-44.50				56153	M	✓											
#####	207.90	-44.50				56163	M	✓											
#####	207.60	-44.50				56139	M	✓											
#####	207.80	-44.50				56138	M	✓											



DRILL HOLE REPORT

Hole Number: MIS16-02

Project: MISHI

Project Number: 243

Drilling		Casing		Core		Location		Other			
Azimuth:	209.9	Length:	3	Dimension:	NQ	Claim No.:	3006841	Company:	IAMGOLD		
Dip:	-45.2	Pulled:	no	Diam Chang:	no	NTS:	42C-03SW	Contractor:	Orbit Garant		
Length:	250	Capped:	yes	Storage:	Klondike Lodge	Hole:	SURFACE	Spotted by:	Scot Halladay		
Started:	06-Nov-16	Cemented:	no	Hole Type	DDH	Section:	L100E	Surveyed:	yes		
Completed:	09-Nov-16	Left in hole:	no	Logged by:	Scot Halladay	Zone:	16	Surveyed by:			
Logged:	08-Nov-16	Making water:	no	Relog by:	Stephen Roach	NAD:	NAD83	Multi shot su	yes		
Township:	MISHIBISHU	Plugged:	no								
Target:	Multiple wk-mod chargeability zones and pyritic cherty BIF					Coordinate - Gemcom		Coordinate - UTM		Coordinate - Local	
Comment:	Logged at site to 86m then quick log as drill equipment move out. Hole intersected several QTSW zones with better inc'd minzn and minor base metals minerals (chalcopyrite, magnetite, sphalerite, pyrite)					East:	613313	East:	613313	East:	0
						North:	5325247	North:	5325247	North:	0
						Elev.:	457	Elev.:	457	Elev.:	0

Deviation Tests

Density Tests

Distance	Azimuth	Dip	Easting	Northing	Elevation	Mag. Fie.	Type	Good	Comments
#####	207.90	-44.40				56124	M	<input checked="" type="checkbox"/>	
#####	207.70	-44.40				56118	M	<input checked="" type="checkbox"/>	
#####	208.10	-44.40				56124	M	<input checked="" type="checkbox"/>	
#####	206.80	-44.40				56403	M	<input checked="" type="checkbox"/>	
#####	207.80	-44.40				56145	M	<input checked="" type="checkbox"/>	

# LITHOLOGY REPORT

## - Detailed -

Hole Number: MIS16-02			Project: MISHI			Project Number: 243								
From (m)	To (m)	Lithology	Weathering Oxidation Colour			Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
0.00	3.00	OB Overburden  Overburden - mainly boulders												
3.00	6.10	Fresh Rock 8D Monzonite-Quartz Monzonite xcut by Di  Quartz-Monzonite-Monzonite - pink to pinkish red and greenish black color, felsic to intermediate in composition being quartz-feldspathic with 5% to 10% green amphibole, strong hematite (kspar?) dusting, vfg and massive with ocassional mafic inclusion up to 2 cm in size, local shearing between 3.0 and 3.5 75 to 80 from C.A., ocassional qs/qcs < 1%  5.5 to 6.1 - Diabase - greensish pink color, mafic composition with strong hematite dusting in matrix, sharp irregular contact with quartz-monzonite-monzonite following 0 to 30 from C.A., weakly to non-magnetic  - extremely broken up core with possible sub-parallel to fault zone but no major shearing or gouge, local vuggy open fractures and pitted core.  Mineralization - ocassional py < 0.5% Contact - broken with diabase from 5.5 to 6.1	2	1	PI									
6.10	17.70	Fresh Rock 3J Felsic Volcaniclastic--Epiclastic/Cherty  Felsic Volcaniclastics/Cherty Tuff - light pink to pinkish-white and brick red color, altered felsic with vfg, aphanitic, and massive strong/intense silicified-(kspar?) altered matrix, strong hematitic dusting from 10.8 to 12.1 with local banding 55 to 70 from C.A.  10.8 - 13.0m reddish unit as above 3-5.8m w tr py and 3% white barren Qtz stringers and ff's CA 20-45, nil sulphides. Cts jagged and wavy.	1	1	PI	282224	11.30	12.10	0.80	0	-	0.01	-	-
						282225	12.10	12.60	0.50	0	-	0.01	-	-
						282226	12.60	12.95	0.35	0	-	0.01	-	-
						282227	12.95	13.50	0.55	0	-	0.01	-	-
						282228	13.50	14.50	1.00	0	-	0.01	-	-

**LITHOLOGY REPORT**  
**- Detailed -**

Hole Number: **MIS16-02** Project: **MISHI** Project Number: **243**

From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
		13.-0 -16.6m back into light massive pinkish, hard siliceous unit, aphanitic w 1% hairline Q-c ff's along lower 2m at 35-45 degtCA. Far ct CA relatively sharp CA 30.  - extremely broken up core being strongly fractured with local brecciation/in-situ fractures with ut "intact" and sheared CA 50-60 w 10-15% angular pinkish fragments from 2cm to 25cm in width  12.1 to 12.6 - Quartz Vein - grayish white to white color, quartz composition with felsic inclusions and in fractures, weakly fractured quartz, varibale 0 to 20 from C.A. with ocassional to scattered vfg py < 1% mainly in wallrock inclusions  16.6 to 17.7 - Fault Zone - blackish white color, strong sheared and altered with a mixture of sil-chl-(cb) with weak cb, strongly sheared 60 from C.A. and strongly brecciated with fragment supported wallrock clasts up to 2 to 3 cm, < 1% py  Mineralization - ocassional to widely scattered vfg py < 1% Contact - sharp, sheared brecciated, fault contact 55 from C.A., fault from 16.6 to 17.7												
17.70	24.70	Fresh Rock	9B	Diabase		1	1		DGR					
		Diabase - dark greenish black color, mafic composition being vfg and massive with possible fault gouge between 22.25 and 22.35 30 to 35 from C.A., jointing along upper and lower contacts with calcite annealment fractures 45 to 70 from C.A.  Minerlaization - barren to < 0.5% py Contact - sharp contact 90 from C.A.												

LITHOLOGY REPORT  
- Detailed -

Hole Number: MIS16-02

Project: MISHI

Project Number: 243

From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
24.70	27.45	<b>Fresh Rock</b> <b>4B</b> <b>Chert-Cherty Tuff</b> Cherty Tuff - pinkish white to creamy white color, siliceous cherty-like composition being vfg and aphanitic, numerous and strong chl shear fractures (up 2.0 cm wide) 60 from C.A. from 25.85 to 26.6 about cherty wallrock (3 to 5 cm) giving a well developed brecciated texture, well developed laminations and banding up to 1 cm in width varying 40 to 70 from C.A.  Mineralization - barren to ocassional < 0.5% py Contact - sharp contact 45 from C.A.	1	1	WH									
<div> <b>Structure Maj.:</b> <b>Inte/Type/Core Angle</b> <b>Comment</b> </div> <div> 24.70 - 26.60 S BX 70 Brecciated, 70° CA, also from 27.5-30.1m </div>														
27.45	30.10	<b>Fresh Rock</b> <b>SH</b> <b>Chlorite Shear (Chert Breccia)</b> Fault Chert Breccia - black and grayish-white to white color, strong chlorite and carbonate altered matrix about bleached white silicified cherty-like bands and detached bands, cherty bands constitute 35% to 45% of the interval and are up to 9 cm in width giving a well developed breccia texture.  - highly contorted and boudinaged, strongly sheared 48 to 55 from C.A.  Mineralization - ocassional <0.5% py Contact - sharp sheared contact 65 from C.A.	1	1	BLK									
<div> <b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b> </div> <div> 27.45 - 30.10 SI PV 2 Silicification, Pervasive, Weak </div> <div> 27.45 - 30.10 SR PV 3 Sericitization, Pervasive, Moderate </div>														

# LITHOLOGY REPORT

## - Detailed -

Hole Number: **MIS16-02**

Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
30.10	40.05	<b>Fresh Rock</b> <b>3E</b> <b>Felsic Banded Flow Autobreccia - Flow</b>	1	1	WH	282229	36.00	37.00	1.00	0	-	0.01	-	-
		Felsic Flow Banded Autobreccia - Flow Breccia - creamy white to bleached white color, altered felsic composition with strong intense sil-(ab?) being vfg and aphanitic with relict flow banding and shearing 55 to 62 from C.A., most notable shears from...				282230	37.00	37.60	0.60	0	-	0.01	-	-
						282231	37.60	38.10	0.50	0	-	0.01	-	-
		33.8 to 34.15 - Chlorite-Carbonate Shear - black and white color, strong chl-cb altered sheared matrix about vfg sil relict wallrock (5% and up to 1-2 cm in size), matrix supported, strongly sheared 65 from C.A, 15% qcs parallel to shearing up to 5 cm, 1% vfg disseminated pyrite				282233	38.10	38.65	0.55	0	-	0.01	-	-
						282234	38.65	39.30	0.65	0	-	0.01	-	-
						282235	39.30	40.05	0.75	0	-	0.01	-	-
		38.5 to 38.9 - Chlorite Shear - black and bleached white color, strong chl and wk cb about vfg sil wallrock (25% to 30%) up to 10 cm wide, strongly sheared 60 from CA., < 1% qcs, < 1% py												
		- occasional to widely scattered qcs/qs (<1%) up to 5 cm wide												
		Mineralization - overall occasional py < 0.5% with increase py along chl-cb shears and increase in scattered vfg py (1% to 2%) from 39.8 to 40.05												
		Contact - sharp contact 60 from C.A.												
		FLt bx -Unit as above with 50% dark greyish to black mm-cm bands CA 60-70 w tr-<1% vfg diss to cubic pyrite, is weakly brecciated in last 50cm, sharp cts CA 60.												
		38.65-39.75m mass light greenish creamy pink unit similar to sections above 37.55m												
		39.75-40.05m banded pyritic (<0.5%) section as at 37.55 - 38.65m. Not enough sulphides to sample.												
40.05	42.40	<b>Fresh Rock</b> <b>FLTb</b> <b>Chlorite-Carbonate Fault Breccia</b>	1	1	BLK	282236	40.05	40.30	0.25	0	-	0.01	-	-
		Chlorite-Carbonate Fault Breccia - black and white color, strongly altered matrix with strong pervasive chl-cb about relict cherty-like wallrock fragments giving this interval a well developed breccia texture, angular to sub-rounded fragments constitute 45-50%, being fragment supported.....up to 5cm in size, strongly sheared 50 to 70 from C.A.				282237	40.30	40.65	0.35	0	-	0.01	-	-
						282238	40.65	41.05	0.40	0	-	0.01	-	-
						282239	41.05	41.80	0.75	0	-	0.01	-	-
		40.3 to 40.65 - Cherty Tuff - pinkish white to bleached white color, siliceous cherty-like matrix being vfg and aphanitic, relict fine laminations and bands 70 from C.A., <1% qcs and py, gradational contacts				282066	41.80	42.40	0.60	0	-	0.01	-	-



LITHOLOGY REPORT  
- Detailed -

Hole Number: MIS16-02			Project: MISHI			Project Number: 243								
From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
Mineralization - ocassional vfg py < 0.5% Contact - sharp irregular contact														
42.40	43.10	Fresh Rock QV Quartz Vein	1	1	WH	282067	42.40	43.10	0.70	0	-	0.01	-	-
Quartz Vein - white color with wispy dark green fractures and inclusions, quartz compositionn with strongly chl and wk cb fracture-filling and diffuse chl wallrock inclusions (1% to 2%), wallrock inclusions up to 2-3 cm in size, particularly at lower contact														
Mineralization - barren to <0.5% py Contact - sharp contact 64 from C.A														
43.10	44.25	Fresh Rock FLTb Chlorite-Carbonate Fault Breccia	1	1	BLK	282068	43.10	43.85	0.75	0	-	0.01	-	-
Chlorite-Carbonate Fault Breccia similar in description to section from 40.05 to 42.4 with...														
282069 43.85 44.25 0.40 0 - 0.01 - -														
1) moderate to strong chl and weak carbonate (calcite) 2) strongly sheared giving brecciated banded texture 65 to 90 from C.A. 3) ocassional qcs/qs < 1%														
Mineralization ocassional py <1% with increase in scattered py cubes 1% to 2% from 43.85 to 44.25 Contact - sharp contact 68 from C.A														

# LITHOLOGY REPORT

## - Detailed -

Hole Number: MIS16-02

Project: MISHI

Project Number: 243

From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
44.25	49.00	<b>Fresh Rock</b> <b>3J</b> <b>Felsic Volcaniclastic-Cherty Tuff</b> Felsic Volcaniclastic-Cherty Tuff - creamy white to dark gray color, overall strong, intense, and pervasive silicified interval comprising of 75% of the interval with banded reworked felsic volcaniclastics and chert from 45.35 to 46.2.  - well developed banding/bedding 48 to 58 from C.A., scattered qs/qcs < 1% to 5% up to 2 cm wide with increasing fracturing in the more silicified sections, qcs ranging 35 to 45 from C.A., contorted chert beds where fold axis is well developed 65 to 70 from C.A. with convergent folds of chert bands, particularly from 45.35 to 46.2  Mineralization - ocassional to widely scattered py < 1% Contact - sharp contact with chert band 50 from C.A.	1	1	WH	282070	44.25	44.75	0.50	0	-	0.01	-	-
						282071	44.75	46.00	1.25	0	-	0.01	-	-
						282072	46.00	47.50	1.50	0	-	0.01	-	-
						282073	47.50	49.00	1.50	0	-	0.01	-	-
49.00	52.65	<b>Fresh Rock</b> <b>3J</b> <b>Felsic Volcaniclastic with minor Chert B</b> Felsic Volcaniclastic with minor Chert Bands - dirty dark greenish gray color and creamy pinkish white bands, felsic to intermediate composition with weak to (moderate) chl-(ser) in matrix, scattered 5% pinkish white chert bands up to 10 cm wide ranging 45 to 60 from C.A., scattered 2% to 5% thin qcs/cs with increased calcite tension fractures at lower contact.  Mineralization - ocassional to scattered vfg py < 1% to local 2% pyrite Contact - sharp contact 45 from C.A.	1	1	GG	282074	49.00	50.00	1.00	0	-	0.01	-	-
						282075	50.00	51.00	1.00	0	-	0.01	-	-
						282077	51.00	52.00	1.00	0	-	0.01	-	-
						282078	52.00	52.65	0.65	0	-	0.01	-	-

## LITHOLOGY REPORT

### - Detailed -

Hole Number: **MIS16-02**

Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
52.65	55.00	<b>Fresh Rock</b> <b>4B</b> <b>Chert-Cherty Tuff</b> Cherty Tuff - creamy white to white color with green seams, overall vfg and aphanitic intense bleached sil-(ab) altered matrix, sheared with chl-(cb) shear seams/bands (up to 4 cm wide) becoming more prolific from 54.0 to 55.0, chl shears give a strong sh appearance ranging from 60 to 80 from C.A., scattered qcs and qs (5%) up to 1 cm wide.  Mineralization - occasional py < 0.5% py Contact - sharp contact 51 from C.A.	1	1	WH	282079	52.65	53.15	0.50	0	-	0.01	-	-
						282080	53.15	54.00	0.85	0	-	0.01	-	-
						282081	54.00	55.00	1.00	0	-	0.01	-	-
55.00	73.70	<b>Fresh Rock</b> <b>1G</b> <b>Mafic Pillow Flows with Chert Bands</b> Mafic Pillow Flows with Chert Bands - dirty dark grayish green to green color with reddish creamy white chert bands, mafic composition with weak to moderate chl-(ep) alteration and weak carbonate (calcite) with gradual increase moderate to strong carbonate towards 73.7, reddish creamy white colored cherty bands show moderate to strong hematite dusting with a recognizeable specular hematite in fracture at xxx  - localized well developed deformed pillows (i.e. at 62.) varying <5 to 15 cm wide with massive/foliated sections, moderate to locally strongly sheared 60 to 90 from C.A. with gradual increased core angles (80 to 90) from 69.5 to 73.7, scattered chert bands < 1 cm to 28 cm accounting for 6% of interval from 55.0 to 66.45, range from 60 to 70 from C.A., scattered qcs/qs < 1% to locally 5% up to 1 to 2 cm wide  Mineralization - <1% to locally 5% vfg scattered py cubes with localized cpy splashes/blebs near/in qcs/cs veining, increase in py (5%) with coarse cpy splashes (<1%) from 71.5 to 73.5; gradual increase in vfg disseminated magnetite (2% to 5%) from 60.4 to 73.7 with moderate to locally strong magnetism.	1	1	GR	282082	55.00	55.60	0.60	0	-	0.01	-	-
						282083	55.60	56.20	0.60	0	-	0.01	-	-
						282084	56.20	57.15	0.95	0	-	0.01	-	-
						282085	57.15	58.00	0.85	0	-	0.01	-	-
						282086	58.00	58.70	0.70	0	-	0.01	-	-
						282087	58.70	59.40	0.70	0	-	0.01	-	-
						282088	59.40	60.40	1.00	0	-	0.01	-	-
						282090	60.40	61.00	0.60	0	-	0.01	-	-
						282091	61.00	62.00	1.00	0	-	0.01	-	-
						282092	62.00	63.00	1.00	0	-	0.01	-	-

# LITHOLOGY REPORT

## - Detailed -

Hole Number: MIS16-02

Project: MISHI

Project Number: 243

From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
		Contact - sharp contact 70 from C.A. with 3 cm wide quartz veinlet				282093	63.00	64.00	1.00	0	-	0.01	-	-
						282094	64.00	65.00	1.00	0	-	0.01	-	-
						282095	65.00	66.00	1.00	0	-	0.01	-	-
						282096	66.00	67.00	1.00	0	-	0.01	-	-
						282097	67.00	68.00	1.00	0	-	0.01	-	-
						282098	68.00	68.80	0.80	0	-	0.01	-	-
						282099	68.80	69.55	0.75	0	-	0.01	-	-
						282100	69.55	70.50	0.95	0	-	0.01	-	-
						282101	70.50	71.50	1.00	0	-	0.01	-	-
						282102	71.50	71.95	0.45	0	-	0.01	-	-
						282103	71.95	72.50	0.55	0	-	0.01	-	-
						282104	72.50	73.20	0.70	0	-	0.01	-	-
						282105	73.20	73.70	0.50	0	-	0.01	-	-
73.70	75.20	<b>Fresh Rock</b>	<b>QTS</b>	<b>Quartz Stockwork</b>										
		Quartz Stockwork - greenish gray, reddish gray, and white veining colors, strongly altered with pervasive banded/fracture controlled sil-(ab?) in matrix of wallrock, banded controlled hematite alteration envelopes about numerous qs fractures up to 16 cm wide accounting for 25% of interval.	1	1	GG	282106	73.70	74.20	0.50	0	-	0.01	-	-
		- fractured appearance with numerous qs/qcs/cs (15%) up to 4 cm wide varying 60 to 90 from C.A., local sheared and relict banding 90 from C.A, as per 74.5				282107	74.20	74.70	0.50	0	-	0.01	-	-
		Mineralization - < 1% to 5% py with local intermittent increases in py (5% to 10%) up to 10 cm wide; overall average of py is about 5%; py occurs as disseminated in wallrock and occasionally in the veinlets, occasional coarse splash of cpy in wallrock fracture				282108	74.70	75.20	0.50	0	-	0.01	-	-
		Contact - sharp contact with thin qs 90 from C.A.												

# LITHOLOGY REPORT

## - Detailed -

Hole Number: **MIS16-02**

Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
75.20	87.80	<b>Fresh Rock</b>	<b>4E</b>	<b>Banded Silicate and Carbonate Lean Iro</b>	1	1	GREBL							
		Banded Silicate and Carbonate Lean Iron Formation - dark blackish green, dark green and black color, banded/laminated with alternating, magnetifeous bands/laminations of amphibole-chlorite, hematitic chert, calcareous laminations/bands, scattered hematitic chert bands (up to 5 cm wide) from 75.2 to 79.2 with carbonate BIF from 79.2 to 87.85 with numerous calcite laminations/bands up to 0.5 cm wide.				282109	75.20	76.00	0.80	0	-	0.02	-	-
						282110	76.00	77.00	1.00	0	-	0.02	-	-
						282111	77.00	77.70	0.70	0	-	0.01	-	-
						282113	77.70	78.30	0.60	0	-	0.01	-	-
		- well developed banding/laminations and bedding ranging 67 to 90 from C.A. with hematitic chert bands showing folded features, ocassional to widely scattered qcs/qs (<1% to 2%) with veinlets up to 5 cm wide, increase in qs/qcs veing from 85.0 to 86.6 averaging 7% with local significant cpy up to 5% as per at 86.25 in 3 cm wide qcs...folded & faulted disseminated cpy in qcs along vn/wr contacta				282114	78.30	78.80	0.50	0	-	0.01	-	-
						282115	78.80	79.25	0.45	0	-	0.01	-	-
						282116	79.25	80.00	0.75	0	-	0.01	-	-
		Mineralization - <1% to local 10% disseminated py with increased pyrite-(chalcopyrite) mineralization associated with carbonate facies BIF from 79.2 to 86.8... averages 3% to 6% vfg disseminated py, widely scattered blebs/splashes of cpy in and associated with qcs/qs with increased cpy associated with veining from 85.0 to 86.6.				282117	80.00	80.50	0.50	0	-	0.01	-	-
						282118	80.50	81.00	0.50	0	-	0.01	-	-
						282119	81.00	81.60	0.60	0	-	0.01	-	-
						282120	81.60	82.00	0.40	0	-	0.01	-	-
		Contact - sharp descrease in carbonate with 80 from C.A.				282121	82.00	82.50	0.50	0	-	0.01	-	-
						282122	82.50	83.10	0.60	0	-	0.01	-	-
						282123	83.10	83.60	0.50	0	-	0.01	-	-
						282125	83.60	84.10	0.50	0	-	0.01	-	-
						282126	84.10	85.00	0.90	0	-	0.01	-	-
						282127	85.00	85.50	0.50	0	-	0.01	-	-
						282128	85.50	86.00	0.50	0	-	0.01	-	-
						282129	86.00	86.30	0.30	0	-	0.01	-	-
						282130	86.30	87.00	0.70	0	-	0.01	-	-
						282131	87.00	87.80	0.80	0	-	0.01	-	-

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### - Detailed -

Hole Number: **MIS16-02**

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
87.80	100.05	<b>Fresh Rock</b> <b>3J</b> <b>Felsic Volcaniclastic</b> Felsic Volcaniclastic - dark gray to greenish gray, felsic to (intermediate) composition with weak to (moderate) chlorite-(biotite) regional metamorphic alteration, vfg and massive fragmental texture, increase in thin dirty white chert (sil alt bnds?) bands (up to 1 cm wide)from 90.1 to 98.4, bands have been contorted and folded with local s-shaped drag folding at 94.2 (F.A. 50 from C.A.).  - moderately foliated/sheared 60 to 90 from C.A, being highly variable, frequentto numerous qs/qcs ranging from <1%5 to locally 10% with increase in qs/qcs veining from 97.9 to 100.5 averaging 10%, qs/qcs up to 16 cm wide., qs/qcs range 50 to 70 from C.A., averaging 62 from C.A.  Mineralization - ocasional to widely scattered py-(cpy) with overall average of interval < 1%,gradual increase in sulphides in the form of fracture-fill cpy>-py (up to 1% locally) in qs/qcs from 99.0 to 100.05.  Contact - sharp increase in quartz veining	1	1	GG	282132	87.80	88.80	1.00	0	-	0.01	-	-
						282133	88.80	89.80	1.00	0	-	0.01	-	-
						282134	95.70	96.20	0.50	0	-	0.01	-	-
						282135	96.20	96.75	0.55	0	-	0.01	-	-
						282137	96.75	97.30	0.55	0	-	0.01	-	-
						282138	97.30	97.80	0.50	0	-	0.01	-	-
						282139	97.80	98.30	0.50	0	-	0.01	-	-
						282140	98.30	98.80	0.50	0	-	0.01	-	-
						282141	98.80	99.30	0.50	0	-	0.01	-	-
						282142	99.30	100.05	0.75	0	-	0.01	-	-
100.05	101.80	<b>Fresh Rock</b> <b>QTS</b> <b>Quartz Stockwork</b> Quartz Stockwork - dark dirty gray to greensih gray to bleached grayish white color, altered felsic composition with strong silicified-(albitized?) bleaching from 101.25 to to 101.8. strongly fractured with numerous qs/qcs averaging about 20%, qs/qcs range from <0.1 cm to 6 cm wide with numerous random oriented and discontinuous hairline qs/qcs tension fractures, qs/qcs vary from 70 to 90 from C.A..  Mineralization - widely scattered cpy>py (up to 1%), generally found as coarse splashes/blebs in qs as per at 100.2, 100.5, and 101.1 Contact - sharp clay fault gouge (2 cm wide) contact 72 from C.A..	1	1	GG	282143	100.05	100.55	0.50	0	-	0.01	-	-
						282144	100.55	101.00	0.45	0	-	0.01	-	-
						282145	101.00	101.40	0.40	0	-	0.01	-	-
						282146	101.40	101.80	0.40	0	-	0.01	-	-

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Hole Number: MIS16-02

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From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
101.80	111.30	<b>Fresh Rock</b> <b>9B</b> <b>Diabase-Fault Gouge</b> Diabase/Fault Gouge - dark green to blackish green to black colors, mafic composition with vfg to fg (up to 0.1 cm in size) amphiboles-(pyroxene?) in a vfg ferromagnesian-rich matrix, 5% disseminated vfg hematite, ophitic texture, numerous calcite tension fractures at upper contact (100.8 to 101.0) and lower contact (110.85 to 111.3) ranging from 5% to 10% cs/qcs up to 0.3 cm wide, extremely broken interval/fault gouge throughout the section with clay gouge at upper and lower contacts.  Mineralization - barren to <0.5% py, moderately magnetic Contact - sharp contact with 3 cm wide clay fault gouge 70 from C.A.	3	3	DGR	282147	101.80	103.00	1.20	0	-	0.01	-	-
						282149	110.30	110.80	0.50	0	-	0.01	-	-
						282150	110.80	111.30	0.50	0	-	0.01	-	-
111.30	115.30	<b>Fresh Rock</b> <b>QTS</b> <b>Silicified Quartz Stockwork</b> Silicified Quartz Stockwork - bleached grayish white, gray to white color, strong intense and pervasive sil-(ab?) alteration of wallrock, strongly fractured with 5% to 25% randomly oriented qs up to 7 cm wide, increase in qs from 112.3 to 115.3 with 20% to 25% qs, wide range 40 to 70 from C.A. of qs.  Mineralization - ocassional to widely scattered blebs/splashes of cpy and py <1% generally found in qs Contact - sharp contact 50% from C.A.	1	1	WH	282151	111.30	112.30	1.00	0	-	0.07	-	-
						282152	112.30	113.30	1.00	0	-	0.03	-	-
						282153	113.30	114.30	1.00	0	-	0.01	-	-
						282154	114.30	115.30	1.00	0	-	0.01	-	-

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## - Detailed -

Hole Number: **MIS16-02**

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
115.30	120.50	<b>Fresh Rock</b> <b>QTS</b> <b>Pyritic Weak Quartz Stockwork</b> Pyritic Weak Quartz Stockwork - gray to dark gray color, altered wallrock with overall moderate insipient chl wallrock with relict sil from 115.3 to 116.5 and more chloritic with weak to moderate carbonate (matrix/fracture-controlled) from 116.5 to 120.5.  - sheared (58 to 70 from C.A.) and weakly to locally moderately fractured with average of 5% qs/qcs up to 2 cm wide...local sections up to 10% over 0.4 meter width, qs/qcs range 60 to 85 from C.A.  Mineralization - vfg to fg (<0.1 cm in size) disseminated pyrite varying 5% to 25%and averaging 5% to 10% pyrite, occurs as pyritic cubes mainly in altered chl-cb and sil wallrock matrix and shears and occassional py in qs/qcs; non-magnetic  Contact - gradational decrease in pyrite	1	1	GY	282155	115.30	115.80	0.50	0	-	0.02	-	-
						282156	115.80	116.30	0.50	0	-	0.01	-	-
						282157	116.30	116.80	0.50	0	-	0.01	-	-
						282158	116.80	117.30	0.50	0	-	0.01	-	-
						282159	117.30	117.80	0.50	0	-	0.01	-	-
						282161	117.80	118.30	0.50	0	-	0.01	-	-
						282162	118.30	118.80	0.50	0	-	0.01	-	-
						282163	118.80	119.30	0.50	0	-	0.01	-	-
						282164	119.30	119.90	0.60	0	-	0.01	-	-
						282165	119.90	120.50	0.60	0	-	0.01	-	-
120.50	153.50	<b>Fresh Rock</b> <b>3F</b> <b>Felsic to Intermediate Tuff</b> Felsic to Intermediate Tuff - dark gray, greenish gray, and gray colors, felsic to intermediate in composiiton with weak to locally moderate chl-bio-(ser) in matrix giving the rock a more mafic appearance in local section, weak carbonate in matrix with gradual increase in carbonate (calcite) with strong carbonate from 139.0 to 144.7 in matrix and fracture-filling, scattered dirty cream colored chert (siliceous/vfg/aphanitic) bands up to 10 cm wide, chert bands range 60 to 70 from C.A..  - moderately sheared 60 to 90 from C.A. (82 from C.A.), scattered qs/qcs (up to 10 cm wide) <5% with 5% to 10% in local sections  Mineralization - scattered vfg to fg pyrite varying < 1% to 10% with...  120.5 to 129.2 - 1% to 3% vfg to fg scattered py with local 5% to 10% vfg to fg disseminated py from 126.3 to 127.3. 133.0 to 133.5 - 5% vfg disseminated py	1	1	GY	282166	120.50	121.50	1.00	0	-	0.01	-	-
						282167	121.50	122.50	1.00	0	-	0.01	-	-
						282168	122.50	123.50	1.00	0	-	0.01	-	-
						282169	123.50	124.50	1.00	0	-	0.01	-	-
						282170	124.50	125.50	1.00	0	-	0.01	-	-
						282171	125.50	126.30	0.80	0	-	0.01	-	-
						282173	126.30	126.80	0.50	0	-	0.01	-	-
						282174	126.80	127.65	0.85	0	-	0.01	-	-
						282175	127.65	128.50	0.85	0	-	0.01	-	-
						282176	128.50	129.20	0.70	0	-	0.01	-	-
						282177	129.20	130.00	0.80	0	-	0.01	-	-

# LITHOLOGY REPORT

## - Detailed -

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Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
		Contact - sharp contact 51 from C.A.				282178	130.00	130.50	0.50	0	-	0.01	-	-
						282179	130.50	131.50	1.00	0	-	0.01	-	-
						282180	131.50	132.50	1.00	0	-	0.01	-	-
						282181	132.50	133.00	0.50	0	-	0.01	-	-
						282182	133.00	133.50	0.50	0	-	0.02	-	-
						282183	133.50	134.50	1.00	0	-	0.01	-	-
						282185	134.50	136.00	1.50	0	-	0.01	-	-
						282186	136.00	137.50	1.50	0	-	0.01	-	-
						282187	137.50	139.00	1.50	0	-	0.01	-	-
						282188	139.00	140.50	1.50	0	-	0.01	-	-
						282189	140.50	142.00	1.50	0	-	0.01	-	-
						282190	149.90	150.40	0.50	0	-	0.01	-	-
						282191	150.40	150.90	0.50	0	-	0.01	-	-
						282192	150.90	151.50	0.60	0	-	0.01	-	-
						282193	151.50	152.50	1.00	0	-	0.01	-	-
						282194	152.50	153.50	1.00	0	-	0.01	-	-
						282224	247.00	0.00	-247.00	0	-	0.01	-	-
153.50	155.10	<b>Fresh Rock</b>	<b>4B</b>	<b>Chert-Cherty Tuff/Felsic Volcaniclastic</b>	1	1	WH							
		Chert-Cherty Tuff/Felsic Volcaniclastic (Weak QTSW) - smokey grayish white chert and dark gray volcaniclastics, felsic to intermediate composition with weak to moderate sil associated with quartz vein fracturing, two(2) vfg, aphanitic siliceous cherty bands at 30 to 35 cm width account for 40% of the unit, well developed chert contacts 55 from C.A., moderately fractured wallrock 10% to 15% thin qs up to 1 cm wide ranging 46 to 58 from C.A.				282195	153.50	154.20	0.70	0	-	0.01	-	-
						282197	154.20	154.80	0.60	0	-	0.01	-	-
						282198	154.80	155.10	0.30	0	-	0.01	-	-
		Mineralization - vfg widely scattered py-(po?) up to 1% scattered in cherty tuff and associated with qs fracturing in felsic volcaniclastic.												
		Contact - sharp contact 55 from C.A.												

