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Geological Report on Diamond Drilling

on the

Gowan Property
Gowan Township
Porcupine Mining Division
District of Cochrane
Province of Ontario

For

Pelangio Exploration Inc.'s

Subsidiary Corporation

5007223 Ontario Inc.

Part I of II

J. Kevin Filo, P.Geo
Filo Exploration Services Limited
1080 Michelano Drive
Timmins Ontario
P4P 1H9

July 30, 2022

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PART II OF II

Figure 1

Pelangio Exploration Inc.
and 5007223 Ontario Inc.

Gowan Project
General Location Map

Date: March, 2022

Name: Kevin Filo

File: ontloc_gowan_2022

Summary:

A diamond drill program was initiated by 5007223 Ontario Inc. on its Gowan Township Property in January of 2022. Field operations including mobilization and demobilization were conducted from January 7 to February 15 2022. Planning and supervision of the drill program was carried out under the direction of J.Kevin Filo, P.Geo. The drilling contract was completed by NPLH Drilling from Timmins Ontario. A total of 1034.80 meters of drilling was completed in 5 holes; two of these holes were lost in overburden and failed to reach bedrock. A total of 427 samples including QA/QC standards and blanks were submitted for analysis. All core logging and sampling for the program was completed by February 25 2022.

The purpose of the drill program was two further evaluate two specific target areas. The first area of interest was located in the northeastern portion of the property. This initial target was associated with a historical semi massive sulphide intercept with significant copper values. The mineralization was coincident with a recently completed induced polarization (IP) anomaly and a flanking magnetic anomaly. Three holes were proposed to evaluate possible extensions of known mineralization and coincident geophysical anomalies. In the southeastern portion of the property a large electromagnetic (VTEM) anomaly was outlined by an airborne survey conducted by 5007223 Ontario Inc in late 2021. The VTEM anomaly also had a strong coincident IP anomaly with it as well from the recent 5007223 Ontario Inc survey. A strong magnetic response and proximal historical drilling suggested this area was underlain by an ultramafic intrusive with potential to host nickel deposits. Two holes were proposed to evaluate this new target area, only a single hole was completed due to difficult drilling conditions and cost overruns.

On the northeast target drilling intersected felsic intrusives, mafic volcanics, ultramafic volcanics and mafic to ultramafic intrusives. The felsic intrusives were often quartz and/or feldspar porphyritic. Substantial pyrite mineralization was noted generally in all of the intrusives and some of the volcanics units. Minor chalcopyrite was noted in some of the intrusive units. On the southeast target, only a single hole was completed. This hole collared in a fault zone and intersected broken blocky ultramafic intrusive for the entire hole. The hole was lost in a sand seem prior to reaching its intended target depth. Substantial magnetite was present in the ultramafic, but no significant sulphide mineralization. A few quartz veins were noted in the ultramafic and these were sampled for gold.

During the course of the program there was very limited environmental impact as access to the drill holes areas was along old historical trails from previous operators. Once the holes were completed casing was left in the holes and the casing capped. There is very minimal historical exploration on this property and thus very little environmental damage from past programs or the current program.

Geographic control points with respect to the property boundary and actual hole location, were determined using a hand held Garmin GPS unit. The property map datum utilized was Nad 83 Zone 17.


480000
490000
5390000
5380000
5370000
CARNEGIE TWP
PROSSER TWP
TULLY TWP
N
Kidd Creek Mine
Gowan Project
KIDD TWP
WARK TWP
GOWAN TWP
EVELYN TWP
Jocko Ck
Big Skegaw R
North Porcupine R
Gowanmarsh Ck
Bigwater Lake
655
JESSOP TWP
MURPHY TWP
HOYLE TWP
MATHESON TWP
Murphy Ck
Little Goose Ck
Craft Ck
Airport Rd
Laforest Rd
Pamour
101
Timmins
Porcupine
MOUNTJOY TWP
TISDALE TWP
WHITNEY TWP
CODY TWP
Shirley St N
Park Ave
Vault Blvd
Pine St N
Ross Ave
Timmins
Wende Ave
Dalton Rd
Moneta Ave
South Porcupine
Goldrush St
Haileybury Cres
Gold Mine Rd
Pine St S
OGDEN TWP
DELORO TWP
SHAW TWP
CASGRAIN TWP
Legend
Gowan Project Boundary
0
1.5
3
6
Kilometers
Figure 2
Pelangio Exploration Inc.
and 5007223 Ontario Inc.
Gowan Project
Location Map
Date: March, 2022
NAD 1983 UTM Zone 17N
Name: TS
File: gowan_locmap2022

This technical geological report was written to document the work completed and geological observations to date on the Gowan Property to fulfill obligations for a grant from Ontario's OJEP program, assessment requirements and corporate records. The current report is an amended version of the original OJEP report. This report was amended to reflect new information from assay data, petrological studies and new geophysical information.

Introduction:

The author was retained by 5007223 Ontario Inc. to prepare a report to cover a recent diamond drill program on the corporations Gowan Property. The drilling program including field work and core logging was completed from January 7 to February 25, 2022. The Gowan Property is located in Timmins Ontario; more specifically the property is in northeast Gowan Township approximately 26 km northeast of the City of Timmins. (see Figs. 1 and 2).

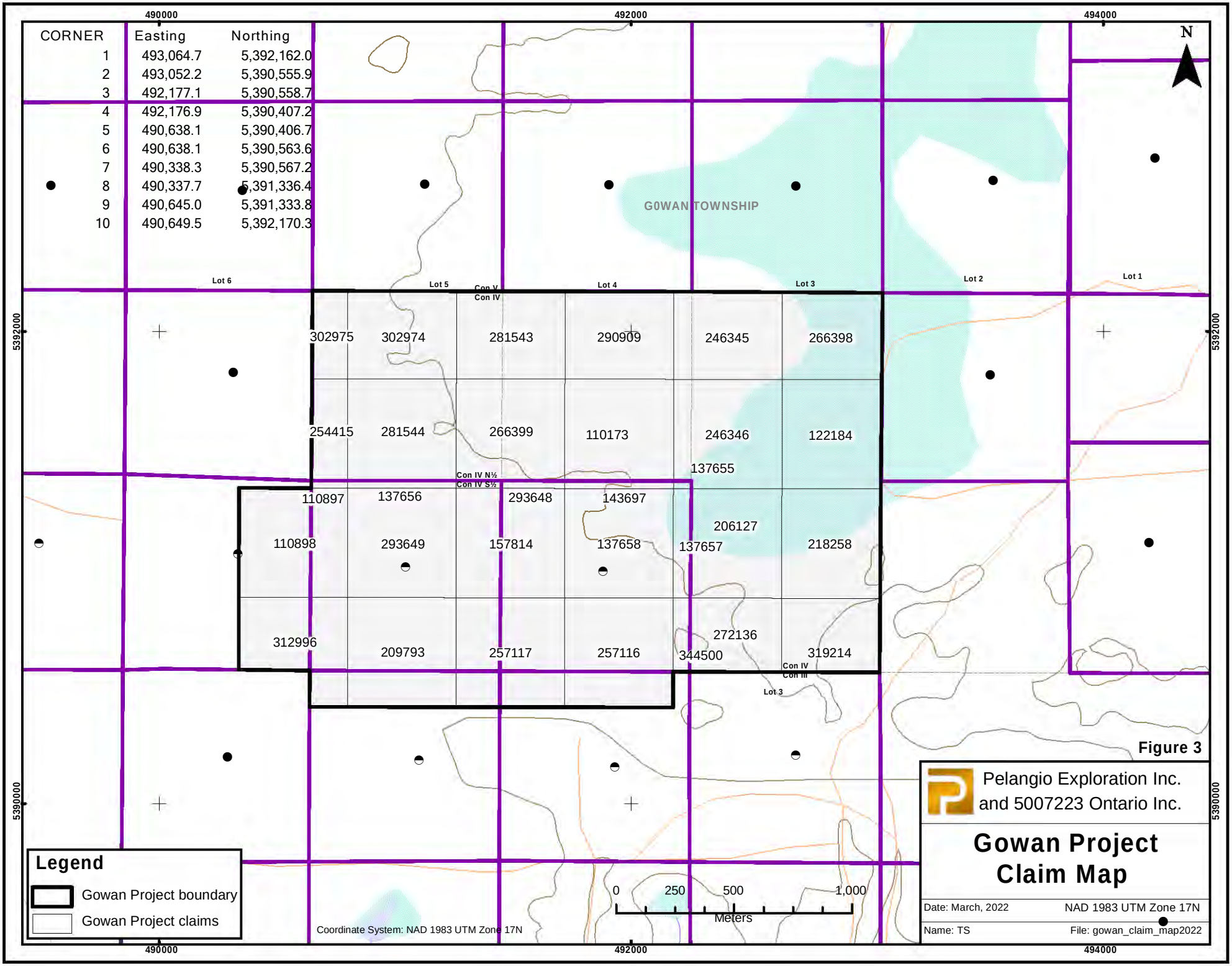
In early 2022, 5007223 Ontario Inc completed a series of drill holes (1034.80 meters) on the property along a single north south section line across the property (see fig.8) to test targets in the northeast and southeast portions of the property. Work on the northeast portion of the property was focused on re-evaluating a historical semi massive sulphide intercept with significant copper values. The base metal intercept was coincident with a new induced polarization anomaly and a flanking magnetic anomaly from recently completed ground surveys by 5007223 Ontario Inc. In the southeastern section of the property a large electromagnetic (VTEM) anomaly was outlined in 2021 by a 5007223 Ontario Inc airborne survey. The more recent IP survey and ground magnetic surveys also detected anomalous zones that were coincident with the airborne VTEM survey. Regional government airborne data has shown the southeast target is associated with a strong, large airborne magnetic response. This response along with some proximal historical drilling suggested that the southeast target area was underlain by a large ultramafic intrusive representing a prospective nickel sulphide target.

This report is a technical geological report summarizing the 2021 drill program and geological observations. It was written to fulfill requirements for Ontario's OJEP grant program, assessment requirements and corporate records. This particular report is an amended version of the original OJEP report; the amended version has been completed to reflect new information from assay data, petrological studies and geophysical data.

Property Description:

Location and Description:

The Gowan Property is located in the northeast portion of Gowan Township approximately 26 km northwest of the City of Timmins or about 16 km east of Glencore's Kidd Creek Mine (fig.1 and 2). The Gowan Property is comprised of 31 mining cells and covers an area of approximately 352 hectares as shown in the accompanying claim map (fig.3).


CORNER Easting Northing
1 493,064.7 5,392,162.0
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4 492,176.9 5,390,407.2
5 490,638.1 5,390,406.7
6 490,638.1 5,390,563.6
7 490,338.3 5,390,567.2
8 490,337.7 5,391,336.4
9 490,645.0 5,391,333.8
10 490,649.5 5,392,170.3
490000
492000
494000
N
GOWAN TOWNSHIP
Lot 6
Lot 5
Lot 4
Lot 3
Lot 2
Lot 1
Con V
Con IV
5392000
5390000
302975
302974
281543
290909
246345
266398
254415
281544
266399
110173
246346
122184
137655
Con IV N½
Con IV S½
110897
137656
293648
143697
206127
110898
293649
157814
137658
137657
218258
312996
209793
257117
257116
272136
344500
319214
Con IV
Con III
Lot 3
Figure 3
Pelangio Exploration Inc.
and 5007223 Ontario Inc.
Gowan Project
Claim Map
Date: March, 2022
NAD 1983 UTM Zone 17N
Name: TS
File: gowan_claim_map2022
Legend
Gowan Project boundary
Gowan Project claims
0 250 500 1,000
Meters
Coordinate System: NAD 1983 UTM Zone 17N

Property Status:

Currently the property is 100% controlled by 5007223 Ontario Inc a wholly owned subsidiary of Pelangio Exploration Inc. In early 2021, the parent company of 5007223 Ontario Inc., Pelangio Exploration Inc., entered into an option agreement with a private company which retains the right to earn up to 50% of the Gowan Property for a series of cash payments and funding future exploration costs up to 2 million dollars. The property is in good standing well into the year 2027 and there are ample assessment credits to maintain the property beyond this date.

Environmental Considerations and Permitting:

Very limited exploration has been carried out on the current Gowan Property. Most of the work on the property to date has consisted of airborne geophysical surveys, ground geophysical surveys and very limited diamond drilling. The area has heavy overburden cover and there are no trenches or shafts on the property nor has there been any production of minerals or tailings residue present.

Upon completion of the drill program drill casings were left in the holes; all hole casings were capped and marked appropriately. All debris and waste from the program was disposed of off the property. There was minimal damage to the surface area where drilling was conducted. Old drill roads from previous operators in the mid 1970's were present and these roads were used to access drill pad locations, thus mitigating damage. All operations were conducted in winter as well to limit damage to the muskeg.

In Ontario an exploration permit is required to conduct diamond drilling. Two permits for exploration work were issued to 5007223 Ontario Inc with permission granted to drill a series of drill holes within various mining cells in the eastern portion of the property. The permit numbers issued granting permission complete the recent drilling were work permits number PR-21-000124 and PR-21-000291.

Accessibility, Climate, Local Resources, Infrastructure, and Physiography:

Access to the Gowan Property during summer months in via helicopter from Timmins as excessive muskeg does not allow for summer ground access. In winter months the property can be accessed off of Highway 101 via Carrigan Road located approximately 27 km west of Timmins. Once on Carrigan one travels north for approximately 5 km and then west for about 500 meters to the Ice Chest Lake cottage road. Again, access is gained by travelling north for about 8 km on the Ice Chest lake cottage Road. At this point access to the property is via a series of old logging and drill roads heading west / northwest for approximately 9 km to the southern portion of the property. There are numerous old drill roads on the property to access various work location sites within the current property boundary.

The main centre with facilities and supplies proximal to the property is the City of Timmins. Timmins is a significant mining town with accommodations, restaurants and various supply and machine shops. The town also has a skilled work force for both mining and mineral exploration.

The Gowan Property has little or no relief and is covered in muskeg swamp. The majority of the property is covered with small spruce, jack pine and tamarack trees.

Climate is typical of northeastern Ontario with below freezing temperatures (-5 to -40 degree Celsius) from November to April and brief periods of hot weather in the summer from 10 to 30 degrees Celsius. Precipitation averages 80 cm per year, with a substantial portion in the form of snow averaging 2.4 m. per year. General exploration is restricted to the month of June to September, when the ground is not covered by snow. However, drilling and geophysical work can be carried out in the winter months when a thick snow pack improves access to otherwise swampy areas.

History:

The following information provides a chronological history of the work conducted on the Gowan Property prior to 5007223 Inc's work. Full details on all historical work can be obtained in assessment Ontario reports located at the Ontario resident geologist's office in Timmins Ontario or on line. General area reports and survey work conducted by the Ontario Geological Survey over and proximal to the subject property are also available for review at the Resident Geologist office in Timmins. A compilation map has been compiled to reflect the various programs conducted on the property over the years as shown in the accompanying figure 7.

Truss, Pre 1970's:
From OGS report 299 on Hoyle and Gowan Townships, Berger a single hole of unknown depth was drilled in the southern extremity of the property as shown in accompanying compilation map (fig.7). Berger shows this hole to have intersected an ultramafic intrusive.

Allerston, R., 1973-1974:
R. Allterston, prospector carried out reverse circulation drilling over a significant portion of the current subject property. Maps in R.S. Middleton's later reports for Alamos Petroleum show the location of some of these holes. A significant copper gold occurrence in the bedrock sample from one of the holes as shown in accompanying fig.7 returned 22600 ppm Cu and 3900 ppb gold.

Alamo Petroleum, 1974 to 1975:
Alamo Petroleum conducted an induced polarization (IP) survey on a cut grid covering the majority of the current subject property. This work resulted in the detection of a series of IP anomalies. Alamo Petroleum in a follow up program completed 4 drill holes to test four specific anomalies. The highlight of a program was drill hole 2 which returned a significant low grade copper mineralization over a width of 36 feet. Hole 4 also intersected two short intervals of copper and zinc mineralization. Further testing of other IP anomalies and step out hole from the zones of mineralization were recommended. The Alamo report also documented some historical RC holes which contained significant gold and copper mineralization in bedrock samples.

Newmont Mining Corp of Canada Ltd., 1977:
Newmont conducted a drill program to follow up on work completed by Alamo. Newmont

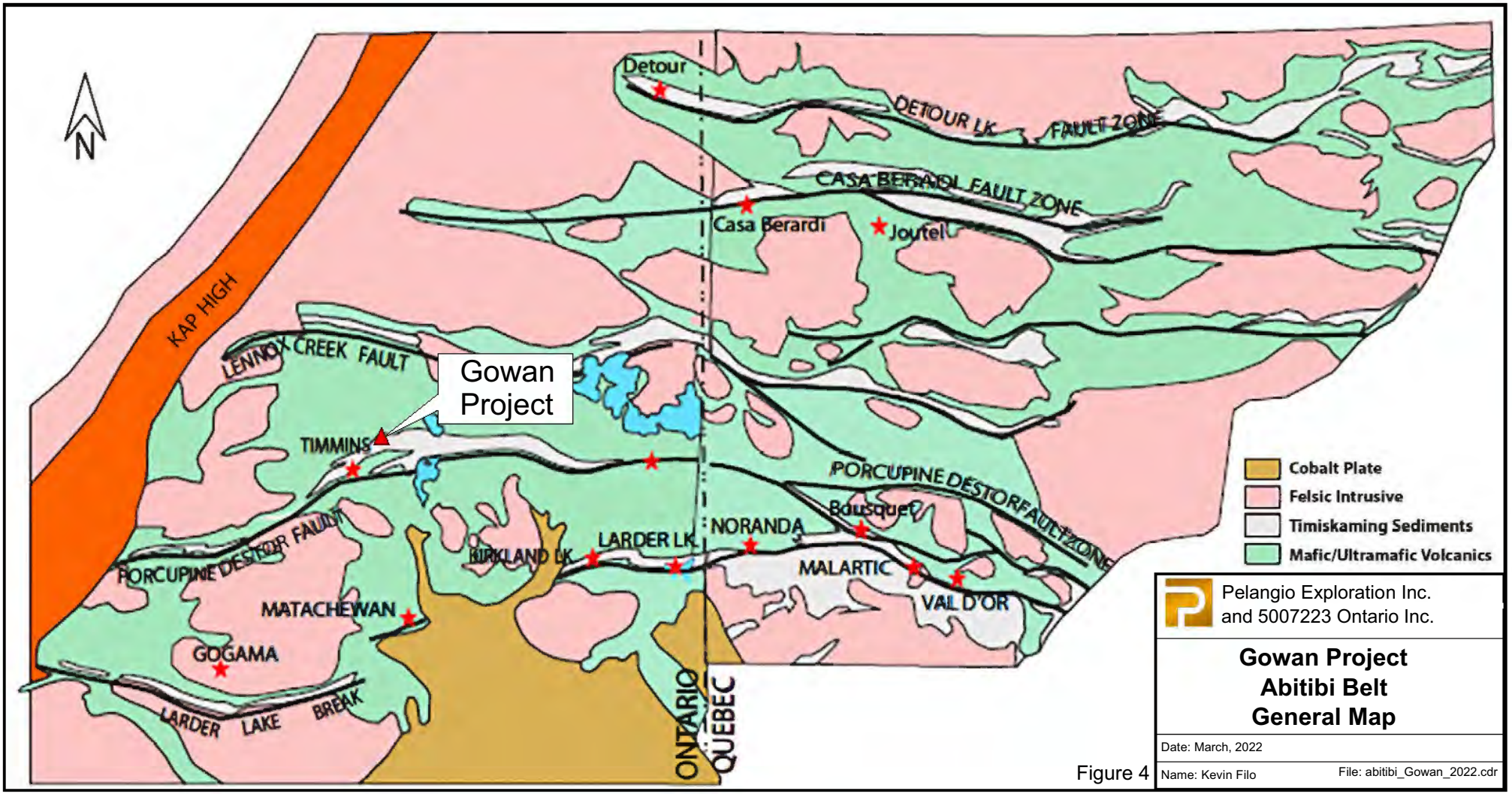

N
Detour
DETOUR LK FAULT ZONE
CASA BERARDI FAULT ZONE
Casa Berardi
Joutel
KAP HIGH
LENNOX CREEK FAULT
Gowan Project
TIMMINS
PORCUPINE DESTOR FAULT
PORCUPINE DESTOR FAULT ZONE
KIRKLAND LK
LARDER LK
NORANDA
Bousquet
MALARTIC
VAL D'OR
MATACHEWAN
GOGAMA
LARDER LAKE BREAK
ONTARIO
QUEBEC
Cobalt Plate
Felsic Intrusive
Timiskaming Sediments
Mafic/Ultramafic Volcanics
Pelangio Exploration Inc.
and 5007223 Ontario Inc.
Gowan Project
Abitibi Belt
General Map
Date: March, 2022
Name: Kevin Filo
File: abitibi_Gowan_2022.cdr

Figure 4

completed four drill holes. The highlight of the Newmont program was Newmont drill hole 77-1 which undercut Alamo Petroleum hole 2. The Newmont hole also returned a broad low grade copper intercept over 28.5 feet. No significant results were noted in the other Newmont holes and no further work was conducted.

Ontario Geological Survey Airborne, 1988 (Map 81064):
The OGS completed an airborne survey over Gowan Township in 1988. Over the Gowan property the survey outlined a number of airborne electromagnetic anomalies, a number of these anomalies were associated and/or proximal to a number of strong magnetic responses.

Falconbridge1998:
Falconbridge reported a single hole 45-01 drilled on the current subject property. The hole was reported to have intersected heavily talc altered ultramafic volcanics and no significant mineralization was noted. This program followed up on a reverse circulation drill program which outlined a large base metal till train along the eastern half of the subject property. The reverse circulation drill report on the till anomalies is shown in the appendix of the Falconbridge diamond drill report.

Amex Exploration Inc, 2018:
In 2018 Amex Exploration contracted Exsics Exploration to conduct a moving coil pulse electromagnetic survey over a portion of the Gowan Property to ground truth the OGS airborne electromagnetic anomalies defined in the 1988 survey. The survey failed to confirm the anomalies and the property was dropped.

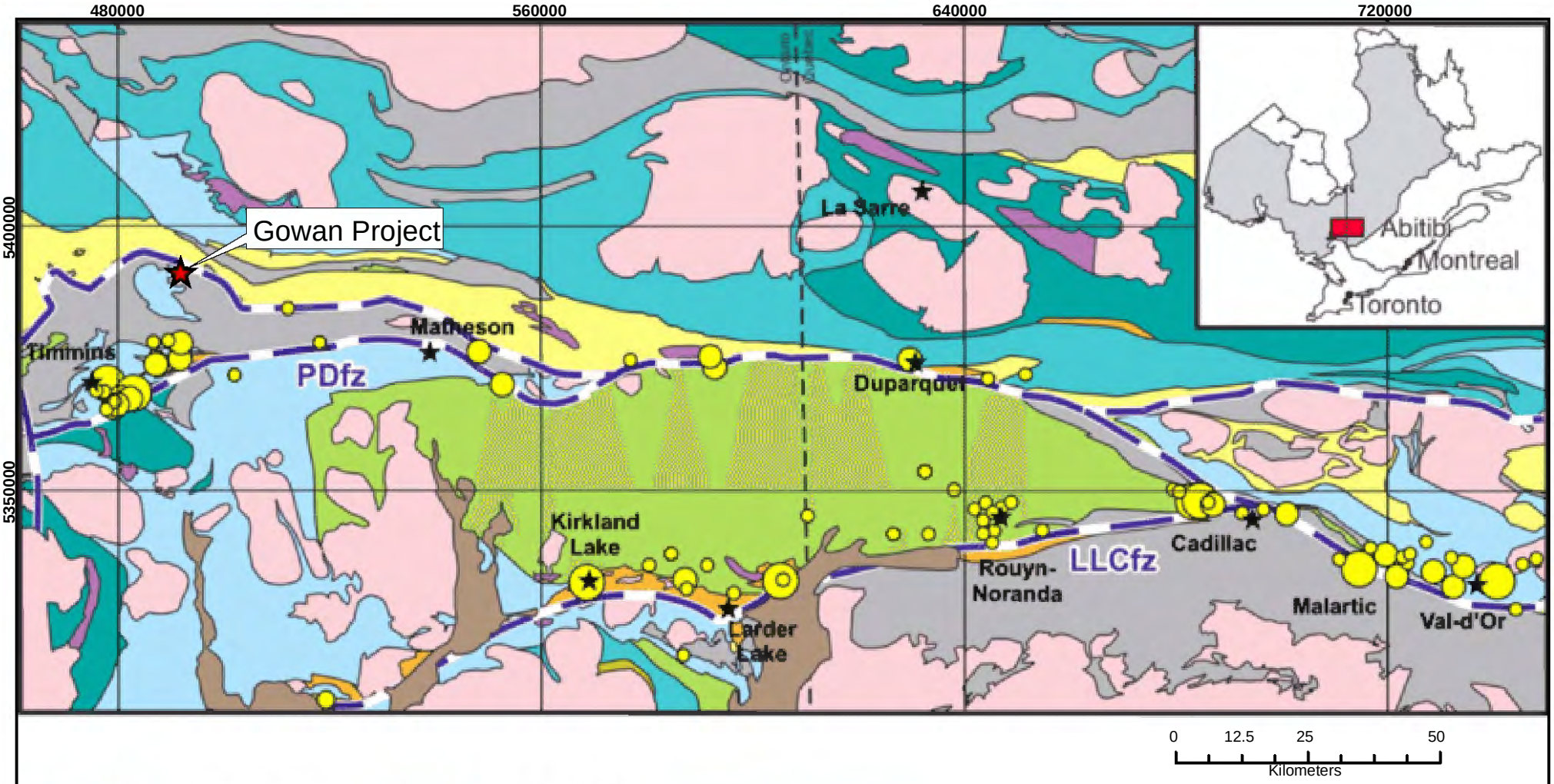
Pelangio Exploration and 5007223 Ontario Inc 2020:
Pelangio and its wholly owned subsidiary conducted a down hole mise a la masse survey on Newmont hole 77-1 and no significant results were noted.

Pelangio Exploration and 5007223 Ontario Inc 2021:
Pelangio and its wholly owned subsidiary completed an airborne VTEM survey outlining a large conductor in the south / southeastern portion of the property. A deep penetrating induced polarization (IP) survey was completed to better define drill targets in the fall of 2021. The IP survey outlined a number of IP targets. One target was coincident with the VTEM anomaly and a second target was associated with a historical Alamos semi massive sulphide zone intercept in Alamos hole 2 in the northeast section of the property. During the drill program upon the advice of an independent geophysicist a more thorough review of the VTEM data was initiated to evaluate it for more subtle targets. This work outlined several new targets some of which were coincident with known IP anomalies. Futher, drill follow up was recommended for these subtle new anomalies. (see fig.7)

Geological Setting:

General Regional Geology:

The Gowan Property is located in the Abitibi Greenstone Belt of the Superior Province of the Canadian Shield. The Abitibi Greenstone belt is a large granite-greenstone terrain



Huronian sedimentary rocks
Archean felsic to intermediate intrusions
Archean mafic to ultramafic intrusions
Major fault
Main town
Gold deposit

<2679-2669 Ma Timiskaming
<2690-2685 Ma Porcupine
2704-2695 Ma Blake River
2710-2704 Ma Tisdale

2719-2711 Ma Kidd-Munro
2723-2720 Ma Stoughton-Roquemaure
2734-2724 Ma Deloro
2795-2735 Ma Pacaud

Legend

Gowan Project Boundary

Adapted from Thurston (2008)

Figure 5

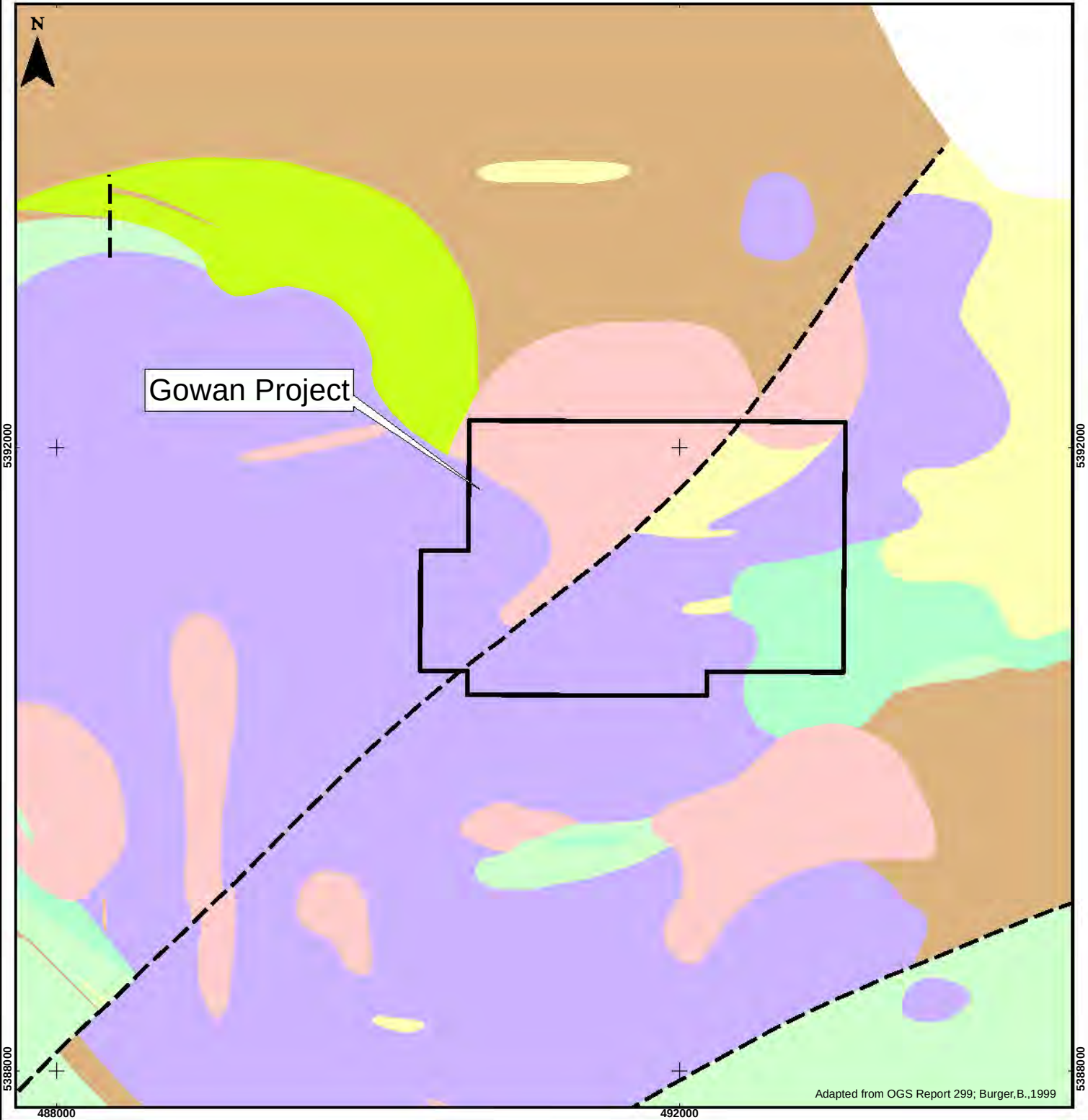
Pelangio Exploration Inc.
and 5007223 Ontario Inc.

Gowan Project

Southern Abitibi Assemblage

Date: March, 2022 NAD 1983 UTM Zone 17N

Name: TS File: gowan_abitibi_assemblage



Legend

M2533 Lithology

- Mafic Intrusions
- Metamorphosed Intermediate and Felsic Intrusions
- Metamorphosed Ultramafic and Mafic Intrusions
- Clastic and Chemical Metasedimentary Rocks
- Felsic Metavolcanic Rocks
- Intermediate Metavolcanic Rocks
- Mafic Metavolcanic Rocks
- Ultramafic Metavolcanic Rocks
- Regional Faults
- Gowan Project Boundary

0 800 1,600
Meters

Figure 6

Pelangio Exploration Inc.
and 5007223 Ontario Inc.

Gowan Project Property Geology

Date: March, 2022 NAD 1983 UTM Zone 17N

Name: TS File: gowan_prop_geol

some 150,000 km^2 in area extending from Lake Superior in north-central Ontario through into north-central Quebec. Measuring 750 km long by 200 km wide, the Abitibi Greenstone belt is the largest greenstone belt within the Canadian Shield. (see fig.4)

Metamorphic grade varies from greenschist to lower amphibolite facies. Recent U-PB Zircon geochronology has shown that the volcanic-sedimentary pile accumulated in three major cycles over a period of 50 million years. Most of the volcanic activity is interpreted to have occurred between 2730 and 2700 Ma (Corfu et al, 1989). The Abitibi Greenstone belt is the most prolific Archean terrain in terms of copper-zinc sulphide mineralization and gold mineralization in Canada.

Major east and northeast trending faults (Destor Porcupine Deformation Zone & Cadillac- Larder Deformation Zone), were active throughout the main periods of volcanism, and became the focus of a late period of alkaline volcanism and sedimentation between 2680 and 2677 Ma. These deformation zones are the focus of most of the major gold deposits found within the Timmins, Kirkland Lake, and Holloway gold camps. In excess of 120 million ounces of gold has been produced from mines associated with these two major structures.

The lithological units within the Abitibi Belt have been grouped into a series of assemblages with a specific chronological age. Figure 5 shows the southern Abitibi Belt and the various assemblages across the belt. Specific assemblages are known to be more prospective for specific types of mineral deposits. An example of this is the Kidd-Munro assemblage which hosts the Kidd Creek copper zinc volcanogenic massive sulphide deposit. The Kidd-Munroe assemblage according to OGS Report 299 (Burger, B.,1998) is interpreted to cross the northern portion of Gowan Township proximal to the subject property suggesting northern Gowan Township is a prospective area for new volcanogenic massive sulphide deposits. Burger does note that due to limited geological data and overburden it is difficult to accurately plot the Kidd-Munroe assemblage boundary in Gowan Township.

Property Geology:

The current subject property has no outcrop exposure and is covered in deep overburden. A geological compilation map from OGS Report 299 by Berger, B. (1998) as shown in accompanying figure 6 covers the current subject property. Berger's interpretation has been based on limited diamond drill data, reverse circulation drilling bedrock chips and geophysical interpretation.

From figure 6 it can be seen that the southern portion of the subject property is predominantly underlain by ultramafic lithology. More specifically the extreme southeast portion of the property is interpreted to be underlain by ultramafic flows (komattites) and majority of the rest of the southern portion of the property is underlain by a large intrusive complex interpreted to be made up of metamorphosed ultramafic and mafic rocks.

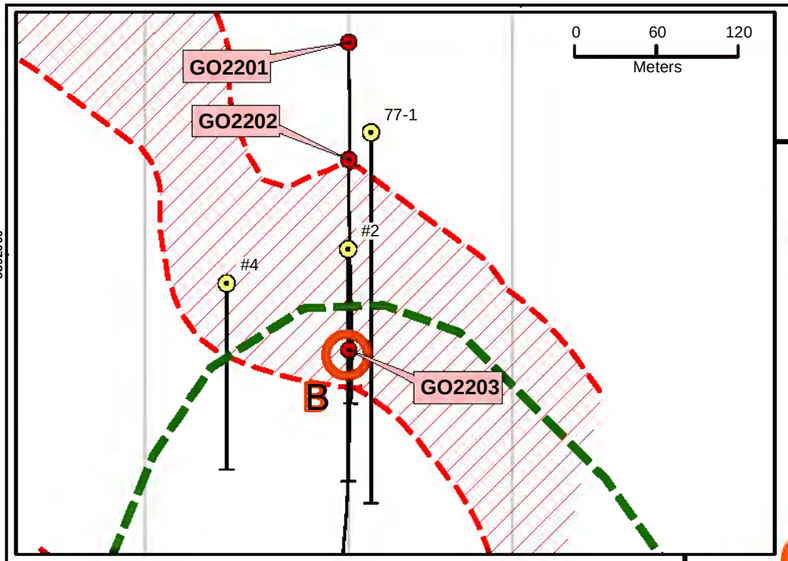
Figure 6 shows the northeastern portion of the property to be somewhat more complex. Berger's map interprets a wedge of felsic volcanics in the central northeast portion of the property is shown to be bounded in the north by an intermediate to felsic intrusive. The same interpreted felsic wedge is fault bounded to the northwest by the same

490400 491200 492000 492800

5392000 5391200 5390400

N

0 60 120
Meters



North Target Area Inset

D

E

77-5
77-3

GO2201
GO2202
GO2203
77-1
#4
#2
B

IP Chargeability
North Target Area

Hole #4
Zinc Zone

Hole #2
Copper Zone

RC bedrock chip
22600 ppm Cu
3900 ppb Au

VTEM Anomaly
1 x 1.5km

#3
77-2
RC#36

A
C

GO2204
45-01

IP Chargeability
South Target Area

#18
F

492290E
492440E
492560E

Historical EM anomalies

- 3-4 Channel
- 5-6 Channel
- 7-8 Channel
- 9-10Channel
- 11-12 Channel

Legend

- 2022 drill hole collar
- historical drill hole collar
- EM Maxwell Plate anomalies
- Gowan Property Boundary
- IP Chargeability Anomaly in plan

Select Gowan Mineralized Zone Highlights

Hole	From	To	Meters	% Cu	% Zn	Ag g/t	Au g/t
2	179.57	190.54	10.97	0.32		11.99	
incl	179.87	183.68	3.81	0.66		10.62	
incl	179.67	180.79	0.92	0.95	0.32	6.85	0.35
4	65.09	65.54	0.45	0.58	0.66		0.685
incl	102.31	102.68	0.37	1.24	0.95		0.2
44	119.41	119.72	0.31	0.17	0.23	1.37	
47-1	234.75	240.54	5.79	0.18	1.24	2.24	0.021
4	238.87	240.54	1.67	2.45	0.17	1.28	0.304

Select Gowan Mineralized Zone Highlights

Hole	Line	St	From	To	Feet	% Cu/ton	% Zn/ton	Ag oz/ton	Au oz/ton
2	20W	1350N	589	625	36	0.32	6.85		0.35
4	23W	875N	215	220	5	0.66			0.685

0 500 1,000
0.02
Meters

Figure 7

Pelangio Exploration Inc.
and 5007223 Ontario Inc.

Gowan Project Compilation Map

Date: March, 2022 NAD 1983 UTM Zone 17N

Name: TS File: gowan_comp_mar2022

intermediate to felsic intrusive. To the south the felsic wedge is bounded by a metamorphosed ultramafic / mafic intrusive complex. Drilling by 5007223 Ontario Inc suggests the felsic wedge interpreted in Berger's map may not be as extensive as interpreted or possibly non-existent. Recent 500722 Ontario Inc drilling also suggests this area is dominated by felsic intrusive units and porphyries; evidence for this is supported by substantial petrographic work and whole rock analysis. The author observed no felsic volcanics whatsoever in the recent drill program

The intermediate to felsic intrusive unit also can be seen to occupy the majority of the northwestern portion of the property with the exception of the extreme western boundary of the property where the ultramafic / mafic intrusive units occur once again.

A large northeasterly trending fault zone is interpreted to cut across the entire property; this is thought to be the major structural feature on the property.

Recent drilling in and around Berger's interpreted felsic wedge described previously has shown that there are numerous mafic volcanics in this area as well which are also intruded by various type of felsic intrusives.

In general rock units in the areas tested by recent drilling appear to be highly metamorphosed (upper greenschist to lower amphibolite facies) possibly as a result of their proximity to the large ultramafic intrusive. The mafic units observed often have a distinct alignment of mafic minerals sometimes giving a schist like appearance; biotite mica is often associated with these mafics and they appear recrystallized. In many instances felsic intrusives are also altered, some of the plagioclase appears to be altered to a white mica.

The large ultramafic intrusive in the southern part of the property also appears metamorphosed. Recent drilling to the southeastern portion of the property intersected a heavily talc altered ultramafic unit with a "greasy feel", this unit was interpreted to be an ultramafic intrusive as per Berger's map.

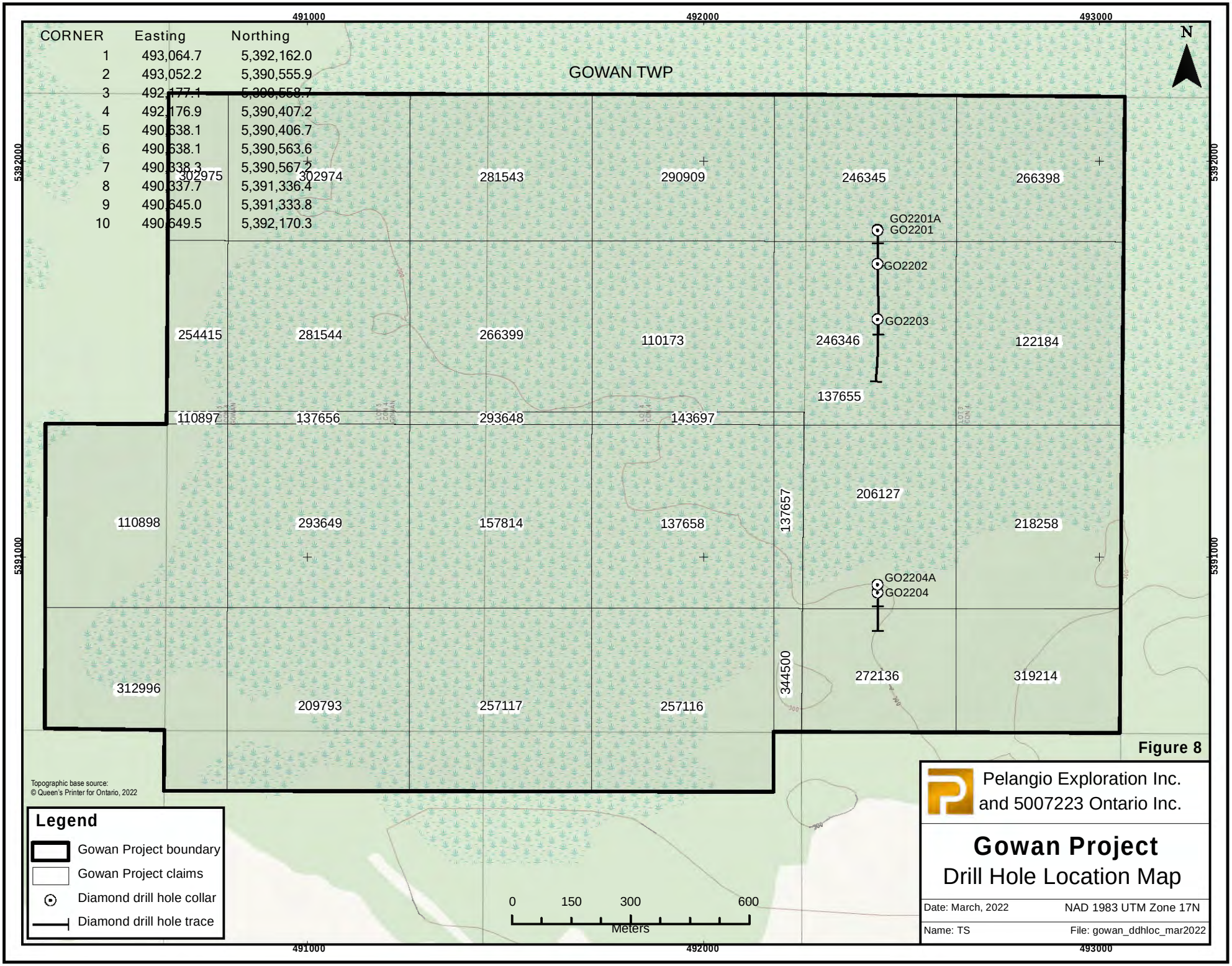
Survey Control:

The diamond drill hole set up was located using a hand held GPS device. This device was set using the datum Nad 83, Zone 17. Once the actual location of the collar was selected in the field, the drill site location was again verified using geo referenced topographic maps. A final reading on the casing site was taken after completion of the hole for a more accurate location. Note, accuracy generally plus or minus 5 meters on the unit.

Down hole azimuth and dip readings were taken on the hole upon completion of the hole. The down hole readings were incorporated into various surface plans and section plots for an accurate representation of the hole location.

Drilling Program Discussion:

The recent drill program on the Gowan Property was focused on targets within the


CORNER Easting Northing
1 493,064.7 5,392,162.0
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5 490,638.1 5,390,406.7
6 490,638.1 5,390,563.6
7 490,638.3 5,390,567.2
8 490,637.7 5,391,336.4
9 490,645.0 5,391,333.8
10 490,649.5 5,392,170.3
GOWAN TWP
N
491000
492000
493000
5392000
5391000
302975
302974
281543
290909
246345
266398
GO2201A
GO2201
GO2202
GO2203
254415
281544
266399
110173
246346
122184
137655
110897
137656
293648
143697
206127
110898
293649
157814
137658
137657
218258
GO2204A
GO2204
344500
272136
319214
312996
209793
257117
257116
Topographic base source:
© Queen's Printer for Ontario, 2022
Legend
Gowan Project boundary
Gowan Project claims
Diamond drill hole collar
Diamond drill hole trace
0 150 300 600
Meters
Figure 8
Pelangio Exploration Inc.
and 5007223 Ontario Inc.
Gowan Project
Drill Hole Location Map
Date: March, 2022
NAD 1983 UTM Zone 17N
Name: TS
File: gowan_ddhloc_mar2022

492000 492400 492800

N

290909 246345 266398

GO2201
492440mE, 5391826mN
Elevation: 320.0m
Dip: -50°, Azimuth: 180°
Length: 138.0m

GO2201A
492440mE, 5391825mN
Elevation: 320.0m
Dip: -50°, Azimuth: 180°
Length: 52.0m

GO2201A
EOH 52.0m

GO2201
EOH 138.0m

GO2202
492440mE, 5391740mN
Elevation: 320.0m
Dip: -45°, Azimuth: 180°
Length: 252.0m

5391600

110173 246346 122184

GO2203
492440mE, 5391600mN
Elevation: 320.0m
Dip: -60°, Azimuth: 180°
Length: 307.0m

GO2202
EOH 252.0m

GO2203
EOH 307.0m

LOT 3
CON 4
GOWAN

143697 137655

5391200

137658 137657 206127 218258

CORNER	Easting	Northing
1	493,064.7	5,392,162.0
2	493,052.2	5,390,555.9
3	492,177.1	5,390,558.7
4	492,176.9	5,390,407.2
5	490,638.1	5,390,406.7
6	490,638.1	5,390,563.6
7	490,338.3	5,390,567.2
8	490,337.7	5,391,336.4
9	490,645.0	5,391,333.8
10	490,649.5	5,392,170.3

GO2204A
492440mE, 5390930mN
Elevation: 320.0m
Dip: -53°, Azimuth: 180°
Length: 92.0m

GO2204
492440mE, 5390910mN
Elevation: 320.0m
Dip: -60°, Azimuth: 180°
Length: 193.8m

303m

GO2204A
EOH 92.0m

GO2204
EOH 193.8m

257116 344500 272136 319214

5390800

Legend
- Gowan Project claim boundaries
- Diamond drill hole collar
- Diamond drill hole trace

Topographic base source:
© Queen's Printer for Ontario, 2022

0 20 40 80
Meters

Figure 9

Pelangio Exploration Inc.
and 5007223 Ontario Inc.

Gowan Project
Diamond Drill Hole Plan

Date: March, 2022 NAD 1983 UTM Zone 17N
Name: TS File: gowan_ddhplan_mar2022

eastern portion of the property, accurate drill location plots can be viewed in the accompanying figure 8 relative to property boundaries. The accompanying table 1 below also provides detailed location and collar data for all holes completed during the program.

Table 1: Drill Hole Summary

Hole No.	Easting	Northing	Az. Deg.	Dip Deg	Final Depth	Assay Samples	Comments
GO2201	492440	5391826	180	-50	138 m.	88	
GO2201A	492440	5391825	180	-50	52 m	nil	Lost in overburden
GO2202	492440	5391740	180	-45	252 m.	166	
G02203	492440	5391600	180	-60	307 m.	157	
GO2204A	492440	5390930	180	-53	92 m.	nil	Lost in overburden
GO2204	492440	5390910	180	-60	193.8 m.	16	Lost in bedrock

*Note: Sample totals above include QA/QC samples

Holes G2201, G2201A, G2202 and G2203 Discussion (see figures 7,8,9,10,11)

This series of holes were all drilled in close proximity to historical Alamo Petroleum and Newmont Canada drill holes (see fig.7 compilation map) in order to re-evaluate historical mineralized zones with significant copper values.

Hole GO2201A and GO2201:

Hole GO2201A was the first hole drilled on the property and this initial hole was lost in overburden. A new hole GO2201 was started 1 meter behind the initial hole. The purpose of GO2201 was to evaluate a magnetic anomaly off the edge of an established IP anomaly know to be associated with historical mineralization. Hole GO2201 intersected mainly felsic intrusives, mafic volcanics, and a mafic tuff. Most of the units in this hole including the initial felsic intrusive at the bedrock overburden contact were strongly magnetic and considerable magnetite observed in the hole. The cause of the magnetic anomaly was likely magnetite. Substantial disseminated pyrite ranging from 0.5-3% was noted in most of the units intersected. No copper sulphide mineralization (chalcopyrite) was observed and samples from this hole were consequently only assayed for gold. No significant gold values were noted.

A total of four samples were sent away for petrographic study and whole rock analysis from this hole. Three samples (26708 to 26709) logged as felsic intrusive in this hole were felsic intrusive units and ranged in composition granite to quartz monzonite. A single sample 26711 was logged as a felsic tuff but plotted from whole rock analysis as a trachybasalt. Drill logs and sections were edited to reflect this. Full details on all petrographic samples examined along with whole rock data can be reviewed in the accompanying report appendix.

Hole GO2202:

Hole GO2202 (-45 deg dip) was drilled 20 meters south of historical Newmont hole 77-1 (-50 deg dip) along the same section line and azimuth as Newmont hole 77-1. The purpose of hole GO2202 was to intersect the possible up dip extension of a low grade

5391400 5391500 5391600 5391700 5391800

SOUTH NORTH

SURFACE

GO2203
492440mE, 5391600mN
Elevation: 320.0m
Dip: -60°, Azimuth: 180°
Length: 307.0m

GO2202
492440mE, 5391740mN
Elevation: 320.0m
Dip: -45°, Azimuth: 180°
Length: 252.0m

GO2201A
492440mE, 5391825mN
Elevation: 320.0m
Dip: -50°, Azimuth: 180°
Length: 52.0m

GO2201
492440mE, 5391826mN
Elevation: 320.0m
Dip: -50°, Azimuth: 180°
Length: 138.0m

Hole 2 (historical)

Hole 77-1 (historical)

Note:
Historical hole geology not plotted due to significant discrepancy in nomenclature.

CAS

EOH: 52.0m

EOH: 138.0m

EOH: 242.68m

EOH: 252.0m

EOH: 307.0m

Sulphide zone: (historical hole 2)
0.32% Cu, 11.99 g/t Ag over 10.97m

Sulphide zone: (historical hole 77-1)
0.18% Cu, 2.24 g/t Ag over 5.79m
including 0.45% Cu, 4.8 g/t Ag over 1.67m

claim #246346

claim #246345

Legend

- Sulphide zone

Lithology

- Overburden
- Fault/ Fault zone
- Quartz vein and quartz vein breccia
- Felsic intrusives
- Mafic to ultramafic intrusives
- Mafic volcanics
- Ultramafic volcanics

0 25 50 100
Meters

Figure 10

Pelangio Exploration Inc.
and 5007223 Ontario Inc.

Gowan Project
Winter 2022 Diamond Drilling
Section 492440 East - North Part
Looking West +/- 25 metres

Date: July, 2022 NAD 1983 UTM Zone 17N

Name: TS File: gowan_section_492440E_north

SOUTH

NORTH

SURFACE

5391400 5391500 5391600 5391700 5391800

350 300 250 200 150 100 50

GO2203
492440mE, 5391600mN
Elevation: 320.0m
Dip: -60°, Azimuth: 180°
Length: 307.0m

GO2202
492440mE, 5391740mN
Elevation: 320.0m
Dip: -45°, Azimuth: 180°
Length: 252.0m

GO2201A
492440mE, 5391825mN
Elevation: 320.0m
Dip: -50°, Azimuth: 180°
Length: 52.0m

GO2201
492440mE, 5391826mN
Elevation: 320.0m
Dip: -50°, Azimuth: 180°
Length: 138.0m

Hole 2 (historical)

Hole 77-1 (historical)

CAS

1U 7QFP 1U 7QFP 1U 7Spor 1U FZ 7Gpor 1U 6U 1U 6U Fz 1U 1U 1U 7U 1U 6U 7U 1U 7GD 1U 2U Fz 1U

EOH: 242.68m

EOH: 307.0m

Qv 7QFP 2U 1U 6U 1U Fz 1U 6U 1U

EOH: 252.0m

7GD 2U 7GD 2U 7GD 2U 7U 2U 7GD 2U Qv bx FZ 2U 7GD 2U FZ 2U

7U 2U 2U 7G 2U 7U 2U 7GD 7Gpor 2U 2U t 7U Fz 2U 7U 7U 2U

EOH: 52.0m

EOH: 138.0m

Sulphide zone: (historical hole 2)
0.32% Cu, 11.99 g/t Ag over 10.97m

MAXWELL PLATE P2 L1210

Sulphide zone: (historical hole 77-1)
0.18% Cu, 2.24 g/t Ag over 5.79m
including 0.45% Cu, 4.8 g/t Ag over 1.67m

MAXWELL PLATE P1 L1210

claim #246346

claim #246345

Legend

- Copper Histograms
- Maxwell plates
- Sulphide zone

Copper histograms:
only values > 25 ppm Cu
1cm = 200 ppm Cu

0 25 50 100
Meters

Figure 11

Pelangio Exploration Inc.
and 5007223 Ontario Inc.

Gowan Project
Winter 2022 Diamond Drilling
Section 492440 East - North Part
Looking West +/- 25 metres

Date: July, 2022 NAD 1983 UTM Zone 17N

Name: TS File: gowan_section_492440E_north_fig11

base metal sulphide zone intersected in in Newmont hole 77-1. Hole GO2202 was also intended re-evaluate the well mineralized porphyritic intrusives noted in the 77-1 for gold mineralization and have some confirmation of the geology seen in historical Hole 77-1.

The recent 5007223 Ontario Inc hole GO2202 intersected mainly mafic volcanics which appear to be intruded by various felsic intrusives to about 164.25 meters. Beyond 164.25 meters mainly ultramafic volcanics and some mafic / ultramafic intrusives were noted in the latter portion of the hole. The geology observed in GO2202 is distinctly different geology from that reported in historical hole 77-1. Newmont geologists reported in the hole 77-1 log numerous sections of felsic volcanics intercalated with the mafic volcanics along with number of intrusives. No felsic volcanics were observed by this author.

A series of samples (26701 to 26704) of felsic units from hole G2202 were sent for petrographic work and whole rock analysis. This work strongly suggested that these units were indeed felsic intrusives (quartz monzonites) and not of felsic volcanic origin as suggested in historical logs. Sample 26706 was from hole G2202 was designated a mafic to ultramafic intrusive in field logs but is more likely an ultramafic intrusive. Also sample 26707 was designated as an ultramafic in logs and this was confirmed. Further details on the petrographic study and whole rock analysis are available for review in the accompanying report appendix.

Substantial disseminated pyrite and the occasional short interval with some massive conductive pyrite over 0.3 m along with very minor occurrences of chalcopyrite were noted in this hole. As a result of the presence of minor chalcopyrite the entire whole was sent for gold and multi element analysis. A significant amount of anomalous copper was noted in GO2202 as seen in the accompanying histogram plot in figure 11. Generally higher anomalous copper values were found in the felsic intrusive units but occasionally some higher anomalous copper sections were noted in association with some of the ultramafic sections of the hole. The entire hole was assayed for gold and no significant values were noted.

The induced polarization anomaly associated with this hole is likely explained by the considerable amount of disseminated pyrite within the various units intersected in this hole.

Hole GO2203:

The main purpose of this hole was to determine if there was an up dip extension of the semi massive sulphide zone with copper values intersected in historical Alamo hole 2. The hole also further evaluated the down dip extension of the IP target tested by GO202.

Hole G2203 lithology was mainly comprised of ultramafic and mafic volcanic units which again were intruded by a series of felsic intrusives including some porphyritic intrusives. Significantly less sulphide content was noted in hole GO2203 compared to hole GO2202. The up dip extension of the sulphide bearing zone intersected in historical Alamos hole 2 reported to be hosted in felsic volcanics was not observed in recent hole GO2203.

5390800 5390900 5391000 5391100 5391200

SOUTH NORTH

SURFACE

GO2204
492440mE, 5390910mN
Elevation: 320.0m
Dip: -60°, Azimuth: 180°
Length: 193.8m

GO2204A
492440mE, 5390930mN
Elevation: 320.0m
Dip: -53°, Azimuth: 180°
Length: 92.0m

overburden

overburden

overburden

CAS

CAS

?

?

?

EOH: 92.0m

bedrock

6P Qv Fz

6P Fz

Lc Qv Fz 6P

Fz 6P

Fz 6P

6P Fz

broken core

Drill hole stopped
in 3 metres of fine sand

?

bedrock

?

claim #272136 claim #206127

350 300 250 200 150 100 50

0 25 50 100
Meters

Figure 12

Pelangio Exploration Inc.
and 5007223 Ontario Inc.

Gowan Project
Winter 2022 Diamond Drilling
Section 492440 East - South Part
Looking West +/- 25 metres

Date: July, 2022 NAD 1983 UTM Zone 17N

Name: TS File: gowan_section_492440E_south

Again as above in previous holes a series of samples (26712,26713 and 26715) from felsic units were sent or a petrographic study and whole rock analysis. These felsic unit samples appear again to be felsic intrusive units ranging in composition from granite to quartz monzonite to syenite. A sample (26714) originally designated as a mafic volcanic was actually more of an ultramafic volcanic; sections and logs were adjusted accordingly.

Hole GO2203 did not intersect up dip extension of copper bearing massive sulphide zone in Alamo hole 2. Hole GO2203 contained less sulphide mineralization than hole GO2202. The hole was assayed for gold and select portions of the hole had multi element analysis completed. No significant gold mineralization was noted. Some anomalous copper mineralization was noted in a quartz monzonite felsic intrusive similar to the quartz monzonite units in the upper portion of hole GO2202. The adjoining ultramafic unit was also had somewhat anomalous in copper. (see figure 11) The quartz monzonite unit contained 7-10% pyrite, the same quartz monzonite units near the top of hole GO2202 had only 2-4% pyrite.

Hole GO2204A and GO2204 (See figures: 7,8,9,12):

Exploration drilling in the southern portion of the property was designed to test an induced polarization target with an associated magnetic response both of which were coincident with a large VTEM airborne anomaly. The first hole collard GO2204A was lost in deep overburden. A second attempt to drill this target was initiated by moving the hole forward and steepening the dip of the hole. This hole intersected a heavily talc altered ultramafic intrusive with multiple fault zones. The hole failed to reach its proposed target depth due to the intersection of a large sand seam. Figure 12 suggests the hole may have been collared in a steep topographic ridge and exited the ridge back into overburden. This hole was very magnetic and it is possible that the magnetite content in the core may have been responsible for both the IP response as well as being the cause of the associated magnetic anomaly.

Sampling Method and Approach:

The core handling and sampling procedures at the Gowan project met current industry standards. Upon completion of an initial review of the core was logged using a consistent lithological table established by the project geologist and all pertinent geological information recorded in an excel spread sheet for easy coding and transfer to a database for plan and section work if warranted.

Intervals to be sampled were identified and marked on the core by a company geologist and the following sampling protocol carried out:

- Beginning and end of sample intervals are based on geology and mineralization logged in the core.
- Maximum individual sample length equal to 1.5 metres with the exception of one sample.
- No minimum sample length.

- Contiguous samples are collected along full length of mineralized diamond core.
- Core sample intervals were divided into half lengthways.
- Half of each sample interval was collected in a new plastic bag and tagged with reference sample number. The samples were placed in rice bag sacks and sealed for delivery to the lab by company staff.
- The residual core half was returned to the original location in the core box along with a numbered sample tag for future reference.

With respect to the design of sampling intervals; the actual intervals were designed to provide contiguous sampling across the full width of the mineralized zones including shoulder samples. Particular attention was paid to the following general geological parameters to identify potential mineralized zones for priority sampling included the following:

- Rock types: No restriction on rock type. Mineralized zones potentially occur in all rock types intersected in the project area.
- Rock deformation: Mineralized zones may include evidence for increased host rock deformation including foliation, ductile strain, and/or brittle fracturing including the following vein-filling minerals: quartz, carbonates, feldspars, sulphides (in particular chalcopyrite, sphalerite, ± pyrite and pyrrhotite).
- Rock alteration: Mineralized zones may be marked by an increase in the following alteration types within the host rock: chloritic alteration, carbonate alteration, sericitization, sulphidization (in particular chalcopyrite ± pyrite and pyrrhotite) and silicification.
- Observed precious metal such as visible gold.

It should be noted that within the sampled section of core there were rare instances of missing core due to drilling problems associated with poor or broken ground conditions. A notation of these ground conditions were made in logs. However, on an over all basis sample quality was considered excellent and representative of the observed mineralized intervals where samples were taken.

Sample Preparation, Analyses and Security:

Core from the Gowan program was reviewed and sampled at a secure logging facility in Connaught Ontario. The core was logged and tagged for sampling by an experienced geologist and split by a technician under the supervision of the project geologist as per protocols described in the previous section. Splitting of the core was completed by an experienced technician M.Lilko.

For the Gowan project the standard operating procedure relative to precious metal assaying is to record in the log and/or data base if a standard gold fire assay or pulp metallic gold fire assay was completed. If a pulp metallic assay was completed it was put into the data base and taken as the most accurate representation of the sample and recorded in both the log and data base. In the event of a duplicate assay completed on a

sample such as a check by the lab the average of the two analysis was placed in the log and the data base. Base metal assays of interest such as copper, nickel, and zinc were recorded in the data base and drill logs. Other multi element results in excel spread sheets were kept for future reference in corporate records.

Analysis for the Gowan project was completed at Actlabs in Timmins Ontario. Basically all samples assayed for gold were fire assayed with and AA finish using industry standard fire assay procedures. If a sample returned 10000 ppb or greater, the sample was re-assayed with a gravimetric finish. Full details on the methodology utilized by Actlabs for their gold assaying annalysis can be obtained from Actlabs. Multi element analysis was also performed using their 1E3 analaysis. Again full details on the multi element analysis technique can be obtained from the Actalbs web site.

Standard quality control procedures are present in the lab utilized. However, in addition to the quality control at the labs an Oreas standard and a blank sample were submitted for QA/QC requirements for every 28 samples submitted.

Data Verification:

As described above exploration at the Gowan project including core logging, sampling procedures and record keeping are industry standard. The author personally supervised the entire program and was on site during the time the work was carried out. Further, the author personally examined all drill core. The author also supervised sampling technicians during the course of the program. Prior to completion of this current report the author reviewed all data base entries, drill logs, plans, and sections for errors prior to submission. From the material reviewed to date no major discrepancies were noted.

Conclusions and Recommendations:

Conclusions:

Drilling was conducted in the northeastern portion of the property to further evaluate a historical drill hole intercept of semi massive sulphide with significant copper values, and a recently defined coincident induced polarization anomaly. Drilling was also conducted on the southern portion of the project to evaluate a large VTEM anomaly for its nickel potential.

Salient points regarding the recently completed drill program are as follows:

North Target Area (Fig.7)

- 50072233 Ont. Inc. drilling in the North Target Area (NTA) did not intersect the extensions of copper bearing sulphide zones from historical drilling.

- The geological environment hosting the historical sulphide mineralization does not appear to be associated with a felsic volcanic package as initially reported in historical holes and does not represent a volcanogenic massive sulphide environment.

- The induced polarization anomaly in the NTA was likely caused by disseminated pyrite and some magnetite.

- No significant gold mineralization was noted from assaying, however some interesting anomalous copper is present in hole GO2202 and GO2203 mainly within pyritic felsic intrusive units and ultramafic units proximal or in contact with these intrusives (fig.10 & 11). These felsic intrusive units may be prospective for porphyry style copper mineralization similar to the deposit at the former MacIntyre Mine in Timmins.

- The Maxwell plate analysis (see fig11) of the VTEM data showed that the VTEM was very effective in detecting sulphide conductors as the Maxwell plates on section plot within a few meters of known historical sulphide zones. The massive sulphide zones although apparently limited in extent appear to be proximal to felsic intrusives with substantial disseminated pyrite associated with anomalous copper mineralization. It should be noted that this was a blind test as the geophysicist was unaware of the intercept locations prior to plotting the Maxwell plates in figure 11.

South Target Area (Fig.7)

- The recent drilling by 5007223 Ontario Inc. South Target Area (STA) did not adequately test the large VTEM anomaly in the southern portion of the property do to a hole lost in overburden and a second hole not actually reaching its target depth.

- Limited bedrock data from recent drilling showed that the VTEM target is likely hosted within a highly altered ultramafic intrusive that may be prospective for nickel sulphide.

- In light of the effectiveness of the Maxwell plate analysis described above in the NTA discussion above and the difficulty selecting a discrete EM target within the large VTEM anomaly it may be best to target the single Maxwell plate target anomaly F. (see figure 7)

Recommendations:

The following recommendations should be considered:

- Consider drilling a single drill hole to test the Maxwell plate anomaly in the STA within the VTEM anomaly. Prior to choosing the exact collar location for this hole in may be prudent to acquire the IP data from our southern neighbour who is willing to share boundary data. Having both IP and VTEM data prior to choosing a collar location would be advantageous. This hole should only be collared after a review of all data and consultation with a geophysicist.

- There are two remote Maxwell plate anomalies designated D and E (fig.7) that are legitimate untested anomalies. Although there is no rock exposure in this area, government interpretation suggests the area in underlain by metamorphosed ultramafic and mafic intrusions. This may represent a good environment for nickel sulphide targets. These targets should be drill tested, as recommended in the accompanying VTEM report in the attached report appendix.

- There are two Maxwell plate anomalies proximal to the recent drill holes completed in the NTA. These have been designated A and C in figure 7. Maxwell plate data in conjunction with recent and historical drill section data (fig.11) suggests these are legitimate targets. In light of historical copper sulphide mineralization in this area some consideration should be given to testing them if budgets permit. They are however a lower priority target due to the host geological environment and that sulphide zones to date have had a limited extent.

- Maxwell plate P1 shown in figure 11 was intersected by two drill holes well above the optimum location for testing this plate. It was recommended in the VTEM report that this target be tested at a significantly deeper depth and slightly off the current section (fig.11). Some consideration to this as historical hole 77-1 did intersect 0.45% Cu and 2.24 g/t Ag over 1.67 m suggesting that further evaluation at depth may be warranted.

- Lastly a short test hole might be considered to test the bedrock occurrence from RC hole 36 (see figure 7) which was reported to have returned 22600 ppm Cu and 3900 ppb gold. This could possibly be done in conjunction with testing Maxwell plate anomaly C which is proximal to the occurrence.

- At the time of writing a new airborne survey had recently been completed over select portions of the property. Processing of data was still under way; this new data should be taken into consideration in conjunction with the recommendations above.

Respectfully Submitted

J. Kevin Filo, P.Geo.

PROFESSIONAL GEOSCIENTIST
J. K. FILO
PRACTISING MEMBER
0220
ONTARIO

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CERTIFICATE OF AUTHOR

I, J. Kevin Filo, P. Geo. do hereby certify that:

1. I am a consultant for Pelangio Exploration Inc. and its wholly owned subsidiary 5007223 Ontario Inc.

2. I graduated with an Honours Bachelor of Science Degree in Geology from Laurentian University in Sudbury in 1980.

3. I am a member of the Association of Professional Geologists of Ontario (Reg. No. 0220).

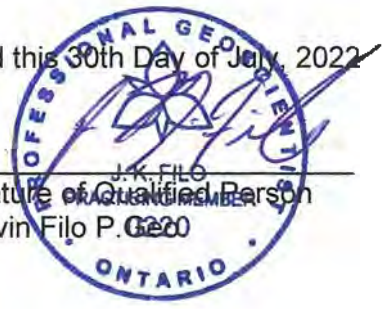
4. I have worked as a geologist for a total of 41 years since my graduation from university.

5. I am responsible for a non- independent review of the current subject report and I was responsible for the planning and supervision of the recent drilling program.

6. I am not aware of any material fact or material change with respect to the subject matter of the report that is not reflected in the report, the omission to disclose which would make the report misleading.

7. I am not independent of Pelangio Exploration or its wholly owned subsidiary 5007223 Ontario Inc. as I presently control a substantial share position in Pelangio Exploration Inc.

Dated this 30th Day of July, 2022



Signature of Qualified Person
J. Kevin Filo P.Geo

APPENDIX 1: DETAILED LITHOLOGY TABLE

LEGEND

- 8U Diabase (All Ages) :
- 7U Felsic to Intermediate Intrusive
  - 7G Granite
  - 7GD Granodiorite, Quartz Monzonite
  - 7T Tonalite
  - 7S Syenite
  - 7M Monzonite
  - 7FP Feldspar Porphyry
  - 7QFP Quartz/Feldspar Porphyry
  - 7PA Pegmatite
  - 7A Aplite
  - 7F Felsite
- 6U Mafic to Ultramafic Intrusive
  - 6D Diorite, Trondhjemite
  - 6G Gabbro
  - 6A Anorthosite
  - 6P Peridotite, Pyroxenite
  - 6L Lamprophyre
- 5U Clastic Sediments
  - 5AR Argillite
    - 5ARG Graphitic Argillite
  - 5GW Greywacke
  - 5CG Conglomerate
    - 5CGT Timiskaming Conglomerate
  - 5SS Sandstone
  - 5ST Siltstone
  - 5Q Quartzite
  - 5A Arkose
- 4U Chemical Sediments
  - 4IF Iron Formation
    - 4IFS Sulphide Facies
    - 4IFC Silicate Facies
    - 4IFO Oxide Facies
  - 4C Chert
  - 4GF Graphite
- 3U Felsic to Intermediate Volcanics
  - 3R Rhyolite
  - 3D Dacite
  - 3A Andesite
  - 3T Trachyte
- 2U Mafic Volcanics
  - 2MS Massive
  - 2P Pillowed
  - 2FB Mafic Flow-Breccia
  - 2HY Mafic Hyaloclastite
  - 2MB Variolitic
  - 2PGR Porphyritic
- 1U Ultramafic Volcanics – Unsubdivided
  - 1TC Talc-Chlorite Altered
  - 1CCB Green-Carbonate Altered

ABBREVIATIONS

Textural

ag	agglomerate
AZ,az	alteration zone
amy	amygdaloidal
FB,fb	flow breccia
fol	foliated
glom	glomerophyric
hy	hyaloclastic
hlr	heterolithic
lap	lapilli
ms	massive
p	pillowed
por	porphyritic
sch	schistose
sfx	spinifex
t	tuffaceous
ves	vesicular
var	variolitic

Alteration

Ab	albitization
Ank	ankeritization
Bi	biotization
Cal	calcitic
Carb	carbonatization
Cb	carbon
Chl	chloritization
Ep	epidotization
Gcb	green carbonate
Hem	hematization
Lx	leucoxene
Pot	potassic
Ser	sericitization
Serp	serpentinization
Si	silicification
Tc	talc
Tour	tourmaline

Intensity Code	
Ank	weak
ANK	moderate
[ANK]	strong

Mineralization

Asp	arsenopyrite
Cl	clustered pyrite
Cpy	chalcopyrite
Ds	disseminated pyrite
Gn	galena
Mt	magnetite
Mo	molybdenite
Po	pyrrhotite
Py	pyrite
Sw	stockwork pyrite
V.G.	visible gold

Intensity Code	
Cpy	trace to 1%
[Cpy]	1–3%
CPY	3–7%
[CPY]	7–15%
[CPY]	>15%

Veining

Av	ankerite
Cv	calcite
Epv	epidote
Hemv	hematite
Mtv	magnetite
Qv	quartz
Qtourv	quartz–tourmaline
Qav	quartz ankerite
Qcv	quartz calcite
Tourv	tourmaline

Intensity Code	
Qav	1–5%
QAV	5–15%
[QAV]	>15%

Structural

bd	bedded
bnd	banded
bx	breccia
bxd	brecciated
ct	contact
f	fault
FZ,fz	fault zone
flt	faulting
fl	flow
fr	fracture
g	gouge
s	shear
SZ,sz	shear zone
slk	slickenside

OTHER

fg	fine grained
mg	medium grained
cg	coarse grained
fmg	fine to medium grained
fcg	fine to coarse grained
int	intermittent
loc,l_	locally (local) eg lmag
mag	magnetic
mod	moderate
st	strong
vs	very strong
wk,w_	weak eg wmag

Revised : July/97

APPENDIX 2: DRILL LOGS

5007223 ONTARIO INC

Prospect: Gowan
DDH:GO2201
Grid:IP Grid
CLAIM:246346

Azimuth/Dip: 180/-50
Tests: see last page
EOH:138 meters

Grid Location: Line 0 Station 1826 North
UTM:492440E 5391826N Nad 83 Zone 17
Date Drilled: Feb.2/22 to Feb.3/22 2021
Date Logged: Feb.4/22 to Feb.7/22

Drill Company:
NPLH Drilling
Logged by:
K. Filo

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
0.00	51.00	Casing	CAS	Note, casing left in hole, boulders and clay pan from 49-51									
51.00	52.95	Mafic Volcanic	2U	This unit is a very dark grey to black color. It is dominantly	953001	51.00	52.00	1.00	0.01				
				made up of mafic minerals (amphiboles mainly) and some	953002	52.00	52.95	0.95	0.007				
				feldspar and quartz, relatively fine-medium grained. Unit is									
				is strongly magnetic with some magnetite noted; there is									
				also about 2-3% disseminated pyrite. Also, unit a mottled									
				appearance and some feldspar within unit slightly coarser									
				grained. Mafic minerals have been chlorite altered to some									
				extent, but overall generally still of moderate hardness									
				and can be scratched with knife with a little effort. Minor									
				broken blocky fault zone from 52.20 to 52.45 , lower									
				contact at 50 deg and minor gouge on contact, no major									
				structure noted a few fractures at 50 deg to CA. Lower									
				contact associated with small quartz vein from 52.70-52.95									
				and contact at 45 deg to CA and sharp. No HCL reaction.									
52.95	54.65	Felsic Intrusive	7U	This is a light grey colored unit on fresh wet surface. It is	953003	52.95	54.00	1.05	0.006				
		(Edited based on		fine grained., extremely hard. Brown coloured,	953004	54.00	54.65	0.65	0.006				
		whole rock analysis		mineral that is extremely hard and not possible to get a									
		of simailar observed		streak from it. Minor pyrite in unit estimate 2-3% diss.									
		units)		The unit is locally moderately magnetic. Unit has no HCL									
				reaction. Unit is massive in appearance, no major structure									
				observed, some minor slip planes at 10 deg to CA. and									
				occassional fracture at 30 deg to CA. Relatively competent									
				unit. Rare phenocryst of plagioclase noted. Unit is									
				mod. Magnetic, lower contact ground									
54.65	57.70	Mafic Volcanic	2U	This mafic unit is lighter grey on fresh wet surface and	953005	54.65	56.00	1.35	0.008				
				again exhibits a mottled appearance. It again comprised	953006	56.00	57.00	1.00	0.007				
				of plagioclase, mafic minerals minor quartz and minor	953007	57.00	57.70	0.70	0.007				
				mica. It is fine to medium grained. Unit is strongly magnetic									
				and has weak to non existant HCL response. Pyrite in									
				disseminated form estimate of 3%. Very competent unit									
				with no major structure observed, a few fractures at 50									
				deg to CA and rare slip at 10-15 deg to CA. It is of moderate									
				hardness but mafic minerals a little softer and somewhat									
				chloritic altered. Lower contact is sharp and at 45 deg									
				to CA.									
57.70	72.50	Felsic Intrusive	7U	Very light grey to buff white colored fine-med. grained	953008	57.70	59.00	1.30	0.005				
		(Edited based on		is extremely hard. It has no HCL reaction. The unit has a	953009	59.00	60.00	1.00	0.006				
		whole rock analysis		variable response to magnet, certain sections strongly	953010	60.00	61.50	1.50	0.007				
		of simailar observed		magnetic and others no response. Some magnetite present.	953011	61.50	63.00	1.50	0.006				
		units)		Pyrite content minimal trace to 0.5% Some minor quartz	953012	63.00	64.50	1.50	0.006				
				veins noted such as at 69.15-69.40. No alteration noted.	953013	64.50	66.00	1.50	0.009				
				Unusal brown hard mineral that cannot be scratched for a	953014	66.00	67.50	1.50	0.005				
				streak as seen above sporadically present in this unit as	953015	67.50	69.00	1.50	< 0.005				
				well. Relatively competent unit with some fractures at 40	953016	69.00	70.50	1.50	0.041				
				deg to CA and some minor slip planes at 60 deg to CA.	953017	70.50	72.00	1.50	< 0.005				
				Note, although overall pyrite content trace - 0.5% some	953018	72.00	72.50	0.50	< 0.005				
				short intervals over 20 cm or so with 1-2% (minor). Lower									
				contact at 60 deg to CA.									