# LITHOLOGY REPORT

## - Detailed -

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Weathering</i>	<i>Oxidation</i>	<i>Colour</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Au</i> (ppm)	<i>AV</i> <i>Au</i> (ppm)	<i>FA</i> <i>Au</i> (ppm)	<i>FA2</i> <i>Au</i> (ppm)	<i>FA3</i> <i>Au</i> (ppm)
155.10	173.10	<b>Fresh Rock</b> <b>3J</b> <b>Felsic Volcaniclastic--Epiclastic</b> Felsic Volcaniclastic - dark gray to blackish gray colors, felsic to intermediate in composition with weak chl-ser-bio in a vfg, aphanitic matrix, well developed laminated/banded varying 55 to 80 from C.A. (average is 67 from C.A.).....possible sheared banded structures.  154.15 to 156.45 - Chert - dirty creamy white color, vfg, aphanitic siliceous composition, massive band, 1% to 2% qs, sharp upper and lower contacts 64 and 55 from C.A., respectively  - scattered qs/qcs < 1% to locally 5%, qs/qcs up to 3 cm wide  Mineralization - ocassional to widely scattered py<1% with local 1% to 2% patchy py near some of the qs/qcs, observed local cpy fracture at 163.9, but <0.5% Contact - sharp contact 45 from C.A. - scatered qs/qcs	1	1	GY	282199	155.10	155.60	0.50	0	-	0.01	-	-
						282200	155.60	156.20	0.60	0	-	0.01	-	-
						282201	156.20	156.50	0.30	0	-	0.01	-	-
						282202	156.50	157.20	0.70	0	-	0.01	-	-
						282203	157.20	157.50	0.30	0	-	0.01	-	-
						282204	157.50	158.50	1.00	0	-	0.01	-	-
						282205	162.50	163.50	1.00	0	-	0.01	-	-
						282206	163.50	164.50	1.00	0	-	0.01	-	-
						282207	164.50	165.10	0.60	0	-	0.01	-	-
						282209	165.10	165.60	0.50	0	-	0.01	-	-
						282210	165.60	166.15	0.55	0	-	0.01	-	-
						282211	166.15	166.70	0.55	0	-	0.01	-	-
						282212	166.70	167.60	0.90	0	-	0.01	-	-
						282213	167.60	168.40	0.80	0	-	0.01	-	-
						282214	168.40	169.40	1.00	0	-	0.01	-	-
173.10	183.25	<b>Fresh Rock</b> <b>3C</b> <b>Felsic Flow Banded/Autobreccia Flow</b> Felsic Flow Banded/Autobreccia - gray, light to darker gray color, felsic in composition with weak to moderate sil and/or albite alteration of vfg matrix from 173.1 to 174.5; well developed flow banded and autobreccia fragmental texture with disrupted flow band up to 1.5 cm in width grading into brecciated and fragmental sections from 178.7 to 183.25, monolithological felsic fragments up to 0.5cm to 2.0 cm in size...fragment supported and fragments are generally sub-rounded in shape.  - flow bands-(shear bands???) range 50 to 70 from C.A., averaging 61 from C.A., ocassional qs < 1%.	1	1	GY	282215	174.50	175.50	1.00	0	-	0.01	-	-
						282216	175.50	176.20	0.70	0	-	0.01	-	-
						282217	176.20	176.80	0.60	0	-	0.01	-	-
						282218	176.80	177.50	0.70	0	-	0.01	-	-
						282219	177.50	178.50	1.00	0	-	0.01	-	-
						282221	180.40	181.00	0.60	0	-	0.01	-	-

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## - Detailed -

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From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
		Mineralization - <1% to 5% vfg disseminated py with increased py (3% to 5%) from 173.1 to 174.5 associated with increased sil-(ab?), but overall < 1% py Contact - gradational more of a fragmental texture												
183.25	202.70	<b>Fresh Rock</b> <b>3G</b> <b>Felsic Lapilli-Tuff-Tuff Breccia</b> Felsic Lapilli-Tuff-Tuff Breccia - gray and light to darker gray color, felsic in composition with a vfg quartz-feldspathic tuffaceous matrix about heterolithic fragments varying <0.5 to 13 cm in size, with the average 1 cm to 3 cm in size, fragment supported with most of the fragments being felsic with <1% to 2% cherty-like clasts.  - well developed fragmental texture with fragments being sub-rounded and attenuated (strongly foliated) ) ranging 32 to 47 from C.A. with shallow core angles 32 to 35 from C.A from 190 to 196, ocassional qs/qcs < 1%.  Mineralization - ocassional to widely scattered py <1% Contact - sharp contact 70 from C.A.	1	1	GY	282222	184.00	185.00	1.00	0	-	0.01	-	-
202.70	237.40	<b>Fresh Rock</b> <b>9A</b> <b>Diabase</b> Diabase - green to dark green color, mafic composition with a fine-grained (up to 0.1 cm) ferromagnesian-rich mineralogy of amphibole-(pyroxene)-calcic-feldspar, moderate saussurtization of feldspar with epidote-chlorite altered matrix, ophitic to sub-equigranular texture, scattered qcs/qs and epidote fracture-filling (<1%	1	1	GR									



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Project: MISHI

Project Number: 243

From (m)	To (m)	Lithology	Weathering	Oxidation	Colour	Sample #	From	To	Length	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)
		to 2%) with weak carbonate....stringers up to 5 cm wide, but more typically <0.5cm to 2 cm wide												
		Mineralization - widely scattered vfg py <1%; weakly to locally moderately magnetic with up to 1% to 2% vfg disseminated magnetite												
		Contact - sharp contact 53 from C.A.; broken core with strong ser slips/gouge indicating possible faulting												
237.40	250.00	<b>Fresh Rock</b> <b>3H</b> <b>Felsic Tuff-Beccia</b> Felsic Tuff Breccia - grayish white to reddish gray, and gray colors, felsic composition with moderate to strong ser and weak to moderate hem dusting from 237.4 to 242.4 and brecciation iwith strong ser slips and scattered calcite tension fractures, gradual decrease in ser from 242.4 to 247.0, 5% to 10% scattered white, vfg (up to 0.1 cm in size) albite crystals.  - well developed ultra-deformed fragmental texture with the fragments up to 4 cm in size, monolithological felsic tuff/crystal tuff fragments form as deformed bands, tightly packed and attenuated, strongly foliated/sheared 57 to 61 from C.A from 237.4 to 242.5 with core angles from 76 to 84 from C.A to end of hole.  242.5 - 9 cm wide irregular silicified breccia zone (diatrema?) at 242.5 with angular fragments set ina vfg sil matrix...wallrock fragments up to 1.5 cm in size. 243.6 - Micro-fault 0 to 10 from C.A. with sinistral strike-slip displacement of approxoimately 0.5 cm  Mineralization - barren to ocassional py < 1%	1	1	GY	282223	246.00	247.00	1.00	0	-	0.01	-	-

## SAMPLE DESCRIPTION REPORT

### - Assay -

Hole Number: **MIS16-02**

Project: **MISHI**

Project Number: **243**

<i>From (m)</i>	<i>To (m)</i>	<i>Length (m)</i>	<i>Sample #</i>	<i>Comments</i>
11.30	12.10	0.80	282224	Quartz Monzonite - reddish pink color, felsic composition being alkalic, vfg to fg, 205 qtz, equigranular texture, massive, <1% qs, occasional py < 1%
12.10	12.60	0.50	282225	Quartz Vein - white color, quartz composition with numerous felsic and qtz-monzonite inclusions, wk fractured, scattered py < 1%
12.60	12.95	0.35	282226	Quartz Monzonite Dyke - pink color, felsic composition being vfg to fg being alkalic, fractured with 5% to 10% qs, <1% py
12.95	13.50	0.55	282227	Cherty Tuff - pinkish white color, siliceous composition being vfg and aphanitic, fractures with hairlines black qs-tour?, < 1% py
13.50	14.50	1.00	282228	Cherty Tuff - pinkish white color, siliceous composition being vfg and aphanitic, fractures with hairlines black qs-tour?, < 1% py
36.00	37.00	1.00	282229	Cherty Tuff - creamy beige white color, siliceous with mod ser being vfg/aphanitic, relict lam.bnd, 5% qs, < 1% py
37.00	37.60	0.60	282230	Cherty Tuff - creamy beige white color, siliceous with mod ser being vfg/aphanitic, relict lam.bnd, 5% qs, < 1% pyCherty Tuff - creamy beige white color, siliceous with mod ser being vfg/aphanitic, relict lam.bnd, 5% qs, < 1% py
37.60	38.10	0.50	282231	Cherty Tuff - bleached creamy white and dark gray bands, well developed bnding between vfg siliceous bands and dark gray dirty carbonate-rich (gf-chl) bnds with 1% to 2% scattered py, <1% qs, <1% overall py
38.10	38.65	0.55	282233	Cherty Tuff - bleached creamy white and dark gray chl, brecciated texture with chl-cb about vfg siliceous chert, well developed bnding, <1% qs, <1% to local 2% scattered py in chl-cb
38.65	39.30	0.65	282234	Cherty Tuff - creamy white color, siliceous and vfg/aphanitic, <1% qs, <1% py
39.30	40.05	0.75	282235	Cherty Tuff - creamy white color, siliceous and vfg/aphanitic, 5% to 10% cs/qcs, <1% py
40.05	40.30	0.25	282236	Fault Breccia - mod to strong chl-cb, strongly sh and bx and local sil cherty bnd at lower interval, 5% qcs/cs parallel to sh,<1% py
40.30	40.65	0.35	282237	Chert Tuff - pinkish white color, siliceous and vfg/aphanitic, finely lam.bnded, < 1% qs, < 1% py
40.65	41.05	0.40	282238	Fault Breccia - mod chl and strong cb, strong sh and bx with clasts up to 8 cm, < 1% qcs/cs, < 1% pyy
41.05	41.80	0.75	282239	Fault Breccia - mod chl and strong cb, strong sh and bx with numerous cherty clasts up to 2 to 5 cm, < 1% qcs/cs, < 1% pyy
41.80	42.40	0.60	282066	Fault Breccia - strong intense and pervasive cb (calcite) > chl, strongly sh and bx, 5% to 10% qcs/cs (folded), < 1% py
42.40	43.10	0.70	282067	Quartz Vein - quartz composition with strongly chl and wk cb fracture-filling and diffuse chl wallrock inclusions (1% to 2%), < 1% py
43.10	43.85	0.75	282068	Fault Breccia - strong cb and moderate to strong chl, strongly sh and fractured, 5% to 10% qcs/cs, occasional py < 1%
43.85	44.25	0.40	282069	Fault Breccia - lower contact with mix of mod sil-chl with weak cb, <1% qcs/cs, 5% disseminated py
44.25	44.75	0.50	282070	Cherty Felsic Volcaniclastic - strong intense pervasive sil, relict felsic tuff, numerous hairline fractures, 10% qs, < 1% py
44.75	46.00	1.25	282071	Banded/Bedded Cherty Felsic Volcaniclastic - banded strong intense pervasive sil cherty bands and felsic volcaniclastic bands, <1% to 3% local qs, < 1% to 2% vfg scattered py mainly in volcaniclastic units
46.00	47.50	1.50	282072	Cherty Felsic Volcaniclastic - strong intense pervasive sil, relict felsic tuff bands (upper interval), 1% qs, < 1% py
47.50	49.00	1.50	282073	Cherty Felsic Volcaniclastic - strong intense pervasive sil, relict felsic tuff bands, 1% qs, < 1% py
49.00	50.00	1.00	282074	Felsic Volcaniclastics - felsic to intermediate composition with wk-mod chl and wk cb, local chert bnds, mod sh, <1% qcs/cs, 1% to 2% vfg scattered py
50.00	51.00	1.00	282075	Felsic Volcaniclastics - felsic to intermediate composition with wk-mod chl (locally strong chl) and wk cb, local chert bnds, mod sh, <1% qcs/cs, 2% to local 4% vfg scattered py with < 1% cpy

## SAMPLE DESCRIPTION REPORT

### - Assay -

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<i>From (m)</i>	<i>To (m)</i>	<i>Length (m)</i>	<i>Sample #</i>	<i>Comments</i>
51.00	52.00	1.00	282077	Felsic Volcaniclastics - felsic to intermediate composition with wk-mod chl (locally strong chl) and wk cb, local folded chert bnds, mod sh, <1% qcs/cs, 1% to 3% vfg scattered py
52.00	52.65	0.65	282078	Felsic Volcaniclastic - mod sil with increasing sil to 52.65 with fracturing up to 5% qs locally, 5% vfg disseminated py
52.65	53.15	0.50	282079	Cherty Tuff - creamy pinkish white color, siliceous and vfg and massive, numerous hairline fracture, < 1% qs and py
53.15	54.00	0.85	282080	Cherty Tuff - creamy pinkish white color, siliceous and vfg and massive, numerous chl seams/fractures, < 1% qs and py
54.00	55.00	1.00	282081	Cherty Tuff - creamy pinkish white color, siliceous and vfg and massive, numerous chl seams/fractures giving local bx texture, 3% qs, < 1% qs and py
55.00	55.60	0.60	282082	Mafic Pillow Flow with Chert - mod to strong chl-cb, mod sh, 1% to 2% qcs/cs, <1% to 2% vfg scattered py & <1% cpy
55.60	56.20	0.60	282083	Mafic Pillow Flow with Chert - mod to strong chl-cb, mod to strongly sh, 1% to 2% qcs/cs, <1% to 2% vfg to cg scattered py & <1% cpy
56.20	57.15	0.95	282084	Cherty Tuff - creamy pinkish white color, strongly sil vfg and aphanitic, relict chl-cb as fractures, < 1% qcs and py
57.15	58.00	0.85	282085	Mafic Pillow Flow with Chert - mod to strong chl-cb, mod to strongly sh, 1% to 2% qcs/cs, <1% patchy local increase in py to 2% to 3% towards 58.0
58.00	58.70	0.70	282086	Mafic Pillow Flow with Chert - mod to strong chl-cb, local magnetite-carboante rich lam/bnds, mod to strongly sh, 1% to 2% qcs/cs, 1% to 3% disseminated patchy py
58.70	59.40	0.70	282087	Mafic Pillow Flow with Chert Band (upper interval)- mod to strong chl-cb with mod ep, banded chert/mafic over 23 cm, 1% to 2% cs/qcs, up to 1% py
59.40	60.40	1.00	282088	Mafic Pillow Flow - mod chl-ep with mod cb matrix and along sh, mod sh, 2% to 3% cs/qcs, 1% to 2% scattered py cubes and splash of cpy with qcs/wr contact at 59.4
60.40	61.00	0.60	282090	Mafic Pillow Flow with Chert - mod chl-ep & wk cb, scattered thin chert lam/bnd, mod sh, 1% qcs/cs, 1% to 3% vfg disseminated py in mafics and chert, strongly magnetic
61.00	62.00	1.00	282091	Mafic Pillow Flow with Chert - mod chl-ep & wk cb, scattered thin chert lam/bnd, mod sh, 5% qcs/cs with <1% cpy splashes, up to 1% py-(cpy in cs/qcs), strongly magnetic
62.00	63.00	1.00	282092	Mafic Pillow Flow with Chert - mod chl-ep & wk cb, locally strong cb with sh, locally mag bnds, scattered red thin chert lam/bnd, mod sh, 1% to 2% qcs/cs, up to 1% py and spec hematite at 62.5, strongly magnetic with disseminated mag <5%
63.00	64.00	1.00	282093	Mafic Pillow Flow with Chert - mod chl-ep & wk to locally mod cb, scattered red thin chert lam/bnd, mod sh, 1% to 2% qcs/cs, up to 1% py-(spec hem with qcs), strongly magnetic with disseminated mag <5%
64.00	65.00	1.00	282094	Mafic Pillow Flow - mod chl-ep and wk cb, wk-mod sh, <25 cs/qcs with cpy fractures, 1% scattered py and < 1% cpy fractures, strongly magnetic with <5% disseminated magnetite
65.00	66.00	1.00	282095	Mafic Pillow Flow with Chert - mod chl-ep with wk to locally strong cb, scattered thin chert bnds up to 5 cm wide, mod sh, <1% to 2% qcs/cs, up to 1% py-(cpy), strongly magnetic with < 5% disseminated magnetite
66.00	67.00	1.00	282096	Mafic Pillow Flow with Chert - mod chl-ep with wk to locally strong cb, scattered thin chert bnds up to 15 cm wide, mod sh, <2% to 3% qcs/cs, up to 1% py, mod patchy magnetic with < 2% to 3% disseminated magnetite
67.00	68.00	1.00	282097	Mafic Pillow Flow with Chert - mod chl-ep with mod to locally strong cb, mod sh, <2% to 3% qcs/cs, up to 1% py increasing towards 68.0 (2%), weakly magnetic with <1% to 2% disseminated magnetite
68.00	68.80	0.80	282098	Mafic Pillow Flow with Chert Bands - mafic composition with mod-strong cb matrix/fract, 5% to 10% fractured chert, 2% to 3% qcs/cs, mod sh/foliated, scattered < 1% py
68.80	69.55	0.75	282099	Mafic Pillow Flow with Chert Bands - mafic composition with mod-strong cb matrix/fract, 10% to 15% fractured chert, 5% qcs/cs, mod sh/foliated, scattered vfg 2% to 3% py
69.55	70.50	0.95	282100	Mafic Pillow Flow - mafic composition with mod to strong cb, strongly sh/fol, 1% to 2% cs/qcs parallel to sh, <1% scattered py
70.50	71.50	1.00	282101	Mafic Pillow Flow with Chert Bands - mafic composition with mod-strong cb matrix/fract, 10% fractured chert, 2% to 3% qcs/cs, mod sh/foliated, scattered vfg <1% py
71.50	71.95	0.45	282102	Mafic Pillow Flow - mafic composition with wk-mod cb, mod-strong sh/fol, <1% qcs, <1% scattered py

## SAMPLE DESCRIPTION REPORT

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<i>From (m)</i>	<i>To (m)</i>	<i>Length (m)</i>	<i>Sample #</i>	<i>Comments</i>
71.95	72.50	0.55	282103	Mafic Pillow Flow with Chert Band - mafic composition with wk cb in matrix and strong cb along sh/fractures, 10% to 15% chert band 9 cm wide, 2% to 3% qcs/qcs, 2% to 3% vfg disseminated py
72.50	73.20	0.70	282104	Mafic Pillow Flow - mafic composition with strong cb along sh to 73.2, 1% qcs along sh, <1% to increasing py to 73.2 to 2%
73.20	73.70	0.50	282105	Mafic Pillow Flow and Chert - mafic composition with mod to strong cb in fracures/shears>matrix, 30% pinkish-red chert bands (up to 8 cm wide), strongly sh and wk fractured with 10% qcs/cs, 15 to 3% scattered py with coarse splashes of cpy 73.2 in wr adjacent to cs < 1%
73.70	74.20	0.50	282106	QTSW - strong sil and fractured with 30% qs, hem chert bands, 1% to 2% py-(cpy)
74.20	74.70	0.50	282107	QTSW - wk to mod sil in bnds and strongly sh and wk fractured at 10% qcs/cs, patchy 5% to py to local 10% py
74.70	75.20	0.50	282108	QTSW - mod to strong sil with relict chert bands, 10% to 20% qcs/cs, 1% to 3% py with spec hem fracture
75.20	76.00	0.80	282109	Silicate-Carbonate Lean BIF - mafic composition with chl and mod-strong cb, bnded/sh with magnetiferous chert bands, <1% qcs/cs, < 1% py and mod-strong magnetic
76.00	77.00	1.00	282110	Silicate-Carbonate Lean BIF - mafic composition with chl and mod-strong cb, bnded/sh with 10% to 15% magnetiferous chert bands, 1% to 2% qcs/cs, 1% widely scattered py and patchy wk-(mod) magnetic
77.00	77.70	0.70	282111	Silicate-Carbonate Lean BIF - mafic composition with chl and mod-strong cb, bnded/sh with local magnetiferous 3 cm wide chert band , 2% to 3% qcs/cs, 2% to 4% py and local cpy (<1%) at 77.65, mod to strongly magnetic
77.70	78.30	0.60	282113	Silicate-Carbonate Lean BIF - mafic composition with chl and mod-strong cb, bnded/sh, <1% qcs/cs, < 1% py and mod-strong magnetic
78.30	78.80	0.50	282114	Silicate-Carbonate Lean BIF - mafic composition with chl and strong cb, bnded/sh with numerous magnetiferous chert bands (30% to 35%) up to 6 cm wide, <1% qcs/cs, 5% vfg disseminated py and strongly magnetic
78.80	79.25	0.45	282115	Silicate-Carbonate Lean BIF - mafic composition with chl and strong cb, bnded/sh with numerous magnetiferous chert bands (5% to 10%), <1% qcs/cs, 3% to 5% vfg disseminated py and strongly magnetic
79.25	80.00	0.75	282116	Silicate-Carbonate Lean BIF - mafic composition with chl and strong cb, bnded/sh, <1% qcs/cs, 1% to 3% vfg disseminated py and strongly magnetic
80.00	80.50	0.50	282117	Silicate-Carbonate Lean BIF - mafic composition with chl and strong cb, bnded/sh, <1% qcs/cs, 5% vfg disseminated py and moderately to strongly magnetic
80.50	81.00	0.50	282118	Silicate-Carbonate Lean BIF - mafic composition with chl and strong cb, bnded/sh, 1% to 2% qcs/cs, 5% to 10% vfg disseminated py and strongly magnetic
81.00	81.60	0.60	282119	Silicate-Carbonate Lean BIF - mafic composition with chl and strong cb, bnded/sh with numerous magnetiferous contorted chert bands (40% to 45%) up to 5 cm wide, 10% qcs/cs, 3% to 5% vfg disseminated py and strongly magnetic
81.60	82.00	0.40	282120	Silicate-Carbonate Lean BIF - mafic composition with chl and strong cb, bnded/sh with numerous magnetiferous contorted chert bands (25% to 35%) up to 5 cm wide, 2% to 3% qcs/cs, 5% vfg disseminated py and strongly magnetic
82.00	82.50	0.50	282121	Silicate-Carbonate Lean BIF - mafic composition with chl and strong cb, bnded/sh, <1% qcs/cs, patchy <1% to 2% vfg disseminated py and strongly magnetic
82.50	83.10	0.60	282122	Silicate-Carbonate Lean BIF - mafic composition with chl and strong cb, bnded/sh, 1% to 2% qcs/cs, patchy <1% to 5% vfg disseminated py and strongly magnetic
83.10	83.60	0.50	282123	Silicate-Carbonate Lean BIF - mafic composition with chl and strong cb, 10% to 20% thin cb-rich chert bands towards 83.6, bnded/sh, up to 1% qcs/cs, 2% to 4% vfg disseminated py and strongly magnetic
83.60	84.10	0.50	282125	Silicate-Carbonate Lean BIF - mafic composition with chl and strong cb, 20% to 25% thin cb-rich chert bands, bnded/sh, 5% qcs/cs, 2% to 5% vfg disseminated py and strongly magnetic
84.10	85.00	0.90	282126	Silicate-Carbonate Lean BIF - mafic composition with chl and strong cb, bnded/sh, 1% to 2% qcs/cs, 1% to 3% vfg disseminated py and strongly magnetic
85.00	85.50	0.50	282127	Silicate-Carbonate Lean BIF - mafic composition with chl and strong cb, bnded/sh, 5% qcs/cs, 2% to 3% vfg disseminated py with local cpy associated fractures and in matrix < 1%, strongly magnetic

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<i>From (m)</i>	<i>To (m)</i>	<i>Length (m)</i>	<i>Sample #</i>	<i>Comments</i>
85.50	86.00	0.50	282128	Silicate-Carbonate Lean BIF - mafic composition with mod sil with mod to strong cb, bnded/sh, 5% qcs/cs, 2% to 3% vfg disseminated py, weakly magnetic
86.00	86.30	0.30	282129	Fractured Silicate-Carbonate Lean BIF & Chert - mafic composition with mod sil with weak cb, 30% pinkish-white laminated chert, bnded/sh and moderately fractures with a series of orthogonal 3 cm fld and flted qtz-cb-cpy (3%) vn (20%-30% qcs), 2% to 3% py
86.30	87.00	0.70	282130	Silicate-Carbonate Lean BIF - mafic composition with mod sil and wk cb, bnded/sh, 2% to 3% qcs/cs, 1% scattered py with occasional cpy <1%, wk to non-magnetic
87.00	87.80	0.80	282131	Silicate-Carbonate Lean BIF - mafic composition with mod sil and wk to mod cb, 20% chert bands up to 5 cm wide, bnded/sh, 2% to 4% qcs/cs parallel to sh, 1% scattered vfg py, wk to non-magnetic
87.80	88.80	1.00	282132	Felsic Volcaniclastic - felsic to intermediate in composition, wk cb, wk-mod sh, <1% cs/qcs, < 1% py
88.80	89.80	1.00	282133	Felsic Volcaniclastic - felsic to intermediate in composition, wk cb, wk-mod sh, <1% cs/qcs, < 1% py
95.70	96.20	0.50	282134	Felsic Volcaniclastic - felsic in composition being wk sil, scattered thin contorted chert band up to 3 cm wide, vfg, relict bnding, <1% qs and py
96.20	96.75	0.55	282135	Felsic Volcaniclastic - felsic in composition with wk-(mod) sil, scattered thin cherty units up to cm wide, vfg and bnded, fractured with 10% qs, up to 1% py-cpy-aspery with cpy-aspery in qs as splashes and fractures
96.75	97.30	0.55	282137	Felsic Volcaniclastic - felsic in composition with wk-mod sil, vfg and massive, up to 1% qs, < 1% py
97.30	97.80	0.50	282138	Felsic Volcaniclastic - felsic in composition with wk-mod sil, vfg and massive, fractured with 10% to 15% qs, < 1% py
97.80	98.30	0.50	282139	Felsic Volcaniclastic - felsic in composition with wk-mod sil, vfg and massive, fractured with 10% to 15% qs, < 1% py
98.30	98.80	0.50	282140	Felsic Volcaniclastic - felsic composition with mod sil, vfg and fractured appearance with 10% qs/qcs, <1% py
98.80	99.30	0.50	282141	Felsic Volcaniclastic - felsic composition with mod sil, vfg and fractured appearance with 10% to 15% qs/qcs, patchy up to 1% py
99.30	100.05	0.75	282142	Felsic Volcaniclastic - felsic composition with mod sil, vfg and fractured appearance with 5% qs/qcs, local < 1% py with local qs-cpy (coarse splashes in qs at 99.8) but <1% cpy<1% py
100.05	100.55	0.50	282143	QTSW - mod to (strong) sil wallrock and strongly fractured with 20% to 25% qs, up to 15 cpy generally found as splashes/blebs in qs but < 1% py-(aspery?? With cpy
100.55	101.00	0.45	282144	QTSW - strong sil, extensively fractured with 15% to 25% qs, <1% py-cpy
101.00	101.40	0.40	282145	QTSW - - strong intense sil with strong 20% to 25% qs>qcs fracturing, <1% py-cpy
101.40	101.80	0.40	282146	QTSW - - strong intense sil with strong 10% to 15% qs>qcs fracturing, <1% py-cpy
101.80	103.00	1.20	282147	Diabase - mafic composition with strong flt clay gouge at upper contact, extremely broken up core, vfg and msv, local 5% cs at upper contact...overall < 1% cs/qcs, < 1% py, wk-mod magnetic
110.30	110.80	0.50	282149	Diabase - mafic composition with strong flt clay gouge at upper contact, extremely broken up core, vfg and msv, local 5% cs at upper contact...overall < 1% cs/qcs, < 1% py, wk magnetic
110.80	111.30	0.50	282150	Diabase - mafic composition, numerous 5% to 10% cs tension fractures, strong clay gouge at lower contact, <1% py and wk-non-magnetic
111.30	112.30	1.00	282151	Silicified Zone (Weak QTSW) - strongly bleached with intense and pervasive sil-(ab) altered wr, strongly fractured with 5% qs, < 1% py
112.30	113.30	1.00	282152	QTSW - strongly bleached with intense and pervasive sil-(ab) altered wr, strongly fractured with 15% to 20% qs, < 1% py
113.30	114.30	1.00	282153	QTSW - strongly bleached with intense and pervasive sil-(ab) altered wr, strongly fractured with 20% to 25% qs, < 1% py
114.30	115.30	1.00	282154	QTSW - strongly bleached with intense and pervasive sil-(ab) altered wr, strongly fractured with 20% to 25% qs, < 1% py
115.30	115.80	0.50	282155	Pyritic Weak QTSW - strong sil and insipient chl alt., sh and wk fractured with 5% qs, 5% to 10% vfg to fg py with vfg aspy (1% to 2%) in grayish-white sil alt at upper interval

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<i>From (m)</i>	<i>To (m)</i>	<i>Length (m)</i>	<i>Sample #</i>	<i>Comments</i>
115.80	116.30	0.50	282156	Pyritic Weak QTSW - strong sil and insipient chl? alt., sh and wk fractured with 10% to 15% qs, 5% to 10% vfg to fg py and < 1% aspy?
116.30	116.80	0.50	282157	Pyritic Weak QTSW - strong sil and insipient chl? alt., sh and wk fractured with 10% to 15% qs, 5% to 10% vfg to fg py and local cpy-(aspy) < 1%
116.80	117.30	0.50	282158	Pyritic Weak QTSW - strong sil and insipient chl? alt., sh and wk fractured with 5% qs, 10% to 15% vfg to fg py and local cpy-(aspy) < 1%
117.30	117.80	0.50	282159	Pyritic Weak QTSW - strong sil and insipient chl? Alt., sh and wk fractured with 5% qs, 15% to 20% vfg to fg py
117.80	118.30	0.50	282161	Pyritic Weak QTSW - mod chl? alt and relict sil, sh and wk fractured with 5% qs, 15% to 20% vfg to fg py
118.30	118.80	0.50	282162	Pyritic Weak QTSW - mod chl and wk-mod cb, sh and wk fractured with 5% qs, 20% to 25% vfg to fg py
118.80	119.30	0.50	282163	Pyritic Weak QTSW - mod chl and mod to strong cb matrix and fractures, sh and wk fractured with 5% qs, 5% to 10% vfg to fg py
119.30	119.90	0.60	282164	Pyritic QTSW - mod chl and wk-mod cb matrix and fractures, sh and wk fractured with 20% qs, <1% to locally 5% near upper interval
119.90	120.50	0.60	282165	Pyritic Shear (Felsic to Intermediate Tuff) - mod chl with weak cb, strongly sh and 5% qs, 5% to 10% py in sh
120.50	121.50	1.00	282166	Felsic to Intermediate Tuff - felsic to intermediate composition with wk-mod chl-ser matrix, local 10 cm wide sh chert bnd, vfg and mod sh, 3% to 4% qs/qcs, 1% to 3% vfg scattered py
121.50	122.50	1.00	282167	Felsic to Intermediate Tuff - felsic to intermediate composition with wk-mod chl-ser matrix, vfg and mod sh, <2% thin qs/qcs, 1% to 2% vfg scattered py
122.50	123.50	1.00	282168	Felsic to Intermediate Tuff - felsic to intermediate composition with wk-mod chl-ser matrix, vfg and mod sh, 4% to 5% thin qs/qcs, 2% to 4% vfg scattered py
123.50	124.50	1.00	282169	Felsic to Intermediate Tuff - felsic to intermediate composition with increase in sil bnds (cherty) to 124.5, vfg and mod sh, 10% with 10 cm wide stylitic qs (1% py), 1% to 3% vfg scattered py increasing towards 124.5
124.50	125.50	1.00	282170	Felsic to Intermediate Tuff - felsic to intermediate composition with strong white sil alt bnds (cherty-like), vfg and mod sh/bnded, <1% thin qs/qcs, 1% to 2% vfg scattered py
125.50	126.30	0.80	282171	Felsic to Intermediate Tuff - felsic to intermediate composition with wk-mod chl-ser matrix, vfg and mod sh, <1% thin qs/qcs, 1% to 2% patchy vfg py
126.30	126.80	0.50	282173	Fractured Cherty Felsic Volcaniclastic - mod to strong sil with cherty bands (25% and up to 7 cm wide, sh/bnded texture, 5% qs, 5% to local 10% vfg disseminated pyrite
126.80	127.65	0.85	282174	Felsic to Intermediate Tuff - felsic to intermediate composition with wk-mod sil associated with qs fractures, wk-mod chl-ser matrix, vfg and mod sh, fractured with numerous 5% to 10% qs, 2% to 4% vfg scattered py
127.65	128.50	0.85	282175	Felsic to Intermediate Tuff - felsic to intermediate composition with wk-mod chl-ser matrix, vfg and mod sh, 2% to 4% thin qs/qcs, up to 1% vfg py
128.50	129.20	0.70	282176	Felsic to Intermediate Tuff - felsic to intermediate composition with wk-mod chl-ser matrix, vfg and mod sh, 2% to 4% thin qs/qcs, 2% to 3% vfg scattered py
129.20	130.00	0.80	282177	Felsic to Intermediate Tuff - felsic to intermediate composition with wk-mod chl-ser matrix, vfg and mod sh, 1% to 2% thin qs/qcs, 1% to local 2% vfg scattered py
130.00	130.50	0.50	282178	Felsic to Intermediate Tuff - felsic to intermediate composition with wk-mod chl-ser matrix, vfg and mod sh, 1% to 2% thin qs/qcs, 1% to local 2% vfg scattered py
130.50	131.50	1.00	282179	Felsic to Intermediate Tuff - felsic to intermediate composition with wk-mod chl-ser matrix, vfg and mod sh, 5% to 10% thin qs/qcs, 2% to 3% vfg scattered py
131.50	132.50	1.00	282180	Felsic to Intermediate Tuff - felsic to intermediate composition with wk-mod ser>chl matrix, vfg and mod sh, 1% to 2% thin qs/qcs, 1% to 2% vfg scattered py
132.50	133.00	0.50	282181	Felsic to Intermediate Tuff - felsic to intermediate composition with wk-mod ser>chl matrix, vfg and mod sh, 5% thin qs/qcs lenses parallel to sh, 1% to 3% vfg disseminated py
133.00	133.50	0.50	282182	Felsic to Intermediate Tuff - felsic to intermediate in composition, wk-mod ser-chl with mod to strong cb along sh planes, 1% to 2% qcs/cs along sh, 5% vfg scattered py

## SAMPLE DESCRIPTION REPORT

### - Assay -

Hole Number: **MIS16-02**

Project: **MISHI**

Project Number: **243**

<i>From (m)</i>	<i>To (m)</i>	<i>Length (m)</i>	<i>Sample #</i>	<i>Comments</i>
133.50	134.50	1.00	282183	Felsic to Intermediate Tuff - felsic to intermediate composition with wk-mod ser>chl matrix, vfg and mod sh, 5% thin qs/qcs lenses parallel to sh, 1% to 3% vfg disseminated py
134.50	136.00	1.50	282185	Felsic to Intermediate Tuff - felsic to intermediate composition with wk-(mod) ser-chl, cb along sh, vfg and sh, 1% to 2% cs/qcs along sh, < 1% widely scattered py
136.00	137.50	1.50	282186	Felsic to Intermediate Tuff - felsic to intermediate in composition, patchy cb in matrix and fractures, vfg/msv/wk-(mod) sh, fractured 5% to 10% qs/qcs, ocassional < 1% py
137.50	139.00	1.50	282187	Felsic to Intermediate Tuff - felsic to intermediate in composition, patchy cb in matrix and fractures, vfg/msv/wk-(mod) sh, fractured 5% qs/qcs, ocassional < 1% py
139.00	140.50	1.50	282188	Felsic to Intermediate Tuff - felsic to intermediate in composition, patchy cb in matrix and fractures, vfg/msv/wk-(mod) sh, fractured 3% to 5% qs/qcs, ocassional < 1% py
140.50	142.00	1.50	282189	Felsic to Intermediate Tuff - felsic to intermediate in composition, patchy cb in matrix and fractures, vfg/msv/wk-(mod) sh, fractured <1% to 2% qs/qcs, ocassional < 1% py
149.90	150.40	0.50	282190	Felsic to Intermediate Tuff - felsic to intermediate in composition, vfg and msv and wk sh, 1% to 2% qcs/qs, < 1% py
150.40	150.90	0.50	282191	Folded Chert/Felsic Volcaniclastic - folded white, vfg siliceous chert beds up to 10 cm wide with irregular contacts with felsic to intermediate tuff, 2% to 3% qs/qcs, < 1% pyti
150.90	151.50	0.60	282192	Felsic to Intermediate Tuff - felsic to intermediate in composition, vfg and msv and wk sh, 1% to 2% qcs/qs, local < 1% py as fracture seam
151.50	152.50	1.00	282193	Felsic to Intermediate Tuff - felsic to intermediate in composition, vfg and msv and wk sh, 2% to 3% qcs/qs, local < 1% py
152.50	153.50	1.00	282194	Felsic to Intermediate Tuff - felsic to intermediate in composition, vfg and msv and wk sh, 3% to 5% thin qcs/qs, local < 1% py
153.50	154.20	0.70	282195	Cherty Tuff (minor Felsic Volcaniclastic) - strong vfg sil being fractured with 10% qs, scattered vfg py-(po?) up to 1% in smokey gray siliceous chert
154.20	154.80	0.60	282197	Weak QTSW - strong sil fracture controlled with 10% to 15% qs, < 1% py
154.80	155.10	0.30	282198	Chert - bleached grayish white color, quartz composition being vfg, ocassional < 1% py-(aspy?) at upper contact
155.10	155.60	0.50	282199	Fractured Felsic Volcaniclastic - altered felsic composition with mod sil, vfg and relict bnding, fractured with 5% qs, < 1% py
155.60	156.20	0.60	282200	Felsic Volcaniclastic - felsic composition with wk sil, finely lam/bnded, 2% to 3% qs, < 1% py
156.20	156.50	0.30	282201	Chert - dirty white color, siliceous vfg and aphanitic, <1% qs, 1% to 2% py-(aspy?) as disseminated seam
156.50	157.20	0.70	282202	Felsic Volcaniclastic - felsic composition with relict fine lam/bnds, 1% to 3% thin qs/qcs, < 1% py
157.20	157.50	0.30	282203	QTSW - felsic composition with mod sil adjacent to qs, strongly fractured with 20% to 25% qs, <1% py
157.50	158.50	1.00	282204	Felsic Volcaniclastic - felsic composition with relict fine lam/bnds, 1% to 2% thin qs/qcs, < 1% py
162.50	163.50	1.00	282205	Felsic Volcaniclastic - felsic composition, vfg and relict fine lam/bnding, scattered 2% to 3% thin qs/qcs, scattered vfg 1% py
163.50	164.50	1.00	282206	Felsic Volcaniclastic - felsic composition, vfg and relict fine lam/bnding, scattered 1% to 3% thin qs/qcs, scattered vfg 1% py
164.50	165.10	0.60	282207	Felsic Volcaniclastic - felsic composition, vfg and relict fine lam/bnding, <1% thin qs/qcs, <1% py
165.10	165.60	0.50	282209	QS xcutting Felsic Volcaniclastic - felsic composition, <1cm to 7 cm wide qs (20%) parallel to C.A., 2% to 3% py in qs with < 1% cpy
165.60	166.15	0.55	282210	Fractured Felsic Volcaniclastic - felsic composition with wk sil-(ser), increase in ser to 166.15, sh and fract with 10% qs/qcs, scattered vfg up to 1%
166.15	166.70	0.55	282211	Felsic Volcaniclastic - felsic composition with ser along slips/jnts, vfg and relict fine lam/bnding, 1% to 2% thin qs/qcs, <1% py

## SAMPLE DESCRIPTION REPORT

### - Assay -

Hole Number: **MIS16-02**

Project: **MISHI**

Project Number: **243**

<i>From</i> (m)	<i>To</i> (m)	<i>Length</i> (m)	<i>Sample #</i>	<i>Comments</i>
166.70	167.60	0.90	282212	Weak QTSW - wk sil and wk-mod ser, fractured with 15% qs/qcs with patchy 1% to locally 2% py with possible aspy?
167.60	168.40	0.80	282213	Felsic Volcaniclastic - felsic composition, vfg and relict fine lam/bnding, <1% thin qs/qcs, <1% py
168.40	169.40	1.00	282214	Felsic Volcaniclastic - felsic composition, minor thin chert vfg and relict fine lam/bnding, <1% thin qs/qcs, <1% widely scattered py
174.50	175.50	1.00	282215	Felsic Flow Banded/Autobreccia - felsic composition with well developed flow banding and local bx textures, < 1% qs, 1% to 2% scattered py
175.50	176.20	0.70	282216	Felsic Flow Banded/Autobreccia - felsic composition being massive part of flow banding and local bx textures, < 1% qs, <1% widely scattered py
176.20	176.80	0.60	282217	Felsic Flow Banded/Autobreccia - felsic composition with mod sil of matrix, well developed flow banding and local bx textures, < 1% qs, 2% to 3% scattered vfg py
176.80	177.50	0.70	282218	Felsic Flow Banded/Autobreccia - felsic composition with well developed flow banding and local bx textures, < 1% qs, 1% to 2% scattered py
177.50	178.50	1.00	282219	Felsic Flow Banded/Autobreccia - felsic composition with well developed flow banding and local bx textures, < 1% qs, <1% widely scattered py
180.40	181.00	0.60	282221	Felsic Autobreccia - felsic composition with well developed bx texture, fragment supported, local fine flow banding, < 1% qs, widely scattered < 1% py
184.00	185.00	1.00	282222	Felsic Lapilli-Tuff/Tuff Breccia - felsic in composition, well developed fragmental texture, attenuated fragments up to 4 cm in size, < 1% qs and py
246.00	247.00	1.00	282223	Felsic Tuff Breccia - felsic composition with scattered white albite xtls (5% to 10%), strongly foliated fragmental texture, tightly packed fragments up to 4 cm in size, < 1% qcs/qs, < 0.5% py
247.00	0.00	#####	282224	

# QUALITY CONTROL REPORT

Hole Number: MIS16-02

Project: MISHI

Project Number: 243

Sample #	Sample Type	Duplicate of	Standard name	Laboratory	Au (ppm)	AV Au (ppm)	FA Au (ppm)	FA2 Au (ppm)	FA3 Au (ppm)	FA4 Au (ppm)	FA5 Au (ppm)	SFA Au (ppm)	SFA2 Au (ppm)	SFA3 Au (ppm)	GA Au (ppm)	GA2 Au (ppm)	GA3 Au (ppm)	GA4 Au (ppm)	GA5 Au (ppm)	AR Au (ppm)	AR2 Au (ppm)	AR3 Au (ppm)	Wt (kg)
282076	BLKDIA			ActLabs	0	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282089	STANDARD		OREAS 501	ActLabs	0	-	0.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282208	STANDARD		OREAS 522	ActLabs	1	-	0.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282220	BLKDIA			ActLabs	0	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282232	STANDARD		OREAS 206	ActLabs	2	-	2.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282112	STANDARD		OREAS 522	ActLabs	1	-	0.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282124	BLKDIA			ActLabs	0	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282136	STANDARD		OREAS 206	ActLabs	2	-	2.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282148	BLKDIA			ActLabs	0	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282160	STANDARD		OREAS 501	ActLabs	0	-	0.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282172	BLKDIA			ActLabs	0	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282184	STANDARD		OREAS 504	ActLabs	2	-	1.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282196	BLKDIA			ActLabs	0	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

# APPENDIX 2

**Quality Analysis ...**



**Innovative Technologies**

**Date Submitted:** 30-Nov-16  
**Invoice No.:** A16-12886-Au  
**Invoice Date:** 02-Dec-16  
**Your Reference:** Mishi 243

**Trelawney Mining and Exploration  
3 Mesomikenda Lake Road  
PO Box 100  
Gogama ON P0M 1W0  
Canada**

**ATTN: Alan Smith**

## **CERTIFICATE OF ANALYSIS**

10 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code UT-6 Total Digestion ICP & ICP/MS

**REPORT      A16-12886-Au**

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.

CERTIFIED BY:

A handwritten signature in black ink, appearing to read "Elitsa Hrischeva".

---

Elitsa Hrischeva, Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**  
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5  
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL [Ancaster@actlabs.com](mailto:Ancaster@actlabs.com) ACTLABS GROUP WEBSITE [www.actlabs.com](http://www.actlabs.com)

**Date Submitted:** 30-Nov-16  
**Invoice No.:** A16-12886-Au  
**Invoice Date:** 02-Dec-16  
**Your Reference:** Mishi 243

**Trelawney Mining and Exploration  
3 Mesomikenda Lake Road  
PO Box 100  
Gogama ON P0M 1W0  
Canada**

**ATTN: Alan Smith**

## **CERTIFICATE OF ANALYSIS**

10 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-50-Timmins Au - Fire Assay AA

**REPORT A16-12886-Au**

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Notes:

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

CERTIFIED BY:



---

Elitsa Hrischeva, Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**  
1752 Riverside Drive, Timmins, Ontario, Canada, P4R 1N1  
TELEPHONE +705 264-0123 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL Timmins@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
282018	0.012
282019	0.007
282020	< 0.005
282021	0.007
282022	0.006
282023	0.005
282024	< 0.005
282025	< 0.005
282026	< 0.005
282027	< 0.005

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
OREAS203 Meas	0.850
OREAS203 Cert	0.871
OREAS 251 Meas	0.483
OREAS 251 Cert	0.50
282027 Split Orig PREP DUP	< 0.005
282027 Split PREP DUP	< 0.005
282027 Orig	< 0.005
282027 Dup	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005

**Quality Analysis ...**



**Innovative Technologies**

**Date Submitted:** 30-Nov-16  
**Invoice No.:** A16-12886-TD  
**Invoice Date:** 29-Dec-16  
**Your Reference:** Mishi 243

**Trelawney Mining and Exploration  
3 Mesomikenda Lake Road  
PO Box 100  
Gogama ON P0M 1W0  
Canada**

**ATTN: Alan Smith**

## **CERTIFICATE OF ANALYSIS**

10 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code UT-6 Total Digestion ICP & ICP/MS

**REPORT A16-12886-TD**

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Notes:

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

CERTIFIED BY:

A handwritten signature in black ink, appearing to be "Emmanuel Eseme".

Emmanuel Eseme, Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**  
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5  
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL [Ancaster@actlabs.com](mailto:Ancaster@actlabs.com) ACTLABS GROUP WEBSITE [www.actlabs.com](http://www.actlabs.com)

**Date Submitted:** 30-Nov-16  
**Invoice No.:** A16-12886-TD  
**Invoice Date:** 29-Dec-16  
**Your Reference:** Mishi 243

**Trelawney Mining and Exploration  
3 Mesomikenda Lake Road  
PO Box 100  
Gogama ON P0M 1W0  
Canada**

**ATTN: Alan Smith**

## **CERTIFICATE OF ANALYSIS**

10 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-50-Timmins Au - Fire Assay AA

**REPORT A16-12886-TD**

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Notes:

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

CERTIFIED BY:



Emmanuel Esemé , Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**  
1752 Riverside Drive, Timmins, Ontario, Canada, P4R 1N1  
TELEPHONE +705 264-0123 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL Timmins@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

## Results

## Activation Laboratories Ltd.

## Report: A16-12886

Analyte Symbol	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi	Se
Unit Symbol	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02	0.1
Method Code	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	TD-MS
282018	29.4	0.71	1.83	4.09	1.92	0.87	< 0.1	132	103	721	5.95	0.9	50	61.7	1.3	0.6	0.4	0.59	0.95	35.2	0.50	6.73	1.7
282019	52.8	1.65	3.33	6.45	0.99	3.01	< 0.1	292	42.4	1710	10.3	0.5	20	36.9	2.3	0.7	0.8	0.38	0.69	59.2	0.70	2.63	1.9
282020	48.1	1.73	2.46	5.99	0.98	3.15	< 0.1	252	53.0	1410	7.93	0.3	20	37.7	1.9	0.7	0.6	0.13	0.57	48.0	0.70	0.95	0.6
282021	44.7	2.48	2.67	6.65	1.06	3.28	< 0.1	280	55.5	1340	8.58	0.7	20	42.8	1.9	0.8	0.6	0.14	0.70	54.6	0.80	2.00	1.3
282022	52.1	2.63	2.93	6.76	0.85	4.20	< 0.1	277	48.3	1410	9.31	1.6	10	41.9	1.9	1.1	0.6	0.07	0.82	50.1	0.70	2.09	1.5
282023	40.1	2.88	1.83	7.32	1.73	2.08	< 0.1	134	188	724	4.45	2.5	< 10	72.0	1.1	1.4	0.4	1.33	1.81	23.3	0.70	1.57	0.4
282024	35.8	> 3.00	1.67	8.46	1.67	1.99	< 0.1	113	132	596	3.91	2.9	< 10	71.6	1.3	1.5	0.4	< 0.05	2.35	20.5	0.70	0.72	0.3
282025	38.6	2.72	1.73	8.13	2.10	1.95	< 0.1	126	115	569	4.20	2.9	< 10	80.1	1.2	1.3	0.4	< 0.05	2.56	23.5	0.80	0.63	0.4
282026	40.5	2.23	1.78	7.95	1.99	1.56	< 0.1	126	134	518	3.97	2.7	< 10	75.5	1.1	1.4	0.4	< 0.05	2.18	21.9	0.80	0.42	0.3
282027	36.9	2.68	1.89	8.99	2.23	1.69	< 0.1	127	136	544	4.23	3.0	50	76.6	1.4	1.4	0.5	0.06	2.85	23.2	0.80	0.95	0.4

## Results

## Activation Laboratories Ltd.

## Report: A16-12886

Analyte Symbol	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu
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	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Method Code	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	TD-MS
282018	90.7	11.3	7.4	57.8	14.7	57.7	46	3.6	1.40	< 0.1	1	< 0.1	0.7	162	3.7	9.8	1.3	6.9	1.5	1.8	0.3	2.1	50.3
282019	152	19.9	3.9	26.9	25.4	133	23	3.6	0.58	< 0.1	1	< 0.1	0.2	209	4.1	11.1	1.6	8.7	2.1	2.8	0.5	3.6	200
282020	118	17.1	0.2	25.0	20.0	196	12	0.8	0.24	< 0.1	1	< 0.1	< 0.1	167	4.2	11.5	1.6	8.5	1.9	2.5	0.4	3.1	132
282021	115	17.6	3.9	29.0	20.5	200	32	2.5	1.01	< 0.1	1	< 0.1	< 0.1	231	6.0	15.6	2.1	10.6	2.1	2.7	0.5	3.1	86.8
282022	116	19.0	4.4	26.3	18.5	178	77	2.1	0.39	< 0.1	2	< 0.1	< 0.1	187	6.6	16.9	2.2	10.7	2.2	2.5	0.4	2.9	121
282023	82.4	14.6	< 0.1	64.7	13.1	153	132	5.5	4.24	< 0.1	1	< 0.1	0.2	433	17.0	39.2	4.4	18.6	2.3	2.1	0.3	1.9	37.3
282024	71.8	15.6	< 0.1	74.9	14.7	198	158	6.4	2.86	< 0.1	2	< 0.1	< 0.1	487	19.3	44.7	5.0	21.0	2.3	2.3	0.3	2.1	50.1
282025	71.6	16.6	3.0	89.8	15.0	200	161	7.1	2.90	< 0.1	2	< 0.1	0.1	573	24.2	56.1	6.0	24.9	3.0	2.8	0.4	2.2	35.3
282026	72.7	16.0	0.5	77.3	13.9	189	145	5.4	2.83	< 0.1	2	< 0.1	< 0.1	549	23.8	53.3	5.9	24.4	2.6	2.6	0.3	2.0	37.6
282027	68.3	16.0	4.4	77.8	16.4	226	154	7.2	4.41	< 0.1	2	< 0.1	0.2	644	25.1	56.5	6.1	25.8	3.3	2.9	0.4	2.4	43.2

Analyte Symbol	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Method Code	TD-MS	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-ICP	TD-ICP
282018	< 0.1	0.2	1.3	0.2	0.2	1.8	< 0.001	0.45	16.2	23	0.7	0.4	0.428	0.030	2.43
282019	0.2	0.4	2.3	0.3	0.1	0.3	< 0.001	0.21	9.1	36	0.5	0.1	0.822	0.047	3.00
282020	0.1	0.3	1.9	0.2	< 0.1	< 0.1	< 0.001	0.19	5.1	33	0.4	0.3	0.603	0.039	1.48
282021	0.2	0.3	1.9	0.2	< 0.1	0.7	0.001	0.22	10.4	33	0.6	0.4	0.722	0.041	2.46
282022	0.1	0.3	2.0	0.3	< 0.1	1.9	< 0.001	0.20	6.8	33	0.8	0.3	0.681	0.047	2.59
282023	< 0.1	0.2	1.1	0.1	0.3	3.4	0.007	0.43	8.9	15	3.2	1.2	0.358	0.053	0.63
282024	< 0.1	0.2	1.4	0.2	0.3	2.9	< 0.001	0.47	6.6	14	3.9	1.1	0.323	0.054	0.45
282025	< 0.1	0.2	1.3	0.2	0.4	3.1	< 0.001	0.52	7.6	15	5.1	1.5	0.325	0.053	0.46
282026	0.1	0.2	1.2	0.2	0.2	2.4	0.002	0.47	6.6	15	5.2	1.6	0.306	0.052	0.32
282027	< 0.1	0.2	1.4	0.2	0.4	3.9	0.001	0.58	9.1	15	5.4	1.6	0.318	0.054	0.43

Analyte Symbol	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi	Se
Unit Symbol	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02	0.1
Method Code	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	TD-MS
GXR-1 Meas	8.1	0.05	0.20	2.07	0.04	0.86	2.6	79	11.7	772	22.3	0.5	3590	34.1		1.0		31.6	2.70	8.0	0.50	1460	16.9
GXR-1 Cert	8.20	0.0520	0.217	3.52	0.050	0.960	3.30	80.0	12.0	852	23.6	0.960	3900	41.0		1.22		31.0	3.00	8.20	0.690	1380	16.6
GXR-1 Meas																							
GXR-1 Cert																							
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas	10.5	0.40	1.35	5.35	2.91	0.92	0.1	80	36.7	137	2.66	1.2	120	33.8		2.2		3.04	2.31	13.0	1.10	19.1	5.8
GXR-4 Cert	11.1	0.564	1.66	7.20	4.01	1.01	0.860	87.0	64.0	155	3.09	6.30	110	42.0		1.90		4.00	2.80	14.6	1.63	19.0	5.60
GXR-4 Meas																							
GXR-4 Cert																							
SDC-1 Meas	33.4	1.52	1.01	8.06	1.96	1.01		56	51.8	854	4.85	1.0	10	32.4	2.9	3.2	1.0		3.62	18.5	1.10		
SDC-1 Cert	34.00	1.52	1.02	8.34	2.72	1.00		102.00	64.00	880.00	4.82	8.30	200.00	38.0	4.10	3.00	1.50		4.00	18.0	1.70		
GXR-6 Meas	35.7	0.09	0.54	> 10.0	1.14	0.19	< 0.1	165	52.7	951	4.57	2.8	80	19.4		1.1		0.11	3.62	12.4	0.50	0.19	0.7
GXR-6 Cert	32.0	0.104	0.609	17.7	1.87	0.180	1.00	186	96.0	1010	5.58	4.30	68.0	27.0		1.40		1.30	4.20	13.8	0.760	0.290	0.940
GXR-6 Meas																							
GXR-6 Cert																							
DNC-1a Meas	4.3							158	255					233						58.5	0.40		
DNC-1a Cert	5.2							148	270					247						57	0.59		
DNC-1a Meas																							
DNC-1a Cert																							
SBC-1 Meas																							
SBC-1 Cert																							
SBC-1 Meas																							
SBC-1 Cert																							
OREAS 45d (4-Acid) Meas	22.3	0.10	0.24	7.29	0.37	0.19		94	478	484	14.8	1.4		233	1.2	0.8	0.4		3.89	31.3	0.50	0.38	
OREAS 45d (4-Acid) Cert	21.5	0.101	0.245	8.150	0.412	0.185		235.0	549	490.000	14.5	3.830		231.0	1.38	0.79	0.46		3.910	29.50	0.57	0.31	
SdAR-M2 (U.S.G.S.) Meas	17.2						5.2	23	41.3			2.8	1160	43.5	2.4	7.1	0.8		1.60	12.6	1.00	1.04	
SdAR-M2 (U.S.G.S.) Cert	17.9						5.1	25.2	49.6			7.29	1440.00	48.8	3.58	6.6	1.21		1.82	12.4	1.44	1.05	
SdAR-M2 (U.S.G.S.) Meas																							
SdAR-M2 (U.S.G.S.) Cert																							
282027 Split Orig PREP DUP	36.9	2.68	1.89	8.99	2.23	1.69	< 0.1	127	136	544	4.23	3.0	50	76.6	1.4	1.4	0.5	0.06	2.85	23.2	0.80	0.95	0.4
282027 Split PREP DUP	38.0	2.91	1.90	9.39	2.30	1.62	< 0.1	132	140	564	4.21	3.0	20	77.2	1.4	1.6	0.5	< 0.05	3.04	23.5	0.80	0.99	0.5
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							