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
72.50	77.40	Mafic Volcanic	2U	As per mafic unit described above this unit is dark grey to	953019	72.50	73.50	1.00	< 0.005				
				black in color and is made up mainly of doninantly of mafic	953020	73.50	74.20	0.70	< 0.005				
				minerals (amphiboles) and some plagioclase and minor	953021	74.20	75.18	0.98	< 0.005				
				quartz. The unit appears fairly fine grained. Unit is magnetic	953022	75.18	76.50	0.72	< 0.005				
				and has a moderate HCL reaction. A light brown colored	953023	76.50	77.40	0.90	0.006				
				mineral possibly a carbonate? ; specks mainly. Fairly soft									
				unit and weakly chlorite altered. Estimate of 2-3% diss.									
				pyrite noted. No significant veining observed and weak									
				shear fabric for 10-15cm at 25 deg to CA just above lower									
				contact with small felsic dyke. Dyke and mafic upper									
				contact at 25 deg to CA. Dyke present from 74.20 to 75.18.									
				A few quartz eyes noted in the dyke, last 20 cm of dyke									
				and lower contact of dyke associated with a quartz vein.									
				Lower contact of unit 30 deg to CA.									
77.40	79.45	Felsic Intrusive	7G	This is a light grey very hard fine to med gr unit. It is non	953024	77.40	78.00	0.60	0.032				
		Granite		magnetic and has no HCL response. Estimate of 1% pyrite	953025	blank			< 0.005				
		(Edited based on		but locally 3-4% over 10-15cm. Rare quartz vein generally	953026	78.00	79.45	1.45	< 0.005				
		whole rock analysis)		less than 10 cm noted. A number of minor slip planes noted									
				at 10-15 deg to CA. Lower contact at 40 deg to CA.									
79.45	82.20	Mafic Volcanic	2U	Mafic unit is dark grey to black in color, and is fine to	953027	79.45	80.50	1.05	< 0.005				
				medium gained. Composed mainly of mafic minerals, some	953028	80.50	81.50	1.00	0.005				
				plagioclase and minor quartz, has a mottled appearance.	953029	81.50	82.20	0.70	< 0.005				
				Strongly magnetic unit again with no HCLreaction. Minor									
				fault at 79.70-79.85 ground core. Minor pyrite noted <0.5%.									
				Relatively soft unit and weakly chlortic. A few minor									
				quartz veins generally less than 5 cm and rare. Lower									
				contact 70 deg to CA.									
82.20	90.00	Felsic Intrusive	7GD	This is a fine grained felsic intursive with	953030	stdor221			1.04				
		Quartz Monzonite		occassional quartz eye present and some K spar noted.	953031	82.20	83.00	0.80	< 0.005				
		(Edited based on		Overall the unit is a very light greyish to white color on	953032	83.00	84.50	0.50	0.007				
		whole rock analysis)		fresh wet surface. There are rafts of volcanic caught up	953033	84.50	85.15	0.65	< 0.005				
				in unit from 84.50 to 85.15, 85.35 to 85.95, and 88.50 to	953034	85.15	85.95	0.80	< 0.005				
				89.40. The unit is strongly magnetic, very hard and has	953035	85.95	87.00	1.05	< 0.005				
				no HCL response. The unit has about 3-4% disseminated	953036	87.00	88.50	1.50	0.006				
				pyrite throughout it and the rafts of volcanic are also	953037	88.50	89.40	0.90	0.005				
				minralized with pyrite. Minor quartz veining not particularily	953038	89.40	90.00	0.60	< 0.005				
				significant. Fairly competent unit a few slip planes at									
				15 deg to CA, no major structure. Gradational contact									
				with coarser intrusive below.									
90.00	103.50	Felsic Intrusive	7Gpor	This a is a white colored unit with mainly composed of	953039	90.00	91.50	1.50	< 0.005				
		Granite		feldspar, quartz and minor mafics. The unit has large	953040	91.50	93.00	1.50	< 0.005				
		(Edited based on		quartz eyes up to about a cm across throughout it. The unit	953041	93.00	94.50	1.50	< 0.005				
		whole rock analysis)		is mediium grained, has no HCL response and is very hard.	953042	94.50	96.00	1.50	0.005				
				The unit is non magnetic but rafts of mafic volcanic within	953043	96.00	96.30	0.30	< 0.005				
				it are magnetic, rafts of mafic volcanic present from 96.30	953044	96.30	97.50	1.20	< 0.005				
				to 98.75, 99.30-100.30, and 102.40 to 103.05. Pyrite	953045	97.50	98.75	1.25	< 0.005				
				content estimated at 0.5% in disseminated form. No	953046	98.75	99.30	0.55	< 0.005				
				significant veining noted, competent unit overall but fault	953047	99.30	100.30	1.00	0.005				
				zone extending out of volcanic raft and also with 7GD	953048	100.30	101.00	0.70	0.007				
				from 97.80 t0 99.00. Lower fault contact at about 10 deg	953049	101.00	102.40	1.40	0.005				
				to CA.	953050	102.40	103.05	0.65	0.005				

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
					953051	103.05	103.50	0.45	0.006				
103.50	106.50	Mafic Volcanic	2U	This is a fine to medium grained unit composed of mainly	953052	103.50	105.00	1.50	0.007				
				mafic minerals, plagioclase some quartz and some mica.	953053	105.00	106.50	1.50	0.007				
				Unit has a mottled apparance and is dark grey to black in	953054	106.50	107.70	1.20	0.012				
				color.Unit is strongly magnetic,soft and chloritic altered	953055	blank			0.006				
				(moderate alteration). Weak to non existant HCL reaction.	953056	107.70	108.80	1.10	0.006				
				Estimate of 1-2% pyrite. No major structure noted, some	953057	108.80	109.70	0.90	0.009				
				fractures at 50 deg to CA and rare slip plane at 15 deg to	953058	109.70	110.20	0.50	0.007				
				CA at 104.6-104.9. Lower contact 65 deg to CA.									
106.50	114.56	Mafic Tuff	2U t	Very light grey to buff white colored; unit is very fine									
		(Edited based on		grained and has an ash like appearance on fresh broken									
		whole rock analysis)		surface. There is a fault zone with some gouge at 106.90									
				to 107.70. At 107.4 gouge noted, this fault could be	953059	110.20	111.00	0.80	0.007				
				described as healed fault with K spar rich quartz and K	953060	stdor221			1.02				
				spar veins intruding the fault zone. Lower contact of fault	953061	111.00	112.50	1.50	0.007				
				at 70 deg to CA. Within the tuff units are sections of mafic	953062	112.50	113.60	1.10	0.006				
				volcanic as described immediately above, possibly	953063	113.60	114.56	0.96	0.007				
				large fragments within the tuff. These are noted from 108.8									
				to 109.7, 110.20-112.50, and 113.6 to lower contct at									
				114.56. The felsic ash tuff is minraralized									
				with some pyrite, estimtate of 2% pyrite but shorter									
				sections of 10-20 cm with 2-4% locally. The mafic volcanic									
				sections within tuff are are also mineralized with 2% pyrite									
				as well. The tuff unit has a variable response to HCL									
				ranging from weak to not existant. There is magnetite									
				within the tuff unit and obviously strongly magnetic. It is									
				of moderate hardness, can be scratched with some effort.									
				Some minor quartz veins, not significant. Competent unit									
				no major structure observed. Lower contact at 85 deg to									
				CA.									
114.56	128.60	Felsic Intrusive	7U	This unit is similar in appearance to unit described above	953064	114.56	115.50	0.94	0.008				
				from 82.20 to 90 m. It is a fine gained intrusive with some	953065	115.50	116.50	1.00	0.005				
				K spar noted and occassional feldspar phenocryst (rare).	953066	116.50	117.15	0.65	0.008				
				It is light grey in color and extremely hard; the unit is	953067	117.15	117.40	0.25	0.011				
				strongly magnetic and has no HCL reaction. There are	953068	117.40	118.50	0.90	0.008				
				rafts of mafic volcanic within the intrusive; these are	953069	118.50	119.15	0.65	0.007				
				noted from 117.15-117.40; 119.15-121.40. Magnetite and	953070	119.15	120.00	0.85	0.013				
				pyrite present, pyrite minor trace to 0.5% estimate. Some	953071	120.00	121.40	1.40	0.013				
				leucoxene noted within this unit. Volcanic rafts have	953072	121.40	122.00	0.60	0.012				
				2-3% disseminated pyrite. A few small quartz veins noted	953073	122.00	123.00	1.00	0.013				
				generally less than 10 cm. Competent unit with a few	953074	123.00	124.50	1.50	0.013				
				fractures at 50 deg to CA in general. Lower contact 20	953075	124.50	126.00	1.50	0.005				
				deg to CA.	953076	126.00	127.50	1.50	0.014				
					953077	127.50	128.60	1.10	0.014				
128.60	132.00	Fault Zone	Fz	This is a healed fault zone with a number of blocky broken	953078	128.60	129.00	0.40	< 0.005				
				sections and a number of quartz calcite and quartz	953079	129.00	130.50	1.50	< 0.005				
				carbonate veins within fault. The host rock for the fault is	953080	103.50	132.00	1.50	0.007				
				a felsic intrusive as described immedately above again									
				with rafts of mafic volcanic. Some pyrite present in									
				felsic intrusive host minor 0.5% at best.									
					953081	132.00	133.00	1.00	0.006				
132.00	133.80	Mafic Volcanic	2U	This is a fine to medium grained unit similar to 2U described	953082	133.00	133.80	0.80	0.005				
				above mainly comprised of mafic minerals, some plagioclase									
				and minor quartz and biotite mica. Has a mottled									
				appearance. The unit is dark grey to black in color on wet									
				surface. Moderate hardness and some chloritic alteration									

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				noted in mafic minerals, weak. Weak to non existant HCL									
				reaction. Strongly magnetic unit, some minor pyrite 2%									
				generally disseminated form. No significant veining noted.									
				Competetent unit with a few fracture planes at 30 and 70									
				deg to CA. Lower contact sharp 85 deg to CA.									
133.80	136.07	Felsic Intrusive	7U	This is a fine-medium grained sugary textured unit on	953083	133.80	135.00	1.20	0.008				
				broken surface that is light grey to white in color with	953084	135.00	136.07	1.07	0.009				
				a some K-spar. The unit is very hard, and does not									
				react to HCL Unit is magnetic and magnetite observed in									
				unit, random tiny flecks. No significant sulphide noted,									
				and rare quartz vein generally less than 10 cm. Minor									
				mafic volcanic rafts noted. Lower contact 25 deg to CA.									
136.07	137.60	Mafic Volcanic	2U	This is a fine grained dark grey to black unit, does not	953085	blank			0.006				
				exibit mottled texture typical of 2U up to this point and	953086	136.07	137.00	0.93	0.009				
				dominantly made up of fine grained mafics minerals. Strong	953087	137.00	137.60	0.60	0.009				
				response to magnet, no HCL response and of moderate									
				hardness. Softer in localized patchy weakly chloritic parts.									
				Minor pyrite 0.5% max. No significant veining noted,									
				competent unit, no major structure Lower contact erratic.									
137.60	138.00	Felsic Intrusive	7U	As described above from 133.80-136.07.	953088	137.60	138.00	0.40	< 0.005				
				EOH 138.00									
				Tests:									
				Depth:54 m Az:190.1 Corrected Az:178.60 Dip:-47									
				Depth:88 m Az:191.5 Corrected Az:180 Dip:-49.1									
				Core stored at Pelangio field office in Connaught Ontario.									

5007223 ONTARIO INC.

Prospect: Gowan
DDH:GO2201A **Azimuth/Dip: 180/-50**
Grid:IP Grid **Tests: see last page**
CLAIM:246346 **EOH:52 meters**

Grid Location: Line 0 Station 1825 North
UTM:492440E 5391825N Nad 83 Zone 17
Date Drilled: Feb.1/22 to Feb.2/22 2021
Date Logged: Not Applicable

Drill Company:
NPLH Drilling
Logged by:
K. Filo

From	*To*	*Rock Type*	*Code*	*Description*	*Sample#*	*From*	*To*	*Meters*	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
0.00	52.00	Casing	CAS	Hole lost in oveburden									

5007223 ONTARIO INC

Prospect: Gowan
DDH: GO2202
Grid:IP GRID
CLAIM:248346

Azimuth/Dip: 180/-45
Tests: see last page
EOH:252

Grid Location: Line 0 ST 1740 North
UTM:492440E 5391740N Nad 83 Zone 17
Date Drilled: Feb.7 2022 to Feb.9 2022
Date Logged: Feb.16 2022 to Feb.20 2022

Drill Company: NPLH Drilling
Logged by: K. Filo

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
0.00	58.00	Casing	CAS	Note, casing left in hole.									
58.00	66.50	Felsic Intrusive	7GD	This is a very light grey to bleached white colored unit. It is	953246	58.00	59.00	100	< 0.005	< 0.2	31	41	9
		Quartz Monzonite		fine grained and has sugary texture on broken fresh	953247	59.00	60.00	1.00	0.005	< 0.2	26	53	6
		(Edited based on		surface.The unit has a high quartz content, numerous tiny	953248	60.00	60.50	0.50	0.006	< 0.2	4	9	6
		whole rock analysis)		flecks of mafic minerals and tiny poorly develoed ghost	953249	60.50	61.00	0.50	0.005	< 0.2	110	36	7
				like phenocrysts of plagioclase. Substantial K spar noted	953250	61.00	62.00	1.00	0.006	< 0.2	139	22	4
				from 60.50 to 61.50. This unit is very broken up, likely as	953251	62.00	63.00	1.00	0.005	< 0.2	218	31	6
				a result of a fairly significant fault zone from 62.75 to 64.40.	953252	63.00	63.90	0.90	0.008	3.9	83	52	21
				The fault zone is a brittle fault zone with blocky broken core	LC			0.50					
				and and some core loss from 63.90 to 64.40. Upper contact	953253	64.40	64.85	0.45	0.01	0.5	94	64	62
				of fault at 55 deg to CA and lower contact 30 deg to CA.	953254	64.85	65.85	1.00	0.01	< 0.2	80	180	227
				Vuggy quartz vein noted from 64.03 to 64.53 m. Upper	953255	65.85	66.50	0.65	0.007	0.2	75	66	37
				contact 40 deg to CA and lower contact ground. Outside of									
				this vein very minor quartz veining noted. Unit is very hard									
				non magnetic to 60.50 but beyond this strong magnetic									
				response in unit. No HCL response in unit. Raft of mafic									
				noted from 64.85 to 65.85. This mafic unit shistose in									
				appearance with allignment of minerals. Towards lower									
				contact unit somewhat transitional due to raft material in									
				unit. Estmate of 1-2% pyrite in this unit, mainly diss. form.									
66.50	68.40	Mafic Volcanic	2U	This unit may be a raft within itrusives. The unit is dark grey	953256	66.50	67.50	1.00	0.007	< 0.2	68	129	225
				in color on wet surface; dominantly made up of mafic	953257	67.50	68.40	0.90	0.008	< 0.2	84	128	248
				minerals mainly. On broken fresh surface it has a shistose									
				appearance and minerals are alligned. Note, some quartz									
				and plagioclase also observed, grain size fine to medium.									
				Fabric oriented at 50 deg to CA within unit. Unit has about									
				2% disseminated pyrite. No quartz veining noted. Unit is non									
				magnetic and has a weak HCL reaction. Unit is soft and									
				weak to moderately pervasively chorite altered. Lower									
				contact at 90 deg to CA.									
68.40	70.45	Felsic Intrusive	7GD	This unit is similar in appearance to initial felsic intrusive	953258	68.40	69.00	0.60	0.009	< 0.2	196	98	8
		Quartz Monzonite		described in this hole. It is a very light grey to white color	953259	69.00	70.45	1.45	0.007	< 0.2	170	60	4
		(Edited based on		and very fine grained. There are some flecks of mafic									
		whole rock analysis		minerals throughout, unit appears to be made up dominantly									
		of simailar observed		of plagioclase feldspar and some quartz. Feldspar altered									
		units)		on occasion (sausseritized??), somewhat micaceous looking									
				Blocky broken zone associated with a brittle fault running									
				sub parallel to core axis from 69.50 to 70.40. Unit is general									
				fairly broken up due to fault and numerous slips present									
				at 10-15 deg to CA and fractures at 85 deg to CA. The unit									
				is extremely hard and difficult to scratch. There is 2-3%									
				disseminated pyrite noted and within fault zone there is									
				some oxidation of sulphides. There is no HCL reaction and									
				the unit is non magnetic. No signifianct veining noted. Lower									
				contact at 70 deg to CA.									
70.45	71.50	Mafic Volcanic	2U	Again this unit thought to be a raft caught up within intrusive	953260	70.45	71.50	1.05	0.015	0.3	200	130	156
				bodies.This unit is as described above from 66.50 to 68.40.	953261	71.50	72.00	0.50	0.007	< 0.2	56	54	18
				Lower contact is erratic and generally subparallel to CA.	953262	72.00	73.50	1.50	0.007	< 0.2	133	61	13

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
					953263	73.50	75.00	1.50	0.01	0.2	309	48	8
71.50	88.85	Felsic Intrusive	7GD	This is a fine to medium grained intrusive comprised									
		Quartz Monzonite		mainly of plagioclase, quartz and minor mafic minerals and	953264	75.00	76.50	1.50	0.005	< 0.2	169	62	16
		(Edited based on		some minor K spar. Some tiny skeletal flecks observed	953265	blank			< 0.005	< 0.2	1	< 2	< 1
		whole rock analysis)		and thought to be leucoxene. This unit has a patchy but	953266	76.50	78.00	1.50	0.016	0.8	2410	53	10
				strong magnetic response as some magnetite observed.	953267	78.00	79.50	1.50	0.011	< 0.2	207	58	6
				Unit is very hard and difficult to scratch with knife. Some	953268	79.50	80.10	0.60	0.008	< 0.2	72	30	5
				localized quartz eyes and feldspar phenocrysts; poorly	953269	80.10	81.00	1.00	0.005	< 0.2	20	9	2
				developed and localized QFP porphyritic texture. This unit	953270	stdor522			0.6	1.1	9190	24	56
				has 3-4% disseminated pyrite and occassional stringer of	953271	81.00	82.50	1.50	0.024	0.6	386	73	20
				pyrite. A few flecks of chalcopyrite are present within the	953272	82.50	84.00	1.50	0.016	0.3	842	51	5
				unit locally and 2% chalco over short interval 77.65-77.75.	953273	84.00	85.50	1.50	0.018	0.9	673	45	9
				No HCL reaction in this unit. Pegmatitic section of unit									
				with substantial K spar from 80.10 to 81.00. This unit is									
				light grey to white in color. A few small quartz veins,									
				not significant, small vein associted with lower contact	953274	85.50	87.00	1.50	0.009	0.5	349	44	10
				with minor fushite. Fairly competent unit, a number of	953275	87.00	88.00	1.00	0.008	0.4	208	30	4
				fractures generally at 50 deg to CA	953276	88.00	88.85	0.85	0.008	0.3	300	40	7
88.85	91.40	Mafic Volcanic	2U	This unit is very similar to mafic volcanic described above	953277	88.85	90.00	1.15	0.007	< 0.2	66	147	318
				from 66.5-68.40. It is dark grey black color on fresh wet	953278	90.00	91.40	1.40	0.012	< 0.2	85	164	217
				surface and is mainly made up of mafic minerals. It could									
				be described as schistose as there is a distinct allignment									
				of minerals (70 deg to CA). The unit is soft and chlorite									
				altered. The unit is fine grained and has weak to non									
				existant HCL reaction. Unit is non magnetic and contains									
				and has a couple of small quartz veinlets within it; these									
				are less than 10 cm and minor. The unit has a fair amount									
				of disseminated pyrite, estimate of 4-5%.. Lower contact									
				erratic.									
91.40	95.80	Felsic Intrusive	7U	This is a very light grey colored unit that is fine to medium	953279	91.40	92.45	1.05	0.011	< 0.2	102	53	43
		(Edited based on		grained, very hard, qtz & feldspar make up sustantial	953280	92.45	93.00	0.55	0.007	< 0.2	73	36	5
		whole rock analysis		component & some flecks of mafic minerals(10% of unit).	953281	93.00	94.00	1.00	0.013	0.2	339	32	6
		of similar observed		Initial meter of unit contains a quartz vein from 91.40-91.75	953282	94.00	95.00	1.00	0.006	< 0.2	117	44	5
		units)		and signifcant pyrite associated with contacts of this vein.	953283	95.00	95.80	0.80	0.008	< 0.2	159	37	5
				Outside of this vein there are also a few smaller quartz									
				veins and stringers, these make up 2-3% of unit maximum.									
				Note, stringer of quartz and K spar with minor chalco and									
				pyrite at 93.5. This unit is well mineralized with substantial									
				pyrite estimate of 5%, some of the pyrite is very finely									
				disseminated and also some clots and stringers. Unit									
				extremely hard, and not possible to scratch with knife. No									
				HCL reaction and unit is non magnetic. Competent unit but									
				minor fault with blocky broken core from 92.6 to 92.86									
				oriented at about 10 deg to CA. Lower contact at 85 deg to									
				CA.									
95.80	103.60	Mafic Volcanic	2U	Very similar to other sections of mafic volcanic in this	953284	95.80	97.00	1.20	0.006	< 0.2	37	135	263
				hole above. It is a dark grey to light black color on fresh	953285	97.00	98.00	1.00	0.007	< 0.2	63	121	260
				wet surface. The unit is fine to medium grained and there	953286	98.00	98.65	0.65	0.009	< 0.2	87	112	222
				is an allignment of minerals giving is a schist like look.	953287	98.65	99.30	0.65	0.027	< 0.2	20	22	43
				Mineral fabric at 50 deg to CA, modest to weak fabric.	953288	99.30	100.00	0.70	0.012	< 0.2	61	107	225
				Generally a competent unit with some slip planes at 20-25	953289	100.00	100.70	0.70	0.012	< 0.2	51	116	213
				deg to CA. Two significant faults associated with vuggy	953290	100.70	101.35	0.65	0.018	< 0.2	68	48	39
				quartz veins. Fault at 98.65 to 99.30 and 100.70-101.35;	953291	101.35	102.00	0.65	< 0.005	< 0.2	63	110	147

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				upper contact of for first and 2nd fault both at 50 deg to CA.	953292	102.00	103.00	1.00	< 0.005	< 0.2	45	95	158
				Lower contact for first fault at 30 deg to CA and for second	953293	103.00	103.60	0.60	< 0.005	< 0.2	53	118	134
				fault 40 deg to CA. Unit well mineralized with disseminated									
				pyrite, estimate of 5%. Variable response to magnet but									
				for most part strongly mangetic as some magnetitie present.									
				Weak to non existant HCL response. Moderate hardness									
				and some weak to moderate pervasisve chlorite alteration.									
				Lower contact is sharp but erratic.									
103.60	115.65	Felsic Intrusive	7GD	Generally a light grey unit, slightly darker grey when	953294	103.60	104.60	1.00	0.006	< 0.2	228	48	55
		Quartz Monzonite		proxiamal to mafic rafts as in first couple of meters. At 104.6	953295	blank			< 0.005	< 0.2	1	< 2	< 1
		(Edited based on		to 105.40 there is a mafic raft similar to description	953296	104.60	105.40	0.90	0.005	< 0.2	91	166	224
		whole rock analysis)		immediately above. The felsic intursive is fine to medium	953297	105.40	106.40	1.00	0.028	< 0.2	242	43	32
				grained. It is comprised of plagioclase feldspar, substantial	953298	106.40	107.90	1.50	0.006	< 0.2	126	168	151
				quartz and minor mafic minerals (5-10%). There are a	953299	107.90	109.90	1.30	0.009	0.3	217	39	11
				number of K spar rich sections and quartz veining often	953300	stdor522			0.523	1.1	9270	24	54
				associated with K spar. The unit is extremely hard,	953301	109.90	110.00	1.00	< 0.005	< 0.2	105	41	8
				strongly mangetic for the most part with minor non magnetic	953302	110.00	111.00	1.00	0.01	< 0.2	202	60	37
				sections. No HCL reaction. Sporadic localized sections	953303	111.00	112.00	1.00	0.035	0.2	349	46	12
				with quartz eyes and small feldspar phencocrysts. Poorly	953304	112.00	113.00	1.00	0.008	0.4	440	43	6
				developed porphyrtic texture locally. Some tiny poorly	953305	113.00	114.00	1.00	0.011	< 0.2	222	51	6
				developed skeletal grains that look like leucoxene??	953306	114.00	115.20	1.20	0.011	0.3	306	48	16
				Estimate of 2-3% fine pyrite and rare flecks of chalcopyrite									
				occassionally. Overall a competent unit with some fractures									
				at 40 deg to CA. and some slip plane at about 10 deg to CA.									
				Small britte fault with blocky broken core 113.25 -113.55.									
				Fault at 20 deg to CA. A raft of mafic voclanic similar to									
				volcancic (2U) described in this hole from 115.2 to115.65.									
				Lower contact 40 deg to CA.	953307	115.20	116.00	0.80	< 0.005	< 0.2	67	104	193
115.65	116.50	Fault Zone	FZ	Broken blocky brittle fault zone; brittle fault mainly rubble.									
				Host rock made up of mafic raft and some felsic intursive.	953308	116.00	116.50	0.50	< 0.005	< 0.2	87	49	48
				Lower contact 10 deg to CA.									
116.50	118.85	Brecciated Qtz	Qv bx	This is a brecciated quartz vei with angular fragments of	953309	116.50	117.50	1.00	< 0.005	0.6	232	15	3
		Vein		felsic intusive and small raft of felsic intrusive with some	953310	117.50	118.85	1.35	0.006	0.7	110	41	11
				K spar rich sections. Certain sections with K spar have	953311	118.85	120.00	1.15	0.005	< 0.2	56	89	130
				a pegmatitic texture. Very sparse pyrite mineralization,									
				trace to 0.5%. Unit is hard, and felsic intrusive rafts and									
				fragments magnetic other sections non magnetic. Variable									
				response to HCL, quartz rich sections no response but									
				K spar rich sections have some reaction. The unit is of									
				variable hardness, obviously more quartz rich sections									
				extremely hard. Note some of rafts and fragments of									
				felsic intrusive are porphyritic. Fairly competent interval									
				with a few fractures at 50 deg to CA in general and a few									
				minor slip planes at 20-25 deg to CA in general. Lower									
				contact at 40 deg to CA.									
118.85	121.30	Mafic Volcanic	2U	This is a mafic volcanic similar to the 2U units described									
				above. It may be a raft between two intrusive units. The	953312	120.00	121.30	1.30	0.005	< 0.2	82	124	214
				unit is chilled for about 40 cm on upper contact; it is									
				dark grey to black in color and fine grained and somewhat									
				schistose in appearance. There are a number of 10 cm or									
				so felsic dykes within unit. Unit has variable hardness									
				ranging from moderate to soft. Softer sections weakly									
				chloritic. The unit is strongly magnetic and has substantial									
				pyrite, estimate of 4-5%. Unit has no HCL reaction.									

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				Competent unit for most part, some fractures at 50 deg									
				to CA and minor slip planes at 10-15 deg to CA. Lower									
				contact 50 deg to CA.									
121.30	127.54	Felsic Intrusive	7GD	This felsic intrusive is bone white in color and fine grained	953313	121.30	122.00	0.70	< 0.005	0.3	27	22	8
		Quartz Monzonite		and somewhat micaceous (alteration of plagioclase?) The	953314	122.00	122.50	0.50	0.006	0.8	29	24	6
		(Edited based on		unit also has quartz and tiny specks of mafic mineral	953315	122.50	123.00	0.50	0.015	1.2	1130	58	12
		whole rock analysis)		throughout. This unit has numerous stringers about 10%	953316	123.00	124.00	1.00	0.008	0.5	865	29	5
				pyrite in disseminated form, stringers and large clots which	953317	124.00	125.00	1.00	0.005	0.8	738	32	5
				are conductive when tested with ohm meter. About	953318	125.00	126.00	1.00	< 0.005	0.9	207	16	2
				20-25% pyrite from 122.65-122.85. Unit has variable	953319	126.00	127.00	1.00	0.007	0.3	688	14	3
				response to magnet as sections that are magnetite rich	953320	127.00	127.54	0.54	< 0.005	0.3	179	33	10
				and other areas with no response whatsoever. No HCL									
				response. Extremely hard unit that cannot be scratched									
				with knife. Unit likely silificified. No quartz veins noted.									
				Competent unit, no major structure observed.									
				Lower contact at 50 deg to CA.									
127.54	133.65	Mafic Volcanic	2U	This is a fine to medium grained mafic volcanic, that is	953321	127.54	129.00	1.46	< 0.005	< 0.2	73	117	226
				grey black in color. Again there is an allignment of minerals	953322	129.00	130.50	1.50	< 0.005	< 0.2	88	131	191
				within unit giving it a weak schist like appearance. Fabric	953323	130.50	132.00	1.50	0.005	0.2	141	169	231
				generally oriented at 50 deg to CA. The unit has a variable	953324	132.00	133.20	1.20	0.006	0.4	132	160	245
				response to magnet, where magnetic very strongly	953325	blank			< 0.005	< 0.2	6	6	6
				magnetic over 1m plus sections but then non magnetic	953326	133.20	133.65	0.45	0.007	0.4	319	85	115
				simailarily over a meter or so. Very strong response to HCL.									
				Relatively soft unit and moderately chloritic altered but									
				pervasive. Small fault zone noted from 132-132.55. Blocky									
				and broken sections, upper contact 5 deg to CA and lower									
				40 deg to CA with minor gouge. Small quartz veinlet less									
				than 10 cm noted within fault; basically only quartz vein									
				noted in this section. Small felsic dyke present, grey and									
				very silicious looking from 133.20-133.65, dyke well									
				mineralized with pyrite 5% plus. Lower contact of dyke									
				along a 2nd small fault from 133.65 to 134.70. Substantial									
				disseminated pyrite in this unit estimated of 5%.									
				Lower contact with fault at 65 deg to CA.									
133.65	134.70	Fault Zone	FZ	Fault with som gouge on upper and lower contacts,	953327	133.65	134.70	1.05	0.006	< 0.2	522	65	286
				volcanic within fault zone talc chlorite altered. Lower									
				contact 85 deg to CA.									
134.70	151.80	Mafic Volcanic	2U	Again continuation of fine grained mafic volcanic that is	953328	134.70	136.00	1.30	< 0.005	< 0.2	62	87	183
		(High MgO borderline		grey black in color. This section of unit has an allignment	953329	136.00	137.00	1.00	< 0.005	< 0.2	55	80	173
		ultramafic volcanic		of minerals giving it weak schistose appearance. Fabric	953330	stdor522			0.607	1.1	9180	24	56
		based on whole rock		in unit oriented at 60-70 deg to CA. This unit has a weak to	953331	137.00	138.00	1.00	< 0.005	< 0.2	67	81	172
		analysis)		non existant response to HCL. Extremely strong response	953332	138.00	139.50	1.50	< 0.005	< 0.2	68	84	158
				to magnet and some magnetite observed. This unit is well	953333	139.50	141.00	1.50	< 0.005	< 0.2	61	96	233
				mineralized with disseminated pyrite, estimate of 3%.	953334	141.00	142.50	1.50	< 0.005	< 0.2	82	157	159
				A few small quartz veins noted generally less than 15 cm	953335	142.50	144.00	1.50	< 0.005	< 0.2	69	116	168
				and often minereralized with pyrite, one vein from 147.00	953336	144.00	145.00	1.00	< 0.005	< 0.2	94	100	138
				to 147.25 contains minor chalcopyrite as well as pyrite.									
				Also some minor quartz stringers noted in unit, these are	953337	145.00	146.00	1.00	0.019	0.2	984	110	247

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				not considered significant. From 145.20 to 145.45 some	953338	146.00	147.00	1.00	< 0.005	< 0.2	75	120	242
				significant pyrite large clots, estimate of 15% pyrite in this	953339	147.00	148.00	1.00	0.005	0.7	946	128	150
				short interval. Unit is of moderate hardness. Weak local	953340	148.00	149.00	1.00	< 0.005	< 0.2	47	124	175
				chlorite alteration. Relatively competent unit. Minor fault	953341	149.00	150.00	1.00	< 0.005	< 0.2	48	109	213
				noted from 142.30 to143.70 subparallel to CA. Some small	953342	150.00	151.00	1.00	< 0.005	< 0.2	44	103	200
				fractures generally at 60 deg to CA generally and also	953343	151.00	151.80	0.80	< 0.005	< 0.2	40	110	193
				some genrally at 40 deg to CA. Lower contact sharp at 40									
				deg to CA and a small chill magin on unit for about 10-15									
				cm proximal to vein.									
151.80	152.43	Quartz Vein	Qv	Barren white quartz vein somewhat blocky and borken up.	953344	151.80	152.43	0.63	< 0.005	1.3	8	4	7
				Lower contact 40 deg to CA.									
152.43	154.73	Felsic Intrusive	7QFP	This unit is very light grey unit and compositionally it is	953345	152.43	153.65	1.22	< 0.005	< 0.2	61	21	3
		Porphyritic		likely a diorite that is quartz feldspar porphyritic but	953346	153.65	154.73	1.08	< 0.005	< 0.2	30	72	53
				porphyritic texture is patchy. The unit is medium grained. It									
				has a small raft of mafic volcanic within it from 153.60 to									
				153.90. The unit is extremely hard, moderately magnetic,									
				and magnetic response somewhat patchy. No HCL									
				response. Minor pyrite trace to 0.5%. Some K spar noted									
				within unit. A few tiny quartz strigers present not									
				significant. Very competent unit with no major structure									
				noted, a few fractures present at 50 deg to CA. Lower									
				contact at 80 deg to CA.									
154.73	164.25	Mafic Volcanic	2U	Continuation of 2U unit described in previous intervals	953347	154.73	156.00	1.27	< 0.005	< 0.2	79	152	113
				above. This particular section is grey black in color and	953348	156.00	157.50	1.50	0.005	< 0.2	63	112	167
				medium grained. Schist like appearance on broken core	953349	157.50	159.00	1.50	< 0.005	< 0.2	72	117	250
				surface but allignment of minerals and fabric not as	953350	159.00	160.50	1.50	< 0.005	< 0.2	71	117	254
				distinct as in units above. Unit is strongly magnetic and has	953351	160.50	161.05	0.55	0.009	4.3	1110	107	187
				no HCL response. Moderate hardness and some weak									
				chloritic alteration patchy. Pyrite content 2% and magnetite									
				present as well. Two small quartz veins at 156.46-156.70									
				and 160.80-160.90. Substantial pyrite in clots in 2nd vein.									
				Very compentent unit, no significant structure noted.									
164.25	170.70	Ultramafic Volcanic	1U	This is an extremely fine grained grey black colored,	953352	161.05	162.00	0.95	< 0.005	< 0.2	76	110	224
				soft, strongly talc chlorite altered volcanic. Unit has no	953353	162.00	163.50	1.50	< 0.005	< 0.2	104	118	188
				HCL reaction and it is strongly magnetic. Substantial pyrite	953354	163.50	164.25	0.75	< 0.005	< 0.2	234	139	107
				present in this unit estimate of 4-5% with in stringers, clots,	953355	blank			< 0.005	< 0.2	6	4	1
				and disseminated form. Some cubic pyrite noted as well.	953356	164.25	165.00	0.75	< 0.005	0.7	965	100	491
				Also, some felsic dykes noted within unit, the largest one	953357	165.00	166.00	1.00	0.008	1	2020	96	335
				runs sub parallel to the unit from 165.50 to 166. The	953358	166.00	167.00	1.00	0.005	1	847	126	451
				small dykes are well minerlized with pyrite as well. There	953359	167.00	168.00	1.00	< 0.005	1	303	131	235
				is a weak sporadic shear fabric in unit, it is oriented at 70	953360	stdor522			0.604	1.2	9630	24	55
				deg to CA. This fabric particularly noted from 164.25-	953361	168.00	169.50	1.50	< 0.005	0.2	176	85	270
				155. Small fault with gouge over a few cm on lower	953362	169.50	170.70	1.20	< 0.005	0.4	188	75	200
				contact. Fairly competent unit overall. Lower contact on									
				fault ground.									
170.70	176.50	Mafic / Ultramafic	6U	This is a very coarse grained unit made up of plagioclase,	953363	170.70	172.00	1.30	< 0.005	< 0.2	17	39	125
		Intrusive		some quartz, mafic minerals and biotite and muscovite mica.	953364	172.00	173.00	1.00	< 0.005	< 0.2	19	40	142
		Gabbro		This unit possibly a gabbro/diorite, distinctly similar to unit	953365	173.00	174.00	1.00	< 0.005	< 0.2	12	62	221
		(Edited based on		from 116.70-135.35 in Hole GO2203. The unit is soft	953366	174.00	175.50	1.50	< 0.005	< 0.2	14	49	230
		whole rock analysis)		and talc chlorite altered. Unit is moderately magnetic									
				throughout. No significant veining noted. Sparsely									
				mineralized with pyrite, trace to 0.5%. Competent unit with									

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				no significant structure. Lower contact at 70 deg to CA.									
176.50	178.60	Ultramafic Volcanic	1U	Appears to be a chill margin fo about 1 m beyond lower	953367	175.50	176.50	1.00	< 0.005	< 0.2	199	67	206
				contact. Beyond 177.50 typical grey black fine grained, soft	953368	176.50	177.70	1.20	0.012	0.9	389	116	212
				talc chlorite altered unit. Unit is strongly magntic, and has	953369	177.70	178.45	1.25	0.005	< 0.2	274	120	456
				no HCL reaction. Unit has a shear fabric at 70 deg to CA.									
				A few insignificant tiny quartz stringers parallel to shear									
				fabric.Some pyrite noted from 176.50 to 177.65, 3% in									
				this section but once unit becomes heavily talc chlorite									
				altered at 177.65 trace to non existant pyrite.									
178.60	190.00	Fault Zone	Fz	This is a sheared block broken section of talc chlorite									
				altered volcanic with substantial gouge locally and some									
				lost core (179.15 to 179.55 and 188.35-189.75). The	953370	182.10	183.05	0.95	0.018	< 0.2	48	28	53
				ultramafic within the fault zone is soft and has a "greasy"	953371	183.05	183.50	0.45	0.01	< 0.2	49	97	442
				feel to it from the talc. The ultramafic unit within fault is	953371A	186.75	187.70	0.95	0.019	0.3	179	135	380
				non magnetic and has no HCL reaction. It is extremely fine									
				grained and grey black color. Some quartz veining mainly									
				from 186.70 to 187.65. Also within fault zone a felsic dyke									
				that is has quartz eyes and feldspar pheonocryts from									
				182.10 to 183.05. Some quartz veining is sheared ultramafic									
				as well from 183.05 to 183.50 just beyond dyke. Shear									
				fabric within fault zone ranges from 50-60 deg to CA. Trace									
				of pyrite within fault zone, pyrite mainly in quartz veins									
				and some in intrusive dyke. Lower contact of fault at 65									
				deg to CA.									
190.00	237.00	Ultramafic Volcanic	1U	At 190.00 to 214.75	953372	190.00	191.00	1.00	0.016	< 0.2	45	114	440
				This is a fine grained grey black ultramafic unit that is soft,	953373	191.00	192.00	1.00	0.008	0.5	177	124	432
				and moderately talc chlorite altered. The unit is strongly	953374	192.00	193.20	1.20	0.014	0.2	244	149	410
				magnetic throughout and has no HCL reaction whatsoever.									
				The unit has a moderate shear fabric present from									
				190.00 to 192.00, shear fabric within this interval oriented									
				at 65 deg to CA. Also a moderate shear									
				fabric from 205.25 to 207.00 with shear fabric oriented at									
				60 deg to CA. Sections of this unit such as at 210 to 214	953375	196.40	196.90	0.50	< 0.005	< 0.2	206	177	494
				have a weaker and somewhat more patchy shear fabric.	953376	196.90	197.50	0.60	0.026	1.7	321	178	280
				The unit has a small fault zone from 194.15-194.85,	953377	197.50	198.00	0.50	< 0.005	< 0.2	113	110	388
				blocky broken section of core with some gouge and lower									
				contact at 85-90 deg to CA. At 196.9-197.5 Small veins,									
				veinlets & stringers of quartz with 5% associated pyrite,									
				minor chalcio & a few specks of a grey mineral (galena?).									
				Also some quartz stringers with about 10% pyrite from									
				204.70 to 204.90. Some minor quartz stringers and very	953378	202.00	203.00	1.00	0.005	0.6	123	384	450
				sparse pyrite associated with more significant shear zones	953379	203.00	204.00	1.00	0.008	1.8	264	886	504
				described above. Beyond 2nd shear zone (205.25-207.00)	953380	204.00	205.00	1.00	< 0.005	< 0.2	32	231	420
				there is a section of poorly developed quartz stringers	953381	205.00	206.00	1.00	< 0.005	0.5	34	73	426
				and veinlets from 207.00 to 207.75 with 2-3% pyrite and	953382	206.00	207.00	1.00	0.012	2.1	188	2570	408
				minor chalcopyrite in one veinlet. Note some quartz	953383	207.00	207.75	0.75	0.019	1.5	714	340	417
				stringers also present in weaker developed shear from	953384	207.75	209.00	1.25	0.008	0.9	86	1180	457
				210-214. Outside of the aforementioned sections of veining	953385	blank			< 0.005	< 0.2	3	13	7
				and mineralization above sulphide and other veining									
				sparse in this unit.	953386	213.00	214.50	1.50	< 0.005	< 0.2	56	67	407
				At 214.75 to 235.70									
				This is a contination of the ultramafic volcanic unit. The	953387	214.50	216.00	1.50	< 0.005	< 0.2	77	76	398
				unit in this interval is again a dark grey to black color, it is	953388	216.00	217.00	1.00	< 0.005	< 0.2	35	101	439
				again extremely fine grained, and moderately to strongly									

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				pervasivly talc chlorite atlered. Consistently magnetic from									
				214.75 to 232. Magnetic response in this section (214.75 -									
				232) ranges from weak to moderate magnetic response.									
				Below 232 m to lower contact baically non magnetic. Unit									
				does not have an HCL response. Shear fabric present in	953389	222.00	223.50	1.50	0.006	< 0.2	36	27	420
				in this unit but variable intensity ranging from moderate to	953390	stdor522			0.506	1.2	9530	24	57
				very weak. Shear fabric in general at about 75-80 deg to	953391	226.00	227.00	1.00	< 0.005	< 0.2	60	40	434
				CA in general. Overall competent unit with some fractures	953392	227.00	227.56	0.56	0.016	0.4	181	55	386
				parallel to fabric. Small fault zone with gouge and broken	953393	227.56	228.00	0.44	0.012	< 0.2	134	79	76
				core from 234.25 to 234.50. Core some what broken up	953394	228.00	229.00	1.00	0.009	< 0.2	131	72	429
				intermittantly for a 1.5 meters approx. below fault. Unit	953395	229.00	229.50	0.50	0.01	< 0.2	66	43	368
				contains tiny microstringers of quartz generally following									
				the shear; these are estimated to make up 7% of the unit;									
				rare quartz veinlet noted geneally less than 15 cm. (rare).									
				On occasion quartz stringers kinked; evidence of folding	953396	234.50	235.50	1.00	0.006	< 0.2	86	35	428
				such as at 226.50. Unit has trace of pyrite overall. Some	953397	235.50	236.00	0.50	0.034	< 0.2	205	66	226
				small clots of pyite noted at 227.15. Note, small mafic dyke	953398	236.00	237.00	1.00	0.013	< 0.2	75	42	196
				present from 227.56 to 228, contacts 90 deg to CA. Lower									
				contact with intrusive below sharp but erratic.									
237.00	243.40	Mafic / Ultramafic	6U	This unit is a medium to coarse grained intrusive distinctly	953399	237.00	238.00	1.00	< 0.005	< 0.2	18	39	215
		Intrusive		similar to unit at 170.70-176.50 described above. It has	953400	238.00	239.00	1.00	< 0.005	< 0.2	< 1	35	181
		Gabbro		less mica and more mafic minerals, again likely a gabbro /	953401	239.00	240.00	1.00	0.009	< 0.2	241	77	233
		(Edited based on		diorite; leaning towards diorite due to quartz content. At	953402	240.00	241.50	1.50	0.007	< 0.2	158	105	232
		whole rock analysis		239 becomes darker in color, dark grey to black in color	953403	241.50	243.00	1.50	0.012	< 0.2	78	121	244
		of similar unit above)		rather than light grey as distinct increase in mafic mineral	953404	243.00	243.40	0.40	0.01	< 0.2	121	83	158
				component and more medium grained. Possibly some rafts									
				of volcanic material within intrusive?.									
				This unit has no HCL reaction and is non magnetic									
				throughout entire interval. From upper contact to 239									
				minor pyrite 0.5 - 1% and below 239 to lower contact 3%;									
				some minor chalcopyrite observed locally, estimate of trace.									
				The unit is very soft and pervasivley weak to moderate									
				talc chlorite alteration present. A few minor quartz veins									
				present and some stringers, veins few in number and under									
				10 cm. Quartz stringers and veins estimated to make up									
				3-4% of unit. Farily competent interval with a few fractures									
				at 30 and 60 deg to CA. Lower contact associated with									
				some quartz veining, minor fushite observed in vein. Lower									
				contact at 243.40. A small chill margin for about 40 cm									
				above contact. Contact at 45 deg to CA.									
243.40	252.00	Ultramafic Volcanic	1U	This is a fine grained dark grey to black colored unit that	943405	243.40	244.50	0.90	< 0.005	< 0.2	86	112	356
	EOH			is soft and talc chlorite altered. Shear fabric present from	943406	244.50	246.00	1.50	< 0.005	< 0.2	20	56	369
				246.00 to fault contact at 248.25. Shear fabric at 40-50	943407	246.00	247.50	1.50	< 0.005	< 0.2	71	63	344
				deg to CA. Significant but short fault with substantial	943408	247.50	248.25	0.75	< 0.005	< 0.2	78	85	460
				gouge with ground quartz fragments from 248.25-249.20.									
				Some minor lost core in fault zone from 248.75 to 249.00.									
				Fault zone contacts ground. Numerous fractures in this									
				interval at about 60 deg to CA. This unit has no HCL									
				reaction and locally weakly mangnetic in the last 1.5 meters									
				of hole. A number of small quartz stringers and veinlets	943409	250.00	250.50	0.50	0.027	0.3	224	137	497
				estimated to make up 5% of unit. Minimal amount of pyrite	943410	250.50	251.30	0.80	0.012	0.5	436	64	252
				noted estimate of trace to 0.5%, rare sections over 10 cm	953411	251.30	252.00	0.70	0.01	0.6	164	118	482
				or so with 3-4% locally. Small felisic dyke from 250.80-251									
				noted in unit with upper contact at 20 deg to CA and									
				ground. EOH 252 m.									
				Core stored at Pelangio field office Connaught Ont.									

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				Tests:									
				Depth:66m Az:190.4 Corrected Az:178.90 Dip:-44.1									
				Depth:116 m Az:186.4 Corrected Az:174.90 Dip:-44.2									
				Depth:166m Az:189.70 Corrected Az:178.20 Dip:-44.2									
				Depth:216 m Az:193.1 Corrected Az:181.6 Dip:-44.80									
				Depth:252 m Az:193,.50 Corrected Az:182 Dip:-45.20									
				Possible bad test at 116 m.									

5007223 ONTARIO INC

Prospect: Gowan
DDH: GO2203
Grid: IP Grid
CLAIM:248346

Azimuth/Dip: 180/-60
Tests: see last page
EOH:307 m.

Grid Location: Line 0 St1600N
UTM:492440E 5391600N Nad 83 Zone 17
Date Drilled: Feb 4 to Feb 6 2022
Date Logged: Feb.7 to Feb 16 2022

Drill Company:
NPLH Drilling
Logged by:
K. Filo

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
0.00	49.50	Casing	CAS	Note, casing left in hole.									
49.50	62.30	Ultramafic	1U	This unit is fine grained dark grey to black in color. It is soft									
		Volcanics		and easily scratched. Some talc chlorite alteration (patchy)									
				and some sections of strong chloritic alteration over									
				short intervals of 20 cm or so. Beyond 55 m to lower									
				contact strongly magnetic and above 55 m non magnetic.									
				At 55.2 chloritic sections for about 20 cm some amygdules									
				with some calcite. Overall no response to HCL. This unit									
				is soft. Small quartz vein from 55.43 to 55.54, no other									
				veins of significance. Minor pyrite noted, perhaps 0.5-1%									
				maximum disseminated and sometimes cubic shape.									
				Competent unit with a few fractures generally at 60 deg									
				to CA. No major structural features. Lower contact at 70									
				deg to CA.	953089	61.00	62.30	1.30	0.01				
					953090	stdor522			0.561	1.2	9250	25	61
62.30	64.65	Felsic Intrusive	7QFP	Fine to medium grained very light grey to white in color	953091	62.30	64.00	0.70	0.005				
		Quartz Feldspar		with feldspar phenocryts and some quartz eyes. Magnetic	953092	64.0	64.65	0.65	< 0.005				
		Porphyritic		unit with some grains of magnetite observed. Very minor									
				pyrite noted, trace at best. Unit is extremely hard, and has									
				no HCL reaction. Very rare minor quartz veinlet noted,									
				not significant. Competent unit no major structure observed.									
				Lower contact at 88 deg to CA.									
64.65	67.15	Ultramafic Volcanics	1U	This is a grey black unit that is fine grained and is possibly	953093	64.65	66.00	1.35	< 0.005				
				a raft within the intrusives above and below it. The unit	953094	66.00	67.15	1.15	< 0.005				
				is soft to moderate in hardness, weak talc alteration of unit									
				The unit is strongly magnetic with grains of magnetite. The									
				unit has no HCL response. There is 3-4% disseminated									
				pyrite throughout the unit. No significant veining or structure									
				noted. Lower contact is sharp at 40 deg to CA.									
67.15	69.12	Felsic Intrusive	7QFP	This is a fine to medium grained light grey to white colored	953095	67.15	68.00	0.85	0.005				
		Quartz Feldspar		unit very similar to unit described above from 62.30-64.95.	953096	68.00	69.12	1.12	0.008				
		Porphyritic		The unit has some minor quartz eyes and some poorly									
				developed plagicoclase phenocrysts (tiny). Some K spar									
				noted in unit as well.The unit is hard, magnetic and has no									
				HCL reaction. Some grains of magnetite present. No									
				significant sulphide mineralization noted. No significant									
				quartz veining two or three veinlets generally less than									
				5 cm. Competent unit with a few fracturs at 50 deg to CA.									
				Lower contact sharp at 70 deg to CA.									
69.12	73.35	Ultramafic Volcanics	1U	This is a fine grained dark grey to black colored unit with	953097	69.12	70.50	1.38	0.011				
				a substantial portion of it strongly talc chlorite altered.	953098	70.50	72.00	1.50	0.01				
				Again this may be a raft of ultramafic caught up within	953099	72.00	73.35	1.35	0.014				
				intrusive above and below it. The unit is soft and strongly	953100	73.35	74.00	0.65	0.006				
				magnetic over certain intervals, patchy strong magnetic									
				response. Very minor pyrite, trace to 0.5%. No HCL reaction									
				and noted only a few tiny quartz stringers less than a									
				couple of cm, not significant. A few specks of pyrite									
				mineralization. Trace at best. A few fractures at 85 deg									

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				to CA in general and occassional minor slip at 15 deg to									
				CA. Lower contact is sharp at 40 deg to CA.									
73.35	78.40	Felsic Intrusive	7Spor	This is a fine to medium grained light grey to white colored									
		Quartz Feldspar		unit similar to other 7QFP units described above. Quartz	953101	74.00	75.00	1.00	0.011				
		Porphyritic		eyes can be seen in unit and some poorly developed small	953102	75.00	76.50	1.50	0.012				
		Syenite		feldspar phenocrysts. The unit is hard, with no HCL	953103	76.50	78.00	1.50	< 0.005				
		(Edited based on		reaction. Strongly magnetic and grains of magnetite noted.	953104	78.00	78.40	0.40	< 0.005				
		whole rock analysis)		No significant quartz veining, rare stringer minor and no									
				significant sulphide mineralization. Some K spar present									
				locally. Very competent unit, no major structure. Lower									
				contact is sharp and at 45 deg to CA.									
78.40	84.45	Ultramafic Volcanic	1U	This is a fine grained dark grey to black colored ultramafic	953105	78.40	79.50	1.10	0.009				
				that is moderately to strongly talc chlorite altered. It is a									
				very soft unit that is strongly magnetic and has no HCL									
				reaction. One small quartz vein noted from 82-82.20. Some	953106	81.50	82.00	0.50	0.007				
				pyrite within vein and in adjoining ultramafic wall rock.	953107	82.00	82.25	0.25	0.036				
				Pyrite content from 81.50 to 83.17 estimated at 2%; outside	953108	82.25	83.00	0.75	0.007				
				of this section no significant mineralization. Some sporadic									
				weak shear fabric noted at 50 deg to CA and some minor									
				slips at similar orientation. Lower contact with fault marked									
				by section of gouge (10 cm) and contact at 88 deg to CA.									
84.45	92.80	Fault Zone	FZ	This is a significantly large fault zone with sheared blocky									
				broken ground and a significant amount of core loss. The									
				upper contact is marked with a section of gouge and lower									
				contact is sharp with intrusive below, some lost core on									
				the contact. A fold axis noted with associated minor quartz									
				veining at 87 m, actually multiple fold axis, at 30 deg to CA.									
				Shear fabric noted at 90-91 m oriented at 50 deg to CA.									
				The unit within the fault zone is a strongly talc chlorite									
				altered ultramafic volcanic that is extremey fine grained,									
				and very soft. No significant sulphide noted and rare									
				qurartz stringer or two. Varaible repsonse to magnet									
				ranging from strong to nil. No HCL response; unit is a									
				dark grey to black color.	953109	92.30	92.80	0.5	0.074	0.5	265	353	434
92.80	99.00	Felsic Intrusive	7Gpor	This is a very light grey to white colored unit with some	953110	92.80	94.00	1.20	0.007	< 0.2	27	27	17
		Quartz Feldspar		quartz eyes and small phenocrysts of feldspar, the feldspar	953111	94.00	95.00	1.00	0.094	< 0.2	7	13	5
		Porphyritic		within matrix appears micaceous or saussertized. The unit	953112	95.00	96.00	1.00	0.012	< 0.2	1	10	2
		Granite		is very hard, and it has no HCL reaction and unit is non	953113	96.00	97.00	1.00	0.01	< 0.2	4	16	10
		(Edited based on		magnetic. Some very minor pyrite noted and a few flecks	953114	97.00	98.00	1.00	0.011	< 0.2	3	8	2
		whole rock analysis)		of chalcopyrite. A few minor quartz stringers present, not	953115	blank			0.007	< 0.2	< 1	< 2	< 1
				significant. No major structure observed, competnent unit.	953116	98.00	99.00	1.00	0.006	< 0.2	4	18	20
				Lower contact at 60 deg to CA and sharp.									
99.00	100.15	Ultramafic Volcanic	1U	Again a fined grained dark grey to black, soft talc	953117	99.00	100.15	1.15	0.023	< 0.2	224	106	467
				chlorite altered ultramafic volcanic. Unit is non magnetic									
				and has no HCL response. Has a weak shear fabric at									
				80 deg to to CA and a number of fractures parallel to fabric.									
				A few tiny quartz stringers not signficant and a trace of									
				pyrite at best. Sharp lower contact at 60 deg to CA.									
100.15	102.10	Mafic to Ultramafic	6U	This is a medium grained intrusive with substantial mafic	953118	100.15	101.10	0.95	0.047	0.2	71	76	242
		Intrusive		mineral component. The unit is grey to black in color and									
				soft. The unit is weakly talc chlorite altered and soft, easily									
				scratched. The unit has an erratic response to magnet,									

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				some sections magnetic and other areas no response. No									
				HCL reaction. No significant mineaerlizaton or veining.									
				Relatively competent unit with a few fractures at 80 deg									
				to CA and 40 deg to CA. Lower contact ground.									
102.10	116.70	Ultramafic Volcanic	1U	This is a fine grained grey black colored, soft talc chlorite									
				altered ultramafic volcanic. The unit is locally strongly	953119	106.00	107.00	1.00	0.008				
				magnetic to 104 meters but beyond this no magnetic	953120	stdor522			0.56	1.2	9500	25	60
				response. A small fault with loss of core (minor) and some	953121	107.00	108.00	1.00	0.006				
				gouge along with ground core from 104.65 to 105. Some	953122	108.00	109.50	1.50	0.007				
				moderate to strong shear fabric for about 0.5 m above	953123	109.50	111.00	1.50	0.008				
				fault and below fault from 105 to 114 m. Within shear zone	953124	111.00	112.50	1.50	0.009				
				below fault some very minor quartz veinlets and clots	953125	112.50	114.00	1.50	0.008				
				making up 3% of shear and very minor pyrite, trace to 0.5%.	953126	114.00	115.50	1.50	0.008				
				This unit has no HCL response. A fold axi noted at 105.1	953127	115.50	116.70	1.20	0.016				
				orinted 30 deg to CA. Lower contact is sharp at 60 deg to									
				CA.									
116.70	135.35	Mafic to Ultramafic	6U	This is a medium grained unit, it could be better described	953128	116.70	118.00	1.30	0.005	0.5	30	37	292
		Intrusive		as meta gabbro?? as in contains ferro mag minerals, minor									
				quartz, plagioclase and biotite and muscovite mica It ranges									
				in color from light grey to dark grey. Weakly talc chlorite									
				altered suggesting unit bordering on mafic / ultramafic									
				compositionally. The unit has a good magnetic response	953129	121.50	123.00	1.50	< 0.005	< 0.2	2	29	253
				from about 120 to 127.5 meters, outside of this weak to	953130	123.00	124.50	1.50	0.012	< 0.2	59	97	279
				non existant response. Unit has no HCL response. No	953131	124.50	126.00	1.50	0.009	< 0.2	52	85	221
				significant mineralization, one small speck of chalcopyrite	953132	126.00	127.50	1.50	0.02	< 0.2	68	117	283
				noted in tiny quartz stringers at 125.10. Rare to non	953133	127.50	129.00	1.50	0.014	< 0.2	83	121	264
				existant quartz stringer or two present. Very competent									
				unit overall but some fractures noted at 90 and 50 deg to									
				CA., also a few minor slip planes at 30 deg to CA. A fault									
				zone is present from 132.50 to 134.05 with broken, ground	953134	134.05	135.35	1.30	0.011	< 0.2	127	184	83
				and lost core as well as some gouge. Lower contact	953135	135.35	136.35	1.00	0.017	0.5	106	187	470
				ground gouge and upper contact 50 deg to CA Beyond									
				fault to lower contact unit is finer grained, chill margin.									
				Lower contact ground.									
135.35	139.65	Fault Zone	Fz	This is a blocky broken fault zone with substantial ground									
				and lost core. Section of lost core from 137 to 137.90. Host									
				rock in fault is a talc chlorite altered ultramafic with some									
				minor quartz veining. The unit is non magnetic and has									
				no HCL reaction. It is greenish black in color, fine grained &									
				soft. No significant mineralization noted. Lower contact									
				at 20-25 deg to CA, some gouge on contact.									
139.65	154.00	Ultramafic Volcanic	1U	This is a dark grey to black colored unit on wet surface,	953136	147.00	148.50	1.50	0.01				
				unit is fine grained and strongly talc chlorite altered from	953137	148.50	150.00	1.50	0.011				
				upper contact to about 147, this section is very soft. A	953138	150.00	151.50	1.50	0.011				
				fault zone is noted from 145 to 146.30. Upper contact of	953139	151.50	153.00	1.50	0.011				
				fault zone is noted from 145 to 146.30 ground.	953140	153.00	154.00	1.00	0.013				
				Lower contact at 85 deg to CA with some									
				gouge. Blocky broken core within talc chlorite ultramafic									
				host in fault zone. Below fault to lower contact talc									
				chlorite altration becomes progressively less and less.									
				Also below fault unit exhibits some weak shear fabric and									
				some brecciation (flow breccia?) Fabric oriented at 85									
				deg to CA. Non magnetic unit except for section from 142.6									
				to 145.50 where is a gabbroic dyke similar to composition									

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				to the gabbro unit described above. The unit does not									
				have an HCL reaction. Estimate of 2% pyrite throughout									
				including section with dyke which is also mineralized with									
				pyrite. Estimate of 2-3% quartz associated with fault zone									
				mainly or proximal to it, small veins and clots of quartz.									
				Lower contact gradational									
154.00	173.40	Ultramafic Volcanic	1U	This is a fine grained light greyish green nd weakly	953141	154.00	155.00	1.00	0.016				
		(Edited based on		chloritic altered unit that is sheared and has a very	953142	155.00	156.00	1.00	0.012				
		whole rock analysis)		homogeneous appearance. The shear fabric is 75 deg to	953143	156.00	157.50	1.50	0.017				
				CA. Very comepentent unit with a few fractures parallel	953144	157.50	159.00	1.50	0.005				
				to shear fabric. The unit is non magnetic and has no HCL	953145	blank			< 0.005	< 0.2	4	2	10
				reaction. Unit of moderate hardness.Estimate of 1-2% pyrite	953146	159.00	160.50	1.50	< 0.005				
				and some minor quartz stringers often well mineralized	953147	160.50	162.00	1.50	0.006				
				with pyrite; these make up 1-2% of unit and are oriented	953148	162.00	163.50	1.50	0.005				
				parallel to fabric. Again this unit appears to have a	953149	163.50	165.00	1.50	< 0.005				
				gradational contact with unit and it becomes slightly talcose	953150	stdor522			0.579	1.1	9210	24	55
				as it grades into talc chlorite altered unit below. Unit may	953151	165.00	166.50	1.50	0.005				
				be borderline ultramafic?	953152	166.50	168.00	1.50	0.006				
					953153	168.00	169.50	1.50	0.005				
					953154	169.50	171.00	1.50	0.008				
					953155	171.00	172.50	1.50	0.008				
					953156	172.50	173.40	0.90	0.007				
173.40	189.35	Ultramafic Volcanic	1U	This is a fine grained grey black colored, talc chlorite altered	953157	173.40	174.00	0.60	0.01				
				soft ultramafic volcanic. The unit has a moderate shear	953158	174.00	175.50	1.50	0.01				
				fabric to about 182 m oriented at 80-85 deg to CA; this	953159	175.50	177.00	1.50	0.006				
				shear fabric is more sporadic and not as intense from	953160	177.00	178.50	1.50	< 0.005				
				182 to lower contact. The talc chlorite alteration is	953161	178.50	180.00	1.50	< 0.005				
				pervasive and of moderate intensity. The unit contains some	953162	180.00	181.50	1.50	0.005				
				quartz veinlets, clots and stringers. These make up 3-4%	953163	181.50	183.00	1.50	0.006				
				of unit. Small vein with fushite at 181.80-181.85 associated	953164	183.00	184.50	1.50	0.009				
				with fault gouge from 181.85 to 181.90. Estimate of 1-2%	953165	184.50	186.00	1.50	0.005				
				pyrite in unit but 3-4% locally over short intervals 5-10 cm	953166	186.00	187.50	1.50	0.007				
				generally with some associated quartz. This unit has no	953167	187.50	189.00	1.50	0.006				
				HCL response and it is non magnetic. Lower contact sharp	953168	189.00	189.35	0.35	0.006				
				at 90 deg to CA.									
189.35	194.30	Felsic Intrusive	7U	This unit is white in color and made up mainly of plagioclase	953169	189.35	190.50	1.15	0.006				
		(Edited based on		feldspar and quartz and some minor mafic minerals. The	953170	190.50	192.00	1.50	0.008				
		whole rock analysis		unit is extremely hard and unaltered. Very competent unit	953171	192.00	193.50	1.50	0.009				
		of simailar looking		with a few fractures at 85 deg to CA in general and a minor	953172	193.50	194.30	1.50	0.009				
		unit)		slip plane or two at 25 deg to CA., no major structure noted.									
				The unit is generally medium grained, and it is non magnetic									
				and has no HCL reaction. The unit is very hard and difficult									
				to scratch with a knife. Some quartz eyes present in first									
				few meters of interval along with some tiny feldspar									
				phenocrysts; poorly developed porphyritic texture.									
				Very minor pyrite trace to 0.5% and no significant alteration									
				noted. Some rafts of wall rock material (volcanic) caught									
				up in last meter of unit. Contact sharp at 194.30.									
194.30	196.10	Ultramafic Volcanic	1U	Again a fine grained dark grey to black colored unit on	953173	194.30	195.00	0.70	0.008				
				fresh wet surface. The unit has pervasive, strong talc	953174	195.00	196.10	1.10	0.011				

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				chlorite alteration and is soft and easy to scratch. Unit is	953175	blank			0.007	< 0.2	1	< 2	2
				non magnetic and has no HCL reaction. Some minor quartz									
				veinlets and clots, these make up 2-3% of unit; some									
				pyrite generally disseminated form, estimate of 2% of unit.									
				Competent unit with no significant structure noted. Lower									
				contact associated with a quartz vein from 195.98-196.10									
				Lower contact erratic but sharp.									
196.10	202.30	Mafic to Ultramafic	6U	This is a coarse grained unit that is distinctly similar to unit	953176	196.10	197.55	1.45	0.009				
		Intrusive		described previously from 116.70-135.35. It it possibly a	953177	197.55	198.00	0.45	0.006				
				meta gabbro??. It contains plagioclase, quartz, biotite mica									
				and mafic minerals. It is however soft and talc chlorite									
				altered suggeting a mafic/ultramafic unit. The unit is non									
				magnetic and has no HCL reaction. A few small quartz									
				mainly from 196.10 to 197.65. Sparse pyrite mineralization									
				0.5-1% disseminated pyrite. Fair number of fractures									
				generally at 60 and 80 deg to CA. Small fault with gouge	953178	201.00	202.30	1.30	0.007				
				near lower contact from 201.95-202.15. Lower contact	953179	202.30	203.10	0.80	0.05				
				sharp at 85 deg to CA.	953180	orstd522			0.603	1.1	9440	24	53
202.30	203.10	Felsic Intrusive	7U	This is a dyke of similar composition to diorite intrusive									
		(Edited based on		described above at 189.35 m. Again medium grained unit									
		whole rock analysis		that is white in color, mainly made up of plagioclase and									
		of simailar looking		quartz and minor mafic minerals. The dyke is non									
		unit)		magnetic and has no HCL reaction. Extremely hard and									
				difficult to scratch. Very competent unit with no major									
				structure. Quartz veining noted (30%) & 0.5% pyrite mainly									
				along lower contact. No major structure, competent unit.									
203.10	214.20	Ultramafic Volcanic	1U	Dark grey to light black fine grained, soft moderately talc	953181	203.10	203.50	0.40	0.012	< 0.2	389	210	184
				chlorite altered ultramafic volcanic. Unit is non magnetic and	953182	203.50	204.00	0.50	0.008	< 0.2	3	108	241
				has no HCL reaction. Numerous quartz stringers and clots	953183	204.00	205.50	1.50	0.008	< 0.2	60	136	467
				and small veins, very minor fushite in veins (rare). Trace	953184	205.50	207.00	1.50	0.009	< 0.2	72	134	500
				of pyrite generally 1% locally associated with quartz over									
				5-10 cm.									
				at 207 to 214.20	953185	207.00	208.50	1.50	0.007	< 0.2	64	114	443
				Continuation of ultramafic volcanic unit, still a fine grained	953186	208.50	210.00	1.50	0.011	< 0.2	164	61	191
				light grey to black unit that is weakly talc chlorite altered &	953187	210.00	211.00	1.00	0.033	< 0.2	202	60	118
				still fairly soft. Distinct increase in quartz veinlets and clots	953188	211.00	212.00	1.00	0.009	< 0.2	108	29	91
				and some quartz ankerite noted. Quartz content more like	953189	212.00	213.00	1.00	0.009	< 0.2	81	43	150
				4-5% of unit. A larger quartz vein sub parallel to core axis	953190	213.00	214.20	1.20	0.009	< 0.2	102	60	162
				from 211.25 to 212.3; substantial wall rock with vein (40%									
				plus). Estmate of pyrite content 0.5-1%, some cubic pyrite									
				noted, small felsic dyke from 210.40-210.60 with about									
				10% fine pyrite. This section of ultramafic is non magnetic									
				to about 209, beyond 209 to lower contact magnetic with									
				sections that are strongly magnetic due to magnetite. Unit									
				has no HCL reaction. Note unit sightly more fine to med									
				grained from 209 to lower contact. No major structure,									
				some shear fabric 208 to 209 m at 85 deg to CA. Competent									
				unit overall. Lower contact sharp at 88 deg to CA.									
214.20	228.17	Felsic Intrusive	7GD	This unit on fresh wet surface ranges from white to slightly	953191	214.20	215.00	0.80	0.01	0.3	202	53	148
		Quartz Monzonite		pinkinsh in color where there is a higher K spar component.	953192	215.00	216.50	1.50	0.015	< 0.2	204	49	38
		(Edited based on		The unit is fine grained to aphantiic and has a sugary	953193	216.50	218.00	1.50	0.016	< 0.2	278	36	64
		whole rock analaysis)		texture where fine grained sections distinct. There are	953194	218.00	219.50	1.50	0.014	< 0.2	73	19	13

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				numerous flecks of a green mafic mineral within unit (5%)	963195	219.50	221.00	1.50	0.012	0.2	17	42	46
				that is fiberous (amphibole). Also stringers of chlorite noted	953196	221.00	222.50	1.50	0.012	< 0.2	45	20	6
				within unit. Some sections of unit have what appear to be	953197	222.50	224.00	1.50	0.038	< 0.2	32	22	14
				poorly developed plagioclase phenocrysts which are	953198	224.00	225.50	1.50	0.007	< 0.2	18	16	7
				extremely tiny. The unit is exceptionaly hard, has no	953199	225.50	227.00	1.50	0.01	< 0.2	16	12	5
				HCL reaction. Variable response to magnet, some sporadic	953200	227.00	228.17	1.17	0.061	0.6	190	43	49
				intervals with magnetite note and other areas totally non									
				magnetic. A number of slip planes present at 10-15 deg									
				to CA and blocky broken fault zone present from 224.70 to									
				225.3, with ground broken contacts. This unit is estimated									
				to have about 7-10% pyrite mainly in disseminated form									
				with occassional band of pyrite over a cm or so such as at									
				215.6. A few small quartz veins and clots noted.									
				At first glance this unit could be mistaken for a felsic									
				volcanic but is indeed an intrusive. This maybe the unit									
				that was called a felsic volcanic in historical holes.									
				Lower contact is sharp but erratic and associated with									
				a quartz vein at 228.17.									
228.17	254.00	Ultramafic Volcanic	1U	This is a very fine grained dark grey to black colored,	953201	228.17	229.00	0.83	0.275	0.4	767	73	456
				very soft unit with strong pevasive talc chlorite alteration									
				to about 250 m. At 250 m to lower contact distinct gradual									
				decrease in talc chlorite alteration until almost non existant.									
				Three distictive faults noted from 231.60 to 234; 235.35 to									
				235.75 and 247.50 to 248.20. First two faults have	953202	237.00	238.00	1.00	< 0.005	< 0.2	38	27	424
				a lot of gouge and more ductal fault and last fault more	953203	238.00	239.50	1.50	< 0.005	< 0.2	37	28	437
				brittle and blocky fault. Contacts on first fault ground; upper									
				contact on second fault at 10 deg to CA. Lower contact									
				on last and lower fault at 10 deg to CA. Significant blocky									
				broken ground for a couple of meters each side of two									
				upper faults. Shear fabric noted through much of this									
				section ranging from 60-70 deg to CA for the most part.									
				Some sporadic quartz veinlets and stringers particularily	953204	247.00	248.50	1.50	< 0.005				
				in strongly sheared section from 237 to 240. Serpentine	953205	blank			< 0.005	< 0.2	1	2	6
				noted at 243.40. Minor pyrite trace to 0.5%. The unit is non	953206	248.50	250.00	1.50	< 0.005				
				magnetic for the most part with rare instance over 10 cm	953207	250.00	251.50	1.50	< 0.005				
				or so where there is a magnetic response. No HCL	953208	251.50	253.00	1.50	< 0.005				
				response. Gradational contact to unit below.	953209	253.00	254.00	1.00	< 0.005				
254.00	293.00	Mafic Volcanic	2U	at 254.00 to 274.10	953210	stdor522			0.579	1.2	9270	25	57
				This is a fine to medium grained unit. It is a greenish grey	953211	254.00	255.00	1.00	< 0.005				
				color. It has a psudo brecciated appearance that is not	953212	255.00	256.00	1.00	< 0.005				
				often continuous some what patchy. The unit is soft and	953213	256.00	257.50	1.50	0.01				
				moderately pervasively chlorite altered. The unit has no	953214	257.50	259.00	1.50	< 0.005				
				HCL response and is non magnetic. Estimate of 1% diss.	953215	259.00	260.50	1.50	< 0.005				
				pyrite, slightly more pyrite up to 2% when associated with	953216	260.50	262.00	1.50	< 0.005				
				quartz veining. Note, quartz veins & stringers	953217	262.00	263.50	1.50	< 0.005				
				are few in number and make up no more that 5% of this	953218	263.50	265.00	1.50	< 0.005				
				particular interval. No significant structure noted, very	953219	265.00	266.50	1.50	< 0.005				
				competent unit. A few fractures at 60 deg to CA and small	953220	266.50	268.00	1.50	0.006				
				fault noted at 264.45 to 264.70 minor gouge and some	953221	268.00	269.50	1.50	0.029				
				blocky broken core. Lower contact at 20 deg to CA.	953222	269.50	271.00	1.50	0.005				
				Note, possible pillow salvage at 274.10 suggesting	953223	271.00	272.50	1.50	0.007				
				brecciation observed here is flow breccia.	953224	272.50	274.00	1.50	0.005				
					953225	274.00	275.00	1.00	0.007				
				at 274.10 to 293.00									
				Continuation of fine to medium graind greenish grey colored.									
				The unit continues to be psudo brecciated, and some									

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				evidence of poorly developed pillow salvages to about									
				284 m where unit has a more massive appearance.									
				Brecciation observed thought to be poorly developed flow	953226	278.00	279.00	1.00	0.005				
				breccia. This unit is again soft and chloritic altered	953227	279.00	280.00	1.00	0.006				
				throughout entire interval. Moderate but pervasive chlorite	953228	280.00	281.50	1.00	< 0.005				
				alteration. Some quartz calcite stringers small veins(<10 cm)	953229	251.50	283.00	1.50	0.006				
				in unit. Quartz calcite up 2-3% of unit. Sparse pyrite noted	953230	283.00	284.00	1.00	0.007				
				estimate of 0.5 to 1% disseminated in unit. The unit is non	953231	284.00	285.00	1.00	0.006				
				magnetic and has no HCL reaction except of veining. Note									
				change from section above where veining quartz and this									
				interval quartz calcite. No major structure observed, a few									
				minor slip planes generally at25-30 deg to CA and a few									
				fractures at 60 deg to CA. Very competent unit	953232	292.00	293.00	1.00	0.007				
293.00	293.30	Fault Zone	Fz	Upper contact of fault 70 deg to CA and associated	953233	293.00	293.30	0.30	0.005				
				with some quartz calcite veining. Very distinctive fault with									
				gouge and brecciated quartz fragments. Host rock of fault									
				apprears to be ultramafic. Lower contact at 90 deg to CA.									
293.30	307.00	Ultramafic Volcanic	1U	This is a fine grained grey black colored unit. Some									
	EOH			brecciation similar to that found in unit above but this	953234	293.30	294.00	0.70	0.006				
				ultramafic unit is very soft and has moderate to strong	953235	blank			0.006	< 0.2	2	< 2	5
				pervasive talc chlorite alteration. The unit soft and easily	953236	294.00	295.00	1.00	0.005				
				scratched.Unit has numerous quartz calcite veinlets(<10cm)	953237	295.00	296.50	1.50	0.005				
				and stringers; these make up about 3-5% of unit. Note,	953238	296.50	298.00	1.50	0.006				
				brecciation mentioned becomes patchy to non existant	953239	298.00	299.50	1.50	0.006				
				beyond 301 m. Estimate of about 1% pyrite in this unit.	953240	std0r522			0.466	1.2	9580	25	57
				Non magnetic unit and no HCL reaction in ultramafic itself	953241	299.50	301.00	1.50	0.006				
				but obvious reaction on quartz calcite veinlets and stringers	953242	301.00	302.50	1.50	0.005				
				No major structure observed. Very competent unit with	953243	302.50	304.00	1.50	0.008				
				some minor slip planes oriented at 30 deg to CA and a few	953244	304.00	305.50	1.50	0.006				
				fractures generally at 30 deg to CA.	953245	305.50	307.00	1.50	0.006				
				EOH 307.00									
				Tests:									
				Depth:60m Az:190.2 Corrected Az:178.70 Dip:-59.7									
				Depth:110 m Az:192.2 Corrected Az:180.7 Dip:-59.30									
				Depth:160m Az:192.8 Corrected Az:181.30 Dip:-59									
				Depth:210 m Az:194.6 Corrected Az:183.1 Dip:-58.30									
				Depth:260 m Az:196.4 Corrected Az:184.9 Dip:-57.90									
				Core stored at Pelangio field office in Connaught Ontario.									

5007223 Ontario Inc

Prospect: Gowan
DDH: GO2204A **Azimuth/Dip: 180/-53**
Grid:IP Grid **Tests: see last page**
CLAIM:206127 **EOH:92.00**

Grid Location: Line 0 Station 930 North
UTM:492440 E 5390930 N Nad 83 Zone 17
Date Drilled: Feb.9 to Feb.11 2022
Date Logged: Not applicable

Drill Company:
NPLH Drilling
Logged by:
K. Filo

From	*To*	*Rock Type*	*Code*	*Description*	*Sample#*	*From*	*To*	*Meters*	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
0.00	92.00	Casing	CAS	Hole lost in overburden. Casing left in hole.									