Analyte Symbol	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi	Se
Unit Symbol	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02	0.1
Method Code	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	TD-MS
Method Blank																							
Method Blank																							
Method Blank	< 0.5	< 0.01	< 0.01	0.03	< 0.01	0.01	< 0.1	2	6.6	8	0.01	< 0.1	30	< 0.5	< 0.1	< 0.1	< 0.1	0.09	< 0.05	< 0.1	< 0.05	0.04	< 0.1
Method Blank																							

Analyte Symbol	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu
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	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Method Code	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	TD-MS
GXR-1 Meas	731	8.4	458	2.6	26.1	274	26	0.8	18.8	0.7	30	25.2	9.5	705	7.0	14.9		9.2	2.3	3.6	0.6	4.1	1160
GXR-1 Cert	760	13.8	427	14.0	32.0	275	38.0	0.800	18.0	0.770	54.0	122	13.0	750	7.50	17.0		18.0	2.70	4.20	0.830	4.30	1110
GXR-1 Meas																							
GXR-1 Cert																							
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas	63.7	14.8	103	116	11.9	202	53	9.8	331	0.2	7	4.1	1.0	227	52.1	105		42.6	4.6	4.0	0.4	2.3	5880
GXR-4 Cert	73.0	20.0	98.0	160	14.0	221	186	10.0	310	0.270	5.60	4.80	0.970	1640	64.5	102		45.0	6.60	5.25	0.360	2.60	6520
GXR-4 Meas																							
GXR-4 Cert																							
SDC-1 Meas	94.3	19.8	< 0.1	88.6		160	46	2.9			< 1	< 0.1		564	34.4	83.9		39.2	5.1	5.2	0.8	4.9	29.3
SDC-1 Cert	103.00	21.00	0.220	127.00		180.00	290.00	21.00			3.00	0.54		630	42.00	93.00		40.00	8.20	7.00	1.20	6.70	30.000
GXR-6 Meas	105	24.6	305	60.4	10.4	40.9	108	3.0	1.74	< 0.1	1	1.4	< 0.1	1280	10.8	31.2		12.2	1.8	1.8	0.3	1.8	61.8
GXR-6 Cert	118	35.0	330	90.0	14.0	35.0	110	7.50	2.40	0.260	1.70	3.60	0.0180	1300	13.9	36.0		13.0	2.67	2.97	0.415	2.80	66.0
GXR-6 Meas																							
GXR-6 Cert																							
DNC-1a Meas	60.2	12.1		2.9	14.9	128	42	1.7				0.3		90	3.1			4.6					91.7
DNC-1a Cert	70	15		5	18.0	144	38.0	3				0.96		118	3.6			5.20					100
DNC-1a Meas																							
DNC-1a Cert																							
SBC-1 Meas																							
SBC-1 Cert																							
SBC-1 Meas																							
SBC-1 Cert																							
OREAS 45d (4-Acid) Meas	40.8	19.8	5.8	39.6	11.1	30.2	62	1.3	0.50	< 0.1	1	< 0.1		184	15.9	37.2	3.8	15.9	2.3	2.3	0.3	2.1	369
OREAS 45d (4-Acid) Cert	45.7	21.20	13.8	42.1	9.53	31.30	141	14.50	2.500	0.096	2.78	0.82		183.0	16.9	37.20	3.70	13.4	2.80	2.42	0.400	2.26	371
SdAR-M2 (U.S.G.S.) Meas	714	14.4		82.9	22.1	136	121	13.1	13.0					882	39.3	89.8	9.2	37.6	4.9	4.5	0.6	3.9	229
SdAR-M2 (U.S.G.S.) Cert	760	17.6		149	32.7	144	259	26.2	13.3					990	46.6	98.8	11.0	39.4	7.18	6.28	0.97	5.88	236.00 00
SdAR-M2 (U.S.G.S.) Meas																							
SdAR-M2 (U.S.G.S.) Cert																							
282027 Split Orig PREP DUP	68.3	16.0	4.4	77.8	16.4	226	154	7.2	4.41	< 0.1	2	< 0.1	0.2	644	25.1	56.5	6.1	25.8	3.3	2.9	0.4	2.4	43.2
282027 Split PREP DUP	72.9	17.2	4.3	79.3	16.7	247	160	7.4	3.95	< 0.1	2	< 0.1	0.2	664	25.9	58.5	6.4	27.0	3.1	3.0	0.4	2.4	45.1
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							

Analyte Symbol	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu
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	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Method Code	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	TD-MS
Method Blank																							
Method Blank																							
Method Blank	< 0.2	0.3	< 0.1	0.2	< 0.1	0.3	< 1	0.1	0.17	< 0.1	< 1	< 0.1	< 0.1	< 1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.6
Method Blank																							

Analyte Symbol	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Method Code	TD-MS	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-ICP	TD-ICP
GXR-1 Meas		0.4	2.2	0.3	< 0.1	126		0.40	765	2	2.4	29.6	0.0274	0.058	0.24
GXR-1 Cert		0.430	1.90	0.280	0.175	164		0.390	730	1.58	2.44	34.9	0.036	0.0650	0.257
GXR-1 Meas										2			0.0275	0.059	0.25
GXR-1 Cert										1.58			0.036	0.0650	0.257
DH-1a Meas											> 500	2030			
DH-1a Cert											910	2629			
GXR-4 Meas		0.2	1.0	0.1	0.6	32.6		3.40	49.7	8	17.7	5.0	0.290	0.130	1.78
GXR-4 Cert		0.210	1.60	0.170	0.790	30.8		3.20	52.0	7.70	22.5	6.20	0.29	0.120	1.77
GXR-4 Meas										8			0.285	0.132	1.81
GXR-4 Cert										7.70			0.29	0.120	1.77
SDC-1 Meas		0.4	3.0		0.1	< 0.1		0.60	23.3	17	11.1	2.4	0.0972	0.053	
SDC-1 Cert		0.65	4.00		1.20	0.80		0.70	25.00	17.00	12.00	3.10	0.606	0.0690	
GXR-6 Meas			1.6	0.2	0.2	0.7		2.24	97.3	26	4.7	1.2		0.036	0.02
GXR-6 Cert			2.40	0.330	0.485	1.90		2.20	101	27.6	5.30	1.54		0.0350	0.0160
GXR-6 Meas										25				0.036	0.02
GXR-6 Cert										27.6				0.0350	0.0160
DNC-1a Meas			1.7						5.9	31			0.278		
DNC-1a Cert			2.0						6.3	31			0.29		
DNC-1a Meas										32			0.291		
DNC-1a Cert										31			0.29		
SBC-1 Meas										21			0.487		
SBC-1 Cert										20.0			0.51		
SBC-1 Meas										21			0.529		
SBC-1 Cert										20.0			0.51		
OREAS 45d (4-Acid) Meas			1.5	0.2	< 0.1	0.1		0.27	21.9	55	13.8	2.6	0.169	0.033	0.04
OREAS 45d (4-Acid) Cert			1.33	0.18	1.02	1.62		0.27	21.8	49.30	14.5	2.63	0.773	0.042	0.049
SdAR-M2 (U.S.G.S.) Meas		0.4	2.6	0.3	0.7	1.1			761	5	12.0	2.1			
SdAR-M2 (U.S.G.S.) Cert		0.54	3.63	0.54	1.8	2.8			808	4.1	14.2	2.53			
SdAR-M2 (U.S.G.S.) Meas										5					
SdAR-M2 (U.S.G.S.) Cert										4.1					
282027 Split Orig PREP DUP	< 0.1	0.2	1.4	0.2	0.4	3.9	0.001	0.58	9.1	15	5.4	1.6	0.318	0.054	0.43
282027 Split PREP DUP	< 0.1	0.2	1.4	0.2	0.5	4.2	0.001	0.60	9.2	15	5.7	1.6	0.332	0.056	0.44
Method Blank										< 1			0.0124	< 0.001	< 0.01
Method Blank										< 1			0.0117	< 0.001	< 0.01
Method Blank										< 1			0.0008	< 0.001	< 0.01
Method Blank										< 1			0.0006	< 0.001	< 0.01

Analyte Symbol	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Method Code	TD-MS	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-ICP	TD-ICP
Method Blank										< 1			0.0208	< 0.001	< 0.01
Method Blank										< 1			0.0010	< 0.001	< 0.01
Method Blank	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.5	< 1	0.1	< 0.1	0.0010	< 0.001	< 0.01
Method Blank										< 1			0.0006	< 0.001	< 0.01



**Date Submitted:** 03-Feb-17  
**Invoice No.:** A17-01036  
**Invoice Date:** 14-Feb-17  
**Your Reference:** Mishi 243

**Trelawney Mining and Exploration**  
**3 Mesomikenda Lake Road**  
**PO Box 100**  
**Gogama ON P0M 1W0**  
**Canada**

**ATTN: Alan Smith**

## CERTIFICATE OF ANALYSIS

199 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-50-(ppm)Timmins Au - Fire Assay AA

**REPORT A17-01036**

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Notes:

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

CERTIFIED BY:

A handwritten signature in black ink, consisting of a stylized 'E' followed by a series of loops and a horizontal stroke at the end.

Emmanuel Esemé , Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**  
1752 Riverside Drive, Timmins, Ontario, Canada, P4R 1N1  
TELEPHONE +705 264-0123 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL Timmins@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
282001	< 0.005
282002	0.005
282003	< 0.005
282004	0.006
282005	< 0.005
282006	< 0.005
282007	< 0.005
282008	< 0.005
282009	0.009
282010	< 0.005
282011	< 0.005
282012	< 0.005
282013	< 0.005
282014	0.005
282015	0.011
282016	0.005
282017	0.552
282028	< 0.005
282029	0.006
282030	< 0.005
282031	0.006
282032	0.006
282033	< 0.005
282034	< 0.005
282035	0.005
282036	< 0.005
282037	0.006
282038	< 0.005
282039	2.198
282040	< 0.005
282041	< 0.005
282042	0.006
282043	< 0.005
282044	0.005
282045	0.005
282046	< 0.005
282047	< 0.005
282048	< 0.005
282049	< 0.005
282050	0.007
282051	< 0.005
282052	< 0.005

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
282053	< 0.005
282054	< 0.005
282055	< 0.005
282056	< 0.005
282057	< 0.005
282058	< 0.005
282059	< 0.005
282060	< 0.005
282061	< 0.005
282062	< 0.005
282063	< 0.005
282064	< 0.005
282240	< 0.005
282241	< 0.005
282242	0.016
282243	< 0.005
282244	< 0.005
282245	< 0.005
282246	< 0.005
282247	< 0.005
282248	< 0.005
282249	< 0.005
282250	< 0.005
282251	< 0.005
282252	< 0.005
282253	< 0.005
282254	< 0.005
282255	< 0.005
282256	< 0.005
282257	< 0.005
282258	< 0.005
282259	< 0.005
282260	0.249
282261	< 0.005
282262	0.005
282263	< 0.005
282264	< 0.005
282265	< 0.005
282266	< 0.005
282267	0.006
282268	0.009
282269	< 0.005

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
282270	0.010
282271	0.010
282272	< 0.005
282273	< 0.005
282274	< 0.005
282275	0.007
282276	< 0.005
282277	< 0.005
282278	< 0.005
282279	0.009
282280	0.007
282281	0.006
282282	0.006
282283	< 0.005
282284	1.589
282285	0.006
282286	< 0.005
282287	0.007
282288	0.006
282289	0.006
282290	0.005
282291	< 0.005
282292	0.008
282293	0.008
282294	< 0.005
282295	0.006
282296	< 0.005
282297	0.005
282298	0.009
282299	0.008
282300	0.009
282301	< 0.005
282302	< 0.005
282303	< 0.005
282304	< 0.005
282305	0.005
282306	0.007
282307	0.007
282308	0.006
282309	0.006
282310	0.008
282311	0.006

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
282312	0.555
282313	0.009
282314	< 0.005
282315	< 0.005
282316	0.005
282317	< 0.005
282318	< 0.005
282319	< 0.005
282320	< 0.005
282321	< 0.005
282322	< 0.005
282323	< 0.005
282324	< 0.005
282325	0.006
282326	0.005
282327	0.005
282328	0.007
282329	0.005
282330	< 0.005
282331	< 0.005
282332	< 0.005
282333	< 0.005
282334	0.006
282335	0.006
282336	2.119
282337	0.006
282338	0.005
282339	0.005
282340	0.005
282341	0.006
282342	0.006
282343	0.012
282344	0.005
282345	< 0.005
282346	< 0.005
282347	0.005
282348	< 0.005
282349	< 0.005
282350	< 0.005
282351	0.022
282352	0.005
282353	< 0.005

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
282354	0.005
282355	0.009
282356	< 0.005
282357	< 0.005
282358	< 0.005
282359	< 0.005
282360	0.235
282361	0.006
282362	< 0.005
282363	< 0.005
282364	0.005
282365	< 0.005
282366	< 0.005
282367	0.009
282368	0.005
282369	0.005
282370	< 0.005
282371	0.005
282372	< 0.005
282373	< 0.005
282374	< 0.005
282375	< 0.005
282376	< 0.005
282377	< 0.005
282378	< 0.005
282379	0.005
282380	< 0.005
282381	< 0.005
282382	< 0.005
282383	0.005
282384	1.544

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
OREAS203 Meas	0.861
OREAS203 Cert	0.871
OREAS203 Meas	0.865
OREAS203 Cert	0.871
OREAS203 Meas	0.826
OREAS203 Cert	0.871
OREAS203 Meas	0.850
OREAS203 Cert	0.871
OREAS203 Meas	0.878
OREAS203 Cert	0.871
OREAS203 Meas	0.862
OREAS203 Cert	0.871
OREAS 251 Meas	0.500
OREAS 251 Cert	0.50
OREAS 251 Meas	0.503
OREAS 251 Cert	0.50
OREAS 251 Meas	0.479
OREAS 251 Cert	0.50
OREAS 251 Meas	0.508
OREAS 251 Cert	0.50
OREAS 251 Meas	0.497
OREAS 251 Cert	0.50
OREAS 251 Meas	0.493
OREAS 251 Cert	0.50
282010 Orig	< 0.005
282010 Dup	< 0.005
282030 Orig	< 0.005
282030 Dup	< 0.005
282040 Orig	< 0.005
282040 Dup	< 0.005
282055 Orig	< 0.005
282055 Dup	< 0.005
282060 Split Orig PREP DUP	< 0.005
282060 Split PREP DUP	< 0.005
282240 Orig	< 0.005
282240 Dup	< 0.005
282250 Orig	< 0.005
282250 Dup	< 0.005
282264 Orig	< 0.005
282264 Dup	< 0.005
282274 Orig	< 0.005

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
282274 Dup	< 0.005
282285 Split Orig PREP DUP	0.006
282285 Split PREP DUP	0.005
282285 Orig	0.006
282285 Dup	0.006
282298 Orig	0.009
282298 Dup	0.008
282308 Orig	0.006
282308 Dup	0.006
282318 Orig	< 0.005
282318 Dup	< 0.005
282333 Orig	0.006
282333 Dup	< 0.005
282335 Split Orig PREP DUP	0.006
282335 Split PREP DUP	0.006
282343 Orig	0.007
282343 Dup	0.016
282353 Orig	< 0.005
282353 Dup	< 0.005
282368 Orig	0.005
282368 Dup	0.005
282378 Orig	0.005
282378 Dup	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005



**Date Submitted:** 30-Nov-16  
**Invoice No.:** A16-12888-Au Rev  
**Invoice Date:** 09-Dec-16  
**Your Reference:** Mishi 243

**Trelawney Mining and Exploration**  
**3 Mesomikenda Lake Road**  
**PO Box 100**  
**Gogama ON P0M 1W0**  
**Canada**

**ATTN: Alan Smith**

## CERTIFICATE OF ANALYSIS

85 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-50-Timmins Au - Fire Assay AA

**REPORT A16-12888-Au Rev**

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Notes:

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

CERTIFIED BY:

A handwritten signature in black ink, consisting of a stylized 'E' followed by a series of loops and a horizontal line.

Emmanuel Esemé , Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**  
1752 Riverside Drive, Timmins, Ontario, Canada, P4R 1N1  
TELEPHONE +705 264-0123 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL Timmins@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
282066	< 0.005
282067	< 0.005
282068	< 0.005
282069	< 0.005
282070	< 0.005
282071	< 0.005
282072	< 0.005
282073	< 0.005
282074	< 0.005
282075	< 0.005
282076	< 0.005
282077	< 0.005
282078	0.006
282079	< 0.005
282080	< 0.005
282081	< 0.005
282082	< 0.005
282083	0.005
282084	< 0.005
282085	< 0.005
282086	< 0.005
282087	< 0.005
282088	< 0.005
282089	0.255
282090	< 0.005
282091	< 0.005
282092	< 0.005
282093	< 0.005
282094	< 0.005
282095	< 0.005
282096	< 0.005
282097	< 0.005
282098	< 0.005
282099	0.007
282100	< 0.005
282101	< 0.005
282102	< 0.005
282103	0.006
282104	< 0.005
282105	< 0.005
282106	< 0.005
282107	< 0.005

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
282108	< 0.005
282109	0.016
282110	0.018
282111	0.008
282112	0.655
282113	0.005
282114	0.005
282115	0.007
282116	< 0.005
282117	0.005
282118	0.010
282119	0.005
282120	0.005
282121	< 0.005
282122	0.009
282123	< 0.005
282124	< 0.005
282125	0.009
282126	0.007
282127	0.006
282128	0.005
282129	0.012
282130	0.005
282131	0.014
282132	< 0.005
282133	< 0.005
282134	0.006
282135	< 0.005
282136	2.180
282137	< 0.005
282138	< 0.005
282139	< 0.005
282140	< 0.005
282141	< 0.005
282142	< 0.005
282143	< 0.005
282144	< 0.005
282145	< 0.005
282146	< 0.005
282147	< 0.005
282148	< 0.005
282149	0.013

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
282150	0.009

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
OREAS203 Meas	0.866
OREAS203 Cert	0.871
OREAS203 Meas	0.928
OREAS203 Cert	0.871
OREAS203 Meas	0.903
OREAS203 Cert	0.871
OREAS203 Meas	0.915
OREAS203 Cert	0.871
OREAS 251 Meas	0.496
OREAS 251 Cert	0.50
OREAS 251 Meas	0.514
OREAS 251 Cert	0.50
OREAS 251 Meas	0.517
OREAS 251 Cert	0.50
OREAS 251 Meas	0.517
OREAS 251 Cert	0.50
282075 Orig	< 0.005
282075 Dup	< 0.005
282085 Orig	< 0.005
282085 Dup	< 0.005
282095 Split Orig	< 0.005
PREP DUP	
282095 Split	< 0.005
PREP DUP	
282095 Orig	< 0.005
282095 Dup	< 0.005
282110 Orig	0.019
282110 Dup	0.016
282120 Orig	0.005
282120 Dup	0.005
282130 Orig	0.006
282130 Dup	0.005
282145 Orig	< 0.005
282145 Dup	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005

**Quality Analysis ...**



**Innovative Technologies**

**Date Submitted:** 30-Nov-16  
**Invoice No.:** A16-12888-TD  
**Invoice Date:** 29-Dec-16  
**Your Reference:** Mishi 243

**Trelawney Mining and Exploration  
3 Mesomikenda Lake Road  
PO Box 100  
Gogama ON P0M 1W0  
Canada**

**ATTN: Alan Smith**

## **CERTIFICATE OF ANALYSIS**

85 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-50-Timmins Au - Fire Assay AA

**REPORT A16-12888-TD**

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Notes:

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

CERTIFIED BY:

A handwritten signature in black ink, appearing to be "Emmanuel Esemé".

Emmanuel Esemé, Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**  
1752 Riverside Drive, Timmins, Ontario, Canada, P4R 1N1  
TELEPHONE +705 264-0123 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL Timmins@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

**Date Submitted:** 30-Nov-16  
**Invoice No.:** A16-12888-TD  
**Invoice Date:** 29-Dec-16  
**Your Reference:** Mishi 243

**Trelawney Mining and Exploration  
3 Mesomikenda Lake Road  
PO Box 100  
Gogama ON P0M 1W0  
Canada**

**ATTN: Alan Smith**

## **CERTIFICATE OF ANALYSIS**

85 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code UT-6 Total Digestion ICP & ICP/MS

**REPORT A16-12888-TD**

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Notes:

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

CERTIFIED BY:



Emmanuel Esemé, Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**  
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5  
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

## Results

## Activation Laboratories Ltd.

## Report: A16-12888

Analyte Symbol	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi	Se
Unit Symbol	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02	0.1
Method Code	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	TD-MS
282066	46.1	0.40	8.27	5.59	0.35	12.3	< 0.1	126	466	1470	5.99	1.5	30	788	1.0	0.8	0.3	< 0.05	1.55	56.7	0.60	0.07	< 0.1
282067	8.2	0.01	1.28	0.76	0.02	1.02	< 0.1	20	146	241	1.68	0.2	10	92.8	0.1	< 0.1	< 0.1	< 0.05	0.22	7.8	0.10	0.03	< 0.1
282068	34.1	< 0.01	6.65	4.26	0.02	9.47	< 0.1	115	460	1130	6.00	1.4	< 10	552	0.9	0.8	0.3	< 0.05	0.88	51.7	0.60	0.06	< 0.1
282069	27.2	> 3.00	3.80	8.80	1.52	1.24	< 0.1	101	222	375	4.55	2.3	< 10	171	1.0	1.0	0.3	< 0.05	0.80	31.3	0.90	0.29	0.4
282070	5.3	> 3.00	0.60	7.21	1.50	2.13	< 0.1	24	29.5	184	1.15	1.4	20	23.0	0.2	0.7	0.1	< 0.05	0.32	4.5	0.20	0.02	0.1
282071	13.8	> 3.00	1.66	9.53	1.70	1.09	< 0.1	62	106	238	2.53	2.1	< 10	70.9	0.4	1.4	0.2	< 0.05	0.74	16.5	0.40	0.05	0.2
282072	5.9	> 3.00	0.46	8.94	0.82	1.46	< 0.1	24	19.6	140	1.11	1.5	< 10	14.0	0.2	1.2	0.1	< 0.05	0.45	5.6	0.20	0.06	0.1
282073	7.7	> 3.00	0.54	9.91	1.36	1.74	< 0.1	28	19.0	165	1.30	1.7	50	14.4	0.2	1.1	0.1	< 0.05	0.92	6.4	0.20	0.08	< 0.1
282074	18.8	> 3.00	1.78	9.82	1.13	1.54	< 0.1	106	130	461	4.14	2.8	30	80.3	1.0	1.3	0.3	< 0.05	0.76	24.9	0.80	0.14	0.2
282075	27.4	> 3.00	2.86	9.08	0.90	1.92	< 0.1	114	205	557	4.59	2.7	20	141	1.1	1.1	0.4	< 0.05	0.68	30.5	0.80	0.23	0.4
282076	19.6	> 3.00	2.06	> 10.0	1.93	5.12	< 0.1	164	26.7	1140	7.06	2.8	10	14.2	3.7	2.9	1.3	< 0.05	1.35	25.0	1.60	0.05	0.4
282077	17.8	> 3.00	1.88	9.74	1.03	2.15	< 0.1	111	155	461	3.86	2.8	10	79.8	1.2	1.2	0.4	< 0.05	0.61	27.6	0.80	0.27	0.4
282078	17.0	> 3.00	1.96	9.19	0.72	1.50	< 0.1	107	157	419	4.08	2.8	< 10	88.3	1.2	0.9	0.4	< 0.05	0.38	31.3	0.85	0.34	0.5
282079	6.5	> 3.00	0.39	7.19	1.09	1.45	< 0.1	17	21.1	156	0.97	0.8	< 10	17.6	0.1	0.7	< 0.1	< 0.05	0.54	2.7	0.10	0.02	< 0.1
282080	8.2	> 3.00	0.34	8.50	1.21	1.49	< 0.1	17	24.5	137	0.69	1.1	50	11.9	0.1	0.9	< 0.1	0.07	0.67	2.2	0.10	0.03	< 0.1
282081	21.0	> 3.00	2.20	8.27	1.11	2.32	< 0.1	38	138	305	2.04	1.5	20	136	0.3	0.8	0.1	< 0.05	0.71	13.8	0.20	0.04	0.1
282082	22.4	> 3.00	1.88	7.78	1.41	3.48	< 0.1	162	66.1	786	4.68	1.3	20	43.3	1.1	0.7	0.4	< 0.05	1.01	28.7	0.40	0.11	0.4
282083	28.7	1.27	2.40	6.77	1.72	3.20	< 0.1	249	56.9	901	7.57	1.5	10	35.8	1.8	0.8	0.6	< 0.05	1.56	59.5	0.60	0.43	0.6
282084	13.9	> 3.00	1.14	9.55	1.14	1.98	< 0.1	46	44.8	270	1.71	1.5	20	46.4	0.3	1.0	0.1	< 0.05	0.89	9.6	0.20	0.43	0.1
282085	28.4	> 3.00	2.41	8.93	0.77	3.89	< 0.1	240	47.3	1000	6.45	1.4	< 10	40.8	1.6	0.8	0.5	< 0.05	0.78	40.9	0.50	0.47	0.6
282086	22.6	> 3.00	2.13	7.94	0.67	5.06	< 0.1	216	28.4	1080	6.05	1.2	< 10	29.8	1.4	1.2	0.4	< 0.05	0.47	38.7	0.50	0.21	0.7
282087	22.3	> 3.00	3.49	8.40	0.85	5.32	< 0.1	217	21.3	1140	6.44	0.9	< 10	37.0	1.5	0.8	0.5	0.12	0.48	42.2	0.50	0.21	0.3
282088	26.3	1.93	3.72	7.31	1.01	6.28	< 0.1	252	24.4	1660	8.46	0.6	40	47.4	1.7	0.7	0.5	0.20	0.39	50.9	0.60	0.23	0.5
282089	28.6	2.48	1.77	8.91	2.69	2.82	< 0.1	142	91.8	594	5.01	2.5	50	41.0	2.1	3.1	0.7	0.46	11.2	18.0	1.00	1.53	2.9
282090	6.9	> 3.00	2.51	7.42	1.12	6.74	< 0.1	216	31.1	1430	10.4	0.7	20	30.0	2.2	1.4	0.7	0.09	0.34	54.7	0.70	0.21	0.3
282091	10.0	> 3.00	3.11	7.02	0.95	7.17	< 0.1	179	39.0	1710	9.55	0.2	10	43.3	2.1	1.2	0.7	0.06	0.43	60.3	0.90	0.18	0.3
282092	15.3	> 3.00	3.38	7.62	0.98	4.71	< 0.1	204	68.9	1560	10.9	0.4	< 10	39.1	2.4	1.2	0.8	0.06	0.55	60.0	0.90	0.20	0.3
282093	12.2	2.84	2.86	7.37	0.94	6.15	< 0.1	196	30.9	1750	11.6	0.4	< 10	36.8	2.5	1.1	0.8	< 0.05	0.41	54.9	0.90	0.13	0.3
282094	17.2	2.09	3.35	6.76	0.72	6.11	< 0.1	240	35.8	1980	14.2	0.3	10	38.3	2.9	0.9	1.0	< 0.05	0.33	62.9	1.00	0.15	0.5
282095	14.4	> 3.00	2.91	7.47	1.01	6.25	< 0.1	196	36.5	1750	12.1	0.4	50	39.0	2.5	1.2	0.8	0.22	0.43	56.3	1.00	0.19	0.5
282096	13.2	> 3.00	2.71	7.43	1.48	5.38	< 0.1	185	24.4	1190	6.26	1.3	30	34.6	1.2	1.2	0.4	< 0.05	0.57	35.6	0.60	0.16	0.3
282097	19.8	> 3.00	3.31	7.56	0.83	5.55	< 0.1	223	22.8	1400	7.23	0.9	< 10	42.4	1.6	0.9	0.5	0.06	0.43	48.2	0.50	0.51	0.2
282098	21.7	> 3.00	2.93	7.68	1.09	4.56	< 0.1	195	33.0	1190	7.28	0.9	20	36.3	1.5	1.0	0.5	< 0.05	0.48	40.0	0.50	0.29	0.4
282099	16.0	> 3.00	2.51	5.79	0.76	5.61	< 0.1	232	45.8	1180	6.85	1.0	20	35.8	1.4	1.1	0.4	< 0.05	0.41	40.1	0.40	0.30	0.4
282100	21.7	2.87	3.30	7.14	0.60	5.84	< 0.1	179	47.7	1620	9.33	0.3	< 10	44.1	2.3	0.9	0.8	< 0.05	0.41	56.9	0.80	0.18	0.4

## Results

## Activation Laboratories Ltd.

## Report: A16-12888

Analyte Symbol	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu
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	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Method Code	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	TD-MS
282066	131	14.9	< 0.1	8.2	10.9	193	75	2.6	0.97	< 0.1	1	< 0.1	0.2	46	3.1	8.9	1.4	8.0	1.6	1.8	0.3	1.7	5.1
282067	24.9	2.8	< 0.1	0.7	1.3	19.7	10	0.5	0.71	< 0.1	< 1	< 0.1	< 0.1	4	0.5	1.3	0.2	1.0	0.2	0.2	< 0.1	0.2	2.7
282068	122	13.8	1.0	2.1	10.6	173	70	2.9	0.37	< 0.1	1	< 0.1	< 0.1	2	7.0	18.4	2.4	11.6	1.8	2.0	0.3	1.6	5.6
282069	95.0	17.5	2.8	24.9	11.3	150	125	5.0	0.90	< 0.1	1	< 0.1	< 0.1	371	36.6	78.4	8.4	34.9	3.4	2.7	0.3	1.8	15.9
282070	18.0	9.0	< 0.1	26.1	3.1	225	75	2.1	0.62	< 0.1	< 1	0.1	< 0.1	342	4.3	10.7	1.3	5.3	0.7	0.6	0.1	0.5	26.8
282071	59.0	15.1	< 0.1	36.9	5.4	278	115	3.8	0.92	< 0.1	1	< 0.1	< 0.1	582	11.6	27.5	2.8	11.8	1.5	1.3	0.2	0.9	10.7
282072	22.1	13.0	< 0.1	20.2	2.5	304	86	2.2	0.63	< 0.1	< 1	< 0.1	< 0.1	280	3.9	8.9	1.0	4.0	0.5	0.5	0.1	0.4	48.2
282073	27.5	15.0	< 0.1	39.0	2.6	299	93	2.1	1.18	< 0.1	< 1	< 0.1	0.2	377	4.3	9.4	1.0	4.3	0.6	0.5	0.1	0.4	13.1
282074	111	18.0	7.5	30.4	12.0	221	143	5.2	1.91	< 0.1	1	< 0.1	0.1	293	23.0	51.5	5.6	23.8	2.7	2.4	0.3	1.8	52.7
282075	126	17.3	2.3	23.5	13.6	203	146	6.1	1.80	< 0.1	1	< 0.1	< 0.1	205	22.0	49.0	5.3	22.9	2.7	2.5	0.3	2.0	43.3
282076	107	23.0	< 0.1	104	44.4	607	161	12.6	1.97	< 0.1	3	< 0.1	< 0.1	678	32.6	83.8	10.7	49.0	7.8	7.7	1.1	6.8	27.3
282077	90.5	17.2	1.2	26.4	13.8	240	148	6.1	1.62	< 0.1	2	< 0.1	0.1	259	12.0	27.6	3.1	14.0	2.2	2.4	0.3	2.1	46.7
282078	88.9	16.3	< 0.1	16.3	13.8	194	147	6.1	2.50	< 0.1	2	< 0.1	0.1	171	22.0	49.8	5.4	22.9	2.7	2.5	0.3	2.1	46.6
282079	14.7	8.2	< 0.1	27.3	1.9	228	37	0.9	0.79	< 0.1	< 1	< 0.1	< 0.1	304	1.7	3.8	0.4	1.9	0.2	0.3	< 0.1	0.2	14.5
282080	7.0	9.9	< 0.1	34.7	1.7	230	55	1.1	0.74	< 0.1	< 1	< 0.1	0.1	392	0.4	1.0	0.1	0.7	0.2	0.2	< 0.1	0.2	165
282081	54.6	12.8	< 0.1	29.5	3.8	198	76	2.2	0.65	< 0.1	< 1	< 0.1	< 0.1	334	2.3	5.8	0.7	3.4	0.5	0.6	0.1	0.5	43.1
282082	88.4	15.0	2.6	38.0	12.1	207	69	1.6	0.48	< 0.1	1	< 0.1	< 0.1	442	3.8	9.4	1.2	6.3	1.3	1.6	0.3	1.8	414
282083	139	16.2	10.3	49.3	18.3	86.8	79	1.0	0.92	< 0.1	2	< 0.1	< 0.1	488	6.5	16.0	2.0	10.1	1.8	2.4	0.4	2.7	328
282084	33.2	12.5	< 0.1	31.9	3.5	263	71	1.7	0.47	< 0.1	1	< 0.1	< 0.1	329	3.0	6.8	0.8	3.7	0.5	0.5	0.1	0.5	88.4
282085	96.1	18.0	7.1	22.8	15.6	142	61	3.7	1.17	< 0.1	1	< 0.1	< 0.1	243	6.9	15.7	2.0	9.6	1.5	1.9	0.3	2.3	124
282086	103	15.4	10.9	17.8	14.1	164	54	3.5	3.00	< 0.1	1	< 0.1	0.1	235	4.9	12.4	1.7	8.0	1.5	1.9	0.3	2.1	147
282087	89.6	14.1	6.9	19.8	15.4	250	41	3.3	1.52	< 0.1	1	< 0.1	0.1	239	7.8	18.8	2.3	10.4	1.5	1.7	0.3	2.0	89.5
282088	126	15.0	4.1	20.8	17.7	279	38	3.3	1.66	< 0.1	1	< 0.1	0.2	190	8.4	20.3	2.5	11.7	1.7	2.1	0.3	2.4	747
282089	91.1	16.2	22.1	154	25.0	323	208	15.8	92.4	0.2	6	0.5	0.1	989	31.5	68.7	7.4	30.5	4.0	4.0	0.6	3.6	2640
282090	95.0	17.9	< 0.1	23.9	23.3	179	31	0.3	0.33	< 0.1	1	< 0.1	< 0.1	190	5.8	14.9	2.1	10.6	2.2	3.0	0.5	3.5	72.7
282091	112	18.7	< 0.1	21.1	23.0	199	32	0.3	0.17	< 0.1	1	< 0.1	< 0.1	185	5.7	14.4	2.0	11.2	2.3	3.0	0.5	3.4	814
282092	131	21.7	< 0.1	23.0	26.0	167	15	0.2	0.14	< 0.1	1	< 0.1	< 0.1	172	5.3	14.7	2.1	11.4	2.6	3.3	0.6	3.8	96.0
282093	124	20.5	< 0.1	20.9	26.5	231	15	0.2	0.21	< 0.1	1	< 0.1	< 0.1	171	6.2	16.6	2.4	12.3	2.7	3.4	0.6	4.0	115
282094	136	19.5	0.2	16.3	30.7	193	25	0.2	0.24	0.1	1	< 0.1	< 0.1	125	6.1	16.8	2.5	13.1	2.8	4.0	0.7	4.6	978
282095	120	20.6	0.3	23.1	25.8	173	15	0.3	0.29	< 0.1	1	< 0.1	0.1	175	7.9	20.1	2.7	13.9	2.9	3.6	0.6	4.0	133
282096	83.1	15.2	< 0.1	33.1	13.3	158	64	3.3	0.38	< 0.1	1	< 0.1	< 0.1	262	10.3	24.2	2.9	12.9	1.7	1.6	0.2	1.7	150
282097	95.1	14.3	1.1	18.0	16.5	132	35	2.9	1.27	< 0.1	1	< 0.1	< 0.1	143	7.2	18.0	2.2	10.0	1.7	1.8	0.3	2.2	134
282098	100	15.7	1.4	26.5	16.9	161	43	2.0	0.43	< 0.1	1	< 0.1	< 0.1	243	6.0	14.4	1.9	8.6	1.5	1.9	0.3	2.2	79.7
282099	87.0	16.4	2.4	13.4	14.7	130	49	3.6	0.33	< 0.1	1	< 0.1	< 0.1	183	4.2	10.7	1.4	6.7	1.3	1.6	0.3	2.0	57.0
282100	117	18.1	< 0.1	14.4	24.4	209	8	0.3	0.09	< 0.1	1	< 0.1	< 0.1	162	6.6	17.1	2.3	11.8	2.4	3.0	0.5	3.5	165

Analyte Symbol	Ge	Tm	Yb	Lu	Ta	W	Re	Ti	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Method Code	TD-MS	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-ICP	TD-ICP
282066	< 0.1	0.1	1.0	0.1	0.1	1.5	< 0.001	0.07	2.3	19	1.4	0.4	0.268	0.067	0.02
282067	0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	< 0.001	< 0.05	< 0.5	3	0.2	0.1	0.0561	0.008	< 0.01
282068	0.5	0.1	1.0	0.1	0.1	1.9	< 0.001	< 0.05	2.0	18	1.3	0.4	0.314	0.074	0.04
282069	< 0.1	0.2	1.1	0.1	0.3	2.3	< 0.001	0.15	9.8	15	4.1	1.2	0.291	0.057	0.61
282070	0.1	< 0.1	0.2	< 0.1	< 0.1	3.1	< 0.001	0.13	4.0	3	1.2	0.4	0.108	0.023	0.02
282071	< 0.1	0.1	0.5	0.1	0.2	1.4	< 0.001	0.19	4.5	7	2.3	0.7	0.200	0.046	0.11
282072	< 0.1	< 0.1	0.2	< 0.1	0.1	1.0	< 0.001	0.09	4.8	3	1.0	0.4	0.109	0.026	0.07
282073	< 0.1	< 0.1	0.2	< 0.1	< 0.1	0.7	< 0.001	0.16	4.0	3	1.1	0.4	0.120	0.021	0.08
282074	0.1	0.2	1.1	0.1	0.2	0.6	< 0.001	0.14	4.5	15	4.7	1.4	0.325	0.057	0.31
282075	< 0.1	0.2	1.1	0.1	0.3	0.9	< 0.001	0.11	3.9	15	4.8	1.5	0.324	0.057	0.39
282076	0.2	0.5	3.6	0.5	0.3	< 0.1	0.003	0.45	12.5	21	3.5	1.2	0.670	0.163	0.14
282077	< 0.1	0.2	1.2	0.2	0.3	0.6	< 0.001	0.13	4.3	15	5.0	1.5	0.328	0.057	0.48
282078	< 0.1	0.2	1.3	0.2	0.4	0.5	0.001	0.09	4.8	15	5.4	1.7	0.336	0.058	0.72
282079	0.1	< 0.1	0.1	< 0.1	< 0.1	0.3	< 0.001	0.12	3.0	3	0.1	0.1	0.0609	0.013	< 0.01
282080	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.6	< 0.001	0.16	3.6	2	0.1	0.1	0.0705	0.014	0.02
282081	< 0.1	< 0.1	0.3	< 0.1	< 0.1	0.4	< 0.001	0.14	2.7	5	0.5	0.3	0.137	0.030	0.03
282082	0.3	0.2	1.1	0.1	< 0.1	0.1	< 0.001	0.17	2.9	18	0.4	0.2	0.393	0.034	0.42
282083	0.2	0.3	1.8	0.2	< 0.1	< 0.1	0.003	0.24	3.2	28	0.8	0.3	0.528	0.037	1.45
282084	0.3	< 0.1	0.3	< 0.1	< 0.1	0.2	< 0.001	0.15	3.0	5	0.4	0.3	0.152	0.026	0.08
282085	0.2	0.2	1.6	0.2	0.2	0.7	0.001	0.12	1.9	26	0.6	0.2	0.567	0.038	0.64
282086	0.1	0.2	1.4	0.2	0.2	0.8	0.003	0.09	2.6	24	0.7	0.3	0.460	0.038	0.74
282087	0.2	0.3	1.8	0.2	0.1	0.3	0.008	0.11	5.0	36	0.9	0.4	0.325	0.041	0.39
282088	0.3	0.3	2.0	0.3	0.2	0.3	0.001	0.14	5.4	42	1.0	0.3	0.415	0.042	0.62
282089	0.3	0.3	2.2	0.3	0.8	2.9	0.002	0.92	21.5	15	14.3	3.9	0.472	0.093	0.34
282090	0.1	0.3	2.2	0.3	< 0.1	< 0.1	< 0.001	0.16	3.1	33	0.6	0.3	0.350	0.040	0.76
282091	0.1	0.3	2.2	0.3	< 0.1	< 0.1	< 0.001	0.14	3.2	39	0.5	0.4	0.386	0.041	0.65
282092	0.1	0.3	2.3	0.3	< 0.1	< 0.1	< 0.001	0.27	2.7	38	0.5	2.3	0.418	0.042	0.49
282093	0.1	0.4	2.4	0.3	< 0.1	< 0.1	0.001	0.14	3.9	39	0.6	0.3	0.307	0.046	0.44
282094	0.3	0.4	2.8	0.3	< 0.1	< 0.1	0.001	0.10	3.5	45	0.5	0.2	0.369	0.048	0.45
282095	0.2	0.4	2.4	0.3	< 0.1	< 0.1	< 0.001	0.15	3.6	38	1.0	0.3	0.318	0.049	0.43
282096	< 0.1	0.2	1.4	0.2	0.1	0.6	< 0.001	0.23	2.2	34	1.3	0.4	0.302	0.044	0.35
282097	0.3	0.3	1.9	0.3	0.1	0.3	< 0.001	0.12	2.1	42	0.7	0.2	0.368	0.043	0.40
282098	0.5	0.2	1.6	0.2	< 0.1	0.1	< 0.001	0.17	2.2	33	0.7	0.3	0.364	0.040	0.38
282099	< 0.1	0.2	1.5	0.2	0.2	0.5	< 0.001	0.11	2.2	27	0.6	0.3	0.399	0.036	0.64
282100	< 0.1	0.3	2.3	0.3	< 0.1	< 0.1	< 0.001	0.09	2.8	41	0.6	0.2	0.294	0.045	0.47

Analyte Symbol	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi	Se
Unit Symbol	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02	0.1
Method Code	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	TD-MS
GXR-1 Meas	8.1	0.05	0.20	2.07	0.04	0.86	2.6	79	11.7	772	22.3	0.5	3590	34.1		1.0		31.6	2.70	8.0	0.50	1460	16.9
GXR-1 Cert	8.20	0.0520	0.217	3.52	0.050	0.960	3.30	80.0	12.0	852	23.6	0.960	3900	41.0		1.22		31.0	3.00	8.20	0.690	1380	16.6
GXR-1 Meas																							
GXR-1 Cert																							
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas	10.5	0.40	1.35	5.35	2.91	0.92	0.1	80	36.7	137	2.66	1.2	120	33.8		2.2		3.04	2.31	13.0	1.10	19.1	5.8
GXR-4 Cert	11.1	0.564	1.66	7.20	4.01	1.01	0.860	87.0	64.0	155	3.09	6.30	110	42.0		1.90		4.00	2.80	14.6	1.63	19.0	5.60
GXR-4 Meas																							
GXR-4 Cert																							
SDC-1 Meas	33.4	1.52	1.01	8.06	1.96	1.01		56	51.8	854	4.85	1.0	10	32.4	2.9	3.2	1.0		3.62	18.5	1.10		
SDC-1 Cert	34.00	1.52	1.02	8.34	2.72	1.00		102.00	64.00	880.00	4.82	8.30	200.00	38.0	4.10	3.00	1.50		4.00	18.0	1.70		
GXR-6 Meas	35.7	0.09	0.54	> 10.0	1.14	0.19	< 0.1	165	52.7	951	4.57	2.8	80	19.4		1.1		0.11	3.62	12.4	0.50	0.19	0.7
GXR-6 Cert	32.0	0.104	0.609	17.7	1.87	0.180	1.00	186	96.0	1010	5.58	4.30	68.0	27.0		1.40		1.30	4.20	13.8	0.760	0.290	0.940
GXR-6 Meas																							
GXR-6 Cert																							
DNC-1a Meas	4.3							158	255					233						58.5	0.40		
DNC-1a Cert	5.2							148	270					247						57	0.59		
DNC-1a Meas																							
DNC-1a Cert																							
SBC-1 Meas																							
SBC-1 Cert																							
SBC-1 Meas																							
SBC-1 Cert																							
OREAS 45d (4-Acid) Meas	22.3	0.10	0.24	7.29	0.37	0.19		94	478	484	14.8	1.4		233	1.2	0.8	0.4		3.89	31.3	0.50	0.38	
OREAS 45d (4-Acid) Cert	21.5	0.101	0.245	8.150	0.412	0.185		235.0	549	490.000	14.5	3.830		231.0	1.38	0.79	0.46		3.910	29.50	0.57	0.31	
SdAR-M2 (U.S.G.S.) Meas	17.2						5.2	23	41.3			2.8	1160	43.5	2.4	7.1	0.8		1.60	12.6	1.00	1.04	
SdAR-M2 (U.S.G.S.) Cert	17.9						5.1	25.2	49.6			7.29	1440.00	48.8	3.58	6.6	1.21		1.82	12.4	1.44	1.05	
SdAR-M2 (U.S.G.S.) Meas																							
SdAR-M2 (U.S.G.S.) Cert																							
282075 Orig	27.5	> 3.00	2.89	9.24	0.91	1.95	< 0.1	113	191	557	4.59	2.6	30	142	1.1	1.1	0.4	< 0.05	0.66	30.1	0.80	0.22	0.4
282075 Dup	27.3	> 3.00	2.82	8.92	0.90	1.89	< 0.1	114	218	557	4.59	2.7	10	140	1.1	1.1	0.4	< 0.05	0.69	30.8	0.80	0.24	0.4
282078 Orig	16.8	> 3.00	1.90	8.88	0.74	1.49	< 0.1	108	161	427	4.13	2.9	< 10	89.0	1.2	0.8	0.4	< 0.05	0.37	32.3	0.90	0.35	0.5
282078 Dup	17.1	> 3.00	2.03	9.51	0.70	1.51	< 0.1	105	153	411	4.03	2.8	< 10	87.7	1.2	1.0	0.4	< 0.05	0.39	30.3	0.80	0.34	0.5
282095 Split Orig PREP DUP	14.4	> 3.00	2.91	7.47	1.01	6.25	< 0.1	196	36.5	1750	12.1	0.4	50	39.0	2.5	1.2	0.8	0.22	0.43	56.3	1.00	0.19	0.5
282095 Split PREP DUP	13.5	2.82	2.71	7.46	0.94	5.88	< 0.1	194	35.5	1600	11.2	0.3	< 10	35.4	2.4	1.1	0.8	< 0.05	0.46	53.9	1.00	0.16	0.4

Analyte Symbol	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi	Se
Unit Symbol	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02	0.1
Method Code	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	TD-MS
282100 Orig	22.0	2.87	3.33	7.27	0.63	5.89	< 0.1	205	54.3	1620	9.56	0.3	10	44.9	2.3	0.9	0.8	< 0.05	0.41	56.8	0.80	0.17	0.3
282100 Dup	21.4	2.86	3.28	7.00	0.56	5.78	< 0.1	152	41.0	1630	9.09	0.2	< 10	43.3	2.2	0.8	0.7	< 0.05	0.40	57.1	0.80	0.18	0.5
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank	< 0.5	< 0.01	< 0.01	0.03	< 0.01	0.01	< 0.1	2	6.6	8	0.01	< 0.1	30	< 0.5	< 0.1	< 0.1	< 0.1	0.09	< 0.05	< 0.1	< 0.05	0.04	< 0.1
Method Blank																							

Analyte Symbol	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu
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	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Method Code	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	TD-MS
GXR-1 Meas	731	8.4	458	2.6	26.1	274	26	0.8	18.8	0.7	30	25.2	9.5	705	7.0	14.9		9.2	2.3	3.6	0.6	4.1	1160
GXR-1 Cert	760	13.8	427	14.0	32.0	275	38.0	0.800	18.0	0.770	54.0	122	13.0	750	7.50	17.0		18.0	2.70	4.20	0.830	4.30	1110
GXR-1 Meas																							
GXR-1 Cert																							
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas	63.7	14.8	103	116	11.9	202	53	9.8	331	0.2	7	4.1	1.0	227	52.1	105		42.6	4.6	4.0	0.4	2.3	5880
GXR-4 Cert	73.0	20.0	98.0	160	14.0	221	186	10.0	310	0.270	5.60	4.80	0.970	1640	64.5	102		45.0	6.60	5.25	0.360	2.60	6520
GXR-4 Meas																							
GXR-4 Cert																							
SDC-1 Meas	94.3	19.8	< 0.1	88.6		160	46	2.9			< 1	< 0.1		564	34.4	83.9		39.2	5.1	5.2	0.8	4.9	29.3
SDC-1 Cert	103.00	21.00	0.220	127.00		180.00	290.00	21.00			3.00	0.54		630	42.00	93.00		40.00	8.20	7.00	1.20	6.70	30.000
GXR-6 Meas	105	24.6	305	60.4	10.4	40.9	108	3.0	1.74	< 0.1	1	1.4	< 0.1	1280	10.8	31.2		12.2	1.8	1.8	0.3	1.8	61.8
GXR-6 Cert	118	35.0	330	90.0	14.0	35.0	110	7.50	2.40	0.260	1.70	3.60	0.0180	1300	13.9	36.0		13.0	2.67	2.97	0.415	2.80	66.0
GXR-6 Meas																							
GXR-6 Cert																							
DNC-1a Meas	60.2	12.1		2.9	14.9	128	42	1.7				0.3		90	3.1			4.6					91.7
DNC-1a Cert	70	15		5	18.0	144	38.0	3				0.96		118	3.6			5.20					100
DNC-1a Meas																							
DNC-1a Cert																							
SBC-1 Meas																							
SBC-1 Cert																							
SBC-1 Meas																							
SBC-1 Cert																							
OREAS 45d (4-Acid) Meas	40.8	19.8	5.8	39.6	11.1	30.2	62	1.3	0.50	< 0.1	1	< 0.1		184	15.9	37.2	3.8	15.9	2.3	2.3	0.3	2.1	369
OREAS 45d (4-Acid) Cert	45.7	21.20	13.8	42.1	9.53	31.30	141	14.50	2.500	0.096	2.78	0.82		183.0	16.9	37.20	3.70	13.4	2.80	2.42	0.400	2.26	371
SdAR-M2 (U.S.G.S.) Meas	714	14.4		82.9	22.1	136	121	13.1	13.0					882	39.3	89.8	9.2	37.6	4.9	4.5	0.6	3.9	229
SdAR-M2 (U.S.G.S.) Cert	760	17.6		149	32.7	144	259	26.2	13.3					990	46.6	98.8	11.0	39.4	7.18	6.28	0.97	5.88	236.00 00
SdAR-M2 (U.S.G.S.) Meas																							
SdAR-M2 (U.S.G.S.) Cert																							
282075 Orig	129	17.4	2.5	23.6	13.4	198	146	5.9	1.73	< 0.1	1	< 0.1	< 0.1	202	21.9	48.9	5.3	22.6	2.7	2.4	0.3	2.0	43.1
282075 Dup	124	17.1	2.2	23.4	13.7	208	147	6.2	1.87	< 0.1	1	< 0.1	< 0.1	208	22.2	49.1	5.3	23.2	2.7	2.5	0.3	2.0	43.5
282078 Orig	89.4	16.5	0.8	16.4	13.9	193	149	6.2	2.51	< 0.1	2	< 0.1	0.2	172	22.1	49.5	5.4	22.7	2.8	2.5	0.3	2.1	44.4
282078 Dup	88.3	16.2	< 0.1	16.3	13.8	195	144	6.1	2.49	< 0.1	2	< 0.1	0.1	171	22.0	50.1	5.5	23.1	2.6	2.4	0.3	2.1	48.7
282095 Split Orig PREP DUP	120	20.6	0.3	23.1	25.8	173	15	0.3	0.29	< 0.1	1	< 0.1	0.1	175	7.9	20.1	2.7	13.9	2.9	3.6	0.6	4.0	133
282095 Split PREP DUP	109	19.7	< 0.1	21.5	25.7	172	14	0.2	0.09	< 0.1	1	< 0.1	< 0.1	161	7.5	19.2	2.5	13.4	2.7	3.4	0.5	3.8	117

Analyte Symbol	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu
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	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Method Code	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	TD-MS
282100 Orig	118	18.5	< 0.1	14.4	24.9	210	10	0.5	0.10	< 0.1	1	< 0.1	< 0.1	165	6.7	17.8	2.3	12.0	2.5	3.0	0.5	3.6	166
282100 Dup	117	17.6	0.6	14.4	23.9	208	6	0.2	0.07	< 0.1	1	< 0.1	< 0.1	159	6.5	16.5	2.3	11.6	2.3	2.9	0.5	3.5	164
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank	< 0.2	0.3	< 0.1	0.2	< 0.1	0.3	< 1	0.1	0.17	< 0.1	< 1	< 0.1	< 0.1	< 1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.6
Method Blank																							

Analyte Symbol	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Method Code	TD-MS	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-ICP	TD-ICP
GXR-1 Meas		0.4	2.2	0.3	< 0.1	126		0.40	765	2	2.4	29.6	0.0274	0.058	0.24
GXR-1 Cert		0.430	1.90	0.280	0.175	164		0.390	730	1.58	2.44	34.9	0.036	0.0650	0.257
GXR-1 Meas										2			0.0275	0.059	0.25
GXR-1 Cert										1.58			0.036	0.0650	0.257
DH-1a Meas											> 500	2030			
DH-1a Cert											910	2629			
GXR-4 Meas		0.2	1.0	0.1	0.6	32.6		3.40	49.7	8	17.7	5.0	0.290	0.130	1.78
GXR-4 Cert		0.210	1.60	0.170	0.790	30.8		3.20	52.0	7.70	22.5	6.20	0.29	0.120	1.77
GXR-4 Meas										8			0.285	0.132	1.81
GXR-4 Cert										7.70			0.29	0.120	1.77
SDC-1 Meas		0.4	3.0		0.1	< 0.1		0.60	23.3	17	11.1	2.4	0.0972	0.053	
SDC-1 Cert		0.65	4.00		1.20	0.80		0.70	25.00	17.00	12.00	3.10	0.606	0.0690	
GXR-6 Meas			1.6	0.2	0.2	0.7		2.24	97.3	26	4.7	1.2		0.036	0.02
GXR-6 Cert			2.40	0.330	0.485	1.90		2.20	101	27.6	5.30	1.54		0.0350	0.0160
GXR-6 Meas										25				0.036	0.02
GXR-6 Cert										27.6				0.0350	0.0160
DNC-1a Meas			1.7						5.9	31			0.278		
DNC-1a Cert			2.0						6.3	31			0.29		
DNC-1a Meas										32			0.291		
DNC-1a Cert										31			0.29		
SBC-1 Meas										21			0.487		
SBC-1 Cert										20.0			0.51		
SBC-1 Meas										21			0.529		
SBC-1 Cert										20.0			0.51		
OREAS 45d (4-Acid) Meas			1.5	0.2	< 0.1	0.1		0.27	21.9	55	13.8	2.6	0.169	0.033	0.04
OREAS 45d (4-Acid) Cert			1.33	0.18	1.02	1.62		0.27	21.8	49.30	14.5	2.63	0.773	0.042	0.049
SdAR-M2 (U.S.G.S.) Meas		0.4	2.6	0.3	0.7	1.1			761	5	12.0	2.1			
SdAR-M2 (U.S.G.S.) Cert		0.54	3.63	0.54	1.8	2.8			808	4.1	14.2	2.53			
SdAR-M2 (U.S.G.S.) Meas										5					
SdAR-M2 (U.S.G.S.) Cert										4.1					
282075 Orig	< 0.1	0.2	1.1	0.1	0.3	1.4	< 0.001	0.12	3.8	15	4.8	1.5	0.325	0.057	0.39
282075 Dup	< 0.1	0.2	1.1	0.1	0.3	0.4	< 0.001	0.10	3.9	14	4.8	1.5	0.323	0.056	0.39
282078 Orig	< 0.1	0.2	1.3	0.2	0.4	0.5	0.001	0.09	4.9	15	5.5	1.7	0.339	0.057	0.72
282078 Dup	< 0.1	0.2	1.2	0.2	0.4	0.5	0.001	0.08	4.7	15	5.4	1.7	0.333	0.058	0.71
282095 Split Orig PREP DUP	0.2	0.4	2.4	0.3	< 0.1	< 0.1	< 0.001	0.15	3.6	38	1.0	0.3	0.318	0.049	0.43
282095 Split PREP DUP	0.1	0.4	2.3	0.3	< 0.1	< 0.1	< 0.001	0.15	3.4	37	0.8	0.3	0.279	0.048	0.42

Analyte Symbol	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Method Code	TD-MS	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-ICP	TD-ICP
282100 Orig	0.1	0.3	2.3	0.3	< 0.1	< 0.1	0.001	0.09	2.7	41	0.6	0.2	0.313	0.044	0.47
282100 Dup	< 0.1	0.3	2.2	0.3	< 0.1	< 0.1	< 0.001	0.09	2.8	41	0.6	0.2	0.276	0.045	0.48
Method Blank										< 1			0.0124	< 0.001	< 0.01
Method Blank										< 1			0.0117	< 0.001	< 0.01
Method Blank										< 1			0.0008	< 0.001	< 0.01
Method Blank										< 1			0.0006	< 0.001	< 0.01
Method Blank										< 1			0.0208	< 0.001	< 0.01
Method Blank										< 1			0.0010	< 0.001	< 0.01
Method Blank	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.5	< 1	0.1	< 0.1	0.0010	< 0.001	< 0.01
Method Blank										< 1			0.0006	< 0.001	< 0.01



**Date Submitted:** 12-Dec-16  
**Invoice No.:** A16-13297-Au  
**Invoice Date:** 19-Dec-16  
**Your Reference:** Mishi 243

**Trelawney Mining and Exploration**  
**3 Mesomikenda Lake Road**  
**PO Box 100**  
**Gogama ON P0M 1W0**  
**Canada**

**ATTN: Alan Smith**

## CERTIFICATE OF ANALYSIS

89 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-50-(ppm) Au - Fire Assay AA

Code UT-6 Total Digestion ICP & ICP/MS

REPORT      **A16-13297-Au**

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

CERTIFIED BY:

A handwritten signature in black ink, appearing to be "Emmanuel Esemé", written over a horizontal line.