5007223 ONTARIO INC

Prospect: Gowan
DDH: GO2204 **Azimuth/Dip:** 180/-60
Grid: IP Grid **Tests:** see last page
CLAIM: 206127 **EOH:** 193.80

Grid Location: Line 0 Station 910 North
UTM: 492440 E 5390910 N Nad 83 Zone 17
Date Drilled: Feb.12 to Feb.15 2022
Date Logged: Feb.21 to Feb. 23 2022

Drill Company: NPLH Drilling
Logged by: K. Filo

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
0.00	95.70	Casing	CAS	Note, casing left in hole.									
95.70	105.00	Fault Zone	FZ	Beyond the casing the hole was entered a major fault zone of blocky broken core which in many instances is just unconsolidate gouge. Host rock within this fault zone is intensely talc altered ultramafic. No sigificant veining or mineralization observed within fault. Unit exceptionally soft and pervasively talc altered. The entire fault zone is extremely magnetic, no sigificant mineralization or veining observed in fault zone. No HCL reaction. The rock has a soft greasy feel througout. Lower contact is ground.									
105.00	108.00	Peridotite	6P	Below fault zone, intensely talc altered, soft ultramafic that is fine gained and greenish grey in color. Some very minor quartz clots, no significant mineralization noted. Some minor sections with poorly developed brecciation. Extremely magnetic section, no HCL reaction. Still some broken up sections of core with a number of slips at 15 deg to CA in general. No significant mineralization, minor quartz clots noted. Lower contact ground.									
108.00	109.20	Quartz Vein	Qv	Quartz vein subparallel to CA associated with a slip plane subparallel to CA. Substantial wall rock within vein 15-20% as vein somewhat broken up. Lower contact along slip plane at 2-3 deg to CA. Note, no significant mineralization within vein observed.	953412	108.00	109.35	1.35	0.005	< 0.2	4	13	314
109.20	131.00	Peridotite	6P	Ths is a fine grained gray to gray green colored ultramafic that is very soft and again strongly talc altered. The unit is strongly magnetic, in many instances numerous grains of magnetite noted such as at 114 meters. Trace of pyrite noted; one vein associated with a fault zone from 123.75 to 124.50. Fault zone is brittle block broken zone with a slip plane at about 5 deg to CA; it extends slightly beyond quartz vein to about 124.60. There are other fault zones such as at 118.40 to 119.15. Within this section there is a loss of 40-50 cm of core within fault zone. The fault zone has substantial ground up core and gouge. Lower contact of fault at 50 deg to CA and associated with small quartz stringer.At 123.6 some breccia noted. Section of 10 cm of gouge at 131.00 m associated with slip planne at 30 deg to CA.	953413	123.40	123.80	0.40	0.006	< 0.2	152	27	621
					953414	123.80	124.50	0.70	0.005	< 0.2	18	20	400
					953415	blank			0.007	< 0.2	4	2	9
					953416	124.50	125.00	0.50	0.005	< 0.2	30	27	644
131.00	135.00	Fault Zone	Fz	Significant fault zone with broken blocky core and a substatial amount of gouge. Ultramafic volcanic host that is totally talc altered and soft and greasy. Very fine grained and non magnetic. Minor quartz noted in unit, and no minralization. Lower contact ground.									
135.00	142.80	Ulramafic Volcanic	6P	Extremely fine grained grey black unit, that is soft and has strong pervasive talc alteration, primary mineralogy destroyed by alteration. The unit has a greasy feel and									

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				is strongly magnetic. No significant mineralization, minor									
				quartz stringers. Small fault zone with some gouge and									
				broken core from 139.9-140.40, lower contact of fault at									
				70 deg to CA., some brecciation within fault. No HCl									
				reaction, a few small quartz veins noted. Not signficant									
				and trace of pyrite. Lower contact with fault ground with									
				some gouge.									
142.80	145.00	Fault Zone	Fz	Section of broken blocky core with gouge and loss of core.	953417	143.50	144.00	0.50	< 0.005	< 0.2	88	26	717
				Host rock heavily altered ultramafic that is greasy, soft	953418	144.00	144.25	0.25	0.006	< 0.2	4	11	209
				and talc altered. Lost core from 144.75 to 147 m. Small quartz	953419	144.25	144.75	0.50	0.009	< 0.2	65	31	631
				vein from 144 to 144.2 trace of pyrite in vein but outside									
				of this no significant mineralization in ultramafic within									
				fault zone. No reaction to HCL of unit within fault and unit	953420	stdor522			0.566	1.1	9350	24	56
				is magnetic. Lower conact of fault ground.	953421	147.00	148.00	1.00	0.007	< 0.2	27	25	466
144.75	147.00	Lost Core	Lc		953422	148.00	149.00	1.00	0.006	< 0.2	18	33	607
					953423	149.00	150.00	1.00	0.008	< 0.2	49	29	541
147.00	148.40	Quartz Vein	Qv	This section of core mainly a quartz vein and series of									
				quartz veinlets with a substantial ultramafic wall rock									
				component (30-35%). Lower contact along a slip at 5 deg									
				to CA. Rare fleck of pyrite noted in vein.									
148.40	156.00	Peridotite	6P	Again fine grained grey black unit that is soft and strongly									
				pervasively talc altered throughtout. Unit has no HCL and it									
				is strongly magnetic. Minor qurartz veins with are speck									
				of pyrite in vein. No significant mineralization observed									
				in ultramafic unit. Despite proximity to fault zones relatively									
				competent interval with a few slips at 5 deg to CA and 60									
				deg to CA. Lower contact at 5 deg to CA.									
156.00	158.50	Fault Zone	Fz	Again a blocky broken zone of core with gouge sections.									
				The host rock of fault is an ultramafic, that is strongly and									
				pervasively talc altered, some sections within fault not									
				as badly broken up, numerous slips and fractures still									
				associated with these sections. Section of lost core									
				from 158-158.5. Unit within fault strongly magnetic and									
				has no HCL reaction. No significant mineralization observed.									
				Minor quartz veining within fault zone. Lower contact									
				ground and with gouge.									
158.50	162.00	Peridotite	6P	Slightly more competent interval between fault zones, this									
				section of ultramafic still a dark grey to black color, again									
				unit is soft and intensely pervasively talc altered. The unit is									
				strongly magnetic and has no HCL reaction. There is a trace									
				of pyrite noted in unit. Small fault zone from 159.45-159.55.									
				Some minor quartz veinlets and stringers in this section;									
				these make up 3% of unit approximately. A number of									
				fractures noted in unit at about 50 deg to CA.									
162.00	168.50	Fault Zone	Fz	Again section of blocky broken core with local fault gouge.	953424	165.00	166.00	1.00	0.006	< 0.2	106	28	699
				Fault host rock an ultramafic unit again. Note at 163 m.	953425	166.00	167.00	1.00	0.006	< 0.2	34	26	580
				lathes of black mafic mineral possible remanent pyroxene	953426	167.00	168.00	1.00	0.043	< 0.2	52	23	511
				spinifex??? The ultramafic unit within the fault is again very	953427	168.00	168.50	0.50	0.008	< 0.2	12	29	554
				fine grained, soft and pervasively talc altered. Unit is	953428	168.50	169.00	0.50	0.009	< 0.2	83	35	619
				stongly magnetic and has no HCL reaction. Some minor									
				quartz noted, no significant mineralization. Approximately									
				0.50 cm of core lost from 164.50 to 165 meters. Note,									
				from 166.50 to 168.5 a slip plane is present for the full									

From	To	Rock Type	Code	Description	Sample#	From	To	Meters	Au g/t	Ag ppm	Cu ppm	Zn ppm	Ni ppm
				length of interval, slip plane runs parallel to CA and is									
				associated with a thin quartz vein for most of its length.									
				The quartz vein has a distinctive "ink blue" mineral in it,									
				possibly ribeckite? Lower contact 2-3 deg to CA.									
				To this point in this drill hole it appears that the hole may									
				have collared in a fault zone and was drilled sub parallel									
				to the fault and thus so much fault material in hole.									
168.50	189.55	Peridotite	6P	Fine grained grey to dark grey unit, exceptionally competent									
				interval for this hole. Unit is soft and moderately to strongly									
				pervasively talc altered throughout. Extremely magnetic									
				throughout and no HCL reaction. Some very minor quartz									
				veining, not significant and sparse pyrite mineralization,									
				trace as best. For first meter below fault contact a number									
				of fractures noted at 65 deg to CA, and some minor slips									
				at 20 deg to CA. Also a few slips and fractures in a similar									
				orientation below first meter or so but no signifiant structure									
				of note. Lower contact with fault ground gouge.									
189.55	191.80	Fault Zone	Fz	Blocky broken fault zone with gouge and some brecciation									
				typical of fault zones interesected above. The host rock									
				within fault zone is again and ultramafic that is extremely									
				soft and talc altered with a greasy feel. The unit is grey									
				to grey black in color and magnetic; no HCL reaction. Some									
				minor quartz clots and breccia noted within fault zone.									
				Lower contact at 30 deg to CA.									
191.80	193.80	Peridotite	6P	Last interval of this hole is grey to dark grey fine grained									
	EOH			ultramafic, that is extremely soft and talc altered, pervasive									
				alteration. No significant mineraliztion noted & minor quartz									
				stringers and veinlets. Unit is strongly magnetic. Some									
				fracture planes noted at 60 deg to CA in general but no									
				significant structure.									
				Tests:									
				No down hole tests were taken in this hole due to									
				premature abandonment of drill hole and potential loss of rod									
				string.									
				Core stored at Pelangiio field office Connaught Ontario.									

Geological Report on Diamond Drilling

on the

Gowan Property
Gowan Township
Porcupine Mining Division
District of Cochrane
Province of Ontario

For

Pelangio Exploration Inc.'s

Subsidiary Corporation

5007223 Ontario Inc.

Part II of II

Appendicies 3 to 7

APPENDIX 3: COPY OF ORIGINAL ASSAY SHEETS

Quality Analysis ... *Innovative Technologies*

Report No.: A22-01634
Report Date: 29-Mar-22
Date Submitted: 09-Feb-22
Your Reference: GOWAN

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

30 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-50-Timmins - 10g/t	QOP AA-Au (Au - Fire Assay AA)	2022-03-29 09:46:03

REPORT **A22-01634**

Notes:

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

SCC Accredited LAB Accrédité éCCN LAB ™

LabID: 709

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

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	g/mt
Lower Limit	0.005
Method Code	FA-AA
953001	0.010
953002	0.007
953003	0.006
953004	0.006
953005	0.008
953006	0.007
953007	0.007
953008	0.005
953009	0.006
953010	0.007
953011	0.006
953012	0.006
953013	0.009
953014	0.005
953015	< 0.005
953016	0.041
953017	< 0.005
953018	< 0.005
953019	< 0.005
953020	< 0.005
953021	< 0.005
953022	< 0.005
953023	0.006
953024	0.032
953025	< 0.005
953026	< 0.005
953027	< 0.005
953028	0.005
953029	< 0.005
953030	1.04

Analyte Symbol	Au
Unit Symbol	g/mt
Lower Limit	0.005
Method Code	FA-AA
Oreas E1336 (Fire Assay) Meas	0.513
Oreas E1336 (Fire Assay) Cert	0.510
Oreas E1336 (Fire Assay) Meas	0.505
Oreas E1336 (Fire Assay) Cert	0.510
Oreas E1336 (Fire Assay) Meas	0.503
Oreas E1336 (Fire Assay) Cert	0.510
OREAS 216b Meas	6.63
OREAS 216b Cert	6.66
OREAS 216b Meas	6.65
OREAS 216b Cert	6.66
OREAS 216b Meas	6.64
OREAS 216b Cert	6.66
953010 Orig	0.008
953010 Dup	0.006
953020 Orig	< 0.005
953020 Dup	< 0.005
953029 Orig	0.005
953029 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

Quality Analysis ... *Innovative Technologies*

Report No.: **A22-01794**
Report Date: **29-Mar-22**
Date Submitted: **14-Feb-22**
Your Reference: **GOWAN**

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

45 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-50-Timmins - 10g/t	QOP AA-Au (Au - Fire Assay AA)	2022-03-29 09:46:03

REPORT **A22-01794**

Notes:

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

SCC Accredited LAB Accrédité CCN TM

LabID: 709

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
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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	g/mt
Lower Limit	0.005
Method Code	FA-AA
953031	< 0.005
953032	0.007
953033	< 0.005
953034	< 0.005
953035	< 0.005
953036	0.006
953037	0.005
953038	< 0.005
953039	< 0.005
953040	< 0.005
953041	< 0.005
953042	0.005
953043	< 0.005
953044	< 0.005
953045	< 0.005
953046	< 0.005
953047	0.005
953048	0.007
953049	0.005
953050	0.005
953051	0.006
953052	0.007
953053	0.007
953054	0.012
953055	0.006
953056	0.006
953057	0.009
953058	0.007
953059	0.007
953060	1.02
953061	0.007
953062	0.006
953063	0.007
953064	0.008
953065	0.005
953066	0.008
953067	0.011
953068	0.008
953069	0.007
953070	0.013
953071	0.013
953072	0.012
953073	0.013
953074	0.013
953075	0.005

Analyte Symbol	Au
Unit Symbol	g/mt
Lower Limit	0.005
Method Code	FA-AA
Oreas E1336 (Fire Assay) Meas	0.513
Oreas E1336 (Fire Assay) Cert	0.510
Oreas E1336 (Fire Assay) Meas	0.505
Oreas E1336 (Fire Assay) Cert	0.510
Oreas E1336 (Fire Assay) Meas	0.503
Oreas E1336 (Fire Assay) Cert	0.510
OREAS 216b Meas	6.63
OREAS 216b Cert	6.66
OREAS 216b Meas	6.65
OREAS 216b Cert	6.66
OREAS 216b Meas	6.64
OREAS 216b Cert	6.66
953050 Orig	0.006
953050 Dup	0.005
953058 Orig	0.007
953058 Dup	0.007
953069 Orig	0.007
953069 Dup	0.007
953072 Orig	0.011
953072 Dup	0.013
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 ... **Actlabs** *Innovative Technologies*

Report No.: A22-01847
Report Date: 20-May-22
Date Submitted: 15-Feb-22
Your Reference: GOWAW

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

55 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1E3	QOP AquaGeo (Aqua Regia ICPOES)	2022-05-06 12:03:28

REPORT **A22-01847**

 If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

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

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

SCC Accredited LAB
LAB Accrédité CCN
TM
LabID: 266

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

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

Report No.: **A22-01847**
Report Date: **20-May-22**
Date Submitted: **15-Feb-22**
Your Reference: **GOWAW**

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

55 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-50-Timmins - 10g/t	QOP AA-Au (Au - Fire Assay AA)	2022-04-04 07:19:09

REPORT **A22-01847**

Notes:

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

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

SCC Accredited LAB Accredited CCN TM

LabID: 709

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

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E-MAIL Timmins@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953076	0.014																						
953077	0.014																						
953078	< 0.005																						
953079	< 0.005																						
953080	0.007																						
953081	0.006																						
953082	0.005																						
953083	0.008																						
953084	0.009																						
953085	0.006																						
953086	0.009																						
953087	0.009																						
953088	< 0.005																						
953089	0.010																						
953090	0.561	1.2	< 0.5	9250	3050	196	61	13	25	1.12	468	< 10	< 10	< 0.5	9	2.83	452	26	21.8	10	< 1	0.51	108
953091	0.005																						
953092	< 0.005																						
953093	< 0.005																						
953094	< 0.005																						
953095	0.005																						
953096	0.008																						
953097	0.011																						
953098	0.010																						
953099	0.014																						
953100	0.006																						
953101	0.011																						
953102	0.012																						
953103	< 0.005																						
953104	< 0.005																						
953105	0.009																						
953106	0.007																						
953107	0.036																						
953108	0.007																						
953109	0.074	0.5	< 0.5	265	1370	< 1	434	5	353	2.97	< 2	< 10	202	< 0.5	2	2.80	37	1790	5.03	< 10	1	< 0.01	< 10
953110	0.007	< 0.2	< 0.5	27	223	< 1	17	< 2	27	0.42	< 2	< 10	54	< 0.5	< 2	0.88	4	36	0.92	< 10	< 1	0.04	< 10
953111	0.094	< 0.2	< 0.5	7	170	< 1	5	< 2	13	0.27	< 2	< 10	53	< 0.5	< 2	1.05	3	6	0.77	< 10	< 1	0.07	< 10
953112	0.012	< 0.2	< 0.5	1	172	< 1	2	< 2	10	0.41	< 2	< 10	106	< 0.5	< 2	0.95	3	6	0.48	< 10	< 1	0.19	< 10
953113	0.010	< 0.2	< 0.5	4	315	< 1	10	< 2	16	0.52	< 2	< 10	111	< 0.5	< 2	1.70	4	6	0.80	< 10	< 1	0.21	24
953114	0.011	< 0.2	< 0.5	3	176	< 1	2	< 2	8	0.32	< 2	< 10	71	< 0.5	< 2	0.92	3	5	0.54	< 10	< 1	0.15	< 10
953115	0.007	< 0.2	< 0.5	< 1	105	< 1	< 1	< 2	< 2	0.01	< 2	< 10	19	< 0.5	< 2	> 10.0	< 1	1	0.10	< 10	< 1	< 0.01	< 10
953116	0.006	< 0.2	< 0.5	4	226	6	20	< 2	18	0.42	< 2	< 10	16	< 0.5	< 2	1.11	3	23	0.87	< 10	< 1	0.02	< 10
953117	0.023	< 0.2	< 0.5	224	1120	< 1	467	3	106	2.86	< 2	< 10	< 10	< 0.5	2	3.05	37	1710	4.84	10	< 1	< 0.01	< 10
953118	0.047	0.2	< 0.5	71	1170	< 1	242	8	76	2.81	< 2	< 10	474	1.3	< 2	5.69	38	565	5.89	< 10	< 1	0.59	11
953119	0.008																						
953120	0.560	1.2	< 0.5	9500	3040	200	60	14	25	1.14	447	< 10	< 10	< 0.5	9	2.85	455	25	21.8	10	< 1	0.50	105
953121	0.006																						
953122	0.007																						
953123	0.008																						
953124	0.009																						
953125	0.008																						
953126	0.008																						

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953127	0.016																						
953128	0.005	0.5	< 0.5	30	678	< 1	292	4	37	2.60	< 2	< 10	722	0.6	< 2	3.84	32	1390	4.17	< 10	< 1	1.15	< 10
953129	< 0.005	< 0.2	< 0.5	2	741	< 1	253	3	29	2.25	< 2	< 10	810	0.7	< 2	4.70	28	1070	3.73	< 10	< 1	1.91	< 10
953130	0.012	< 0.2	< 0.5	59	871	< 1	279	7	97	2.24	< 2	< 10	479	1.3	< 2	4.79	36	648	5.76	< 10	< 1	2.11	23

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953076																
953077																
953078																
953079																
953080																
953081																
953082																
953083																
953084																
953085																
953086																
953087																
953088																
953089																
953090	1.01	0.058	0.081	2.18	14	7	31	0.14	< 20	1	< 2	18	144	108	12	53
953091																
953092																
953093																
953094																
953095																
953096																
953097																
953098																
953099																
953100																
953101																
953102																
953103																
953104																
953105																
953106																
953107																
953108																
953109	5.55	0.036	0.005	0.05	13	17	240	< 0.01	< 20	< 1	< 2	< 10	96	< 10	< 1	1
953110	0.74	0.065	0.021	0.11	< 2	1	46	< 0.01	< 20	< 1	< 2	< 10	8	< 10	1	3
953111	0.49	0.088	0.017	0.19	< 2	< 1	46	< 0.01	< 20	2	< 2	< 10	2	< 10	1	5
953112	0.45	0.060	0.023	0.04	< 2	< 1	18	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	1	3
953113	0.84	0.059	0.058	0.04	< 2	< 1	33	< 0.01	< 20	< 1	< 2	< 10	2	< 10	3	< 1
953114	0.42	0.066	0.023	0.08	< 2	< 1	19	< 0.01	< 20	< 1	< 2	< 10	1	< 10	1	5
953115	2.17	0.014	0.006	< 0.01	< 2	< 1	46	< 0.01	< 20	< 1	< 2	< 10	2	< 10	1	< 1
953116	0.82	0.133	0.017	0.03	< 2	1	53	< 0.01	< 20	< 1	< 2	< 10	7	< 10	1	7
953117	5.75	0.009	0.008	0.03	11	16	261	< 0.01	< 20	< 1	< 2	< 10	92	< 10	< 1	1
953118	7.17	0.078	0.171	0.01	5	18	540	0.07	< 20	< 1	< 2	< 10	123	< 10	9	4
953119																
953120	1.02	0.056	0.081	2.21	13	7	31	0.14	< 20	1	< 2	18	143	108	13	51
953121																
953122																
953123																
953124																
953125																
953126																

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953127																
953128	6.40	0.126	0.115	0.01	9	20	533	0.11	< 20	< 1	< 2	< 10	80	< 10	6	4
953129	6.51	0.163	0.087	0.01	8	25	706	0.16	< 20	< 1	< 2	< 10	76	< 10	7	7
953130	5.87	0.100	0.165	< 0.01	6	19	706	0.10	< 20	< 1	< 2	< 10	156	< 10	13	2

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas				353	400		217	18	35	5.31	10		76		4	0.09	26	483	13.2	20		0.11	< 10
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2290	775	< 1	36	60	271	2.75	6		71	0.7	10	0.39	20	46	5.11	< 10		0.39	36
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 922 (AQUA REGIA) Meas		0.7	< 0.5	2230	760	< 1	37	60	271	2.96	6		81	0.7	7	0.40	20	47	5.14	< 10		0.43	42
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 907 (Aqua Regia) Meas		1.2	< 0.5	6150	336	5	8	35	152	1.29	36		260	1.0	23	0.27	46	10	7.93	20		0.34	42
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 239 (Fire Assay) Meas	3.59																						
OREAS 239 (Fire Assay) Cert	3.55																						
OREAS 239 (Fire Assay) Meas	3.54																						
OREAS 239 (Fire Assay) Cert	3.55																						
OREAS 130 (Aqua Regia) Meas		6.4	29.8	230	1620	9	34	1270	> 10000	1.20	209				6	1.73	27	24	7.08	< 10	1	0.52	22
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
OREAS 130 (Aqua Regia) Meas		6.1	28.8	227	1590	8	35	1300	> 10000	1.32	209				6	1.68	27	26	7.06	< 10	1	0.55	25
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
Oreas 623 (Aqua Regia) Meas		18.9	49.0	> 10000	520	8	14	2260	9260	1.87	75			< 0.5	14	0.97	201	17	12.2	10	< 1	0.18	17
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9
Oreas E1336 (Fire Assay) Meas	0.511																						
Oreas E1336 (Fire Assay) Cert	0.510																						
Oreas E1336 (Fire Assay) Meas	0.500																						
Oreas E1336 (Fire Assay) Cert	0.510																						
Oreas 620 (Aqua Regia) Meas		41.7	168	1840	448	11	15	> 5000	> 10000	1.23	49		< 10	0.6	< 2	1.33	14	20	2.61	< 10	2	0.29	24
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		40.2	166	1760	422	9	13	> 5000	> 10000	1.30	49		< 10	0.7	< 2	1.30	13	16	2.60	< 10	2	0.31	28
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953084 Orig	0.008																						
953084 Dup	0.009																						
953094 Orig	< 0.005																						
953094 Dup	0.005																						
953104 Orig	0.005																						
953104 Dup	< 0.005																						
953111 Orig	0.097																						
953111 Dup	0.091																						
953113 Orig		< 0.2	< 0.5	4	312	< 1	9	< 2	16	0.52	< 2	< 10	112	< 0.5	< 2	1.70	4	6	0.79	< 10	< 1	0.21	24
953113 Dup		< 0.2	< 0.5	4	318	< 1	10	< 2	16	0.52	< 2	< 10	110	< 0.5	< 2	1.70	4	6	0.81	< 10	< 1	0.21	24
953123 Orig	0.007																						
953123 Dup	0.008																						
953125 Orig	0.008																						
953125 Split PREP DUP	0.012																						
Method Blank	< 0.005																						
Method Blank	< 0.005																						
Method Blank	< 0.005																						
Method Blank	0.005																						
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas	0.17	0.046	0.034	0.04		43	13		< 20			< 10	195		4	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 922 (AQUA REGIA) Meas	1.35	0.033	0.067	0.39	3	4	17		< 20		< 2	< 10	35	< 10	21	13
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 922 (AQUA REGIA) Meas	1.40	0.035	0.063	0.37	3	4	17		< 20		< 2	< 10	33	< 10	21	7
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 907 (Aqua Regia) Meas	0.23	0.117	0.020	0.06	6	2	14	0.02	< 20	< 1	< 2	< 10	6	< 10	8	3
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 239 (Fire Assay) Meas																
OREAS 239 (Fire Assay) Cert																
OREAS 239 (Fire Assay) Meas																
OREAS 239 (Fire Assay) Cert																
OREAS 130 (Aqua Regia) Meas	0.93		0.088	6.21	7	4	21	0.04	< 20	< 1	< 2	< 10	38	< 10	14	34
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
OREAS 130 (Aqua Regia) Meas	0.95		0.084	5.96	7	3	21	0.03	< 20	< 1	< 2	< 10	35	< 10	13	26
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
Oreas 623 (Aqua Regia) Meas	1.09	0.070	0.041	8.35	23	4	13		< 20	2	< 2	< 10	17	< 10	8	57
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
Oreas 620 (Aqua Regia) Meas	0.27	0.115	0.028	2.56	62		20		< 20		< 2	< 10	9	42	9	7
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	60
Oreas 620 (Aqua Regia) Meas	0.27	0.115	0.031	2.47	64		19		< 20		< 2	< 10	8	42	8	57
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953084 Orig																
953084 Dup																
953094 Orig																
953094 Dup																
953104 Orig																
953104 Dup																
953111 Orig																
953111 Dup																
953113 Orig	0.84	0.060	0.058	0.04	< 2	< 1	33	< 0.01	< 20	< 1	< 2	< 10	2	< 10	3	< 1
953113 Dup	0.85	0.059	0.057	0.04	< 2	< 1	34	< 0.01	< 20	1	< 2	< 10	2	< 10	3	1
953123 Orig																
953123 Dup																
953125 Orig																
953125 Split PREP DUP																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1

Quality Analysis ... **Actlabs** *Innovative Technologies*

Report No.: A22-01968
Report Date: 09-May-22
Date Submitted: 17-Feb-22
Your Reference: GOWAN

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

35 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-50-Timmins - 10g/t	QOP AA-Au (Au - Fire Assay AA)	2022-04-06 07:05:13

REPORT **A22-01968**

Notes:

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

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

SCC Accredited LAB Accrédité CCN TM

LabID: 709

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
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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

Report No.: A22-01968
Report Date: 09-May-22
Date Submitted: 17-Feb-22
Your Reference: GOWAN

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

35 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1E3	QOP AquaGeo (Aqua Regia ICPOES)	2022-05-04 22:26:43

REPORT **A22-01968**

Notes:

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

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

SCC Accredited LAB Accréditéé CAN TM

LabID: 266

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

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

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953131	0.009	< 0.2	< 0.5	52	900	< 1	221	3	85	2.07	< 2	< 10	872	1.4	< 2	5.05	38	376	5.96	10	1	2.23	21
953132	0.020	< 0.2	< 0.5	68	875	< 1	283	4	117	2.39	< 2	< 10	776	1.4	< 2	4.73	40	483	5.99	10	< 1	2.46	13
953133	0.014	< 0.2	< 0.5	83	925	< 1	264	8	121	2.12	< 2	< 10	742	1.1	< 2	4.68	36	718	5.17	< 10	< 1	1.87	12
953134	0.011	< 0.2	< 0.5	127	1680	< 1	83	21	184	0.96	< 2	< 10	86	1.1	3	6.13	35	141	8.04	< 10	< 1	0.86	51
953135	0.017	0.5	< 0.5	106	1240	< 1	470	27	187	2.24	< 2	< 10	67	1.0	< 2	4.71	41	1150	5.60	10	< 1	0.83	< 10
953136	0.010																						
953137	0.011																						
953138	0.011																						
953139	0.011																						
953140	0.013																						
953141	0.016																						
953142	0.012																						
953143	0.017																						
953144	0.005																						
953145	< 0.005	< 0.2	< 0.5	4	106	< 1	10	< 2	2	0.07	< 2	< 10	16	< 0.5	< 2	> 10.0	2	33	0.23	< 10	< 1	< 0.01	< 10
953146	< 0.005																						
953147	0.006																						
953148	0.005																						
953149	< 0.005																						
953150	0.579	1.1	< 0.5	9210	2890	187	55	9	24	1.16	404	< 10	< 10	< 0.5	8	2.59	424	25	20.8	10	< 1	0.56	111
953151	0.005																						
953152	0.006																						
953153	0.005																						
953154	0.008																						
953155	0.008																						
953156	0.007																						
953157	0.010																						
953158	0.010																						
953159	0.006																						
953160	< 0.005																						
953161	< 0.005																						
953162	0.005																						
953163	0.006																						
953164	0.009																						
953165	0.005																						

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953131	5.61	0.179	0.094	0.02	4	19	680	0.05	< 20	< 1	< 2	< 10	158	< 10	14	2
953132	5.99	0.157	0.064	0.02	4	18	706	0.09	< 20	< 1	< 2	< 10	154	< 10	10	2
953133	5.81	0.149	0.104	0.02	6	16	715	0.12	< 20	< 1	< 2	< 10	125	< 10	8	2
953134	4.19	0.059	0.522	0.37	4	7	924	0.01	< 20	< 1	< 2	< 10	225	< 10	26	4
953135	6.22	0.025	0.010	0.18	9	16	671	0.09	< 20	< 1	< 2	< 10	115	< 10	3	4
953136																
953137																
953138																
953139																
953140																
953141																
953142																
953143																
953144																
953145	0.79	0.011	0.006	0.03	< 2	< 1	54	< 0.01	< 20	< 1	< 2	< 10	4	< 10	2	< 1
953146																
953147																
953148																
953149																
953150	0.97	0.066	0.074	2.05	10	6	27	0.13	< 20	2	< 2	31	130	98	12	48
953151																
953152																
953153																
953154																
953155																
953156																
953157																
953158																
953159																
953160																
953161																
953162																
953163																
953164																
953165																

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas				357	407		208	15	37	5.33	6		78		6	0.09	26	468	13.2	20		0.10	11
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 45d (Aqua Regia) Meas				359	406		212	15	36	5.34	6		78		4	0.10	26	485	13.7	20		0.11	12
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2330	790	< 1	35	60	274	2.75	7		73	0.7	9	0.39	19	45	5.32	< 10		0.40	41
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2260	771	< 1	34	57	257	2.66	5		58	0.7	7	0.39	19	44	4.75	< 10		0.37	37
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 907 (Aqua Regia) Meas		1.0	< 0.5	5450	307	5	4	29	129	0.98	31		200	0.9	19	0.24	40	7	6.64	10		0.26	34
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 907 (Aqua Regia) Meas		1.3	< 0.5	6710	364	6	4	35	156	1.24	36		249	1.1	21	0.28	47	8	8.31	20		0.34	42
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 263 (Aqua Regia) Meas		0.2	< 0.5	93	530	< 1	75	35	139	1.74	32		182	1.3	< 2	1.09	34	55	3.80	< 10	< 1	0.31	
OREAS 263 (Aqua Regia) Cert		0.285	0.270	87.0	490	0.570	72.0	34.0	127	1.29	30.8		175	1.22	0.570	1.03	31.0	48.0	3.68	4.92	0.170	0.288	
OREAS 263 (Aqua Regia) Meas		0.2	< 0.5	91	523	< 1	75	35	137	1.81	31		191	1.4	< 2	1.07	33	57	3.82	< 10	< 1	0.34	
OREAS 263 (Aqua Regia) Cert		0.285	0.270	87.0	490	0.570	72.0	34.0	127	1.29	30.8		175	1.22	0.570	1.03	31.0	48.0	3.68	4.92	0.170	0.288	
OREAS 130 (Aqua Regia) Meas		6.2	28.6	233	1640	8	32	1300	> 10000	1.20	204				5	1.71	27	23	7.16	< 10	1	0.52	25
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
OREAS 130 (Aqua Regia) Meas		5.9	27.7	229	1620	8	31	1270	> 10000	1.18	200				4	1.68	26	23	6.76	< 10	< 1	0.50	23
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
Oreas 623 (Aqua Regia) Meas		19.2	48.4	> 10000	528	9	18	2270	9250	1.65	75			< 0.5	23	0.98	206	21	12.2	10	< 1	0.17	18
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9
Oreas 623 (Aqua Regia) Meas		19.2	47.7	> 10000	519	9	16	2210	9180	1.63	73			< 0.5	25	0.96	201	17	12.0	10	1	0.16	17
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas E1336 (Fire Assay) Meas	0.506																						
Oreas E1336 (Fire Assay) Cert	0.510																						
Oreas E1336 (Fire Assay) Meas	0.518																						
Oreas E1336 (Fire Assay) Cert	0.510																						
Oreas E1336 (Fire Assay) Meas	0.512																						
Oreas E1336 (Fire Assay) Cert	0.510																						
OREAS 216b Meas	6.88																						
OREAS 216b Cert	6.66																						
OREAS 216b Meas	6.49																						
OREAS 216b Cert	6.66																						
OREAS 216b Meas	6.81																						
OREAS 216b Cert	6.66																						
OREAS 521 (Aqua Regia) Meas		0.8		5530	2500	137	62	8	22	1.23	292			< 0.5	5	2.85	310	29	19.3	10		0.47	115
OREAS 521 (Aqua Regia) Cert		0.8		5990	3000	133	68	9	24	1.44	333			0.5	6	3.66	374	33	20.0	10		0.53	147
OREAS 521 (Aqua Regia) Meas		1.2		5420	2450	129	58	7	21	1.21	285			< 0.5	8	2.89	306	28	18.5	10		0.45	110
OREAS 521 (Aqua Regia) Cert		0.82		5990	3000	133	68	9	24	1.44	333			0.5	6	3.66	374	33	20.0	10		0.53	147
Oreas 620 (Aqua Regia) Meas		42.3	176	1960	467	11	16	> 5000	> 10000	1.26	54		< 10	0.7	< 2	1.38	14	22	2.85	< 10	2	0.30	29
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		41.5	167	1880	456	10	14	> 5000	> 10000	1.24	51		< 10	0.7	< 2	1.34	14	17	2.67	< 10	2	0.29	28
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		40.8	163	1870	450	10	15	> 5000	> 10000	1.25	51		< 10	0.7	< 2	1.29	14	18	2.60	< 10	2	0.28	27
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
953140 Orig	0.015																						
953140 Dup	0.012																						
953145 Orig		< 0.2	< 0.5	4	107	< 1	11	< 2	2	0.07	< 2	< 10	16	< 0.5	< 2	> 10.0	2	33	0.23	< 10	< 1	< 0.01	< 10
953145 Dup		< 0.2	< 0.5	3	106	< 1	9	< 2	2	0.07	< 2	< 10	16	< 0.5	< 2	> 10.0	1	33	0.23	< 10	< 1	< 0.01	< 10
953149 Orig	< 0.005																						
953149 Dup	< 0.005																						
953160 Orig	< 0.005																						
953160 Dup	< 0.005																						
Method Blank	< 0.005																						
Method Blank	< 0.005																						
Method Blank	< 0.005																						
Method Blank	< 0.005																						
Method Blank	< 0.005																						

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Method Blank	< 0.005																						
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas	0.17	0.045	0.033	0.04		43	14		< 20			< 10	186		5	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 45d (Aqua Regia) Meas	0.17	0.046	0.033	0.04		43	14		< 20			< 10	190		5	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 922 (AQUA REGIA) Meas	1.38	0.032	0.065	0.39	3	4	17		< 20		< 2	< 10	33	< 10	22	12
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 922 (AQUA REGIA) Meas	1.26	0.029	0.063	0.37	2	3	17		< 20		< 2	< 10	31	< 10	22	9
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 907 (Aqua Regia) Meas	0.19	0.098	0.020	0.05	4	2	12	0.02	< 20	< 1	< 2	< 10	5	< 10	7	18
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 907 (Aqua Regia) Meas	0.24	0.121	0.023	0.06	5	2	14	0.03	< 20	< 1	< 2	< 10	6	< 10	8	9
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 263 (Aqua Regia) Meas	0.61	0.106	0.043	0.12	8	4	20		< 20	< 1	< 2	< 10	25		14	
OREAS 263 (Aqua Regia) Cert	0.593	0.0790	0.0410	0.126	7.37	3.52	16.9		10.6	0.210	0.530	1.28	22.8		12.0	
OREAS 263 (Aqua Regia) Meas	0.62	0.105	0.043	0.12	8	4	20		< 20	< 1	< 2	< 10	27		14	
OREAS 263 (Aqua Regia) Cert	0.593	0.0790	0.0410	0.126	7.37	3.52	16.9		10.6	0.210	0.530	1.28	22.8		12.0	
OREAS 130 (Aqua Regia) Meas	0.93		0.087	6.12	6	3	21	0.03	< 20	< 1	< 2	< 10	36	10	14	33
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
OREAS 130 (Aqua Regia) Meas	0.89		0.084	6.02	6	3	20	0.03	< 20	< 1	< 2	< 10	35	11	14	34
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
Oreas 623 (Aqua Regia) Meas	1.05	0.063	0.041	8.65	21	4	13		< 20	< 1	< 2	< 10	17	< 10	8	73
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0
Oreas 623 (Aqua Regia) Meas	1.03	0.062	0.041	8.74	21	4	13		< 20	< 1	< 2	< 10	17	< 10	8	72
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 521 (Aqua Regia) Meas	1.08	0.046	0.072	1.56	10	9	30	0.14	< 20	< 1	< 2	22	178	68	13	29
OREAS 521 (Aqua Regia) Cert	1.10	0.045	0.081	1.85	4	10	54	0.14	8	0.7	0.1	28	200	71	15	38
OREAS 521 (Aqua Regia) Meas	1.03	0.046	0.071	1.49	9	8	30	0.14	< 20	2	< 2	20	173	64	13	29
OREAS 521 (Aqua Regia) Cert	1.10	0.045	0.081	1.85	4	10	54	0.14	8	0.7	0.1	28	200	71	15	38
Oreas 620 (Aqua Regia) Meas	0.29	0.119	0.029	2.70	60		20		< 20		< 2	< 10	9	< 10	9	13
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
Oreas 620 (Aqua Regia) Meas	0.27	0.117	0.028	2.62	59		20		< 20		< 2	< 10	8	39	9	16
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
Oreas 620 (Aqua Regia) Meas	0.26	0.115	0.028	2.53	58		19		< 20		< 2	< 10	8	51	9	21
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
953140 Orig																
953140 Dup																
953145 Orig	0.80	0.011	0.006	0.03	< 2	< 1	54	< 0.01	< 20	< 1	< 2	< 10	4	< 10	2	< 1
953145 Dup	0.79	0.010	0.006	0.02	< 2	< 1	54	< 0.01	< 20	< 1	< 2	< 10	4	< 10	2	< 1
953149 Orig																
953149 Dup																
953160 Orig																
953160 Dup																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Method Blank																
Method Blank	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1

Quality Analysis ... **Actlabs** *Innovative Technologies*

Report No.: A22-02133
Report Date: 09-May-22
Date Submitted: 22-Feb-22
Your Reference: GOWAN

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

55 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-50-Timmins - 10g/t	QOP AA-Au (Au - Fire Assay AA)	2022-04-06 07:05:13

REPORT **A22-02133**

Notes:

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

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

SCC Accredited LAB Accrédité CCN TM

LabID: 709

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

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Report No.: **A22-02133**
Report Date: **09-May-22**
Date Submitted: **22-Feb-22**
Your Reference: **GOWAN**

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

55 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1E3	QOP AquaGeo (Aqua Regia ICPOES)	2022-05-04 22:26:43

REPORT **A22-02133**

Notes:

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

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

SCC Accredited LAB
LAB Accrédité CCN
TM

LabID: 266

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

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Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953166	0.007																						
953167	0.006																						
953168	0.006																						
953169	0.006																						
953170	0.008																						
953171	0.009																						
953172	0.009																						
953173	0.008																						
953174	0.011																						
953175	0.007	< 0.2	< 0.5	1	104	< 1	2	< 2	< 2	0.02	< 2	< 10	17	< 0.5	< 2	> 10.0	< 1	8	0.10	< 10	< 1	< 0.01	< 10
953176	0.009																						
953177	0.006																						
953178	0.007																						
953179	0.050																						
953180	0.603	1.1	< 0.5	9440	2930	185	53	8	24	1.19	412	< 10	< 10	< 0.5	10	2.67	427	25	20.9	10	< 1	0.57	108
953181	0.012	< 0.2	< 0.5	389	804	< 1	184	5	210	1.47	2	< 10	21	1.7	< 2	2.18	27	944	4.24	< 10	< 1	0.71	< 10
953182	0.008	< 0.2	< 0.5	3	1840	< 1	241	5	108	1.07	< 2	< 10	170	< 0.5	< 2	4.26	20	1090	2.98	< 10	< 1	0.10	< 10
953183	0.008	< 0.2	< 0.5	60	2050	< 1	467	9	136	1.43	< 2	< 10	56	0.6	< 2	5.44	35	1210	4.28	< 10	< 1	0.23	< 10
953184	0.009	< 0.2	< 0.5	72	2320	< 1	500	12	134	1.62	< 2	< 10	66	0.8	< 2	6.44	36	655	5.38	< 10	< 1	0.35	< 10
953185	0.007	< 0.2	< 0.5	64	1680	< 1	443	9	114	1.34	< 2	< 10	371	0.8	< 2	5.29	34	1230	3.96	< 10	< 1	0.29	< 10
953186	0.011	< 0.2	< 0.5	154	1160	< 1	191	9	61	1.53	< 2	< 10	37	1.7	< 2	5.25	42	595	6.64	< 10	< 1	0.83	< 10
953187	0.033	< 0.2	< 0.5	202	1130	< 1	118	14	60	0.77	3	< 10	14	1.1	4	6.06	38	349	7.15	< 10	< 1	0.42	12
953188	0.009	< 0.2	< 0.5	108	741	1	91	9	29	0.43	3	< 10	< 10	< 0.5	< 2	4.46	32	300	4.36	< 10	< 1	0.14	< 10
953189	0.009	< 0.2	< 0.5	81	1030	11	150	10	43	0.60	2	< 10	11	0.7	< 2	5.52	47	496	4.90	< 10	< 1	0.20	< 10
953190	0.009	< 0.2	< 0.5	102	1140	3	162	11	60	0.70	< 2	< 10	19	1.2	2	4.87	36	600	4.62	< 10	< 1	0.32	15
953191	0.010	0.3	< 0.5	202	1380	< 1	148	20	53	0.14	3	< 10	24	< 0.5	< 2	6.52	32	110	4.25	< 10	< 1	0.04	< 10
953192	0.015	< 0.2	< 0.5	204	993	< 1	38	10	49	0.21	< 2	< 10	45	< 0.5	< 2	3.50	23	36	3.40	< 10	< 1	0.10	< 10
953193	0.016	< 0.2	< 0.5	278	692	< 1	64	8	36	0.13	< 2	< 10	19	< 0.5	< 2	1.91	37	246	3.17	< 10	< 1	0.03	< 10
953194	0.014	< 0.2	< 0.5	73	190	< 1	13	2	19	0.19	< 2	< 10	44	< 0.5	< 2	0.59	6	27	1.14	< 10	< 1	0.05	< 10
953195	0.012	0.2	< 0.5	17	586	< 1	46	15	42	0.19	< 2	< 10	40	< 0.5	< 2	2.55	17	28	2.06	< 10	< 1	0.09	< 10
953196	0.012	< 0.2	< 0.5	45	412	< 1	6	2	20	0.15	< 2	< 10	32	< 0.5	< 2	1.70	4	3	0.82	< 10	< 1	0.02	< 10
953197	0.038	< 0.2	< 0.5	32	355	< 1	14	7	22	0.16	< 2	< 10	15	< 0.5	< 2	1.61	16	8	1.59	< 10	< 1	0.01	< 10
953198	0.007	< 0.2	< 0.5	18	246	< 1	7	< 2	16	0.20	< 2	< 10	12	< 0.5	< 2	1.01	8	4	1.20	< 10	< 1	0.01	< 10
953199	0.010	< 0.2	< 0.5	16	133	< 1	5	< 2	12	0.15	< 2	< 10	< 10	< 0.5	< 2	0.44	5	4	0.91	< 10	< 1	0.01	< 10
953200	0.061	0.6	< 0.5	190	579	< 1	49	33	43	0.11	< 2	< 10	< 10	< 0.5	< 2	2.03	43	7	2.14	< 10	< 1	< 0.01	< 10
953201	0.275	0.4	< 0.5	767	2490	< 1	456	9	73	0.31	15	< 10	16	0.6	< 2	6.07	42	489	4.08	< 10	< 1	0.10	< 10
953202	< 0.005	< 0.2	< 0.5	38	1370	< 1	424	2	27	2.11	2	< 10	68	< 0.5	< 2	4.55	40	1450	4.03	< 10	< 1	< 0.01	< 10
953203	< 0.005	< 0.2	< 0.5	37	1040	< 1	437	< 2	28	2.06	4	< 10	33	< 0.5	< 2	3.34	43	1500	3.82	< 10	< 1	< 0.01	< 10
953204	< 0.005																						
953205	< 0.005	< 0.2	< 0.5	1	110	< 1	6	< 2	2	0.03	< 2	< 10	15	< 0.5	< 2	> 10.0	< 1	17	0.13	< 10	< 1	< 0.01	< 10
953206	< 0.005																						
953207	< 0.005																						
953208	< 0.005																						
953209	< 0.005																						
953210	0.579	1.2	< 0.5	9270	2940	194	57	10	25	1.18	410	< 10	< 10	< 0.5	10	2.67	431	25	22.3	10	< 1	0.57	124
953211	< 0.005																						
953212	< 0.005																						
953213	0.010																						
953214	< 0.005																						
953215	< 0.005																						
953216	< 0.005																						

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953217	< 0.005																						
953218	< 0.005																						
953219	< 0.005																						
953220	0.006																						

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953166																
953167																
953168																
953169																
953170																
953171																
953172																
953173																
953174																
953175	1.79	0.011	0.006	< 0.01	< 2	< 1	49	< 0.01	< 20	< 1	< 2	< 10	2	< 10	1	< 1
953176																
953177																
953178																
953179																
953180	0.99	0.066	0.075	2.13	12	7	27	0.14	< 20	1	< 2	32	132	99	12	41
953181	3.09	0.026	0.027	0.77	7	21	221	0.15	< 20	< 1	< 2	< 10	140	< 10	2	13
953182	3.95	0.042	0.002	< 0.01	8	12	512	0.04	< 20	< 1	< 2	< 10	54	< 10	< 1	2
953183	5.35	0.025	0.042	0.36	9	13	527	0.05	< 20	< 1	< 2	< 10	72	< 10	3	6
953184	6.53	0.029	0.057	0.26	5	17	675	0.07	< 20	< 1	< 2	< 10	99	< 10	4	4
953185	5.22	0.077	0.006	0.11	9	13	594	0.05	< 20	< 1	< 2	< 10	67	< 10	2	3
953186	5.59	0.028	0.028	0.31	5	17	535	0.14	< 20	< 1	< 2	< 10	136	< 10	3	5
953187	4.52	0.029	0.389	1.26	4	11	681	0.01	< 20	< 1	< 2	< 10	137	< 10	13	2
953188	3.11	0.031	0.007	1.47	3	8	521	0.07	< 20	< 1	< 2	< 10	56	< 10	2	8
953189	4.23	0.033	0.012	1.16	4	13	669	0.06	< 20	< 1	< 2	< 10	91	< 10	2	7
953190	3.77	0.044	0.066	0.93	4	13	608	0.10	< 20	< 1	< 2	< 10	110	< 10	5	4
953191	4.13	0.053	0.055	1.34	2	6	951	0.04	< 20	< 1	< 2	< 10	35	< 10	5	3
953192	2.06	0.098	0.069	0.64	< 2	5	487	0.03	< 20	< 1	< 2	< 10	72	< 10	6	3
953193	1.09	0.096	0.018	0.99	2	3	160	0.03	< 20	< 1	< 2	< 10	54	< 10	3	14
953194	0.47	0.123	0.019	0.15	< 2	2	55	0.02	< 20	< 1	< 2	< 10	29	< 10	3	8
953195	1.48	0.088	0.027	0.29	< 2	3	177	0.01	< 20	< 1	< 2	< 10	43	< 10	3	3
953196	0.77	0.123	0.028	0.27	< 2	1	100	0.01	< 20	< 1	< 2	< 10	5	< 10	2	1
953197	0.73	0.142	0.030	1.07	< 2	1	120	< 0.01	< 20	< 1	< 2	< 10	5	< 10	3	4
953198	0.55	0.134	0.022	0.82	< 2	< 1	67	0.01	< 20	< 1	< 2	< 10	4	< 10	2	6
953199	0.28	0.096	0.020	0.70	< 2	< 1	30	0.02	< 20	< 1	< 2	< 10	5	< 10	2	8
953200	0.91	0.095	0.070	1.80	< 2	1	157	< 0.01	< 20	< 1	< 2	< 10	2	< 10	4	2
953201	3.97	0.040	0.009	1.30	4	8	550	0.04	< 20	< 1	< 2	< 10	38	< 10	2	3
953202	6.33	0.024	0.006	0.14	10	14	439	0.01	< 20	< 1	< 2	< 10	79	< 10	2	1
953203	5.36	0.016	0.006	0.30	10	14	319	< 0.01	< 20	< 1	< 2	< 10	77	< 10	1	1
953204																
953205	1.30	0.013	0.006	< 0.01	< 2	< 1	50	< 0.01	< 20	< 1	< 2	< 10	2	< 10	1	< 1
953206																
953207																
953208																
953209																
953210	1.02	0.064	0.075	2.13	10	7	30	0.13	< 20	< 1	< 2	32	136	95	12	51
953211																
953212																
953213																
953214																
953215																
953216																

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953217																
953218																
953219																
953220																

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas				357	407		208	15	37	5.33	6		78		6	0.09	26	468	13.2	20		0.10	11
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 45d (Aqua Regia) Meas				359	406		212	15	36	5.34	6		78		4	0.10	26	485	13.7	20		0.11	12
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2330	790	< 1	35	60	274	2.75	7		73	0.7	9	0.39	19	45	5.32	< 10		0.40	41
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2260	771	< 1	34	57	257	2.66	5		58	0.7	7	0.39	19	44	4.75	< 10		0.37	37
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 907 (Aqua Regia) Meas		1.0	< 0.5	5450	307	5	4	29	129	0.98	31		200	0.9	19	0.24	40	7	6.64	10		0.26	34
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 907 (Aqua Regia) Meas		1.3	< 0.5	6710	364	6	4	35	156	1.24	36		249	1.1	21	0.28	47	8	8.31	20		0.34	42
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 263 (Aqua Regia) Meas		0.2	< 0.5	93	530	< 1	75	35	139	1.74	32		182	1.3	< 2	1.09	34	55	3.80	< 10	< 1	0.31	
OREAS 263 (Aqua Regia) Cert		0.285	0.270	87.0	490	0.570	72.0	34.0	127	1.29	30.8		175	1.22	0.570	1.03	31.0	48.0	3.68	4.92	0.170	0.288	
OREAS 263 (Aqua Regia) Meas		0.2	< 0.5	91	523	< 1	75	35	137	1.81	31		191	1.4	< 2	1.07	33	57	3.82	< 10	< 1	0.34	
OREAS 263 (Aqua Regia) Cert		0.285	0.270	87.0	490	0.570	72.0	34.0	127	1.29	30.8		175	1.22	0.570	1.03	31.0	48.0	3.68	4.92	0.170	0.288	
OREAS 130 (Aqua Regia) Meas		6.2	28.6	233	1640	8	32	1300	> 10000	1.20	204				5	1.71	27	23	7.16	< 10	1	0.52	25
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
OREAS 130 (Aqua Regia) Meas		5.9	27.7	229	1620	8	31	1270	> 10000	1.18	200				4	1.68	26	23	6.76	< 10	< 1	0.50	23
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
Oreas 623 (Aqua Regia) Meas		19.2	48.4	> 10000	528	9	18	2270	9250	1.65	75			< 0.5	23	0.98	206	21	12.2	10	< 1	0.17	18
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9
Oreas 623 (Aqua Regia) Meas		19.2	47.7	> 10000	519	9	16	2210	9180	1.63	73			< 0.5	25	0.96	201	17	12.0	10	1	0.16	17
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas E1336 (Fire Assay) Meas	0.506																						
Oreas E1336 (Fire Assay) Cert	0.510																						
Oreas E1336 (Fire Assay) Meas	0.518																						
Oreas E1336 (Fire Assay) Cert	0.510																						
Oreas E1336 (Fire Assay) Meas	0.512																						
Oreas E1336 (Fire Assay) Cert	0.510																						
OREAS 216b Meas	6.88																						
OREAS 216b Cert	6.66																						
OREAS 216b Meas	6.49																						
OREAS 216b Cert	6.66																						
OREAS 216b Meas	6.81																						
OREAS 216b Cert	6.66																						
OREAS 521 (Aqua Regia) Meas		0.8		5530	2500	137	62	8	22	1.23	292			< 0.5	5	2.85	310	29	19.3	10		0.47	115
OREAS 521 (Aqua Regia) Cert		0.8		5990	3000	133	68	9	24	1.44	333			0.5	6	3.66	374	33	20.0	10		0.53	147
OREAS 521 (Aqua Regia) Meas		1.2		5420	2450	129	58	7	21	1.21	285			< 0.5	8	2.89	306	28	18.5	10		0.45	110
OREAS 521 (Aqua Regia) Cert		0.82		5990	3000	133	68	9	24	1.44	333			0.5	6	3.66	374	33	20.0	10		0.53	147
Oreas 620 (Aqua Regia) Meas		42.3	176	1960	467	11	16	> 5000	> 10000	1.26	54		< 10	0.7	< 2	1.38	14	22	2.85	< 10	2	0.30	29
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		41.5	167	1880	456	10	14	> 5000	> 10000	1.24	51		< 10	0.7	< 2	1.34	14	17	2.67	< 10	2	0.29	28
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		40.8	163	1870	450	10	15	> 5000	> 10000	1.25	51		< 10	0.7	< 2	1.29	14	18	2.60	< 10	2	0.28	27
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
953179 Orig	0.053																						
953179 Dup	0.048																						
953188 Orig	0.009																						
953188 Dup	0.009																						
953195 Orig		0.2	< 0.5	16	585	< 1	45	14	42	0.19	< 2	< 10	34	< 0.5	< 2	2.51	17	27	2.03	< 10	< 1	0.09	< 10
953195 Dup		0.3	< 0.5	17	587	< 1	47	17	43	0.19	< 2	< 10	46	< 0.5	< 2	2.59	18	29	2.09	< 10	< 1	0.09	< 10
953199 Orig	0.009																						
953199 Dup	0.011																						
953202 Orig	< 0.005																						
953202 Dup	< 0.005																						
953215 Orig	< 0.005																						
953215 Split PREP DUP	< 0.005																						
953216 Orig	< 0.005																						

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953216 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		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas	0.17	0.045	0.033	0.04		43	14		< 20			< 10	186		5	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 45d (Aqua Regia) Meas	0.17	0.046	0.033	0.04		43	14		< 20			< 10	190		5	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 922 (AQUA REGIA) Meas	1.38	0.032	0.065	0.39	3	4	17		< 20		< 2	< 10	33	< 10	22	12
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 922 (AQUA REGIA) Meas	1.26	0.029	0.063	0.37	2	3	17		< 20		< 2	< 10	31	< 10	22	9
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 907 (Aqua Regia) Meas	0.19	0.098	0.020	0.05	4	2	12	0.02	< 20	< 1	< 2	< 10	5	< 10	7	18
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 907 (Aqua Regia) Meas	0.24	0.121	0.023	0.06	5	2	14	0.03	< 20	< 1	< 2	< 10	6	< 10	8	9
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 263 (Aqua Regia) Meas	0.61	0.106	0.043	0.12	8	4	20		< 20	< 1	< 2	< 10	25		14	
OREAS 263 (Aqua Regia) Cert	0.593	0.0790	0.0410	0.126	7.37	3.52	16.9		10.6	0.210	0.530	1.28	22.8		12.0	
OREAS 263 (Aqua Regia) Meas	0.62	0.105	0.043	0.12	8	4	20		< 20	< 1	< 2	< 10	27		14	
OREAS 263 (Aqua Regia) Cert	0.593	0.0790	0.0410	0.126	7.37	3.52	16.9		10.6	0.210	0.530	1.28	22.8		12.0	
OREAS 130 (Aqua Regia) Meas	0.93		0.087	6.12	6	3	21	0.03	< 20	< 1	< 2	< 10	36	10	14	33
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
OREAS 130 (Aqua Regia) Meas	0.89		0.084	6.02	6	3	20	0.03	< 20	< 1	< 2	< 10	35	11	14	34
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
Oreas 623 (Aqua Regia) Meas	1.05	0.063	0.041	8.65	21	4	13		< 20	< 1	< 2	< 10	17	< 10	8	73
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0
Oreas 623 (Aqua Regia) Meas	1.03	0.062	0.041	8.74	21	4	13		< 20	< 1	< 2	< 10	17	< 10	8	72
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 521 (Aqua Regia) Meas	1.08	0.046	0.072	1.56	10	9	30	0.14	< 20	< 1	< 2	22	178	68	13	29
OREAS 521 (Aqua Regia) Cert	1.10	0.045	0.081	1.85	4	10	54	0.14	8	0.7	0.1	28	200	71	15	38
OREAS 521 (Aqua Regia) Meas	1.03	0.046	0.071	1.49	9	8	30	0.14	< 20	2	< 2	20	173	64	13	29
OREAS 521 (Aqua Regia) Cert	1.10	0.045	0.081	1.85	4	10	54	0.14	8	0.7	0.1	28	200	71	15	38
Oreas 620 (Aqua Regia) Meas	0.29	0.119	0.029	2.70	60		20		< 20		< 2	< 10	9	< 10	9	13
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
Oreas 620 (Aqua Regia) Meas	0.27	0.117	0.028	2.62	59		20		< 20		< 2	< 10	8	39	9	16
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
Oreas 620 (Aqua Regia) Meas	0.26	0.115	0.028	2.53	58		19		< 20		< 2	< 10	8	51	9	21
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
953179 Orig																
953179 Dup																
953188 Orig																
953188 Dup																
953195 Orig	1.47	0.084	0.027	0.28	< 2	3	176	0.01	< 20	< 1	< 2	< 10	43	< 10	3	2
953195 Dup	1.49	0.092	0.028	0.31	< 2	3	177	0.01	< 20	< 1	< 2	< 10	43	< 10	3	3
953199 Orig																
953199 Dup																
953202 Orig																
953202 Dup																
953215 Orig																
953215 Split PREP DUP																
953216 Orig																

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953216 Dup																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1

Quality Analysis ... **Actlabs** *Innovative Technologies*

Report No.: A22-02137
Report Date: 09-May-22
Date Submitted: 22-Feb-22
Your Reference: GOWAN

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

45 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1E3	QOP AquaGeo (Aqua Regia ICPOES)	2022-05-04 22:26:43

REPORT **A22-02137**

Notes:

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

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

SCC Accredited LAB Accrédité CCN TM

LabID: 266

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

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

Report No.: A22-02137
Report Date: 09-May-22
Date Submitted: 22-Feb-22
Your Reference: GOWAN

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

45 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-50-Timmins - 10g/t	QOP AA-Au (Au - Fire Assay AA)	2022-04-06 13:53:04

REPORT **A22-02137**

Notes:

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

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

SCC Accredited LAB
LAB Accrédité CCN
LabID: 709

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

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

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953221	0.029																						
953222	0.005																						
953223	0.007																						
953224	0.005																						
953225	0.007																						
953226	0.005																						
953227	0.006																						
953228	< 0.005																						
953229	0.006																						
953230	0.007																						
953231	0.006																						
953232	0.007																						
953233	0.005																						
953234	0.006																						
953235	0.006	< 0.2	< 0.5	2	114	< 1	5	< 2	< 2	0.03	< 2	< 10	13	< 0.5	< 2	> 10.0	< 1	14	0.16	< 10	< 1	< 0.01	< 10
953236	0.005																						
953237	0.005																						
953238	0.006																						
953239	0.006																						
953240	0.466	1.2	< 0.5	9580	2910	193	57	8	25	1.17	415	< 10	< 10	< 0.5	7	2.64	426	26	22.2	10	< 1	0.58	117
953241	0.006																						
953242	0.005																						
953243	0.008																						
953244	0.006																						
953245	0.006																						
953246	< 0.005	< 0.2	< 0.5	31	336	2	9	< 2	41	0.46	< 2	< 10	147	< 0.5	< 2	1.33	4	21	1.04	< 10	< 1	0.11	< 10
953247	0.005	< 0.2	< 0.5	26	282	3	6	3	53	0.42	< 2	< 10	51	0.5	< 2	1.34	3	11	1.07	< 10	< 1	0.05	< 10
953248	0.006	< 0.2	< 0.5	4	1800	< 1	6	7	9	1.29	< 2	< 10	4040	0.7	< 2	> 10.0	3	11	2.27	< 10	< 1	0.08	12
953249	0.005	< 0.2	< 0.5	110	307	< 1	7	3	36	0.31	< 2	< 10	126	0.6	< 2	1.78	5	11	1.39	< 10	< 1	0.06	< 10
953250	0.006	< 0.2	< 0.5	139	663	< 1	4	< 2	22	0.24	< 2	< 10	1510	< 0.5	< 2	3.86	4	9	1.41	< 10	< 1	0.02	< 10
953251	0.005	< 0.2	< 0.5	218	412	< 1	6	3	31	0.24	< 2	< 10	1540	< 0.5	< 2	2.66	5	11	1.24	< 10	< 1	0.02	< 10
953252	0.008	3.9	< 0.5	83	717	< 1	21	10	52	0.40	< 2	< 10	143	0.7	6	4.51	10	22	2.05	< 10	< 1	0.04	10
953253	0.010	0.5	< 0.5	94	1010	< 1	62	11	64	0.33	< 2	< 10	21	2.1	2	4.14	18	98	3.27	< 10	< 1	0.05	< 10
953254	0.010	< 0.2	< 0.5	80	884	< 1	227	8	180	2.35	< 2	< 10	622	8.3	< 2	3.17	43	388	7.35	20	< 1	1.53	< 10
953255	0.007	0.2	< 0.5	75	804	< 1	37	10	66	0.58	2	< 10	33	1.3	< 2	3.66	13	40	2.77	< 10	< 1	0.03	< 10
953256	0.007	< 0.2	< 0.5	68	1000	< 1	225	3	129	2.51	< 2	< 10	54	1.1	< 2	4.09	43	363	7.74	10	< 1	0.23	< 10
953257	0.008	< 0.2	< 0.5	84	1250	< 1	248	2	128	3.05	< 2	< 10	96	< 0.5	2	4.00	47	401	8.06	10	< 1	0.06	< 10
953258	0.009	< 0.2	< 0.5	196	295	1	8	< 2	98	0.68	4	< 10	29	< 0.5	< 2	1.06	12	12	1.38	< 10	< 1	0.23	< 10
953259	0.007	< 0.2	< 0.5	170	196	< 1	4	< 2	60	0.59	< 2	< 10	40	< 0.5	< 2	0.64	10	7	0.95	< 10	< 1	0.18	< 10
953260	0.015	0.3	< 0.5	200	1050	< 1	156	4	130	2.23	< 2	< 10	39	< 0.5	< 2	3.17	34	259	6.13	< 10	< 1	0.04	< 10
953261	0.007	< 0.2	< 0.5	56	306	< 1	18	< 2	54	0.69	< 2	< 10	65	< 0.5	< 2	0.83	15	28	1.82	< 10	< 1	0.05	< 10
953262	0.007	< 0.2	< 0.5	133	281	< 1	13	4	61	0.30	< 2	< 10	42	< 0.5	< 2	1.36	13	17	1.69	< 10	< 1	0.08	< 10
953263	0.010	0.2	< 0.5	309	240	< 1	8	8	48	0.21	< 2	< 10	332	0.5	< 2	1.20	10	16	1.77	< 10	< 1	0.05	< 10
953264	0.005	< 0.2	< 0.5	169	403	< 1	16	6	62	0.24	< 2	< 10	188	1.0	< 2	2.33	9	24	1.98	< 10	< 1	0.06	< 10
953265	< 0.005	< 0.2	< 0.5	1	77	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	18	< 0.5	< 2	> 10.0	< 1	1	0.07	< 10	< 1	< 0.01	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953221																
953222																
953223																
953224																
953225																
953226																
953227																
953228																
953229																
953230																
953231																
953232																
953233																
953234																
953235	1.35	0.013	0.006	0.02	< 2	< 1	49	< 0.01	< 20	< 1	< 2	< 10	3	< 10	2	< 1
953236																
953237																
953238																
953239																
953240	1.03	0.065	0.076	2.12	10	7	28	0.13	< 20	2	< 2	31	136	97	12	49
953241																
953242																
953243																
953244																
953245																
953246	0.56	0.105	0.024	0.13	< 2	1	56	0.01	< 20	< 1	< 2	< 10	7	< 10	2	1
953247	0.51	0.092	0.022	0.21	< 2	1	99	< 0.01	< 20	< 1	< 2	< 10	8	< 10	2	1
953248	7.22	2.97	0.043	< 0.01	< 2	3	231	< 0.01	< 20	< 1	< 2	< 10	3	< 10	16	< 1
953249	0.85	0.117	0.028	0.15	< 2	2	142	0.01	< 20	< 1	< 2	< 10	41	< 10	3	8
953250	1.98	0.344	0.029	0.02	< 2	1	128	< 0.01	< 20	< 1	< 2	< 10	30	< 10	6	1
953251	1.02	0.363	0.046	0.02	< 2	2	243	< 0.01	< 20	< 1	< 2	< 10	31	< 10	5	< 1
953252	1.12	0.088	0.304	0.06	< 2	4	329	< 0.01	< 20	< 1	< 2	< 10	24	< 10	10	< 1
953253	1.62	0.061	0.113	0.38	< 2	8	220	0.03	< 20	< 1	< 2	< 10	77	< 10	10	1
953254	4.55	0.138	0.023	0.02	4	22	707	0.21	< 20	< 1	< 2	< 10	191	< 10	3	8
953255	1.78	0.063	0.099	0.40	< 2	4	176	0.01	< 20	< 1	< 2	< 10	38	< 10	8	1
953256	4.65	0.026	0.023	0.28	5	22	407	0.07	< 20	< 1	< 2	< 10	154	< 10	3	5
953257	5.00	0.032	0.024	0.20	5	23	250	0.03	< 20	< 1	< 2	< 10	146	< 10	3	3
953258	0.75	0.061	0.021	0.48	< 2	< 1	19	0.02	< 20	< 1	< 2	< 10	7	< 10	2	11
953259	0.30	0.064	0.022	0.15	< 2	< 1	13	< 0.01	< 20	< 1	< 2	< 10	4	< 10	2	1
953260	3.34	0.034	0.024	0.28	3	16	128	0.04	< 20	< 1	< 2	< 10	103	< 10	3	5
953261	0.84	0.102	0.021	0.47	< 2	3	30	0.02	< 20	< 1	< 2	< 10	21	< 10	1	12
953262	0.77	0.113	0.030	0.22	< 2	2	136	0.02	< 20	< 1	< 2	< 10	50	< 10	3	3
953263	0.55	0.158	0.026	0.04	< 2	1	181	0.03	< 20	< 1	< 2	< 10	62	< 10	2	2
953264	1.18	0.136	0.034	0.06	< 2	2	290	0.02	< 20	< 1	< 2	< 10	71	< 10	3	5
953265	0.78	0.012	0.006	< 0.01	< 2	< 1	54	< 0.01	< 20	< 1	< 2	< 10	2	< 10	2	< 1

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas				357	407		208	15	37	5.33	6		78		6	0.09	26	468	13.2	20		0.10	11
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 45d (Aqua Regia) Meas				359	406		212	15	36	5.34	6		78		4	0.10	26	485	13.7	20		0.11	12
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2330	790	< 1	35	60	274	2.75	7		73	0.7	9	0.39	19	45	5.32	< 10		0.40	41
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2260	771	< 1	34	57	257	2.66	5		58	0.7	7	0.39	19	44	4.75	< 10		0.37	37
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 907 (Aqua Regia) Meas		1.0	< 0.5	5450	307	5	4	29	129	0.98	31		200	0.9	19	0.24	40	7	6.64	10		0.26	34
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 907 (Aqua Regia) Meas		1.3	< 0.5	6710	364	6	4	35	156	1.24	36		249	1.1	21	0.28	47	8	8.31	20		0.34	42
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 263 (Aqua Regia) Meas		0.2	< 0.5	93	530	< 1	75	35	139	1.74	32		182	1.3	< 2	1.09	34	55	3.80	< 10	< 1	0.31	
OREAS 263 (Aqua Regia) Cert		0.285	0.270	87.0	490	0.570	72.0	34.0	127	1.29	30.8		175	1.22	0.570	1.03	31.0	48.0	3.68	4.92	0.170	0.288	
OREAS 263 (Aqua Regia) Meas		0.2	< 0.5	91	523	< 1	75	35	137	1.81	31		191	1.4	< 2	1.07	33	57	3.82	< 10	< 1	0.34	
OREAS 263 (Aqua Regia) Cert		0.285	0.270	87.0	490	0.570	72.0	34.0	127	1.29	30.8		175	1.22	0.570	1.03	31.0	48.0	3.68	4.92	0.170	0.288	
OREAS 130 (Aqua Regia) Meas		6.2	28.6	233	1640	8	32	1300	> 10000	1.20	204				5	1.71	27	23	7.16	< 10	1	0.52	25
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
OREAS 130 (Aqua Regia) Meas		5.9	27.7	229	1620	8	31	1270	> 10000	1.18	200				4	1.68	26	23	6.76	< 10	< 1	0.50	23
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
Oreas 623 (Aqua Regia) Meas		19.2	48.4	> 10000	528	9	18	2270	9250	1.65	75			< 0.5	23	0.98	206	21	12.2	10	< 1	0.17	18
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9
Oreas 623 (Aqua Regia) Meas		19.2	47.7	> 10000	519	9	16	2210	9180	1.63	73			< 0.5	25	0.96	201	17	12.0	10	1	0.16	17
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas E1336 (Fire Assay) Meas	0.528																						
Oreas E1336 (Fire Assay) Cert	0.510																						
Oreas E1336 (Fire Assay) Meas	0.526																						
Oreas E1336 (Fire Assay) Cert	0.510																						
Oreas E1336 (Fire Assay) Meas	0.518																						
Oreas E1336 (Fire Assay) Cert	0.510																						
OREAS 216b Meas	6.80																						
OREAS 216b Cert	6.66																						
OREAS 216b Meas	6.79																						
OREAS 216b Cert	6.66																						
OREAS 216b Meas	6.78																						
OREAS 216b Cert	6.66																						
OREAS 521 (Aqua Regia) Meas		0.8		5530	2500	137	62	8	22	1.23	292			< 0.5	5	2.85	310	29	19.3	10		0.47	115
OREAS 521 (Aqua Regia) Cert		0.8		5990	3000	133	68	9	24	1.44	333			0.5	6	3.66	374	33	20.0	10		0.53	147
OREAS 521 (Aqua Regia) Meas		1.2		5420	2450	129	58	7	21	1.21	285			< 0.5	8	2.89	306	28	18.5	10		0.45	110
OREAS 521 (Aqua Regia) Cert		0.82		5990	3000	133	68	9	24	1.44	333			0.5	6	3.66	374	33	20.0	10		0.53	147
Oreas 620 (Aqua Regia) Meas		42.3	176	1960	467	11	16	> 5000	> 10000	1.26	54		< 10	0.7	< 2	1.38	14	22	2.85	< 10	2	0.30	29
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		41.5	167	1880	456	10	14	> 5000	> 10000	1.24	51		< 10	0.7	< 2	1.34	14	17	2.67	< 10	2	0.29	28
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		40.8	163	1870	450	10	15	> 5000	> 10000	1.25	51		< 10	0.7	< 2	1.29	14	18	2.60	< 10	2	0.28	27
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
953227 Orig	0.007																						
953227 Dup	0.005																						
953237 Orig	0.005																						
953237 Dup	0.005																						
953247 Orig	0.005																						
953247 Dup	0.005																						
953250 Orig		< 0.2	< 0.5	140	660	< 1	5	< 2	21	0.24	< 2	< 10	1450	< 0.5	< 2	3.83	4	8	1.40	< 10	< 1	0.02	< 10
953250 Dup		< 0.2	< 0.5	138	667	< 1	4	< 2	22	0.24	< 2	< 10	1570	< 0.5	< 2	3.89	4	9	1.42	< 10	< 1	0.02	< 10
Method Blank	0.005																						
Method Blank	< 0.005																						
Method Blank	< 0.005																						
Method Blank	0.005																						
Method Blank	< 0.005																						

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Method Blank	< 0.005																						
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas	0.17	0.045	0.033	0.04		43	14		< 20			< 10	186		5	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 45d (Aqua Regia) Meas	0.17	0.046	0.033	0.04		43	14		< 20			< 10	190		5	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 922 (AQUA REGIA) Meas	1.38	0.032	0.065	0.39	3	4	17		< 20		< 2	< 10	33	< 10	22	12
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 922 (AQUA REGIA) Meas	1.26	0.029	0.063	0.37	2	3	17		< 20		< 2	< 10	31	< 10	22	9
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 907 (Aqua Regia) Meas	0.19	0.098	0.020	0.05	4	2	12	0.02	< 20	< 1	< 2	< 10	5	< 10	7	18
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 907 (Aqua Regia) Meas	0.24	0.121	0.023	0.06	5	2	14	0.03	< 20	< 1	< 2	< 10	6	< 10	8	9
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 263 (Aqua Regia) Meas	0.61	0.106	0.043	0.12	8	4	20		< 20	< 1	< 2	< 10	25		14	
OREAS 263 (Aqua Regia) Cert	0.593	0.0790	0.0410	0.126	7.37	3.52	16.9		10.6	0.210	0.530	1.28	22.8		12.0	
OREAS 263 (Aqua Regia) Meas	0.62	0.105	0.043	0.12	8	4	20		< 20	< 1	< 2	< 10	27		14	
OREAS 263 (Aqua Regia) Cert	0.593	0.0790	0.0410	0.126	7.37	3.52	16.9		10.6	0.210	0.530	1.28	22.8		12.0	
OREAS 130 (Aqua Regia) Meas	0.93		0.087	6.12	6	3	21	0.03	< 20	< 1	< 2	< 10	36	10	14	33
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
OREAS 130 (Aqua Regia) Meas	0.89		0.084	6.02	6	3	20	0.03	< 20	< 1	< 2	< 10	35	11	14	34
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
Oreas 623 (Aqua Regia) Meas	1.05	0.063	0.041	8.65	21	4	13		< 20	< 1	< 2	< 10	17	< 10	8	73
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0
Oreas 623 (Aqua Regia) Meas	1.03	0.062	0.041	8.74	21	4	13		< 20	< 1	< 2	< 10	17	< 10	8	72
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 521 (Aqua Regia) Meas	1.08	0.046	0.072	1.56	10	9	30	0.14	< 20	< 1	< 2	22	178	68	13	29
OREAS 521 (Aqua Regia) Cert	1.10	0.045	0.081	1.85	4	10	54	0.14	8	0.7	0.1	28	200	71	15	38
OREAS 521 (Aqua Regia) Meas	1.03	0.046	0.071	1.49	9	8	30	0.14	< 20	2	< 2	20	173	64	13	29
OREAS 521 (Aqua Regia) Cert	1.10	0.045	0.081	1.85	4	10	54	0.14	8	0.7	0.1	28	200	71	15	38
Oreas 620 (Aqua Regia) Meas	0.29	0.119	0.029	2.70	60		20		< 20		< 2	< 10	9	< 10	9	13
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
Oreas 620 (Aqua Regia) Meas	0.27	0.117	0.028	2.62	59		20		< 20		< 2	< 10	8	39	9	16
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
Oreas 620 (Aqua Regia) Meas	0.26	0.115	0.028	2.53	58		19		< 20		< 2	< 10	8	51	9	21
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
953227 Orig																
953227 Dup																
953237 Orig																
953237 Dup																
953247 Orig																
953247 Dup																
953250 Orig	1.96	0.336	0.028	0.01	< 2	1	127	< 0.01	< 20	< 1	< 2	< 10	30	< 10	6	1
953250 Dup	2.01	0.351	0.029	0.02	< 2	1	129	< 0.01	< 20	< 1	< 2	< 10	30	< 10	6	2
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Method Blank																
Method Blank	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1

Quality Analysis ... **Actlabs** *Innovative Technologies*

Report No.: A22-02138
Report Date: 09-May-22
Date Submitted: 22-Feb-22
Your Reference: GOWAN

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

45 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-50-Timmins - 10g/t	QOP AA-Au (Au - Fire Assay AA)	2022-04-06 13:53:04

REPORT **A22-02138**

Notes:

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

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

SCC Accredited LAB
LAB Accrédité CCN
TM

LabID: 709

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

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

Report No.: **A22-02138**
Report Date: **09-May-22**
Date Submitted: **22-Feb-22**
Your Reference: **GOWAN**

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

45 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1E3	QOP AquaGeo (Aqua Regia ICPOES)	2022-05-04 22:26:43

REPORT **A22-02138**

Notes:

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

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

SCC Accredited LAB Ac cédité CCN TM

LabID: 266

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

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Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953266	0.016	0.8	< 0.5	2410	271	1	10	9	53	0.16	< 2	< 10	46	< 0.5	9	1.52	7	22	2.08	< 10	< 1	0.03	< 10
953267	0.011	< 0.2	< 0.5	207	185	< 1	6	< 2	58	0.37	< 2	< 10	119	0.7	< 2	0.95	8	8	1.51	< 10	< 1	0.14	< 10
953268	0.008	< 0.2	< 0.5	72	750	< 1	5	5	30	0.16	< 2	< 10	360	< 0.5	< 2	3.68	6	7	0.79	< 10	< 1	0.04	< 10
953269	0.005	< 0.2	< 0.5	20	1010	< 1	2	2	9	0.10	< 2	< 10	145	< 0.5	< 2	4.14	3	3	0.75	< 10	< 1	< 0.01	< 10
953270	0.600	1.1	< 0.5	9190	2890	185	56	8	24	1.16	403	< 10	< 10	< 0.5	9	2.65	421	24	20.8	10	< 1	0.55	109
953271	0.024	0.6	< 0.5	386	413	1	20	17	73	0.45	< 2	< 10	19	1.0	< 2	2.64	16	34	2.26	< 10	< 1	0.10	< 10
953272	0.016	0.3	< 0.5	842	235	< 1	5	3	51	0.29	< 2	< 10	36	0.6	< 2	0.94	10	8	1.59	< 10	< 1	0.09	< 10
953273	0.018	0.9	< 0.5	673	338	< 1	9	11	45	0.27	< 2	< 10	11	< 0.5	2	1.63	29	11	2.49	< 10	< 1	0.03	< 10
953274	0.009	0.5	< 0.5	349	352	< 1	10	7	44	0.24	3	< 10	14	0.9	< 2	3.21	25	25	2.79	< 10	< 1	0.06	< 10
953275	0.008	0.4	< 0.5	208	197	< 1	4	13	30	0.29	< 2	< 10	20	< 0.5	< 2	0.92	10	9	1.48	< 10	< 1	0.07	< 10
953276	0.008	0.3	< 0.5	300	223	2	7	2	40	0.36	< 2	< 10	14	< 0.5	< 2	0.92	19	9	1.90	< 10	< 1	0.06	< 10
953277	0.007	< 0.2	< 0.5	66	1030	< 1	318	3	147	3.56	< 2	< 10	56	1.0	< 2	3.40	53	513	8.07	10	< 1	0.29	< 10
953278	0.012	< 0.2	< 0.5	85	977	< 1	217	8	164	2.05	< 2	< 10	26	2.8	< 2	4.10	38	366	6.77	10	< 1	0.44	< 10
953279	0.011	< 0.2	< 0.5	102	591	< 1	43	6	53	0.61	< 2	< 10	12	0.6	< 2	2.95	18	53	2.95	< 10	< 1	0.03	< 10
953280	0.007	< 0.2	< 0.5	73	269	< 1	5	3	36	0.47	< 2	< 10	71	< 0.5	< 2	1.02	10	11	1.35	< 10	< 1	0.05	< 10
953281	0.013	0.2	< 0.5	339	275	2	6	5	32	0.44	< 2	< 10	33	< 0.5	< 2	1.05	13	13	1.47	< 10	< 1	0.05	< 10
953282	0.006	< 0.2	< 0.5	117	192	< 1	5	< 2	44	0.72	< 2	< 10	128	< 0.5	< 2	0.82	9	9	1.31	< 10	< 1	0.12	< 10
953283	0.008	< 0.2	< 0.5	159	233	1	5	2	37	0.68	< 2	< 10	111	< 0.5	< 2	1.05	10	11	1.33	< 10	< 1	0.11	< 10
953284	0.006	< 0.2	< 0.5	37	1370	< 1	263	< 2	135	2.98	< 2	< 10	177	< 0.5	< 2	3.85	45	373	7.35	10	< 1	0.04	< 10
953285	0.007	< 0.2	< 0.5	63	1350	< 1	260	< 2	121	2.76	< 2	< 10	54	< 0.5	2	3.90	45	386	7.48	10	< 1	0.15	< 10
953286	0.009	< 0.2	< 0.5	87	1340	< 1	222	2	112	2.23	< 2	< 10	71	0.5	2	5.05	40	323	6.89	< 10	< 1	0.09	< 10
953287	0.027	< 0.2	< 0.5	20	2340	< 1	43	5	22	0.58	< 2	< 10	4120	1.0	< 2	> 10.0	11	37	3.38	< 10	< 1	0.04	22
953288	0.012	< 0.2	< 0.5	61	1170	< 1	225	7	107	2.10	< 2	< 10	28	3.0	< 2	4.74	41	354	6.61	10	< 1	0.42	< 10
953289	0.012	< 0.2	< 0.5	51	1120	< 1	213	7	116	1.91	< 2	< 10	26	2.6	< 2	4.56	38	334	6.45	< 10	< 1	0.69	< 10
953290	0.018	< 0.2	< 0.5	68	2160	< 1	39	7	48	0.35	< 2	< 10	16	< 0.5	< 2	> 10.0	13	34	3.48	< 10	< 1	0.02	10
953291	< 0.005	< 0.2	< 0.5	63	1070	< 1	147	5	110	1.47	< 2	< 10	42	0.9	< 2	3.82	39	266	6.80	< 10	< 1	0.19	< 10
953292	< 0.005	< 0.2	< 0.5	45	1120	< 1	158	4	95	1.61	< 2	< 10	59	0.8	2	3.92	37	275	7.07	< 10	1	0.18	< 10
953293	< 0.005	< 0.2	< 0.5	53	1100	< 1	134	4	118	1.53	< 2	< 10	32	0.9	3	3.74	42	246	7.46	< 10	< 1	0.18	< 10
953294	0.006	< 0.2	< 0.5	228	737	< 1	55	5	48	0.49	< 2	< 10	25	1.1	< 2	2.70	16	68	2.66	< 10	< 1	0.11	< 10
953295	< 0.005	< 0.2	< 0.5	1	97	< 1	< 1	< 2	< 2	0.02	< 2	< 10	28	< 0.5	< 2	> 10.0	< 1	3	0.13	< 10	< 1	< 0.01	< 10
953296	0.005	< 0.2	< 0.5	91	1130	< 1	224	6	166	1.94	< 2	< 10	52	3.3	< 2	3.68	40	319	7.12	10	< 1	0.63	< 10
953297	0.028	< 0.2	< 0.5	242	1140	< 1	32	6	43	0.29	< 2	< 10	28	0.7	< 2	5.29	13	45	3.11	< 10	< 1	0.05	< 10
953298	0.006	< 0.2	< 0.5	126	946	< 1	151	7	168	1.29	< 2	< 10	11	3.7	< 2	4.27	29	232	5.61	< 10	1	0.44	< 10
953299	0.009	0.3	< 0.5	217	229	< 1	11	7	39	0.27	< 2	< 10	56	0.7	< 2	1.29	6	15	1.54	< 10	< 1	0.05	< 10
953300	0.523	1.1	< 0.5	9270	2870	186	54	8	24	1.08	398	< 10	< 10	< 0.5	8	2.60	418	24	20.9	10	< 1	0.48	113
953301	< 0.005	< 0.2	< 0.5	105	177	< 1	8	4	41	0.24	< 2	< 10	106	0.6	< 2	1.05	7	9	1.38	< 10	< 1	0.05	< 10
953302	0.010	< 0.2	< 0.5	202	335	< 1	37	8	60	0.33	< 2	< 10	27	1.3	< 2	2.09	13	50	2.58	< 10	< 1	0.09	< 10
953303	0.035	0.2	< 0.5	349	220	< 1	12	10	46	0.25	< 2	< 10	30	< 0.5	< 2	1.52	8	12	1.65	< 10	< 1	0.03	< 10
953304	0.008	0.4	< 0.5	440	206	< 1	6	10	43	0.31	< 2	< 10	33	0.6	< 2	0.99	8	12	1.52	< 10	< 1	0.06	< 10
953305	0.011	< 0.2	< 0.5	222	162	< 1	6	4	51	0.26	< 2	< 10	360	0.5	< 2	1.06	6	9	1.38	< 10	< 1	0.05	< 10
953306	0.011	0.3	< 0.5	306	206	< 1	15	10	48	0.24	< 2	< 10	479	0.8	< 2	1.39	8	39	2.25	< 10	< 1	0.05	< 10
953307	< 0.005	< 0.2	< 0.5	67	1080	< 1	193	9	104	1.29	< 2	< 10	245	5.1	< 2	3.93	39	421	6.81	< 10	< 1	1.27	< 10
953308	< 0.005	< 0.2	< 0.5	87	1030	< 1	48	12	49	0.16	< 2	< 10	518	1.5	< 2	> 10.0	12	121	4.09	< 10	< 1	0.11	< 10
953309	< 0.005	0.6	< 0.5	232	128	< 1	3	17	15	0.09	< 2	< 10	346	< 0.5	< 2	1.10	2	13	1.14	< 10	< 1	< 0.01	< 10
953310	0.006	0.7	< 0.5	110	462	< 1	11	43	41	0.11	< 2	< 10	447	0.6	< 2	5.71	4	28	1.64	< 10	< 1	< 0.01	11