Emmanuel Esemé , Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**  
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5  
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL [Ancaster@actlabs.com](mailto:Ancaster@actlabs.com) ACTLABS GROUP WEBSITE [www.actlabs.com](http://www.actlabs.com)

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
282151	0.067
282152	0.028
282153	< 0.005
282154	0.006
282155	0.018
282156	0.012
282157	0.010
282158	0.008
282159	0.005
282160	0.238
282161	0.005
282162	0.005
282163	0.005
282164	< 0.005
282165	< 0.005
282166	< 0.005
282167	< 0.005
282168	< 0.005
282169	< 0.005
282170	< 0.005
282171	< 0.005
282172	< 0.005
282173	< 0.005
282174	< 0.005
282175	< 0.005
282176	< 0.005
282177	< 0.005
282178	< 0.005
282179	< 0.005
282180	< 0.005
282181	< 0.005
282182	0.018
282183	< 0.005
282184	1.514
282185	< 0.005
282186	0.006
282187	< 0.005
282188	< 0.005
282189	< 0.005
282190	< 0.005
282191	< 0.005
282192	< 0.005

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
282193	< 0.005
282194	< 0.005
282195	< 0.005
282196	< 0.005
282197	< 0.005
282198	< 0.005
282199	< 0.005
282200	< 0.005
282201	< 0.005
282202	< 0.005
282203	< 0.005
282204	< 0.005
282205	< 0.005
282206	< 0.005
282207	< 0.005
282208	0.546
282209	< 0.005
282210	< 0.005
282211	< 0.005
282212	< 0.005
282213	< 0.005
282214	< 0.005
282215	< 0.005
282216	< 0.005
282217	< 0.005
282218	< 0.005
282219	< 0.005
282220	< 0.005
282221	0.005
282222	< 0.005
282223	< 0.005
282224	< 0.005
282225	< 0.005
282226	< 0.005
282227	< 0.005
282228	< 0.005
282229	< 0.005
282230	< 0.005
282231	0.005
282232	2.200
282233	< 0.005
282234	< 0.005

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
282235	0.006
282236	< 0.005
282237	< 0.005
282238	< 0.005
282239	< 0.005

Analyte Symbol	Au
Unit Symbol	ppm
Lower Limit	0.005
Method Code	FA-AA
OREAS203 Meas	0.871
OREAS203 Cert	0.871
OREAS203 Meas	0.844
OREAS203 Cert	0.871
OREAS203 Meas	0.859
OREAS203 Cert	0.871
OREAS 251 Meas	0.489
OREAS 251 Cert	0.50
OREAS 251 Meas	0.489
OREAS 251 Cert	0.50
OREAS 251 Meas	0.514
OREAS 251 Cert	0.50
282161 Orig	0.006
282161 Dup	0.005
282170 Orig	< 0.005
282170 Dup	< 0.005
282180 Orig	< 0.005
282180 Dup	< 0.005
282195 Orig	< 0.005
282195 Dup	< 0.005
282200 Split Orig	< 0.005
PREP DUP	
282200 Split	< 0.005
PREP DUP	
282205 Orig	< 0.005
282205 Dup	< 0.005
282215 Orig	< 0.005
282215 Dup	< 0.005
282230 Orig	< 0.005
282230 Dup	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005
Method Blank	< 0.005



**Date Submitted:** 12-Dec-16  
**Invoice No.:** A16-13297-TD  
**Invoice Date:** 12-Jan-17  
**Your Reference:** Mishi 243

**Trelawney Mining and Exploration**  
**3 Mesomikenda Lake Road**  
**PO Box 100**  
**Gogama ON P0M 1W0**  
**Canada**

**ATTN: Alan Smith**

## CERTIFICATE OF ANALYSIS

89 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-50-(ppm) Au - Fire Assay AA

Code UT-6 Total Digestion ICP & ICP/MS

REPORT **A16-13297-TD**

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

CERTIFIED BY:

A handwritten signature in black ink, consisting of a stylized 'E' followed by a series of loops and a horizontal line.

Emmanuel Esemé, Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**  
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5  
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL [Ancaster@actlabs.com](mailto:Ancaster@actlabs.com) ACTLABS GROUP WEBSITE [www.actlabs.com](http://www.actlabs.com)

## Results

## Activation Laboratories Ltd.

## Report: A16-13297

Analyte Symbol	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi	Se
Unit Symbol	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02	0.1
Method Code	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	TD-MS
282151	18.4	1.04	0.53	5.97	0.26	1.07	< 0.1	20	58.6	196	1.66	0.5	< 10	32.7	0.2	0.4	0.1	0.19	1.82	8.6	0.10	1.63	0.2
282152	17.0	1.39	0.60	7.99	0.64	0.45	< 0.1	22	48.9	166	1.42	0.7	< 10	32.0	0.3	0.8	0.1	0.21	2.02	7.3	0.10	2.16	0.3
282153	13.2	0.73	0.88	4.48	0.15	0.56	< 0.1	11	41.7	184	1.34	0.3	50	26.7	0.1	0.2	< 0.1	0.20	0.89	6.3	0.10	1.60	< 0.1
282154	29.3	0.18	1.88	5.16	0.35	0.25	< 0.1	39	191	341	2.22	0.6	< 10	151	0.3	0.3	0.1	0.16	1.17	9.6	0.10	1.35	< 0.1
282155	22.6	0.44	1.48	8.40	1.81	0.41	< 0.1	72	95.9	417	3.95	0.8	10	73.6	1.0	0.6	0.3	0.33	1.88	24.3	0.30	5.75	0.9
282156	23.0	1.84	1.72	> 10.0	1.50	0.85	< 0.1	127	44.8	615	5.08	0.9	< 10	32.5	1.2	1.6	0.3	0.19	0.88	32.4	0.40	2.91	1.1
282157	29.7	1.28	2.25	> 10.0	1.42	1.35	< 0.1	171	45.7	1000	7.02	0.8	< 10	38.5	1.6	1.3	0.4	0.14	1.08	40.0	0.50	2.82	1.1
282158	33.6	1.30	2.59	> 10.0	1.12	2.33	< 0.1	218	42.9	1300	8.81	0.9	< 10	40.2	1.9	1.1	0.5	0.07	0.92	53.3	0.70	2.30	1.1
282159	32.0	1.04	2.51	> 10.0	1.44	3.37	< 0.1	183	39.2	1310	9.04	0.6	< 10	40.5	2.0	1.7	0.6	0.05	2.73	53.1	0.80	1.89	0.7
282160	26.2	2.02	1.50	> 10.0	3.16	2.35	< 0.1	110	85.7	534	4.22	2.7	60	45.4	2.2	2.7	0.6	0.70	11.2	16.6	0.90	1.69	2.3
282161	26.4	1.65	2.44	> 10.0	1.39	2.55	< 0.1	146	66.8	1280	8.23	0.5	40	46.5	2.0	0.8	0.6	0.22	2.00	53.4	0.70	1.70	1.3
282162	38.9	1.35	3.13	> 10.0	0.63	3.08	< 0.1	201	36.1	1620	10.2	0.6	20	38.7	2.6	1.1	0.7	0.16	2.94	53.7	0.80	1.88	1.3
282163	26.2	1.77	2.07	9.28	0.67	4.00	< 0.1	163	34.1	1360	7.61	0.6	< 10	36.4	2.0	0.8	0.6	0.15	0.60	43.2	0.60	1.94	0.9
282164	44.3	0.81	3.81	8.07	0.60	2.81	< 0.1	137	431	1110	5.58	0.9	< 10	276	1.2	0.4	0.3	0.06	0.91	40.9	0.50	0.26	< 0.1
282165	31.3	2.48	2.57	> 10.0	0.59	1.21	< 0.1	151	108	851	6.19	1.6	< 10	74.1	1.6	1.0	0.4	< 0.05	0.66	38.4	0.50	0.80	0.5
282166	23.5	2.79	1.23	9.35	1.25	1.03	< 0.1	79	113	449	3.10	2.8	< 10	57.6	1.2	1.6	0.4	< 0.05	1.22	16.9	0.80	0.23	< 0.1
282167	32.7	2.45	1.70	2.01	1.54	1.29	< 0.1	102	126	516	3.82	3.0	< 10	88.9	1.2	1.6	0.4	< 0.05	2.90	22.3	0.80	0.21	< 0.1
282168	27.3	2.23	1.44	> 10.0	1.46	1.02	< 0.1	87	130	456	3.38	2.9	< 10	76.8	1.2	1.6	0.3	< 0.05	2.14	20.1	0.70	0.42	< 0.1
282169	29.1	2.40	1.54	> 10.0	1.46	1.29	< 0.1	84	109	430	3.50	2.6	50	70.3	1.1	1.4	0.3	< 0.05	1.76	18.9	0.70	0.40	< 0.1
282170	25.1	> 3.00	1.44	> 10.0	1.56	1.75	< 0.1	79	107	412	3.22	2.5	10	69.3	1.0	1.3	0.3	< 0.05	1.57	17.7	0.60	1.98	< 0.1
282171	33.3	2.29	1.84	6.55	1.92	1.43	< 0.1	86	103	412	3.54	2.9	< 10	81.9	1.1	1.3	0.3	< 0.05	2.33	18.3	0.80	0.31	< 0.1
282172	19.1	2.84	1.69	0.97	1.62	4.12	< 0.1	112	21.0	922	5.86	2.9	< 10	14.4	3.7	4.2	1.1	< 0.05	1.29	20.2	1.30	0.07	< 0.1
282173	25.2	2.91	1.61	9.45	1.37	1.57	< 0.1	77	128	388	3.18	2.2	< 10	80.6	0.8	1.2	0.2	< 0.05	1.78	18.4	0.50	0.93	< 0.1
282174	32.1	2.41	1.91	8.51	1.75	1.77	< 0.1	119	174	585	4.45	2.5	10	73.9	1.3	1.5	0.4	0.07	1.88	22.8	0.70	0.50	< 0.1
282175	30.3	2.79	1.83	> 10.0	1.14	2.93	< 0.1	114	191	594	4.10	2.2	< 10	60.2	1.3	1.1	0.4	< 0.05	1.11	21.2	0.80	0.25	< 0.1
282176	42.0	1.89	2.23	4.56	1.84	2.44	< 0.1	161	140	710	5.34	2.7	< 10	76.3	1.6	1.2	0.4	< 0.05	1.86	29.5	0.80	0.41	< 0.1
282177	43.1	2.03	1.89	8.54	1.38	2.05	< 0.1	139	115	694	5.39	2.3	< 10	67.8	1.7	1.1	0.5	< 0.05	1.45	27.6	0.70	0.28	< 0.1
282178	40.2	1.91	1.89	9.12	1.90	1.36	< 0.1	131	118	623	5.07	2.8	< 10	73.3	1.6	1.5	0.4	< 0.05	2.42	26.3	0.80	0.33	< 0.1
282179	37.2	2.03	1.69	8.08	1.33	2.15	< 0.1	136	97.0	629	4.92	2.4	< 10	60.6	1.5	1.0	0.4	< 0.05	3.25	24.7	0.60	0.30	< 0.1
282180	29.8	2.59	1.38	> 10.0	1.81	1.44	< 0.1	89	65.2	429	3.75	2.7	< 10	54.7	1.3	1.3	0.4	< 0.05	2.73	18.3	0.70	0.28	< 0.1
282181	30.7	1.71	1.45	8.93	2.48	0.78	< 0.1	115	173	415	4.03	3.1	< 10	70.8	1.3	1.2	0.4	< 0.05	2.85	23.9	0.70	1.04	< 0.1
282182	36.8	2.01	1.70	> 10.0	2.87	1.76	< 0.1	144	116	515	4.81	3.5	40	78.5	1.6	1.5	0.4	< 0.05	2.80	26.9	0.70	0.66	< 0.1
282183	35.0	1.97	1.65	> 10.0	2.31	1.51	< 0.1	121	99.7	463	4.30	3.3	< 10	74.5	1.5	1.3	0.4	< 0.05	2.37	24.0	0.80	0.24	< 0.1
282184	20.7	1.88	1.65	7.71	3.24	2.53	< 0.1	153	76.1	524	7.27	2.0	40	37.4	1.6	1.6	0.4	2.61	5.08	21.0	0.60	5.19	11.2
282185	43.2	2.08	2.66	8.61	1.51	1.96	< 0.1	112	307	550	4.18	2.7	< 10	151	1.2	1.2	0.3	0.16	1.67	25.9	0.70	0.21	< 0.1
282186	32.9	2.32	2.01	8.48	1.41	2.32	< 0.1	102	163	522	3.86	2.5	< 10	84.3	1.1	1.4	0.3	< 0.05	1.69	21.8	0.70	0.22	< 0.1
282187	41.0	2.18	2.56	8.70	1.68	2.38	< 0.1	113	227	588	4.36	2.6	< 10	104	1.1	1.3	0.3	< 0.05	1.68	23.2	0.80	0.18	< 0.1
282188	40.8	2.69	2.67	8.82	1.51	2.47	< 0.1	104	228	566	3.99	2.3	< 10	133	1.1	1.1	0.3	< 0.05	2.08	22.9	0.70	0.15	< 0.1
282189	36.7	2.73	2.34	8.96	1.55	2.28	< 0.1	101	162	593	4.35	2.4	< 10	109	1.2	1.3	0.3	< 0.05	1.81	24.1	0.70	0.16	< 0.1
282190	53.4	1.70	3.74	8.87	1.76	0.45	< 0.1	129	551	823	5.97	2.8	50	233	1.2	1.5	0.3	< 0.05	4.67	38.5	0.40	0.18	< 0.1
282191	27.5	> 3.00	1.73	9.32	1.72	1.00	< 0.1	56	110	352	2.58	2.0	30	73.2	0.5	1.1	0.2	< 0.05	1.66	13.3	0.60	0.09	< 0.1
282192	37.7	2.82	2.23	8.61	2.19	0.65	< 0.1	113	146	541	4.46	3.1	< 10	101	1.2	1.8	0.4	< 0.05	3.59	23.1	1.00	0.26	< 0.1

## Results

## Activation Laboratories Ltd.

## Report: A16-13297

Analyte Symbol	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi	Se
Unit Symbol	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02	0.1
Method Code	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	TD-MS
282193	29.3	> 3.00	1.94	> 10.0	2.27	1.00	< 0.1	102	142	496	4.01	2.9	< 10	94.8	1.1	1.7	0.3	< 0.05	3.12	21.7	0.80	0.37	< 0.1
282194	24.5	3.00	1.88	8.96	2.48	0.88	< 0.1	94	148	474	3.92	2.8	< 10	88.5	1.1	1.6	0.3	< 0.05	2.55	20.8	0.80	0.36	< 0.1
282195	14.1	1.62	1.09	5.14	1.65	0.26	< 0.1	45	96.1	229	2.07	1.6	< 10	51.8	0.6	0.6	0.2	< 0.05	1.34	18.7	0.40	1.44	< 0.1
282196	17.6	2.82	1.71	9.52	1.46	4.18	< 0.1	119	28.5	908	5.48	3.2	< 10	15.1	3.0	2.5	0.9	< 0.05	1.10	19.8	1.10	0.05	< 0.1
282197	20.2	2.49	1.66	6.93	1.50	0.40	< 0.1	61	189	316	2.73	1.9	< 10	64.5	0.7	0.9	0.2	< 0.05	1.58	13.5	0.40	0.35	< 0.1
282198	8.2	> 3.00	0.51	7.50	0.95	0.39	< 0.1	15	22.1	121	1.08	1.1	< 10	10.4	0.2	1.0	0.1	< 0.05	0.60	3.7	0.20	0.20	< 0.1
282199	20.4	2.71	1.60	6.95	1.47	0.81	< 0.1	68	126	391	3.07	1.3	60	73.7	0.8	1.6	0.2	0.05	1.31	16.4	0.60	0.70	< 0.1
282200	30.9	2.68	2.13	8.19	2.14	0.46	< 0.1	71	131	463	3.83	2.0	30	92.9	1.0	1.6	0.3	< 0.05	2.17	19.9	0.70	0.18	< 0.1
282201	11.7	> 3.00	0.65	7.43	1.12	0.32	< 0.1	24	30.7	151	1.40	1.6	10	25.4	0.4	1.3	0.1	< 0.05	1.32	10.6	0.20	1.10	< 0.1
282202	26.5	> 3.00	2.05	8.25	1.96	0.44	< 0.1	83	224	419	3.70	2.6	< 10	92.6	1.0	1.6	0.3	< 0.05	1.64	24.0	0.60	1.05	< 0.1
282203	21.6	1.90	1.65	5.85	1.36	0.34	< 0.1	61	97.4	333	2.89	1.6	< 10	59.8	1.0	1.7	0.3	< 0.05	1.12	13.7	0.60	0.29	< 0.1
282204	32.5	> 3.00	2.16	9.35	2.19	0.52	< 0.1	99	149	451	3.93	2.9	< 10	95.1	1.1	1.8	0.3	< 0.05	3.13	21.4	0.80	0.54	< 0.1
282205	24.4	> 3.00	2.11	9.98	1.19	0.75	< 0.1	96	162	463	4.42	3.3	< 10	97.9	1.2	1.9	0.3	< 0.05	1.64	25.9	0.80	0.38	< 0.1
282206	24.6	> 3.00	1.96	7.91	1.24	0.44	< 0.1	90	154	331	3.45	2.9	< 10	78.9	1.0	1.6	0.3	< 0.05	1.87	19.5	0.60	0.27	< 0.1
282207	29.3	> 3.00	2.25	9.28	0.96	0.52	< 0.1	95	149	366	3.96	3.0	40	86.9	1.2	1.7	0.3	< 0.05	1.97	30.3	0.90	0.42	< 0.1
282208	19.0	0.72	1.34	5.61	3.45	3.93	< 0.1	178	50.5	4390	27.4	2.8	120	88.0	1.8	0.9	0.5	1.01	0.68	> 500	1.45	9.83	1.5
282209	21.7	> 3.00	1.69	7.58	1.23	0.55	< 0.1	69	94.2	312	3.12	2.2	10	72.6	0.9	1.3	0.2	< 0.05	1.94	16.6	0.60	0.23	< 0.1
282210	19.6	2.25	1.22	6.17	1.26	0.73	< 0.1	58	74.8	251	2.41	2.0	< 10	51.2	0.6	1.0	0.2	< 0.05	2.62	12.0	0.50	0.18	< 0.1
282211	24.8	2.95	1.61	7.36	1.24	0.27	< 0.1	68	96.6	311	3.22	2.5	< 10	70.1	1.0	1.4	0.3	< 0.05	3.56	17.4	0.60	0.23	< 0.1
282212	30.7	1.90	0.86	6.53	0.96	0.41	< 0.1	49	72.0	162	2.23	2.4	< 10	41.9	0.8	1.5	0.2	< 0.05	9.87	14.4	0.50	0.22	< 0.1
282213	30.0	2.74	1.61	7.68	1.44	0.26	< 0.1	74	93.0	265	2.90	2.8	< 10	64.5	1.0	1.4	0.3	< 0.05	7.39	17.8	0.60	0.29	< 0.1
282214	25.0	> 3.00	1.84	9.00	1.35	0.50	< 0.1	89	94.7	330	3.38	2.9	60	69.9	1.1	1.8	0.3	< 0.05	2.26	17.1	0.70	0.31	< 0.1
282215	29.3	> 3.00	2.73	8.72	0.24	0.70	< 0.1	91	18.9	216	3.43	2.7	20	23.0	1.9	1.6	0.5	< 0.05	2.97	19.1	0.90	0.32	< 0.1
282216	30.9	> 3.00	2.72	9.15	0.30	0.55	< 0.1	74	31.9	204	2.89	3.6	< 10	40.5	1.6	1.6	0.5	< 0.05	3.27	14.8	0.80	0.23	< 0.1
282217	18.7	> 3.00	1.51	8.68	0.69	0.37	< 0.1	56	27.0	163	2.53	3.2	< 10	26.0	1.3	1.3	0.4	< 0.05	1.61	14.8	0.70	0.54	< 0.1
282218	17.1	> 3.00	1.50	8.68	0.66	0.36	< 0.1	49	28.0	165	2.38	2.7	< 10	20.9	1.2	1.4	0.3	< 0.05	1.70	12.7	0.70	0.31	< 0.1
282219	17.5	> 3.00	1.56	8.61	0.54	0.39	< 0.1	40	19.5	155	2.45	2.2	< 10	18.0	1.1	1.3	0.3	< 0.05	1.47	10.2	0.80	0.20	< 0.1
282220	19.9	2.97	1.85	> 10.0	1.94	4.35	< 0.1	117	19.6	964	6.04	2.6	< 10	15.9	3.9	2.8	1.1	< 0.05	1.29	21.7	1.40	0.05	< 0.1
282221	13.5	> 3.00	1.28	7.50	0.91	0.38	< 0.1	32	24.6	143	1.92	1.2	40	19.8	0.6	1.1	0.2	< 0.05	1.19	7.5	0.50	0.29	< 0.1
282222	20.4	> 3.00	1.47	9.22	0.90	0.45	< 0.1	43	20.3	123	1.91	2.8	30	17.1	1.2	1.8	0.3	< 0.05	1.73	9.3	0.60	0.17	< 0.1
282223	35.5	> 3.00	0.71	9.17	1.81	2.29	< 0.1	43	25.0	433	2.21	1.1	20	18.4	0.6	0.8	0.2	< 0.05	4.99	9.2	0.40	0.09	< 0.1
282224	6.3	> 3.00	0.85	7.25	1.21	0.31	< 0.1	25	24.5	176	1.50	2.2	10	18.3	0.1	1.2	< 0.1	< 0.05	0.29	7.8	0.10	0.11	< 0.1
282225	8.0	2.24	0.81	5.61	1.26	0.15	< 0.1	24	26.8	189	1.54	1.4	< 10	15.6	0.1	1.0	< 0.1	< 0.05	0.39	5.5	0.10	0.06	< 0.1
282226	5.0	> 3.00	0.44	8.93	1.66	0.28	< 0.1	15	11.9	93	0.81	1.0	< 10	5.6	0.1	1.4	< 0.1	< 0.05	0.50	2.8	0.10	0.05	< 0.1
282227	5.5	> 3.00	0.21	8.83	1.15	0.34	< 0.1	8	5.1	47	0.47	1.4	< 10	3.0	0.1	1.3	< 0.1	< 0.05	0.66	1.5	0.10	0.04	< 0.1
282228	3.7	> 3.00	0.21	9.94	0.76	0.47	< 0.1	6	4.2	55	0.37	1.6	< 10	2.5	0.1	0.8	< 0.1	< 0.05	0.39	1.4	0.10	0.03	< 0.1
282229	8.4	> 3.00	0.41	9.44	1.72	1.37	< 0.1	8	10.5	106	0.76	1.3	50	11.8	0.1	0.9	< 0.1	0.21	1.20	1.9	< 0.05	0.24	< 0.1
282230	8.5	> 3.00	0.35	9.26	1.67	1.51	< 0.1	7	11.2	104	0.62	1.3	20	9.0	0.1	1.0	< 0.1	0.10	1.35	2.0	< 0.05	0.11	< 0.1
282231	17.4	> 3.00	1.36	9.05	0.87	2.08	< 0.1	35	75.3	241	1.86	1.4	< 10	76.1	0.3	1.0	0.1	0.19	0.91	10.9	0.10	0.19	< 0.1
282232	9.0	1.79	3.54	7.75	0.70	5.02	< 0.1	154	168	4140	11.8	2.6	< 10	139	2.1	1.0	0.7	0.22	3.96	37.1	1.20	0.13	1.3
282233	38.6	> 3.00	3.36	8.27	0.24	2.54	< 0.1	33	128	328	2.41	1.2	< 10	191	0.3	0.7	0.1	0.13	0.50	15.1	0.20	0.11	< 0.1
282234	7.1	> 3.00	0.26	8.81	1.43	1.37	< 0.1	6	11.6	112	0.60	1.3	< 10	3.5	< 0.1	0.8	< 0.1	< 0.05	1.44	1.6	< 0.05	0.09	< 0.1

## Results

## Activation Laboratories Ltd.

Report: A16-13297

Analyte Symbol	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi	Se
Unit Symbol	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02	0.1
Method Code	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	TD-MS
282235	7.2	> 3.00	0.31	8.58	1.27	2.77	< 0.1	9	7.1	154	0.72	1.3	< 10	4.7	0.1	0.9	< 0.1	< 0.05	1.08	3.7	0.10	0.10	< 0.1
282236	41.4	1.89	5.31	7.59	0.24	12.4	< 0.1	69	492	1350	5.15	2.0	< 10	458	1.0	1.0	0.3	< 0.05	0.90	37.8	0.30	0.10	< 0.1
282237	12.8	> 3.00	0.45	3.41	2.39	0.92	< 0.1	49	9.4	80	0.71	1.7	< 10	9.1	0.1	2.1	< 0.1	< 0.05	2.14	1.8	0.10	0.05	< 0.1
282238	34.9	1.11	4.92	5.60	0.07	19.7	< 0.1	56	260	1880	4.57	1.5	40	413	1.6	1.4	0.4	< 0.05	0.72	36.5	0.50	0.06	< 0.1
282239	45.7	> 3.00	4.18	> 10.0	0.60	8.33	< 0.1	47	77.9	962	3.22	2.1	20	145	1.0	1.7	0.3	< 0.05	1.02	18.2	0.50	0.03	< 0.1

## Results

## Activation Laboratories Ltd.

## Report: A16-13297

Analyte Symbol	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu
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	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Method Code	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	TD-MS
282151	23.7	3.4	9.6	13.2	2.3	33.6	20	1.2	3.08	< 0.1	< 1	< 0.1	< 0.1	23	2.3	4.6	0.6	2.3	0.4	0.3	0.1	0.4	316
282152	24.8	4.0	3.9	18.2	3.2	42.8	28	1.6	2.11	< 0.1	< 1	< 0.1	< 0.1	98	3.2	6.7	0.8	3.3	0.6	0.5	0.1	0.6	366
282153	25.2	2.6	1.2	4.4	1.3	21.9	12	0.5	3.19	< 0.1	< 1	< 0.1	0.2	21	1.0	2.2	0.3	1.3	0.3	0.2	< 0.1	0.2	404
282154	62.6	6.1	1.1	8.8	2.6	11.6	22	1.3	13.3	< 0.1	< 1	< 0.1	< 0.1	67	2.5	5.7	0.8	3.2	0.6	0.4	0.1	0.5	121
282155	70.2	6.5	7.3	39.3	7.9	23.3	35	2.0	19.6	< 0.1	< 1	< 0.1	0.4	282	2.7	6.0	0.9	3.8	1.1	0.9	0.2	1.4	< 0.2
282156	53.5	10.3	1.0	31.5	9.3	53.6	24	3.0	1.00	< 0.1	< 1	< 0.1	0.2	261	3.5	8.0	1.2	4.9	1.2	1.3	0.3	1.7	2.8
282157	90.6	12.4	1.0	29.4	13.1	53.0	39	2.6	0.87	< 0.1	< 1	< 0.1	0.2	227	4.9	10.5	1.5	6.7	1.8	1.9	0.3	2.4	137
282158	102	15.2	< 0.1	24.7	15.3	84.2	37	2.0	0.61	< 0.1	1	< 0.1	0.1	162	7.2	15.5	2.4	10.9	2.8	2.4	0.4	2.8	27.0
282159	111	14.6	< 0.1	29.2	17.3	70.7	35	1.8	0.42	< 0.1	< 1	< 0.1	< 0.1	154	6.1	12.8	2.0	9.2	2.6	2.8	0.5	3.3	75.3
282160	69.9	12.5	16.9	157	20.3	312	105	11.9	75.4	0.2	6	0.3	0.2	1040	31.1	57.6	7.1	26.3	4.3	3.5	0.5	3.6	2500
282161	110	15.3	0.6	29.6	17.4	114	22	1.8	0.58	< 0.1	1	< 0.1	0.1	149	5.3	12.5	2.0	9.4	2.4	2.6	0.4	3.1	105
282162	151	18.4	1.3	18.4	22.7	115	14	2.1	0.41	< 0.1	< 1	< 0.1	0.1	172	5.2	12.5	2.0	9.6	2.7	2.9	0.5	3.8	133
282163	105	14.9	2.0	13.2	16.9	169	18	2.1	0.41	< 0.1	1	< 0.1	0.1	192	3.6	8.5	1.4	6.3	1.9	2.0	0.4	2.9	188
282164	80.7	11.0	< 0.1	13.5	10.8	71.7	38	5.1	0.63	< 0.1	< 1	1.0	< 0.1	185	4.1	9.0	1.4	6.4	1.6	1.7	0.3	1.9	47.6
282165	71.8	12.7	1.8	12.4	13.3	122	60	3.4	1.32	< 0.1	1	< 0.1	< 0.1	200	6.5	13.6	1.9	8.0	2.0	1.7	0.3	2.3	90.0
282166	51.4	12.5	< 0.1	37.1	11.4	171	129	5.1	2.67	< 0.1	1	< 0.1	< 0.1	446	23.6	46.9	5.6	21.3	3.3	2.5	0.3	2.1	27.0
282167	67.9	14.9	< 0.1	51.1	11.3	211	121	5.0	2.28	< 0.1	1	< 0.1	< 0.1	542	24.9	47.4	6.0	21.8	3.8	2.3	0.3	2.1	18.3
282168	55.8	14.3	< 0.1	51.2	10.8	212	122	4.9	1.78	< 0.1	1	< 0.1	< 0.1	512	22.2	43.6	5.5	20.1	3.3	2.3	0.3	2.0	38.0
282169	61.6	13.0	< 0.1	46.4	9.9	235	102	3.8	1.60	< 0.1	1	< 0.1	0.1	476	20.9	41.3	5.2	18.1	3.0	2.3	0.3	1.8	30.9
282170	51.0	13.2	< 0.1	43.5	9.2	302	104	3.8	1.20	< 0.1	1	< 0.1	0.2	478	18.3	34.9	4.7	16.1	2.4	2.0	0.3	1.6	38.2
282171	60.5	14.8	< 0.1	63.0	10.7	256	114	4.7	2.01	< 0.1	1	< 0.1	< 0.1	635	25.1	45.9	6.0	21.2	3.0	2.3	0.3	2.0	30.9
282172	85.1	19.1	< 0.1	81.6	33.7	568	129	6.4	0.51	< 0.1	2	< 0.1	< 0.1	702	30.2	65.9	9.6	38.5	7.9	6.5	1.0	6.1	2.0
282173	51.6	13.5	4.1	39.4	6.9	243	85	3.7	1.55	< 0.1	1	< 0.1	0.1	455	15.1	29.1	3.7	13.8	2.1	1.6	0.2	1.2	23.9
282174	66.0	14.9	< 0.1	51.1	11.7	236	117	4.5	1.58	< 0.1	1	< 0.1	< 0.1	575	21.0	41.7	5.5	19.6	3.1	2.8	0.4	2.2	33.1
282175	62.6	14.4	< 0.1	30.1	11.2	241	89	4.3	1.09	< 0.1	1	< 0.1	< 0.1	435	18.6	37.8	5.2	19.3	3.3	2.8	0.4	2.1	33.5
282176	75.8	15.3	2.1	52.3	13.4	176	108	5.1	1.48	< 0.1	1	< 0.1	< 0.1	566	15.7	30.8	4.3	16.6	3.0	2.6	0.4	2.4	71.8
282177	84.6	12.8	2.8	41.0	13.5	167	83	3.1	0.90	< 0.1	< 1	< 0.1	< 0.1	346	16.1	31.8	4.2	16.0	2.7	2.6	0.4	2.5	64.5
282178	77.1	14.1	1.8	54.6	12.9	144	105	3.6	1.23	< 0.1	1	< 0.1	< 0.1	460	18.3	37.9	4.7	17.3	3.1	2.6	0.4	2.4	62.5
282179	72.9	12.6	1.8	38.8	11.9	167	92	3.8	1.00	< 0.1	1	< 0.1	< 0.1	312	13.5	26.9	3.5	13.4	2.5	2.4	0.3	2.2	66.4
282180	59.4	13.7	< 0.1	50.2	11.0	196	95	3.6	0.99	< 0.1	1	< 0.1	< 0.1	475	19.2	38.2	4.9	17.2	2.8	2.4	0.3	2.0	35.8
282181	52.7	12.6	< 0.1	75.2	11.7	151	121	5.1	2.30	< 0.1	1	< 0.1	< 0.1	604	20.9	40.3	5.0	18.7	3.0	2.4	0.3	2.1	32.9
282182	57.3	16.8	5.9	78.2	14.8	214	144	5.9	1.86	< 0.1	1	< 0.1	0.2	560	21.8	45.1	5.7	20.1	3.0	2.4	0.4	2.4	72.9
282183	66.9	15.4	1.0	63.6	13.8	225	138	4.3	1.50	< 0.1	1	< 0.1	< 0.1	546	20.8	43.5	5.5	18.9	3.3	2.7	0.4	2.5	53.6
282184	93.5	12.3	4.7	89.5	14.1	391	73	9.4	469	0.7	11	0.7	0.3	441	17.0	32.0	4.2	15.1	2.8	2.6	0.4	2.5	> 10000
282185	61.3	13.3	< 0.1	42.4	10.9	272	114	4.4	2.67	< 0.1	1	< 0.1	< 0.1	656	17.0	36.7	4.7	16.1	2.7	2.2	0.3	1.9	61.6
282186	55.2	11.8	< 0.1	38.6	10.3	311	99	3.0	2.02	< 0.1	1	< 0.1	< 0.1	596	17.5	36.5	4.8	16.9	2.9	2.1	0.3	1.9	39.5
282187	62.4	12.9	< 0.1	43.6	10.1	259	105	3.4	1.17	< 0.1	1	< 0.1	< 0.1	615	20.0	40.8	5.4	19.3	3.3	2.4	0.3	1.8	35.1
282188	68.5	12.8	6.8	41.3	9.2	245	102	3.4	1.13	< 0.1	1	< 0.1	< 0.1	511	19.1	38.8	5.1	18.7	2.9	2.2	0.3	1.8	17.8
282189	68.4	14.7	4.2	42.8	11.0	256	111	3.1	1.21	< 0.1	1	< 0.1	< 0.1	441	18.9	38.4	5.1	18.2	3.2	2.3	0.3	2.0	32.4
282190	107	16.9	< 0.1	62.5	9.7	89.6	110	3.3	8.54	< 0.1	1	< 0.1	0.1	461	7.9	16.5	2.3	8.9	2.1	1.5	0.2	1.7	< 0.2
282191	37.8	11.9	< 0.1	44.6	5.2	178	84	2.9	0.88	< 0.1	< 1	< 0.1	< 0.1	416	17.8	31.8	4.1	14.6	2.3	1.7	0.2	0.9	20.2
282192	75.4	16.4	< 0.1	70.7	11.4	191	129	5.6	1.95	< 0.1	1	< 0.1	< 0.1	598	28.5	56.9	7.1	24.5	4.0	3.0	0.4	2.1	32.2

## Results

## Activation Laboratories Ltd.

## Report: A16-13297

Analyte Symbol	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu
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	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Method Code	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	TD-MS
282193	64.6	15.2	< 0.1	67.5	10.4	205	117	5.1	3.01	< 0.1	1	< 0.1	< 0.1	529	25.5	50.1	6.1	21.9	3.2	2.5	0.3	1.9	55.0
282194	59.4	14.4	< 0.1	65.8	10.0	210	112	4.8	3.41	< 0.1	1	< 0.1	< 0.1	650	24.2	48.0	5.9	20.7	3.1	2.4	0.3	1.9	78.4
282195	19.7	6.8	0.8	41.4	5.1	69.5	69	2.8	1.71	< 0.1	< 1	< 0.1	< 0.1	462	9.4	19.5	2.5	8.9	1.5	1.0	0.1	0.9	24.6
282196	69.6	17.2	< 0.1	58.1	26.5	536	115	4.8	0.48	< 0.1	2	< 0.1	< 0.1	715	19.5	45.5	6.5	27.3	6.0	5.2	0.8	5.1	< 0.2
282197	41.3	10.7	< 0.1	35.3	6.0	101	81	3.0	8.60	< 0.1	< 1	< 0.1	< 0.1	359	12.4	25.9	3.5	12.2	2.2	1.5	0.2	1.1	57.7
282198	9.1	7.8	< 0.1	22.4	2.3	161	40	1.5	0.84	< 0.1	< 1	< 0.1	< 0.1	214	3.7	7.0	0.9	2.9	0.5	0.4	0.1	0.4	16.6
282199	41.0	11.0	< 0.1	35.6	7.1	126	61	2.6	1.87	< 0.1	< 1	< 0.1	0.2	444	18.9	35.8	4.5	15.9	2.6	1.9	0.2	1.3	29.8
282200	60.8	13.5	< 0.1	55.7	9.3	142	84	1.0	0.87	< 0.1	< 1	< 0.1	< 0.1	620	20.3	40.5	5.0	17.8	3.0	2.3	0.3	1.7	46.5
282201	20.5	8.8	2.0	31.7	3.3	180	59	1.8	1.21	< 0.1	< 1	< 0.1	< 0.1	274	7.6	14.3	1.6	5.0	0.7	0.6	0.1	0.6	2.4
282202	48.4	13.2	3.4	42.2	9.9	155	106	4.4	1.53	< 0.1	1	< 0.1	< 0.1	439	23.7	47.6	5.5	19.2	3.3	2.3	0.3	1.7	4.1
282203	37.7	9.5	2.1	32.2	10.4	87.0	69	3.1	1.33	< 0.1	< 1	< 0.1	< 0.1	361	14.6	28.0	3.4	12.3	2.1	1.9	0.3	1.7	24.6
282204	49.4	13.7	4.1	54.6	10.1	175	117	5.1	1.93	< 0.1	1	< 0.1	< 0.1	668	28.7	55.6	6.1	22.3	3.3	2.5	0.3	1.8	20.9
282205	43.5	15.5	< 0.1	31.1	10.7	217	131	4.2	1.46	< 0.1	1	< 0.1	< 0.1	373	27.6	56.7	6.5	22.5	3.7	2.5	0.3	2.0	27.1
282206	25.5	14.7	< 0.1	32.0	8.9	152	112	5.1	1.96	< 0.1	1	< 0.1	< 0.1	422	17.2	43.6	4.3	14.2	2.6	2.0	0.3	1.6	294
282207	28.8	14.3	2.5	27.3	11.3	179	125	4.6	1.83	< 0.1	2	< 0.1	0.2	355	29.7	58.7	7.2	24.8	3.5	2.7	0.3	2.0	103
282208	14.9	8.0	320	75.8	17.3	94.9	133	2.0	195	0.2	9	5.8	0.4	1340	72.8	91.0	8.2	23.7	3.5	3.1	0.4	2.8	> 10000
282209	23.8	11.7	0.3	32.5	8.0	146	92	2.3	1.86	< 0.1	< 1	< 0.1	< 0.1	332	21.1	40.5	4.9	17.4	2.5	1.8	0.2	1.4	57.0
282210	27.8	9.5	0.2	32.4	6.1	98.5	75	3.0	1.41	< 0.1	1	< 0.1	< 0.1	326	18.6	35.6	4.2	15.0	2.3	1.6	0.2	1.1	64.2
282211	33.9	12.2	1.1	34.7	8.0	136	94	1.9	0.95	< 0.1	< 1	< 0.1	< 0.1	392	18.9	39.1	4.6	15.9	2.5	1.9	0.2	1.4	48.4
282212	28.7	9.2	6.3	32.5	6.8	75.7	90	3.9	1.68	< 0.1	1	< 0.1	< 0.1	307	13.8	26.8	3.1	10.5	1.5	1.2	0.2	1.2	77.2
282213	25.5	11.8	0.1	43.6	8.6	121	104	4.1	1.46	< 0.1	1	< 0.1	< 0.1	502	26.5	52.9	6.3	20.5	2.6	1.9	0.3	1.6	53.9
282214	21.0	13.9	5.9	38.2	10.0	180	120	3.8	2.27	< 0.1	1	< 0.1	0.1	395	25.0	50.7	6.1	22.4	2.8	2.3	0.3	1.8	20.4
282215	< 0.2	13.6	0.7	8.3	16.6	133	112	3.2	1.17	< 0.1	1	< 0.1	< 0.1	55	15.2	31.2	4.6	17.6	3.5	3.0	0.4	2.9	< 0.2
282216	0.2	15.2	< 0.1	10.1	15.0	146	150	3.6	1.15	< 0.1	2	< 0.1	< 0.1	87	22.8	46.3	5.8	21.2	4.0	2.8	0.4	2.7	< 0.2
282217	4.7	13.5	< 0.1	19.6	11.1	131	129	5.3	2.08	< 0.1	1	< 0.1	< 0.1	173	29.3	54.0	6.6	22.5	3.4	2.4	0.3	2.0	< 0.2
282218	2.0	13.9	< 0.1	17.3	10.5	141	126	4.2	1.17	< 0.1	2	< 0.1	< 0.1	157	15.9	30.8	4.0	14.4	2.6	1.9	0.3	1.9	< 0.2
282219	2.8	14.4	< 0.1	14.6	10.3	130	81	1.5	0.95	< 0.1	1	< 0.1	< 0.1	107	14.8	29.8	3.9	13.8	2.7	1.9	0.3	1.8	< 0.2
282220	81.4	16.6	< 0.1	84.6	35.6	581	103	5.5	0.40	< 0.1	2	< 0.1	< 0.1	773	30.8	67.4	9.7	40.2	7.5	6.4	1.0	6.5	1.1
282221	2.8	10.8	< 0.1	20.5	5.3	153	55	2.4	7.41	< 0.1	< 1	< 0.1	0.1	126	11.8	21.8	2.7	9.6	1.4	1.2	0.1	0.9	< 0.2
282222	< 0.2	15.6	< 0.1	26.3	11.4	134	104	4.3	1.17	< 0.1	1	< 0.1	< 0.1	199	17.6	35.3	4.2	15.4	2.4	1.9	0.3	1.9	< 0.2
282223	43.3	13.7	0.8	60.2	5.4	232	45	2.2	0.79	< 0.1	< 1	< 0.1	< 0.1	453	10.4	20.1	2.4	9.0	1.3	1.1	0.2	1.0	14.7
282224	55.8	10.3	< 0.1	25.4	1.3	236	83	2.5	0.29	< 0.1	< 1	< 0.1	< 0.1	940	1.6	3.6	0.4	1.7	0.3	0.3	< 0.1	0.2	2.1
282225	43.0	8.1	0.1	25.7	1.0	191	48	1.7	0.37	< 0.1	< 1	< 0.1	< 0.1	647	0.9	1.9	0.3	1.1	0.2	0.1	< 0.1	0.2	0.6
282226	20.3	7.3	< 0.1	34.2	0.8	285	42	2.2	0.30	< 0.1	< 1	< 0.1	< 0.1	1010	0.8	1.5	0.2	0.8	0.2	0.1	< 0.1	0.1	0.4
282227	10.3	8.7	0.2	38.2	0.6	270	41	1.0	0.24	< 0.1	< 1	< 0.1	< 0.1	312	0.7	1.4	0.2	0.7	0.2	0.1	< 0.1	0.1	0.9
282228	8.2	10.9	0.4	24.6	0.8	188	54	1.2	0.23	< 0.1	< 1	< 0.1	< 0.1	225	0.7	1.6	0.2	1.0	0.2	0.2	< 0.1	0.1	< 0.2
282229	12.4	9.4	64.7	43.1	0.8	205	37	1.0	0.60	< 0.1	< 1	< 0.1	0.3	503	0.5	1.3	0.2	0.7	0.2	0.1	< 0.1	0.1	5.0
282230	16.1	9.0	157	44.0	0.7	222	36	1.1	0.69	< 0.1	< 1	< 0.1	0.3	573	0.5	1.0	0.2	0.6	0.1	0.1	< 0.1	0.1	8.5
282231	39.6	9.4	406	24.2	2.3	243	49	1.6	0.78	< 0.1	< 1	< 0.1	0.5	552	1.1	2.5	0.4	1.8	0.5	0.4	0.1	0.4	44.3
282232	122	13.1	1110	19.1	19.4	312	117	11.3	3.36	< 0.1	1	0.8	0.1	282	23.0	35.4	5.5	23.4	4.6	4.5	0.6	3.9	105
282233	59.8	10.7	17.5	6.6	2.8	175	44	1.4	1.16	< 0.1	< 1	< 0.1	0.3	140	2.2	4.9	0.8	3.5	0.7	0.6	0.1	0.5	13.0
282234	7.3	8.7	3.0	42.5	0.6	197	40	1.2	1.34	< 0.1	< 1	< 0.1	< 0.1	483	0.4	1.1	0.1	0.6	0.1	0.1	< 0.1	0.1	3.4

## Results

## Activation Laboratories Ltd.

Report: A16-13297

Analyte Symbol	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu
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	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Method Code	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	TD-MS
282235	14.3	8.7	4.6	37.7	0.9	252	42	1.4	0.89	< 0.1	< 1	< 0.1	0.1	458	1.3	2.6	0.3	1.3	0.2	0.2	< 0.1	0.1	15.9
282236	157	15.7	3.7	6.0	8.4	326	70	2.1	0.32	< 0.1	< 1	< 0.1	< 0.1	119	3.4	7.0	1.1	5.0	1.1	1.2	0.2	1.4	35.5
282237	2.4	6.3	< 0.1	58.8	1.0	429	54	1.4	0.38	< 0.1	< 1	< 0.1	< 0.1	1190	1.0	2.0	0.3	1.0	0.2	0.2	< 0.1	0.2	< 0.2
282238	120	11.0	3.7	2.5	14.4	334	57	2.1	0.30	< 0.1	< 1	< 0.1	0.1	29	7.7	16.3	2.3	9.1	2.0	2.1	0.3	2.3	29.2
282239	79.9	8.3	< 0.1	12.1	9.2	341	100	2.9	0.25	< 0.1	< 1	< 0.1	< 0.1	263	7.9	17.6	2.5	9.7	2.0	1.6	0.2	1.5	< 0.2

Analyte Symbol	Ge	Tm	Yb	Lu	Ta	W	Re	Ti	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Method Code	TD-MS	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-ICP	TD-ICP
282151	< 0.1	< 0.1	0.2	< 0.1	0.2	1.0	< 0.001	0.07	3.2	4	0.8	0.3	0.0809	0.014	0.13
282152	< 0.1	< 0.1	0.3	< 0.1	0.3	5.4	< 0.001	0.09	3.0	5	1.4	0.5	0.103	0.017	0.19
282153	< 0.1	< 0.1	0.1	< 0.1	< 0.1	1.1	< 0.001	< 0.05	1.7	2	0.4	0.1	0.0526	0.009	0.12
282154	< 0.1	< 0.1	0.3	< 0.1	< 0.1	1.3	0.004	0.05	2.7	6	0.6	0.3	0.120	0.024	0.13
282155	< 0.1	0.1	0.9	0.1	0.3	1.4	0.007	0.27	14.2	15	0.7	0.3	0.270	0.022	1.86
282156	< 0.1	0.2	1.1	0.1	0.7	0.8	< 0.001	0.19	6.3	20	0.4	0.2	0.498	0.029	2.26
282157	< 0.1	0.2	1.4	0.2	0.2	0.8	< 0.001	0.19	9.6	28	0.4	0.2	0.582	0.035	2.34
282158	0.3	0.3	1.9	0.3	0.2	0.4	0.001	0.15	4.3	34	0.5	0.1	0.631	0.040	3.10
282159	0.2	0.3	1.9	0.2	0.2	0.9	< 0.001	0.19	3.6	32	0.4	0.2	0.508	0.038	2.57
282160	0.3	0.3	2.2	0.3	0.7	1.7	0.001	0.95	21.6	14	15.1	5.2	0.346	0.092	0.33
282161	0.2	0.3	1.9	0.2	< 0.1	0.6	< 0.001	0.19	5.2	34	0.6	0.2	0.474	0.053	2.79
282162	0.2	0.4	2.4	0.3	0.2	0.4	< 0.001	0.13	6.6	39	0.5	0.2	0.563	0.050	3.40
282163	0.3	0.3	1.9	0.2	0.2	0.3	< 0.001	0.10	12.0	32	0.5	0.2	0.505	0.050	2.56
282164	0.1	0.2	1.1	0.2	0.3	0.6	< 0.001	0.09	1.5	22	0.6	0.2	0.458	0.032	0.48
282165	0.4	0.3	1.8	0.2	0.3	2.0	0.001	0.09	3.7	31	1.1	0.3	0.442	0.045	1.60
282166	< 0.1	0.2	1.2	0.2	0.4	2.2	0.001	0.19	4.3	13	5.3	1.6	0.292	0.055	0.22
282167	< 0.1	0.2	1.2	0.2	0.3	2.6	< 0.001	0.31	5.2	16	6.0	2.0	0.339	0.061	0.17
282168	< 0.1	0.2	1.2	0.2	0.4	3.1	< 0.001	0.32	7.3	15	5.6	1.8	0.322	0.058	0.30
282169	< 0.1	0.2	1.0	0.2	0.3	3.2	< 0.001	0.26	6.7	14	5.6	1.7	0.270	0.051	0.18
282170	0.2	0.1	0.9	0.1	0.3	3.7	< 0.001	0.23	7.1	13	4.5	1.5	0.274	0.051	0.26
282171	0.1	0.2	1.1	0.2	0.3	3.5	< 0.001	0.33	6.2	14	7.5	4.1	0.296	0.056	0.15
282172	0.2	0.5	3.3	0.4	0.4	0.1	< 0.001	0.43	12.1	21	3.8	1.4	0.463	0.150	0.14
282173	< 0.1	0.1	0.8	0.1	0.3	4.2	< 0.001	0.21	6.0	12	3.1	1.1	0.262	0.048	0.42
282174	< 0.1	0.2	1.2	0.2	0.3	3.4	< 0.001	0.25	28.1	18	4.0	1.2	0.367	0.065	0.28
282175	0.1	0.2	1.3	0.2	0.3	3.7	< 0.001	0.15	4.2	18	3.4	1.0	0.383	0.062	0.22
282176	0.1	0.2	1.7	0.2	0.3	4.7	0.001	0.28	5.3	24	3.4	1.0	0.452	0.058	0.42
282177	0.3	0.3	1.8	0.3	0.3	2.3	< 0.001	0.21	4.9	24	3.4	1.0	0.229	0.045	0.18
282178	0.4	0.2	1.6	0.2	0.3	3.0	< 0.001	0.29	5.2	22	4.3	1.3	0.258	0.049	0.29
282179	0.5	0.2	1.5	0.2	0.2	3.9	< 0.001	0.18	4.4	22	3.0	0.9	0.254	0.043	0.33
282180	0.3	0.2	1.3	0.2	0.7	3.1	< 0.001	0.27	5.3	16	4.5	1.4	0.194	0.047	0.16
282181	< 0.1	0.2	1.4	0.2	0.4	5.2	< 0.001	0.41	6.4	19	5.0	1.5	0.389	0.053	0.45
282182	< 0.1	0.2	1.6	0.3	0.5	7.1	< 0.001	0.36	6.6	20	5.7	1.7	0.429	0.057	0.54
282183	0.2	0.2	1.5	0.2	0.3	3.2	< 0.001	0.33	5.5	19	5.2	1.6	0.356	0.056	0.18
282184	< 0.1	0.2	1.6	0.3	0.6	2.6	0.007	0.46	24.6	15	7.4	2.3	0.370	0.091	1.26
282185	< 0.1	0.2	1.2	0.2	0.3	3.0	< 0.001	0.22	4.6	16	3.6	1.2	0.355	0.079	0.04
282186	< 0.1	0.2	1.1	0.2	0.2	1.9	< 0.001	0.23	4.6	16	3.4	1.1	0.316	0.065	0.04
282187	< 0.1	0.2	1.1	0.2	0.2	2.3	< 0.001	0.24	5.4	16	3.7	1.1	0.297	0.086	0.09
282188	0.2	0.2	1.1	0.2	0.2	2.5	< 0.001	0.19	7.3	16	3.8	1.1	0.281	0.073	0.02
282189	0.4	0.2	1.2	0.2	0.3	1.8	< 0.001	0.21	5.0	18	4.0	1.2	0.195	0.064	0.03
282190	0.3	0.2	1.3	0.2	0.2	2.5	< 0.001	0.39	2.7	24	4.2	1.4	0.312	0.054	0.05
282191	0.1	0.1	0.5	0.1	0.2	1.5	< 0.001	0.25	2.8	9	2.0	0.7	0.232	0.044	0.02
282192	< 0.1	0.2	1.3	0.2	0.5	3.4	< 0.001	0.37	6.0	17	6.7	2.1	0.369	0.062	0.07

Analyte Symbol	Ge	Tm	Yb	Lu	Ta	W	Re	Ti	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Method Code	TD-MS	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-ICP	TD-ICP
282193	< 0.1	0.2	1.1	0.2	0.4	2.7	0.001	0.35	6.4	16	6.1	1.9	0.336	0.055	0.10
282194	< 0.1	0.2	1.1	0.2	0.3	2.4	0.002	0.36	4.2	15	5.8	8.3	0.332	0.058	0.08
282195	< 0.1	0.1	0.6	0.1	0.2	2.6	< 0.001	0.29	17.0	10	3.3	1.0	0.218	0.034	0.31
282196	< 0.1	0.4	2.9	0.4	0.2	< 0.1	< 0.001	0.41	11.7	18	1.9	1.2	0.610	0.163	0.14
282197	< 0.1	0.1	0.7	0.1	0.2	2.5	0.009	0.23	7.9	11	4.0	1.2	0.245	0.042	0.07
282198	0.1	< 0.1	0.2	< 0.1	0.3	0.7	< 0.001	0.12	2.9	2	0.7	0.5	0.0794	0.015	0.03
282199	< 0.1	0.1	0.8	0.1	0.3	1.6	< 0.001	0.25	9.8	11	4.5	1.4	0.254	0.042	0.03
282200	0.1	0.2	1.0	0.1	< 0.1	0.4	0.001	0.36	5.2	16	5.5	1.7	0.182	0.052	0.04
282201	< 0.1	0.1	0.3	< 0.1	0.1	1.2	< 0.001	0.16	9.0	4	1.3	0.8	0.116	0.022	0.35
282202	< 0.1	0.1	1.0	0.1	0.3	2.6	< 0.001	0.25	14.2	13	5.3	1.7	0.308	0.052	0.46
282203	< 0.1	0.1	0.8	0.1	0.2	1.6	< 0.001	0.16	3.9	10	3.5	1.1	0.219	0.038	0.13
282204	0.1	0.2	1.1	0.2	0.5	3.1	< 0.001	0.36	6.0	15	5.6	1.7	0.344	0.061	0.24
282205	0.1	0.2	1.2	0.2	0.3	1.8	< 0.001	0.19	5.2	16	6.4	2.1	0.256	0.060	0.25
282206	< 0.1	0.1	1.1	0.2	0.3	2.5	< 0.001	0.22	4.7	13	4.3	1.7	0.320	0.056	0.18
282207	< 0.1	0.2	1.2	0.2	0.4	3.1	0.001	0.15	5.5	15	6.7	2.1	0.346	0.059	0.46
282208	0.1	0.3	1.9	0.3	< 0.1	34.4	0.090	0.31	7.0	11	1.8	44.9	0.259	0.081	2.34
282209	0.1	0.1	0.9	0.1	0.2	1.3	< 0.001	0.17	3.9	12	5.0	1.6	0.225	0.047	0.15
282210	< 0.1	0.1	0.7	0.1	0.2	1.7	< 0.001	0.16	3.0	10	4.1	1.4	0.207	0.039	0.14
282211	0.1	0.2	1.0	0.1	< 0.1	0.7	< 0.001	0.18	3.7	13	5.1	1.8	0.253	0.051	0.20
282212	< 0.1	0.1	0.8	0.1	0.3	2.2	< 0.001	0.18	7.2	8	7.5	2.7	0.214	0.038	0.24
282213	< 0.1	0.1	1.0	0.1	0.2	2.0	< 0.001	0.26	4.6	12	8.0	2.9	0.270	0.049	0.24
282214	< 0.1	0.2	1.1	0.2	0.2	1.8	< 0.001	0.22	5.4	14	5.8	1.9	0.308	0.057	0.26
282215	0.1	0.3	1.9	0.3	0.2	2.3	< 0.001	0.06	3.8	16	2.8	0.8	0.476	0.073	0.31
282216	< 0.1	0.2	1.5	0.2	0.2	2.2	< 0.001	0.05	2.7	13	3.9	1.2	0.321	0.071	0.13
282217	< 0.1	0.2	1.4	0.2	0.4	3.1	< 0.001	0.09	4.1	10	4.0	1.2	0.306	0.042	0.53
282218	< 0.1	0.2	1.3	0.2	0.3	2.2	< 0.001	0.10	3.4	8	3.8	1.1	0.271	0.039	0.25
282219	< 0.1	0.2	1.1	0.2	< 0.1	0.5	< 0.001	0.06	2.3	7	3.3	0.9	0.215	0.037	0.18
282220	0.1	0.6	3.6	0.5	0.2	< 0.1	< 0.001	0.45	12.6	21	3.3	1.3	0.498	0.163	0.15
282221	0.1	0.1	0.6	0.1	< 0.1	3.9	0.012	0.12	2.9	6	2.0	0.6	0.192	0.031	0.18
282222	0.1	0.2	1.3	0.2	0.4	2.3	< 0.001	0.11	2.8	8	4.5	1.3	0.249	0.042	0.16
282223	0.1	0.1	0.6	0.1	0.2	0.9	< 0.001	0.36	4.5	8	2.0	0.6	0.182	0.033	0.09
282224	0.1	< 0.1	0.2	< 0.1	< 0.1	0.5	< 0.001	0.30	5.7	3	0.4	0.6	0.108	0.016	0.10
282225	0.1	< 0.1	0.1	< 0.1	< 0.1	0.4	< 0.001	0.23	3.0	3	0.4	0.5	0.0878	0.014	0.06
282226	0.1	< 0.1	0.1	< 0.1	< 0.1	0.4	< 0.001	0.37	4.6	1	0.2	0.3	0.0857	0.021	0.02
282227	0.1	< 0.1	0.1	< 0.1	< 0.1	0.5	< 0.001	0.24	2.2	1	0.1	0.2	0.0727	0.016	< 0.01
282228	0.1	< 0.1	0.1	< 0.1	< 0.1	0.3	< 0.001	0.16	2.0	1	0.3	0.3	0.0822	0.019	< 0.01
282229	0.1	< 0.1	0.1	< 0.1	< 0.1	0.7	< 0.001	0.30	3.5	2	0.4	9.0	0.0742	0.015	0.04
282230	0.1	< 0.1	0.1	< 0.1	< 0.1	0.8	< 0.001	0.30	3.1	1	0.1	0.2	0.0723	0.016	0.06
282231	0.1	< 0.1	0.3	< 0.1	< 0.1	1.8	< 0.001	0.14	3.1	5	0.3	0.2	0.138	0.028	0.39
282232	0.2	0.3	2.0	0.2	0.5	0.7	< 0.001	0.10	6.8	17	4.4	1.3	0.626	0.179	1.60
282233	0.1	< 0.1	0.3	< 0.1	< 0.1	0.7	< 0.001	< 0.05	3.1	6	0.4	0.2	0.125	0.029	0.14
282234	0.1	< 0.1	< 0.1	< 0.1	0.2	0.7	< 0.001	0.28	3.0	1	0.1	0.1	0.0653	0.015	0.03

## Results

## Activation Laboratories Ltd.

Report: A16-13297

Analyte Symbol	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Method Code	TD-MS	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-ICP	TD-ICP
282235	0.1	< 0.1	0.1	< 0.1	< 0.1	0.9	< 0.001	0.23	3.4	2	0.3	0.3	0.0802	0.021	0.16
282236	0.1	0.1	1.0	0.1	< 0.1	1.6	< 0.001	0.05	11.1	14	1.4	0.7	0.211	0.024	0.11
282237	0.1	< 0.1	0.1	< 0.1	< 0.1	1.1	< 0.001	0.33	5.8	6	0.2	0.2	0.0973	0.025	0.02
282238	< 0.1	0.2	1.6	0.2	0.1	1.6	< 0.001	0.05	6.5	15	1.4	0.6	0.173	0.028	0.09
282239	0.4	0.2	1.1	0.1	0.2	1.4	< 0.001	0.08	4.6	11	3.0	0.6	0.196	0.010	< 0.01