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953266	0.65	0.103	0.037	0.23	< 2	2	161	0.02	< 20	< 1	< 2	< 10	69	< 10	3	3
953267	0.60	0.126	0.020	0.19	< 2	2	65	0.03	< 20	< 1	< 2	< 10	36	< 10	2	15
953268	0.35	0.147	0.048	0.02	< 2	2	408	< 0.01	< 20	< 1	< 2	< 10	27	< 10	5	1
953269	2.09	0.066	0.053	0.05	< 2	2	924	< 0.01	< 20	< 1	< 2	< 10	11	< 10	7	< 1
953270	0.98	0.064	0.074	2.09	11	6	27	0.13	< 20	2	< 2	31	130	96	12	40
953271	1.41	0.091	0.111	0.64	< 2	3	347	0.03	< 20	< 1	< 2	< 10	47	< 10	5	4
953272	0.60	0.125	0.020	0.42	< 2	2	103	0.02	< 20	< 1	< 2	< 10	44	< 10	2	16
953273	0.83	0.088	0.020	1.35	< 2	2	158	0.02	< 20	< 1	< 2	< 10	37	< 10	2	15
953274	0.92	0.078	0.028	0.75	< 2	2	194	0.01	< 20	< 1	< 2	< 10	93	< 10	3	14
953275	0.49	0.102	0.020	0.73	< 2	1	63	0.01	< 20	< 1	< 2	< 10	20	< 10	1	14
953276	0.59	0.093	0.024	1.34	< 2	1	48	< 0.01	< 20	< 1	< 2	< 10	9	< 10	1	16
953277	5.77	0.022	0.020	0.17	6	22	362	0.08	< 20	< 1	< 2	< 10	144	< 10	3	3
953278	4.53	0.026	0.046	0.52	3	20	572	0.12	< 20	< 1	< 2	< 10	169	< 10	4	6
953279	1.76	0.071	0.044	1.17	< 2	5	325	0.02	< 20	< 1	< 2	< 10	40	< 10	4	9
953280	0.67	0.109	0.022	0.28	< 2	2	45	0.02	< 20	< 1	< 2	< 10	13	< 10	2	9
953281	0.67	0.111	0.021	0.56	< 2	1	37	0.02	< 20	< 1	< 2	< 10	10	< 10	2	11
953282	0.51	0.102	0.021	0.16	< 2	< 1	19	0.01	< 20	< 1	< 2	< 10	8	< 10	2	6
953283	0.54	0.111	0.021	0.19	< 2	< 1	20	0.02	< 20	< 1	< 2	< 10	8	< 10	2	7
953284	4.65	0.043	0.014	0.12	4	22	215	0.06	< 20	< 1	< 2	< 10	151	< 10	3	2
953285	4.88	0.027	0.015	0.18	4	23	352	0.07	< 20	< 1	< 2	< 10	152	< 10	4	3
953286	5.06	0.033	0.043	0.23	4	21	426	0.04	< 20	< 1	< 2	< 10	135	< 10	5	4
953287	7.68	1.22	0.116	< 0.01	< 2	6	225	< 0.01	< 20	< 1	< 2	< 10	14	< 10	20	< 1
953288	5.02	0.030	0.014	0.32	4	20	661	0.13	< 20	< 1	< 2	< 10	130	< 10	5	5
953289	4.89	0.029	0.026	0.35	3	18	651	0.18	< 20	< 1	< 2	< 10	135	< 10	5	6
953290	7.69	0.025	0.021	0.31	< 2	4	346	< 0.01	< 20	< 1	< 2	< 10	19	< 10	15	1
953291	3.72	0.043	0.023	0.27	3	22	663	0.11	< 20	< 1	< 2	< 10	163	< 10	4	6
953292	4.00	0.045	0.024	0.21	4	23	633	0.13	< 20	< 1	< 2	< 10	160	< 10	3	5
953293	3.83	0.041	0.016	0.42	3	24	550	0.12	< 20	< 1	< 2	< 10	186	< 10	2	5
953294	1.57	0.107	0.021	0.46	< 2	5	307	0.05	< 20	< 1	< 2	< 10	51	< 10	4	11
953295	1.80	0.013	0.006	< 0.01	< 2	< 1	51	< 0.01	< 20	< 1	< 2	< 10	2	< 10	1	< 1
953296	4.35	0.034	0.013	0.24	4	22	796	0.15	< 20	< 1	< 2	< 10	164	< 10	2	5
953297	2.79	0.053	0.027	0.30	< 2	5	229	0.02	< 20	< 1	< 2	< 10	56	< 10	7	6
953298	3.72	0.039	0.018	1.19	2	18	666	0.12	< 20	< 1	< 2	< 10	171	< 10	5	8
953299	0.68	0.113	0.035	0.19	< 2	2	228	0.02	< 20	< 1	< 2	< 10	51	< 10	3	5
953300	0.98	0.054	0.075	2.06	13	6	29	0.13	< 20	< 1	< 2	29	130	99	12	44
953301	0.56	0.128	0.043	0.21	< 2	2	189	0.02	< 20	< 1	< 2	< 10	43	< 10	2	8
953302	1.16	0.111	0.038	0.56	< 2	4	430	0.03	< 20	< 1	< 2	< 10	92	< 10	3	12
953303	0.74	0.103	0.038	0.48	< 2	2	252	0.02	< 20	< 1	< 2	< 10	42	< 10	3	6
953304	0.62	0.124	0.023	0.39	< 2	2	156	0.03	< 20	< 1	< 2	< 10	35	< 10	2	11
953305	0.56	0.166	0.028	0.10	< 2	2	184	0.02	< 20	< 1	< 2	< 10	42	< 10	2	10
953306	0.74	0.188	0.052	0.05	< 2	2	311	0.02	< 20	< 1	< 2	< 10	79	< 10	4	3
953307	4.17	0.094	0.012	0.06	4	19	1040	0.17	< 20	< 1	< 2	< 10	144	< 10	4	9
953308	2.22	0.119	0.013	0.02	< 2	6	1000	0.03	< 20	< 1	< 2	< 10	137	< 10	14	5
953309	0.27	0.112	0.036	0.03	< 2	< 1	607	0.01	< 20	< 1	< 2	< 10	41	< 10	3	6
953310	1.11	0.125	0.079	0.02	< 2	< 1	1940	< 0.01	< 20	< 1	< 2	< 10	44	< 10	12	1

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas				357	407		208	15	37	5.33	6		78		6	0.09	26	468	13.2	20		0.10	11
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 45d (Aqua Regia) Meas				359	406		212	15	36	5.34	6		78		4	0.10	26	485	13.7	20		0.11	12
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2330	790	< 1	35	60	274	2.75	7		73	0.7	9	0.39	19	45	5.32	< 10		0.40	41
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2260	771	< 1	34	57	257	2.66	5		58	0.7	7	0.39	19	44	4.75	< 10		0.37	37
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 907 (Aqua Regia) Meas		1.0	< 0.5	5450	307	5	4	29	129	0.98	31		200	0.9	19	0.24	40	7	6.64	10		0.26	34
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 907 (Aqua Regia) Meas		1.3	< 0.5	6710	364	6	4	35	156	1.24	36		249	1.1	21	0.28	47	8	8.31	20		0.34	42
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 263 (Aqua Regia) Meas		0.2	< 0.5	93	530	< 1	75	35	139	1.74	32		182	1.3	< 2	1.09	34	55	3.80	< 10	< 1	0.31	
OREAS 263 (Aqua Regia) Cert		0.285	0.270	87.0	490	0.570	72.0	34.0	127	1.29	30.8		175	1.22	0.570	1.03	31.0	48.0	3.68	4.92	0.170	0.288	
OREAS 263 (Aqua Regia) Meas		0.2	< 0.5	91	523	< 1	75	35	137	1.81	31		191	1.4	< 2	1.07	33	57	3.82	< 10	< 1	0.34	
OREAS 263 (Aqua Regia) Cert		0.285	0.270	87.0	490	0.570	72.0	34.0	127	1.29	30.8		175	1.22	0.570	1.03	31.0	48.0	3.68	4.92	0.170	0.288	
OREAS 130 (Aqua Regia) Meas		6.2	28.6	233	1640	8	32	1300	> 10000	1.20	204				5	1.71	27	23	7.16	< 10	1	0.52	25
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
OREAS 130 (Aqua Regia) Meas		5.9	27.7	229	1620	8	31	1270	> 10000	1.18	200				4	1.68	26	23	6.76	< 10	< 1	0.50	23
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
Oreas 623 (Aqua Regia) Meas		19.2	48.4	> 10000	528	9	18	2270	9250	1.65	75			< 0.5	23	0.98	206	21	12.2	10	< 1	0.17	18
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9
Oreas 623 (Aqua Regia) Meas		19.2	47.7	> 10000	519	9	16	2210	9180	1.63	73			< 0.5	25	0.96	201	17	12.0	10	1	0.16	17
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas E1336 (Fire Assay) Meas	0.528																						
Oreas E1336 (Fire Assay) Cert	0.510																						
Oreas E1336 (Fire Assay) Meas	0.526																						
Oreas E1336 (Fire Assay) Cert	0.510																						
Oreas E1336 (Fire Assay) Meas	0.518																						
Oreas E1336 (Fire Assay) Cert	0.510																						
OREAS 216b Meas	6.80																						
OREAS 216b Cert	6.66																						
OREAS 216b Meas	6.79																						
OREAS 216b Cert	6.66																						
OREAS 216b Meas	6.78																						
OREAS 216b Cert	6.66																						
OREAS 521 (Aqua Regia) Meas		0.8		5530	2500	137	62	8	22	1.23	292			< 0.5	5	2.85	310	29	19.3	10		0.47	115
OREAS 521 (Aqua Regia) Cert		0.8		5990	3000	133	68	9	24	1.44	333			0.5	6	3.66	374	33	20.0	10		0.53	147
OREAS 521 (Aqua Regia) Meas		1.2		5420	2450	129	58	7	21	1.21	285			< 0.5	8	2.89	306	28	18.5	10		0.45	110
OREAS 521 (Aqua Regia) Cert		0.82		5990	3000	133	68	9	24	1.44	333			0.5	6	3.66	374	33	20.0	10		0.53	147
Oreas 620 (Aqua Regia) Meas		42.3	176	1960	467	11	16	> 5000	> 10000	1.26	54		< 10	0.7	< 2	1.38	14	22	2.85	< 10	2	0.30	29
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		41.5	167	1880	456	10	14	> 5000	> 10000	1.24	51		< 10	0.7	< 2	1.34	14	17	2.67	< 10	2	0.29	28
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		40.8	163	1870	450	10	15	> 5000	> 10000	1.25	51		< 10	0.7	< 2	1.29	14	18	2.60	< 10	2	0.28	27
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
953267 Orig	0.007																						
953267 Dup	0.015																						
953270 Orig		1.2	< 0.5	9390	2910	187	57	8	24	1.16	404	< 10	< 10	< 0.5	10	2.66	423	24	21.0	10	< 1	0.55	112
953270 Dup		1.1	< 0.5	8990	2870	184	55	7	24	1.16	401	< 10	< 10	< 0.5	9	2.63	418	24	20.7	10	< 1	0.55	107
953277 Orig	0.007																						
953277 Dup	0.007																						
953283 Orig		< 0.2	< 0.5	160	234	1	6	2	38	0.68	< 2	< 10	118	< 0.5	< 2	1.05	10	11	1.37	< 10	< 1	0.12	< 10
953283 Dup		< 0.2	< 0.5	157	231	1	5	2	37	0.68	< 2	< 10	104	< 0.5	< 2	1.04	10	11	1.30	< 10	< 1	0.11	< 10
953287 Orig	0.023																						
953287 Dup	0.032																						
953292 Orig	0.005																						
953292 Dup	< 0.005																						
953294 Orig		< 0.2	< 0.5	230	739	< 1	55	4	48	0.50	< 2	< 10	27	1.1	< 2	2.69	16	68	2.67	< 10	< 1	0.11	< 10

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953294 Dup		< 0.2	< 0.5	226	736	< 1	54	5	48	0.49	< 2	< 10	23	1.1	< 2	2.71	16	67	2.64	< 10	< 1	0.11	< 10
953307 Orig	< 0.005	< 0.2	< 0.5	65	1070	< 1	192	10	103	1.28	< 2	< 10	235	5.1	< 2	3.92	39	413	6.80	< 10	< 1	1.27	< 10
953307 Dup	< 0.005	< 0.2	< 0.5	68	1080	< 1	193	8	104	1.30	< 2	< 10	254	5.1	< 2	3.95	40	429	6.82	< 10	< 1	1.27	< 10
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		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas	0.17	0.045	0.033	0.04		43	14		< 20			< 10	186		5	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 45d (Aqua Regia) Meas	0.17	0.046	0.033	0.04		43	14		< 20			< 10	190		5	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 922 (AQUA REGIA) Meas	1.38	0.032	0.065	0.39	3	4	17		< 20		< 2	< 10	33	< 10	22	12
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 922 (AQUA REGIA) Meas	1.26	0.029	0.063	0.37	2	3	17		< 20		< 2	< 10	31	< 10	22	9
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 907 (Aqua Regia) Meas	0.19	0.098	0.020	0.05	4	2	12	0.02	< 20	< 1	< 2	< 10	5	< 10	7	18
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 907 (Aqua Regia) Meas	0.24	0.121	0.023	0.06	5	2	14	0.03	< 20	< 1	< 2	< 10	6	< 10	8	9
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 263 (Aqua Regia) Meas	0.61	0.106	0.043	0.12	8	4	20		< 20	< 1	< 2	< 10	25		14	
OREAS 263 (Aqua Regia) Cert	0.593	0.0790	0.0410	0.126	7.37	3.52	16.9		10.6	0.210	0.530	1.28	22.8		12.0	
OREAS 263 (Aqua Regia) Meas	0.62	0.105	0.043	0.12	8	4	20		< 20	< 1	< 2	< 10	27		14	
OREAS 263 (Aqua Regia) Cert	0.593	0.0790	0.0410	0.126	7.37	3.52	16.9		10.6	0.210	0.530	1.28	22.8		12.0	
OREAS 130 (Aqua Regia) Meas	0.93		0.087	6.12	6	3	21	0.03	< 20	< 1	< 2	< 10	36	10	14	33
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
OREAS 130 (Aqua Regia) Meas	0.89		0.084	6.02	6	3	20	0.03	< 20	< 1	< 2	< 10	35	11	14	34
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
Oreas 623 (Aqua Regia) Meas	1.05	0.063	0.041	8.65	21	4	13		< 20	< 1	< 2	< 10	17	< 10	8	73
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0
Oreas 623 (Aqua Regia) Meas	1.03	0.062	0.041	8.74	21	4	13		< 20	< 1	< 2	< 10	17	< 10	8	72
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 521 (Aqua Regia) Meas	1.08	0.046	0.072	1.56	10	9	30	0.14	< 20	< 1	< 2	22	178	68	13	29
OREAS 521 (Aqua Regia) Cert	1.10	0.045	0.081	1.85	4	10	54	0.14	8	0.7	0.1	28	200	71	15	38
OREAS 521 (Aqua Regia) Meas	1.03	0.046	0.071	1.49	9	8	30	0.14	< 20	2	< 2	20	173	64	13	29
OREAS 521 (Aqua Regia) Cert	1.10	0.045	0.081	1.85	4	10	54	0.14	8	0.7	0.1	28	200	71	15	38
Oreas 620 (Aqua Regia) Meas	0.29	0.119	0.029	2.70	60		20		< 20		< 2	< 10	9	< 10	9	13
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
Oreas 620 (Aqua Regia) Meas	0.27	0.117	0.028	2.62	59		20		< 20		< 2	< 10	8	39	9	16
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
Oreas 620 (Aqua Regia) Meas	0.26	0.115	0.028	2.53	58		19		< 20		< 2	< 10	8	51	9	21
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
953267 Orig																
953267 Dup																
953270 Orig	0.98	0.063	0.075	2.11	11	6	28	0.13	< 20	2	< 2	31	130	95	12	45
953270 Dup	0.97	0.064	0.073	2.07	10	6	26	0.14	< 20	2	< 2	31	130	97	12	35
953277 Orig																
953277 Dup																
953283 Orig	0.55	0.113	0.022	0.20	< 2	< 1	20	0.02	< 20	< 1	< 2	< 10	8	< 10	2	10
953283 Dup	0.52	0.109	0.021	0.19	< 2	< 1	20	0.02	< 20	< 1	< 2	< 10	8	< 10	2	5
953287 Orig																
953287 Dup																
953292 Orig																
953292 Dup																
953294 Orig	1.56	0.107	0.022	0.46	< 2	5	310	0.04	< 20	< 1	< 2	< 10	51	< 10	4	11

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953294 Dup	1.58	0.107	0.021	0.46	< 2	5	304	0.05	< 20	< 1	< 2	< 10	51	< 10	4	11
953307 Orig	4.16	0.093	0.012	0.06	4	18	1030	0.17	< 20	< 1	< 2	< 10	142	< 10	4	9
953307 Dup	4.18	0.095	0.012	0.06	4	19	1060	0.17	< 20	< 1	< 2	< 10	145	< 10	4	9
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1

Quality Analysis ... **Actlabs** *Innovative Technologies*

Report No.: A22-02303
Report Date: 09-May-22
Date Submitted: 23-Feb-22
Your Reference: GOWAN

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

66 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1E3	QOP AquaGeo (Aqua Regia ICPOES)	2022-05-04 22:26:43

REPORT **A22-02303**

Notes:

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

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

SCC Accredited LAB Accrédit ©CN LAB TM

LabID: 266

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

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

Report No.: A22-02303
Report Date: 09-May-22
Date Submitted: 23-Feb-22
Your Reference: GOWAN

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

66 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-50-Timmins - 10g/t	QOP AA-Au (Au - Fire Assay AA)	2022-04-06 21:15:56

REPORT **A22-02303**

Notes:

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

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

SCC Accredited LAB
LAB Accrédité CCN TM

LabID: 709

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
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Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953311	0.005	< 0.2	< 0.5	56	925	< 1	130	6	89	0.98	< 2	< 10	158	2.8	< 2	3.84	27	313	5.72	< 10	< 1	0.51	< 10
953312	0.005	< 0.2	< 0.5	82	1170	< 1	214	5	124	2.25	< 2	< 10	100	1.0	< 2	3.89	36	325	6.43	10	< 1	0.30	< 10
953313	< 0.005	0.3	< 0.5	27	65	13	8	11	22	0.42	3	< 10	< 10	< 0.5	< 2	0.07	12	12	3.04	< 10	< 1	0.09	< 10
953314	0.006	0.8	< 0.5	29	69	38	6	28	24	0.54	15	< 10	< 10	< 0.5	3	0.05	16	4	2.77	< 10	< 1	0.13	< 10
953315	0.015	1.2	< 0.5	1130	62	366	12	45	58	0.40	15	< 10	< 10	< 0.5	5	0.02	34	3	8.62	< 10	< 1	0.07	< 10
953316	0.008	0.5	< 0.5	865	105	7	5	22	29	0.65	3	< 10	< 10	< 0.5	< 2	0.06	9	5	2.65	< 10	< 1	0.24	< 10
953317	0.005	0.8	< 0.5	738	129	1	5	87	32	0.33	< 2	< 10	11	0.5	< 2	0.72	11	19	3.02	< 10	< 1	0.15	< 10
953318	< 0.005	0.9	< 0.5	207	142	< 1	2	126	16	0.18	< 2	< 10	100	0.5	< 2	0.77	5	6	2.39	< 10	< 1	< 0.01	< 10
953319	0.007	0.3	< 0.5	688	137	1	3	8	14	0.27	4	< 10	13	< 0.5	< 2	0.40	14	4	2.14	< 10	< 1	0.08	16
953320	< 0.005	0.3	< 0.5	179	525	< 1	10	20	33	0.43	< 2	< 10	62	0.9	< 2	3.41	7	31	2.33	< 10	< 1	0.16	< 10
953321	< 0.005	< 0.2	< 0.5	73	914	< 1	226	2	117	3.60	< 2	< 10	88	0.8	< 2	3.66	40	362	7.28	10	< 1	0.28	< 10
953322	< 0.005	< 0.2	< 0.5	88	1080	< 1	191	3	131	3.61	< 2	< 10	20	< 0.5	< 2	4.61	35	304	7.49	10	< 1	0.02	< 10
953323	0.005	0.2	< 0.5	141	1130	< 1	231	5	169	3.95	< 2	< 10	12	< 0.5	2	3.94	44	356	8.16	10	< 1	< 0.01	< 10
953324	0.006	0.4	< 0.5	132	1230	< 1	245	3	160	3.61	< 2	< 10	15	< 0.5	2	3.79	42	385	7.99	10	< 1	0.01	< 10
953325	< 0.005	< 0.2	< 0.5	6	121	< 1	6	< 2	6	0.11	< 2	< 10	14	< 0.5	< 2	> 10.0	< 1	11	0.27	< 10	< 1	< 0.01	< 10
953326	0.007	0.4	< 0.5	319	791	1	115	5	85	1.40	< 2	< 10	11	< 0.5	< 2	2.88	23	220	3.59	< 10	< 1	< 0.01	< 10
953327	0.006	< 0.2	< 0.5	522	1210	< 1	286	5	65	2.05	< 2	< 10	115	1.3	< 2	5.51	31	1010	5.45	10	< 1	0.55	37
953328	< 0.005	< 0.2	< 0.5	62	1130	< 1	183	5	87	1.75	< 2	< 10	43	1.3	< 2	3.98	37	401	6.90	< 10	< 1	0.53	< 10
953329	< 0.005	< 0.2	< 0.5	55	1150	< 1	173	3	80	2.07	< 2	< 10	50	0.7	< 2	3.82	40	410	7.10	10	< 1	0.05	< 10
953330	0.607	1.1	< 0.5	9180	2850	189	56	10	24	1.07	408	< 10	< 10	< 0.5	9	2.61	424	24	21.3	10	< 1	0.46	113
953331	< 0.005	< 0.2	< 0.5	67	921	< 1	172	< 2	81	2.33	< 2	< 10	57	< 0.5	< 2	3.11	41	421	7.34	10	< 1	0.01	< 10
953332	< 0.005	< 0.2	< 0.5	68	1150	< 1	158	< 2	84	1.92	< 2	< 10	38	< 0.5	< 2	3.78	39	337	6.93	< 10	< 1	0.02	< 10
953333	< 0.005	< 0.2	< 0.5	61	1160	< 1	233	3	96	2.30	< 2	< 10	51	0.7	< 2	3.83	46	434	7.44	10	< 1	0.07	< 10
953334	< 0.005	< 0.2	< 0.5	82	934	< 1	159	12	157	1.43	< 2	< 10	58	3.3	< 2	3.76	33	342	6.15	10	< 1	0.85	< 10
953335	< 0.005	< 0.2	< 0.5	69	1120	< 1	168	7	116	1.51	< 2	< 10	93	2.8	< 2	3.84	35	344	6.52	< 10	< 1	1.09	< 10
953336	< 0.005	< 0.2	< 0.5	94	1250	< 1	138	9	100	1.14	< 2	< 10	14	1.7	< 2	4.39	32	259	6.31	< 10	< 1	0.75	< 10
953337	0.019	0.2	< 0.5	984	1160	1	247	14	110	1.48	< 2	< 10	13	1.9	< 2	4.09	43	607	8.72	< 10	< 1	0.90	< 10
953338	< 0.005	< 0.2	< 0.5	75	1320	< 1	242	56	120	1.90	< 2	< 10	110	2.9	< 2	3.90	41	567	7.08	< 10	< 1	1.93	< 10
953339	0.005	0.7	< 0.5	946	1220	< 1	150	114	128	0.82	< 2	< 10	64	4.5	3	4.31	28	632	6.56	< 10	< 1	0.84	< 10
953340	< 0.005	< 0.2	< 0.5	47	1300	< 1	175	4	124	1.53	< 2	< 10	111	5.4	< 2	3.41	39	370	6.97	< 10	< 1	1.69	< 10
953341	< 0.005	< 0.2	< 0.5	48	1210	< 1	213	5	109	1.65	< 2	< 10	69	4.3	< 2	3.55	42	442	7.52	< 10	< 1	1.73	< 10
953342	< 0.005	< 0.2	< 0.5	44	1320	< 1	200	3	103	1.73	< 2	< 10	83	2.9	< 2	3.51	41	410	7.38	< 10	< 1	1.44	< 10
953343	< 0.005	< 0.2	< 0.5	40	1190	< 1	193	11	110	1.67	< 2	< 10	176	3.1	< 2	3.44	37	428	7.17	< 10	< 1	1.30	< 10
953344	< 0.005	1.3	< 0.5	8	184	2	7	98	4	0.03	< 2	< 10	677	< 0.5	< 2	0.67	2	31	0.47	< 10	< 1	< 0.01	< 10
953345	< 0.005	< 0.2	< 0.5	61	227	< 1	3	< 2	21	0.31	< 2	< 10	72	< 0.5	< 2	1.00	6	6	0.95	< 10	< 1	0.07	< 10
953346	< 0.005	< 0.2	< 0.5	30	432	< 1	53	< 2	72	0.85	< 2	< 10	43	< 0.5	< 2	1.38	16	110	2.69	< 10	< 1	0.12	< 10
953347	< 0.005	< 0.2	< 0.5	79	1230	1	113	2	152	1.84	< 2	< 10	< 10	< 0.5	< 2	3.32	38	238	7.34	10	< 1	< 0.01	< 10
953348	0.005	< 0.2	< 0.5	63	1140	< 1	167	5	112	1.45	< 2	< 10	66	1.7	< 2	3.27	37	330	6.24	< 10	< 1	0.57	< 10
953349	< 0.005	< 0.2	< 0.5	72	1060	< 1	250	2	117	1.98	< 2	< 10	89	2.4	2	3.12	50	525	8.24	10	< 1	0.79	< 10
953350	< 0.005	< 0.2	< 0.5	71	1070	< 1	254	< 2	117	2.04	< 2	< 10	140	2.5	2	3.12	48	525	8.17	10	< 1	0.82	< 10
953351	0.009	4.3	< 0.5	1110	1230	< 1	187	606	107	1.03	< 2	< 10	< 10	1.8	9	4.42	46	340	9.61	< 10	< 1	0.60	< 10
953352	< 0.005	< 0.2	< 0.5	76	1110	< 1	224	3	110	1.65	< 2	< 10	36	2.5	< 2	3.51	45	451	8.00	< 10	< 1	1.07	< 10
953353	< 0.005	< 0.2	< 0.5	104	1100	< 1	188	3	118	1.74	< 2	< 10	25	0.8	3	2.89	48	408	8.39	10	< 1	0.40	< 10
953354	< 0.005	< 0.2	< 0.5	234	1300	< 1	107	4	139	1.19	< 2	< 10	31	< 0.5	4	3.67	38	204	8.02	< 10	< 1	0.04	< 10
953355	< 0.005	< 0.2	< 0.5	6	96	< 1	1	< 2	4	0.02	< 2	< 10	14	< 0.5	< 2	> 10.0	< 1	2	0.12	< 10	< 1	< 0.01	< 10
953356	< 0.005	0.7	< 0.5	965	1400	3	491	4	100	2.36	< 2	< 10	< 10	< 0.5	4	3.12	45	1600	7.46	20	< 1	< 0.01	< 10
953357	0.008	1.0	< 0.5	2020	1390	1	335	6	96	1.76	4	< 10	< 10	< 0.5	4	3.42	54	941	7.65	10	1	< 0.01	< 10
953358	0.005	1.0	< 0.5	847	682	< 1	451	3	126	2.38	7	< 10	< 10	< 0.5	4	1.30	42	1640	6.38	10	< 1	< 0.01	< 10
953359	< 0.005	1.0	< 0.5	303	512	< 1	235	2	131	2.41	< 2	< 10	< 10	0.7	4	1.16	57	532	7.29	10	< 1	0.12	< 10
953360	0.604	1.2	< 0.5	9630	2970	193	55	9	24	1.13	414	< 10	< 10	< 0.5	9	2.70	434	25	21.6	10	< 1	0.51	118
953361	< 0.005	0.2	< 0.5	176	1100	< 1	270	3	85	1.76	< 2	< 10	17	0.9	3	2.91	51	722	7.09	< 10	< 1	0.16	< 10

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953362	< 0.005	0.4	< 0.5	188	1400	< 1	200	10	75	1.78	< 2	< 10	29	< 0.5	3	4.10	49	374	6.87	< 10	< 1	0.03	< 10
953363	< 0.005	< 0.2	< 0.5	17	938	< 1	125	9	39	0.89	< 2	< 10	215	1.5	< 2	5.85	23	374	4.95	< 10	< 1	0.47	27
953364	< 0.005	< 0.2	< 0.5	19	872	< 1	142	10	40	1.02	< 2	< 10	385	2.0	< 2	6.02	23	382	4.92	< 10	< 1	0.82	27
953365	< 0.005	< 0.2	< 0.5	12	818	< 1	221	7	62	1.83	< 2	< 10	376	3.1	< 2	4.91	32	476	5.30	10	< 1	1.37	18
953366	< 0.005	< 0.2	< 0.5	14	808	< 1	230	9	49	1.84	< 2	< 10	184	1.3	< 2	4.68	29	588	4.94	10	< 1	0.39	15
953367	< 0.005	< 0.2	< 0.5	199	838	< 1	206	8	67	1.60	< 2	< 10	97	1.1	< 2	4.76	32	535	5.48	10	< 1	0.26	13
953368	0.012	0.9	< 0.5	389	1090	< 1	212	24	116	1.27	< 2	< 10	13	3.3	2	3.79	43	551	7.19	< 10	< 1	0.51	< 10
953369	0.005	< 0.2	< 0.5	274	947	5	456	2	120	2.22	< 2	< 10	39	< 0.5	< 2	2.75	36	1720	5.20	10	< 1	< 0.01	< 10
953370	0.018	< 0.2	< 0.5	48	658	2	53	< 2	28	0.64	< 2	< 10	39	< 0.5	< 2	1.57	7	111	2.61	< 10	< 1	< 0.01	< 10
953371	0.010	< 0.2	< 0.5	49	1770	< 1	442	5	97	2.09	< 2	< 10	24	< 0.5	2	4.34	29	1540	5.48	10	< 1	< 0.01	< 10
953372	0.016	< 0.2	< 0.5	45	1400	< 1	440	4	114	3.08	< 2	< 10	450	< 0.5	3	3.12	34	1920	6.64	10	2	< 0.01	< 10
953373	0.008	0.5	< 0.5	177	1270	1	432	6	124	3.27	< 2	< 10	415	< 0.5	3	2.96	34	1730	6.91	10	< 1	0.01	< 10
953374	0.014	0.2	< 0.5	244	1520	< 1	410	5	149	1.98	< 2	< 10	555	< 0.5	< 2	3.28	31	1470	4.74	< 10	< 1	< 0.01	< 10
953375	< 0.005	< 0.2	< 0.5	205	954	3	494	< 2	177	2.34	< 2	< 10	227	< 0.5	4	1.38	41	1780	5.74	< 10	< 1	< 0.01	< 10
953375A	0.019	0.3	< 0.5	179	1890	< 1	380	6	135	2.35	< 2	< 10	147	< 0.5	< 2	4.16	28	737	4.91	10	< 1	< 0.01	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953311	2.84	0.082	0.040	0.09	3	13	707	0.10	< 20	< 1	< 2	< 10	171	< 10	7	8
953312	4.79	0.040	0.060	0.16	3	20	460	0.07	< 20	< 1	< 2	< 10	146	< 10	6	5
953313	0.35	0.095	0.006	3.28	< 2	1	8	< 0.01	< 20	< 1	< 2	< 10	12	< 10	< 1	22
953314	0.26	0.077	0.014	2.87	< 2	< 1	6	< 0.01	< 20	< 1	< 2	< 10	4	< 10	1	22
953315	0.31	0.079	0.007	10.1	3	< 1	3	< 0.01	< 20	< 1	< 2	< 10	7	< 10	< 1	25
953316	0.82	0.107	0.021	2.65	< 2	1	5	0.01	< 20	< 1	< 2	< 10	12	< 10	1	28
953317	0.43	0.135	0.049	1.04	< 2	1	69	0.02	< 20	< 1	< 2	< 10	91	< 10	3	20
953318	0.19	0.142	0.032	0.16	< 2	< 1	77	< 0.01	< 20	< 1	< 2	< 10	94	< 10	3	10
953319	0.27	0.141	0.030	1.93	< 2	1	50	0.03	< 20	< 1	< 2	< 10	10	< 10	2	25
953320	0.71	0.141	0.041	0.36	< 2	2	299	0.05	< 20	< 1	< 2	< 10	54	< 10	7	8
953321	4.52	0.033	0.023	0.28	5	22	238	0.10	< 20	< 1	< 2	< 10	149	< 10	6	3
953322	4.47	0.024	0.022	0.37	5	24	266	0.07	< 20	< 1	< 2	< 10	159	< 10	7	3
953323	5.01	0.021	0.017	0.56	5	25	136	0.06	< 20	< 1	< 2	< 10	164	< 10	7	3
953324	5.08	0.021	0.022	0.35	5	24	224	0.05	< 20	< 1	< 2	< 10	164	< 10	5	3
953325	1.53	0.010	0.006	< 0.01	< 2	< 1	54	< 0.01	< 20	< 1	< 2	< 10	4	< 10	2	< 1
953326	2.32	0.074	0.017	0.80	2	7	184	0.04	< 20	< 1	< 2	< 10	49	< 10	3	9
953327	3.91	0.032	0.120	0.21	7	16	497	0.08	< 20	< 1	< 2	< 10	132	< 10	7	2
953328	3.60	0.042	0.034	0.16	6	16	638	0.13	< 20	< 1	< 2	< 10	143	< 10	5	5
953329	3.62	0.045	0.026	0.17	4	15	289	0.10	< 20	< 1	< 2	< 10	155	< 10	8	3
953330	0.99	0.050	0.075	2.09	11	6	29	0.12	< 20	< 1	< 2	30	131	96	12	38
953331	3.63	0.051	0.023	0.13	5	16	170	0.11	< 20	< 1	< 2	< 10	169	< 10	6	3
953332	3.75	0.046	0.026	0.16	3	16	261	0.12	< 20	< 1	< 2	< 10	152	< 10	6	3
953333	4.64	0.041	0.023	0.20	5	21	345	0.09	< 20	< 1	< 2	< 10	149	< 10	6	2
953334	3.57	0.074	0.018	0.19	3	17	540	0.16	< 20	< 1	< 2	< 10	176	< 10	6	9
953335	3.92	0.079	0.024	0.13	4	20	516	0.16	< 20	< 1	< 2	< 10	165	< 10	7	9
953336	3.80	0.064	0.016	0.74	3	18	419	0.12	< 20	< 1	< 2	< 10	130	< 10	6	8
953337	3.88	0.060	0.034	1.80	5	18	429	0.17	< 20	< 1	< 2	< 10	167	< 10	8	11
953338	4.67	0.072	0.021	0.16	5	20	439	0.23	< 20	1	< 2	< 10	146	< 10	7	12
953339	2.85	0.119	0.017	0.15	5	11	558	0.13	< 20	< 1	< 2	< 10	188	< 10	8	14
953340	4.20	0.138	0.019	0.13	4	21	458	0.21	< 20	< 1	< 2	< 10	157	< 10	7	9
953341	4.45	0.089	0.018	0.18	5	19	489	0.20	< 20	< 1	< 2	< 10	175	< 10	6	8
953342	4.43	0.079	0.020	0.19	5	22	386	0.18	< 20	1	< 2	< 10	157	< 10	5	6
953343	4.23	0.087	0.028	0.13	4	18	318	0.17	< 20	< 1	< 2	< 10	157	< 10	6	7
953344	0.31	0.148	0.003	0.02	< 2	< 1	56	< 0.01	< 20	< 1	< 2	< 10	4	< 10	1	< 1
953345	0.36	0.166	0.020	0.21	< 2	< 1	38	0.04	< 20	< 1	< 2	< 10	9	< 10	1	7
953346	1.21	0.099	0.021	0.20	< 2	6	55	0.07	< 20	< 1	< 2	< 10	51	< 10	4	14
953347	3.48	0.060	0.021	0.33	3	19	126	0.11	< 20	< 1	< 2	< 10	184	< 10	6	4
953348	3.58	0.068	0.018	0.33	4	17	215	0.11	< 20	< 1	< 2	< 10	139	< 10	4	8
953349	4.68	0.058	0.019	0.21	6	23	177	0.08	< 20	< 1	< 2	< 10	167	< 10	2	5
953350	4.80	0.071	0.019	0.18	5	24	180	0.09	< 20	< 1	< 2	< 10	167	< 10	2	8
953351	4.09	0.055	0.016	3.77	4	16	205	0.07	< 20	< 1	< 2	< 10	144	< 10	5	10
953352	4.63	0.061	0.018	0.38	5	23	192	0.10	< 20	< 1	< 2	< 10	165	< 10	3	9
953353	4.19	0.046	0.020	0.62	6	22	145	0.04	< 20	< 1	< 2	< 10	182	< 10	3	7
953354	3.56	0.075	0.022	1.24	4	17	172	0.02	< 20	< 1	< 2	< 10	189	< 10	4	8
953355	0.82	0.014	0.006	0.01	< 2	< 1	56	< 0.01	< 20	< 1	< 2	< 10	3	< 10	2	< 1
953356	5.67	0.016	0.007	2.69	11	19	167	0.01	< 20	< 1	< 2	< 10	121	< 10	2	4
953357	4.74	0.028	0.014	3.52	8	16	178	0.01	< 20	< 1	< 2	< 10	119	< 10	3	7
953358	4.68	0.018	0.010	2.34	13	19	74	< 0.01	< 20	< 1	< 2	< 10	122	< 10	1	5
953359	4.32	0.053	0.022	2.49	7	26	86	0.02	< 20	< 1	< 2	< 10	204	< 10	2	6
953360	1.00	0.058	0.078	2.14	13	7	31	0.14	< 20	1	< 2	31	134	103	12	49
953361	4.29	0.039	0.018	1.66	7	19	194	0.03	< 20	< 1	< 2	< 10	141	< 10	3	5

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953362	4.90	0.047	0.021	2.14	5	21	296	0.02	< 20	< 1	< 2	< 10	114	< 10	4	5
953363	4.40	0.076	0.526	0.06	4	18	485	0.05	< 20	< 1	< 2	< 10	99	< 10	27	2
953364	4.72	0.115	0.559	0.01	4	21	556	0.02	< 20	< 1	< 2	< 10	89	< 10	26	2
953365	5.61	0.109	0.386	0.06	4	21	455	0.02	< 20	< 1	< 2	< 10	96	< 10	24	2
953366	5.33	0.062	0.347	0.06	5	23	480	0.06	< 20	< 1	< 2	< 10	94	< 10	20	2
953367	4.86	0.043	0.463	0.30	4	21	489	0.05	< 20	< 1	< 2	< 10	117	< 10	27	3
953368	4.08	0.045	0.014	1.25	6	18	367	0.08	< 20	< 1	< 2	< 10	178	< 10	4	18
953369	5.41	0.015	0.005	0.08	13	16	253	< 0.01	< 20	< 1	< 2	< 10	90	< 10	1	2
953370	1.43	0.112	0.020	0.14	< 2	2	149	0.01	< 20	< 1	< 2	< 10	23	< 10	2	7
953371	5.81	0.019	0.006	0.02	11	16	445	< 0.01	< 20	< 1	< 2	< 10	86	< 10	2	2
953372	6.59	0.084	0.006	0.03	14	20	282	< 0.01	< 20	< 1	< 2	< 10	121	< 10	1	2
953373	6.85	0.079	0.017	0.07	14	21	250	< 0.01	< 20	< 1	< 2	< 10	124	< 10	2	3
953374	5.36	0.102	0.006	0.04	11	14	263	< 0.01	< 20	< 1	< 2	< 10	81	< 10	1	1
953375	5.88	0.049	0.009	0.06	15	16	111	< 0.01	< 20	< 1	< 2	< 10	92	< 10	< 1	2
953375A	5.83	0.048	0.033	0.03	7	9	397	< 0.01	< 20	< 1	< 2	< 10	68	< 10	3	2

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas				357	407		208	15	37	5.33	6		78		6	0.09	26	468	13.2	20		0.10	11
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 45d (Aqua Regia) Meas				359	406		212	15	36	5.34	6		78		4	0.10	26	485	13.7	20		0.11	12
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2330	790	< 1	35	60	274	2.75	7		73	0.7	9	0.39	19	45	5.32	< 10		0.40	41
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2260	771	< 1	34	57	257	2.66	5		58	0.7	7	0.39	19	44	4.75	< 10		0.37	37
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 907 (Aqua Regia) Meas		1.0	< 0.5	5450	307	5	4	29	129	0.98	31		200	0.9	19	0.24	40	7	6.64	10		0.26	34
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 907 (Aqua Regia) Meas		1.3	< 0.5	6710	364	6	4	35	156	1.24	36		249	1.1	21	0.28	47	8	8.31	20		0.34	42
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 239 (Fire Assay) Meas	3.52																						
OREAS 239 (Fire Assay) Cert	3.55																						
OREAS 263 (Aqua Regia) Meas		0.2	< 0.5	93	530	< 1	75	35	139	1.74	32		182	1.3	< 2	1.09	34	55	3.80	< 10	< 1	0.31	
OREAS 263 (Aqua Regia) Cert		0.285	0.270	87.0	490	0.570	72.0	34.0	127	1.29	30.8		175	1.22	0.570	1.03	31.0	48.0	3.68	4.92	0.170	0.288	
OREAS 263 (Aqua Regia) Meas		0.2	< 0.5	91	523	< 1	75	35	137	1.81	31		191	1.4	< 2	1.07	33	57	3.82	< 10	< 1	0.34	
OREAS 263 (Aqua Regia) Cert		0.285	0.270	87.0	490	0.570	72.0	34.0	127	1.29	30.8		175	1.22	0.570	1.03	31.0	48.0	3.68	4.92	0.170	0.288	
OREAS 130 (Aqua Regia) Meas		6.2	28.6	233	1640	8	32	1300	> 10000	1.20	204				5	1.71	27	23	7.16	< 10	1	0.52	25
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
OREAS 130 (Aqua Regia) Meas		5.9	27.7	229	1620	8	31	1270	> 10000	1.18	200				4	1.68	26	23	6.76	< 10	< 1	0.50	23
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
Oreas 623 (Aqua Regia) Meas		19.2	48.4	> 10000	528	9	18	2270	9250	1.65	75			< 0.5	23	0.98	206	21	12.2	10	< 1	0.17	18
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas 623 (Aqua Regia) Meas		19.2	47.7	> 10000	519	9	16	2210	9180	1.63	73			< 0.5	25	0.96	201	17	12.0	10	1	0.16	17
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9
Oreas E1336 (Fire Assay) Meas	0.512																						
Oreas E1336 (Fire Assay) Cert	0.510																						
Oreas E1336 (Fire Assay) Meas	0.527																						
Oreas E1336 (Fire Assay) Cert	0.510																						
Oreas E1336 (Fire Assay) Meas	0.530																						
Oreas E1336 (Fire Assay) Cert	0.510																						
OREAS 216b Meas	6.95																						
OREAS 216b Cert	6.66																						
OREAS 216b Meas	6.83																						
OREAS 216b Cert	6.66																						
OREAS 216b Meas	6.91																						
OREAS 216b Cert	6.66																						
OREAS 521 (Aqua Regia) Meas		0.8		5530	2500	137	62	8	22	1.23	292			< 0.5	5	2.85	310	29	19.3	10		0.47	115
OREAS 521 (Aqua Regia) Cert		0.8		5990	3000	133	68	9	24	1.44	333			0.5	6	3.66	374	33	20.0	10		0.53	147
OREAS 521 (Aqua Regia) Meas		1.2		5420	2450	129	58	7	21	1.21	285			< 0.5	8	2.89	306	28	18.5	10		0.45	110
OREAS 521 (Aqua Regia) Cert		0.82		5990	3000	133	68	9	24	1.44	333			0.5	6	3.66	374	33	20.0	10		0.53	147
Oreas 620 (Aqua Regia) Meas		42.3	176	1960	467	11	16	> 5000	> 10000	1.26	54		< 10	0.7	< 2	1.38	14	22	2.85	< 10	2	0.30	29
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		41.5	167	1880	456	10	14	> 5000	> 10000	1.24	51		< 10	0.7	< 2	1.34	14	17	2.67	< 10	2	0.29	28
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		40.8	163	1870	450	10	15	> 5000	> 10000	1.25	51		< 10	0.7	< 2	1.29	14	18	2.60	< 10	2	0.28	27
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
953319 Orig	0.007																						
953319 Dup	0.006																						
953323 Orig		0.2	< 0.5	140	1130	< 1	230	4	169	3.94	2	< 10	12	< 0.5	2	3.92	44	355	8.15	10	1	< 0.01	< 10
953323 Dup		0.3	< 0.5	141	1130	< 1	232	5	169	3.97	< 2	< 10	13	< 0.5	3	3.95	44	358	8.16	10	< 1	< 0.01	< 10
953328 Orig	< 0.005																						
953328 Dup	< 0.005																						
953336 Orig		< 0.2	< 0.5	94	1250	< 1	137	9	100	1.12	< 2	< 10	13	1.7	< 2	4.40	32	261	6.29	< 10	< 1	0.75	< 10
953336 Dup		< 0.2	< 0.5	95	1250	< 1	139	8	100	1.15	< 2	< 10	15	1.7	< 2	4.38	31	257	6.33	< 10	< 1	0.75	< 10
953343 Orig	< 0.005																						
953343 Dup	< 0.005																						

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953348 Orig		< 0.2	< 0.5	62	1130	< 1	165	4	112	1.44	< 2	< 10	68	1.7	< 2	3.27	37	330	6.19	< 10	< 1	0.57	< 10
953348 Dup		< 0.2	< 0.5	64	1140	< 1	168	6	113	1.47	< 2	< 10	64	1.7	< 2	3.28	37	330	6.28	< 10	< 1	0.58	< 10
953354 Orig	< 0.005																						
953354 Dup	< 0.005																						
953359 Orig		1.0	< 0.5	303	512	< 1	235	2	131	2.41	< 2	< 10	< 10	0.7	4	1.16	57	532	7.29	10	< 1	0.12	< 10
953359 Split PREP DUP		0.5	< 0.5	297	504	< 1	231	2	130	2.39	< 2	< 10	< 10	0.7	4	1.14	56	523	7.16	10	< 1	0.12	< 10
953363 Orig	< 0.005																						
953363 Dup	< 0.005																						
953364 Orig		< 0.2	< 0.5	19	868	< 1	141	10	39	1.01	< 2	< 10	381	2.0	< 2	6.01	23	381	4.79	< 10	< 1	0.80	27
953364 Dup		< 0.2	< 0.5	19	875	< 1	143	11	40	1.03	< 2	< 10	389	2.0	< 2	6.03	23	384	5.05	< 10	< 1	0.85	28
Method Blank	< 0.005																						
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Method Blank	< 0.005																						
Method Blank	< 0.005																						
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas	0.17	0.045	0.033	0.04		43	14		< 20			< 10	186		5	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 45d (Aqua Regia) Meas	0.17	0.046	0.033	0.04		43	14		< 20			< 10	190		5	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 922 (AQUA REGIA) Meas	1.38	0.032	0.065	0.39	3	4	17		< 20		< 2	< 10	33	< 10	22	12
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 922 (AQUA REGIA) Meas	1.26	0.029	0.063	0.37	2	3	17		< 20		< 2	< 10	31	< 10	22	9
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 907 (Aqua Regia) Meas	0.19	0.098	0.020	0.05	4	2	12	0.02	< 20	< 1	< 2	< 10	5	< 10	7	18
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 907 (Aqua Regia) Meas	0.24	0.121	0.023	0.06	5	2	14	0.03	< 20	< 1	< 2	< 10	6	< 10	8	9
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 239 (Fire Assay) Meas																
OREAS 239 (Fire Assay) Cert																
OREAS 263 (Aqua Regia) Meas	0.61	0.106	0.043	0.12	8	4	20		< 20	< 1	< 2	< 10	25		14	
OREAS 263 (Aqua Regia) Cert	0.593	0.0790	0.0410	0.126	7.37	3.52	16.9		10.6	0.210	0.530	1.28	22.8		12.0	
OREAS 263 (Aqua Regia) Meas	0.62	0.105	0.043	0.12	8	4	20		< 20	< 1	< 2	< 10	27		14	
OREAS 263 (Aqua Regia) Cert	0.593	0.0790	0.0410	0.126	7.37	3.52	16.9		10.6	0.210	0.530	1.28	22.8		12.0	
OREAS 130 (Aqua Regia) Meas	0.93		0.087	6.12	6	3	21	0.03	< 20	< 1	< 2	< 10	36	10	14	33
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
OREAS 130 (Aqua Regia) Meas	0.89		0.084	6.02	6	3	20	0.03	< 20	< 1	< 2	< 10	35	11	14	34
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
Oreas 623 (Aqua Regia) Meas	1.05	0.063	0.041	8.65	21	4	13		< 20	< 1	< 2	< 10	17	< 10	8	73
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas 623 (Aqua Regia) Meas	1.03	0.062	0.041	8.74	21	4	13		< 20	< 1	< 2	< 10	17	< 10	8	72
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 521 (Aqua Regia) Meas	1.08	0.046	0.072	1.56	10	9	30	0.14	< 20	< 1	< 2	22	178	68	13	29
OREAS 521 (Aqua Regia) Cert	1.10	0.045	0.081	1.85	4	10	54	0.14	8	0.7	0.1	28	200	71	15	38
OREAS 521 (Aqua Regia) Meas	1.03	0.046	0.071	1.49	9	8	30	0.14	< 20	2	< 2	20	173	64	13	29
OREAS 521 (Aqua Regia) Cert	1.10	0.045	0.081	1.85	4	10	54	0.14	8	0.7	0.1	28	200	71	15	38
Oreas 620 (Aqua Regia) Meas	0.29	0.119	0.029	2.70	60		20		< 20		< 2	< 10	9	< 10	9	13
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
Oreas 620 (Aqua Regia) Meas	0.27	0.117	0.028	2.62	59		20		< 20		< 2	< 10	8	39	9	16
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
Oreas 620 (Aqua Regia) Meas	0.26	0.115	0.028	2.53	58		19		< 20		< 2	< 10	8	51	9	21
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
953319 Orig																
953319 Dup																
953323 Orig	4.99	0.020	0.017	0.56	4	25	135	0.06	< 20	< 1	< 2	< 10	165	< 10	7	3
953323 Dup	5.02	0.021	0.017	0.56	5	25	137	0.06	< 20	< 1	< 2	< 10	164	< 10	7	3
953328 Orig																
953328 Dup																
953336 Orig	3.80	0.065	0.016	0.75	3	18	411	0.12	< 20	< 1	< 2	< 10	131	< 10	6	8
953336 Dup	3.79	0.064	0.016	0.74	3	17	427	0.12	< 20	< 1	< 2	< 10	130	< 10	6	8
953343 Orig																
953343 Dup																

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953348 Orig	3.56	0.066	0.018	0.33	3	17	214	0.11	< 20	< 1	< 2	< 10	138	< 10	4	8
953348 Dup	3.60	0.070	0.018	0.34	4	17	216	0.11	< 20	< 1	< 2	< 10	139	< 10	4	8
953354 Orig																
953354 Dup																
953359 Orig	4.32	0.053	0.022	2.49	7	26	86	0.02	< 20	< 1	< 2	< 10	204	< 10	2	6
953359 Split PREP DUP	4.26	0.055	0.022	2.45	6	25	83	0.02	< 20	< 1	< 2	< 10	200	< 10	2	6
953363 Orig																
953363 Dup																
953364 Orig	4.61	0.115	0.556	0.01	3	20	554	0.02	< 20	< 1	< 2	< 10	88	< 10	26	2
953364 Dup	4.84	0.114	0.561	0.01	4	21	559	0.02	< 20	< 1	< 2	< 10	90	< 10	26	2
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1

Quality Analysis ... *Innovative Technologies*

Report No.: A22-02305
Report Date: 09-May-22
Date Submitted: 23-Feb-22
Your Reference: GOWAN

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

20 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-50-Timmins - 10g/t	QOP AA-Au (Au - Fire Assay AA)	2022-04-06 21:15:56

REPORT **A22-02305**

Notes:

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

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

SCC Accredited LAB Accréditéé CCN TM

LabID: 709

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

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

Report No.: A22-02305
Report Date: 09-May-22
Date Submitted: 23-Feb-22
Your Reference: GOWAN

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

20 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1E3	QOP AquaGeo (Aqua Regia ICPOES)	2022-05-04 22:26:43

REPORT **A22-02305**

Notes:

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

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

SCC Accredited LAB Accredité CNC TM

LabID: 266

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

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Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953376	0.026	1.7	2.3	321	3240	7	280	27	178	1.13	< 2	< 10	19	< 0.5	3	6.67	40	830	3.91	< 10	< 1	< 0.01	< 10
953377	< 0.005	< 0.2	< 0.5	113	761	77	388	3	110	1.23	< 2	< 10	280	< 0.5	< 2	1.31	28	1170	3.89	< 10	< 1	< 0.01	< 10
953378	0.005	0.6	0.7	123	1300	< 1	450	9	384	2.39	3	< 10	23	< 0.5	3	2.81	45	1720	5.03	< 10	< 1	< 0.01	< 10
953379	0.008	1.8	1.5	254	1300	< 1	504	15	886	2.42	5	< 10	15	< 0.5	6	3.03	58	1620	6.47	< 10	< 1	< 0.01	< 10
953380	< 0.005	< 0.2	< 0.5	32	1480	< 1	420	6	231	2.28	< 2	< 10	92	< 0.5	3	3.06	43	1630	4.77	< 10	< 1	< 0.01	< 10
953381	< 0.005	0.5	< 0.5	34	1440	< 1	426	8	73	2.35	< 2	< 10	63	< 0.5	3	3.07	39	1630	4.75	< 10	< 1	< 0.01	< 10
953382	0.012	2.1	15.3	188	1270	< 1	408	12	2570	2.29	2	< 10	< 10	< 0.5	7	3.81	60	1340	6.23	< 10	< 1	0.10	< 10
953383	0.019	1.5	0.9	714	1110	< 1	417	10	340	1.75	< 2	< 10	< 10	< 0.5	4	4.03	49	1490	5.05	< 10	< 1	0.02	< 10
953384	0.008	0.9	4.5	85	985	< 1	457	5	1180	2.46	< 2	< 10	21	< 0.5	5	2.97	58	1820	5.86	< 10	1	0.03	< 10
953385	< 0.005	< 0.2	< 0.5	3	109	< 1	7	< 2	13	0.05	< 2	< 10	21	< 0.5	< 2	> 10.0	< 1	22	0.17	< 10	< 1	< 0.01	< 10
953386	< 0.005	< 0.2	< 0.5	56	1170	< 1	407	2	67	2.18	< 2	< 10	322	< 0.5	< 2	3.52	36	1510	4.33	< 10	< 1	0.04	< 10
953387	< 0.005	< 0.2	< 0.5	77	1120	< 1	398	5	76	2.12	< 2	< 10	162	< 0.5	2	3.45	37	1530	4.37	< 10	1	< 0.01	< 10
953388	< 0.005	< 0.2	< 0.5	35	1100	< 1	439	5	101	1.94	< 2	< 10	190	< 0.5	2	3.01	32	1570	4.13	< 10	< 1	< 0.01	< 10
953389	0.005	< 0.2	< 0.5	36	1250	< 1	420	5	27	2.09	< 2	< 10	769	< 0.5	< 2	4.18	32	1490	4.20	< 10	< 1	< 0.01	< 10
953390	0.506	1.2	< 0.5	9530	2920	191	57	9	24	1.11	407	< 10	< 10	< 0.5	9	2.64	422	25	21.6	10	< 1	0.51	117
953391	< 0.005	< 0.2	< 0.5	60	902	< 1	434	4	40	2.30	2	< 10	161	< 0.5	< 2	3.10	36	1660	4.27	< 10	< 1	< 0.01	< 10
953392	0.016	0.4	< 0.5	181	865	< 1	386	12	55	2.07	< 2	< 10	32	< 0.5	< 2	3.74	45	1260	4.95	< 10	< 1	0.12	< 10
953393	0.012	< 0.2	< 0.5	134	1160	< 1	76	10	79	2.08	< 2	< 10	107	0.9	< 2	4.96	33	232	6.06	< 10	< 1	0.54	25
953394	0.009	< 0.2	< 0.5	131	953	< 1	429	8	72	2.71	< 2	< 10	441	0.5	< 2	3.54	39	1410	5.24	10	< 1	0.17	< 10
953395	0.010	< 0.2	< 0.5	55	1080	< 1	368	8	43	2.53	< 2	< 10	407	< 0.5	2	3.94	38	1650	4.93	< 10	< 1	< 0.01	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953376	7.01	0.012	0.011	0.47	6	10	488	< 0.01	< 20	< 1	< 2	< 10	40	< 10	3	1
953377	5.26	0.055	< 0.001	0.03	8	9	109	< 0.01	< 20	< 1	< 2	< 10	62	< 10	< 1	1
953378	5.41	0.012	0.006	0.53	12	16	139	< 0.01	< 20	< 1	< 2	< 10	94	< 10	< 1	2
953379	5.78	0.011	0.018	1.86	13	16	161	< 0.01	< 20	< 1	< 2	< 10	108	< 10	1	3
953380	5.56	0.024	0.006	0.24	12	17	156	< 0.01	< 20	< 1	< 2	< 10	93	< 10	< 1	1
953381	5.74	0.018	0.009	0.18	11	16	184	< 0.01	< 20	< 1	< 2	< 10	94	< 10	< 1	1
953382	5.99	0.013	0.043	2.07	11	17	200	0.02	< 20	< 1	< 2	< 10	105	< 10	2	4
953383	5.35	0.012	0.012	1.64	11	15	234	< 0.01	< 20	< 1	< 2	< 10	82	< 10	1	2
953384	5.88	0.011	0.006	1.24	13	18	165	< 0.01	< 20	< 1	< 2	< 10	104	< 10	< 1	2
953385	1.15	0.018	0.006	0.01	< 2	< 1	56	< 0.01	< 20	< 1	< 2	< 10	3	< 10	2	< 1
953386	5.70	0.062	0.007	0.09	11	15	274	0.01	< 20	< 1	< 2	< 10	84	< 10	1	1
953387	5.59	0.035	0.007	0.14	11	15	291	< 0.01	< 20	< 1	< 2	< 10	82	< 10	1	1
953388	5.38	0.039	0.006	0.02	10	14	238	< 0.01	< 20	< 1	< 2	< 10	76	< 10	< 1	1
953389	5.99	0.143	0.006	0.03	11	15	437	< 0.01	< 20	< 1	< 2	< 10	81	< 10	1	1
953390	1.01	0.056	0.076	2.11	13	7	30	0.14	< 20	< 1	< 2	31	133	102	12	47
953391	5.27	0.035	0.006	0.15	11	16	316	< 0.01	< 20	< 1	< 2	< 10	90	< 10	1	1
953392	5.22	0.017	0.095	0.81	10	13	443	0.03	< 20	< 1	< 2	< 10	88	< 10	5	4
953393	5.48	0.038	0.205	0.13	< 2	26	614	0.11	< 20	< 1	< 2	< 10	186	< 10	10	4
953394	6.18	0.082	0.055	0.04	10	17	432	0.03	< 20	< 1	< 2	< 10	113	< 10	3	4
953395	6.29	0.078	0.021	0.03	11	17	467	< 0.01	< 20	< 1	< 2	< 10	102	< 10	2	1

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas				357	407		208	15	37	5.33	6		78		6	0.09	26	468	13.2	20		0.10	11
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 45d (Aqua Regia) Meas				359	406		212	15	36	5.34	6		78		4	0.10	26	485	13.7	20		0.11	12
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2330	790	< 1	35	60	274	2.75	7		73	0.7	9	0.39	19	45	5.32	< 10		0.40	41
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2260	771	< 1	34	57	257	2.66	5		58	0.7	7	0.39	19	44	4.75	< 10		0.37	37
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 907 (Aqua Regia) Meas		1.0	< 0.5	5450	307	5	4	29	129	0.98	31		200	0.9	19	0.24	40	7	6.64	10		0.26	34
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 907 (Aqua Regia) Meas		1.3	< 0.5	6710	364	6	4	35	156	1.24	36		249	1.1	21	0.28	47	8	8.31	20		0.34	42
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 263 (Aqua Regia) Meas		0.2	< 0.5	93	530	< 1	75	35	139	1.74	32		182	1.3	< 2	1.09	34	55	3.80	< 10	< 1	0.31	
OREAS 263 (Aqua Regia) Cert		0.285	0.270	87.0	490	0.570	72.0	34.0	127	1.29	30.8		175	1.22	0.570	1.03	31.0	48.0	3.68	4.92	0.170	0.288	
OREAS 263 (Aqua Regia) Meas		0.2	< 0.5	91	523	< 1	75	35	137	1.81	31		191	1.4	< 2	1.07	33	57	3.82	< 10	< 1	0.34	
OREAS 263 (Aqua Regia) Cert		0.285	0.270	87.0	490	0.570	72.0	34.0	127	1.29	30.8		175	1.22	0.570	1.03	31.0	48.0	3.68	4.92	0.170	0.288	
OREAS 130 (Aqua Regia) Meas		6.2	28.6	233	1640	8	32	1300	> 10000	1.20	204				5	1.71	27	23	7.16	< 10	1	0.52	25
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
OREAS 130 (Aqua Regia) Meas		5.9	27.7	229	1620	8	31	1270	> 10000	1.18	200				4	1.68	26	23	6.76	< 10	< 1	0.50	23
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
Oreas 623 (Aqua Regia) Meas		19.2	48.4	> 10000	528	9	18	2270	9250	1.65	75			< 0.5	23	0.98	206	21	12.2	10	< 1	0.17	18
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9
Oreas 623 (Aqua Regia) Meas		19.2	47.7	> 10000	519	9	16	2210	9180	1.63	73			< 0.5	25	0.96	201	17	12.0	10	1	0.16	17
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas E1336 (Fire Assay) Meas	0.527																						
Oreas E1336 (Fire Assay) Cert	0.510																						
Oreas E1336 (Fire Assay) Meas	0.530																						
Oreas E1336 (Fire Assay) Cert	0.510																						
OREAS 216b Meas	6.95																						
OREAS 216b Cert	6.66																						
OREAS 216b Meas	6.83																						
OREAS 216b Cert	6.66																						
OREAS 216b Meas	6.91																						
OREAS 216b Cert	6.66																						
OREAS 521 (Aqua Regia) Meas		0.8		5530	2500	137	62	8	22	1.23	292			< 0.5	5	2.85	310	29	19.3	10		0.47	115
OREAS 521 (Aqua Regia) Cert		0.8		5990	3000	133	68	9	24	1.44	333			0.5	6	3.66	374	33	20.0	10		0.53	147
OREAS 521 (Aqua Regia) Meas		1.2		5420	2450	129	58	7	21	1.21	285			< 0.5	8	2.89	306	28	18.5	10		0.45	110
OREAS 521 (Aqua Regia) Cert		0.82		5990	3000	133	68	9	24	1.44	333			0.5	6	3.66	374	33	20.0	10		0.53	147
Oreas 620 (Aqua Regia) Meas		42.3	176	1960	467	11	16	> 5000	> 10000	1.26	54		< 10	0.7	< 2	1.38	14	22	2.85	< 10	2	0.30	29
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		41.5	167	1880	456	10	14	> 5000	> 10000	1.24	51		< 10	0.7	< 2	1.34	14	17	2.67	< 10	2	0.29	28
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		40.8	163	1870	450	10	15	> 5000	> 10000	1.25	51		< 10	0.7	< 2	1.29	14	18	2.60	< 10	2	0.28	27
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
953377 Orig	< 0.005																						
953377 Dup	< 0.005																						
953385 Orig		< 0.2	< 0.5	3	108	< 1	7	< 2	12	0.04	< 2	< 10	21	< 0.5	< 2	> 10.0	< 1	22	0.17	< 10	< 1	< 0.01	< 10
953385 Dup		< 0.2	< 0.5	3	109	< 1	7	< 2	13	0.06	< 2	< 10	21	< 0.5	< 2	> 10.0	< 1	21	0.17	< 10	< 1	< 0.01	< 10
953388 Orig	< 0.005																						
953388 Dup	< 0.005																						
953393 Orig		< 0.2	< 0.5	132	1160	< 1	77	10	80	2.09	< 2	< 10	111	0.9	< 2	4.96	34	237	6.13	< 10	< 1	0.55	25
953393 Dup		< 0.2	< 0.5	135	1160	< 1	74	10	78	2.06	< 2	< 10	102	0.9	< 2	4.96	33	227	5.98	< 10	< 1	0.54	26
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		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas	0.17	0.045	0.033	0.04		43	14		< 20			< 10	186		5	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 45d (Aqua Regia) Meas	0.17	0.046	0.033	0.04		43	14		< 20			< 10	190		5	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 922 (AQUA REGIA) Meas	1.38	0.032	0.065	0.39	3	4	17		< 20		< 2	< 10	33	< 10	22	12
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 922 (AQUA REGIA) Meas	1.26	0.029	0.063	0.37	2	3	17		< 20		< 2	< 10	31	< 10	22	9
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 907 (Aqua Regia) Meas	0.19	0.098	0.020	0.05	4	2	12	0.02	< 20	< 1	< 2	< 10	5	< 10	7	18
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 907 (Aqua Regia) Meas	0.24	0.121	0.023	0.06	5	2	14	0.03	< 20	< 1	< 2	< 10	6	< 10	8	9
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 263 (Aqua Regia) Meas	0.61	0.106	0.043	0.12	8	4	20		< 20	< 1	< 2	< 10	25		14	
OREAS 263 (Aqua Regia) Cert	0.593	0.0790	0.0410	0.126	7.37	3.52	16.9		10.6	0.210	0.530	1.28	22.8		12.0	
OREAS 263 (Aqua Regia) Meas	0.62	0.105	0.043	0.12	8	4	20		< 20	< 1	< 2	< 10	27		14	
OREAS 263 (Aqua Regia) Cert	0.593	0.0790	0.0410	0.126	7.37	3.52	16.9		10.6	0.210	0.530	1.28	22.8		12.0	
OREAS 130 (Aqua Regia) Meas	0.93		0.087	6.12	6	3	21	0.03	< 20	< 1	< 2	< 10	36	10	14	33
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
OREAS 130 (Aqua Regia) Meas	0.89		0.084	6.02	6	3	20	0.03	< 20	< 1	< 2	< 10	35	11	14	34
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
Oreas 623 (Aqua Regia) Meas	1.05	0.063	0.041	8.65	21	4	13		< 20	< 1	< 2	< 10	17	< 10	8	73
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0
Oreas 623 (Aqua Regia) Meas	1.03	0.062	0.041	8.74	21	4	13		< 20	< 1	< 2	< 10	17	< 10	8	72
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 521 (Aqua Regia) Meas	1.08	0.046	0.072	1.56	10	9	30	0.14	< 20	< 1	< 2	22	178	68	13	29
OREAS 521 (Aqua Regia) Cert	1.10	0.045	0.081	1.85	4	10	54	0.14	8	0.7	0.1	28	200	71	15	38
OREAS 521 (Aqua Regia) Meas	1.03	0.046	0.071	1.49	9	8	30	0.14	< 20	2	< 2	20	173	64	13	29
OREAS 521 (Aqua Regia) Cert	1.10	0.045	0.081	1.85	4	10	54	0.14	8	0.7	0.1	28	200	71	15	38
Oreas 620 (Aqua Regia) Meas	0.29	0.119	0.029	2.70	60		20		< 20		< 2	< 10	9	< 10	9	13
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
Oreas 620 (Aqua Regia) Meas	0.27	0.117	0.028	2.62	59		20		< 20		< 2	< 10	8	39	9	16
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
Oreas 620 (Aqua Regia) Meas	0.26	0.115	0.028	2.53	58		19		< 20		< 2	< 10	8	51	9	21
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
953377 Orig																
953377 Dup																
953385 Orig	1.15	0.013	0.006	0.01	< 2	< 1	55	< 0.01	< 20	< 1	< 2	< 10	3	< 10	2	< 1
953385 Dup	1.15	0.023	0.007	0.01	< 2	< 1	56	< 0.01	< 20	< 1	< 2	< 10	3	< 10	2	< 1
953388 Orig																
953388 Dup																
953393 Orig	5.53	0.039	0.206	0.14	< 2	27	612	0.11	< 20	< 1	< 2	< 10	188	< 10	10	4
953393 Dup	5.43	0.037	0.205	0.13	3	26	615	0.10	< 20	< 1	< 2	< 10	184	< 10	9	4
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1

Quality Analysis ... **Actlabs** *Innovative Technologies*

Report No.: A22-02389
Report Date: 09-May-22
Date Submitted: 25-Feb-22
Your Reference: GOWAN

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

33 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1E3	QOP AquaGeo (Aqua Regia ICPOES)	2022-05-04 22:26:43

REPORT **A22-02389**

Notes:

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

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

SCC Accredited LAB Accrédité CCN TM

LabID: 266

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
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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

Report No.: A22-02389
Report Date: 09-May-22
Date Submitted: 25-Feb-22
Your Reference: GOWAN

Pelangio Exploration Inc

ATTN: Kevin Filo (inv)

CERTIFICATE OF ANALYSIS

33 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-50-Timmins - 10g/t	QOP AA-Au (Au - Fire Assay AA)	2022-05-03 12:12:09

REPORT **A22-02389**

Notes:

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

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

SCC Accredited LAB
LAB
Acc r édit é CCN
TM

LabID: 709

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

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E-MAIL Timmins@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953396	0.005	< 0.2	< 0.5	86	1100	< 1	428	5	35	1.66	3	< 10	263	< 0.5	< 2	4.11	28	1320	3.33	< 10	< 1	0.04	13
953397	0.034	< 0.2	< 0.5	205	1270	< 1	226	13	66	1.22	< 2	< 10	21	1.0	2	> 10.0	38	291	6.44	< 10	< 1	0.48	14
953398	0.013	< 0.2	< 0.5	75	860	< 1	196	5	42	1.77	< 2	< 10	541	1.0	< 2	5.74	28	581	4.69	< 10	< 1	0.41	< 10
953399	< 0.005	< 0.2	< 0.5	18	672	< 1	215	7	39	2.17	< 2	< 10	587	1.0	< 2	5.27	29	904	4.38	10	< 1	0.46	18
953400	< 0.005	< 0.2	< 0.5	< 1	691	< 1	181	4	35	1.72	< 2	< 10	362	0.6	< 2	5.24	23	839	3.69	< 10	< 1	0.33	13
953401	0.009	< 0.2	< 0.5	241	861	< 1	233	11	77	2.40	< 2	< 10	51	1.9	< 2	5.52	40	626	6.95	10	< 1	1.56	< 10
953402	0.007	< 0.2	< 0.5	158	1070	< 1	232	11	105	2.03	< 2	< 10	113	2.1	< 2	5.68	36	506	6.18	10	< 1	1.41	10
953403	0.012	< 0.2	< 0.5	78	1010	< 1	244	11	121	2.04	< 2	< 10	125	1.6	< 2	5.03	37	471	6.26	10	< 1	1.40	16
953404	0.010	< 0.2	< 0.5	121	1350	< 1	158	15	83	1.22	2	< 10	26	1.0	< 2	6.06	35	320	5.50	< 10	< 1	0.60	11
953405	< 0.005	< 0.2	< 0.5	86	1250	< 1	356	10	112	2.93	< 2	< 10	39	1.2	< 2	4.06	45	1030	6.66	10	< 1	0.69	< 10
953406	< 0.005	< 0.2	< 0.5	20	1210	< 1	369	5	56	1.89	< 2	< 10	239	< 0.5	< 2	4.03	30	1360	3.90	< 10	< 1	0.16	< 10
953407	< 0.005	< 0.2	< 0.5	71	975	< 1	344	6	63	2.38	< 2	< 10	215	0.6	< 2	4.08	37	1150	5.15	< 10	< 1	0.30	< 10
953408	< 0.005	< 0.2	< 0.5	78	1070	< 1	460	3	85	2.55	< 2	< 10	45	< 0.5	3	3.29	40	1570	4.74	< 10	< 1	0.01	< 10
953409	0.027	0.3	< 0.5	224	1620	< 1	497	7	137	2.54	< 2	< 10	106	< 0.5	2	4.40	43	1420	5.32	< 10	< 1	0.02	< 10
953410	0.012	0.5	< 0.5	436	962	4	252	7	64	1.84	2	< 10	< 10	< 0.5	< 2	3.06	67	530	5.09	< 10	< 1	0.08	< 10
953411	0.010	0.6	< 0.5	164	1170	46	462	8	118	2.79	< 2	< 10	54	< 0.5	4	3.07	78	1170	5.62	10	< 1	0.02	< 10
953412	0.005	< 0.2	< 0.5	4	1840	< 1	314	3	13	1.16	< 2	< 10	466	< 0.5	< 2	6.40	22	653	2.33	< 10	< 1	0.02	< 10
953413	0.006	< 0.2	< 0.5	152	1100	< 1	621	21	27	2.04	< 2	< 10	124	< 0.5	2	3.79	42	2080	6.10	< 10	< 1	0.03	< 10
953414	0.005	< 0.2	< 0.5	18	2430	< 1	400	< 2	20	1.48	< 2	< 10	157	< 0.5	< 2	7.08	31	926	3.42	< 10	< 1	0.03	< 10
953415	0.007	< 0.2	< 0.5	4	105	< 1	9	< 2	2	0.05	< 2	< 10	22	< 0.5	< 2	> 10.0	< 1	23	0.16	< 10	< 1	< 0.01	< 10
953416	0.005	< 0.2	< 0.5	30	1210	< 1	644	< 2	27	2.22	< 2	< 10	< 10	< 0.5	< 2	3.97	42	1770	5.27	< 10	1	0.03	< 10
953417	< 0.005	< 0.2	< 0.5	88	779	< 1	717	< 2	26	2.48	< 2	< 10	23	< 0.5	3	2.95	44	1800	4.86	< 10	< 1	0.01	< 10
953418	0.006	< 0.2	< 0.5	4	2680	< 1	209	5	11	0.81	< 2	< 10	72	< 0.5	< 2	> 10.0	19	418	2.62	< 10	< 1	< 0.01	< 10
953419	0.009	< 0.2	< 0.5	65	748	< 1	631	7	31	2.70	< 2	< 10	< 10	< 0.5	3	2.43	47	2540	7.37	< 10	< 1	0.03	< 10
953420	0.566	1.1	< 0.5	9350	2880	190	56	8	24	1.10	405	< 10	< 10	< 0.5	9	2.62	420	24	21.6	10	< 1	0.50	118
953421	0.007	< 0.2	< 0.5	27	1470	< 1	466	< 2	25	2.14	< 2	< 10	< 10	< 0.5	< 2	4.70	38	1520	4.60	< 10	< 1	0.02	< 10
953422	0.006	< 0.2	< 0.5	18	680	< 1	607	< 2	33	2.34	< 2	< 10	< 10	< 0.5	3	2.49	49	1970	5.39	< 10	2	0.06	< 10
953423	0.008	< 0.2	< 0.5	49	907	< 1	541	< 2	29	2.49	< 2	< 10	< 10	< 0.5	2	3.10	45	1940	5.10	< 10	< 1	0.02	< 10
953424	0.006	< 0.2	< 0.5	106	1040	< 1	699	< 2	28	2.31	< 2	< 10	< 10	< 0.5	2	4.10	44	1680	4.43	< 10	1	0.04	< 10
953425	0.006	< 0.2	< 0.5	34	707	< 1	580	< 2	26	2.28	< 2	< 10	< 10	< 0.5	3	2.86	44	1800	4.75	< 10	< 1	0.03	< 10
953426	0.043	< 0.2	< 0.5	52	895	< 1	511	2	23	1.89	< 2	< 10	< 10	< 0.5	2	4.11	45	1560	4.45	< 10	< 1	0.03	< 10
953427	0.008	< 0.2	< 0.5	12	773	< 1	554	< 2	29	2.58	< 2	< 10	15	< 0.5	2	2.81	44	1820	4.94	< 10	< 1	0.02	< 10
953428	0.009	< 0.2	< 0.5	83	494	< 1	619	< 2	35	3.02	< 2	< 10	21	< 0.5	3	1.41	51	2050	5.38	< 10	< 1	0.02	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
953396	5.30	0.053	0.021	0.02	9	12	623	0.01	< 20	< 1	< 2	< 10	83	< 10	3	2
953397	5.59	0.020	0.800	0.86	3	15	1180	0.03	< 20	< 1	< 2	< 10	126	< 10	33	3
953398	6.19	0.106	0.147	0.05	5	23	954	0.07	< 20	< 1	< 2	< 10	99	< 10	7	3
953399	6.26	0.110	0.252	< 0.01	7	22	958	0.07	< 20	< 1	< 2	< 10	109	< 10	10	2
953400	5.79	0.080	0.082	< 0.01	6	23	932	0.05	< 20	< 1	< 2	< 10	82	< 10	5	5
953401	6.21	0.023	0.323	0.27	6	23	813	0.04	< 20	< 1	< 2	< 10	175	< 10	17	2
953402	6.03	0.035	0.197	0.11	5	20	810	0.07	< 20	< 1	< 2	< 10	171	< 10	12	3
953403	5.54	0.040	0.175	0.10	4	19	675	0.16	< 20	< 1	< 2	< 10	179	< 10	10	3
953404	4.91	0.029	0.191	0.49	4	21	731	0.12	< 20	< 1	< 2	< 10	152	< 10	9	3
953405	6.61	0.019	0.064	0.26	9	22	523	0.10	< 20	< 1	< 2	< 10	146	< 10	4	4
953406	5.25	0.051	0.031	0.03	9	14	520	0.03	< 20	< 1	< 2	< 10	79	< 10	2	3
953407	5.90	0.046	0.154	0.18	8	18	460	0.06	< 20	< 1	< 2	< 10	108	< 10	6	4
953408	5.92	0.016	0.009	0.14	10	16	290	< 0.01	< 20	< 1	< 2	< 10	94	< 10	1	1
953409	6.43	0.026	0.009	0.25	11	15	298	0.01	< 20	< 1	< 2	< 10	95	< 10	1	2
953410	4.04	0.027	0.021	1.30	5	14	222	0.04	< 20	< 1	< 2	< 10	85	< 10	2	5
953411	6.15	0.021	0.017	0.67	9	13	244	< 0.01	< 20	< 1	< 2	< 10	86	< 10	2	3
953412	6.81	0.151	< 0.001	0.02	4	6	517	< 0.01	< 20	< 1	< 2	< 10	31	< 10	5	< 1
953413	7.10	0.228	0.006	0.08	14	13	128	< 0.01	< 20	< 1	< 2	< 10	99	< 10	2	2
953414	8.31	0.228	0.004	0.03	6	7	322	< 0.01	< 20	< 1	< 2	< 10	40	< 10	4	< 1
953415	0.88	0.014	0.006	0.01	< 2	< 1	60	< 0.01	< 20	< 1	< 2	< 10	3	< 10	2	< 1
953416	7.59	0.253	0.003	0.02	13	11	134	< 0.01	< 20	< 1	< 2	< 10	73	< 10	2	1
953417	6.72	0.073	0.005	0.08	14	11	122	< 0.01	< 20	< 1	< 2	< 10	93	< 10	2	1
953418	8.34	0.062	0.011	0.03	3	5	462	< 0.01	< 20	< 1	< 2	< 10	20	< 10	7	< 1
953419	7.15	0.188	0.003	0.01	18	16	104	< 0.01	< 20	< 1	< 2	< 10	119	< 10	3	2
953420	1.00	0.055	0.075	2.08	11	7	30	0.13	< 20	1	< 2	31	132	99	12	48
953421	7.34	0.118	0.009	0.02	11	11	191	< 0.01	< 20	< 1	< 2	< 10	65	< 10	4	1
953422	7.19	0.367	0.007	0.01	15	8	82	< 0.01	< 20	< 1	< 2	< 10	72	< 10	3	2
953423	6.87	0.106	0.007	< 0.01	13	8	89	< 0.01	< 20	< 1	< 2	< 10	66	< 10	4	1
953424	6.51	0.208	0.003	0.14	11	9	117	< 0.01	< 20	< 1	< 2	< 10	73	< 10	3	1
953425	5.71	0.114	0.003	0.16	12	10	99	< 0.01	< 20	< 1	< 2	< 10	76	< 10	3	1
953426	5.56	0.146	0.004	0.47	12	8	108	< 0.01	< 20	< 1	< 2	< 10	58	< 10	3	1
953427	6.61	0.107	0.004	0.10	14	10	102	< 0.01	< 20	< 1	< 2	< 10	69	< 10	3	1
953428	6.96	0.122	0.003	0.03	14	10	90	< 0.01	< 20	< 1	< 2	< 10	75	< 10	1	1