Analyte Symbol	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi	Se
Unit Symbol	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02	0.1
Method Code	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	TD-MS
GXR-1 Meas	8.4	0.05	0.24	2.95	0.05	0.86	2.2	85	15.1	914	27.1	0.3	3420	44.4		1.0		32.6	2.92	8.4	0.40	1520	15.6
GXR-1 Cert	8.20	0.0520	0.217	3.52	0.050	0.960	3.30	80.0	12.0	852	23.6	0.960	3900	41.0		1.22		31.0	3.00	8.20	0.690	1380	16.6
GXR-1 Meas	9.5	0.05	0.24	3.26	0.06	0.88	2.5	83	15.5	932	25.8	0.5	1870	43.7		1.4		30.8	2.79	8.6	0.40	1490	16.5
GXR-1 Cert	8.20	0.0520	0.217	3.52	0.050	0.960	3.30	80.0	12.0	852	23.6	0.960	3900	41.0		1.22		31.0	3.00	8.20	0.690	1380	16.6
DH-1a Meas																							
DH-1a Cert																							
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas	10.5	0.59	1.76	7.86	3.05	0.96	< 0.1	87	48.0	153	3.11	1.3	70	40.9		2.0		3.19	2.72	14.1	1.10	19.1	5.1
GXR-4 Cert	11.1	0.564	1.66	7.20	4.01	1.01	0.860	87.0	64.0	155	3.09	6.30	110	42.0		1.90		4.00	2.80	14.6	1.63	19.0	5.60
GXR-4 Meas	11.7	0.56	1.85	8.39	4.85	0.99	0.3	89	47.6	165	3.23	1.3	70	44.8		2.2		3.36	2.86	14.7	1.10	19.7	5.7
GXR-4 Cert	11.1	0.564	1.66	7.20	4.01	1.01	0.860	87.0	64.0	155	3.09	6.30	110	42.0		1.90		4.00	2.80	14.6	1.63	19.0	5.60
SDC-1 Meas	35.3	1.65	1.01	9.72	1.67	1.00		51	51.0	857	4.72	1.0	< 10	35.4	3.0	2.9	0.8		3.89	18.2	1.10		
SDC-1 Cert	34.00	1.52	1.02	8.34	2.72	1.00		102.00	64.00	880.00	4.82	8.30	200.00	38.0	4.10	3.00	1.50		4.00	18.0	1.70		
SDC-1 Meas	32.7	1.45	0.97	4.29	1.88	0.89		62	44.6	786	4.48	1.0	30	34.4	2.8	2.9	0.8		3.89	17.4	1.00		
SDC-1 Cert	34.00	1.52	1.02	8.34	2.72	1.00		102.00	64.00	880.00	4.82	8.30	200.00	38.0	4.10	3.00	1.50		4.00	18.0	1.70		
GXR-6 Meas	34.0	0.11	0.58	> 10.0	1.44	0.18	< 0.1	149	72.9	949	5.13	2.2	70	23.3		1.0		0.09	4.00	12.1	0.40	0.19	< 0.1
GXR-6 Cert	32.0	0.104	0.609	17.7	1.87	0.180	1.00	186	96.0	1010	5.58	4.30	68.0	27.0		1.40		1.30	4.20	13.8	0.760	0.290	0.940
GXR-6 Meas																							
GXR-6 Cert																							
DNC-1a Meas	5.0							145	201					276						59.4	0.40		
DNC-1a Cert	5.2							148	270					247						57	0.59		
DNC-1a Meas	5.0							146	159					265						57.1	0.40		
DNC-1a Cert	5.2							148	270					247						57	0.59		
SBC-1 Meas	151						0.2	218	71.0			2.7		87.6	2.9	3.3	0.8		7.95	22.3	1.30	0.71	
SBC-1 Cert	163.0						0.40	220.0	109			3.7		82.8	3.80	3.20	1.40		8.2	22.7	1.98	0.70	
SBC-1 Meas	167						0.3	220	91.6			3.3		91.9	3.1	3.4	0.9		8.97	22.8	1.40	0.72	
SBC-1 Cert	163.0						0.40	220.0	109			3.7		82.8	3.80	3.20	1.40		8.2	22.7	1.98	0.70	
OREAS 45d (4-Acid) Meas	21.1	0.10	0.25	> 10.0	0.46	0.18		100	510	504	14.8	1.6		243	1.2	0.7	0.3		3.77	31.2	0.40	0.34	
OREAS 45d (4-Acid) Cert	21.5	0.101	0.245	8.150	0.412	0.185		235.0	549	490.000	14.5	3.830		231.0	1.38	0.79	0.46		3.910	29.50	0.57	0.31	
SdAR-M2 (U.S.G.S.) Meas	16.2						4.6	23	37.7			2.9	1130	49.7	2.3	6.6	0.6		1.74	11.9	1.00	1.05	
SdAR-M2 (U.S.G.S.) Cert	17.9						5.1	25.2	49.6			7.29	1440.00	48.8	3.58	6.6	1.21		1.82	12.4	1.44	1.05	
SdAR-M2 (U.S.G.S.) Meas	17.3						4.9	24	41.5			3.4	530	52.3	2.2	6.9	0.6		1.79	12.9	0.90	1.07	
SdAR-M2 (U.S.G.S.) Cert	17.9						5.1	25.2	49.6			7.29	1440.00	48.8	3.58	6.6	1.21		1.82	12.4	1.44	1.05	
282154 Orig	28.5	0.18	1.86	4.98	0.33	0.25	< 0.1	39	184	329	2.18	0.5	40	147	0.3	0.2	0.1	0.17	1.13	9.5	0.10	1.34	< 0.1
282154 Dup	30.0	0.19	1.91	5.35	0.37	0.26	< 0.1	39	199	352	2.25	0.6	< 10	155	0.3	0.3	0.1	0.15	1.22	9.7	0.10	1.36	< 0.1
282156 Orig	23.0	1.87	1.68	> 10.0	1.46	0.83	< 0.1	127	45.7	625	4.95	0.9	10	31.5	1.1	2.1	0.3	0.18	0.89	31.7	0.40	2.85	1.1
282156 Dup	22.9	1.82	1.77	> 10.0	1.55	0.87	< 0.1	127	43.8	604	5.21	0.9	< 10	33.5	1.2	1.1	0.3	0.19	0.88	33.1	0.40	2.97	1.1

Analyte Symbol	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi	Se
Unit Symbol	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02	0.1
Method Code	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	TD-MS
282183 Orig	34.8	1.95	1.61	> 10.0	2.32	1.51	< 0.1	122	98.0	462	4.18	3.4	20	73.4	1.6	1.2	0.4	< 0.05	2.39	23.2	0.80	0.23	< 0.1
282183 Dup	35.3	1.99	1.70	9.44	2.30	1.52	< 0.1	120	101	464	4.43	3.2	< 10	75.6	1.5	1.3	0.4	< 0.05	2.35	24.7	0.80	0.25	< 0.1
282200 Split Orig PREP DUP	30.9	2.68	2.13	8.19	2.14	0.46	< 0.1	71	131	463	3.83	2.0	30	92.9	1.0	1.6	0.3	< 0.05	2.17	19.9	0.70	0.18	< 0.1
282200 Split PREP DUP	30.8	2.72	2.05	8.93	2.02	0.45	< 0.1	94	126	456	3.89	2.5	20	91.2	1.0	1.6	0.3	< 0.05	2.32	20.1	0.70	0.18	< 0.1
282208 Orig	19.1	0.73	1.37	5.65	3.44	3.84	< 0.1	179	52.9	4490	28.0	2.8	130	89.6	1.9	1.0	0.5	0.93	0.68	> 500	1.50	9.89	1.5
282208 Dup	18.8	0.71	1.31	5.56	3.46	4.02	< 0.1	177	48.1	4290	26.8	2.8	110	86.4	1.8	0.9	0.5	1.10	0.68	> 500	1.40	9.77	1.5
282226 Orig	5.1	> 3.00	0.45	9.19	1.60	0.29	< 0.1	15	15.7	95	0.83	0.9	< 10	5.7	0.1	1.5	< 0.1	< 0.05	0.51	2.9	0.10	0.05	< 0.1
282226 Dup	4.9	> 3.00	0.44	8.68	1.72	0.28	< 0.1	15	8.2	91	0.80	1.2	< 10	5.6	0.1	1.3	< 0.1	< 0.05	0.48	2.7	0.10	0.05	< 0.1
Method Blank																							
Method Blank																							
Method Blank	< 0.5	< 0.01	< 0.01	0.01	< 0.01	0.01	< 0.1	1	2.4	7	< 0.01	< 0.1	< 10	< 0.5	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.1	< 0.05	0.04	< 0.1
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							

Analyte Symbol	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu
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	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Method Code	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	TD-MS
GXR-1 Meas	889	4.4	413	2.7	25.8	308	15	0.8	17.9	0.8	29	27.3	8.8	742	7.2	13.2		7.7	2.4	3.1	0.6	3.7	1300
GXR-1 Cert	760	13.8	427	14.0	32.0	275	38.0	0.800	18.0	0.770	54.0	122	13.0	750	7.50	17.0		18.0	2.70	4.20	0.830	4.30	1110
GXR-1 Meas	938	9.4	405	3.6	24.3	296	24	1.4	18.3	0.9	31	45.0	10.0	684	7.1	13.6		7.7	2.2	3.0	0.5	3.7	1250
GXR-1 Cert	760	13.8	427	14.0	32.0	275	38.0	0.800	18.0	0.770	54.0	122	13.0	750	7.50	17.0		18.0	2.70	4.20	0.830	4.30	1110
DH-1a Meas																							
DH-1a Cert																							
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas	68.4	9.9	89.1	110	12.0	217	43	9.8	319	0.2	7	3.7	1.2	695	55.6	99.9		38.9	4.9	3.5	0.4	2.1	7050
GXR-4 Cert	73.0	20.0	98.0	160	14.0	221	186	10.0	310	0.270	5.60	4.80	0.970	1640	64.5	102		45.0	6.60	5.25	0.360	2.60	6520
GXR-4 Meas	68.5	13.0	91.8	138	11.0	217	41	9.5	331	0.2	7	3.8	0.9	1120	57.6	104		40.2	5.2	3.6	0.4	2.2	7060
GXR-4 Cert	73.0	20.0	98.0	160	14.0	221	186	10.0	310	0.270	5.60	4.80	0.970	1640	64.5	102		45.0	6.60	5.25	0.360	2.60	6520
SDC-1 Meas	107	13.7	< 0.1	76.5		178	41	2.4			< 1	< 0.1		640	33.3	72.6		36.1	5.7	4.9	0.7	4.6	22.4
SDC-1 Cert	103.00	21.00	0.220	127.00		180.00	290.00	21.00			3.00	0.54		630	42.00	93.00		40.00	8.20	7.00	1.20	6.70	30.000
SDC-1 Meas	87.8	16.2	< 0.1	75.5		165	41	8.8			2	< 0.1		598	35.4	78.0		35.8	5.4	4.7	0.7	4.5	15.4
SDC-1 Cert	103.00	21.00	0.220	127.00		180.00	290.00	21.00			3.00	0.54		630	42.00	93.00		40.00	8.20	7.00	1.20	6.70	30.000
GXR-6 Meas	110	12.4	247	54.5	9.1	38.4	100	3.2	1.48	< 0.1	1	1.5	< 0.1	1390	10.8	26.7		10.3	1.9	1.6	0.2	1.6	49.6
GXR-6 Cert	118	35.0	330	90.0	14.0	35.0	110	7.50	2.40	0.260	1.70	3.60	0.0180	1300	13.9	36.0		13.0	2.67	2.97	0.415	2.80	66.0
GXR-6 Meas																							
GXR-6 Cert																							
DNC-1a Meas	56.0	11.6		2.9	14.2	146	41	1.5				0.3		109	3.4			4.6					88.8
DNC-1a Cert	70	15		5	18.0	144	38.0	3				0.96		118	3.6			5.20					100
DNC-1a Meas	55.8	11.7		3.1	12.4	137	38	1.8				0.4		99	3.3			4.2					85.8
DNC-1a Cert	70	15		5	18.0	144	38.0	3				0.96		118	3.6			5.20					100
SBC-1 Meas	175	18.4	10.3	91.9	25.8	172	111	9.8	2.38		3	0.6		602	45.7	91.4	11.6	42.5	7.5	5.7	0.8	4.8	13.1
SBC-1 Cert	186.0	27.0	25.7	147	36.5	178.0	134.0	15.3	2.40		3.3	1.01		788.0	52.5	108.0	12.6	49.2	9.6	8.5	1.20	7.10	31.0000
SBC-1 Meas	186	20.7	15.1	130	25.9	169	121	15.6	2.09		4	0.7		717	45.8	95.4	12.4	44.9	6.9	6.1	0.9	5.2	12.7
SBC-1 Cert	186.0	27.0	25.7	147	36.5	178.0	134.0	15.3	2.40		3.3	1.01		788.0	52.5	108.0	12.6	49.2	9.6	8.5	1.20	7.10	31.0000
OREAS 45d (4-Acid) Meas	38.7	18.5	2.8	36.8	9.4	30.1	67	1.7	0.53	< 0.1	< 1	< 0.1		187	15.4	32.5	3.7	13.2	2.1	1.7	0.2	1.8	377
OREAS 45d (4-Acid) Cert	45.7	21.20	13.8	42.1	9.53	31.30	141	14.50	2.500	0.096	2.78	0.82		183.0	16.9	37.20	3.70	13.4	2.80	2.42	0.400	2.26	371
SdAR-M2 (U.S.G.S.) Meas	845	8.4		85.4	20.3	128	96	16.4	11.9					920	41.2	86.1	9.9	33.3	5.6	4.0	0.6	3.6	246
SdAR-M2 (U.S.G.S.) Cert	760	17.6		149	32.7	144	259	26.2	13.3					990	46.6	98.8	11.0	39.4	7.18	6.28	0.97	5.88	236.00 00
SdAR-M2 (U.S.G.S.) Meas	893	14.3		101	19.6	141	111	21.1	13.2					976	38.4	83.4	9.5	32.6	4.8	3.8	0.5	3.5	237
SdAR-M2 (U.S.G.S.) Cert	760	17.6		149	32.7	144	259	26.2	13.3					990	46.6	98.8	11.0	39.4	7.18	6.28	0.97	5.88	236.00 00
282154 Orig	62.0	6.1	1.5	8.6	2.4	10.7	22	1.1	13.0	< 0.1	< 1	< 0.1	0.1	63	2.5	5.7	0.8	3.2	0.6	0.4	0.1	0.5	117
282154 Dup	63.2	6.2	0.7	9.0	2.7	12.5	22	1.4	13.6	< 0.1	1	< 0.1	< 0.1	70	2.5	5.7	0.8	3.2	0.7	0.5	0.1	0.5	124

Analyte Symbol	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu
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	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Method Code	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	TD-MS
282156 Orig	53.2	10.3	1.4	31.0	9.2	52.0	24	3.2	0.94	< 0.1	< 1	< 0.1	0.3	248	3.3	7.8	1.1	4.8	1.2	1.2	0.2	1.7	1.3
282156 Dup	53.7	10.2	0.6	32.1	9.4	55.2	24	2.7	1.05	< 0.1	< 1	< 0.1	0.2	274	3.7	8.2	1.2	5.1	1.3	1.3	0.3	1.7	4.2
282183 Orig	67.9	15.1	1.3	63.2	13.7	219	143	4.8	1.51	< 0.1	1	< 0.1	< 0.1	541	20.6	43.3	5.4	18.5	3.4	2.8	0.4	2.4	51.0
282183 Dup	65.9	15.7	0.8	64.0	14.0	230	134	3.8	1.48	< 0.1	1	< 0.1	< 0.1	551	20.9	43.7	5.6	19.3	3.3	2.5	0.4	2.5	56.1
282200 Split Orig PREP DUP	60.8	13.5	< 0.1	55.7	9.3	142	84	1.0	0.87	< 0.1	< 1	< 0.1	< 0.1	620	20.3	40.5	5.0	17.8	3.0	2.3	0.3	1.7	46.5
282200 Split PREP DUP	53.1	14.3	< 0.1	54.5	9.4	143	101	3.6	2.15	< 0.1	< 1	< 0.1	< 0.1	588	20.8	41.2	5.4	18.5	3.1	2.2	0.3	1.8	40.2
282208 Orig	14.7	8.4	321	74.1	17.4	95.4	136	2.1	198	0.2	9	6.0	0.5	1300	79.9	95.6	8.4	24.1	3.5	3.2	0.4	2.8	> 10000
282208 Dup	15.2	7.6	319	77.6	17.1	94.3	130	1.9	193	0.3	9	5.7	0.4	1390	65.6	86.4	8.0	23.4	3.5	3.0	0.4	2.8	9870
282226 Orig	20.5	7.1	< 0.1	35.2	0.7	286	44	2.1	0.32	< 0.1	< 1	< 0.1	< 0.1	1050	0.8	1.6	0.2	0.8	0.2	0.1	< 0.1	0.1	0.5
282226 Dup	20.1	7.5	0.5	33.2	0.8	284	41	2.3	0.28	< 0.1	< 1	< 0.1	< 0.1	964	0.8	1.5	0.2	0.8	0.2	0.1	< 0.1	0.1	0.4
Method Blank																							
Method Blank																							
Method Blank	< 0.2	< 0.1	< 0.1	< 0.2	< 0.1	0.2	< 1	< 0.1	0.09	< 0.1	< 1	< 0.1	< 0.1	< 1	0.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.2
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							

Analyte Symbol	Ge	Tm	Yb	Lu	Ta	W	Re	Ti	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Method Code	TD-MS	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-ICP	TD-ICP
GXR-1 Meas		0.3	2.0	0.2	< 0.1	109		0.37	734	1	2.5	32.4	0.0268	0.059	0.25
GXR-1 Cert		0.430	1.90	0.280	0.175	164		0.390	730	1.58	2.44	34.9	0.036	0.0650	0.257
GXR-1 Meas		0.3	2.0	0.3	0.1	126		0.38	729	1	2.5	32.2	0.0254	0.058	0.24
GXR-1 Cert		0.430	1.90	0.280	0.175	164		0.390	730	1.58	2.44	34.9	0.036	0.0650	0.257
DH-1a Meas											> 500	2260			
DH-1a Cert											910	2629			
DH-1a Meas											> 500	2210			
DH-1a Cert											910	2629			
GXR-4 Meas		0.1	0.9	0.1	0.5	29.7		3.04	49.0	8	18.3	5.5	0.290	0.133	1.78
GXR-4 Cert		0.210	1.60	0.170	0.790	30.8		3.20	52.0	7.70	22.5	6.20	0.29	0.120	1.77
GXR-4 Meas		0.2	0.9	0.1	0.6	29.7		3.13	49.1	8	20.0	5.7	0.275	0.130	1.73
GXR-4 Cert		0.210	1.60	0.170	0.790	30.8		3.20	52.0	7.70	22.5	6.20	0.29	0.120	1.77
SDC-1 Meas		0.4	2.8		0.1	0.1		0.57	22.7	17	10.8	2.6	0.194	0.055	
SDC-1 Cert		0.65	4.00		1.20	0.80		0.70	25.00	17.00	12.00	3.10	0.606	0.0690	
SDC-1 Meas		0.4	2.9		0.6	0.3		0.55	21.4	16	10.7	2.7	0.136	0.051	
SDC-1 Cert		0.65	4.00		1.20	0.80		0.70	25.00	17.00	12.00	3.10	0.606	0.0690	
GXR-6 Meas			1.4	0.2	0.2	0.8		1.83	85.6	27	4.3	1.3		0.034	0.02
GXR-6 Cert			2.40	0.330	0.485	1.90		2.20	101	27.6	5.30	1.54		0.0350	0.0160
GXR-6 Meas										28				0.036	0.02
GXR-6 Cert										27.6				0.0350	0.0160
DNC-1a Meas			1.8						6.1	31			0.268		
DNC-1a Cert			2.0						6.3	31			0.29		
DNC-1a Meas			1.7						5.8	31			0.273		
DNC-1a Cert			2.0						6.3	31			0.29		
SBC-1 Meas		0.4	2.9	0.4	0.6	1.1		0.82	31.7	21	13.7	5.2	0.468		
SBC-1 Cert		0.56	3.64	0.54	1.10	1.60		0.89	35.0	20.0	15.8	5.76	0.51		
SBC-1 Meas		0.5	3.2	0.5	1.0	1.5		0.86	33.6	22	14.8	5.5	0.508		
SBC-1 Cert		0.56	3.64	0.54	1.10	1.60		0.89	35.0	20.0	15.8	5.76	0.51		
OREAS 45d (4-Acid) Meas			1.3	0.2	0.1	0.2		0.25	21.1		13.2	2.6			
OREAS 45d (4-Acid) Cert			1.33	0.18	1.02	1.62		0.27	21.8		14.5	2.63			
SdAR-M2 (U.S.G.S.) Meas		0.3	2.3	0.3	0.9	1.2			733	4	12.4	2.3			
SdAR-M2 (U.S.G.S.) Cert		0.54	3.63	0.54	1.8	2.8			808	4.1	14.2	2.53			
SdAR-M2 (U.S.G.S.) Meas		0.3	2.3	0.4	1.0	1.9			773	4	12.1	2.3			
SdAR-M2 (U.S.G.S.) Cert		0.54	3.63	0.54	1.8	2.8			808	4.1	14.2	2.53			
282154 Orig	< 0.1	< 0.1	0.3	< 0.1	0.1	1.3	0.004	0.05	2.7	6	0.6	0.3	0.120	0.024	0.13
282154 Dup	< 0.1	< 0.1	0.3	< 0.1	< 0.1	1.3	0.004	0.05	2.8	6	0.7	0.3	0.120	0.025	0.13
282156 Orig	< 0.1	0.2	1.1	0.1	1.0	0.8	< 0.001	0.19	5.3	20	0.4	0.2	0.493	0.029	2.24
282156 Dup	< 0.1	0.2	1.1	0.1	0.4	0.8	< 0.001	0.19	7.4	21	0.4	0.2	0.503	0.029	2.28

Analyte Symbol	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Method Code	TD-MS	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-ICP	TD-ICP
282183 Orig	0.1	0.2	1.5	0.2	0.3	3.4	< 0.001	0.33	5.3	19	5.1	1.6	0.379	0.057	0.18
282183 Dup	0.3	0.2	1.5	0.2	0.3	3.0	< 0.001	0.33	5.8	19	5.3	1.6	0.334	0.056	0.18
282200 Split Orig PREP DUP	0.1	0.2	1.0	0.1	< 0.1	0.4	0.001	0.36	5.2	16	5.5	1.7	0.182	0.052	0.04
282200 Split PREP DUP	0.2	0.2	1.1	0.1	0.3	1.9	0.001	0.34	5.4	16	5.5	1.8	0.249	0.054	0.04
282208 Orig	0.1	0.3	1.9	0.3	< 0.1	34.6	0.091	0.33	7.4	11	2.1	45.0	0.257	0.080	2.31
282208 Dup	0.1	0.3	1.9	0.3	< 0.1	34.3	0.089	0.29	6.7	11	1.6	44.8	0.261	0.081	2.36
282226 Orig	0.1	< 0.1	0.1	< 0.1	< 0.1	0.4	< 0.001	0.37	4.7	1	0.2	0.3	0.0852	0.021	0.02
282226 Dup	0.1	< 0.1	0.1	< 0.1	< 0.1	0.4	< 0.001	0.36	4.5	1	0.2	0.3	0.0862	0.021	0.02
Method Blank										< 1			0.0007	< 0.001	< 0.01
Method Blank										< 1			< 0.0005	< 0.001	< 0.01
Method Blank	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.5	< 1	< 0.1	< 0.1	< 0.0005	< 0.001	< 0.01
Method Blank										< 1			< 0.0005	< 0.001	< 0.01
Method Blank										< 1			< 0.0005	< 0.001	< 0.01
Method Blank										< 1			< 0.0005	< 0.001	< 0.01
Method Blank										< 1			< 0.0005	< 0.001	< 0.01
Method Blank										< 1			< 0.0005	< 0.001	< 0.01

# APPENDIX 3

# Trelawney Mining & Exploration - Mishi 2016 Drill Program



3006841





MIS16-02

MIS16-01

3006842

3006843

## MIS16-01 and MIS16-02 location 1:5,000 scale NAD83 Zone 16N

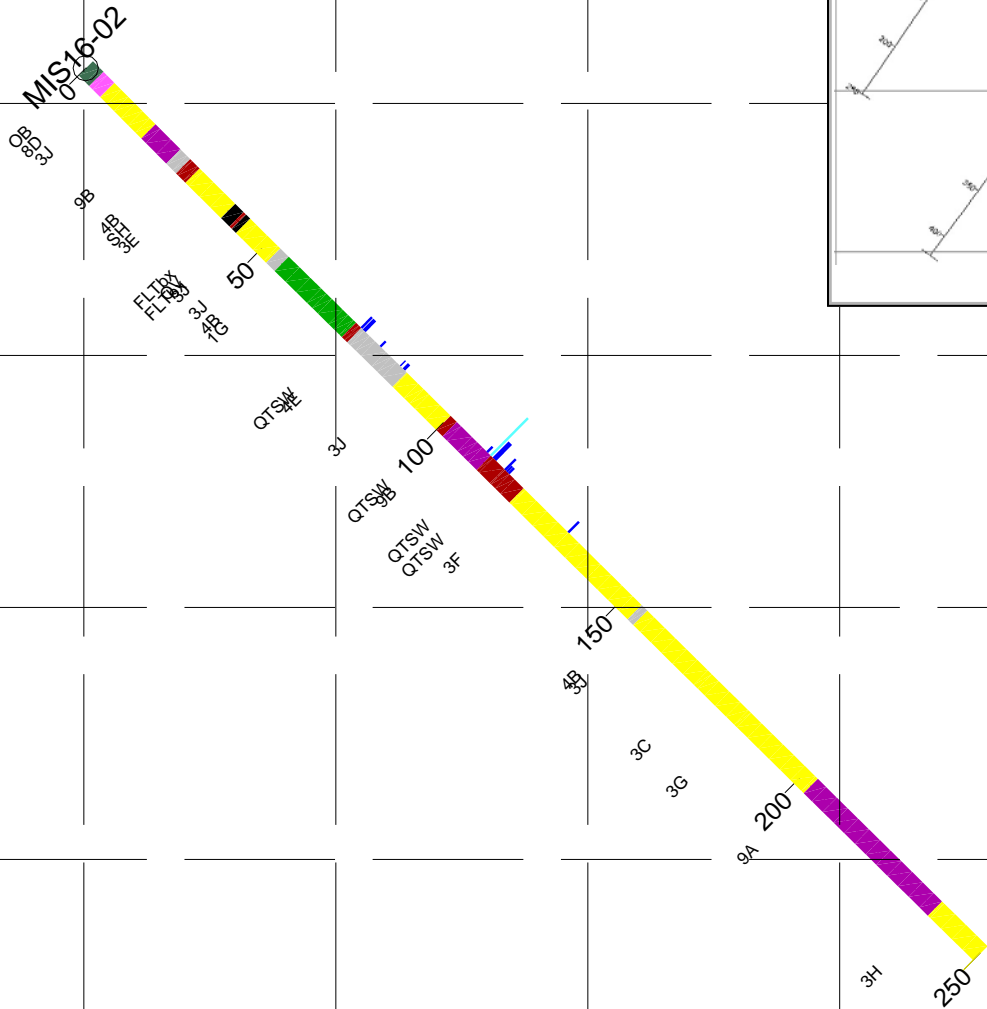
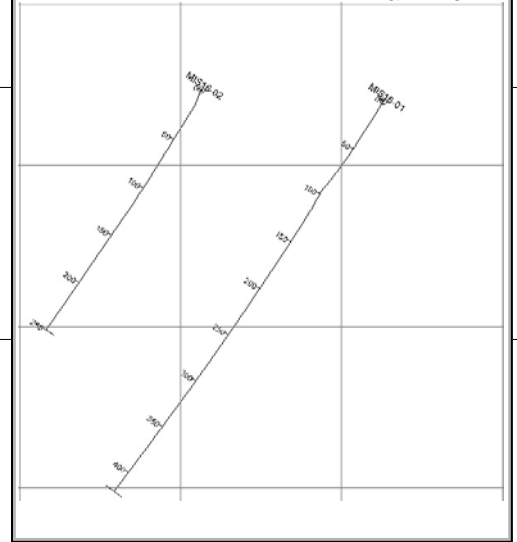
-  2016\_DDH\_Collars
-  claims
-  roads
-  waterbody

# APPENDIX 4



Azimuth: 209.9 degrees  
Dip: -45.2 degrees

Plan View



AU\_HISTO

0.01000	0.05750	Blue
0.05750	0.10500	Cyan
0.10500	0.15250	Green
0.15250	0.20001	Yellow

EOH 250m

MISHLEG: Mishi Lithologies

- OB Overburden
- FLTbx Fault Breccia
- FLTg Fault Gouge
- SH Shear Zone
- QTBX Quartz Breccia
- QTSW Quartz Stockwork
- QV Quartz Vein
- 9 Diabase
- 8 Felsic to Inter. Intrusiv
- 7 Mafic Intrusives
- 6 Porphyritic Intrusives
- 5 Clastic Meta-sediments
- 4 Chemical Meta-sediments
- 3 Felsic Volcanic
- 2 Intermediate Volcanic
- 1 Mafic Volcanic



2016 Mishi Project

Drill Hole Section 100E

MIS16-01 (looking easterly)

Projection: Non-Earth (meters)



Date: 06/03/2017

Jillian Craig

Claim Number: 3006841

Drawing:

Scale: 1:1500

5275000 mN

5275050 mN

5275100 mN

5275150 mN