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas				357	407		208	15	37	5.33	6		78		6	0.09	26	468	13.2	20		0.10	11
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 45d (Aqua Regia) Meas				359	406		212	15	36	5.34	6		78		4	0.10	26	485	13.7	20		0.11	12
OREAS 45d (Aqua Regia) Cert				345	400		176	17	30.6	4.86	6.50		80		0.30	0.09	26.2	467	13.7	17.9		0.097	10.0
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2330	790	< 1	35	60	274	2.75	7		73	0.7	9	0.39	19	45	5.32	< 10		0.40	41
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2260	771	< 1	34	57	257	2.66	5		58	0.7	7	0.39	19	44	4.75	< 10		0.37	37
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 907 (Aqua Regia) Meas		1.0	< 0.5	5450	307	5	4	29	129	0.98	31		200	0.9	19	0.24	40	7	6.64	10		0.26	34
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 907 (Aqua Regia) Meas		1.3	< 0.5	6710	364	6	4	35	156	1.24	36		249	1.1	21	0.28	47	8	8.31	20		0.34	42
OREAS 907 (Aqua Regia) Cert		1.30	0.540	6370	330	5.64	4.74	34.1	139	0.945	37.0		225	0.870	22.3	0.280	43.7	8.59	8.18	14.7		0.286	36.1
OREAS 263 (Aqua Regia) Meas		0.2	< 0.5	93	530	< 1	75	35	139	1.74	32		182	1.3	< 2	1.09	34	55	3.80	< 10	< 1	0.31	
OREAS 263 (Aqua Regia) Cert		0.285	0.270	87.0	490	0.570	72.0	34.0	127	1.29	30.8		175	1.22	0.570	1.03	31.0	48.0	3.68	4.92	0.170	0.288	
OREAS 263 (Aqua Regia) Meas		0.2	< 0.5	91	523	< 1	75	35	137	1.81	31		191	1.4	< 2	1.07	33	57	3.82	< 10	< 1	0.34	
OREAS 263 (Aqua Regia) Cert		0.285	0.270	87.0	490	0.570	72.0	34.0	127	1.29	30.8		175	1.22	0.570	1.03	31.0	48.0	3.68	4.92	0.170	0.288	
OREAS 130 (Aqua Regia) Meas		6.2	28.6	233	1640	8	32	1300	> 10000	1.20	204				5	1.71	27	23	7.16	< 10	1	0.52	25
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
OREAS 130 (Aqua Regia) Meas		5.9	27.7	229	1620	8	31	1270	> 10000	1.18	200				4	1.68	26	23	6.76	< 10	< 1	0.50	23
OREAS 130 (Aqua Regia) Cert		6.27	28.8	226	1630	8.25	35.2	1300	16900	1.10	205				3.05	1.81	27.1	23.2	7.27	4.78	0.670	0.500	26.4
Oreas 623 (Aqua Regia) Meas		19.2	48.4	> 10000	528	9	18	2270	9250	1.65	75			< 0.5	23	0.98	206	21	12.2	10	< 1	0.17	18
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9
Oreas 623 (Aqua Regia) Meas		19.2	47.7	> 10000	519	9	16	2210	9180	1.63	73			< 0.5	25	0.96	201	17	12.0	10	1	0.16	17
Oreas 623 (Aqua Regia) Cert		20.4	52.0	17200	570	8.38	15.6	2520	10100	1.80	76.0			0.370	16.9	1.09	216	19.4	13.0	11.9	0.830	0.175	17.9

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	g/mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.005	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas E1336 (Fire Assay) Meas	0.508																						
Oreas E1336 (Fire Assay) Cert	0.510																						
OREAS 216b Meas	6.89																						
OREAS 216b Cert	6.66																						
OREAS 521 (Aqua Regia) Meas		0.8		5530	2500	137	62	8	22	1.23	292			< 0.5	5	2.85	310	29	19.3	10		0.47	115
OREAS 521 (Aqua Regia) Cert		0.8		5990	3000	133	68	9	24	1.44	333			0.5	6	3.66	374	33	20.0	10		0.53	147
OREAS 521 (Aqua Regia) Meas		1.2		5420	2450	129	58	7	21	1.21	285			< 0.5	8	2.89	306	28	18.5	10		0.45	110
OREAS 521 (Aqua Regia) Cert		0.82		5990	3000	133	68	9	24	1.44	333			0.5	6	3.66	374	33	20.0	10		0.53	147
Oreas 620 (Aqua Regia) Meas		42.3	176	1960	467	11	16	> 5000	> 10000	1.26	54		< 10	0.7	< 2	1.38	14	22	2.85	< 10	2	0.30	29
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		41.5	167	1880	456	10	14	> 5000	> 10000	1.24	51		< 10	0.7	< 2	1.34	14	17	2.67	< 10	2	0.29	28
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
Oreas 620 (Aqua Regia) Meas		40.8	163	1870	450	10	15	> 5000	> 10000	1.25	51		< 10	0.7	< 2	1.29	14	18	2.60	< 10	2	0.28	27
Oreas 620 (Aqua Regia) Cert		38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2	0.31	25
953405 Orig	0.005																						
953405 Dup	< 0.005																						
953407 Orig		< 0.2	< 0.5	68	973	< 1	346	6	63	2.38	< 2	< 10	288	0.6	< 2	4.09	37	1150	5.16	< 10	< 1	0.30	< 10
953407 Dup		< 0.2	< 0.5	74	976	< 1	342	6	63	2.38	< 2	< 10	142	0.6	< 2	4.08	37	1160	5.14	< 10	< 1	0.31	< 10
953415 Orig	0.006																						
953415 Dup	0.007																						
953425 Orig	0.007	< 0.2	< 0.5	37	714	< 1	583	2	26	2.29	< 2	< 10	< 10	< 0.5	3	2.87	44	1790	4.75	< 10	< 1	0.03	< 10
953425 Dup	0.005	< 0.2	< 0.5	32	699	< 1	577	< 2	27	2.27	< 2	< 10	< 10	< 0.5	3	2.84	43	1800	4.75	< 10	< 1	0.03	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank	< 0.005																						
Method Blank	0.005																						

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 45d (Aqua Regia) Meas	0.17	0.045	0.033	0.04		43	14		< 20			< 10	186		5	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 45d (Aqua Regia) Meas	0.17	0.046	0.033	0.04		43	14		< 20			< 10	190		5	
OREAS 45d (Aqua Regia) Cert	0.144	0.031	0.035	0.045		41.50	11.0		11.3			1.64	201		5.08	
OREAS 922 (AQUA REGIA) Meas	1.38	0.032	0.065	0.39	3	4	17		< 20		< 2	< 10	33	< 10	22	12
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 922 (AQUA REGIA) Meas	1.26	0.029	0.063	0.37	2	3	17		< 20		< 2	< 10	31	< 10	22	9
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 907 (Aqua Regia) Meas	0.19	0.098	0.020	0.05	4	2	12	0.02	< 20	< 1	< 2	< 10	5	< 10	7	18
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 907 (Aqua Regia) Meas	0.24	0.121	0.023	0.06	5	2	14	0.03	< 20	< 1	< 2	< 10	6	< 10	8	9
OREAS 907 (Aqua Regia) Cert	0.221	0.0860	0.0240	0.0660	2.28	2.16	11.7	0.0170	8.04	0.230	0.120	2.15	5.12	0.980	6.52	43.7
OREAS 263 (Aqua Regia) Meas	0.61	0.106	0.043	0.12	8	4	20		< 20	< 1	< 2	< 10	25		14	
OREAS 263 (Aqua Regia) Cert	0.593	0.0790	0.0410	0.126	7.37	3.52	16.9		10.6	0.210	0.530	1.28	22.8		12.0	
OREAS 263 (Aqua Regia) Meas	0.62	0.105	0.043	0.12	8	4	20		< 20	< 1	< 2	< 10	27		14	
OREAS 263 (Aqua Regia) Cert	0.593	0.0790	0.0410	0.126	7.37	3.52	16.9		10.6	0.210	0.530	1.28	22.8		12.0	
OREAS 130 (Aqua Regia) Meas	0.93		0.087	6.12	6	3	21	0.03	< 20	< 1	< 2	< 10	36	10	14	33
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
OREAS 130 (Aqua Regia) Meas	0.89		0.084	6.02	6	3	20	0.03	< 20	< 1	< 2	< 10	35	11	14	34
OREAS 130 (Aqua Regia) Cert	0.892		0.0860	6.02	4.69	3.42	23.2	0.0270	10.3	0.170	5.92	8.36	33.1	1.40	13.0	19.0
Oreas 623 (Aqua Regia) Meas	1.05	0.063	0.041	8.65	21	4	13		< 20	< 1	< 2	< 10	17	< 10	8	73
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0
Oreas 623 (Aqua Regia) Meas	1.03	0.062	0.041	8.74	21	4	13		< 20	< 1	< 2	< 10	17	< 10	8	72
Oreas 623 (Aqua Regia) Cert	1.11	0.0680	0.0400	8.75	20.2	4.63	14.2		4.72	0.570	0.260	1.43	15.8	2.62	7.43	50.0

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas E1336 (Fire Assay) Meas																
Oreas E1336 (Fire Assay) Cert																
OREAS 216b Meas																
OREAS 216b Cert																
OREAS 521 (Aqua Regia) Meas	1.08	0.046	0.072	1.56	10	9	30	0.14	< 20	< 1	< 2	22	178	68	13	29
OREAS 521 (Aqua Regia) Cert	1.10	0.045	0.081	1.85	4	10	54	0.14	8	0.7	0.1	28	200	71	15	38
OREAS 521 (Aqua Regia) Meas	1.03	0.046	0.071	1.49	9	8	30	0.14	< 20	2	< 2	20	173	64	13	29
OREAS 521 (Aqua Regia) Cert	1.10	0.045	0.081	1.85	4	10	54	0.14	8	0.7	0.1	28	200	71	15	38
Oreas 620 (Aqua Regia) Meas	0.29	0.119	0.029	2.70	60		20		< 20		< 2	< 10	9	< 10	9	13
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
Oreas 620 (Aqua Regia) Meas	0.27	0.117	0.028	2.62	59		20		< 20		< 2	< 10	8	39	9	16
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
Oreas 620 (Aqua Regia) Meas	0.26	0.115	0.028	2.53	58		19		< 20		< 2	< 10	8	51	9	21
Oreas 620 (Aqua Regia) Cert	0.27	0.117	0.031	2.47	62		20		7		0.5	2.2	7	0.79	7	57
953405 Orig																
953405 Dup																
953407 Orig	5.87	0.058	0.155	0.18	9	18	468	0.06	< 20	< 1	< 2	< 10	107	< 10	6	5
953407 Dup	5.93	0.034	0.152	0.18	8	18	452	0.06	< 20	< 1	< 2	< 10	110	< 10	6	3
953415 Orig																
953415 Dup																
953425 Orig	5.69	0.116	0.003	0.16	12	10	97	< 0.01	< 20	< 1	< 2	< 10	76	< 10	3	1
953425 Dup	5.72	0.113	0.003	0.16	11	10	101	< 0.01	< 20	< 1	< 2	< 10	76	< 10	2	1
Method Blank	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank																
Method Blank																

VA22129828 - Finalized
CLIENT : "LASFIR - First Geolas Consulting"
# of SAMPLES : 16
DATE RECEIVED : 2022-05-17 DATE FINALIZED : 2022-06-07
PROJECT : "Gowan"
CERTIFICATE COMMENTS : ""
PO NUMBER : " "

	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	OA-GRA05x
SAMPLE	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O	P2O5	SO3	SiO2	SrO	TiO2	Total	LOI 1000
DESCRIPTI	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
26701wr	16.16	0.08	2.17	<0.01	1.55	0.29	1.06	0.04	9.33	0.04	0.17	66.53	0.04	0.18	100.6	2.94
26702wr	17.14	0.12	1.23	<0.01	1.97	0.16	0.97	0.02	>10.0	0.07	0.06	66.29	0.03	0.12	100.45	1.77
26703wr	16.37	0.04	0.98	<0.01	2.19	0.16	1.06	0.02	9.8	0.04	0.04	67.51	0.04	0.15	99.74	1.29
26704wr	15.75	0.14	1.26	<0.01	3.01	0.08	3.02	0.02	9.59	0.01	0.14	65.2	0.02	0.13	99.88	1.45
26705wr	13.12	0.01	5.88	0.08	13.26	0.06	10	0.19	4.79	0.06	0.38	42.62	0.05	0.86	100.7	9.17
26706wr	9.23	0.02	5.81	0.1	10.5	0.24	16.95	0.09	2.46	0.89	0.05	40.88	0.05	1.1	99.25	10.71
26707wr	5.66	0.03	2.04	0.32	10.71	<0.01	26.2	0.13	0.06	0.02	0.03	42.66	0.01	0.3	98.95	10.5
26708wr	15.39	0.16	1.64	<0.01	1.8	1.73	0.82	0.03	6.24	0.05	0.01	69.87	0.01	0.13	100	2.09
26709wr	16.58	0.02	1.25	<0.01	2.37	0.17	1.32	0.02	9.88	0.05	0.01	66.54	0.03	0.16	99.75	1.3
26710wr	15.98	0.09	1.5	<0.01	1.06	1.02	0.7	0.04	7.7	0.04	0.04	69.78	0.01	0.1	99.66	1.58
26711wr	10.2	0.05	5.29	0.07	11.48	0.42	8.2	0.11	5.73	0.02	0.01	49.43	0.1	0.55	100.25	8.43
26712wr	17.82	0.02	1.21	<0.01	1.39	0.1	1.02	0.02	>10.0	0.03	<0.01	65.66	0.02	0.12	100.05	1.75
26713wr	16.23	0.06	1.26	<0.01	1.16	1.51	0.98	0.02	7.19	0.05	0.02	69.42	0.01	0.11	100.35	2.3
26714wr	8.43	0.03	6.73	0.23	10.52	0.08	14.45	0.16	1.82	0.04	0.13	41.25	0.03	0.55	99.71	15.1
26715wr	16.36	0.01	0.76	0.01	3.02	0.08	3.09	0.03	9.89	0.04	0.44	64.45	0.01	0.12	99.9	1.54
26716wr	5.77	0.09	4.59	0.3	9.78	0.14	24.8	0.13	0.78	0.02	0.51	40.6	0.02	0.28	99.73	11.69

# of SAMPLES : 16
DATE RECEIVED : 2022-05-17 DATE FINALIZED : 2022-06-07
PROJECT : "Gowan"
CERTIFICATE COMMENTS : ""
PO NUMBER : " "

	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	ME-XRF26	OA-GRA05:
SAMPLE	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O	P2O5	SO3	SiO2	SrO	TiO2	Total	LOI 1000
DESCRIPTI	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
26701wr	16.16	0.08	2.17	<0.01	1.55	0.29	1.06	0.04	9.33	0.04	0.17	66.53	0.04	0.18	100.6	2.94
26702wr	17.14	0.12	1.23	<0.01	1.97	0.16	0.97	0.02	>10.0	0.07	0.06	66.29	0.03	0.12	100.45	1.77
26703wr	16.37	0.04	0.98	<0.01	2.19	0.16	1.06	0.02	9.8	0.04	0.04	67.51	0.04	0.15	99.74	1.29
26704wr	15.75	0.14	1.26	<0.01	3.01	0.08	3.02	0.02	9.59	0.01	0.14	65.2	0.02	0.13	99.88	1.45
26705wr	13.12	0.01	5.88	0.08	13.26	0.06	10	0.19	4.79	0.06	0.38	42.62	0.05	0.86	100.7	9.17
26706wr	9.23	0.02	5.81	0.1	10.5	0.24	16.95	0.09	2.46	0.89	0.05	40.88	0.05	1.1	99.25	10.71
26707wr	5.66	0.03	2.04	0.32	10.71	<0.01	26.2	0.13	0.06	0.02	0.03	42.66	0.01	0.3	98.95	10.5
26708wr	15.39	0.16	1.64	<0.01	1.8	1.73	0.82	0.03	6.24	0.05	0.01	69.87	0.01	0.13	100	2.09
26709wr	16.58	0.02	1.25	<0.01	2.37	0.17	1.32	0.02	9.88	0.05	0.01	66.54	0.03	0.16	99.75	1.3
26710wr	15.98	0.09	1.5	<0.01	1.06	1.02	0.7	0.04	7.7	0.04	0.04	69.78	0.01	0.1	99.66	1.58
26711wr	10.2	0.05	5.29	0.07	11.48	0.42	8.2	0.11	5.73	0.02	0.01	49.43	0.1	0.55	100.25	8.43
26712wr	17.82	0.02	1.21	<0.01	1.39	0.1	1.02	0.02	>10.0	0.03	<0.01	65.66	0.02	0.12	100.05	1.75
26713wr	16.23	0.06	1.26	<0.01	1.16	1.51	0.98	0.02	7.19	0.05	0.02	69.42	0.01	0.11	100.35	2.3
26714wr	8.43	0.03	6.73	0.23	10.52	0.08	14.45	0.16	1.82	0.04	0.13	41.25	0.03	0.55	99.71	15.1
26715wr	16.36	0.01	0.76	0.01	3.02	0.08	3.09	0.03	9.89	0.04	0.44	64.45	0.01	0.12	99.9	1.54
26716wr	5.77	0.09	4.59	0.3	9.78	0.14	24.8	0.13	0.78	0.02	0.51	40.6	0.02	0.28	99.73	11.69

APPENDIX 4
SPECIFICATIONS FOR OREAS STANDARDS 221 AND 522

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CERTIFICATE OF ANALYSIS FOR

Gold Ore (Andy Well Gold Mine, Western Australia)

CERTIFIED REFERENCE MATERIAL

OREAS 221

Table 1. Certified Values, SDs, 95% Confidence and Tolerance Limits for OREAS 221.

Constituent	Certified Value	SD	95% Confidence Limits		95% Tolerance Limits	
			Low	High	Low	High
Pb Fire Assay						
Au, Gold (ppm)	1.062	0.036	1.051	1.074	1.057*	1.067*
Aqua Regia Digestion (sample weights 10-30g)						
Au, Gold (ppm)	1.042	0.039	1.026	1.058	1.037*	1.047*
Gas / Liquid Pychometry						
SG, Specific Gravity (Unity)	2.98	0.053	2.95	3.00	2.96	3.00

SI unit equivalents: ppm, parts per million ≡ mg/kg ≡ µg/g ≡ 0.0001 wt.% ≡ 1000 ppb, parts per billion.

*Gold Tolerance Limits for typical 30g fire assay and 25g aqua regia digestion methods are determined from 20 x 85mg INAA results and the Sampling Constant (Ingamells & Switzer, 1973).

Note 1: intervals may appear asymmetric due to rounding.

Note 2: the number of decimal places quoted does not imply accuracy of the certified value to this level but are given to minimise rounding errors when calculating 2SD and 3SD windows.

INTRODUCTION

OREAS reference materials are intended to provide a low cost method of evaluating and improving the quality of analysis of geological samples. To the geologist they provide a means of implementing quality control in analytical data sets generated in exploration from the grass roots level through to prospect evaluation, and in grade control at mining operations. To the analyst they provide an effective means of calibrating analytical equipment, assessing new techniques and routinely monitoring in-house procedures.

SOURCE MATERIALS

Certified Reference Material (CRM) OREAS 221 was prepared from a blend of Archean greenstone-hosted Wilber Lode primary ore from the Andy Well Gold Mine and barren Cambrian greenstone sourced from a quarry north of Melbourne, Australia. The Wilber Lode is a shear-hosted, narrow vein, quartz lode-style gold deposit situated within the Meekatharra-Wydgee greenstone belt in the Archean Yilgarn Craton of Western Australia. The common primary mineral assemblage, as stated by Mason and Harris (2011, 2012, cited in Hingston et al, 2014), is quartz, calcite, chlorite, fuchsite, pyrite, galena, sphalerite, chalcopyrite and gold. The host rock consists of a complex sequence of Archean meta-basalt and meta-porphyritic rocks derived from a primary mineralogy of albite, actinolite, chlorite, sericite, biotite, calcite, zoisite, muscovite, quartz and titanate. The Andy Well deposit is located approximately 45km north of Meekatharra in the Murchison region of Western Australia.

The approximate major and trace element composition of OREAS 221 is provided in Table 2. The non-certified values contained in this table are the means of duplicate assays from one laboratory.

COMMINUTION AND HOMOGENISATION PROCEDURES

The material constituting OREAS 221 was prepared in the following manner:

- Drying to constant mass at 105°C;
- Crushing and milling of the barren materials to 98% minus 75 microns;
- Crushing and milling of the ore material to 100% minus 30 microns;
- Blending in appropriate proportions to achieve the desired grade;
- Packaging in 60g units sealed in laminated foil pouches and 1kg units in plastic jars.

ANALYTICAL PROGRAM

Thirty commercial analytical laboratories participated in the program to certify gold (as reported in Table 1) by the following methods:

- Gold via 25-50g fire assay with AAS (24 labs) or ICP-OES (4 labs) finish;
- Instrumental neutron activation analysis for Au on 20 x 1g subsamples to confirm homogeneity (1 laboratory).
- Gold via 15-50g aqua regia digestion with ICP-MS (13 labs), AAS (7 labs) or ICP-OES (1 lab) finish. It is important to note that in the analytical industry there is no standardisation of the aqua regia digestion process. Aqua regia is a partial empirical digest and differences in recoveries for various analytes are commonplace. These are caused by variations in the digest conditions which can include the ratio of nitric to hydrochloric acids, acid strength, temperatures, leach times and secondary digestions.
- Specific gravity by gas (12 labs) or liquid (4 labs) pycnometry.

For the round robin program twenty 1.5kg test units were taken at predetermined intervals during the bagging stage, immediately following final blending, and are considered representative of the entire batch. The six samples received by each laboratory were obtained by taking two 110g scoop splits from each of three separate 1kg test units. This format enabled nested ANOVA treatment of the results to evaluate homogeneity, i.e. to ascertain whether between-unit variance is greater than within-unit variance.

Table 1 presents the certified values together with their associated 1SD's, 95% confidence and tolerance limits and Table 2 shows 66 indicative values for major and trace element composition. Tabulated results of all elements (including Au INAA analyses) together with uncorrected means, medians, standard deviations, relative standard deviations and percent deviation of lab means from the corrected mean of means (PDM[3]) are presented in the detailed certification data for this CRM (**OREAS 221 DataPack - 1.1.181025_100056.xlsx**).

Results are also presented in scatter plots for gold by fire assay and aqua regia digestion (Figures 1 and 2, respectively) together with ±3SD (magenta) and ±5% (yellow) control lines and certified value (green line). Accepted individual results are coloured blue and individual and dataset outliers are identified in red and violet, respectively.

Table 2. Indicative Values for OREAS 221.

Constituent	Unit	Value	Constituent	Unit	Value	Constituent	Unit	Value
Pb Fire Assay								
Pd	ppb	*9.17*	Pt	ppb	*9.17*			
Borate Fusion XRF								
Al_2O_3	wt.%	*13.30*	K_2O	wt.%	*0.285*	P_2O_5	wt.%	*0.101*
CaO	wt.%	*9.80*	MgO	wt.%	*7.13*	S	wt.%	*0.197*
Cl	ppm	*10.0*	MnO	wt.%	*0.180*	SiO_2	wt.%	*50.15*
Fe_2O_3	wt.%	*11.70*	Na_2O	wt.%	*2.83*	TiO_2	wt.%	*1.08*
Thermogravimetry								
LOI^{1000}	wt.%	*3.36*						
Laser Ablation ICP-MS								
Ag	ppm	*0.250*	Hf	ppm	*1.86*	Sm	ppm	*2.34*
As	ppm	*9.10*	Ho	ppm	*0.82*	Sn	ppm	*1.50*
Ba	ppm	*150*	In	ppm	*0.075*	Sr	ppm	*111*
Be	ppm	*0.50*	La	ppm	*4.12*	Ta	ppm	*0.19*
Bi	ppm	*0.10*	Lu	ppm	*0.30*	Tb	ppm	*0.58*
Cd	ppm	*0.075*	Mn	wt.%	*0.146*	Te	ppm	*0.30*
Ce	ppm	*9.91*	Mo	ppm	*1.50*	Th	ppm	*0.43*
Co	ppm	*47.9*	Nb	ppm	*3.43*	Ti	wt.%	*0.636*
Cr	ppm	*254*	Nd	ppm	*8.12*	Tl	ppm	*< 0.2*
Cs	ppm	*0.19*	Ni	ppm	*111*	Tm	ppm	*0.31*
Cu	ppm	*152*	Pb	ppm	*5.50*	U	ppm	*0.025*
Dy	ppm	*3.53*	Pr	ppm	*1.55*	V	ppm	*306*
Er	ppm	*2.51*	Rb	ppm	*5.35*	W	ppm	*1.90*
Eu	ppm	*0.89*	Re	ppm	*0.008*	Y	ppm	*22.5*
Ga	ppm	*14.8*	Sb	ppm	*0.50*	Yb	ppm	*2.47*
Gd	ppm	*2.93*	Sc	ppm	*43.5*	Zn	ppm	*88*
Ge	ppm	*1.63*	Se	ppm	*< 5*	Zr	ppm	*63*

SI unit equivalents: ppm, parts per million ≡ mg/kg ≡ µg/g ≡ 0.0001 wt.% ≡ 1000 ppb, parts per billion.
Note: the number of significant figures reported is not a reflection of the level of certainty of stated values. They are instead an artefact of ORE's in-house CRM-specific LIMS.

STATISTICAL ANALYSIS

Certified Values, Confidence Limits, Standard Deviations and Tolerance Limits (Table 1) have been determined for each analyte following removal of individual, laboratory dataset (batch) and 3SD outliers (single iteration).

For individual outliers within a laboratory batch the z-score test is used in combination with a second method that determines the per cent deviation of the individual value from the batch median. Outliers in general are selected on the basis of z-scores > 2.5 and with per cent deviations (i) > 3 and (ii) more than three times the average absolute per cent deviation for the batch. In certain instances statistician's prerogative has been employed in discriminating outliers.

Each laboratory data set mean is tested for outlying status based on z-score discrimination and rejected if > 2.5. After individual and laboratory data set (batch) outliers have been eliminated a non-iterative 3 standard deviation filter is applied, with those values lying outside this window also relegated to outlying status.

Certified Values are the means of accepted laboratory means after outlier filtering. The INAA data (see Table 3) is omitted from determination of the certified value for Au and is used solely for the calculation of Tolerance Limits and homogeneity evaluation of OREAS 221.

95% Confidence Limits are inversely proportional to the number of participating laboratories and inter-laboratory agreement. It is a measure of the reliability of the certified value. A 95% confidence interval indicates a 95% probability that the true value of the analyte under consideration lies between the upper and lower limits. *95% Confidence Limits should not be used as control limits for laboratory performance.*

Indicative (uncertified) values (Table 2) are provided for the major and trace elements determined by borate fusion XRF (Al_2O_3 to TiO_2), laser ablation with ICP-MS (Ag to Zr), LOI at 1000°C and C + S by infrared combustion furnace and are the means of duplicate assays from Bureau Veritas, Perth. Additional indicative values by other analytical methods are present where the number of laboratories reporting a particular analyte is insufficient (< 5) to support certification or where inter-laboratory consensus is poor.

Standard Deviation values (1SDs) are reported in Table 1 and provide an indication of a level of performance that might reasonably be expected from a laboratory being monitored by this CRM in a QA/QC program. The SD's take into account errors attributable to measurement uncertainty and CRM variability. For an effective CRM the contribution of the latter should be negligible in comparison to measurement errors. The SD values thus include all sources of measurement uncertainty: between-lab variance, within-run variance (precision errors) and CRM variability. OREAS prepared reference materials have a level of homogeneity such that the observed variance from repeated analysis has its origin almost exclusively in the analytical process rather than the reference material itself.

The SD for each analyte's certified value is calculated from the same filtered data set used to determine the certified value, i.e. after removal of any individual, lab dataset (batch) and 3SD outliers (single iteration). These outliers can only be removed after the absolute homogeneity of the CRM has been independently established, i.e. the outliers must be confidently deemed to be analytical rather than arising from inhomogeneity of the CRM. **The standard deviation is then calculated for each analyte from the pooled accepted analyses generated from the certification program.**

In the application of SD's in monitoring performance it is important to note that not all laboratories function at the same level of proficiency and that different methods in use at a particular laboratory have differing levels of precision. Each laboratory has its own inherent SD (for a specific concentration level and analyte-method pair) based on the analytical process and this SD is not directly related to the round robin program.

The majority of data generated in the round robin program was produced by a selection of world class laboratories. The SD's thus generated are more constrained than those that would be produced across a randomly selected group of laboratories. To produce more generally achievable SD's the 'pooled' SD's provided in this report include inter-lab bias. This 'one size fits all' approach may require revision at the discretion of the QC manager concerned following careful scrutiny of QC control charts.

Homogeneity Evaluation

The homogeneity of gold has been determined by INAA using the reduced analytical subsample method which utilises the known relationship between standard deviation and analytical subsample weight (Ingamells and Switzer, 1973). In this approach the sample aliquot is substantially reduced to a point where most of the variability in replicate assays should be due to inhomogeneity of the reference material and measurement error becomes negligible.

Table 3. Neutron Activation Analysis of Au (in ppm) on 20 x 85mg subsamples showing the equivalent results scaled to a 30g sample mass typical of fire assay determination.

Replicate No.	Au 85mg actual	Au 30g equivalent*
1	1.062	1.093
2	1.074	1.094
3	1.081	1.094
4	1.104	1.096
5	1.121	1.096
6	1.039	1.092
7	1.074	1.094
8	1.107	1.096
9	1.095	1.095
10	1.134	1.097
11	1.088	1.095
12	1.098	1.095
13	1.113	1.096
14	1.057	1.093
15	1.116	1.096
16	1.070	1.094
17	1.150	1.098
18	1.129	1.097
19	1.072	1.094
20	1.119	1.096
Mean	1.095	1.095
Median	1.096	1.096
Std Dev.	0.029	0.002
Rel Std Dev.	2.64%	0.140%

*Results calculated for a 30g equivalent sample mass using the formula: $x^{30g\ Eq} = \frac{(x^{INAA} - \overline{X}) \times RSD@30g}{RSD@85mg} + \overline{X}$

where $x^{30g\ Eq}$ = equivalent result calculated for a 30g sample mass
(x^{INAA}) = raw INAA result at 85mg
$\overline{X}$ = mean of 85mg INAA results

Table 3 above shows the INAA data determined on 20 x 85mg subsamples of OREAS 221. A subsample weight of 85 milligrams was employed and the 1RSD of 0.14% calculated for a 30g fire assay or aqua regia sample (2.64% at 85mg weights) confirms the high level of gold homogeneity in OREAS 221.

Please note that these RSD's and tolerance limits pertain to the homogeneity of the CRM only and should not be used as control limits for laboratory performance.

The gold homogeneity of OREAS 221 has also been evaluated in a **nested ANOVA** of the round robin program. Each of the thirty round robin laboratories received six samples per

CRM and these samples were made up of paired samples from three different, non-adjacent sampling intervals. The purpose of the ANOVA evaluation is to test that no statistically significant difference exists in the variance between-units to that of the variance within-units. This allows an assessment of homogeneity across the entire prepared batch of OREAS 221. The test was performed using the following parameters:

- Gold fire assay – 180 samples (30 laboratories each providing analyses on 3 pairs of samples);
- Gold aqua regia digestion – 120 samples (20 laboratories each providing analyses on 3 pairs of samples);
- Null Hypothesis, H_0: Between-unit variance is no greater than within-unit variance (reject H_0 if p-value < 0.05);
- Alternative Hypothesis, H_1: Between-unit variance is greater than within-unit variance.

P-values are a measure of probability where values less than 0.05 indicate a greater than 95% probability that the observed differences in within-unit and between-unit variances are real. The dataset was filtered for both individual and laboratory data set (batch) outliers prior to the calculation of the *p*-value. This process derived *p*-values of 0.47 for Au by fire assay and 0.82 for Au by aqua regia digestion. Both p-values are insignificant and the Null Hypothesis is retained.

It is important to note that ANOVA is not an absolute measure of homogeneity. Rather, it establishes whether or not the analytes are distributed in a similar manner throughout the packaging run of OREAS 221 and whether the variance between two subsamples from the same unit is statistically distinguishable to the variance from two subsamples taken from any two separate units. A reference material therefore, can possess poor absolute homogeneity yet still pass a relative homogeneity test if the within-unit heterogeneity is large and similar across all units.

Based on the statistical analysis of the results of the inter-laboratory certification program it can be concluded that OREAS 221 is fit-for-purpose as a certified reference material (see 'Intended Use' below).

Table 4 shows **Performance Gates** calculated for two and three standard deviations. As a guide these intervals may be regarded as warning or rejection for multiple 2SD outliers, or rejection for individual 3SD outliers in QC monitoring, although their precise application should be at the discretion of the QC manager concerned. A second method utilises a 5% window calculated directly from the certified value.

Standard deviation is also shown in relative percent for one, two and three relative standard deviations (1RSD, 2RSD and 3RSD) to facilitate an appreciation of the magnitude of these numbers and a comparison with the 5% window. Caution should be exercised when concentration levels approach lower limits of detection of the analytical methods employed as performance gates calculated from standard deviations tend to be excessively wide whereas those determined by the 5% method are too narrow. One approach used at commercial laboratories is to set the acceptance criteria at twice the detection level (DL) ± 10%.

i.e. Certified Value ± 10% ± 2DL (adapted from Govett, 1983)

Table 4. Pooled-Lab Performance Gates for OREAS 221.

Constituent	Certified Value	Absolute Standard Deviations					Relative Standard Deviations			±5% window	
		1SD	2SD Low	2SD High	3SD Low	3SD High	1RSD	2RSD	3RSD	Low	High
Pb Fire Assay											
Au, ppm	1.062	0.036	0.989	1.135	0.953	1.171	3.43%	6.86%	10.28%	1.009	1.115
Aqua Regia Digestion											
Au, ppm	1.042	0.039	0.963	1.121	0.924	1.160	3.78%	7.55%	11.33%	0.990	1.094
Gas / Liquid Pycnometry											
SG, Unity	2.98	0.053	2.87	3.08	2.82	3.14	1.77%	3.53%	5.30%	2.83	3.13

SI unit equivalents: ppm, parts per million ≡ mg/kg ≡ µg/g ≡ 0.0001 wt.% ≡ 1000 ppb, parts per billion.

Note 1: Intervals may appear asymmetric due to rounding.

Note 2: the number of decimal places quoted does not imply accuracy of the certified value to this level but are given to minimise rounding errors when calculating 2SD and 3SD windows.

PARTICIPATING LABORATORIES

1. Actlabs, Ancaster, Ontario, Canada
2. ALS, Brisbane, QLD, Australia
3. ALS, Lima, Peru
4. ALS, Loughrea, Galway, Ireland
5. ALS, Perth, WA, Australia
6. ALS, Vancouver, BC, Canada
7. Bureau Veritas, Abidjan, Cote D'ivoire
8. Bureau Veritas Commodities Canada Ltd, Vancouver, BC, Canada
9. Bureau Veritas Geoanalytical, Adelaide, SA, Australia
10. Bureau Veritas Geoanalytical, Perth, WA, Australia
11. Inspectorate (BV), Lima, Peru
12. Intertek Genalysis, Adelaide, SA, Australia
13. Intertek Genalysis, Perth, WA, Australia
14. Intertek Testing Services, Cupang, Muntinlupa, Philippines
15. MinAnalytical Services, Perth, WA, Australia
16. Nagrom, Perth, WA, Australia
17. Newcrest Services Laboratory (NSL), Orange, NSW, Australia
18. PT Geoservices Ltd, Cikarang, Jakarta Raya, Indonesia
19. PT Intertek Utama Services, Jakarta Timur, DKI Jakarta, Indonesia
20. SGS, Randfontein, Gauteng, South Africa
21. SGS Australia Mineral Services, Kalgoorlie, WA, Australia
22. SGS Australia Mineral Services, Perth, WA, Australia
23. SGS del Peru, Lima, Peru
24. SGS Lakefield Research Ltd, Lakefield, Ontario, Canada
25. SGS Mineral Services, Townsville, QLD, Australia
26. Shiva Analyticals Ltd, Bangalore North, Karnataka, India
27. Sucofindo Mineral Lab, Cibitung, West Java, Indonesia
28. Sucofindo Mineral Lab, Timika, Papua, Indonesia

Please note: The above numbered alphabetical list of participating laboratories <u>does not</u> reflect the Lab ID numbering on the scatter plots below.

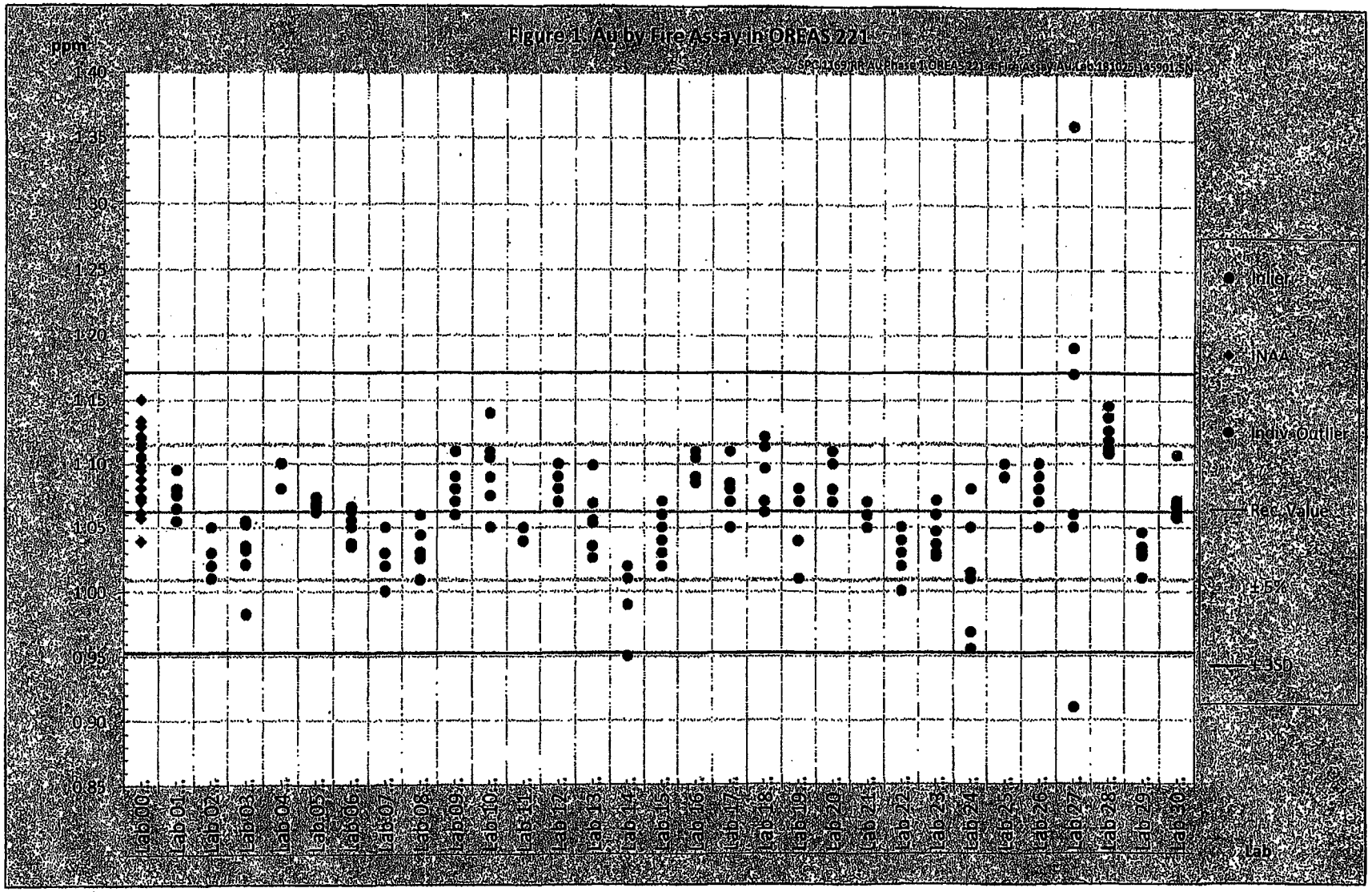
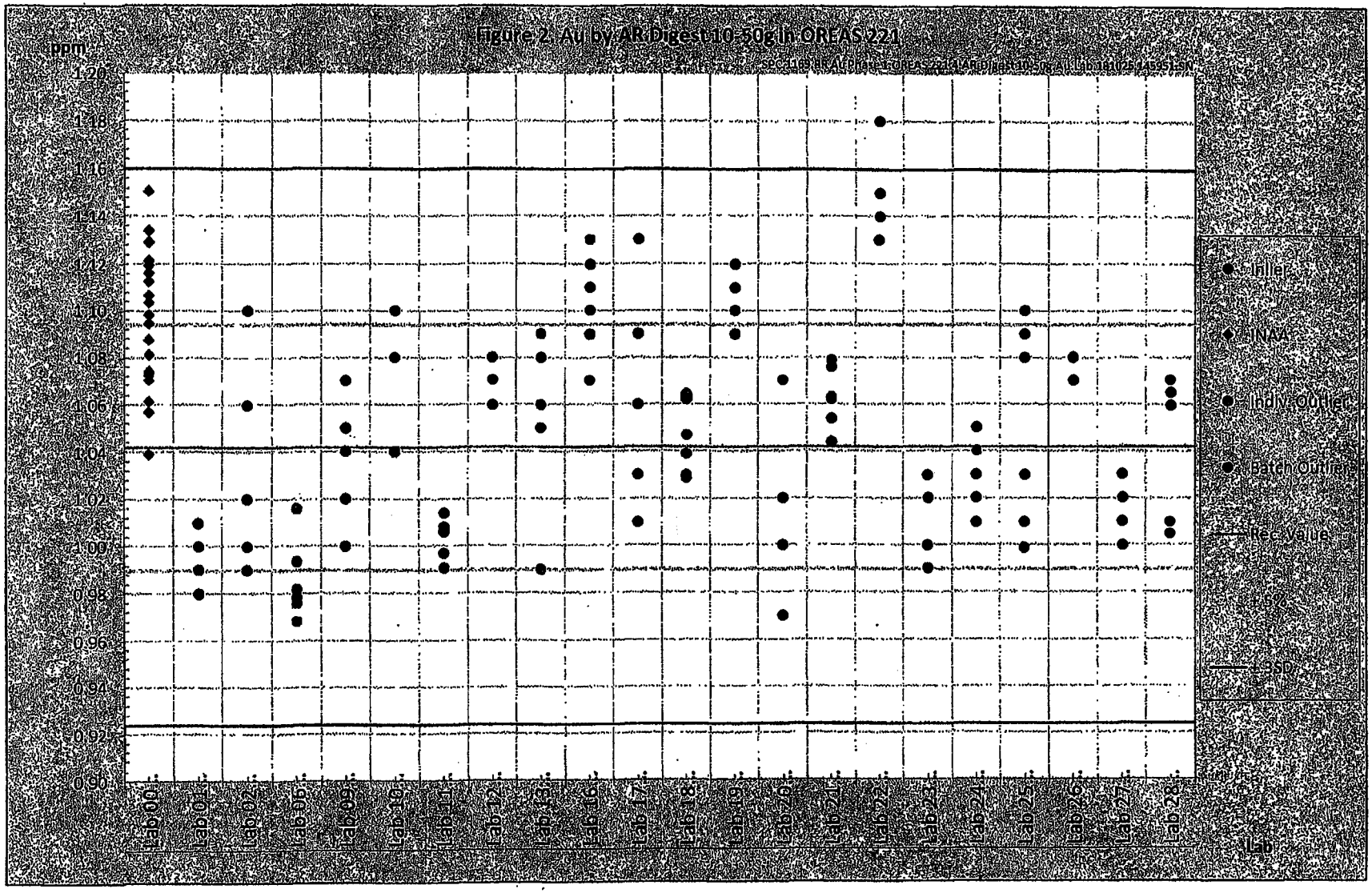


Figure 1: Au by Fire Assay in OREAS 221
ppm
1.40
1.35
1.30
1.25
1.20
1.15
1.10
1.05
1.00
0.95
0.90
0.85
Inlier
NAA
Indiv.Outlier
Rec. Value
±5%
±3sb
Lab

Figure 2: Au by AR Digest 10-50g in OREAS 221



PREPARER AND SUPPLIER

Certified reference material OREAS 221 is prepared, certified and supplied by:

ORE RESEARCH & EXPLORATION

ORE Research & Exploration Pty Ltd
37A Hosie Street
Bayswater North VIC 3153
AUSTRALIA

Tel: +613-9729 0333
Fax: +613-9729 8338
Web: www.ore.com.au
Email: info@ore.com.au

It is available in unit sizes of 60g (single-use laminated foil pouches) and 1kg (plastic jars).

METROLOGICAL TRACEABILITY

The analytical samples were selected in a manner to represent the entire batch of prepared CRM. This 'representivity' was maintained in each submitted laboratory sample batch and ensures the user that the data is traceable from sample selection through to the analytical results that underlie the consensus values. Each analytical data set has been validated by its assayer through the inclusion of internal reference materials and QC checks during analysis.

The laboratories were chosen on the basis of their competence (from past performance in inter-laboratory programs undertaken by ORE Pty Ltd) for a particular analytical method, analyte or analyte suite, and sample matrix. Most of these laboratories have and maintain ISO 17025 accreditation. The certified values presented in this report are calculated from the means of accepted data following robust statistical treatment as detailed in this report.

Guide ISO/TR 16476:2016, section 5.3.1 describes metrological traceability in reference materials as it pertains to the transformation of the measurand. In this section it states, *"Although the determination of the property value itself can be made traceable to appropriate units through, for example, calibration of the measurement equipment used, steps like the transformation of the sample from one physical (chemical) state to another cannot. Such transformations may only be compared with a reference (when available), or among themselves. For some transformations, reference methods have been defined and may be used in certification projects to evaluate the uncertainty associated with such a transformation. In other cases,* ***only a comparison among different laboratories using the same method is possible. In this case, certification takes place on the basis of agreement among independent measurement results*** *(see ISO Guide 35:2006, Clause 10)."*

COMMUTABILITY

The measurements of the results that underlie the certified values contained in this report were undertaken by methods involving pre-treatment (digestion/fusion) of the sample. This served to reduce the sample to a simple and well understood form permitting calibration using simple solutions of the CRM. Due to these methods being well understood and highly effective, commutability is not an issue for this CRM. All OREAS CRMs are sourced from natural ore minerals meaning they will display similar behaviour as routine 'field' samples in the relevant measurement process. Care should be taken to ensure 'matrix matching' as close as practically achievable. The matrix and mineralisation style of the CRM is described in the 'Source Material' section and users should select appropriate CRMs matching these attributes to their field samples.

INTENDED USE

OREAS 221 is intended to cover all activities needed to produce a measurement result. This includes extraction, possible separation steps and the actual measurement process (the signal producing step). OREAS 221 may be used to calibrate the entire procedure by producing a pure substance CRM transformed into a calibration solution.

OREAS 221 is intended for the following uses:

- For the monitoring of laboratory performance in the analysis of gold by fire assay, gold by aqua regia digestion and specific gravity by pycnometry in geological samples;
- For the verification of analytical methods (gold fire assay, gold aqua regia digestion and specific gravity by pycnometry);
- For the calibration of instruments used in the determination of gold or specific gravity.

STABILITY AND STORAGE INSTRUCTIONS

OREAS 221 has been prepared from primary gold ore diluted with barren greenstone. It is low in reactive sulphide (~0.20 wt.%) and in its unopened state and under normal conditions of storage has a shelf life beyond ten years. Its stability will be monitored at regular intervals and purchasers notified if any changes are observed.

INSTRUCTIONS FOR CORRECT USE

The certified values for OREAS 221 refer to the concentration levels in its packaged state. There is no need for drying prior to weighing and analysis.

HANDLING INSTRUCTIONS

Fine powders pose a risk to eyes and lungs and therefore standard precautions such as the use of safety glasses and dust masks are advised.

LEGAL NOTICE

Ore Research & Exploration Pty Ltd has prepared and statistically evaluated the property values of this reference material to the best of its ability. The Purchaser by receipt hereof releases and indemnifies Ore Research & Exploration Pty Ltd from and against all liability and costs arising from the use of this material and information.

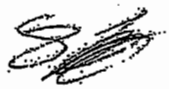
DOCUMENT HISTORY

Revision No.	Date	Changes applied
1	25th Oct, 2018	Replaced original INAA data with new improved INAA data (a more precise method became available).
0	22nd Dec, 2016	First publication.

QMS ACCREDITED

ORE Pty Ltd is accredited to ISO 9001:2015 by Lloyd's Register Quality Assurance Ltd for its quality management system including development, manufacturing, certification and supply of CRMs.

CERTIFYING OFFICER



25th October, 2018

Craig Hamlyn (B.Sc. Hons - Geology), Technical Manager - ORE P/L

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ISO Guide 31 (2015), Reference materials – Contents of certificates and labels.

ISO Guide 3207 (1975), Statistical interpretation of data - Determination of a statistical tolerance interval.

ISO Guide 35 (2017), Certification of reference materials - General and statistical principals.

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CERTIFICATE OF ANALYSIS FOR

IRON OXIDE COPPER-GOLD ORE
CERTIFIED REFERENCE MATERIAL
OREAS 522

Summary Statistics for Key Analytes (see Table 1 for 155 additional certified values).

Constituent (ppm)	Certified Value	1SD	95% Confidence Limits		95% Tolerance Limits	
			Low	High	Low	High
Pb Fire Assay						
Au, Gold (ppm)	0.574	0.018	0.567	0.580	0.567*	0.580*
Aqua Regia Digestion						
Au, Gold (ppm)	0.549	0.025	0.541	0.557	0.542†	0.556†
4-Acid Digestion						
Co, Cobalt (ppm)	550	19	542	558	541	559
Cu, Copper (wt.%)	0.916	0.026	0.906	0.927	0.901	0.932
Infrared Combustion						
S, Sulphur (wt.%)	3.11	0.082	3.07	3.14	3.05	3.17

*Gold Tolerance Limits for typical 30g fire assay charge weight determined from 20 x 85mg NAA results and the Sampling Constant (Ingamells & Switzer, 1973);
†Gold Tolerance Limits for typical 25g aqua regia sample weight determined as above;
Please note: intervals may appear asymmetric due to rounding.

The homogeneity of OREAS 522 is of a level such that ***negligible sampling error exists*** for a conventional fire assay, peroxide fusion, 4-acid digestion, 3-acid digestion, aqua regia digestion, infrared combustion or pycnometry determination.

INTRODUCTION

OREAS reference materials are intended to provide a low cost method of evaluating and improving the quality of analysis of geological samples. To the geologist they provide a means of implementing quality control in analytical data sets generated in exploration from the grass roots level through to prospect evaluation, and in grade control at mining operations. To the analyst they provide an effective means of calibrating analytical equipment, assessing new techniques and routinely monitoring in-house procedures.

SOURCE MATERIALS

Certified Reference Material (CRM) OREAS 522 was prepared from a blend of iron oxide copper-gold ore and magnetite-bearing waste rock (altered, porphyritic, intermediate volcanic rock). The mineralisation is hosted by a breccia comprising strongly altered and replaced felsic volcanic fragments in a matrix largely composed of magnetite, calcite, pyrite, biotite, chalcopyrite, K feldspar titanite and quartz. Accessory minerals include garnet, barite, molybdenite, fluorite, amphibole, apatite, monazite, arsenopyrite, a LREE fluorcarbonate, galena, cobaltite, sphalerite, scheelite, uraninite and tourmaline. Copper occurs as native copper, bornite and chalcopyrite. Gold occurs mainly in the molecular framework of the chalcopyrite. Significant levels of cobalt, molybdenum, rare earth elements and low levels of uranium are also present. The ore and waste materials were sourced from the Ernest Henry Mine located about 38 kilometres north-east of Cloncurry in north-west Queensland.

COMMINUTION AND HOMOGENISATION PROCEDURES

The material constituting OREAS 522 was prepared in the following manner:

- drying to constant mass at 105°C;
- crushing and milling of the ore material to 100% minus 35 microns;
- crushing and milling of the barren material to 99% minus 75 microns;
- blending in appropriate proportions to achieve the desired grades;
- packaging in 60g and 100g units sealed under nitrogen in laminated foil pouches.

ANALYTICAL PROGRAM

Twenty six commercial analytical laboratories participated in the program to certify the 160 analytes reported in Table 1. The following methods were employed:

- Gold via 25-50g fire assay with AAS (18 labs) or ICP-OES (6 labs) finish;
- Gold via 15-40g aqua regia digestion with ICP-MS (12 labs) or AAS (5 labs) finish;
- Instrumental neutron activation analysis (INAA) for Au on 85mg subsamples to confirm homogeneity (1 lab);
- Peroxide fusion for full elemental suite ICP-OES and ICP-MS finishes (up to 19 laboratories depending on the element);
- 4-Acid digestion (HF-HNO_3-$HClO_4$-HCl) for full elemental suite ICP-OES and ICP-MS finishes (up to 22 laboratories depending on the element; one lab used an AAS finish for Cu only);

- 3-Acid digestion (HNO_3-$HClO_4$-HCl) for Ag, As, Co, Cu, Fe, Mo and S with ICP-OES or AAS finishes (up to 16 laboratories depending on the element; one lab used an ICP-MS finish for Ag, As and Mo);
- Aqua regia digestion (see note below) for full elemental suite ICP-OES and ICP-MS finishes (up to 14 laboratories depending on the element; some laboratories used an AAS finish for certain elements i.e. Ag, As, Co, Cu, Fe and Mo);
- S by IR combustion furnace (21 labs);
- Specific gravity by gas (11 labs) or liquid (5 labs) pycnometry.

It is important to note that in the analytical industry there is no standardisation of the aqua regia digestion process. Aqua regia is a partial empirical digest and differences in recoveries for various analytes are commonplace. These are caused by variations in the digest conditions which can include the ratio of nitric to hydrochloric acids, acid strength, temperatures, leach times and secondary digestions. Recoveries for sulphide-hosted base metal sulphides approach total values, however, other analytes, in particular the lithophile elements, show greater sensitivity to method parameters. This can result in lack of consensus in an inter-laboratory certification program for these elements. The approach applied here is to report certified values in those instances where reasonable agreement exists amongst a majority of participating laboratories. The results of specific laboratories may differ significantly from the certified values, but will, nonetheless, be valid and reproducible in the context of the specifics of the aqua regia method in use. Users of this reference material should, therefore, be mindful of this limitation when applying the certified values in a quality control program.

For the round robin program twenty 1kg lot samples were taken at predetermined intervals during the bagging stage, immediately following final blending and are considered representative of the entire batch. The six samples received by each laboratory were obtained by taking two 110g scoop splits from each of three separate 1kg lots. This format enabled nested ANOVA treatment of the results to evaluate homogeneity, i.e. to ascertain whether between-unit variance is greater than within-unit variance. Table 1 presents the 160 certified values together with their associated 1SD's, 95% confidence and tolerance limits and Table 2 shows 35 indicative values. Table 3 shows the gold instrumental neutron activation analysis (INAA) results for twenty 85mg subsamples determined by the Australian Nuclear Science & Technology Organisation (ANSTO) located in Lucas Heights, NSW, Australia. Table 4 provides performance gate intervals for the certified values of each method group based on their pooled 1SD's. Tabulated results of all elements together with uncorrected means, medians, standard deviations, relative standard deviations and per cent deviation of lab means from the corrected mean of means (PDM^3) are presented in the detailed certification data for this CRM (**OREAS 522 DataPack.xlsx**).

STATISTICAL ANALYSIS

Certified Values, Confidence Limits, Standard Deviations and Tolerance Limits (Table 1) have been determined for each analytical method following the removal of individual, laboratory dataset (batch) and 3SD outliers (single iteration). For individual outliers within a laboratory batch the z-score test is used in combination with a second method that determines the per cent deviation of the individual value from the batch median. Outliers in general are selected on the basis of z-scores > 2.5 and with per cent deviations (i) > 3 and (ii) more than three times the average absolute per cent deviation for

the batch. In certain instances statistician's prerogative has been employed in discriminating outliers. Each laboratory data set mean is tested for outlying status based on z-score discrimination and rejected if > 2.5. After individual and laboratory data set (batch) outliers have been eliminated a non-iterative 3 standard deviation filter is applied, with those values lying outside this window also relegated to outlying status.

Certified Values are the means of accepted laboratory means after outlier filtering. The INAA data (see Table 3) is omitted from determination of the certified values for gold (fire assay and aqua regia) and is used solely for the calculation of Tolerance Limits and homogeneity evaluation of OREAS 522.

Indicative Values (Table 2) are provided where the number of laboratories reporting a particular analyte is insufficient (< 5) to support certification or inter-laboratory consensus is poor.

95% Confidence Limits are inversely proportional to the number of participating laboratories and inter-laboratory agreement. It is a measure of the reliability of the certified value. A 95% confidence interval indicates a 95% probability that the true value of the analyte under consideration lies between the upper and lower limits. *95% Confidence Limits should not be used as control limits for laboratory performance.*

Standard Deviation values (1SDs) are reported in Table 1 and provide an indication of a level of performance that might reasonably be expected from a laboratory being monitored by this CRM in a QA/QC program. The SD's take into account errors attributable to measurement uncertainty and CRM variability. For an effective CRM the contribution of the latter should be negligible in comparison to measurement errors. The SD values thus include all sources of measurement uncertainty: between-lab variance, within-run variance (precision errors) and CRM variability. OREAS prepared reference materials have a level of homogeneity such that the observed variance from repeated analysis has its origin almost exclusively in the analytical process rather than the reference material itself.

The SD for each analyte's certified value is calculated from the same filtered data set used to determine the certified value, i.e. after removal of any individual, lab dataset (batch) and 3SD outliers (single iteration). These outliers can only be removed after the absolute homogeneity of the CRM has been independently established, i.e. the outliers must be confidently deemed to be analytical rather than arising from inhomogeneity of the CRM. **The standard deviation is then calculated for each analyte from the pooled accepted analyses generated from the certification program.**

In the application of SD's in monitoring performance it is important to note that not all laboratories function at the same level of proficiency and that different methods in use at a particular laboratory have differing levels of precision. Each laboratory has its own inherent SD (for a specific concentration level and analyte-method pair) based on the analytical process and this SD is not directly related to the round robin program.

The majority of data generated in the round robin program was produced by a selection of world class laboratories. The SD's thus generated are more constrained than those that would be produced across a randomly selected group of laboratories. To produce more generally achievable SD's the 'pooled' SD's provided in this report include inter-lab bias. This 'one size fits all' approach may require revision at the discretion of the QC manager concerned following careful scrutiny of QC control charts.

Table 4 shows **Performance Gates** calculated for two and three standard deviations. As a guide these intervals may be regarded as warning or rejection for multiple 2SD outliers, or rejection for individual 3SD outliers in QC monitoring, although their precise application should be at the discretion of the QC manager concerned. A second method utilises a 5% window calculated directly from the certified value. Standard deviation is also shown in relative percent for one, two and three relative standard deviations (1RSD, 2RSD and 3RSD) to facilitate an appreciation of the magnitude of these numbers and a comparison with the 5% window. Caution should be exercised when concentration levels approach lower limits of detection of the analytical methods employed as performance gates calculated from standard deviations tend to be excessively wide whereas those determined by the 5% method are too narrow.

Tolerance Limits (ISO Guide 3207) were determined using an analysis of precision errors method and are considered a conservative estimate of true homogeneity. The meaning of tolerance limits may be illustrated for copper via 4-acid digestion where 99% of the time ($1-\alpha=0.99$) at least 95% of subsamples ($\rho=0.95$) will have concentrations lying between 0.901 and 0.932 wt.%. Put more precisely, this means that if the same number of subsamples were taken and analysed in the same manner repeatedly, 99% of the tolerance intervals so constructed would cover at least 95% of the total population, and 1% of the tolerance intervals would cover less than 95% of the total population (ISO Guide 35).

For gold, tolerance can be determined by INAA using the reduced analytical subsample method which utilises the known relationship between standard deviation and analytical subsample weight (Ingamells and Switzer, 1973). In this approach the latter parameter is substantially reduced to a point where most of the variability in replicate assays is due to inhomogeneity of the reference material and measurement error becomes negligible. In this instance very small subsample weights of 85 milligrams were employed and the 1RSD of 0.375% at a 30g charge weight (7.06% at 85mg weights) confirms the high level of gold homogeneity in OREAS 522 (see Table 3 below).

The homogeneity of OREAS 522 has also been evaluated in a **nested ANOVA** of the round robin program. Each of the twenty-six round robin laboratories received six samples per CRM and these samples were made up of paired samples from three different, non-adjacent sampling intervals. The purpose of the ANOVA evaluation is to test that no statistically significant difference exists in the variance between-units to that of the variance within-units. This allows an assessment of homogeneity across the entire prepared batch of OREAS 522. The test was performed using the following parameters:

- Significance Level α = P (type I error) = 0.05;
- Null Hypothesis, H_0: Between-unit variance is no greater than within-unit variance (reject H_0 if *p*-value < 0.05);
- Alternative Hypothesis, H_1: Between-unit variance is greater than within-unit variance.

P-values are a measure of probability where values less than 0.05 indicate a greater than 95% probability that the observed differences in within-unit and between-unit variances are real. The dataset was filtered for both individual and laboratory data set (batch) outliers prior to the calculation of the *p*-value. This process derived no significant *p*-values for all 160 certified values (except for Hf by peroxide fusion ICP but this case is considered an artefact of reading resolution) and the Null Hypothesis is retained.

It is important to note that ANOVA is not an absolute measure of homogeneity. Rather, it establishes whether or not the analytes are distributed in a similar manner throughout the packaging run of OREAS 522 and whether the variance between two subsamples from the same unit is statistically distinguishable to the variance from two subsamples taken from any two separate units. A reference material therefore, can possess poor absolute homogeneity yet still pass a relative homogeneity test if the within-unit heterogeneity is large and similar across all units.

Based on the statistical analysis of the results of the inter-laboratory certification program it can be concluded that OREAS 522 is fit-for-purpose as a certified reference material (see 'Intended Use' below). Furthermore, the homogeneity of OREAS 522 is of a level such that ***negligible sampling error exists*** for a conventional fire assay, peroxide fusion, 4-acid digestion, 3-acid digestion, aqua regia digestion, infrared combustion or pycnometry determination.

PARTICIPATING LABORATORIES

1. Actlabs, Ancaster, Ontario, Canada
2. ALS, Brisbane, QLD, Australia
3. ALS, Lima, Peru
4. ALS, Loughrea, Galway, Ireland
5. ALS, Perth, WA, Australia
6. ALS, Vancouver, BC, Canada
7. ANSTO, Lucas Heights, NSW, Australia
8. Bureau Veritas Commodities Canada Ltd, Vancouver, BC, Canada
9. Bureau Veritas Geoanalytical, Adelaide, SA, Australia
10. Bureau Veritas Geoanalytical, Perth, WA, Australia
11. Bureau Veritas Minerals, Santiago, Chile
12. Geoanalitica, Antofagasta, Chile
13. Inspectorate (BV), Lima, Peru
14. Intertek Genalysis, Adelaide, SA, Australia
15. Intertek Genalysis, Perth, WA, Australia
16. Intertek Testing Services, Cupang, Muntinlupa, Philippines
17. MinAnalytical Services, Perth, WA, Australia
18. Mineracao Mine Lab, Paracatu, Minas Gerais, Brazil
19. PT Geoservices Ltd, Cikarang, Jakarta Raya, Indonesia
20. PT Intertek Utama Services, Jakarta Timur, DKI Jakarta, Indonesia
21. SGS Australia Mineral Services, Perth, WA, Australia
22. SGS Canada Inc., Vancouver, BC, Canada
23. SGS CIMM T & S, Antofagasta, Chile
24. SGS del Peru, Lima, Peru
25. SGS Lakefield Research Ltd, Lakefield, Ontario, Canada
26. SGS Mineral Services, Townsville, QLD, Australia
27. Shiva Analyticals Ltd, Bangalore North, Karnataka, India

Table 1. Certified Values, SD's, 95% Confidence and Tolerance Limits for OREAS 522.

Constituent	Certified Value	1SD	95% Confidence Limits		95% Tolerance Limits	
			Low	High	Low	High
Pb Fire Assay						
Au, Gold (ppm)	0.574	0.018	0.567	0.580	0.567*	0.580*
Peroxide Fusion ICP						
Al, Aluminium (wt.%)	4.02	0.119	3.96	4.07	3.94	4.10
As, Arsenic (ppm)	522	33	508	536	504	539
Ba, Barium (wt.%)	2.38	0.192	2.19	2.56	2.30	2.45
Bi, Bismuth (ppm)	9.12	0.632	8.67	9.56	8.76	9.47
Ca, Calcium (wt.%)	3.87	0.188	3.77	3.96	3.79	3.94
Ce, Cerium (ppm)	163	7	159	167	158	168
Co, Cobalt (ppm)	555	34	537	573	539	571
Cr, Chromium (ppm)	34.5	6.2	30.3	38.8	IND	IND
Cs, Cesium (ppm)	0.67	0.062	0.63	0.71	IND	IND
Cu, Copper (wt.%)	0.923	0.024	0.911	0.936	0.909	0.938
Dy, Dysprosium (ppm)	3.50	0.261	3.34	3.67	3.32	3.69
Er, Erbium (ppm)	2.13	0.099	2.05	2.20	2.04	2.21
Fe, Iron (wt.%)	24.72	0.594	24.43	25.00	24.29	25.14
Ga, Gallium (ppm)	16.3	0.83	15.8	16.9	15.5	17.1
Gd, Gadolinium (ppm)	4.20	0.385	3.88	4.51	4.01	4.39
Hf, Hafnium (ppm)	3.35	0.54	2.95	3.75	IND	IND
Ho, Holmium (ppm)	0.72	0.08	0.67	0.77	0.66	0.78
In, Indium (ppm)	0.25	0.05	0.22	0.28	IND	IND
K, Potassium (wt.%)	2.89	0.133	2.82	2.96	2.81	2.96
La, Lanthanum (ppm)	222	10	215	228	215	228
Lu, Lutetium (ppm)	0.35	0.04	0.31	0.38	0.32	0.37
Mg, Magnesium (wt.%)	1.15	0.035	1.13	1.17	1.12	1.18
Mn, Manganese (wt.%)	0.418	0.020	0.408	0.428	0.410	0.426
Mo, Molybdenum (ppm)	207	15	196	217	200	213
Nb, Niobium (ppm)	6.00	0.90	5.27	6.73	5.53	6.48
Nd, Neodymium (ppm)	28.9	2.04	27.5	30.4	27.9	29.9
Ni, Nickel (ppm)	72	9	67	77	67	77
P, Phosphorus (wt.%)	0.089	0.007	0.086	0.093	0.082	0.097
Pr, Praseodymium (ppm)	10.4	0.81	9.8	11.0	10.0	10.9
Rb, Rubidium (ppm)	84	3.2	83	86	82	87
S, Sulphur (wt.%)	3.09	0.092	3.03	3.15	3.03	3.15
Sb, Antimony (ppm)	8.24	0.567	7.94	8.55	7.48	9.01
Sc, Scandium (ppm)	10.4	0.53	9.9	10.9	IND	IND
Si, Silicon (wt.%)	15.81	0.420	15.55	16.08	15.52	16.11
Sm, Samarium (ppm)	4.32	0.424	4.00	4.64	3.99	4.65
Sn, Tin (ppm)	10.8	0.86	10.1	11.5	9.5	12.1
Sr, Strontium (ppm)	236	8	232	241	229	243
Tb, Terbium (ppm)	0.61	0.042	0.59	0.63	0.57	0.65

Note: intervals may appear asymmetric due to rounding; *Gold Tolerance Limits for typical 30g fire assay charge weight determined from 20 x 85mg INAA results and the Sampling Constant (Ingamells & Switzer, 1973).

Table 1 continued.

Constituent	Certified Value	1SD	95% Confidence Limits		95% Tolerance Limits	
			Low	High	Low	High
Peroxide Fusion ICP continued						
Th, Thorium (ppm)	8.69	0.667	8.32	9.07	8.44	8.95
Ti, Titanium (wt.%)	0.394	0.009	0.391	0.397	0.385	0.404
Tm, Thulium (ppm)	0.33	0.03	0.30	0.35	0.29	0.36
U, Uranium (ppm)	44.0	2.68	42.3	45.8	43.2	44.9
V, Vanadium (ppm)	182	17	170	194	175	189
W, Tungsten (ppm)	134	12	126	141	130	137
Y, Yttrium (ppm)	19.3	0.93	18.7	19.8	18.4	20.1
Yb, Ytterbium (ppm)	2.11	0.165	2.01	2.21	1.97	2.25
Zr, Zirconium (ppm)	111	11	96	125	105	116
4-Acid Digestion						
Ag, Silver (ppm)	1.31	0.114	1.26	1.37	1.23	1.39
Al, Aluminium (wt.%)	3.95	0.120	3.90	4.00	3.87	4.02
As, Arsenic (ppm)	490	26	477	503	479	501
Be, Beryllium (ppm)	0.70	0.09	0.65	0.74	0.64	0.75
Bi, Bismuth (ppm)	8.72	0.499	8.51	8.92	8.45	8.98
Ca, Calcium (wt.%)	3.65	0.144	3.59	3.70	3.57	3.72
Ce, Cerium (ppm)	148	13	142	153	143	152
Co, Cobalt (ppm)	550	19	542	558	541	559
Cr, Chromium (ppm)	29.6	3.7	27.8	31.4	27.5	31.7
Cs, Cesium (ppm)	0.64	0.055	0.61	0.67	0.61	0.67
Cu, Copper (wt.%)	0.916	0.026	0.906	0.927	0.901	0.932
Dy, Dysprosium (ppm)	3.24	0.185	3.10	3.37	3.15	3.32
Er, Erbium (ppm)	1.97	0.088	1.91	2.03	1.91	2.02
Eu, Europium (ppm)	1.88	0.074	1.83	1.93	1.80	1.96
Fe, Iron (wt.%)	24.63	0.998	24.15	25.12	24.26	25.01
Ga, Gallium (ppm)	16.0	0.83	15.6	16.4	15.6	16.4
Gd, Gadolinium (ppm)	3.87	0.56	3.45	4.29	3.70	4.04
Hf, Hafnium (ppm)	2.96	0.146	2.89	3.03	2.85	3.06
Ho, Holmium (ppm)	0.66	0.042	0.63	0.69	0.63	0.70
In, Indium (ppm)	0.23	0.03	0.22	0.24	0.22	0.24
K, Potassium (wt.%)	2.83	0.103	2.78	2.87	2.75	2.90
La, Lanthanum (ppm)	171	30	157	184	163	178
Li, Lithium (ppm)	16.2	1.51	15.6	16.9	15.7	16.7
Lu, Lutetium (ppm)	0.31	0.020	0.29	0.32	0.29	0.32
Mg, Magnesium (wt.%)	1.12	0.067	1.09	1.15	1.10	1.14
Mn, Manganese (wt.%)	0.397	0.022	0.387	0.407	0.389	0.404
Mo, Molybdenum (ppm)	206	12	200	211	201	210
Na, Sodium (wt.%)	0.633	0.043	0.613	0.653	0.619	0.647
Nb, Niobium (ppm)	5.66	0.368	5.47	5.85	5.42	5.90
Nd, Neodymium (ppm)	27.2	1.20	26.4	28.0	26.5	28.0
Ni, Nickel (ppm)	70	4.4	68	72	69	72
P, Phosphorus (wt.%)	0.089	0.005	0.087	0.091	0.087	0.091

Note: intervals may appear asymmetric due to rounding.

Table 1 continued.

Constituent	Certified Value	1SD	95% Confidence Limits		95% Tolerance Limits	
			Low	High	Low	High
4-Acid Digestion continued						
Pb, Lead (ppm)	12.5	1.3	11.8	13.1	12.0	12.9
Pr, Praseodymium (ppm)	9.76	0.631	9.28	10.24	9.51	10.01
Rb, Rubidium (ppm)	82	3.3	81	83	79	85
Re, Rhenium (ppm)	0.098	0.005	0.096	0.101	0.093	0.104
S, Sulphur (wt.%)	2.50	0.103	2.45	2.54	2.43	2.56
Sb, Antimony (ppm)	7.93	0.465	7.71	8.15	7.64	8.22
Sc, Scandium (ppm)	10.9	0.83	10.5	11.2	10.5	11.2
Se, Selenium (ppm)	2.74	0.51	2.49	2.98	2.54	2.93
Sm, Samarium (ppm)	4.17	0.196	4.02	4.32	4.03	4.32
Sn, Tin (ppm)	9.32	0.686	9.03	9.61	9.00	9.63
Sr, Strontium (ppm)	199	20	189	208	193	204
Ta, Tantalum (ppm)	0.44	0.06	0.40	0.47	0.42	0.46
Tb, Terbium (ppm)	0.59	0.053	0.55	0.62	0.56	0.61
Te, Tellurium (ppm)	1.14	0.092	1.11	1.18	1.09	1.20
Th, Thorium (ppm)	7.53	0.627	7.17	7.88	7.25	7.80
Ti, Titanium (wt.%)	0.344	0.018	0.336	0.352	0.334	0.353
Tl, Thallium (ppm)	0.29	0.016	0.28	0.29	0.27	0.30
Tm, Thulium (ppm)	0.28	0.015	0.27	0.29	0.27	0.30
U, Uranium (ppm)	42.2	3.17	40.7	43.8	41.1	43.4
V, Vanadium (ppm)	164	9	160	168	160	168
W, Tungsten (ppm)	135	11	130	140	131	139
Y, Yttrium (ppm)	18.5	0.94	18.1	18.9	18.0	19.0
Yb, Ytterbium (ppm)	1.97	0.115	1.90	2.03	1.89	2.05
Zn, Zinc (ppm)	30.2	2.14	29.1	31.3	28.8	31.7
Zr, Zirconium (ppm)	112	6	109	114	108	115
3-Acid Digestion (no HF)						
Ag, Silver (ppm)	1.19	0.18	1.05	1.34	IND	IND
As, Arsenic (ppm)	502	17	493	512	489	516
Co, Cobalt (ppm)	547	22	534	560	538	556
Cu, Copper (wt.%)	0.908	0.022	0.896	0.920	0.894	0.922
Fe, Iron (wt.%)	24.91	0.563	24.65	25.17	24.36	25.45
Mo, Molybdenum (ppm)	193	9	188	198	189	197
S, Sulphur (wt.%)	2.74	0.167	2.63	2.85	2.67	2.81
Aqua Regia Digestion						
Ag, Silver (ppm)	1.23	0.102	1.17	1.29	1.17	1.29
Al, Aluminium (wt.%)	1.29	0.044	1.26	1.32	1.26	1.31
As, Arsenic (ppm)	492	25	476	507	481	503
Au, Gold (ppm)	0.549	0.025	0.541	0.557	0.542†	0.556†
Be, Beryllium (ppm)	0.41	0.06	0.36	0.47	0.37	0.46
Bi, Bismuth (ppm)	8.87	0.487	8.59	9.15	8.51	9.23

Note: intervals may appear asymmetric due to rounding; †Gold Tolerance Limits for typical 25g aqua regia sample weight determined from 20 x 85mg INAA results and the Sampling Constant (Ingamells & Switzer, 1973).

Table 1 continued.

Constituent	Certified Value	1SD	95% Confidence Limits		95% Tolerance Limits	
			Low	High	Low	High
Aqua Regia Digestion continued						
Ca, Calcium (wt.%)	3.43	0.154	3.33	3.53	3.32	3.54
Ce, Cerium (ppm)	153	9	147	160	149	158
Co, Cobalt (ppm)	533	33	512	553	524	541
Cr, Chromium (ppm)	28.6	1.32	27.7	29.6	27.4	29.9
Cs, Cesium (ppm)	0.52	0.05	0.48	0.57	0.50	0.54
Cu, Copper (wt.%)	0.904	0.031	0.885	0.922	0.889	0.918
Fe, Iron (wt.%)	24.13	0.615	23.75	24.51	23.67	24.60
Ga, Gallium (ppm)	13.2	1.5	12.1	14.3	12.6	13.8
Hf, Hafnium (ppm)	1.21	0.066	1.15	1.27	1.17	1.25
In, Indium (ppm)	0.23	0.023	0.21	0.25	0.22	0.24
K, Potassium (wt.%)	0.528	0.020	0.515	0.542	0.514	0.543
La, Lanthanum (ppm)	192	16	181	204	188	197
Li, Lithium (ppm)	15.9	1.55	14.7	17.1	15.4	16.5
Lu, Lutetium (ppm)	0.23	0.015	0.21	0.25	0.23	0.24
Mg, Magnesium (wt.%)	1.07	0.056	1.03	1.11	1.05	1.10
Mn, Manganese (wt.%)	0.367	0.020	0.353	0.382	0.358	0.377
Mo, Molybdenum (ppm)	198	12	189	207	193	203
Nb, Niobium (ppm)	0.91	0.066	0.84	0.97	0.86	0.95
Ni, Nickel (ppm)	64	3.2	62	66	63	66
P, Phosphorus (wt.%)	0.089	0.005	0.085	0.093	0.087	0.091
Pb, Lead (ppm)	12.5	1.18	11.5	13.4	11.9	13.1
Rb, Rubidium (ppm)	30.9	1.68	29.4	32.5	30.0	31.8
S, Sulphur (wt.%)	2.59	0.127	2.50	2.69	2.54	2.65
Sb, Antimony (ppm)	5.39	1.02	4.68	6.09	5.22	5.55
Sc, Scandium (ppm)	8.18	0.87	7.59	8.76	7.92	8.44
Se, Selenium (ppm)	3.06	0.56	2.61	3.50	2.81	3.30
Sn, Tin (ppm)	7.59	0.158	7.46	7.73	7.39	7.79
Sr, Strontium (ppm)	64	7	59	69	62	65
Tb, Terbium (ppm)	0.54	0.038	0.49	0.59	0.52	0.56
Te, Tellurium (ppm)	1.11	0.083	1.05	1.17	1.05	1.17
Th, Thorium (ppm)	7.33	0.573	6.88	7.77	7.13	7.53
Ti, Titanium (wt.%)	0.146	0.021	0.131	0.161	0.141	0.151
Tl, Thallium (ppm)	0.13	0.011	0.12	0.14	IND	IND
U, Uranium (ppm)	40.2	3.47	37.5	42.9	39.4	41.0
V, Vanadium (ppm)	153	8	147	158	149	156
W, Tungsten (ppm)	113	10	106	121	111	116
Y, Yttrium (ppm)	14.9	1.34	13.9	15.9	14.5	15.3
Yb, Ytterbium (ppm)	1.57	0.119	1.41	1.72	IND	IND
Zn, Zinc (ppm)	28.3	1.67	27.3	29.3	26.6	30.0
Zr, Zirconium (ppm)	45.7	3.55	42.7	48.8	44.0	47.5

Note: intervals may appear asymmetric due to rounding.

Table 1 continued.

Constituent	Certified Value	1SD	95% Confidence Limits		95% Tolerance Limits	
			Low	High	Low	High
Infrared Combustion						
S, Sulphur (wt.%)	3.11	0.082	3.07	3.14	3.05	3.17
Gas / Liquid Pycnometry						
SG, Specific Gravity (Unity)	3.26	0.076	3.22	3.30	3.23	3.29

Note: intervals may appear asymmetric due to rounding.

Table 2. Indicative Values for OREAS 522.

Constituent	Unit	Value	Constituent	Unit	Value	Constituent	Unit	Value
Pb Fire Assay								
Pd	ppb	*< 5*	Pt	ppb	*4*			
Peroxide Fusion ICP								
Ag	ppm	*1.01*	Ge	ppm	*0.87*	Ta	ppm	*0.48*
B	ppm	*37.0*	Li	ppm	*17.6*	Te	ppm	*1.25*
Be	ppm	*< 1*	Pb	ppm	*12.5*	Tl	ppm	*< 0.5*
Cd	ppm	*< 1*	Re	ppm	*< 0.1*	Zn	ppm	*33.0*
Eu	ppm	*2.67*	Se	ppm	*3.35*			
4-Acid Digestion								
Cd	ppm	*< 0.02*	Ge	ppm	*0.33*	Hg	ppm	*0.18*
Aqua Regia Digestion								
B	ppm	*< 10*	Gd	ppm	*3.83*	Nd	ppm	*28.8*
Cd	ppm	*0.047*	Ge	ppm	*0.30*	Pr	ppm	*10.5*
Dy	ppm	*3.02*	Hg	ppm	*0.17*	Re	ppm	*0.10*
Er	ppm	*1.70*	Ho	ppm	*0.62*	Sm	ppm	*4.01*
Eu	ppm	*1.81*	Na	wt.%	*0.046*	Tm	ppm	*0.23*
Sulphuric Acid Leach (5%)								
Cu	wt.%	*0.200*						

Table 3. Instrumental Neutron Activation Analysis of Au on 20 x 85mg subsamples of OREAS 522.

Replicate No	INAA 85mg
1	0.587
2	0.520
3	0.646
4	0.512
5	0.601
6	0.502
7	0.576
8	0.565
9	0.544
10	0.513
11	0.584
12	0.613

Table 3 continued.

13	0.546
14	0.579
15	0.523
16	0.595
17	0.583
18	0.577
19	0.626
20	0.588
Mean	0.569
Median	0.578
Std Dev.	0.040
Rel.Std.Dev.	7.06%
PDM[3]	-0.81%

Table 4. Performance Gates for OREAS 522.

Constituent	Certified Value	Absolute Standard Deviations					Relative Standard Deviations			5% window	
		1SD	2SD Low	2SD High	3SD Low	3SD High	1RSD	2RSD	3RSD	Low	High
Pb Fire Assay											
Au, ppm	0.574	0.018	0.538	0.610	0.520	0.627	3.13%	6.25%	9.38%	0.545	0.602
Peroxide Fusion ICP											
Al, wt.%	4.02	0.119	3.78	4.26	3.66	4.37	2.97%	5.93%	8.90%	3.82	4.22
As, ppm	522	33	457	587	424	619	6.24%	12.47%	18.71%	496	548
Ba, wt.%	2.38	0.192	1.99	2.76	1.80	2.95	8.10%	16.21%	24.31%	2.26	2.49
Bi, ppm	9.12	0.632	7.85	10.38	7.22	11.01	6.93%	13.86%	20.79%	8.66	9.57
Ca, wt.%	3.87	0.188	3.49	4.24	3.30	4.43	4.85%	9.71%	14.56%	3.67	4.06
Ce, ppm	163	7	150	176	143	183	4.02%	8.04%	12.06%	155	171
Co, ppm	555	34	487	623	454	656	6.08%	12.17%	18.25%	527	583
Cr, ppm	34.5	6.2	22.1	47.0	15.8	53.3	18.06%	36.13%	54.19%	32.8	36.3
Cs, ppm	0.67	0.062	0.55	0.80	0.49	0.86	9.19%	18.37%	27.56%	0.64	0.71
Cu, wt.%	0.923	0.024	0.875	0.972	0.850	0.997	2.64%	5.28%	7.92%	0.877	0.970
Dy, ppm	3.50	0.261	2.98	4.03	2.72	4.29	7.46%	14.92%	22.38%	3.33	3.68
Er, ppm	2.13	0.099	1.93	2.33	1.83	2.43	4.65%	9.30%	13.94%	2.02	2.24
Fe, wt.%	24.72	0.594	23.53	25.91	22.93	26.50	2.40%	4.81%	7.21%	23.48	25.95
Ga, ppm	16.3	0.83	14.7	18.0	13.9	18.8	5.06%	10.11%	15.17%	15.5	17.2
Gd, ppm	4.20	0.385	3.43	4.97	3.04	5.35	9.16%	18.32%	27.48%	3.99	4.41
Hf, ppm	3.35	0.54	2.26	4.44	1.72	4.99	16.25%	32.50%	48.75%	3.18	3.52
Ho, ppm	0.72	0.08	0.56	0.87	0.49	0.95	10.74%	21.48%	32.22%	0.68	0.75
In, ppm	0.25	0.05	0.15	0.35	0.10	0.40	19.84%	39.68%	59.53%	0.24	0.27
K, wt.%	2.89	0.133	2.62	3.16	2.49	3.29	4.61%	9.22%	13.83%	2.75	3.03
La, ppm	222	10	201	242	191	253	4.64%	9.28%	13.92%	211	233
Lu, ppm	0.35	0.04	0.26	0.43	0.22	0.47	12.28%	24.56%	36.84%	0.33	0.36
Mg, wt.%	1.15	0.035	1.08	1.22	1.04	1.26	3.08%	6.17%	9.25%	1.09	1.21
Mn, wt.%	0.418	0.020	0.378	0.458	0.358	0.478	4.77%	9.55%	14.32%	0.397	0.439
Mo, ppm	207	15	177	236	163	251	7.10%	14.20%	21.30%	196	217
Nb, ppm	6.00	0.90	4.21	7.80	3.31	8.70	14.96%	29.93%	44.89%	5.70	6.30
Nd, ppm	28.9	2.04	24.9	33.0	22.8	35.0	7.04%	14.08%	21.12%	27.5	30.4

Note: intervals may appear asymmetric due to rounding.

Table 4 continued.

Constituent	Certified Value	Absolute Standard Deviations					Relative Standard Deviations			5% window	
		1SD	2SD Low	2SD High	3SD Low	3SD High	1RSD	2RSD	3RSD	Low	High
Peroxide Fusion ICP continued											
Ni, ppm	72	9	54	91	44	100	12.91%	25.83%	38.74%	69	76
P, wt.%	0.089	0.007	0.076	0.102	0.070	0.109	7.30%	14.61%	21.91%	0.085	0.094
Pr, ppm	10.4	0.81	8.8	12.0	8.0	12.9	7.79%	15.57%	23.36%	9.9	10.9
Rb, ppm	84	3.2	78	91	75	94	3.75%	7.51%	11.26%	80	89
S, wt.%	3.09	0.092	2.91	3.28	2.81	3.37	2.99%	5.97%	8.96%	2.94	3.25
Sb, ppm	8.24	0.567	7.11	9.38	6.54	9.95	6.88%	13.76%	20.64%	7.83	8.66
Sc, ppm	10.4	0.53	9.3	11.5	8.8	12.0	5.13%	10.27%	15.40%	9.9	10.9
Si, wt.%	15.81	0.420	14.98	16.65	14.56	17.07	2.65%	5.31%	7.96%	15.02	16.61
Sm, ppm	4.32	0.424	3.47	5.17	3.05	5.59	9.81%	19.63%	29.44%	4.10	4.53
Sn, ppm	10.8	0.86	9.1	12.5	8.2	13.4	7.98%	15.97%	23.95%	10.3	11.3
Sr, ppm	236	8	221	252	213	260	3.29%	6.58%	9.87%	225	248
Tb, ppm	0.61	0.042	0.53	0.70	0.49	0.74	6.85%	13.71%	20.56%	0.58	0.64
Th, ppm	8.69	0.667	7.36	10.03	6.69	10.69	7.67%	15.34%	23.01%	8.26	9.13
Ti, wt.%	0.394	0.009	0.376	0.412	0.368	0.421	2.25%	4.51%	6.76%	0.375	0.414
Tm, ppm	0.33	0.03	0.26	0.39	0.22	0.43	10.68%	21.37%	32.05%	0.31	0.34
U, ppm	44.0	2.68	38.7	49.4	36.0	52.1	6.09%	12.19%	18.28%	41.8	46.3
V, ppm	182	17	147	216	130	234	9.51%	19.01%	28.52%	173	191
W, ppm	134	12	110	157	99	168	8.71%	17.42%	26.13%	127	140
Y, ppm	19.3	0.93	17.4	21.1	16.5	22.0	4.81%	9.62%	14.42%	18.3	20.2
Yb, ppm	2.11	0.165	1.78	2.44	1.62	2.60	7.81%	15.62%	23.43%	2.00	2.22
Zr, ppm	111	11	88	133	77	144	10.02%	20.04%	30.06%	105	116
4-Acid Digestion											
Ag, ppm	1.31	0.114	1.08	1.54	0.97	1.65	8.70%	17.40%	26.10%	1.25	1.38
Al, wt.%	3.95	0.120	3.71	4.19	3.59	4.31	3.05%	6.11%	9.16%	3.75	4.14
As, ppm	490	26	438	542	412	568	5.30%	10.61%	15.91%	466	515
Be, ppm	0.70	0.09	0.52	0.87	0.43	0.96	12.56%	25.13%	37.69%	0.66	0.73
Bi, ppm	8.72	0.499	7.72	9.71	7.22	10.21	5.72%	11.44%	17.16%	8.28	9.15
Ca, wt.%	3.65	0.144	3.36	3.93	3.22	4.08	3.94%	7.88%	11.82%	3.46	3.83
Ce, ppm	148	13	122	173	110	186	8.59%	17.18%	25.77%	140	155
Co, ppm	550	19	512	588	493	607	3.43%	6.86%	10.28%	523	578
Cr, ppm	29.6	3.7	22.2	37.0	18.5	40.7	12.53%	25.06%	37.59%	28.1	31.1
Cs, ppm	0.64	0.055	0.53	0.75	0.48	0.80	8.55%	17.10%	25.64%	0.61	0.67
Cu, wt.%	0.916	0.026	0.865	0.968	0.839	0.993	2.80%	5.60%	8.40%	0.870	0.962
Dy, ppm	3.24	0.185	2.86	3.61	2.68	3.79	5.73%	11.47%	17.20%	3.07	3.40
Er, ppm	1.97	0.088	1.79	2.14	1.70	2.23	4.49%	8.97%	13.46%	1.87	2.06
Eu, ppm	1.88	0.074	1.73	2.03	1.66	2.10	3.95%	7.90%	11.85%	1.79	1.98
Fe, wt.%	24.63	0.998	22.64	26.63	21.64	27.63	4.05%	8.10%	12.15%	23.40	25.87
Ga, ppm	16.0	0.83	14.4	17.7	13.5	18.5	5.21%	10.42%	15.63%	15.2	16.8
Gd, ppm	3.87	0.56	2.75	4.99	2.19	5.55	14.45%	28.90%	43.35%	3.68	4.06
Hf, ppm	2.96	0.146	2.66	3.25	2.52	3.39	4.94%	9.87%	14.81%	2.81	3.10
Ho, ppm	0.66	0.042	0.58	0.75	0.54	0.79	6.37%	12.75%	19.12%	0.63	0.70
In, ppm	0.23	0.03	0.17	0.28	0.14	0.31	12.21%	24.42%	36.64%	0.22	0.24
K, wt.%	2.83	0.103	2.62	3.03	2.52	3.13	3.66%	7.31%	10.97%	2.68	2.97

Note: intervals may appear asymmetric due to rounding.

Table 4 continued.

Constituent	Certified Value	Absolute Standard Deviations					Relative Standard Deviations			5% window	
		1SD	2SD Low	2SD High	3SD Low	3SD High	1RSD	2RSD	3RSD	Low	High
4-Acid Digestion continued											
La, ppm	171	30	111	230	82	259	17.35%	34.69%	52.04%	162	179
Li, ppm	16.2	1.51	13.2	19.3	11.7	20.8	9.31%	18.63%	27.94%	15.4	17.0
Lu, ppm	0.31	0.020	0.27	0.35	0.25	0.37	6.55%	13.11%	19.66%	0.29	0.32
Mg, wt.%	1.12	0.067	0.99	1.25	0.92	1.32	5.99%	11.98%	17.97%	1.06	1.18
Mn, wt.%	0.397	0.022	0.352	0.442	0.330	0.464	5.66%	11.31%	16.97%	0.377	0.417
Mo, ppm	206	12	182	229	170	241	5.79%	11.58%	17.37%	195	216
Na, wt.%	0.633	0.043	0.547	0.719	0.504	0.763	6.81%	13.63%	20.44%	0.601	0.665
Nb, ppm	5.66	0.368	4.93	6.40	4.56	6.76	6.49%	12.99%	19.48%	5.38	5.94
Nd, ppm	27.2	1.20	24.8	29.6	23.6	30.8	4.39%	8.78%	13.17%	25.9	28.6
Ni, ppm	70	4.4	62	79	57	84	6.25%	12.51%	18.76%	67	74
P, wt.%	0.089	0.005	0.078	0.099	0.073	0.105	5.95%	11.90%	17.85%	0.084	0.093
Pb, ppm	12.5	1.3	9.9	15.0	8.7	16.2	10.05%	20.11%	30.16%	11.8	13.1
Pr, ppm	9.76	0.631	8.50	11.02	7.87	11.65	6.46%	12.93%	19.39%	9.27	10.25
Rb, ppm	82	3.3	75	89	72	92	3.98%	7.95%	11.93%	78	86
Re, ppm	0.098	0.005	0.088	0.109	0.083	0.114	5.35%	10.71%	16.06%	0.093	0.103
S, wt.%	2.50	0.103	2.29	2.70	2.19	2.81	4.11%	8.22%	12.32%	2.37	2.62
Sb, ppm	7.93	0.465	7.00	8.86	6.54	9.33	5.86%	11.72%	17.58%	7.53	8.33
Sc, ppm	10.9	0.83	9.2	12.5	8.4	13.4	7.60%	15.20%	22.80%	10.3	11.4
Se, ppm	2.74	0.51	1.71	3.76	1.20	4.27	18.74%	37.48%	56.22%	2.60	2.87
Sm, ppm	4.17	0.196	3.78	4.57	3.59	4.76	4.70%	9.41%	14.11%	3.97	4.38
Sn, ppm	9.32	0.686	7.95	10.69	7.26	11.38	7.36%	14.72%	22.08%	8.85	9.79
Sr, ppm	199	20	159	238	139	258	9.99%	19.97%	29.96%	189	209
Ta, ppm	0.44	0.06	0.32	0.55	0.27	0.61	13.03%	26.06%	39.09%	0.41	0.46
Tb, ppm	0.59	0.053	0.48	0.69	0.43	0.74	9.03%	18.06%	27.08%	0.56	0.62
Te, ppm	1.14	0.092	0.96	1.33	0.87	1.42	8.03%	16.06%	24.09%	1.09	1.20
Th, ppm	7.53	0.627	6.27	8.78	5.64	9.41	8.33%	16.66%	25.00%	7.15	7.90
Ti, wt.%	0.344	0.018	0.307	0.380	0.289	0.399	5.32%	10.65%	15.97%	0.327	0.361
Tl, ppm	0.29	0.016	0.25	0.32	0.24	0.33	5.60%	11.21%	16.81%	0.27	0.30
Tm, ppm	0.28	0.015	0.25	0.31	0.23	0.33	5.52%	11.05%	16.57%	0.27	0.29
U, ppm	42.2	3.17	35.9	48.6	32.7	51.8	7.51%	15.01%	22.52%	40.1	44.4
V, ppm	164	9	147	181	138	190	5.30%	10.60%	15.91%	156	172
W, ppm	135	11	113	157	102	168	8.18%	16.37%	24.55%	128	142
Y, ppm	18.5	0.94	16.6	20.4	15.7	21.3	5.09%	10.18%	15.28%	17.6	19.4
Yb, ppm	1.97	0.115	1.74	2.20	1.62	2.31	5.83%	11.66%	17.49%	1.87	2.06
Zn, ppm	30.2	2.14	25.9	34.5	23.8	36.6	7.08%	14.16%	21.23%	28.7	31.7
Zr, ppm	112	6	101	123	95	128	4.94%	9.87%	14.81%	106	117
3-Acid Digestion (no HF)											
Ag, ppm	1.19	0.18	0.82	1.56	0.64	1.74	15.39%	30.79%	46.18%	1.13	1.25
As, ppm	502	17	469	536	452	553	3.33%	6.66%	9.99%	477	528
Co, ppm	547	22	503	591	481	613	4.00%	8.00%	12.01%	520	574
Cu, wt.%	0.908	0.022	0.864	0.952	0.842	0.974	2.42%	4.84%	7.25%	0.863	0.954
Fe, wt.%	24.91	0.563	23.78	26.03	23.22	26.60	2.26%	4.52%	6.77%	23.66	26.15
Mo, ppm	193	9	175	211	167	220	4.60%	9.19%	13.79%	184	203
S, wt.%	2.74	0.167	2.41	3.07	2.24	3.24	6.08%	12.16%	18.24%	2.60	2.88

Table 4 continued.

Constituent	Certified Value	Absolute Standard Deviations					Relative Standard Deviations			5% window	
		1SD	2SD Low	2SD High	3SD Low	3SD High	1RSD	2RSD	3RSD	Low	High
Aqua Regia Digestion											
Ag, ppm	1.23	0.102	1.03	1.43	0.92	1.54	8.31%	16.63%	24.94%	1.17	1.29
Al, wt.%	1.29	0.044	1.20	1.37	1.15	1.42	3.42%	6.84%	10.26%	1.22	1.35
As, ppm	492	25	442	541	417	566	5.03%	10.07%	15.10%	467	516
Au, ppm	0.549	0.025	0.499	0.599	0.474	0.624	4.54%	9.08%	13.62%	0.521	0.576
Be, ppm	0.41	0.06	0.28	0.54	0.22	0.60	15.52%	31.05%	46.57%	0.39	0.43
Bi, ppm	8.87	0.487	7.89	9.84	7.41	10.33	5.49%	10.97%	16.46%	8.42	9.31
Ca, wt.%	3.43	0.154	3.12	3.74	2.97	3.89	4.48%	8.96%	13.45%	3.26	3.60
Ce, ppm	153	9	136	171	127	179	5.64%	11.27%	16.91%	146	161
Co, ppm	533	33	467	598	434	631	6.17%	12.34%	18.51%	506	559
Cr, ppm	28.6	1.32	26.0	31.3	24.7	32.6	4.61%	9.22%	13.83%	27.2	30.1
Cs, ppm	0.52	0.05	0.42	0.63	0.36	0.69	10.19%	20.38%	30.58%	0.50	0.55
Cu, wt.%	0.904	0.031	0.841	0.966	0.810	0.997	3.44%	6.88%	10.32%	0.858	0.949
Fe, wt.%	24.13	0.615	22.90	25.36	22.29	25.98	2.55%	5.10%	7.64%	22.93	25.34
Ga, ppm	13.2	1.5	10.3	16.2	8.8	17.6	11.18%	22.37%	33.55%	12.6	13.9
Hf, ppm	1.21	0.066	1.07	1.34	1.01	1.40	5.48%	10.97%	16.45%	1.15	1.27
In, ppm	0.23	0.023	0.18	0.27	0.16	0.30	9.96%	19.92%	29.88%	0.22	0.24
K, wt.%	0.528	0.020	0.488	0.568	0.468	0.589	3.79%	7.59%	11.38%	0.502	0.555
La, ppm	192	16	160	224	144	240	8.31%	16.61%	24.92%	183	202
Li, ppm	15.9	1.55	12.8	19.0	11.3	20.6	9.73%	19.47%	29.20%	15.1	16.7
Lu, ppm	0.23	0.015	0.20	0.26	0.19	0.28	6.60%	13.20%	19.80%	0.22	0.25
Mg, wt.%	1.07	0.056	0.96	1.18	0.90	1.24	5.27%	10.53%	15.80%	1.02	1.12
Mn, wt.%	0.367	0.020	0.328	0.407	0.308	0.427	5.38%	10.75%	16.13%	0.349	0.386
Mo, ppm	198	12	173	223	161	236	6.30%	12.61%	18.91%	188	208
Nb, ppm	0.91	0.066	0.77	1.04	0.71	1.10	7.29%	14.58%	21.88%	0.86	0.95
Ni, ppm	64	3.2	58	70	55	74	4.95%	9.89%	14.84%	61	67
P, wt.%	0.089	0.005	0.079	0.099	0.074	0.104	5.48%	10.95%	16.43%	0.084	0.093
Pb, ppm	12.5	1.18	10.1	14.8	8.9	16.0	9.48%	18.97%	28.45%	11.8	13.1
Rb, ppm	30.9	1.68	27.6	34.3	25.9	36.0	5.44%	10.89%	16.33%	29.4	32.5
S, wt.%	2.59	0.127	2.34	2.85	2.21	2.97	4.88%	9.77%	14.65%	2.46	2.72
Sb, ppm	5.39	1.02	3.35	7.42	2.33	8.44	18.88%	37.77%	56.65%	5.12	5.65
Sc, ppm	8.18	0.87	6.45	9.91	5.58	10.77	10.58%	21.16%	31.74%	7.77	8.59
Se, ppm	3.06	0.56	1.93	4.18	1.37	4.74	18.38%	36.75%	55.13%	2.90	3.21
Sn, ppm	7.59	0.158	7.28	7.91	7.12	8.06	2.08%	4.15%	6.23%	7.21	7.97
Sr, ppm	64	7	50	77	44	84	10.51%	21.03%	31.54%	61	67
Tb, ppm	0.54	0.038	0.46	0.61	0.42	0.65	7.10%	14.20%	21.30%	0.51	0.56
Te, ppm	1.11	0.083	0.94	1.27	0.86	1.36	7.51%	15.01%	22.52%	1.05	1.16
Th, ppm	7.33	0.573	6.18	8.48	5.61	9.05	7.81%	15.63%	23.44%	6.96	7.70
Ti, wt.%	0.146	0.021	0.103	0.188	0.082	0.210	14.54%	29.08%	43.62%	0.139	0.153
Tl, ppm	0.13	0.011	0.11	0.16	0.10	0.17	8.30%	16.60%	24.89%	0.13	0.14
U, ppm	40.2	3.47	33.3	47.1	29.8	50.6	8.63%	17.26%	25.89%	38.2	42.2
V, ppm	153	8	138	168	130	175	4.94%	9.89%	14.83%	145	160
W, ppm	113	10	93	134	83	144	8.98%	17.96%	26.95%	108	119
Y, ppm	14.9	1.34	12.2	17.6	10.9	18.9	8.99%	17.98%	26.97%	14.1	15.6

Note: intervals may appear asymmetric due to rounding.

Table 4 continued.

Constituent	Certified Value	Absolute Standard Deviations					Relative Standard Deviations			5% window	
		1SD	2SD Low	2SD High	3SD Low	3SD High	1RSD	2RSD	3RSD	Low	High
Aqua Regia Digestion continued											
Yb, ppm	1.57	0.119	1.33	1.80	1.21	1.92	7.59%	15.17%	22.76%	1.49	1.64
Zn, ppm	28.3	1.67	24.9	31.6	23.3	33.3	5.89%	11.78%	17.66%	26.9	29.7
Zr, ppm	45.7	3.55	38.6	52.8	35.1	56.4	7.76%	15.52%	23.28%	43.4	48.0
Infrared Combustion											
S, wt.%	3.11	0.082	2.94	3.27	2.86	3.36	2.65%	5.29%	7.94%	2.95	3.26
Gas / Liquid Pycnometry											
SG, Unity	3.26	0.076	3.11	3.41	3.03	3.49	2.34%	4.69%	7.03%	3.10	3.42

Note: intervals may appear asymmetric due to rounding.

PREPARER AND SUPPLIER OF THE REFERENCE MATERIAL

Reference material OREAS 522 has been prepared, certified and is supplied by:

ORE Research & Exploration Pty Ltd
37A Hosie Street
Bayswater North VIC 3153
AUSTRALIA

Tel: +613-9729 0333
Fax: +613-9729 8338
Web: www.ore.com.au
Email: info@ore.com.au

OREAS 522 is available in unit sizes of 60g and 100g sealed under nitrogen in laminated foil pouches.

INTENDED USE

OREAS 522 is intended for the following uses:

- for the monitoring of laboratory performance in the analysis of analytes reported in Table 1 in geological samples;
- for the verification of analytical methods for analytes reported in Table 1;
- for the calibration of instruments used in the determination of the concentration of analytes reported in Table 1.

STABILITY AND STORAGE INSTRUCTIONS

OREAS 522 has been sourced from iron oxide copper-gold ore and waste rock from the Ernest Henry deposit. It contains reactive sulphide (3.11% S) and has been packaged under a nitrogen environment (single use laminated foil pouches only). In its unopened state and under normal conditions of storage the CRM has a shelf life beyond ten years. Its stability will be monitored at regular intervals and purchasers notified if any changes are observed.

INSTRUCTIONS FOR CORRECT USE

The certified values for OREAS 522 refer to the concentration level in its packaged state. It should not be dried prior to weighing and analysis.

HANDLING INSTRUCTIONS

Fine powders pose a risk to eyes and lungs and therefore standard precautions such as the use of safety glasses and dust masks are advised.

TRACEABILITY

The analytical samples were selected in a manner to represent the entire batch of prepared CRM. This 'representivity' was maintained in each submitted laboratory sample batch and ensures the user that the data is traceable from sample selection through to the analytical results that underlie the consensus values. Each analytical data set has been validated by its assayer through the inclusion of internal reference materials and QC checks during analysis. The laboratories were chosen on the basis of their competence (from past performance in inter-laboratory programs) for a particular analytical method, analyte or analyte suite, and sample matrix. Most of these laboratories have and maintain ISO 17025 accreditation. The certified values presented in this report are calculated from the means of accepted data following robust statistical treatment as detailed in this report.

LEGAL NOTICE

Ore Research & Exploration Pty Ltd has prepared and statistically evaluated the property values of this reference material to the best of its ability. The Purchaser by receipt hereof releases and indemnifies Ore Research & Exploration Pty Ltd from and against all liability and costs arising from the use of this material and information.

QMS ACCREDITED

ORE Pty Ltd is accredited to ISO 9001:2008 by Lloyd's Register Quality Assurance Ltd for its quality management system including development, manufacturing, certification and supply of CRMs.

CERTIFYING OFFICER

Craig Hamlyn (B.Sc. Hons - Geology), Technical Manager - ORE P/L

REFERENCES

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APPENDIX 5: PETROGRAPHIC STUDY REPORT

Gowan Property

Petrography and Whole Rock Geochemistry Report

Krisztina Pandur,
Connor Malek

First Geolas Consulting

2022 June 28

Summary

Sixteen samples were collected for petrographic analysis from drill core obtained during the January 2022 diamond drill program completed on the Gowan Property by Pelangio Exploration Inc. Sixteen additional samples were collected for whole rock geochemistry from the vicinity of the petrography samples. The main aims of the study were to provide a general characterization of the microscopic features of the various rock units encountered during drilling and to provide an analysis of the lithology with regard to the intrusive versus extrusive nature of the felsic rock units.

Samples 26701 to 26707 (and the associated whole rock samples 26701wr to 26707wr) are from various depths of drillhole GO2202, samples 26708 to 26711 (and 26708wr to 26711wr) are from drillhole GO2201, samples 26712 to 26715 (and 26712wr to 26715wr) are from drillhole GO2203, and sample 26716 (and 26716wr) is from drillhole GO2204.

Petrographic Analysis

The following paragraphs contain a summary of the lithological and deformation features, observed alteration and mineralization characteristics of the petrography samples, and detailed descriptions for each thin section are provided at the end of the report. Each petrographic description is followed by several photomicrographs (referred to and explained in the description text), where "PPL" denotes plane polarized light image in transmitted light, "XPL" denotes cross polarized light image in transmitted light, and "REF" denotes plane polarized light image in transmitted light.

Samples 26701, 26702, and 26703 (logged as Felsic Intrusive unit from drillhole GO2202) and 26708 and 26709 (logged as Felsic Intrusive unit from drillhole GO2201) capture felsic intrusive rocks, with intergranular, equigranular or porphyritic textures, consisting dominantly of plagioclase phenocrysts and interstitial quartz and plagioclase, with minor K-feldspar in some of the samples. Muscovite and lesser biotite, commonly altered to chlorite, are present in the samples, either along fractures or forming clusters or irregular sheared layers. Weak sericite and carbonate alteration was observed throughout the samples and rare carbonate veins were also encountered. The samples display weak deformation, generally manifested in undulose extinction, subgrain formation and grain size reduction in quartz crystals, but these features are also present locally in plagioclase and rare K-feldspar phenocrysts. The plagioclase crystals also commonly display deformation twinning. Distinct shearing defined by mica layers was only observed in sample 26708. The samples contain disseminated magnetite

and ilmenite, the latter commonly forming pseudomorphs with fine titanite. They also contain trace disseminated pyrite and chalcopyrite and rare transparent sphalerite was observed in sample 26701 and 26709, hosted within a late carbonate veinlet with associated limonite alteration in the latter sample.

Samples 26704 (logged as Felsic Intrusive unit from drillhole GO2202), 26710 (logged as Diorite Quartz Eye Porphyry unit from drillhole GO2201), 26712, 26713 (logged as Felsic Intrusive Quartz Feldspar Porphyritic unit from drillhole GO2203) and 26715 (Felsic Intrusive Granodiorite unit from drillhole GO2203) capture porphyritic rocks with finer grained groundmass. These samples consist primarily of plagioclase, lesser quartz, minor K-feldspar, chloritized biotite, muscovite and carbonate. The plagioclase phenocrysts are weakly sericite altered, with localized carbonate alteration. Rare K-feldspar phenocrysts also displaying weak sericite alteration, and few slightly embayed quartz phenocrysts were observed. Quartz eyes and quartz-plagioclase-carbonate rich flattened segregations are also present along foliation. The groundmass consists of quartz, plagioclase, muscovite, chlorite and carbonate. The samples are slightly deformed (undulose extinction in quartz and plagioclase, and deformation twinning in plagioclase crystals) or contain sheared layers of muscovite and chlorite. In the more deformed samples, sheared plagioclase porphyroblasts and carbonate porphyroclasts, as well as sheared lenses of mica crystals were observed. Disseminated magnetite, hematite, rare chalcopyrite and pyrite are present in most of these samples. Chalcopyrite is a secondary, fracture filling phase in samples 26704 and 26710, and is associated with secondary hematite replacing magnetite in the latter sample. The groundmass in these porphyritic samples is crystalline, and void of any obvious indications of volcanic origin. No concentrically zoned plagioclase crystals indicating extrusion were observed. The degree of recrystallization in the fine grained matrix is difficult to determine as the samples were subject to greenschist to lower amphibolite grade metamorphism, therefore a definitive determination on whether these samples represent coarse grained volcanic rocks (from the lower part of a volcanic flow) or shallow intrusive rocks is not possible. However, they have similar mineralogy to the above mentioned intrusive granitoid samples and they lack definitive textural features suggesting volcanic origin, suggesting that most of these samples are from shallow intrusive rocks.

Sample 26711 (logged as Felsic Tuff unit from drillhole GO2201) captures a fine grained tuff unit consisting of plagioclase and quartz crystals in equigranular pattern within sections separated by discontinuous mica layers consisting mostly of muscovite and lesser biotite, and carbonate porhyroclasts. The mica crystals and flattened carbonate porphyroclasts define the weakly developed foliation in the sample. Trace sericite alteration, and disseminated magnetite, hematite, and trace chalcopyrite and pyrite crystals were observed.

Fine grained, mafic volcanic rocks (logged as Mafic Volcanic unit) were captured in samples 26705 (from drillhole GO2202) and 26714 (from drillhole GO2203), consisting dominantly of plagioclase, carbonate, chlorite, and lesser muscovite. These rocks are weakly (sample 26705) to strongly deformed (sample 26714) with foliation defined by flattened carbonate rich patches and sheared sigmoidal carbonate porphyroclasts surrounded by chlorite rich pressure shadows, as well as chlorite and muscovite rich sheared layers. Chlorite replaces biotite in these samples, and plagioclase crystals are fine grained and recrystallized. Trace titanite and rutile are present. These samples host disseminated magnetite and ilmenite, with rare pyrite and chalcopyrite in the vicinity of magnetite. Irregular carbonate-quartz veinlets are present along foliation in both samples.

Sample 26706 (logged as Mafic/Ultramafic Intrusive unit from drillhole GO2202) captures a coarser grained mafic intrusive rock also consisting of plagioclase, carbonate, muscovite, and chloritized biotite. The mica crystals are loosely aligned along moderately developed shearing. The sample contains disseminated magnetite and ilmenite, and minor pyrite and chalcopyrite. Chalcopyrite is a late fracture filling phase.

Fine grained, intensely altered ultramafic rocks were captured in samples 26707 (logged as Ultramafic Volcanic unit from drillhole GO2202) and 26716 (logged as Peridotite from drillhole GO2204). Sample 26707 is almost completely replaced by carbonate and lesser chlorite, whereas sample 26716 is intensely altered to talc, with lesser carbonate, serpentine, and chlorite. In these samples, coarser pseudomorphs preserve the shape of original mafic minerals and sigma clasts, embedded in the fine grained groundmass. These samples also host disseminated magnetite and rare chalcopyrite and pyrite.

Whole Rock Geochemistry

Sixteen drill core samples were collected within 2 meters of each corresponding petrography sample with an identical sample identifier (Table 1). Each of these samples were subject to whole rock analysis by fusion with XRF finish by ALS Geochemistry in North Vancouver, BC. The goal of this analysis is to geochemically characterize and classify the various rock units encountered in the January 2022 drilling. Rocks collected from the mapped felsic metavolcanic rocks forming in a wedge in the eastern portion of the Gowan Property, primarily through historic and current drilling, have not been subject to detailed geochemical analysis other than standard assays that have recorded anomalous copper, zinc, and silver mineralization (Berger, 1998). The geochemical results show that the felsic samples ranged between 64.45 and 69.87 wt.% SiO_2 with high sodium content (Table 2). This contrasts with

geochemical signature of prospective Type FIII metavolcanic rocks from the Superior Province (Lesher et al., 1986) which have SiO_2 values of 70 to 78 %, less sodium (~2.0-5.0% Na_2O), and elevated potassium (~1.0-3.0 % K_2O) concentrations.

Table 1. Whole Rock Geochemistry Samples

Sample ID	Drillhole	Depth (m)	Sample ID	Drillhole	Depth (m)
26701wr	GO2202	58.2	26709wr	GO2201	83.55
26702wr	GO2202	74.9	26710wr	GO2201	91.8
26703wr	GO2202	109.85	26711wr	GO2201	113
26704wr	GO2202	125.7	26712wr	GO2203	74.7
26705wr	G02202	137.9	26713wr	GO2203	95
26706wr	GO2202	175.05	26714wr	GO2203	164.8
26707wr	GO2202	194.8	26715wr	GO2203	218.05
26708wr	GO2201	66.7	26716wr	GO2204	113.85

Table 2. Whole Rock Geochemistry Results

Sample ID	Al2O3 %	BaO %	CaO %	Cr2O3 %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SO3 %	SiO2 %	SrO %	TiO2 %	Total %	LOI %
26701	16.16	0.08	2.17	<0.01	1.55	0.29	1.06	0.04	9.33	0.04	0.17	66.53	0.04	0.18	100.6	2.94
26702	17.14	0.12	1.23	<0.01	1.97	0.16	0.97	0.02	>10.0	0.07	0.06	66.29	0.03	0.12	100.45	1.77
26703	16.37	0.04	0.98	<0.01	2.19	0.16	1.06	0.02	9.8	0.04	0.04	67.51	0.04	0.15	99.74	1.29
26704	15.75	0.14	1.26	<0.01	3.01	0.08	3.02	0.02	9.59	0.01	0.14	65.2	0.02	0.13	99.88	1.45
26705	13.12	0.01	5.88	0.08	13.26	0.06	10	0.19	4.79	0.06	0.38	42.62	0.05	0.86	100.7	9.17
26706	9.23	0.02	5.81	0.1	10.5	0.24	16.95	0.09	2.46	0.89	0.05	40.88	0.05	1.1	99.25	10.71
26707	5.66	0.03	2.04	0.32	10.71	<0.01	26.2	0.13	0.06	0.02	0.03	42.66	0.01	0.3	98.95	10.5
26708	15.39	0.16	1.64	<0.01	1.8	1.73	0.82	0.03	6.24	0.05	0.01	69.87	0.01	0.13	100	2.09
26709	16.58	0.02	1.25	<0.01	2.37	0.17	1.32	0.02	9.88	0.05	0.01	66.54	0.03	0.16	99.75	1.3
26710	15.98	0.09	1.5	<0.01	1.06	1.02	0.7	0.04	7.7	0.04	0.04	69.78	0.01	0.1	99.66	1.58
26711	10.2	0.05	5.29	0.07	11.48	0.42	8.2	0.11	5.73	0.02	0.01	49.43	0.1	0.55	100.25	8.43
26712	17.82	0.02	1.21	<0.01	1.39	0.1	1.02	0.02	>10.0	0.03	<0.01	65.66	0.02	0.12	100.05	1.75
26713	16.23	0.06	1.26	<0.01	1.16	1.51	0.98	0.02	7.19	0.05	0.02	69.42	0.01	0.11	100.35	2.3
26714	8.43	0.03	6.73	0.23	10.52	0.08	14.45	0.16	1.82	0.04	0.13	41.25	0.03	0.55	99.71	15.1
26715	16.36	0.01	0.76	0.01	3.02	0.08	3.09	0.03	9.89	0.04	0.44	64.45	0.01	0.12	99.9	1.54
26716	5.77	0.09	4.59	0.3	9.78	0.14	24.8	0.13	0.78	0.02	0.51	40.6	0.02	0.28	99.73	11.69

A total alkali versus silica ("TAS") plutonic rock classification was used for the 2022 drill core samples (Figure 1). The felsic rocks encountered in the 2022 drilling have an intrusive genesis, suggested by the petrographic analysis, and the majority of samples plot within or bounding the quartz monzonite field of the TAS plutonic diagram.

A total alkali versus silica ("TAS") volcanic rock classification was also used (Figure 2). If the porphyritic rocks with finer grained groundmass (samples 26704, 26710, 26712, 26713, 26715) are of volcanic affinity, the majority of the samples plot within the trachyte field. Interestingly, sample 26711 which was logged as a felsic tuff unit plots within the trachybasalt field. The mafic rocks (samples 26705, 26706, 26714) intersected in the January 2022 drilling plot within the ultramafic field, likely due to increased Mg/Si ratio due to chlorite alteration.

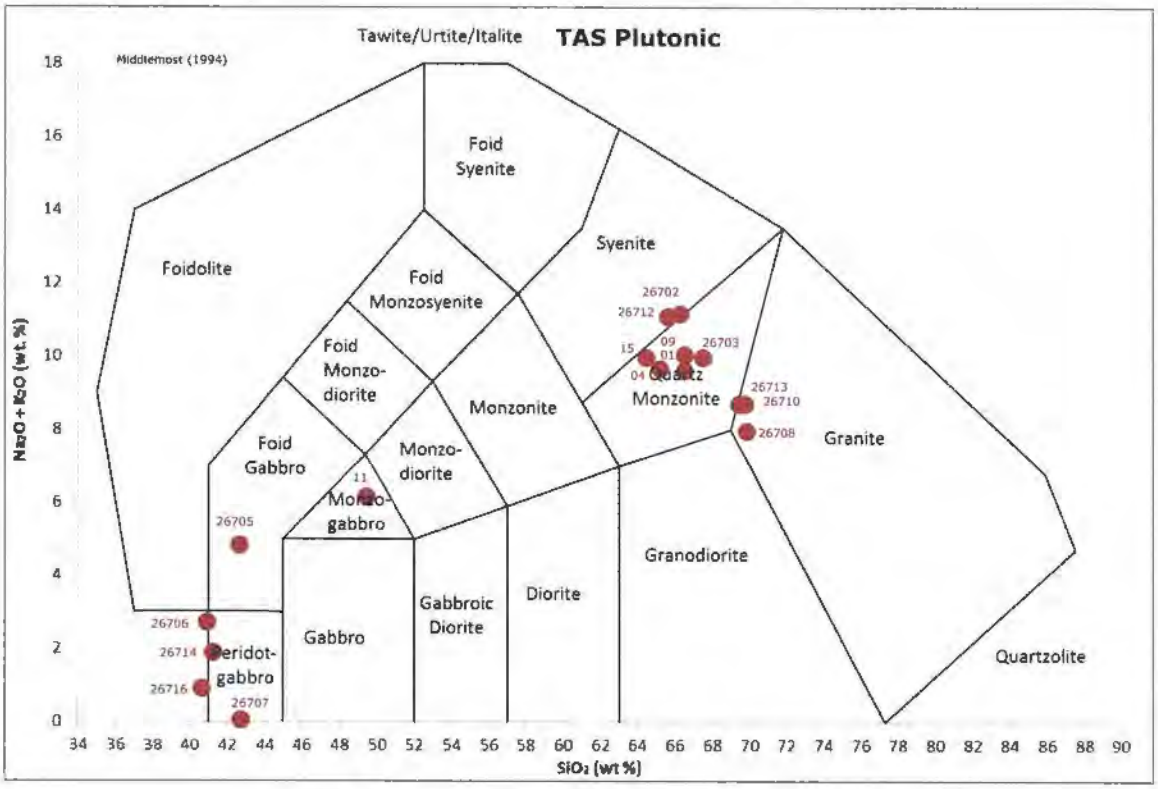


Figure 1. TAS Plutonic Rock Classification Diagram

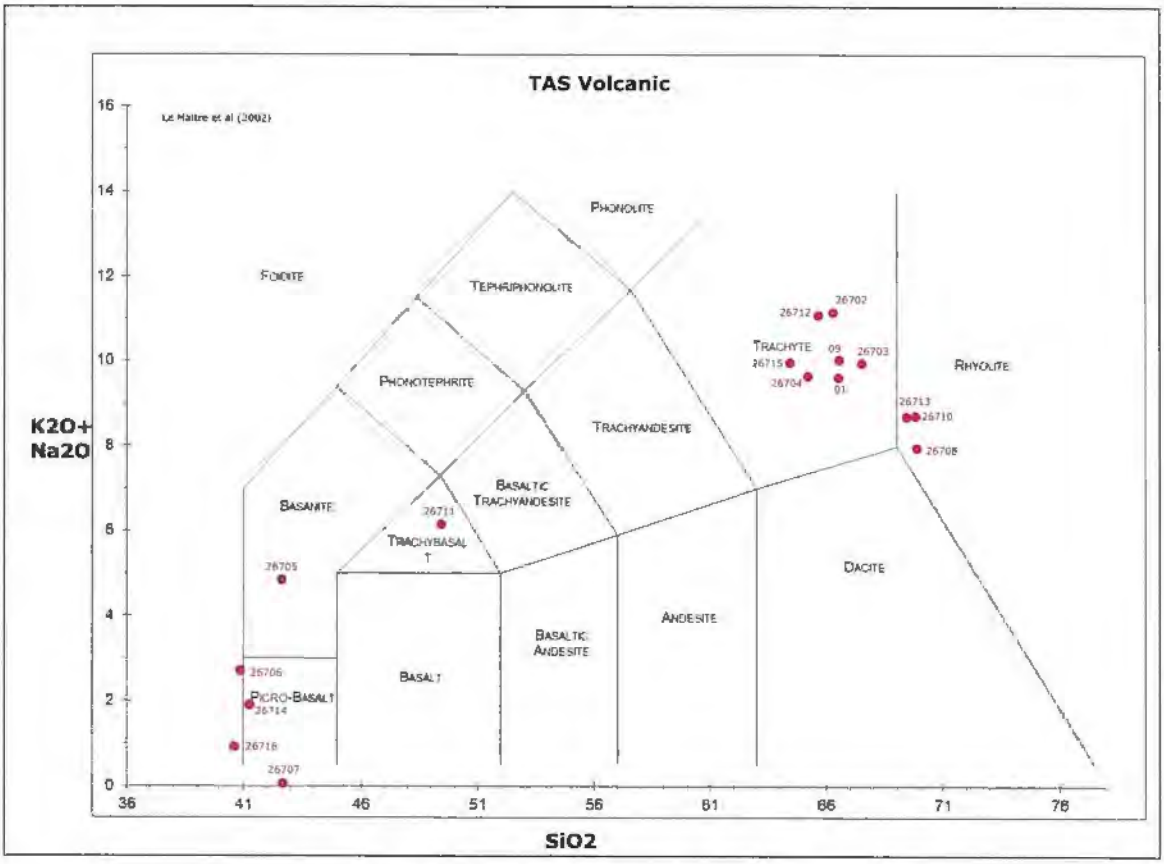


Figure 2. TAS Volcanic Rock Classification Diagram

Future geochemical work on the Gowan Property can include trace and REE element analysis to further classify the units and compare against known VMS mineralization in the area. The rhyolites hosting the Kidd Creek VMS deposit are described to exhibit pronounced negative Eu anomalies, low Zr/Y, high abundances of HFS elements, and low abundances of Sr (Type FIIIb felsic metavolcanic rocks; Lesher et al., 1986).

Petrographic Descriptions

Sample 26701

Location: Drillhole GO2202 – 59.5 m

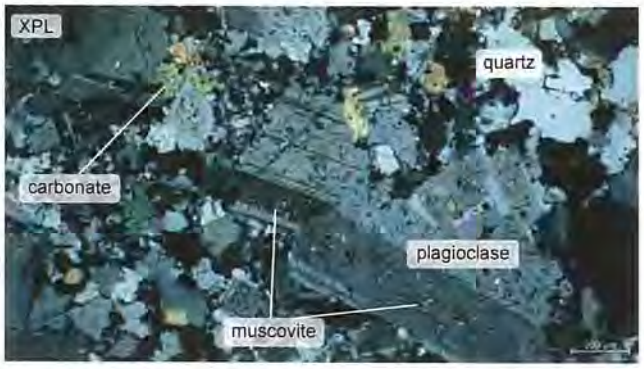
Hand Specimen Description: Light grey/white fine grained rock hosting white phenocrysts of plagioclase and lesser mafic minerals. Multiple fractures hosting mafic minerals were observed, and trace disseminated sulphides are present in the sample. Logged as Felsic Intrusive (7U) unit.

Mineralogy:

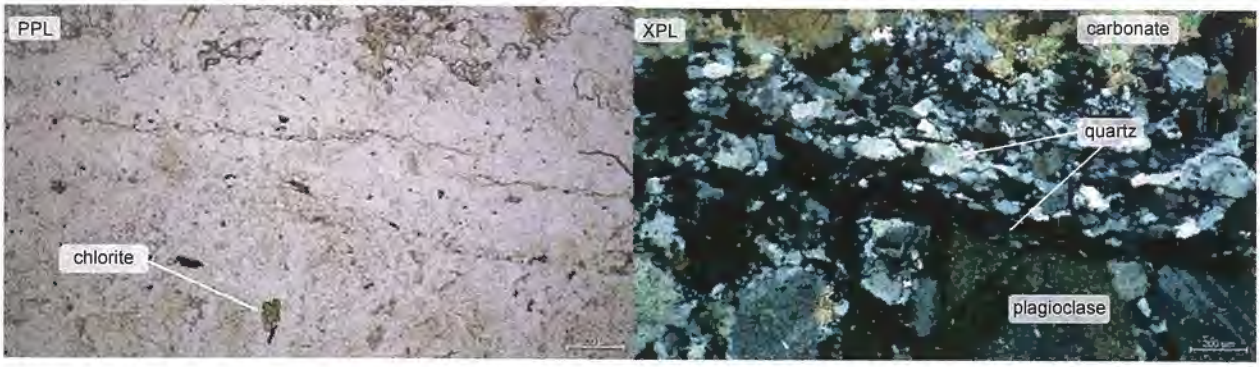
Mineral	%	Size	Distribution and Characteristics
Plagioclase	45	40 µm – 3 mm	Subhedral crystals, polysynthetic twinning, weak to moderate sericite alteration, primarily in the larger crystals, the outer margins of the crystals are locally unaltered
Quartz	35	5 µm – 1 mm	Anhedral, mostly interstitial to plagioclase, displaying undulose extinction, sutured grain boundaries and localized grain size reduction along fractures cross-cutting the sample
Carbonate	10	10 µm – 2.5 mm	Anhedral to subhedral crystals, forming irregular patches throughout the sample, altering plagioclase
Muscovite	5	submicron – 300 µm	Euhedral crystals, forming patches throughout the sample and with chlorite, along fractures cross-cutting the sample, altering plagioclase
Chlorite	3	5 µm – 300 µm	Euhedral crystals, disseminated throughout the sample and forming patches, also fine crystals along fractures with muscovite
Apatite	tr	20 µm – 100 µm	Euhedral crystals, disseminated in the sample
Pyrite	tr	submicron – 600 µm	Euhedral, disseminated crystals
Chalcopyrite	tr	submicron – 300 µm	Anhedral crystals, disseminated, adjacent to sphalerite
Sphalerite	tr	submicron – 700 µm	Anhedral, transparent crystals, generally adjacent to chalcopyrite and containing fine pyrite and chalcopyrite inclusions

Petrographic Description:

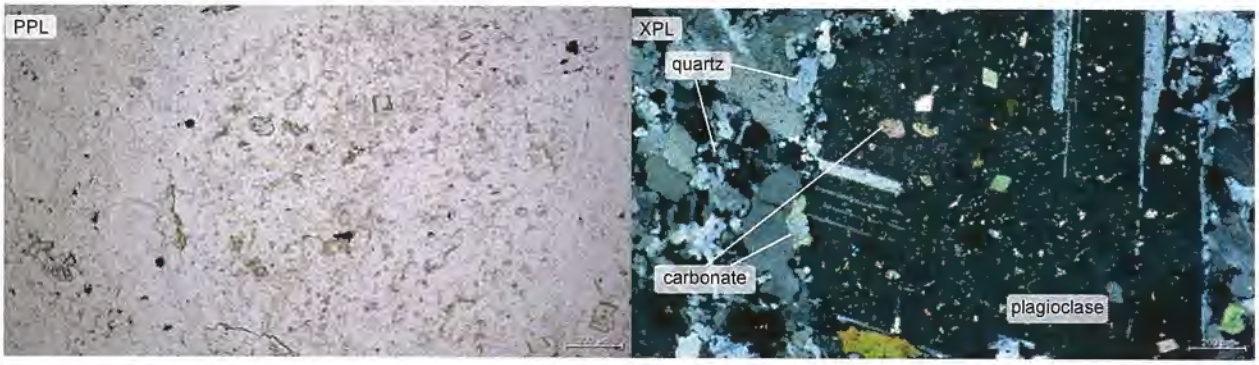
- Generally intergranular, locally equigranular and porphyritic, weakly altered intrusive rock, consisting dominantly of plagioclase, quartz, and lesser carbonate, muscovite, and chlorite, with trace apatite and disseminated sulphides.
- The plagioclase crystals are subhedral and show strong polysynthetic twinning, they are generally coarser grained phenocrysts in the rock with weak to moderate sericite (fine grained muscovite) alteration. The sericite alteration is most prominent in larger plagioclase crystals (Photomicrograph 26701_01), locally the crystal margins are unaltered/recrystallized.
- The anhedral quartz crystals in the sample are generally finer grained and interstitial to plagioclase. They display strong (locally sweeping) undulose extinction, sutured grain boundaries, and localized grain size reduction, particularly along fractures cross-cutting the sample (Photomicrograph 26701_02).
- Anhedral to subhedral carbonate crystals are present in the sample, forming irregular patches, interstitial to plagioclase and quartz and locally overprinting plagioclase (Photomicrograph 26701_03).
- Euhedral muscovite and lesser chlorite are present in the sample, forming irregular patches and chlorite shows increased abundance along fractures (Photomicrograph 26701_04). Muscovite also alters the plagioclase phenocrysts.
- Trace disseminated euhedral apatite crystals were observed.
- Trace euhedral pyrite and anhedral chalcopyrite crystals are disseminated in the sample, and anhedral, transparent sphalerite crystals were also observed, hosting fine pyrite and chalcopyrite inclusions (Photomicrograph 26701_05).



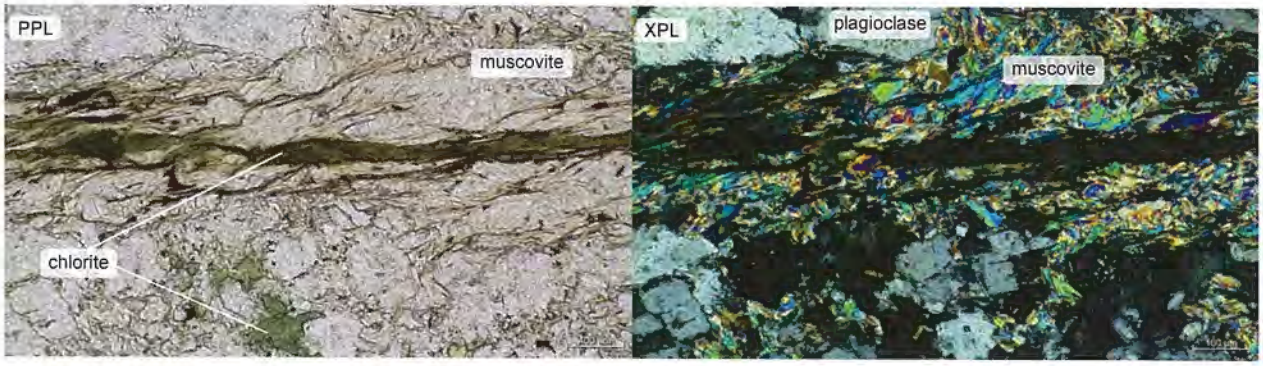
Photomicrograph 26701_01



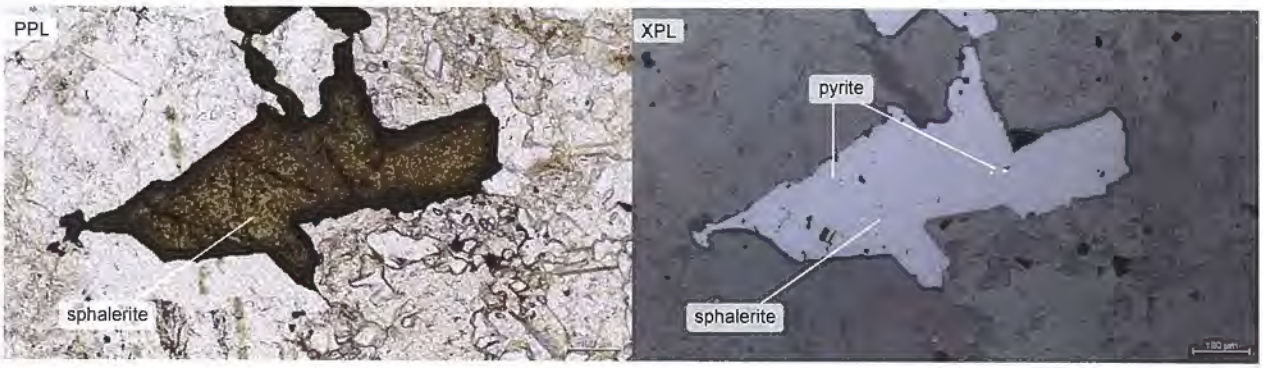
Photomicrograph 26701_02



Photomicrograph 26701_03



Photomicrograph 26701_04



Photomicrograph 26701_05

Sample 26702

Location: Drillhole GO2202 – 72.2 m

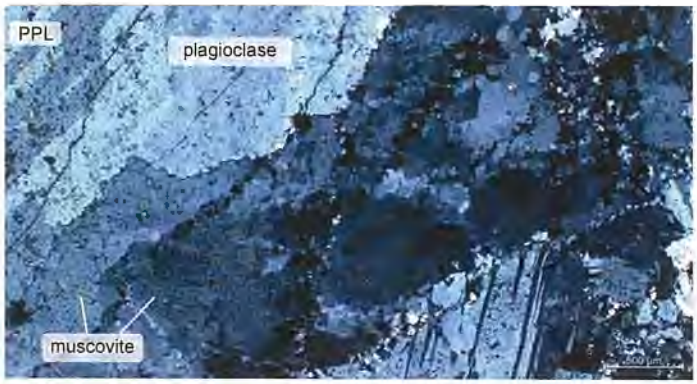
Hand Specimen Description: Light grey, fine grained intrusive rock hosting plagioclase, quartz, and lesser mafic minerals and K-feldspar, and a few quartz eyes and feldspar phenocrysts. Disseminated sulphides were observed. Logged as Felsic Intrusive (7U) unit.

Mineralogy:

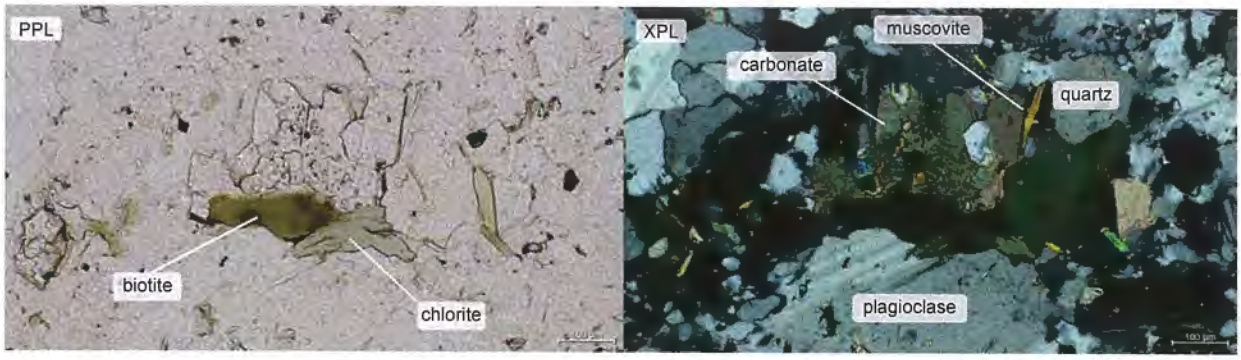
Mineral	%	Size	Distribution and Characteristics
Plagioclase	47	40 µm – 5 mm	Subhedral to euhedral crystals, polysynthetic twinning, weak sericite alteration and localized carbonate replacement, primarily in the larger crystals
Quartz	35	submicron – 600 µm	Anhedral, interstitial to plagioclase phenocrysts, displaying undulose extinction and localized grain size reduction
Carbonate	10	submicron – 800 µm	Anhedral to subhedral crystals, forming irregular patches throughout the sample, interstitial to and replacing plagioclase
Biotite	4	5 µm – 400 µm	Euhedral crystals, altered to chlorite, commonly in the vicinity of opaque minerals
Chlorite	1	5 µm – 200 µm	Euhedral crystals, replacing biotite
Muscovite	1	submicron – 200 µm	Euhedral crystals, altering plagioclase
Titanite	tr	10 µm – 200 µm	Fine anhedral crystals, forming rectangular pseudomorphs with carbonate and ilmenite
Zircon	tr	10 µm – 60 µm	Rare euhedral, zoned crystals
Magnetite	1	10 µm – 150 µm	Euhedral, disseminated crystals
Ilmenite	tr	submicron – 200 µm	Anhedral crystals, disseminated, in the vicinity of magnetite, also forming rectangular pseudomorphs with carbonate and titanite
Chalcopyrite	tr	10 µm – 100 µm	Rare anhedral crystals

Petrographic Description:

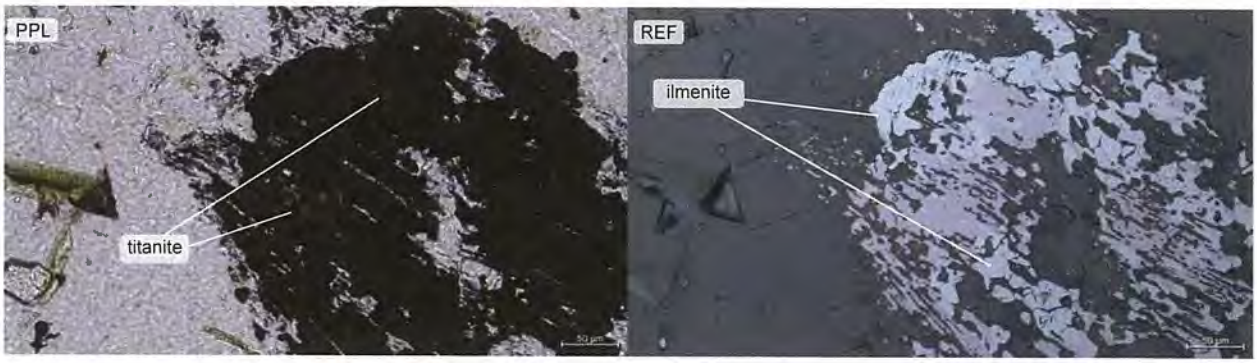
- Porphyritic, weakly altered intrusive rock, consisting dominantly of plagioclase phenocrysts and interstitial finer grained quartz, and lesser carbonate, biotite, muscovite, and chlorite. The sample hosts disseminated magnetite, ilmenite and rare chalcopyrite.
- The plagioclase crystals are subhedral to euhedral and show strong polysynthetic twinning, displaying weak sericite alteration and localized carbonate replacement, primarily in the coarser phenocrysts. Some of the coarser plagioclase phenocrysts display undulose extinction and grain size reduction along fractures and grain boundaries (Photomicrograph 26702_01).
- Fine quartz grains are interstitial to plagioclase in the sample, displaying undulose extinction and localized grain size reduction.
- Anhedral to subhedral carbonate crystals form patches in the interstitial space between plagioclase crystals, and also appear to replace plagioclase locally.
- Euhedral biotite is present throughout the sample, generally in the vicinity of opaque minerals and carbonate (Photomicrograph 26702_02). Chlorite replaces biotite locally. Trace muscovite is present in the sample, in the vicinity of biotite and altering plagioclase.
- Trace zircon was also observed, disseminated in the sample.
- Rare rectangular phenocrysts consisting of anhedral titanite, carbonate and ilmenite were observed locally (Photomicrograph 26702_03).
- The sample contains disseminated euhedral magnetite and anhedral ilmenite crystals (Photomicrograph 26702_04). Rare anhedral chalcopyrite crystals were also observed.



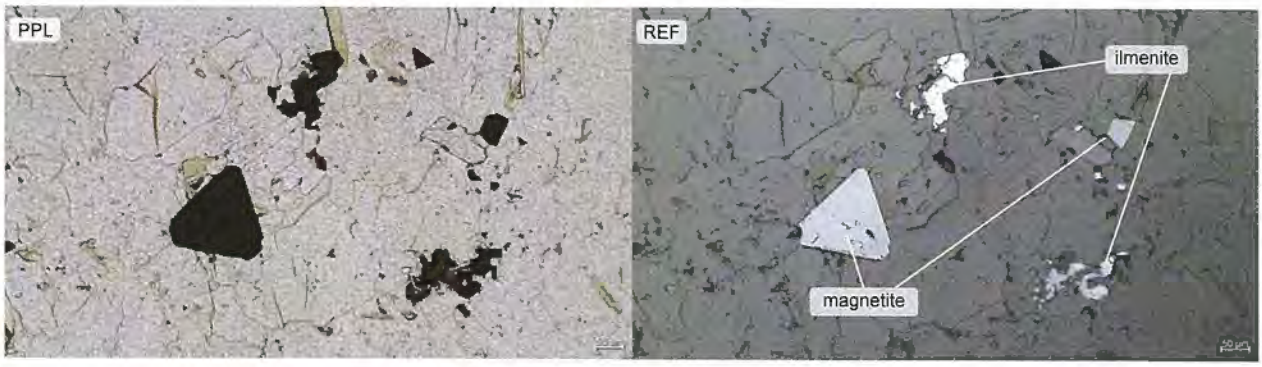
Photomicrograph 26702_01



Photomicrograph 26702_02



Photomicrograph 26702_03



Photomicrograph 26702_04

Sample 26703

Location: Drillhole GO2202 – 109.7 m

Hand Specimen Description: Medium grey, fine grained crystalline rock consisting primarily of feldspar and quartz, and lesser mafic minerals with poorly developed porphyritic texture (feldspar phenocrysts). White quartz and feldspar rich irregular patches/segregations were observed associated with increased abundance of mafic minerals. Logged as Felsic Intrusive (7U) unit.

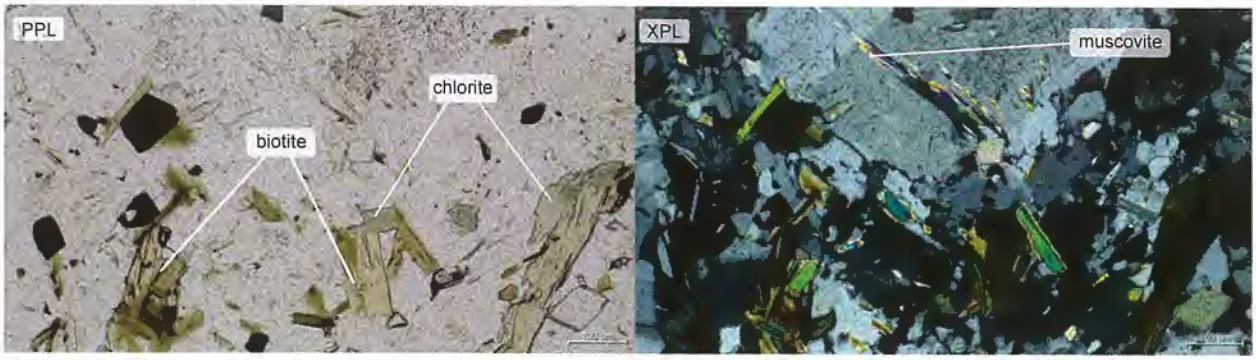
Mineralogy:

Mineral	%	Size	Distribution and Characteristics
Plagioclase	47	20 µm – 6 mm	Subhedral crystals, polysynthetic twinning and albite twinning, weak sericite alteration in the core of larger phenocrysts, the margins of these phenocrysts are unaltered, weak undulose extinction and subgrain formation within some phenocrysts and along grain boundaries
Quartz	35	10 µm – 100 µm	Anhedral crystals, interstitial to plagioclase, displaying undulose extinction
Carbonate	10	submicron – 300 µm	Anhedral to subhedral crystals, interstitial to plagioclase
Biotite	3	5 µm – 300 µm	Euhedral crystals, generally in the vicinity of carbonate and opaque phases, altered to chlorite
Chlorite	2	10 µm – 300 µm	Euhedral crystals, replacing biotite
Muscovite	1	submicron – 100 µm	Euhedral crystals, altering plagioclase
Titanite	tr	10 µm – 150 µm	Subhedral brown zoned crystals forming clusters with ilmenite and carbonate
Apatite	tr	50 µm – 100 µm	Rare euhedral crystals
Magnetite	2	10 µm – 300 µm	Euhedral, disseminated crystals throughout the sample
Ilmenite	tr	5 µm – 50 µm	Anhedral crystals, forming clusters with titanite and carbonate
Chalcopyrite	tr	5 µm – 100 µm	Trace anhedral crystals, disseminated and adjacent to ilmenite/titanite
Pyrite	tr	2 µm – 80 µm	Trace anhedral crystals, disseminated and adjacent to ilmenite/titanite

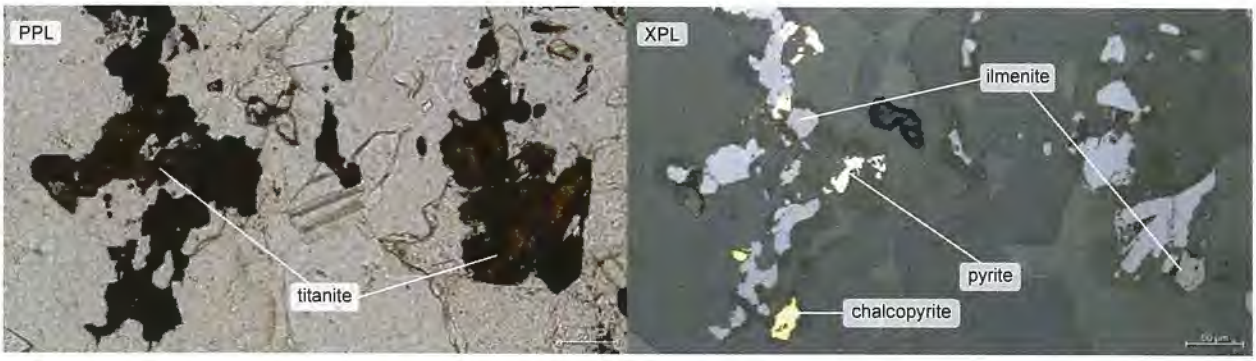
Petrographic Description:

- Porphyritic, weakly sericite-carbonate altered intrusive rock, consisting dominantly of plagioclase phenocrysts, and fine grained interstitial quartz, lesser carbonate, biotite, chlorite and muscovite. Disseminated magnetite is present in the sample, with trace ilmenite, chalcopyrite and pyrite.
- The plagioclase crystals are subhedral, with well-developed polysynthetic twinning and localized albite twinning. Weak sericite alteration was observed, primarily in the core of larger plagioclase phenocrysts, the margins of these phenocrysts are unaltered (Photomicrograph 26703_01). The plagioclase phenocrysts display weak undulose extinction and subgrain formation within some crystals and along grain boundaries.
- The quartz crystals of the sample are interstitial to plagioclase and display undulose extinction.
- Anhedral to subhedral carbonate crystals are present interstitial to plagioclase, and locally associated with ilmenite and titanite.
- Euhedral biotite crystals are present in the vicinity of carbonate crystals and opaque phases in the sample, and are partially or completely replaced by chlorite (Photomicrograph 26703_02). Fine euhedral muscovite alters the plagioclase phenocrysts.
- Rare euhedral apatite crystals were also observed.
- Locally, subhedral brown zoned titanite crystals were observed (brown cores and transparent margins), forming clusters with ilmenite and carbonate (Photomicrograph 26703_03).
- Disseminated euhedral magnetite is present throughout the sample. Ilmenite was observed locally, associated with titanite and carbonate. Trace anhedral chalcopyrite and pyrite crystals are also present (Photomicrograph 26703_03).

Photomicrograph 26703_01



Photomicrograph 26703_02



Photomicrograph 26703_03

Sample 26704

Location: Drillhole GO2202 – 125.5 m

Hand Specimen Description: White, fine grained intrusive rock consisting primarily of plagioclase, quartz, white pseudomorphs after phenocrysts, and minor disseminated mafic minerals. A stringer of opaque minerals cross-cuts the sample. Logged as Felsic Intrusive (7U) unit.

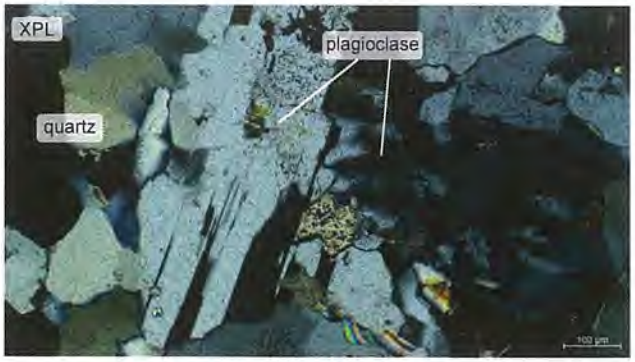
Mineralogy:

Mineral	%	Size	Distribution and Characteristics
Plagioclase	50	50 µm – 1 mm	Subhedral crystals, generally limited to pseudomorphs after phenocrysts, trace sericite alteration
Quartz	36	10 µm – 400 µm	Anhedral crystals, sweeping undulose extinction and polygonal grain boundaries in the fine grained intervals
Muscovite	10	submicron – 700 µm	Euhedral crystals, throughout the sample, showing similar alignment (weakly developed foliation) and increased abundance along fractures cross-cutting the sample
Carbonate	2	10 µm – 300 µm	Anhedral crystals, forming isolated patches in the sample
Titanite	tr	5 µm – 50 µm	Subhedral crystals forming clusters, in the vicinity of muscovite along fractures
Magnetite	2	20 µm – 600 µm	Euhedral, disseminated crystals, strongly fractured, chalcopyrite and hematite along margins and fractures
Chalcopyrite	tr	submicron – 300 µm	Anhedral crystals, in the vicinity of magnetite, coating along fractures within magnetite and within the sample
Hematite	tr	submicron – 100 µm	Anhedral crystals, in the vicinity of chalcopyrite, along fractures cross-cutting the sample

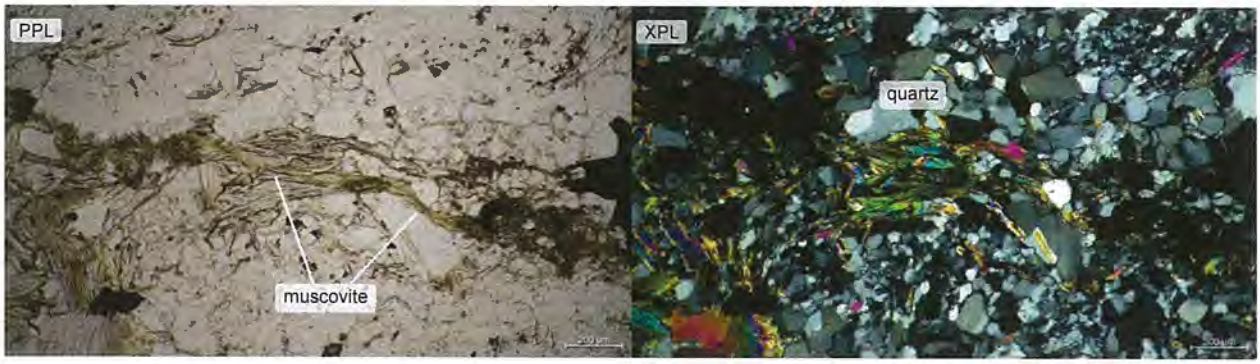
Petrographic Description:

- Silicified and recrystallized porphyritic rock comprising large pseudomorphs of phenocrysts and quartz eyes within a fine grained matrix, consisting of plagioclase and quartz (Photomicrograph 26704_01). Lesser plagioclase was observed in some of the pseudomorphs, muscovite is present throughout the sample, with increased abundance along fractures.
- The quartz crystals in the sample are anhedral, and commonly display sweeping undulose extinction, and in the fine grained matrix of the sample polygonal grain boundaries are common, indicating recrystallization.
- Subhedral plagioclase crystals were observed in the phenocryst pseudomorphs (Photomicrograph 26704_02), and in the fine grained matrix. They display trace sericite alteration.
- Euhedral muscovite crystals were observed throughout the sample, showing similar alignment (weakly developed foliation) and increased abundance along fractures cross-cutting the sample (Photomicrograph 26704_03).
- Anhedral carbonate crystals were observed in localized patches in the sample.
- Subhedral titanite crystals form clusters locally, in the vicinity of muscovite along fractures (Photomicrograph 26704_04).
- The sample contains disseminated euhedral, strongly fractured magnetite crystals. Anhedral hematite clusters were also observed in the vicinity of magnetite (Photomicrograph 26704_05).
- Trace chalcopyrite crystals are present along the fractures within magnetite (Photomicrograph 26704_06) and also along the muscovite lined fractures in the sample (Photomicrograph 26704_07).

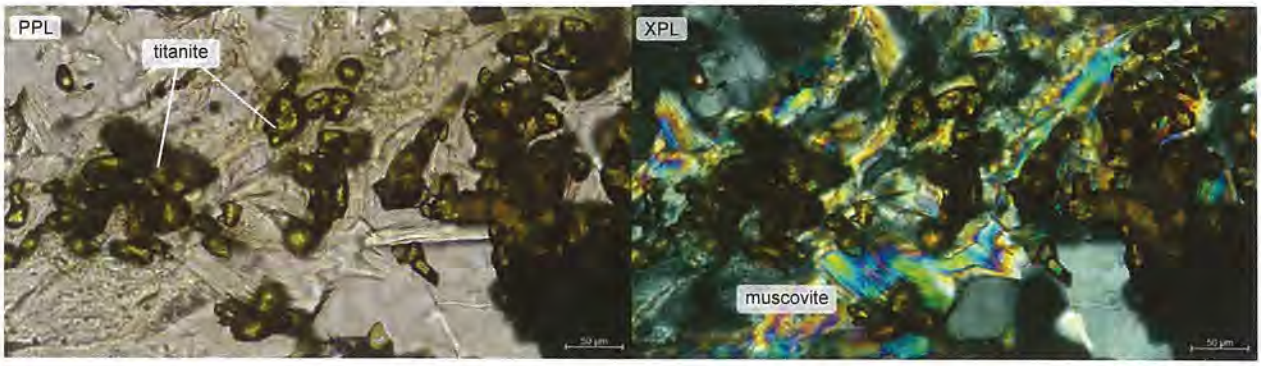
Photomicrograph 26704_01



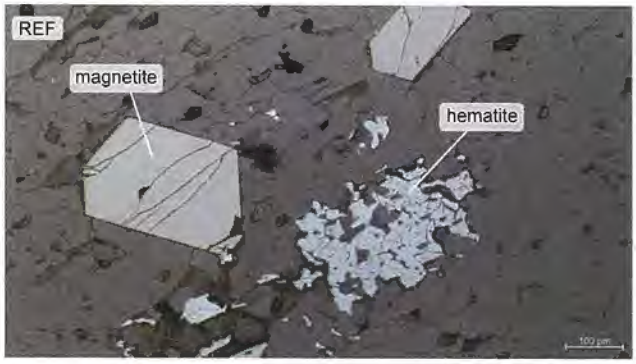
Photomicrograph 26704_02



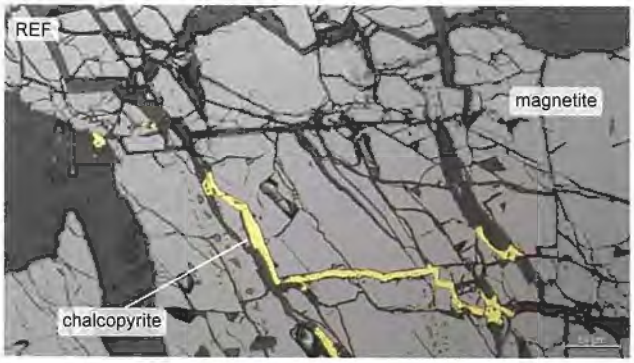
Photomicrograph 26704_03



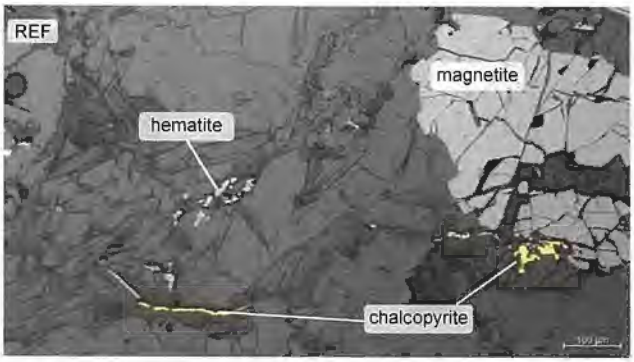
Photomicrograph 26704_04



Photomicrograph 26704_05

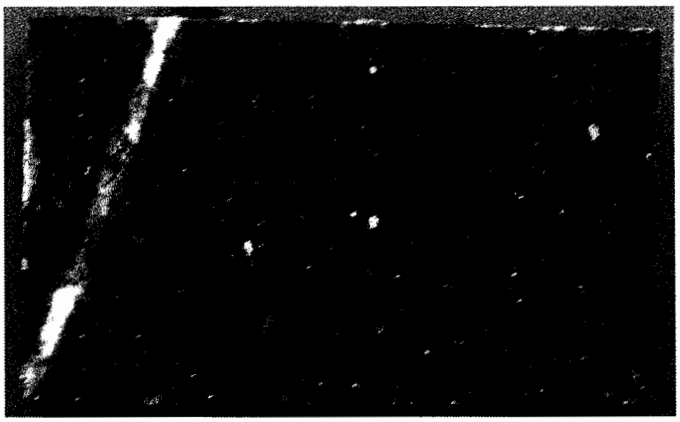


Photomicrograph 26704_06



Photomicrograph 26704_07

Sample 26705



Location: Drillhole GO2202 – 138.3 m

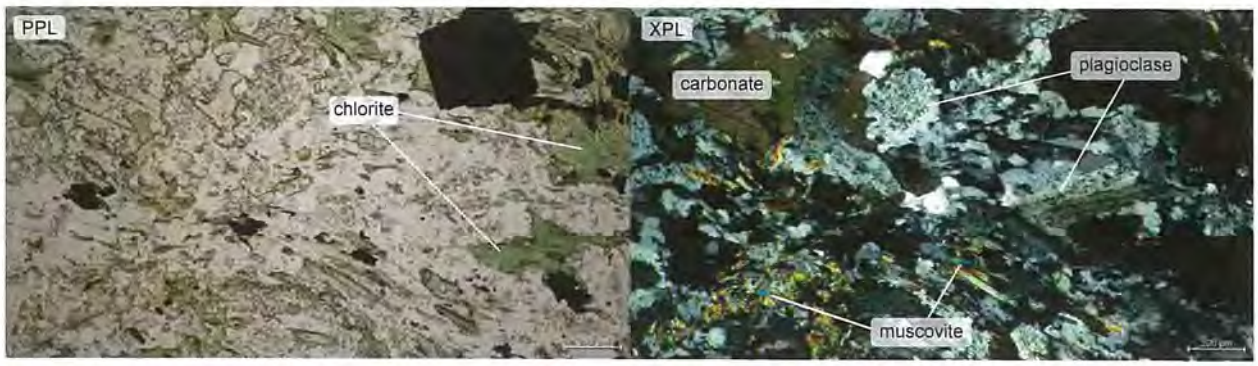
Hand Specimen Description: Greenish grey, fine grained mafic unit hosting disseminated pyrite crystals. Logged as Mafic Volcanic (2U) unit.

Mineralogy:

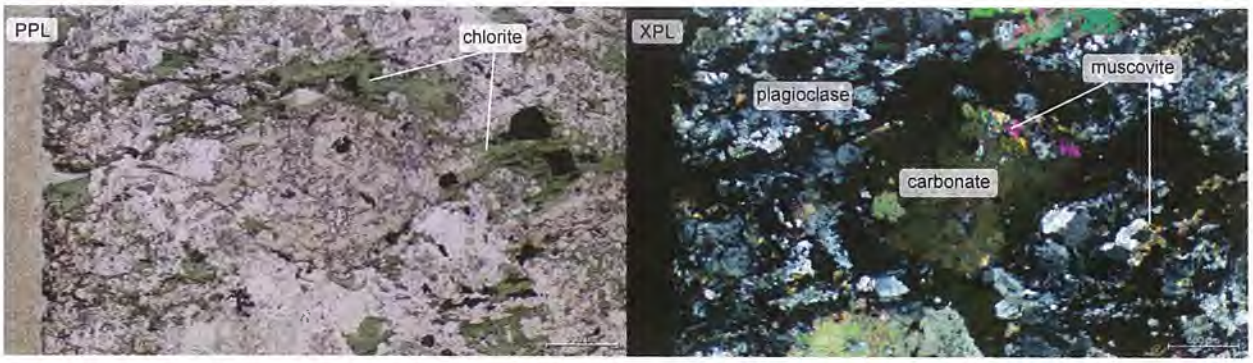
Mineral	%	Size	Distribution and Characteristics
Plagioclase	50	10 µm – 1 mm	Anhedral crystals, weakly developed polysynthetic twinning, common undulose extinction and sutured grain boundaries
Quartz	2	20 µm – 500 µm	Anhedral crystals, undulose extinction, localized adjacent to carbonate patches and porphyroclasts
Carbonate	20	10 µm – 1.5 mm	Anhedral crystals, forming irregular, slightly sheared patches sub-parallel to foliation and weakly developed sigma porphyroclasts with chlorite pressure shadows
Chlorite	20	5 µm – 800 µm	Euhedral crystals, generally aligned in similar orientations along foliation
Muscovite	5	submicron – 600 µm	Euhedral crystals, generally in the vicinity of chlorite
Titanite	tr	20 µm – 80 µm	Anhedral, yellow-orange crystals, generally in the vicinity of chlorite and opaque minerals
Rutile	tr	5 µm – 50 µm	Euhedral, brown and orange-brown, needle shaped crystals, generally embedded in chlorite
Magnetite	2	10 µm – 800 µm	Euhedral, fractured crystals disseminated throughout the sample
Ilmenite	1	5 µm – 200 µm	Anhedral crystals, generally in the vicinity of magnetite, and adjacent to rutile
Pyrite	tr	submicron – 800 µm	Euhedral crystals, disseminated in the sample
Chalcopyrite	tr	5 µm – 100 µm	Rare anhedral crystals, generally in the vicinity of magnetite

Petrographic Description:

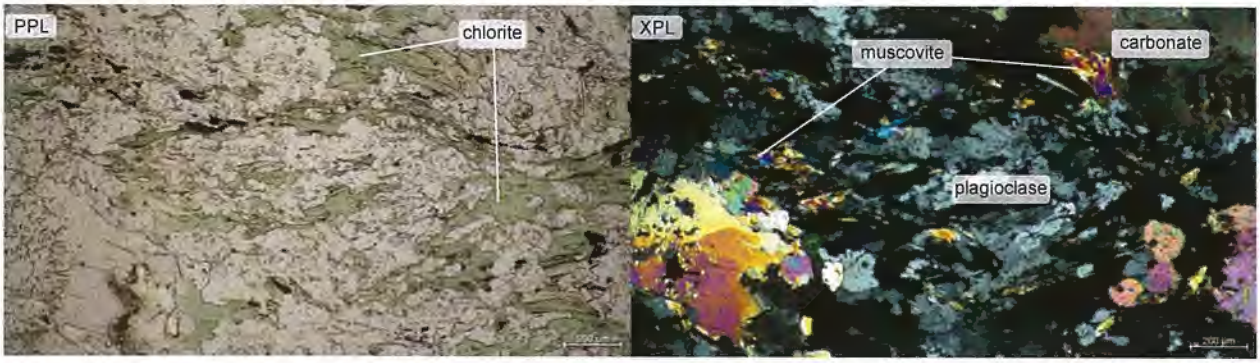
- Weakly deformed mafic unit consisting dominantly of plagioclase, carbonate, chlorite, lesser muscovite and quartz. The unit contains disseminated magnetite, ilmenite, and trace pyrite and chalcopyrite.
- The plagioclase crystals are anhedral and display weakly developed polysynthetic twinning. They commonly display undulose extinction and sutured grain boundaries, and localized weak alignment along foliation (Photomicrograph 26705_01).
- The rock contains irregular flattened patches and sigmoidal porphyroclasts of carbonate, the latter associated with chlorite pressure shadows (Photomicrograph 26705_02).
- Rare quartz crystals were observed adjacent to the carbonate patches, displaying undulose extinction.
- The euhedral chlorite crystals of the sample are generally aligned in similar orientations defining the weakly developed foliation of the sample (Photomicrograph 26705_03). Muscovite is commonly found adjacent to chlorite.
- Trace anhedral yellow titanite and euhedral brown and orange-brown rutile are found associated with chlorite throughout the sample.
- The sample contains disseminated euhedral magnetite and anhedral ilmenite. The latter are commonly adjacent to rutile crystals within the chlorite rich sections of the sample.
- Rare pyrite and chalcopyrite were also found, commonly associated with magnetite (Photomicrograph 26705_04).
- A 1.2 mm wide veinlet cross-cuts the sample, hosting carbonate with minor quartz, chlorite and muscovite (Photomicrograph 26705_05). The veinlet is irregular with poorly defined contacts.



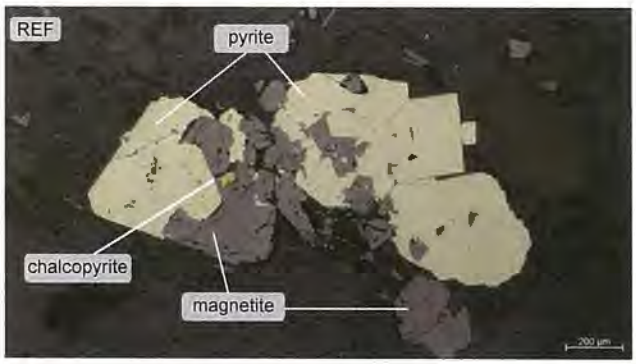
Photomicrograph 26705_01



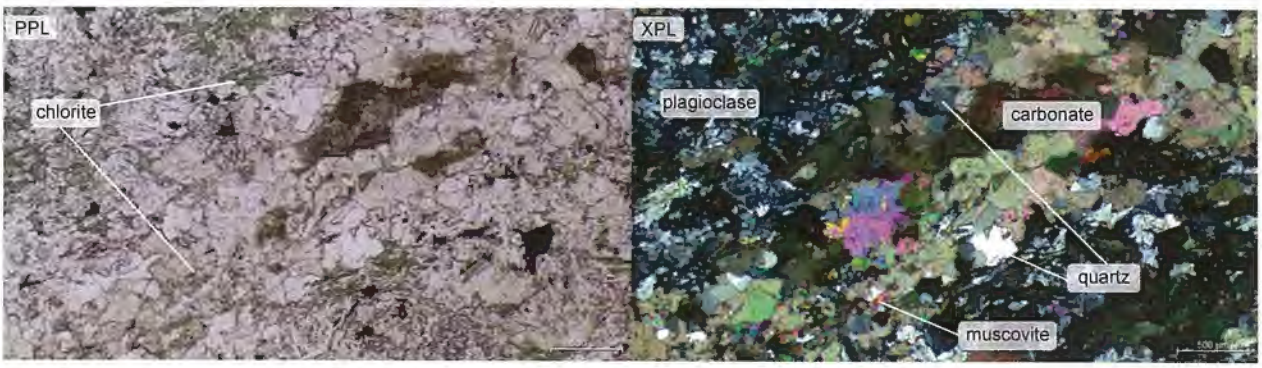
Photomicrograph 26705_02



Photomicrograph 26705_03

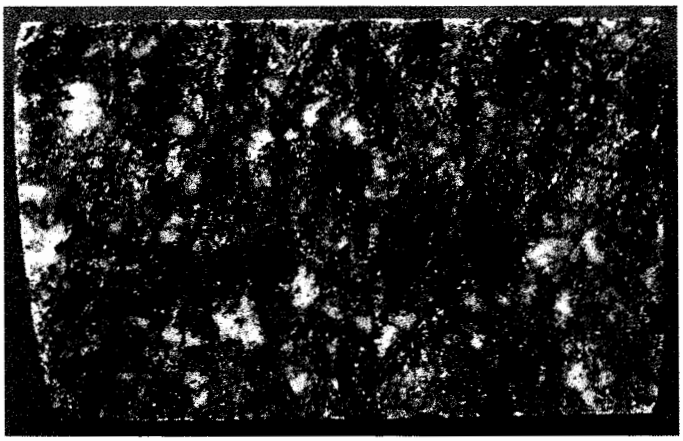


Photomicrograph 26705_04



Photomicrograph 26705_05

Sample 26706



Location: Drillhole GO2202 – 175.9 m

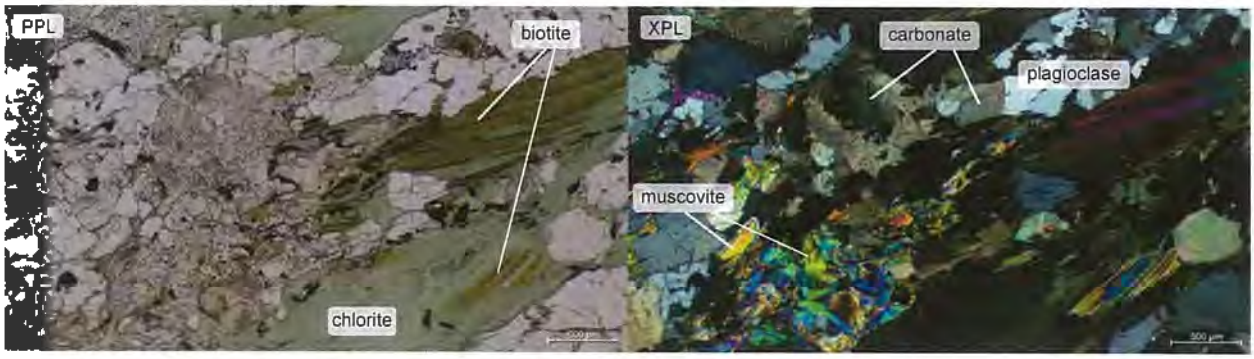
Hand Specimen Description: Grey, coarse grained intrusive rock consisting of plagioclase, quartz, mafic minerals, biotite and muscovite, with weak chlorite alteration. Logged as Mafic/Ultramafic Intrusive (6U) unit.

Mineralogy:

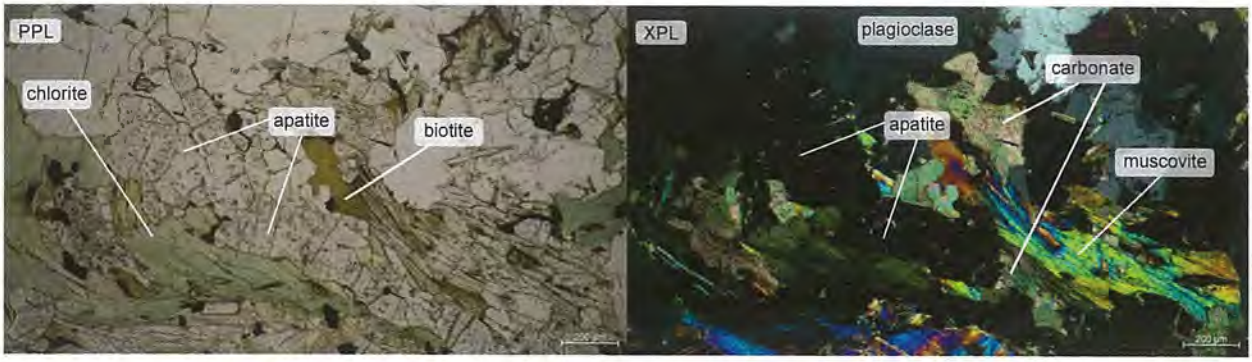
Mineral	%	Size	Distribution and Characteristics
Plagioclase	35	40 µm – 1.5 mm	Anhedral crystals, fractured along cleavage, rare polysynthetic twinning, undulose extinction and subgrain formation
Carbonate	15	20 µm – 1.5 mm	Anhedral crystals forming irregular patches sweeping undulose extinction
Muscovite	20	10 µm – 1.5 mm	Euhedral crystals, loosely aligned along moderately developed foliation, undulose extinction, altered to chlorite along margins
Biotite	10	20 µm – 2.5 mm	Euhedral crystals, loosely aligned along moderately developed foliation, undulose extinction, partially replaced by chlorite
Chlorite	15	submicron – 1 mm	Euhedral crystals, altering biotite and to lesser extent, muscovite
Rutile	tr	10 µm – 100 µm	Euhedral, yellow and orange crystals, associated with ilmenite and mica crystals
Apatite	2	30 µm – 500 µm	Euhedral, coarse crystals forming localized clusters in the sample
Magnetite	2	20 µm – 1 mm	Subhedral, strongly fractured crystals disseminated in the sample, locally containing pyrite inclusions
Ilmenite	tr	submicron – 100 µm	Anhedral crystals, generally in the vicinity of rutile crystals
Pyrite	tr	10 µm – 300 µm	Rare subhedral and euhedral crystals, disseminated and inclusions in magnetite
Chalcopyrite	tr	5 µm – 200 µm	Anhedral crystals, disseminated in the sample and inclusions in pyrite, also along late fractures

Petrographic Description:

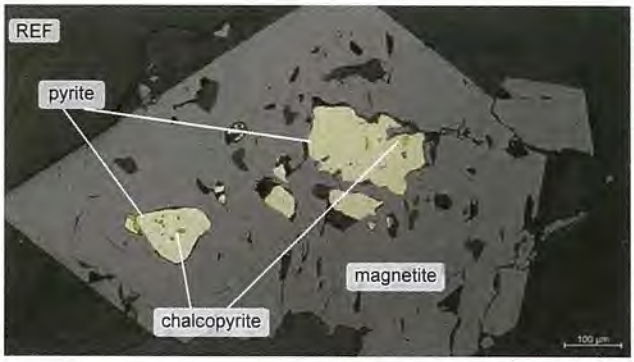
- Coarse grained, moderately deformed mafic rock, consisting primarily of plagioclase, carbonate, muscovite, and chloritized biotite. The sample contains disseminated magnetite and ilmenite, and minor pyrite and chalcopyrite.
- The anhedral plagioclase crystals of the sample are generally fractured along cleavage, and display rare polysynthetic twinning, undulose extinction and subgrain formation.
- Anhedral carbonate crystals form irregular patches throughout the sample, and display sweeping undulose extinction and sutured grain boundaries.
- Euhedral muscovite and biotite crystals are loosely aligned along moderately developed foliation/shearing. Irregular mica fish were observed, although no dominant orientation of shearing can be determined. The muscovite crystals are altered along grain boundaries to chlorite, and the biotite crystals are partially replaced by chlorite (Photomicrograph 26706_01).
- Rare euhedral rutile needles were observed, generally associated with ilmenite, encompassed by mica crystals.
- Euhedral, coarse apatite crystals form localized clusters in the sample (Photomicrograph 26706_02), and these are altered to carbonate.
- Disseminated subhedral, strongly fractured magnetite crystals were observed in the sample, and these locally contain pyrite inclusions (Photomicrograph 26706_03). Fine pyrite crystals are also disseminated in the sample.
- Anhedral chalcopyrite crystals were also observed, disseminated in the sample and as inclusions in pyrite, as well as along late fractures (Photomicrograph 26706_04).



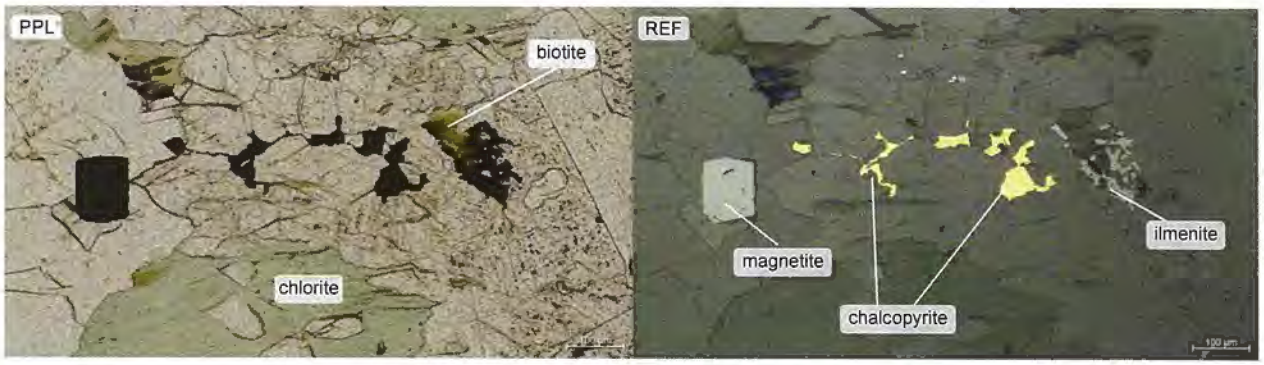
Photomicrograph 26706_01



Photomicrograph 26706_02

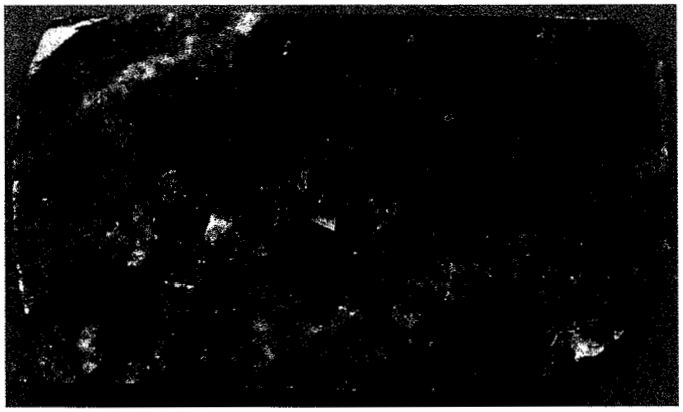


Photomicrograph 26706_03



Photomicrograph 26706_04

Sample 26707



Location: Drillhole GO2202 – 194 m

Hand Specimen Description: Dark grey/black, fine grained ultramafic rock, with coarser carbonate rich patches, hosting disseminated sulphides. Logged as Ultramafic Volcanic (1U) unit.

Mineralogy:

Mineral	%	Size	Distribution and Characteristics
Carbonate	90	submicron – 500 µm	Anhedral carbonate replacing everything in the sample, commonly taking the fibrous shape of the original mica crystals, also euhedral rhombic crystals in clusters, undulose extinction, likely dolomite
Chlorite	7	submicron – 50 µm	Euhedral crystals, generally very fine grained and partially replaced by carbonate, optical features in crossed polarized light are hard to distinguish
Rutile	tr	10 µm – 100 µm	Euhedral, needle shaped, yellow crystals forming clusters in the sample
Magnetite	3	submicron – 50 µm	Fine euhedral crystals disseminated throughout the sample
Chalcopyrite	tr	5 µm – 50 µm	Rare anhedral disseminated crystals

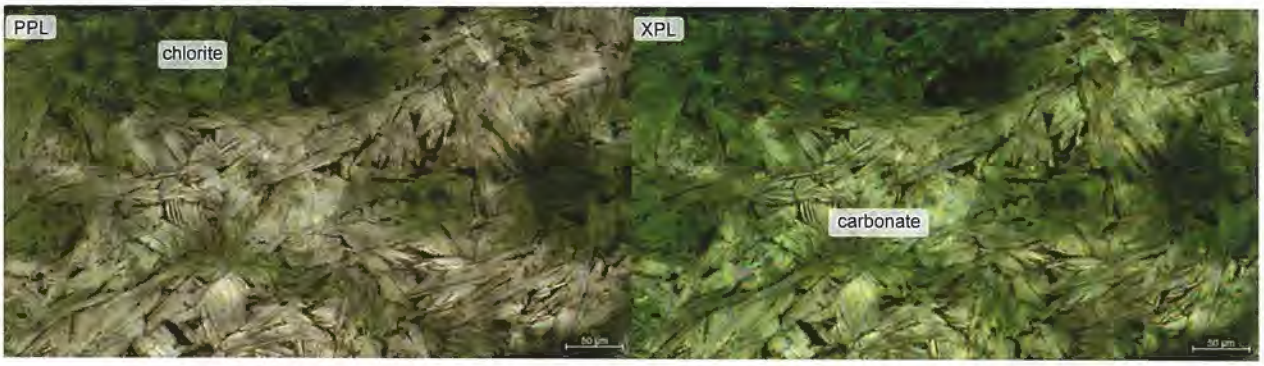
Petrographic Description:

- Intensely altered and sheared ultramafic rock consisting almost entirely of carbonate and lesser chlorite.
- Carbonate replaces the majority of the rock, commonly forming pseudomorphs after primary mica(?) crystals (Photomicrograph 26707_01), and replacing fine fibrous chlorite/serpentine(?) (Photomicrograph 26707_02). Carbonate also completely replaces the original leucosome of the sample, preserving the shape of sigma clasts

(Photomicrograph 26707_03). In the wider leucosome sections euhedral, rhombic carbonate crystals were also observed (Photomicrograph 26707_04).

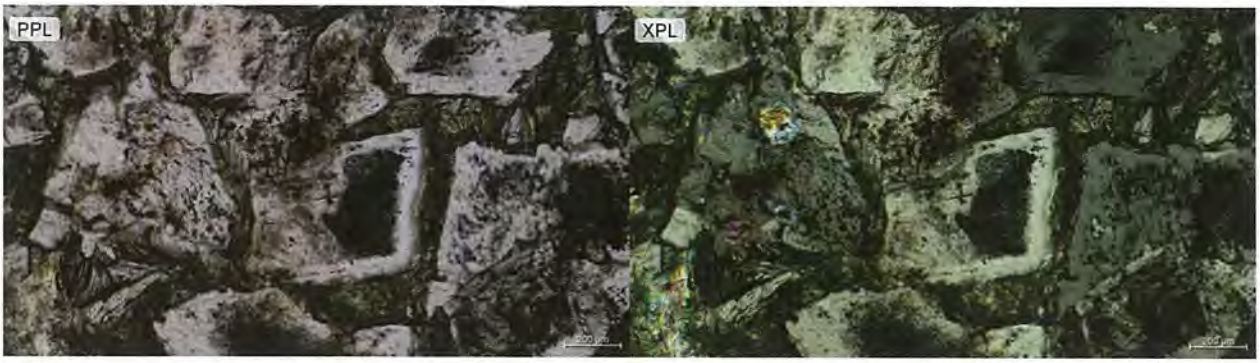
- Fine euhedral chlorite is present throughout the sample, resulting in the intense green colour of the sample, although the intense carbonate replacement masks the optical features of the chlorite crystals, so the exact chlorite ratio is difficult to determine. Chlorite primarily replaces fibrous phases (possibly serpentine?) in the sample.
- Euhedral, needle shaped, yellow rutile crystals were observed, forming clusters in the sample (Photomicrograph 26707_05).
- The sample contains disseminated fine euhedral magnetite mostly within the chlorite rich melanosome, and rare chalcopyrite crystals were also observed.

Photomicrograph 26707_01



Photomicrograph 26707_02

Photomicrograph 26707_03



Photomicrograph 26707_04

Photomicrograph 26707_05

Sample 26708

Location: Drillhole GO2201 – 66.15 m

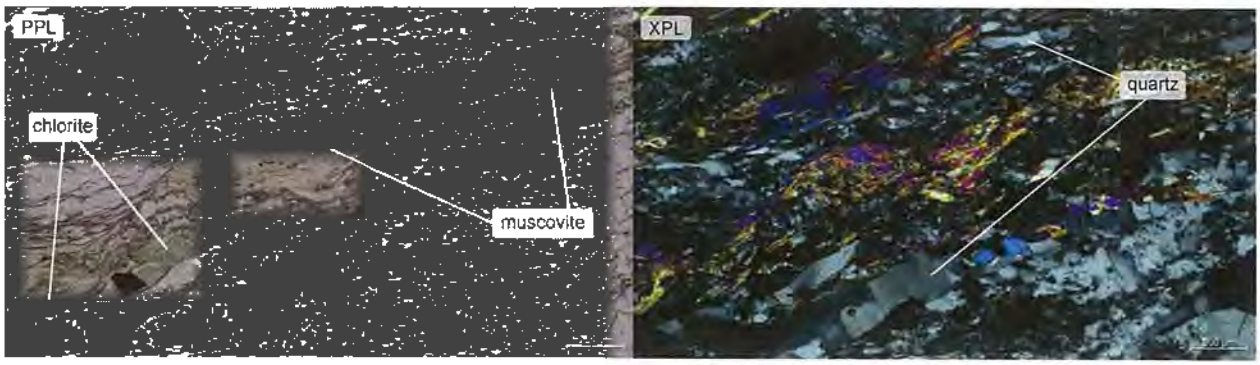
Hand Specimen Description: Light grey, medium grained unit consisting of feldspar, quartz, ad minor mafic minerals, hosting several sub-parallel fractures with mafic mineral coating. Logged as Felsic Intrusive (7U) unit.

Mineralogy:

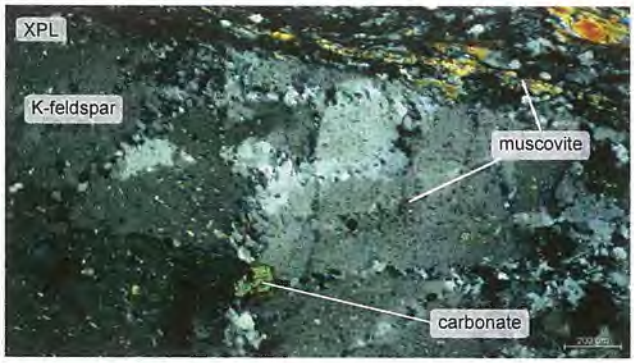
Mineral	%	Size	Distribution and Characteristics
Plagioclase	50	40 µm – 2.5 mm	Subhedral crystals, polysynthetic twinning, sutured grain boundaries, weakly altered to sericite and carbonate
K-feldspar	10	20 µm – 5 mm	Subhedral phenocrysts, weakly altered to sericite, undulose extinction, fractured with subgrain formation along fractures
Quartz	20	20 µm – 800 µm	Anhedral crystals, undulose extinction, sutured grain boundaries
Muscovite	10	submicron - 600 µm	Euhedral crystals, forming irregular sheared layers with chlorite
Chlorite	4	5 µm - 400 µm	Euhedral crystals, along muscovite in mica layers and altering biotite
Biotite	1	5 µm - 400 µm	Euhedral crystals forming patches throughout the sample, altered to chlorite
Carbonate	4	submicron - 400 µm	Anhedral crystals, altering plagioclase
Tourmaline	tr	20 µm – 600 µm	Brown-bluish green euhedral crystals, within muscovite and chlorite rich layers
Titanite	tr	5 µm – 50 µm	Anhedral yellow crystals, forming clusters, generally adjacent to ilmenite
Pyrite	1	20 µm – 300 µm	Disseminated euhedral crystals, contain chalcopyrite inclusions locally, also along loose stringers
Chalcopyrite	tr	5 µm – 200 µm	Rare disseminated anhedral crystals, also along loose stringers
Ilmenite	tr	submicron – 50 µm	Disseminated anhedral crystals, generally in the vicinity of titanite

Petrographic Description:

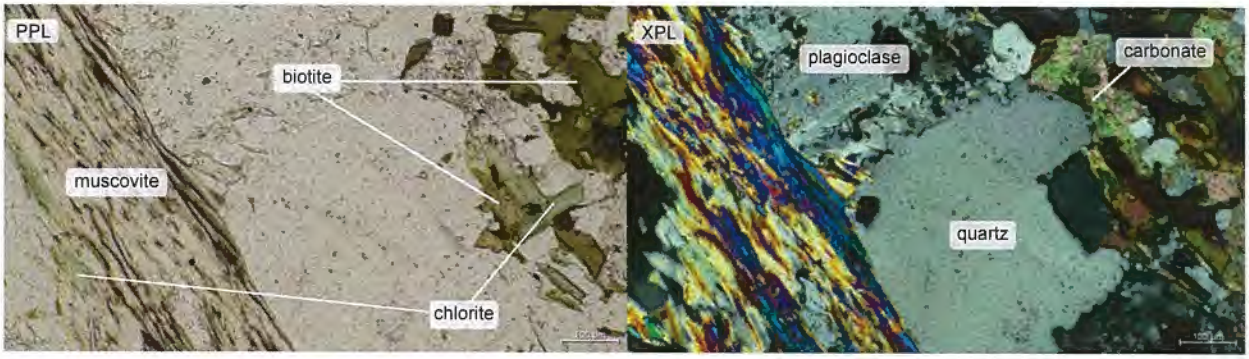
- Equigranular and locally porphyritic, weakly altered intrusive rock, consisting dominantly of plagioclase, lesser K-feldspar and quartz. Distinct sheared muscovite and chlorite rich layers are present in the sample in generally similar orientations. Loose, discontinuous sulphide stringers (primarily pyrite with lesser chalcopyrite) are present along these mica rich layers but also occur elsewhere in the sample (Photomicrograph 26708_01).
- The plagioclase crystals of the sample are subhedral, and display polysynthetic twinning and sutured grain boundaries. They are weakly altered to sericite and locally to carbonate.
- Subhedral K-feldspar phenocrysts were observed in the sample. These are weakly altered to sericite, and display undulose extinction, and intense fracturing with subgrain formation along fractures (Photomicrograph 26708_02).
- The quartz crystals of the sample are anhedral, displaying undulose extinction and sutured grain boundaries.
- Euhedral muscovite crystals forming irregular sheared layers in the sample, associated with lesser chlorite (Photomicrograph 26708_03). Chlorite also appears to replace biotite in the sample.
- Brown-bluish green euhedral tourmaline crystals were observed within the muscovite and chlorite rich sheared layers (Photomicrograph 26708_04).
- The sample contains trace anhedral yellow titanite crystals, forming clusters, generally adjacent to disseminated anhedral ilmenite crystals.
- Disseminated euhedral pyrite crystals, that contain chalcopyrite inclusions locally, form loose stringers in the sample (Photomicrograph 26708_05). Anhedral chalcopyrite is commonly found in the vicinity of pyrite.



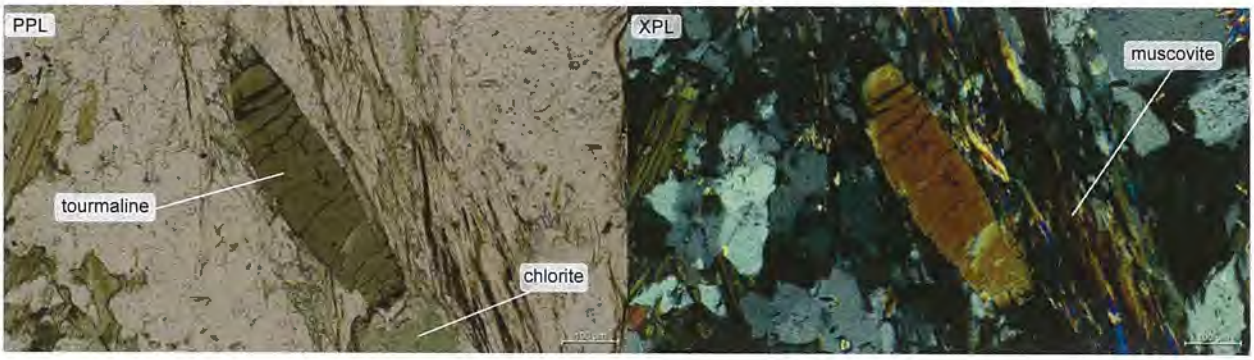
Photomicrograph 26708_01



Photomicrograph 26708_02



Photomicrograph 26708_03



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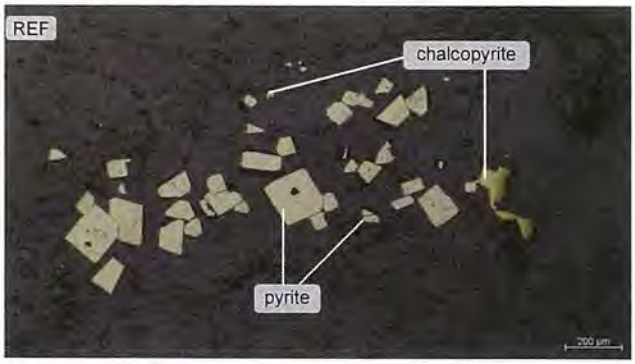


Photomicrograph 26708_05

Sample 26709

Location: Drillhole GO2201 – 83.9 m

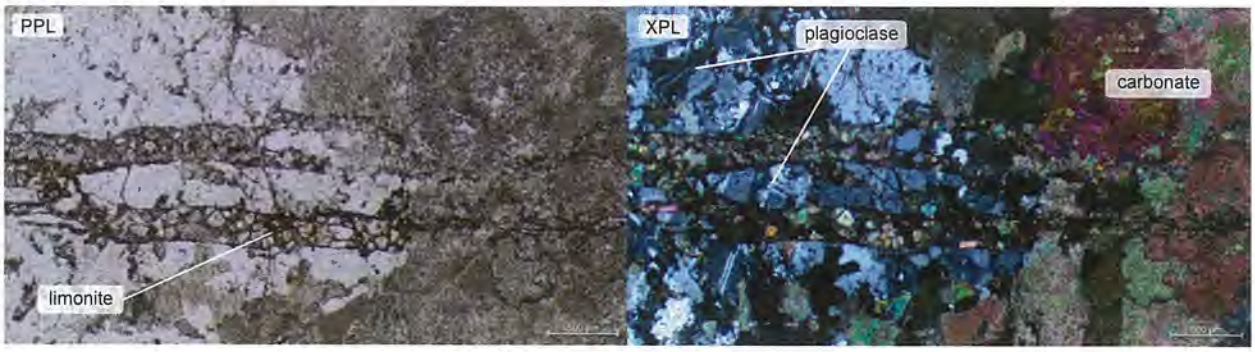
Hand Specimen Description: Light grey, fine grained, intrusive rock comprising dominantly of feldspar, quartz and minor mafic minerals, hosting cross-cutting carbonate veinlets and associated limonite staining. Logged as Felsic Intrusive (7U) unit.

Mineralogy:

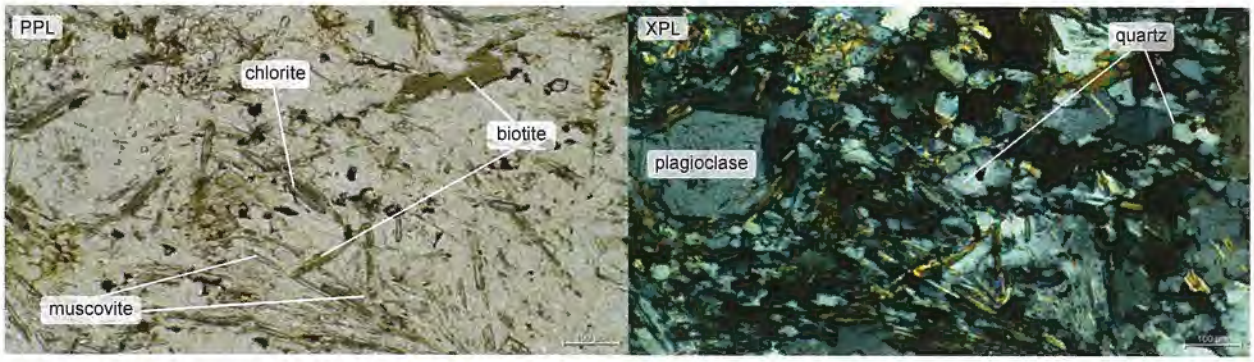
Mineral	%	Size	Distribution and Characteristics
Plagioclase	55	20 µm – 1.5 mm	Subhedral crystals, polysynthetic twinning, sutured grain boundaries, weakly altered to sericite and carbonate
K-feldspar	10	1 mm – 8 mm	Subhedral large phenocrysts, some flattened, weakly altered to sericite, undulose extinction, fractured with subgrain formation along fractures
Quartz	10	10 µm – 400 µm	Anhedral crystals, undulose extinction, sutured grain boundaries
Carbonate	15	submicron – 1.2 mm	Anhedral crystals throughout sample and forming an irregular vein across the sample, also within younger cross-cutting carbonate veinlet
Biotite	2	10 µm – 100 µm	Euhedral crystals, altered to chlorite
Chlorite	3	20 µm – 300 µm	Euhedral crystals, altering biotite
Muscovite	3	submicron – 100 µm	Euhedral crystals, forming patches in the sample
Limonite	tr	submicron	Fine grains associated with the carbonate veinlet and fractures in the sample
Apatite	tr	20 µm – 150 µm	Rare euhedral crystals
Sphalerite	tr	100 µm – 150 µm	Few subhedral transparent crystals within carbonate veinlet cross-cutting the sample
Chalcopyrite	tr	5 µm – 150 µm	Fine anhedral crystals within carbonate veinlet and along fractures in the sample, also disseminated in the sample
Pyrite	tr	10 µm – 100 µm	Rare anhedral crystals
Magnetite	1	10 µm – 300 µm	Disseminated euhedral crystals, strongly fractured, altered to hematite
Hematite	tr	2 µm – 50 µm	Fine grains altering magnetite along grain boundaries and forming clusters in the sample

Petrographic Description:

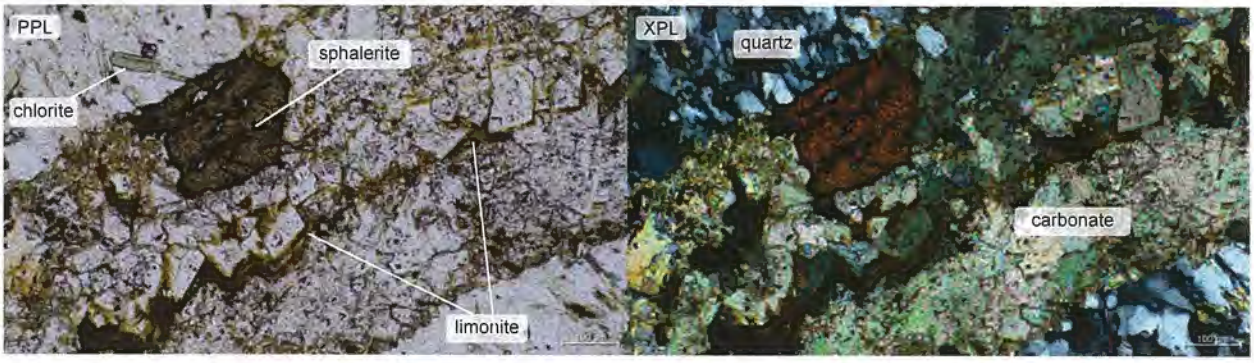
- Equigranular and locally porphyritic, moderately altered intrusive rock, consisting dominantly of plagioclase, lesser K-feldspar and quartz, and minor muscovite and chloritized biotite. An irregular carbonate veinlet with poorly defined contacts cross-cuts the sample and is then cross-cut by a thin carbonate veinlet (Photomicrograph 26709_01).
- The plagioclase crystals of the sample are subhedral, and display polysynthetic twinning and sutured grain boundaries. They are weakly altered to sericite and locally to carbonate.
- Subhedral K-feldspar phenocrysts were observed in the sample. These are weakly altered to sericite, and display undulose extinction, and intense fracturing with subgrain formation along fractures.
- The quartz crystals of the sample are anhedral, with undulose extinction and sutured grain boundaries.
- Euhedral muscovite crystals form clusters with rare biotite. The majority of biotite crystals in the sample are altered to chlorite (Photomicrograph 26709_02). Limonite staining is commonly associated with the mica crystals.
- Moderate carbonate alteration is present throughout the sample, resulting in abundant carbonate rich patches surrounding the carbonate veins.
- Rare apatite crystals were observed disseminated in the sample.
- The sample contains disseminated euhedral magnetite crystals, which are strongly fractured, and some finer grains are altered to hematite along grain boundaries. Fine hematite crystals also form clusters throughout the sample, associated with limonite staining.
- A wider irregular and discontinuous carbonate veinlet with vaguely defined contacts cross-cuts the sample. This vein is then cross-cut by a thinner, straight carbonate veinlet with more well-defined, sharp contacts and strong limonite straining (Photomicrograph 26709_01). Where the older vein is cross-cut, the younger vein thins to a fracture. This younger vein contains euhedral carbonate crystals, and also hosts subhedral, transparent sphalerite crystals (Photomicrograph 26709_03) and trace fine anhedral chalcopyrite.
- Fine anhedral chalcopyrite and pyrite were also observed disseminated in the host rock (Photomicrograph 26709_04).



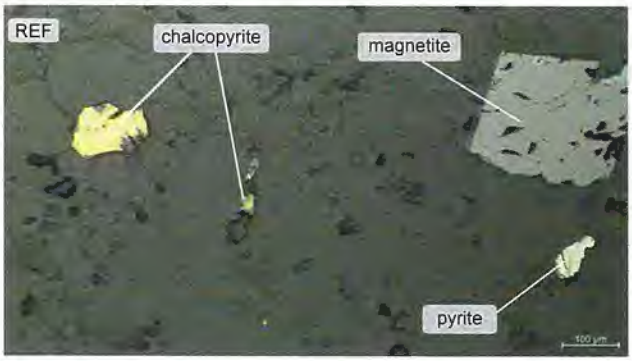
Photomicrograph 26709_01



Photomicrograph 26709_02



Photomicrograph 26709_03



Photomicrograph 26709_04

Sample 26710

Location: Drillhole GO2201 – 93.3 m

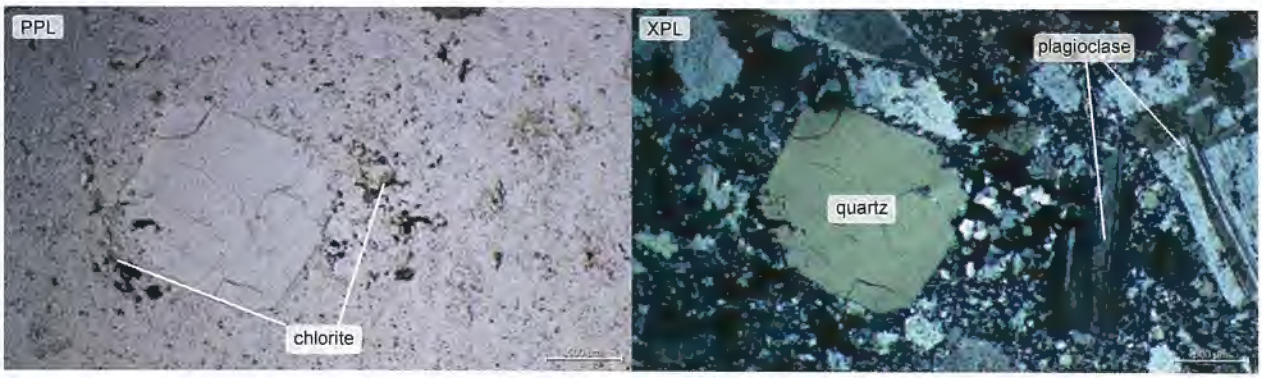
Hand Specimen Description: White, medium grained intrusive rock mainly comprised of quartz, feldspar and lesser mafic minerals, and minor limonite staining. Logged as Diorite Quartz Eye Porphyry (7GDpor) unit.

Mineralogy:

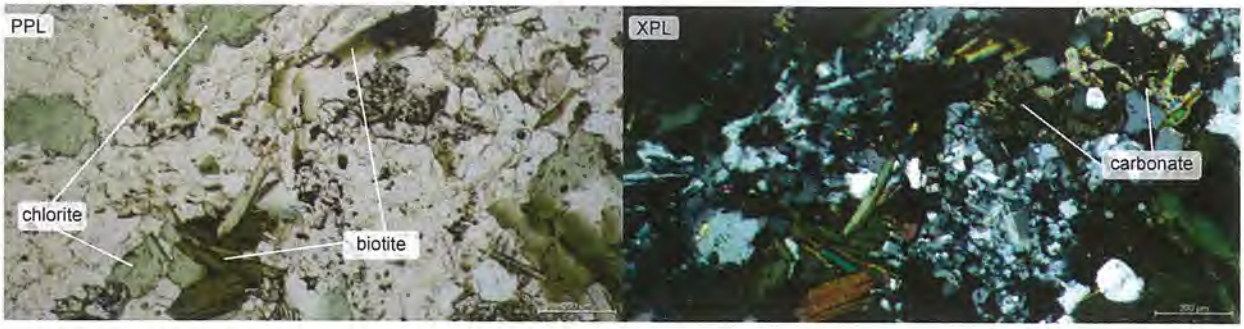
Mineral	%	Size	Distribution and Characteristics
Plagioclase	50	50 µm – 6 mm	Euhedral phenocrysts and subhedral fine crystals in the interstitial space, polysynthetic twinning, weak sericite alteration
K-feldspar	10	100 µm – 3 mm	Subhedral phenocrysts, undulose extinction, weak sericite alteration
Quartz	25	10 µm – 6 mm	Anhedral, locally slightly embayed phenocrysts, strongly developed undulose extinction and localized subgrain formation along fractures, the finer grained quartz grains of the interstitial space are anhedral
Biotite	6	10 µm – 600 µm	Euhedral crystals forming clusters throughout the sample, altered to chlorite
Chlorite	4	20 µm – 800 µm	Euhedral crystals altering and in places replacing biotite
Muscovite	tr	submicron – 10 µm	Fine euhedral crystals altering feldspar crystals
Carbonate	5	10 µm – 800 µm	Anhedral crystals, generally in the vicinity of biotite and chlorite
Apatite	tr	5 µm – 200 µm	Rare disseminated subhedral crystals
Limonite	tr	5 µm – 30 µm	Fine crystals forming clusters, generally in the vicinity of mica crystals
Magnetite	tr	10 µm – 300 µm	Disseminated, subhedral crystals, partially to fully replaced by hematite along fractures and grain boundaries
Hematite	tr	submicron – 200 µm	Altering and in some cases fully replacing magnetite
Pyrite	tr	2 µm – 50 µm	Anhedral crystals, associated with hematite pseudomorphs after magnetite
Chalcopyrite	tr	submicron – 5 µm	Anhedral crystals, associated with hematite pseudomorphs after magnetite

Petrographic Description:

- Weakly altered porphyritic, likely shallow intrusive unit consisting primarily of plagioclase and lesser quartz, K-feldspar, chloritized biotite and carbonate.
- Plagioclase occurs as euhedral phenocrysts and subhedral fine crystals in the interstitial space, displaying polysynthetic twinning and weak sericite alteration.
- The K-feldspar phenocrysts of the sample display undulose extinction and weak sericite alteration.
- Anhedral, locally slightly embayed quartz phenocrysts were observed (Photomicrograph 26710_01), locally displaying strongly developed undulose extinction and localized subgrain formation along fractures. The finer grained quartz grains of the interstitial space are anhedral.
- Euhedral biotite crystals form clusters throughout the sample, and are altered to and in places completely replaced by chlorite (Photomicrograph 26710_02).
- Anhedral carbonate crystals are generally found in the vicinity of biotite and chlorite.
- Trace disseminated apatite crystals were observed in the sample.
- Fine limonite crystals form clusters in the sample, generally in the vicinity of mica crystals.
- The sample contains disseminated, subhedral magnetite crystals, partially to fully replaced by hematite along fractures and grain boundaries (Photomicrograph 26710_03).
- Rare anhedral pyrite and chalcopyrite are associated with hematite pseudomorphs after magnetite (Photomicrograph 26710_04).

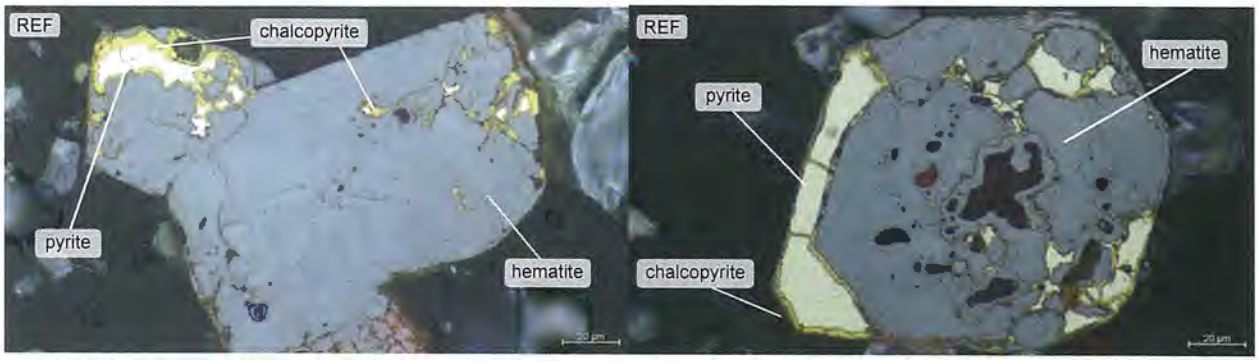


Photomicrograph 26710_01



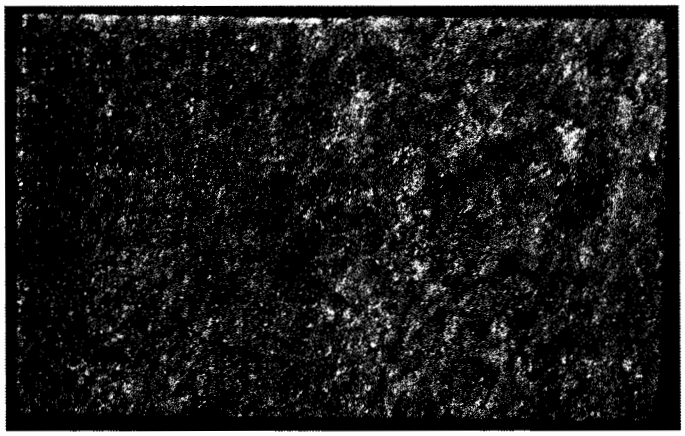
Photomicrograph 26710_02

Photomicrograph 26710_03



Photomicrograph 26710_04

Sample 26711



Location: Drillhole GO2201 – 113.4 m

Hand Specimen Description: Grey, fine grained felsic tuff unit, consisting of feldspar, quartz, and minor mafic minerals. Logged as Felsic Tuff (3U t) unit.

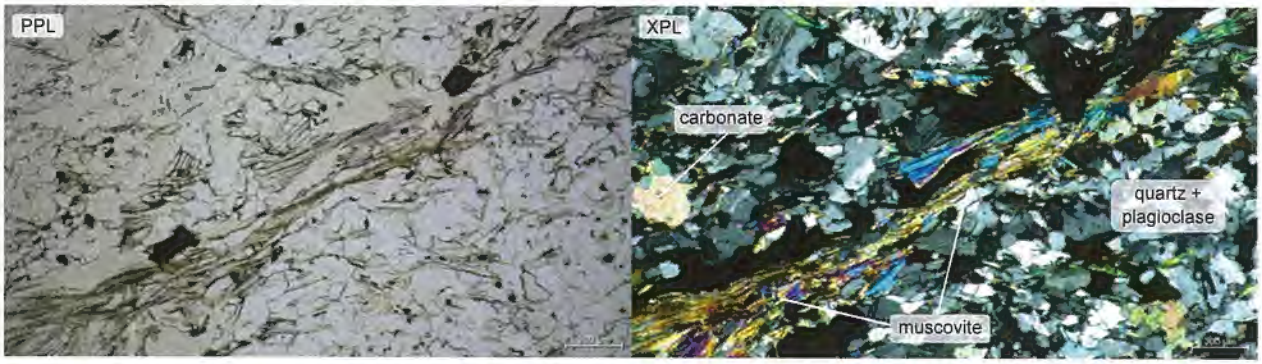
Mineralogy:

Mineral	%	Size	Distribution and Characteristics
Plagioclase	44	10 µm – 400 µm	Anhedral crystals, polysynthetic twinning, trace muscovite alteration
Carbonate	25	10 µm – 1.5 mm	Anhedral crystals, forming slightly flattened patches along weakly developed foliation
Quartz	15	10 µm – 350 µm	Anhedral crystals, undulose extinction
Muscovite	10	submicron - 200 µm	Euhedral crystals, undulose extinction, forming slightly sheared layers along weakly developed foliation
Biotite	3	20 µm – 150 µm	Euhedral crystals
Magnetite	2	20 µm – 1 mm	Subhedral disseminated crystals, strongly fractured
Hematite	1	10 µm – 300 µm	Subhedral disseminated crystals and crystal clusters
Chalcopyrite	tr	2 µm – 300 µm	Rare anhedral crystals, disseminated in the sample
Pyrite	tr	10 µm – 150 µm	Rare anhedral crystals associated with chalcopyrite

Petrographic Description:

- Weakly foliated, fine grained rock, consisting mostly of plagioclase and quartz crystals in an equigranular pattern in sections separated by discontinuous mica layers consisting mostly of muscovite and lesser biotite and abundant flattened carbonate patches.
- The anhedral plagioclase crystals display polysynthetic twinning and trace muscovite alteration.

- The quartz crystals are anhedral, and commonly display undulose extinction.
- The muscovite crystals of the sample are euhedral and commonly display undulose extinction. They are either forming irregular sheared layers or occur as individual crystals generally aligned in similar orientations, defining the weakly developed foliation in the sample (Photomicrograph 26711_01). Lesser euhedral biotite crystals were also observed.
- Flattened carbonate porphyroclasts are aligned along foliation as well (Photomicrograph 26711_02).
- Disseminated subhedral, strongly fractured magnetite crystals are present throughout the sample (Photomicrograph 26711_03).
- Hematite crystals are also disseminated throughout the sample and form clusters.
- Rare anhedral chalcopyrite crystals are also present disseminated in the sample (Photomicrograph 26711_03). Trace pyrite was also observed, associated with chalcopyrite (Photomicrograph 26711_04).



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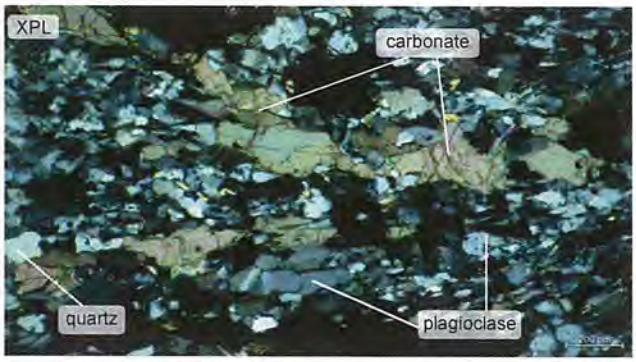

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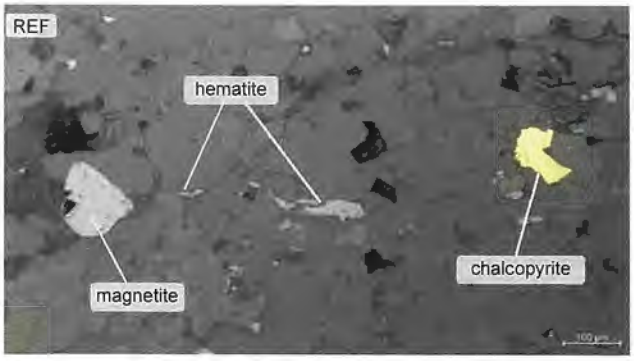

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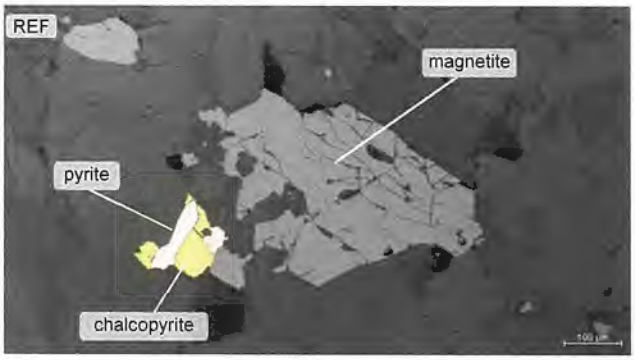
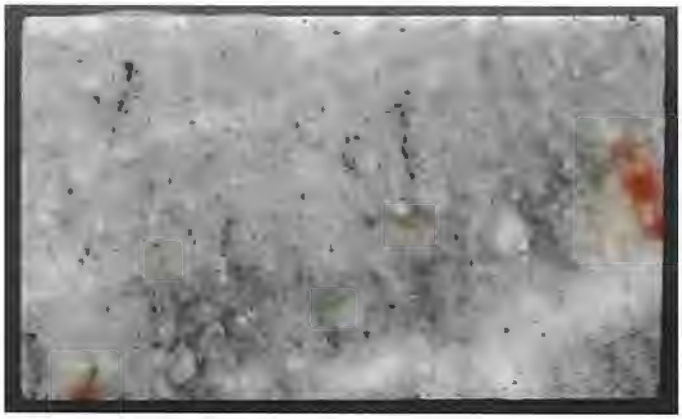


Photomicrograph 26711_04

Sample 26712



Location: Drillhole GO2203 – 74.9 m

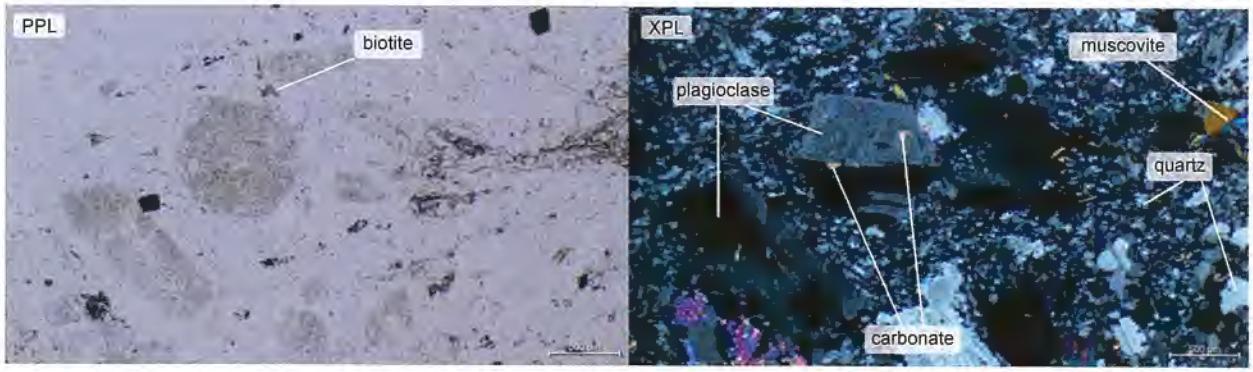
Hand Specimen Description: Light grey, fine to medium grained intrusive unit with poorly developed porphyritic texture (feldspar phenocrysts) and rare quartz eyes, hosting minor disseminated mafic minerals. Logged as Felsic Intrusive Quartz Feldspar Porphyritic (7QFP) unit.

Mineralogy:

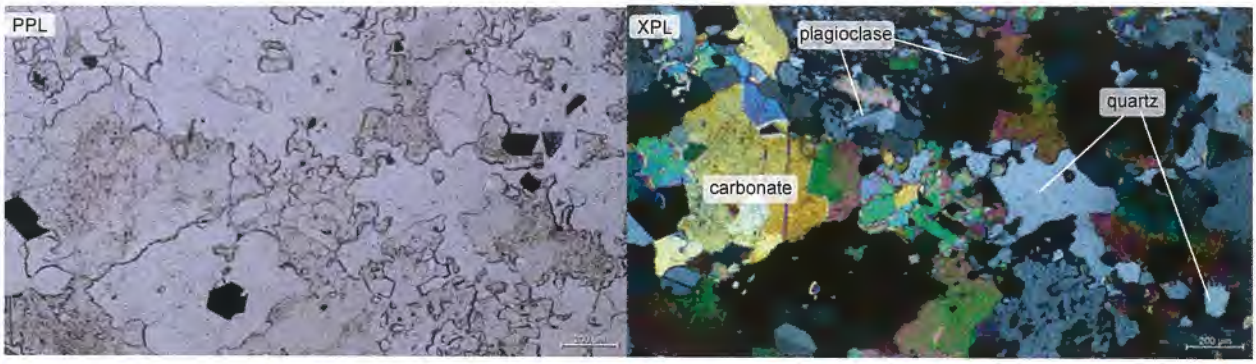
Mineral	%	Size	Distribution and Characteristics
Plagioclase	55	20 µm – 7 mm	Euhedral phenocrysts displaying polysynthetic twinning, weak sericite, chlorite, carbonate alteration, fine subhedral crystals in interstitial space
Quartz	30	5 µm – 600 µm	Anhedral crystals, generally interstitial to plagioclase phenocrysts, but also forming irregular patches with carbonate crystals, undulose extinction, slightly sutured grain boundaries
K-feldspar	5	300 µm – 3 mm	Few phenocrysts, weak sericite alteration
Carbonate	5	submicron – 800 µm	Anhedral crystals, forming patches with quartz and fine plagioclase, altering plagioclase phenocrysts
Muscovite	3	submicron – 600 µm	Fine euhedral crystals altering plagioclase, also coarser euhedral crystals interstitial to plagioclase phenocrysts
Chlorite	tr	5 µm – 100 µm	Fine euhedral crystals, locally altering plagioclase
Biotite	tr	20 µm – 200 µm	Rare euhedral crystals interstitial to plagioclase phenocrysts
Titanite	1	5 µm – 200 µm	Subhedral yellow crystals forming rhombic pseudomorphs
Magnetite	tr	5 µm – 300 µm	Euhedral, strongly fractured, disseminated crystals
Hematite	tr	5 µm – 150 µm	Disseminated anhedral crystals

Petrographic Description:

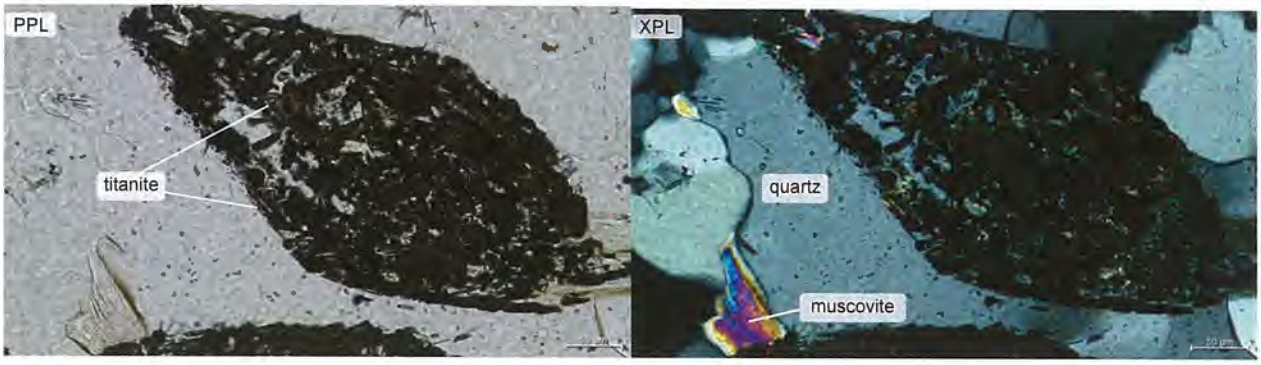
- Porphyritic, weakly altered rock consisting primarily of plagioclase phenocrysts and fine grained quartz, plagioclase, minor muscovite and biotite in the interstitial space.
- The plagioclase phenocrysts are euhedral and display polysynthetic twinning (Photomicrograph 26712_01). Some crystal clusters were also observed. They are weakly sericitized, with localized chlorite and carbonate alteration. Fine subhedral plagioclase crystals were observed in the interstitial space and forming irregular patches with quartz and carbonate (Photomicrograph 26712_02).
- Anhedral quartz crystals are generally interstitial to plagioclase phenocrysts, but also occur in irregular patches with anhedral carbonate crystals (Photomicrograph 26712_02). The quartz crystals display undulose extinction and slightly sutured grain boundaries.
- Few K-feldspar phenocrysts showing weak sericite alteration are also present in the sample.
- Euhedral muscovite and biotite crystals are present in the interstitial space and rare chlorite crystals were also observed, replacing biotite and altering plagioclase phenocrysts locally.
- Subhedral yellow titanite crystals form rhombic pseudomorphs locally (Photomicrograph 26712_03).
- The sample contains disseminated euhedral magnetite crystals and anhedral hematite.



Photomicrograph 26712_01



Photomicrograph 26712_02



Photomicrograph 26712_03

Sample 26713

Location: Drillhole GO2203 – 95.9 m

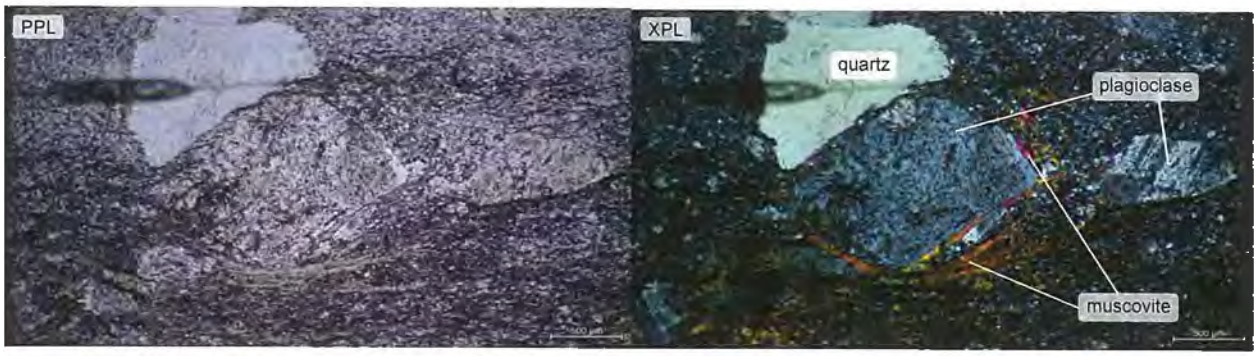
Hand Specimen Description: Light grey, fine to medium grained intrusive unit consisting mostly of quartz and feldspar, with porphyritic texture (feldspar phenocrysts) and rare quartz eyes. Sub-parallel fractures with mica coating were observed. Logged as Felsic Intrusive Quartz Feldspar Porphyritic (7QFP) unit.

Mineralogy:

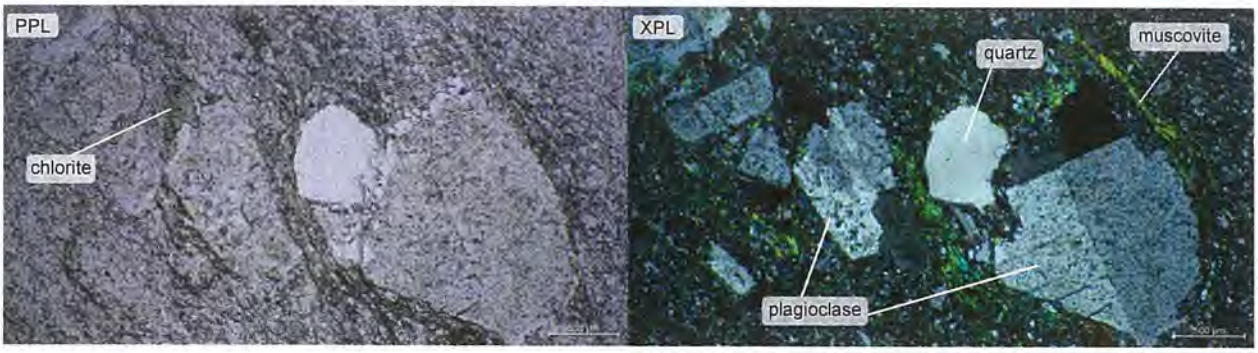
Mineral	%	Size	Distribution and Characteristics
Plagioclase	55	10 µm – 3 mm	Subhedral and anhedral, slightly rounded phenocrysts, polysynthetic twinning and albite twinning, weak sericite alteration and localized carbonate alteration, anhedral fine grains in the interstitial space, some sheared porphyroblasts with muscovite pressure shadows
Quartz	25	5 µm – 2.5 mm	Anhedral, locally rounded phenocrysts, slightly resorbed, undulose extinction and localized subgrain formation, fine anhedral crystals in the interstitial space
Carbonate	10	5 µm – 700 µm	Anhedral crystals, forming irregular patches with quartz, locally altering plagioclase, also within quartz-carbonate veinlet
Muscovite	8	submicron – 300 µm	Euhedral crystals, aligned in sheared layers defining the weakly defined foliation in the sample
Chlorite	2	20 µm – 300 µm	Euhedral crystals, generally not aligned with the foliation parallel muscovite crystals, also within pseudomorphs with titanite
Titanite	tr	10 µm – 50 µm	Fine anhedral crystals forming pseudomorphs with chlorite
Pyrite	tr	10 µm – 100 µm	Disseminated euhedral crystals

Petrographic Description:

- Moderately deformed and weakly altered rock with plagioclase and quartz phenocrysts and rare quartz-carbonate eyes embedded in fine grained crystalline groundmass consisting primarily of quartz, plagioclase, muscovite, chlorite, and carbonate.
- The plagioclase phenocrysts are subhedral and anhedral, slightly rounded, and display polysynthetic twinning and albite twinning. They are characterized by weak sericite alteration and localized carbonate alteration. Some sheared plagioclase porphyroblasts were observed with muscovite in pressure shadows (Photomicrograph 26713_01).
- Quartz is present as anhedral, locally rounded and slightly resorbed phenocrysts (Photomicrograph 26713_02), displaying undulose extinction and localized subgrain formation. Fine anhedral quartz crystals are common in the interstitial space.
- Anhedral carbonate crystals form irregular patches with quartz, and also locally alter plagioclase.
- Euhedral muscovite crystals are generally aligned in similar orientation and form sheared layers defining the weakly developed foliation in the sample (Photomicrograph 26713_03).
- Euhedral chlorite crystals are present throughout the sample, not aligned with the foliation parallel muscovite crystals, and they also occur within pseudomorphs with titanite.
- The sample contains disseminated euhedral pyrite crystals.
- A 1-1.2 mm wide veinlet with well-defined contacts cross-cuts the sample, hosting quartz, carbonate and minor muscovite (Photomicrograph 26713_04).



Photomicrograph 26713_01



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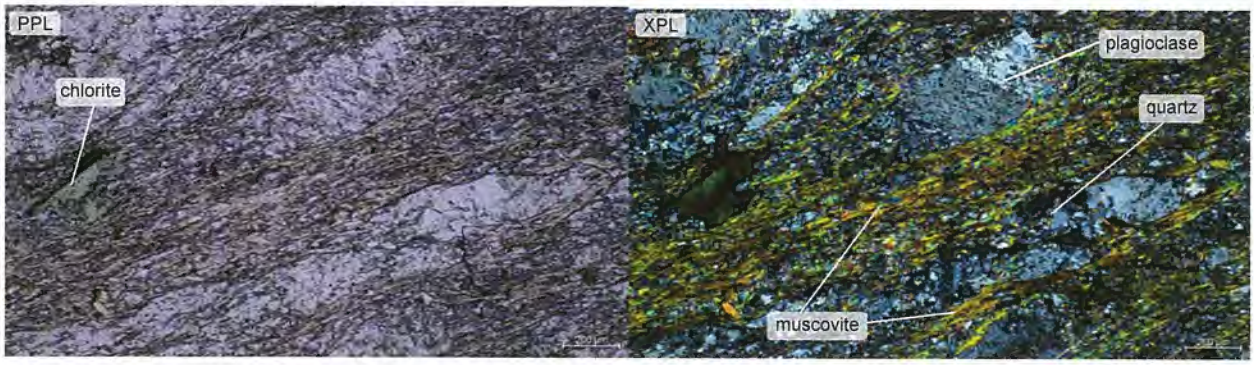

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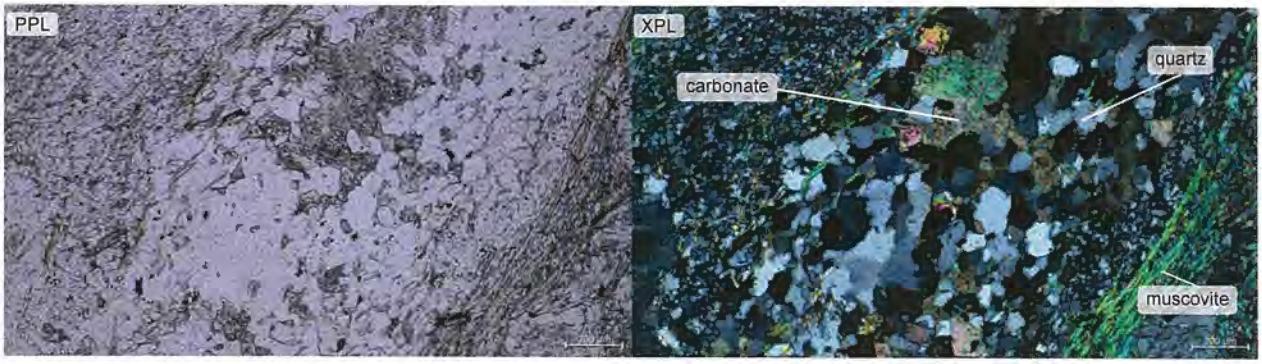
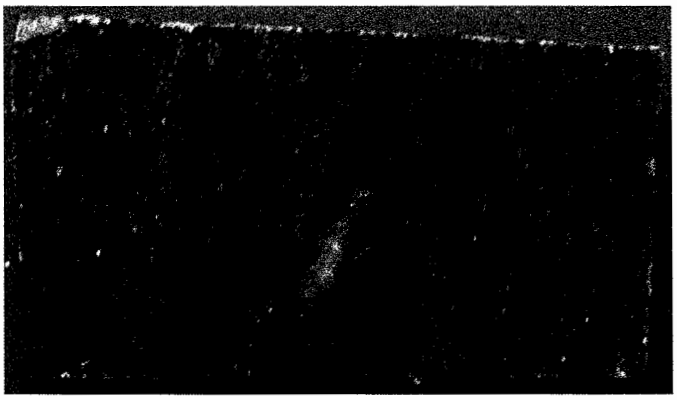


Photomicrograph 26713_04

Sample 26714



Location: Drillhole GO2203 – 166.9 m

Hand Specimen Description: Dark greenish grey, fine grained mafic volcanic unit with well-developed shearing hosting carbonate-quartz vein along foliation. Logged as Mafic Volcanic (2U) unit.

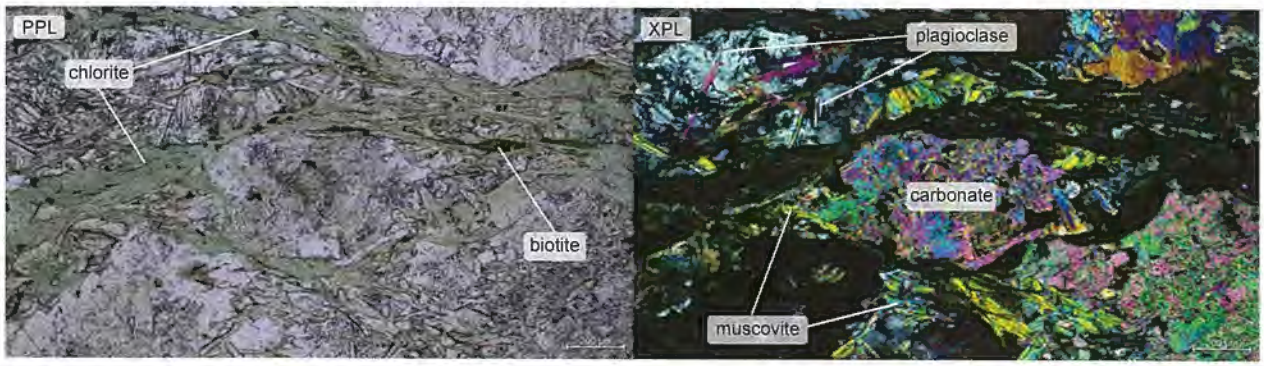
Mineralogy:

Mineral	%	Size	Distribution and Characteristics
Carbonate	40	20 µm – 1.5 mm	Anhedral crystals forming irregular flattened patches and sheared porphyroclasts in the sample, sweeping undulose extinction
Plagioclase	25	5 µm – 400 µm	Anhedral, fine, recrystallized in limited leucosome, in between carbonate and mica rich layers
Chlorite	13	submicron – 250 µm	Euhedral crystals forming irregular, sheared layers along foliation
Muscovite	12	submicron – 600 µm	Euhedral crystals forming irregular, sheared layers along foliation
Quartz	10	5 µm – 80 µm	Anhedral, fine crystals in sheared quartz-carbonate stringer
Biotite	tr	50 µm – 200 µm	Rare euhedral crystals
Rutile	tr	2 µm – 100 µm	Fine euhedral, needle shaped, yellow crystals, within the mica rich layers
Pyrite	tr	Submicron – 70 µm	Rare euhedral crystals generally associated with the sheared quartz-carbonate vein

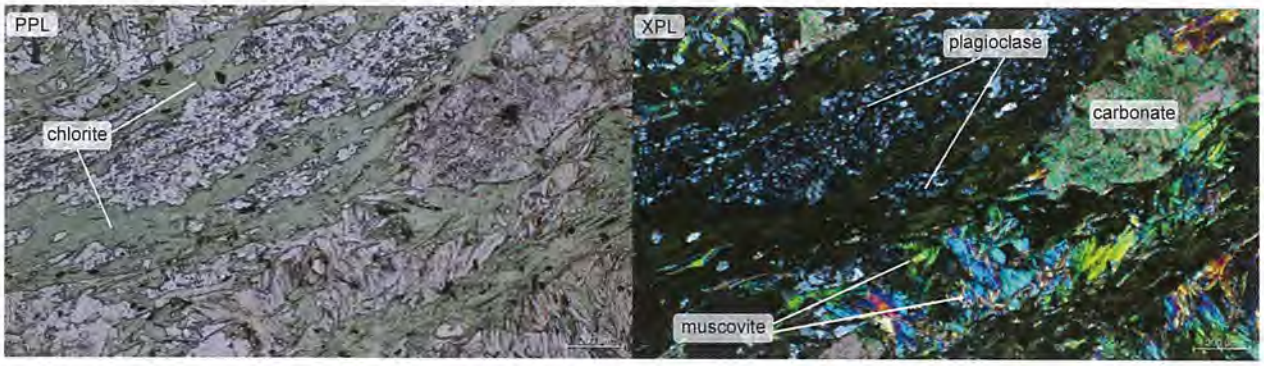
Petrographic Description:

- Strongly deformed, fine grained mafic volcanic unit, consisting mostly of carbonate porphyroclasts, chlorite and muscovite rich sheared layers and remnant fine grained plagioclase rich leucosome.

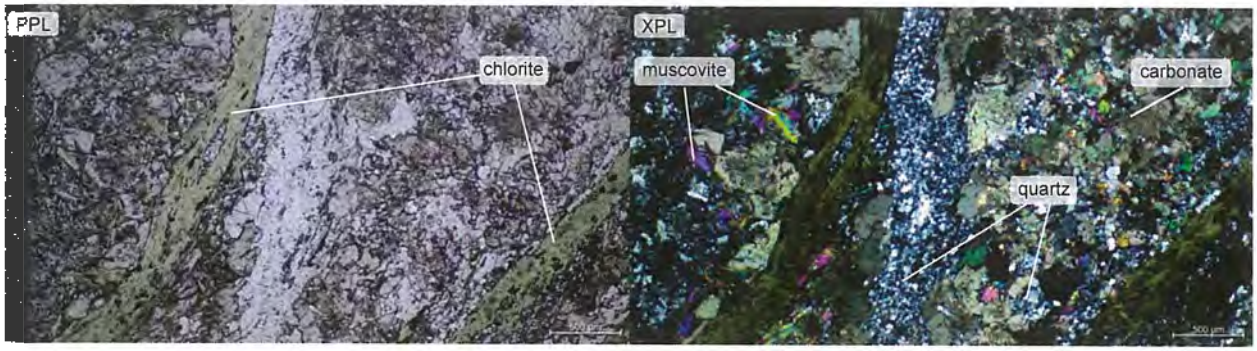
- The anhedral carbonate crystals form irregular flattened patches and sheared porphyroclasts with chlorite in pressure shadows (Photomicrograph 26714_01), and display sweeping undulose extinction.
- The plagioclase crystals of the limited leucosome in between carbonate and mica rich layers are anhedral, fine grained and recrystallized (Photomicrograph 26714_02).
- Euhedral chlorite crystals form irregular, sheared layers along foliation, the euhedral muscovite crystals of the sample are generally not aligned parallel to the chlorite layers (Photomicrograph 26714_02). Rare euhedral biotite crystals were also observed.
- A sheared quartz-carbonate vein/segregation (1-4 mm thick) with minor muscovite was observed along foliation, rimmed by chlorite layers (Photomicrograph 26714_02), hosting disseminated euhedral pyrite. The quartz crystals are fine grained and anhedral.
- Fine euhedral, needle shaped, yellow rutile crystals were also observed within the mica rich layers.



Photomicrograph 26714_01

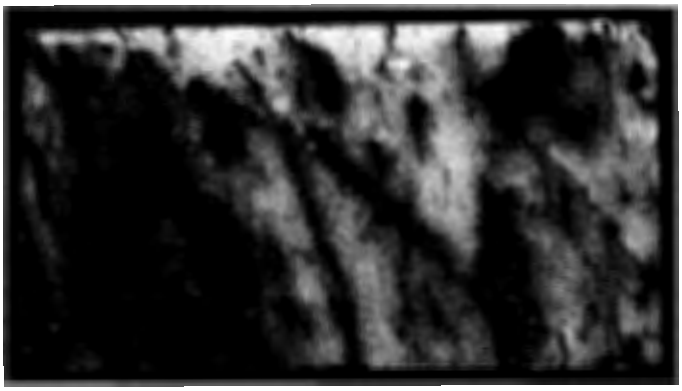


Photomicrograph 26714_02



Photomicrograph 26714_03

Sample 26715



Location: Drillhole GO2203 – 218.25 m

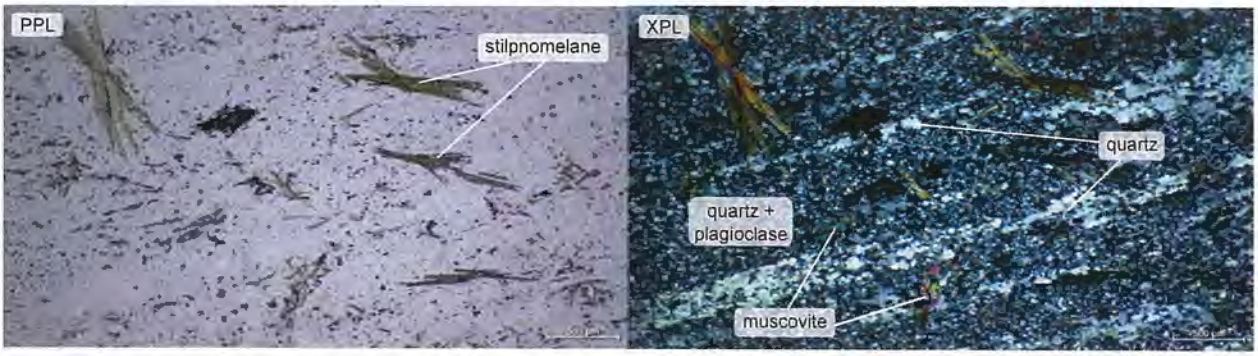
Hand Specimen Description: White, fine grained felsic intrusive unit consisting dominantly of quartz and feldspar, with lesser biotite aligned along weakly developed foliation. Logged as Felsic Intrusive Granodiorite (7GD) unit.

Mineralogy:

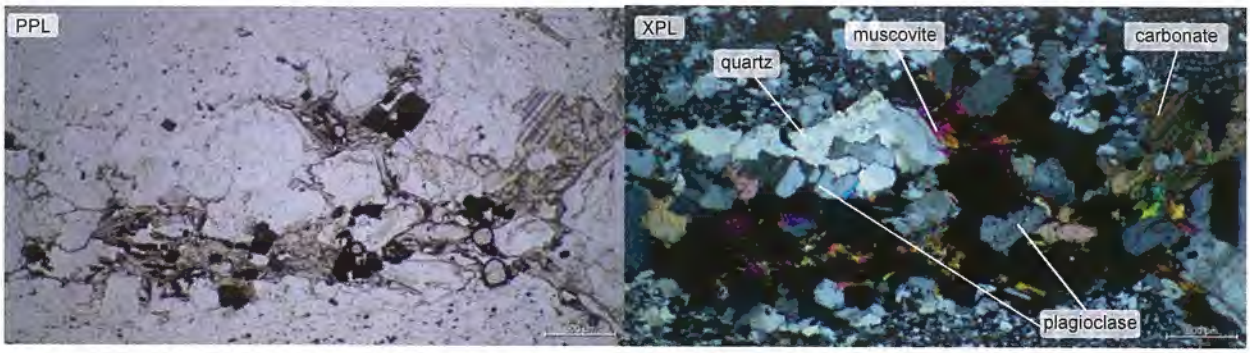
Mineral	%	Size	Distribution and Characteristics
Plagioclase	50	10 µm – 1 mm	Fine anhedral crystals in the groundmass, coarser subhedral crystals in sheared, flattened segregations
Quartz	40	10 µm – 600 µm	Anhedral crystals, undulose extinction, forming slightly coarser grained, stretched quartz eyes along foliation
Carbonate	4	100 µm – 1 mm	Anhedral crystals, forming irregular patches and sheared porphyroclasts
Muscovite	3	20 µm – 800 µm	Euhedral crystals, forming irregular sheared lenses along foliation
Stilpnomelane	2	20 µm – 1.2 mm	Euhedral crystals, radial growth, not aligned with foliation
Titanite	tr	10 µm – 250 µm	Rare subhedral crystals, generally within muscovite rich lenses and in the vicinity ilmenite crystals
Magnetite	1	20 µm – 400 µm	Euhedral crystals, dominantly within muscovite rich lenses
Ilmenite	tr	10 µm – 100 µm	Anhedral crystals, disseminated throughout sample, in the vicinity of titanite
Chalcopyrite	tr	submicron – 100 µm	Rare anhedral crystals, dominantly within muscovite rich lenses
Pyrite	tr	10 µm – 50 µm	Rare anhedral crystals, dominantly within muscovite rich lenses

Petrographic Description:

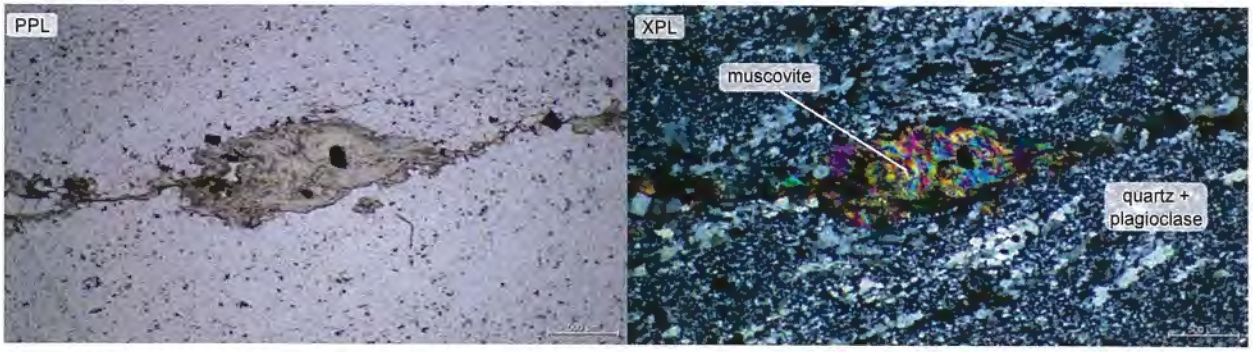
- Strongly deformed and recrystallized rock, consisting dominantly of fine grained plagioclase and quartz rich groundmass encompassing stretched and flattened quartz eyes along the well-defined foliation (Photomicrograph 26715_01), irregular coarser grained plagioclase-carbonate-quartz containing patches, sheared carbonate porphyroclasts, and sheared lenses of muscovite and associated opaque phases.
- Plagioclase is present in the sample as fine anhedral crystals in the groundmass and coarser subhedral crystals in sheared, flattened segregations (Photomicrograph 26715_02).
- Anhedral quartz crystals display undulose extinction and form slightly coarser grained, stretched quartz eyes along foliation (Photomicrograph 26715_01).
- Anhedral carbonate crystals form irregular patches with coarser plagioclase and quartz (Photomicrograph 26715_02) and rare sheared porphyroclasts.
- Euhedral muscovite crystals form irregular sheared and locally boudinaged lenses along foliation (Photomicrograph 26715_03). Stilpnomelane crystals displays radial growth and is not aligned with foliation (Photomicrograph 26715_01).
- Rare subhedral titanite crystals were observed, generally within muscovite rich lenses and close to anhedral ilmenite crystals.
- Euhedral magnetite crystals are present in the sample, dominantly within muscovite rich lenses. Rare chalcopyrite and pyrite crystals were also observed (Photomicrograph 26715_04). Chalcopyrite crystals were also observed adjacent to titanite (Photomicrograph 26715_05).



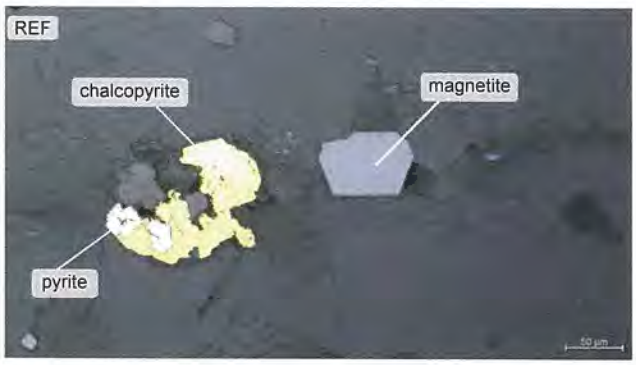
Photomicrograph 26715_01



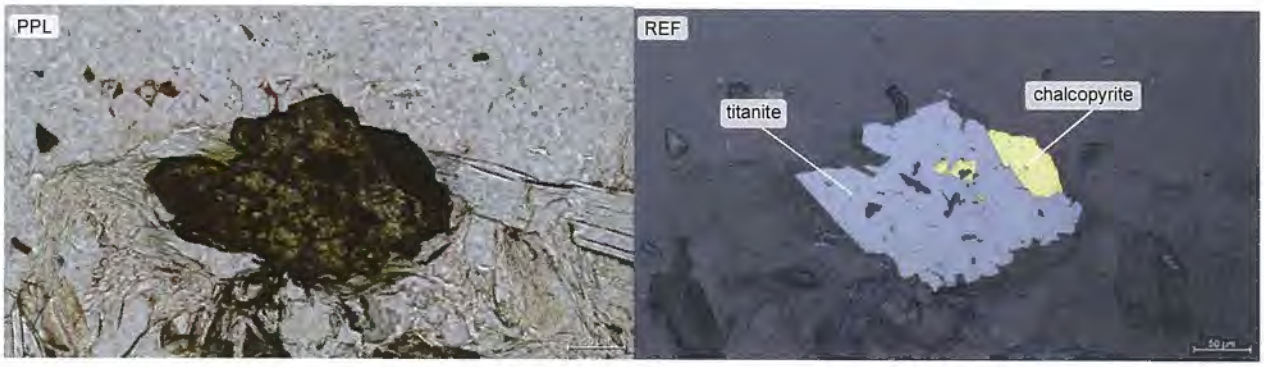
Photomicrograph 26715_02



Photomicrograph 26715_03

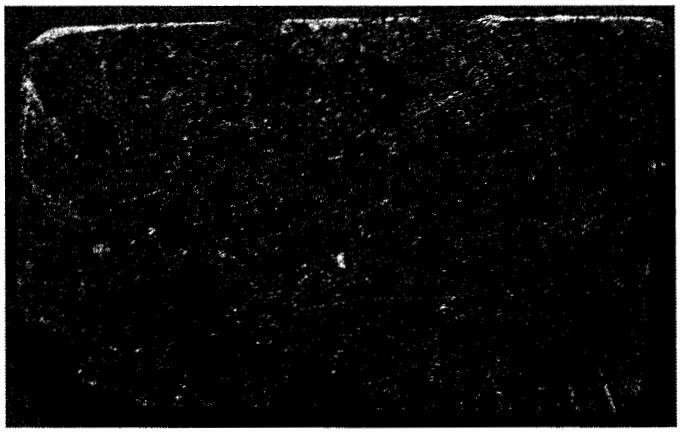


Photomicrograph 26715_04



Photomicrograph 26715_05

Sample 26716



Location: Drillhole GO2204 – 114.15 m

Hand Specimen Description: Greenish grey, fine grained ultramafic rock with strong talc alteration, hosting disseminated carbonate and magnetite crystals. Logged as Peridotite (6P) unit.

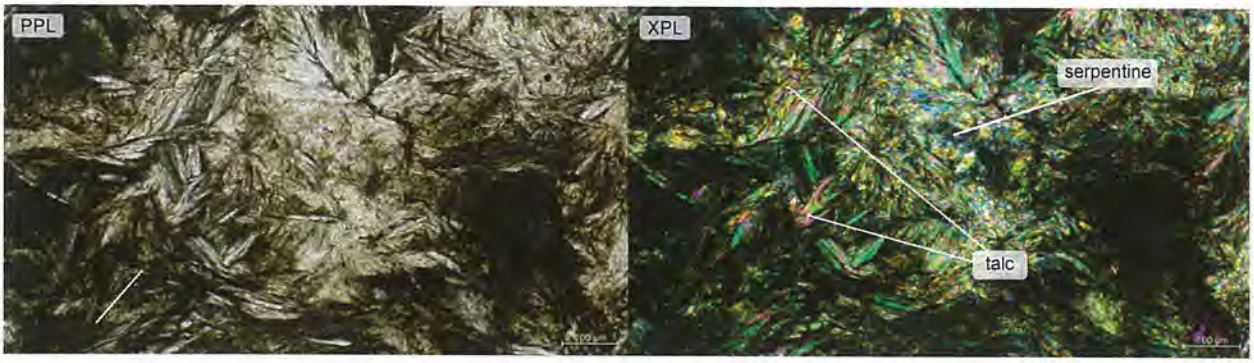
Mineralogy:

Mineral	%	Size	Distribution and Characteristics
Talc	50	submicron – 400 µm	Euhedral fibrous crystals, displaying radial growth
Carbonate	30	submicron – 2.5 mm	Very fine grains in groundmass of sample, also large euhedral crystals throughout the sample, growing in place of mafic minerals
Serpentine	10	submicron – 20 µm	Fine fibrous grains forming round patches, likely pseudomorphs after original phenocrysts in the sample
Chlorite	5	20 µm – 800 µm	Euhedral crystals, rimming euhedral carbonate crystals in pseudomorphs
Pyroxene	3	2 mm – 3 mm	Some remnant anhedral crystals, partially replaced by carbonate, chlorite and serpentine
Rutile	tr	20 µm – 300 µm	Euhedral, needle shaped crystals, locally forming clusters in the sample
Magnetite	2	5 µm – 250 µm	Subhedral, disseminated crystals throughout the sample
Pyrite	tr	10 µm – 500 µm	Rare euhedral disseminated crystals
Chalcopyrite	tr	2 µm – 100 µm	Rare anhedral disseminated crystals

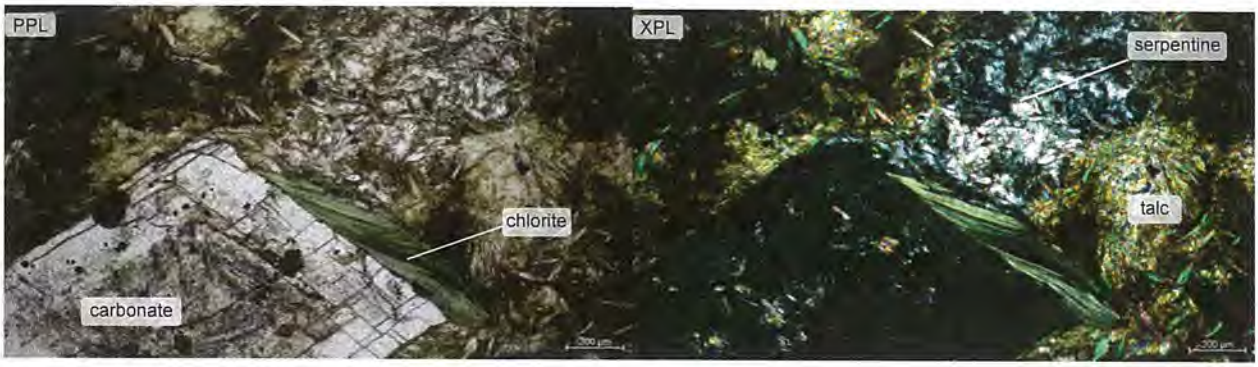
Petrographic Description:

- Strongly altered, fine grained ultramafic rock, consisting dominantly of talc in the matrix and pseudomorphs after the original mafic phenocrysts (made up of carbonate, serpentine, and chlorite), hosting disseminated magnetite and pyrite.

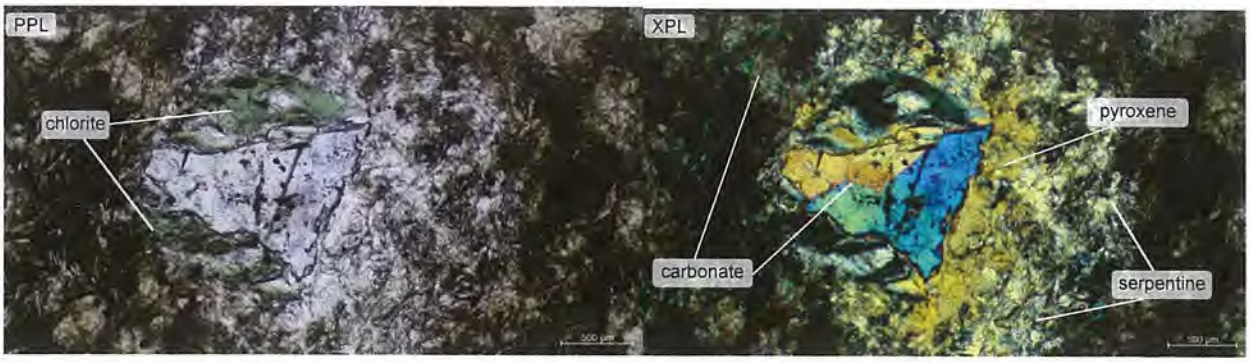
- The talc crystals of the sample are needle shaped, displaying radial growth, and make up most of the groundmass of the sample (Photomicrograph 26716_01).
- Very fine carbonate is also present in the groundmass and large euhedral carbonate crystals are also present in the sample growing in place of mafic minerals (Photomicrograph 26716_02).
- Fine fibrous serpentine (likely crysotile) forms round patches in the sample, likely also pseudomorphs after original phenocrysts (Photomicrograph 26716_02).
- Euhedral chlorite crystals were observed, rimming the carbonate crystals in pseudomorphs (Photomicrograph 26716_02).
- Some remnant anhedral pyroxene phenocrysts are also present in the sample, partially replaced by carbonate, chlorite and serpentine (Photomicrograph 26716_03).
- Trace euhedral, needle shaped rutile crystals form clusters in the sample.
- The sample hosts disseminated subhedral magnetite, and trace disseminated pyrite and chalcopyrite (Photomicrograph 26716_04).



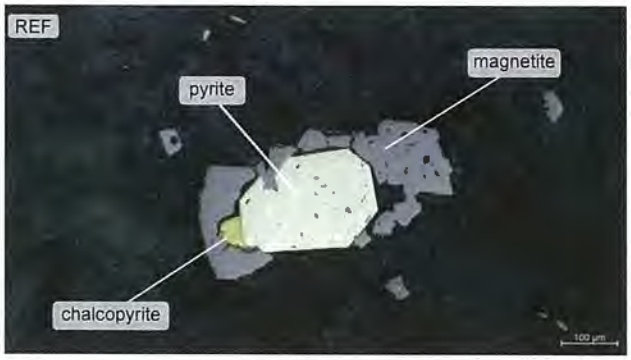
Photomicrograph 26716_01



Photomicrograph 26716_02



Photomicrograph 26716_03



Photomicrograph 26716_04

APPENDIX 6: VTEM MAXWELL PLATE STUDY REPORT

GEOTECH
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The Results of EMIT Maxwell® Plate Modeling

VTEM™ Plus Survey

Gowan Project

Timmins, ON

For

Pelangio Exploration Inc.

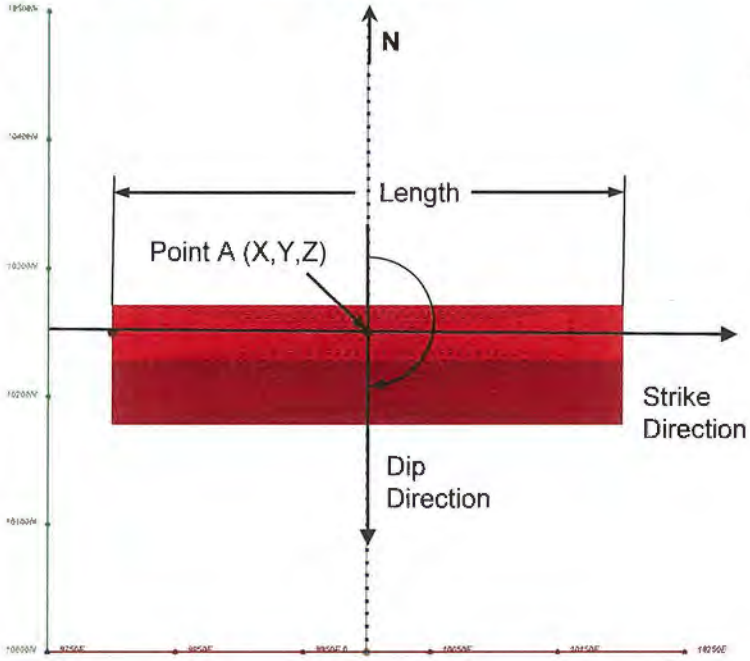
Maxwell Version: 7.1.91.33793

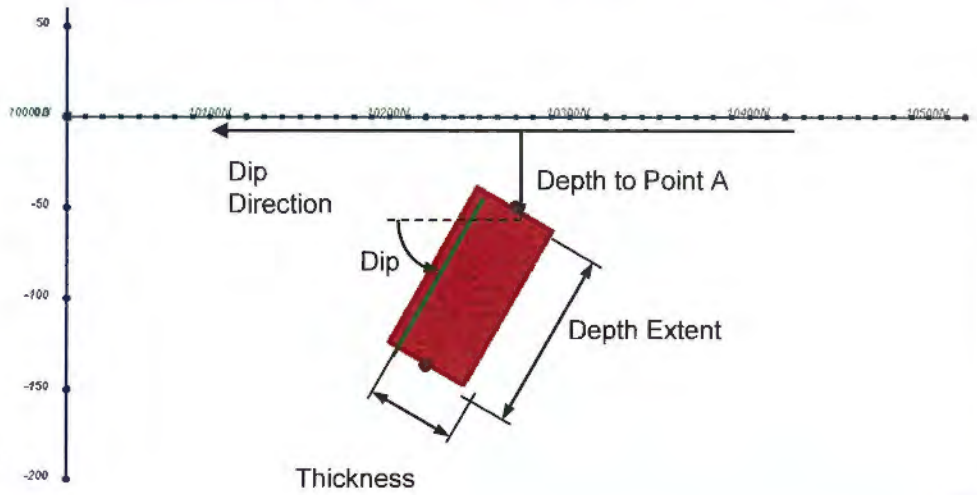
January 2022

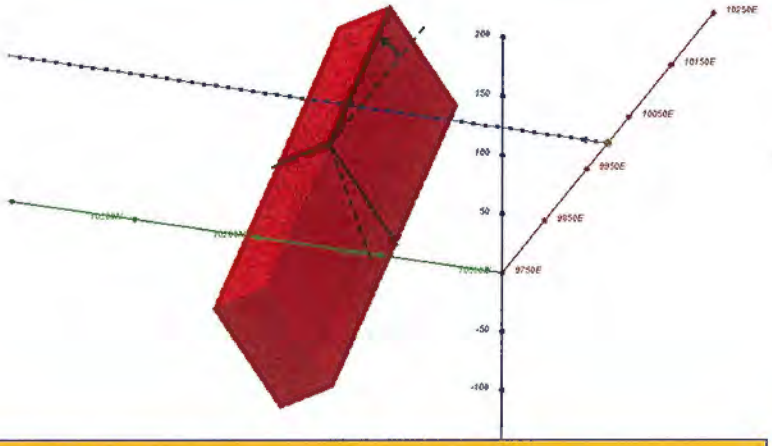
VTEM survey flown in March 2021
Job GL210071

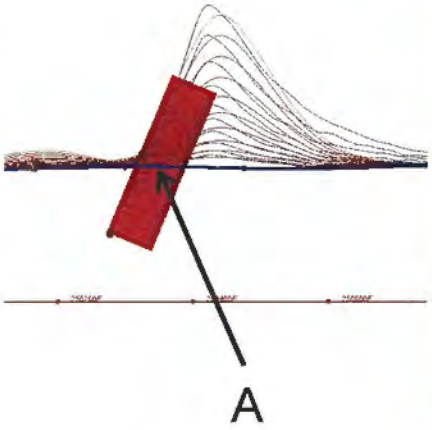
GEOTECH

Maxwell Model Parameters conventional terms









(X, Y) refers to Center Top of the Plate projected to surface, i.e., point A.

All X and Y Coordinates are projected using **WGS84/UTM Z17N**

Target Plate Parameters		
Parameter		**Units**
X		Meters
Y		Meters
Z		Meters
Depth to Point A		Meters
Dip		Degrees
Dip Direction		Degrees
Strike Direction		Degrees
Rotation		Degrees
Length		Meters
Depth Extent		Meters
Conductivity-Thickness		Siemens

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Maxwell Models

- In order to model a single discrete and localized EM anomaly from a single survey (data) line, one primary sub-vertical or sub-horizontal plate (not counting the simulation plate for over-burden if used) is required. Multiple EM anomalies from a single survey line can be modelled using multiple primary plates.
- However, if the strike length of a linear conductor (for example, one that related to a possible mineralized fault/contact) extends over several survey (data) lines, then it is possible to simultaneously model the EM anomalies from several lines (in practice two or three lines) with a single plate or multiple plates, with the best possible fits to the VTEM responses of the lines.
- In general, Maxwell modeling fits two components of EM data (dB/dt voltage) in Z and X directions. Double-peak anomalies in Z-component data usually correspond to sub-vertical thin conductors. Z-component data helps to constrain the depths to the top, dips and conductances of the thin plates. X-component data help to constrain the lateral locations and dips of the plates. For this project, the dB/dt Z and X data are used.
- If the VTEM responses are dominated by near surface extended sub-horizontal conductors, including the overburden, the dBz/dt responses of a sub-vertical conductor could be very subtle. In this situation, the dBx/dt responses of the sub-vertical conductor become the most relevant VTEM component in the MX modeling.

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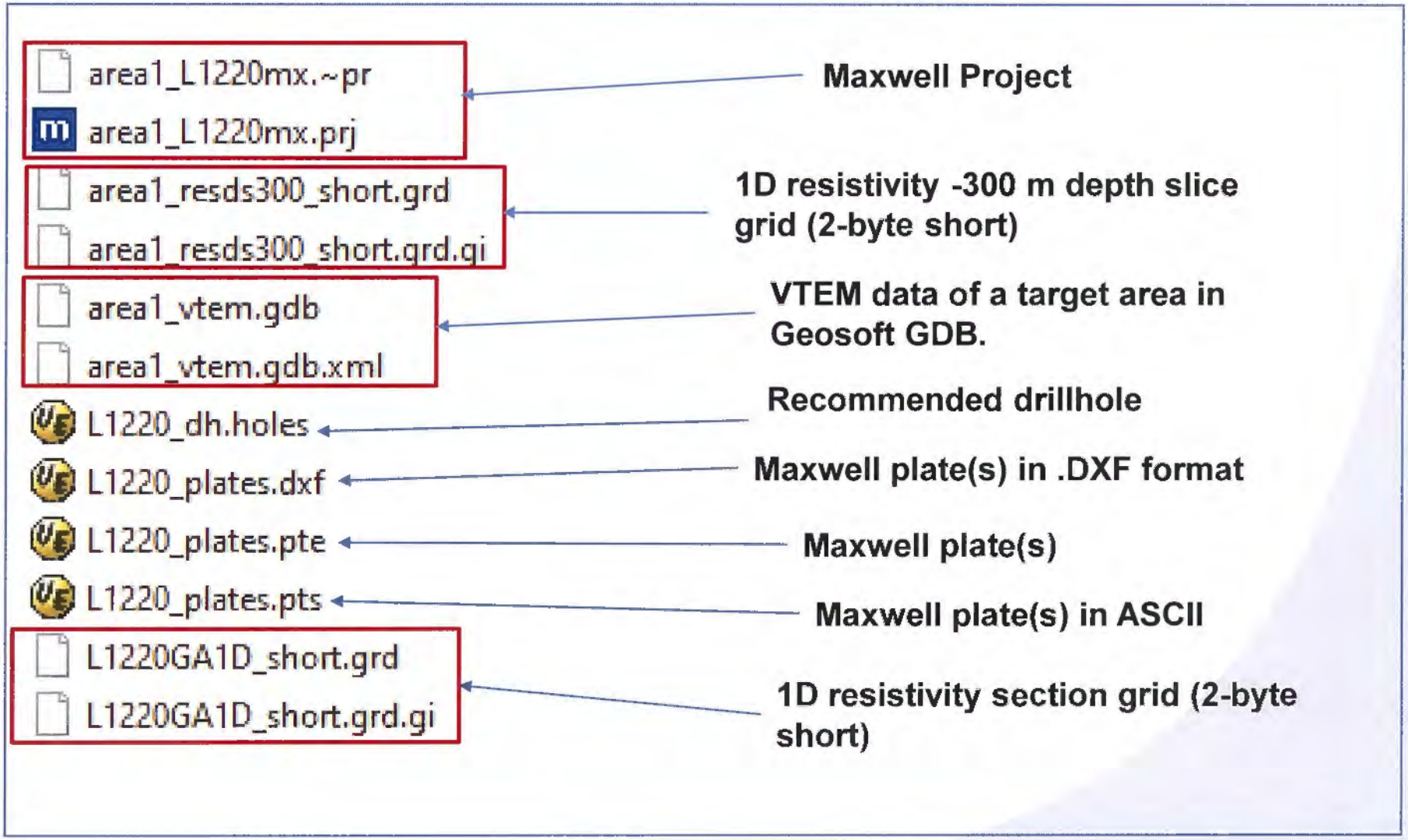
Final Deliverables

Each area folder include the files below.



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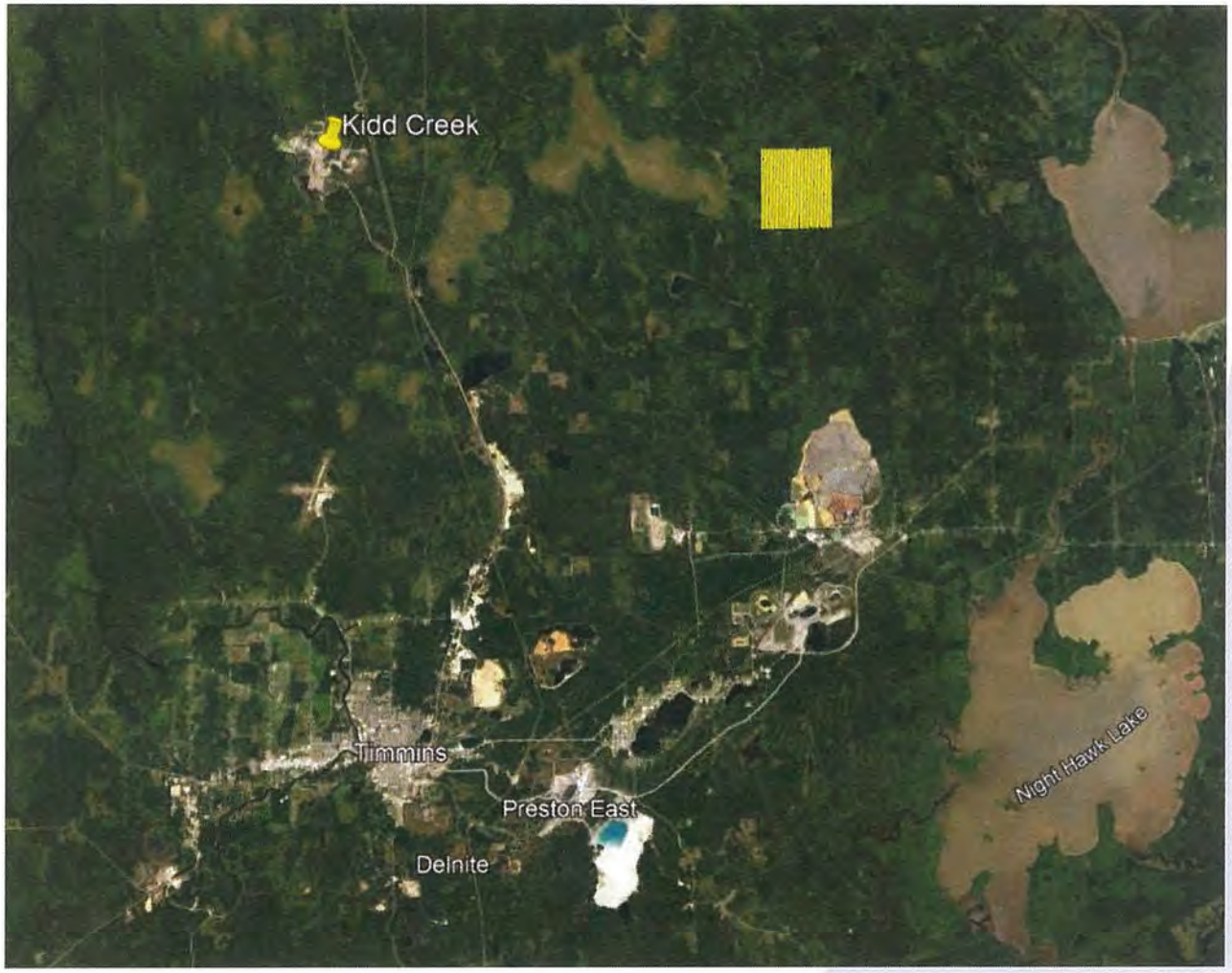
General location of the VTEM survey

The Gowan VTEM survey is located approximately 22 kms NE of the giant Timmins Gold Camp (~80 Moz of past Au production), and 18 kms east of the giant Kidd Creek VMS mine with >138 Mt grading 2.35% Cu, 6.5% Zn, 0.23% Pb and 87 g/t Ag (Barrie, Hannington & Bleeker, 1999).



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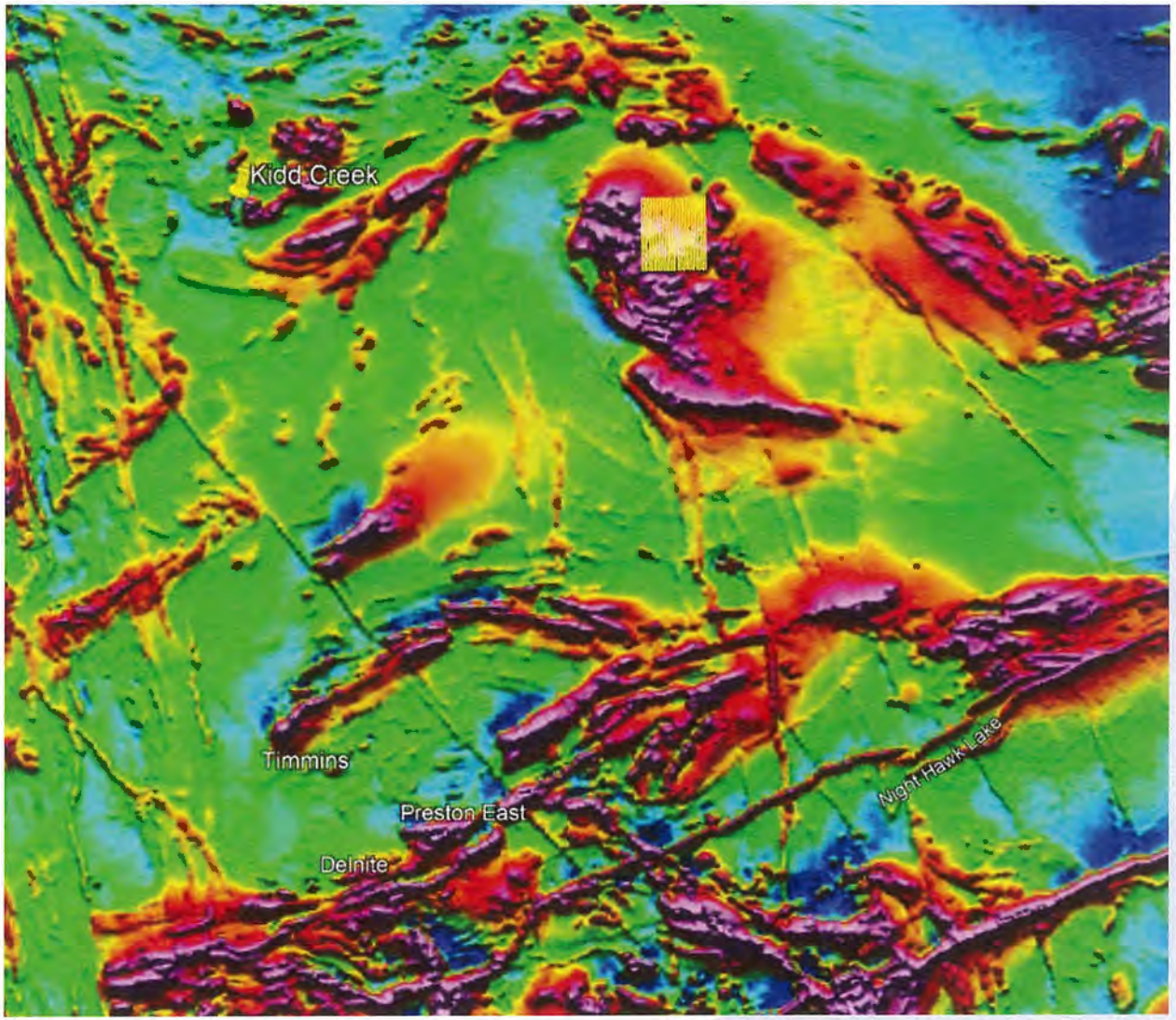
VTEM survey over magnetic data

The Gowan VTEM survey is located in a nearly circular magnetic high anomaly in the high resolution aeromagnetic data of the Timmins area (sourced from MNDM).



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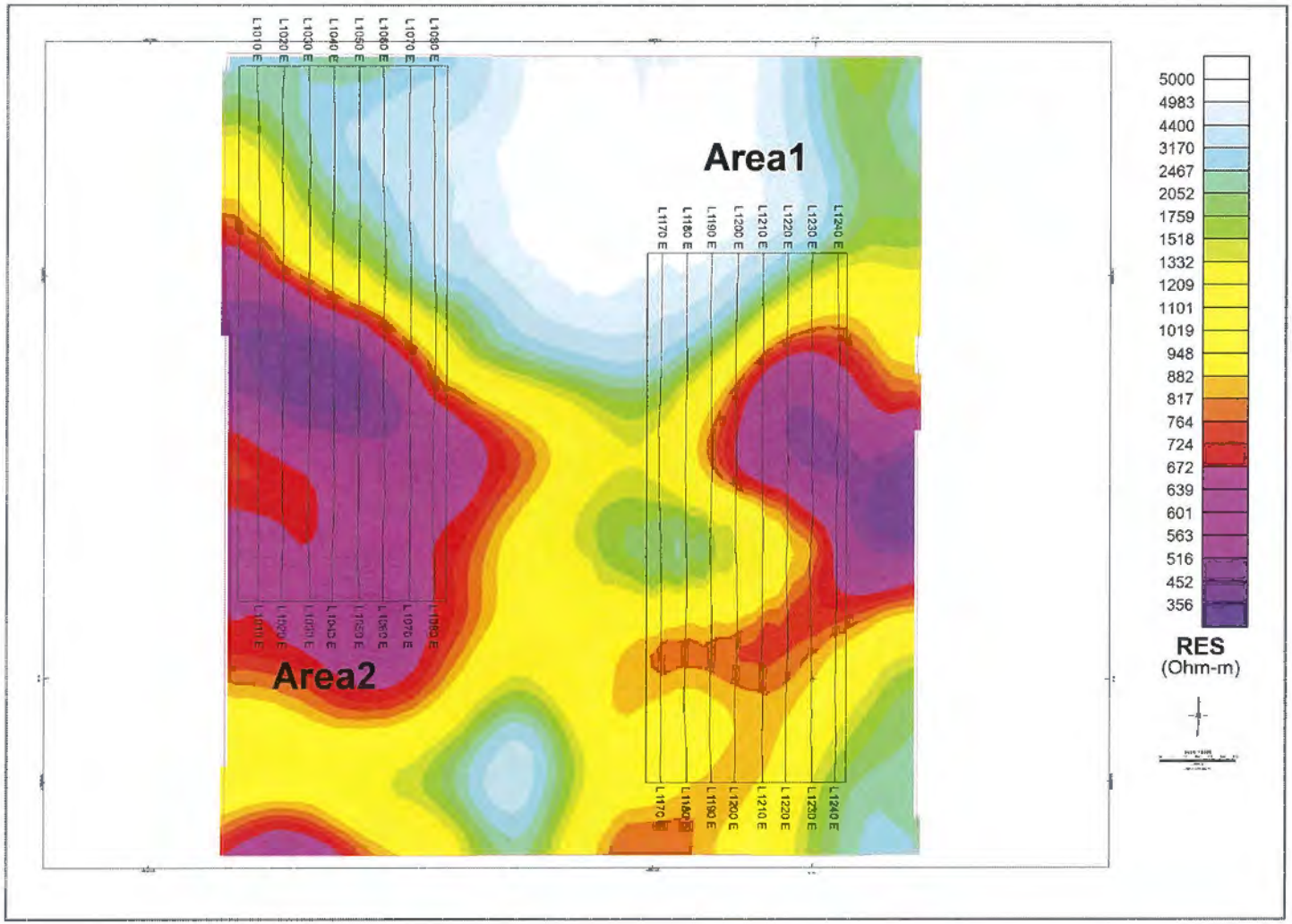
Areas of Interest (AOIs) for Maxwell Modeling

Two areas of interest, Area1 and Area2, are selected for Maxwell modeling. Area1 is in the east-central region of the VTEM area, and Area2 is in the northwest.



1D resistivity -300 m depth slice

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Area 1

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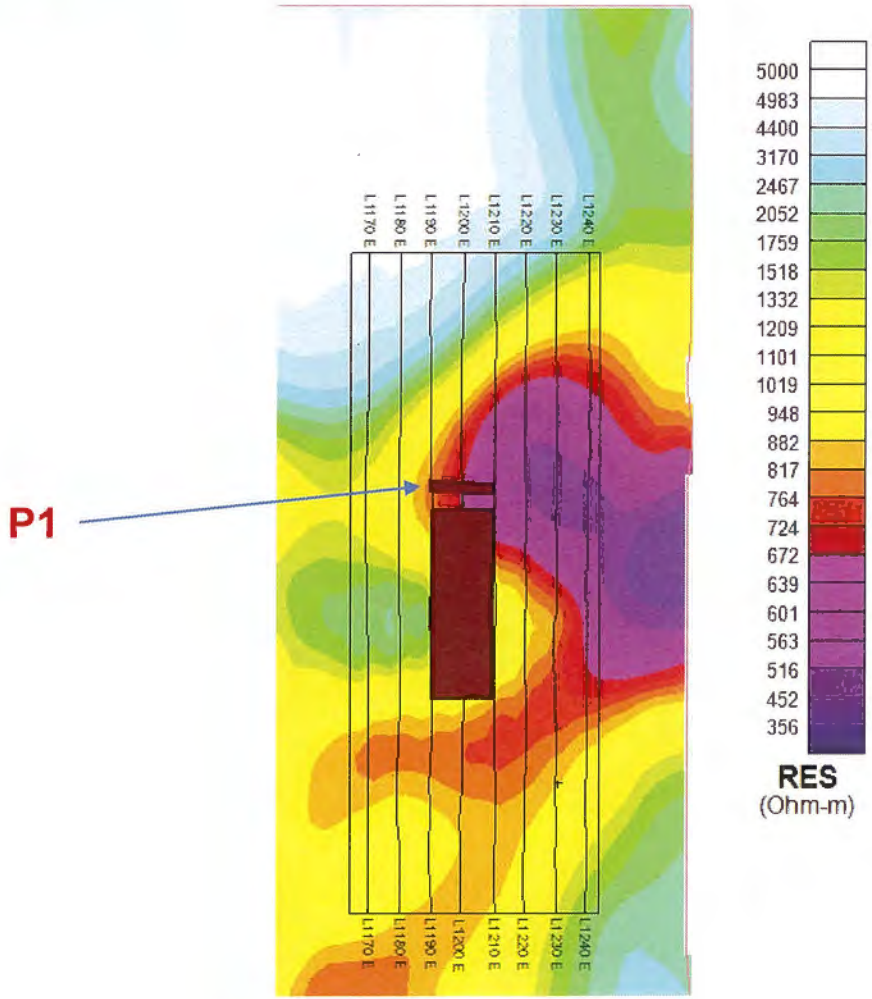
AIRBORNE GEOPHYSICAL SURVEYS

Area 1 - L1200



1D resistivity -300 m depth slice

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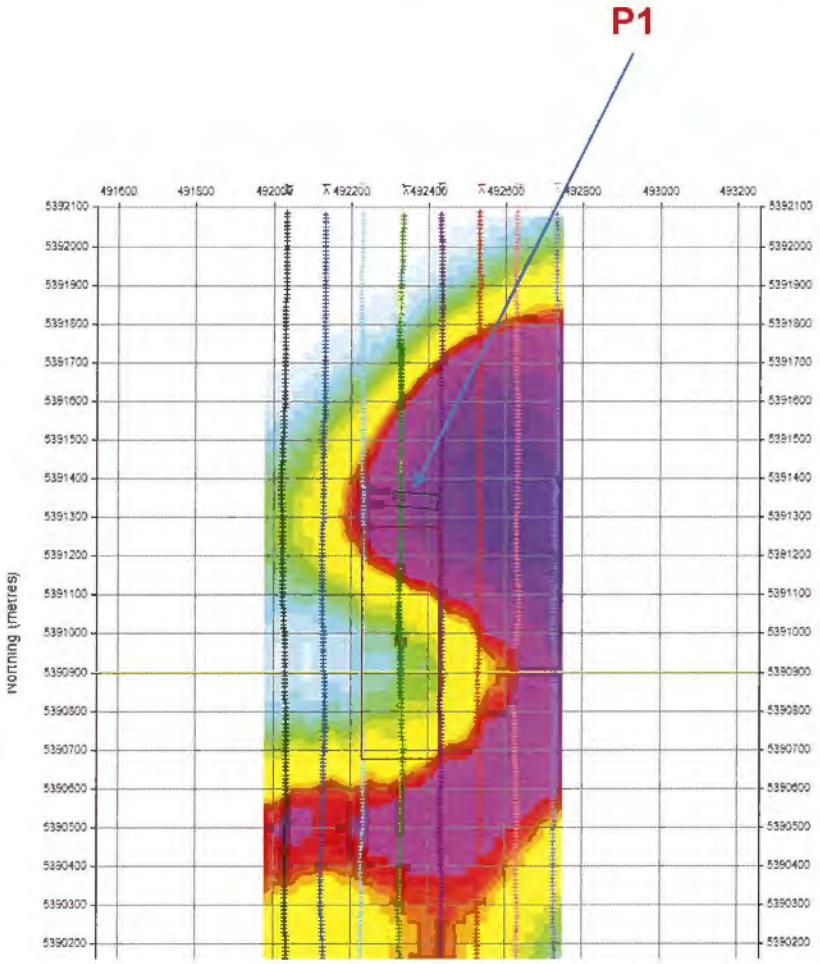

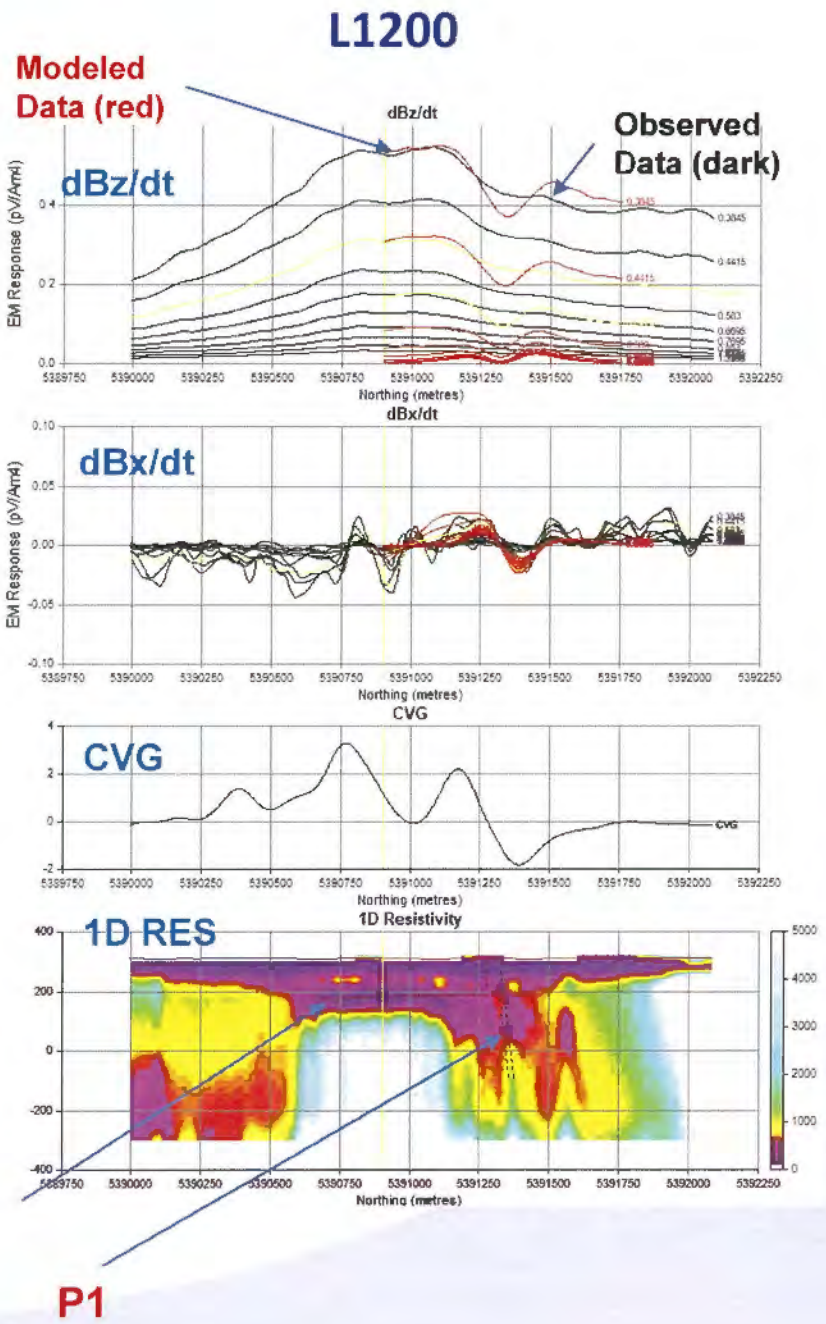

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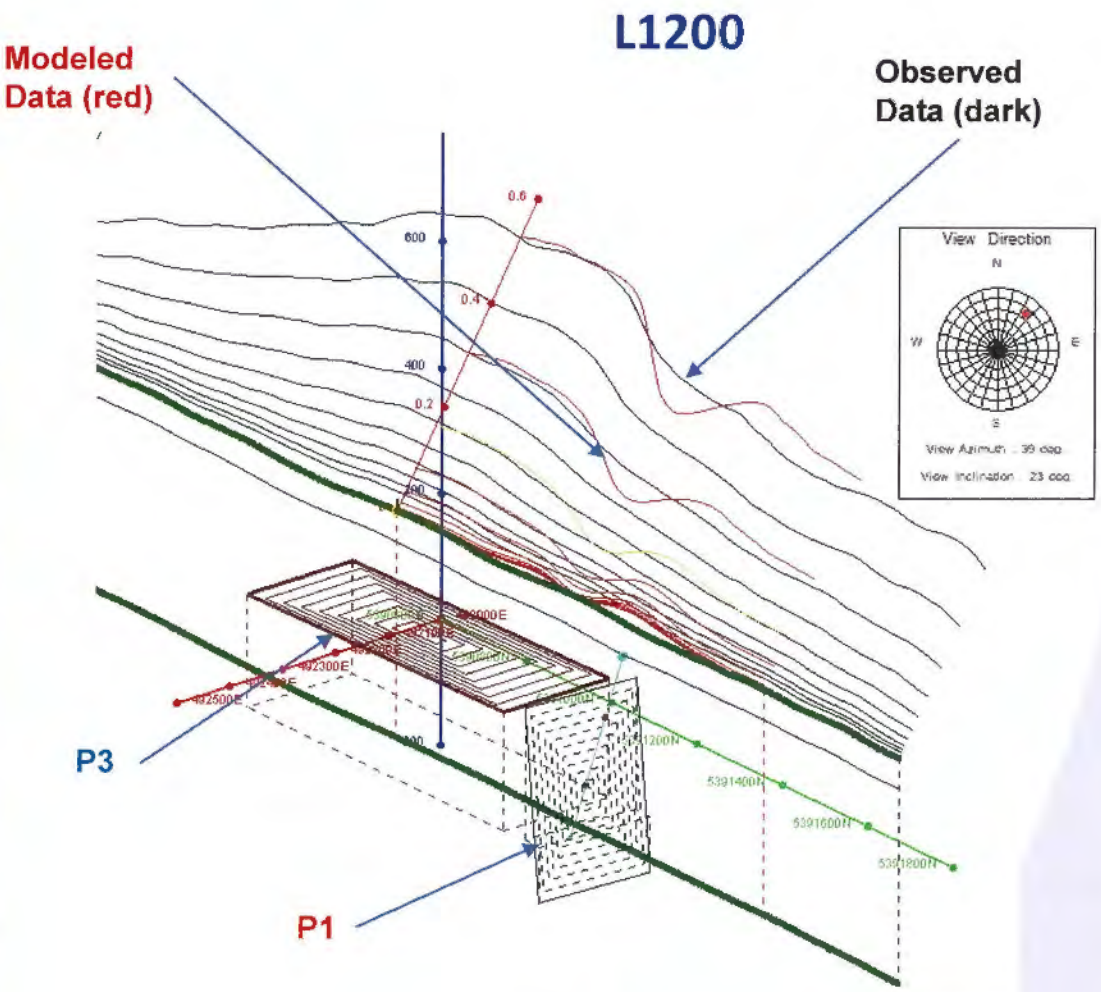
Target Plate Parameters			
Parameter	P1	P3	**Units**
X	492324	492328	Meters
Y	5391328	5391276	Meters
Z	210	190	Meters
Depth	-101.1	-122.6	Meters
Dip	83.0	1.0	Degrees
Dip Direction	4.00	180.0	Degrees
Strike Direction	94.0	270.0	Degrees
Rotation	0	0	Degrees
Length	200	200	Meters
Depth Extent	300	600	Meters
Conductance	80.0	3.6	Siemens

x,y,z-- coordinates of top-center point of the plate
depth—depth from surface to top-center of the plate



3D View of the plates

Planned drill-hole parameters appropriate plate P1							
Hole-ID	X (m)	Y (m)	Z (m)	Dip (deg)	Azimuth (deg)	Total Length (m)	Length To Plate (m)
L1200_DH	492328	5391430	303	70	180	350	248.5

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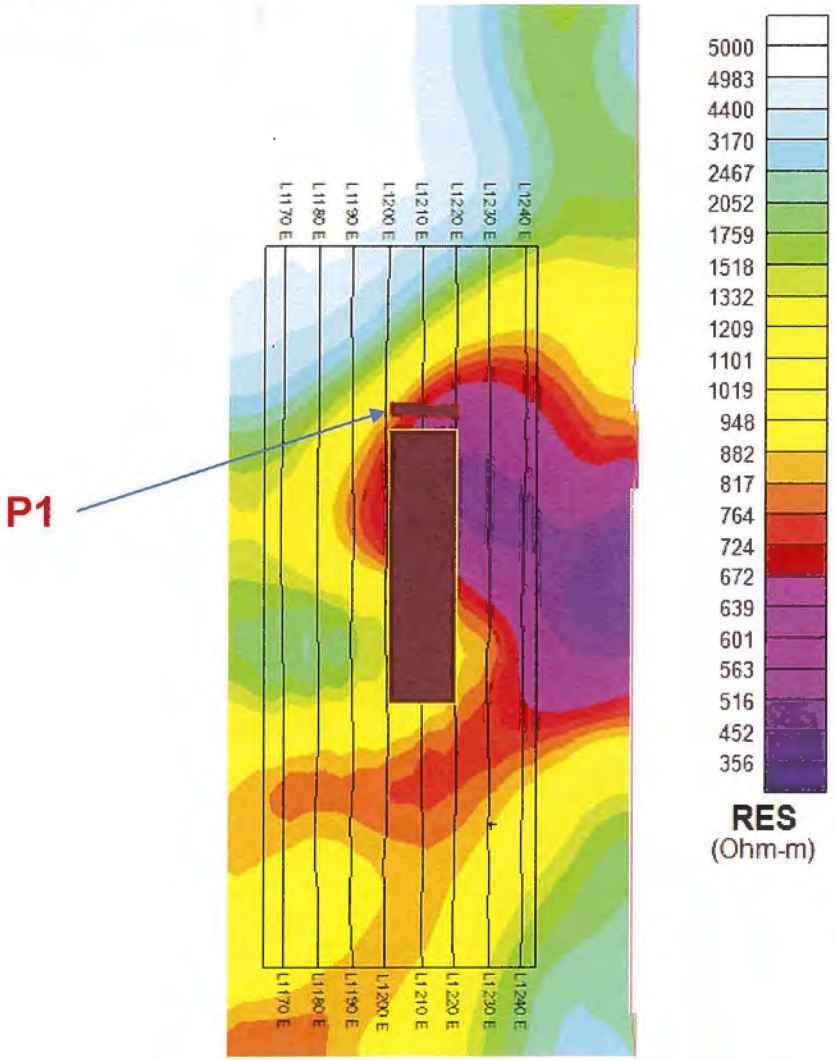
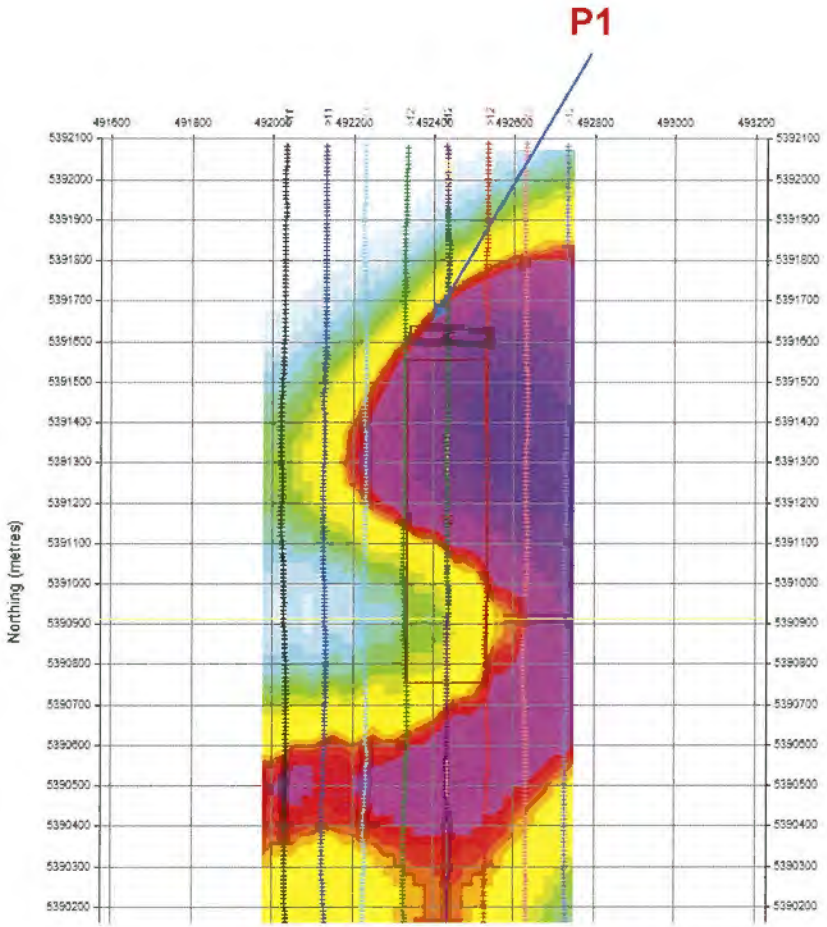
AIRBORNE GEOPHYSICAL SURVEYS

Area 1 - L1210

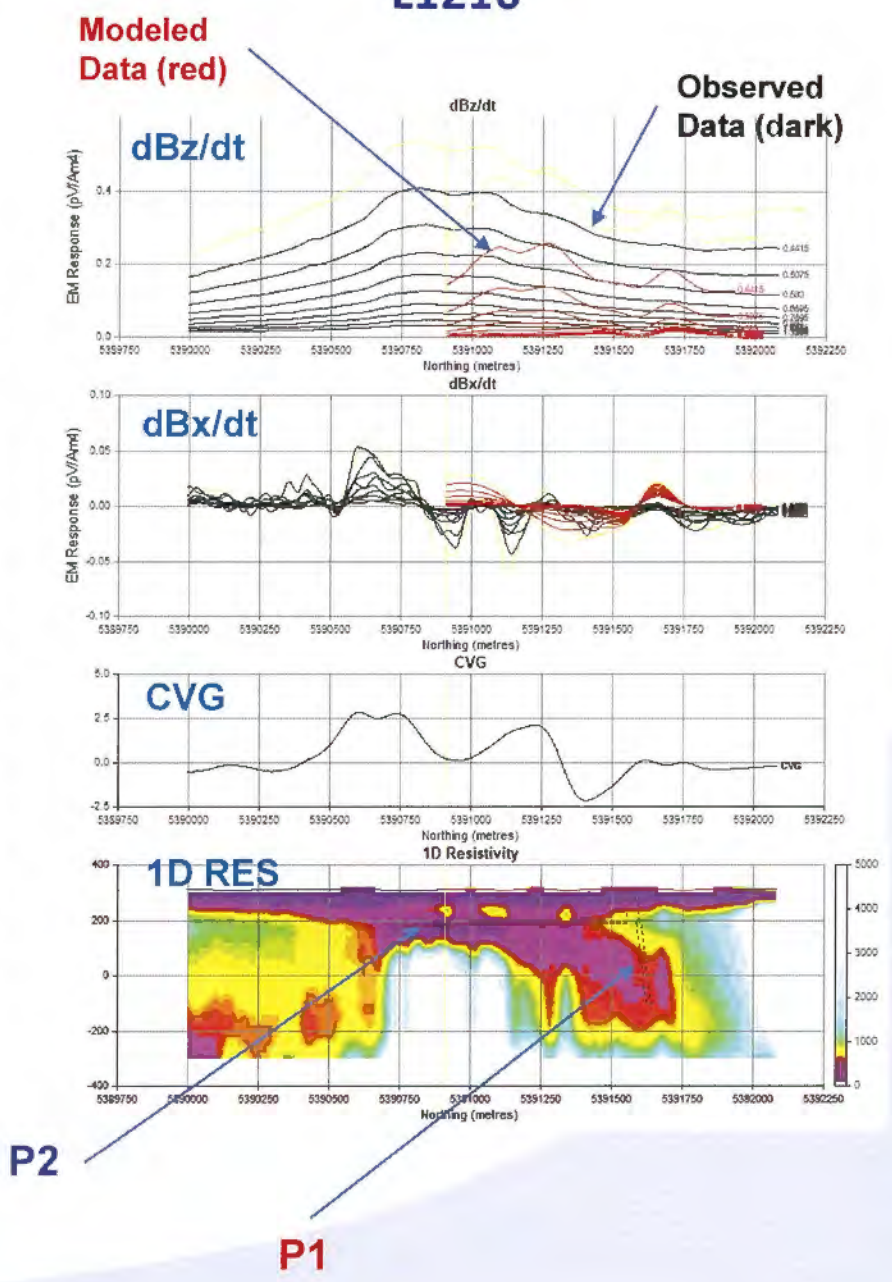


1D resistivity -300 m depth slice

GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS



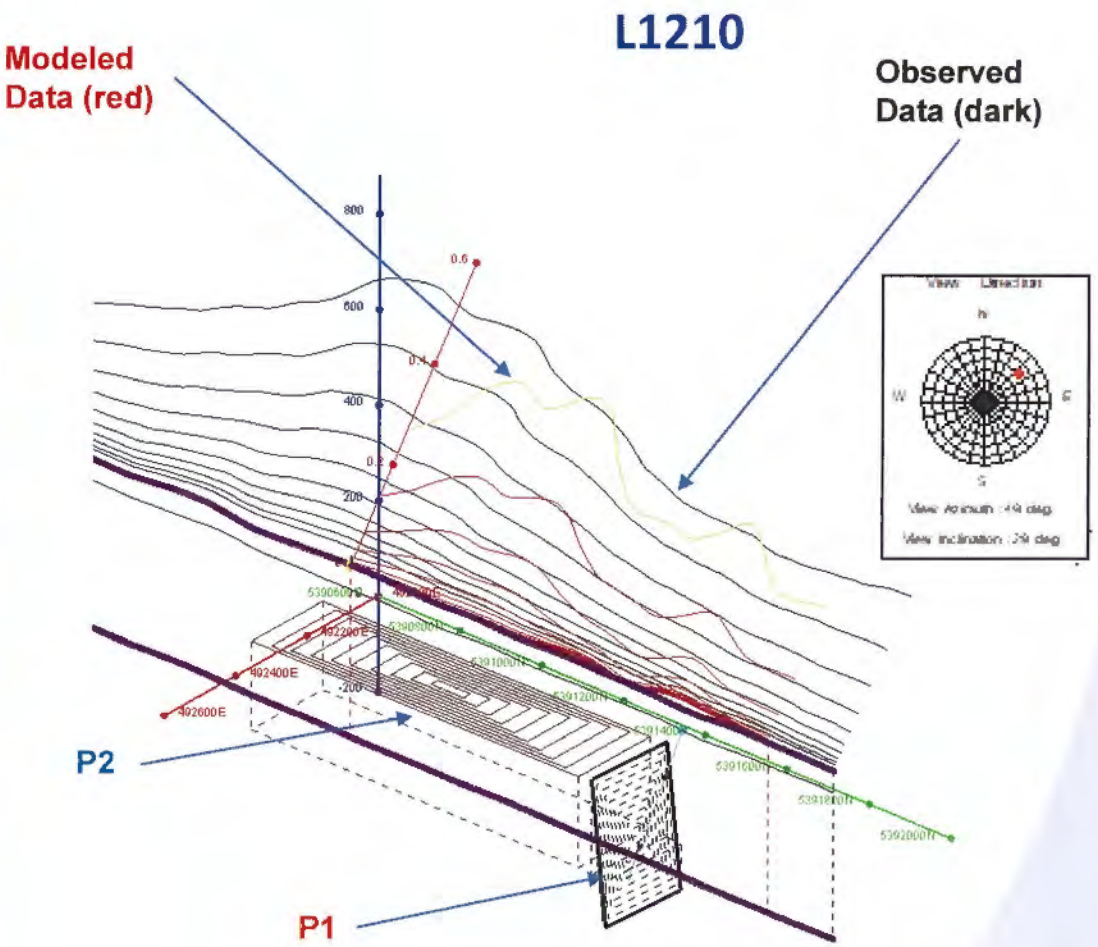
L1210



GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

Target Plate Parameters			
Parameter	P1	P2	**Units**
X	492439	492434	Meters
Y	5391596	5391555	Meters
Z	200	192	Meters
Depth	-111.0	-119.3	Meters
Dip	83.0	0.5	Degrees
Dip Direction	3.00	180.0	Degrees
Strike Direction	93.0	270.0	Degrees
Rotation	0	0	Degrees
Length	200	200	Meters
Depth Extent	300	800	Meters
Conductance	60.0	5.5	Siemens

x,y,z-- coordinates of top-center point of the plate
depth—depth from surface to top-center of the plate



3D View of the plates

Planned drill-hole parameters appropriate plate P1							
Hole-ID	X (m)	Y (m)	Z (m)	Dip (deg)	Azimuth (deg)	Total Length (m)	Length To Plate (m)
L1210_DH	492433	5391720	307	70	180	380	299.1

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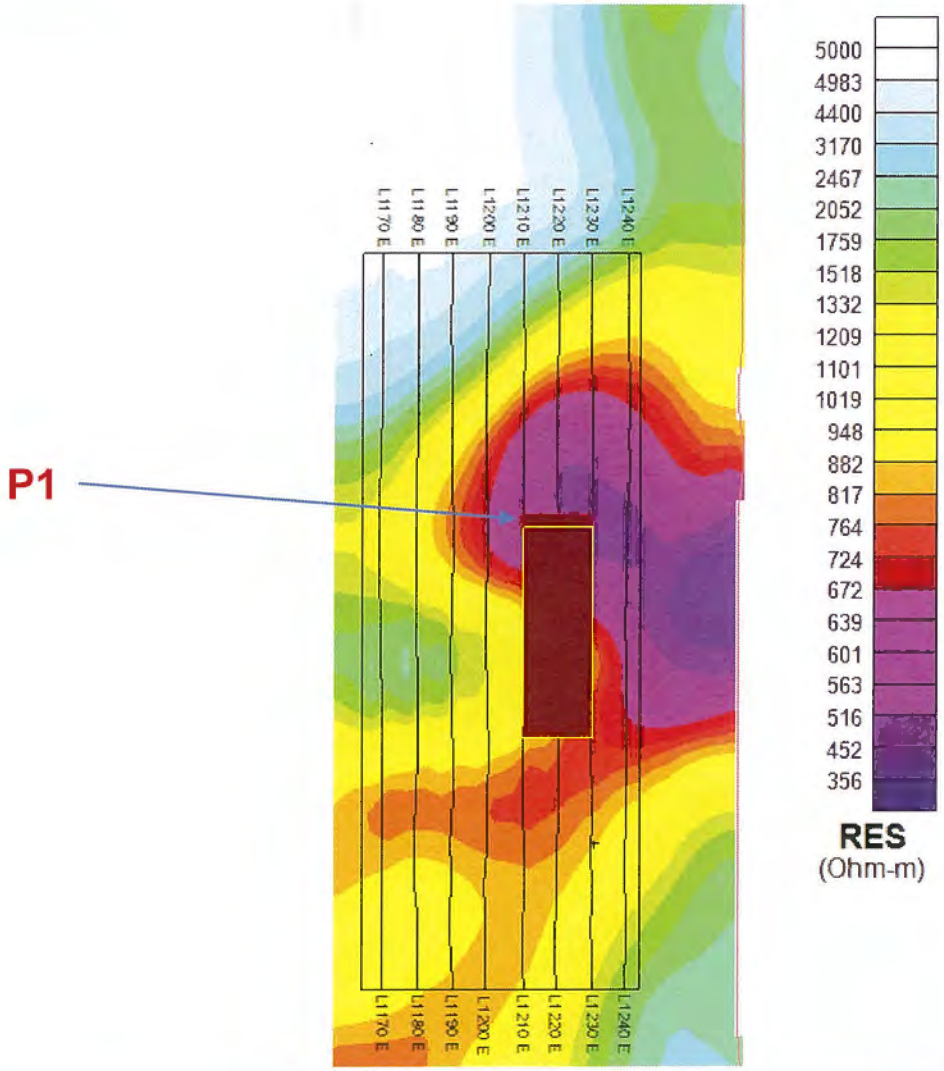
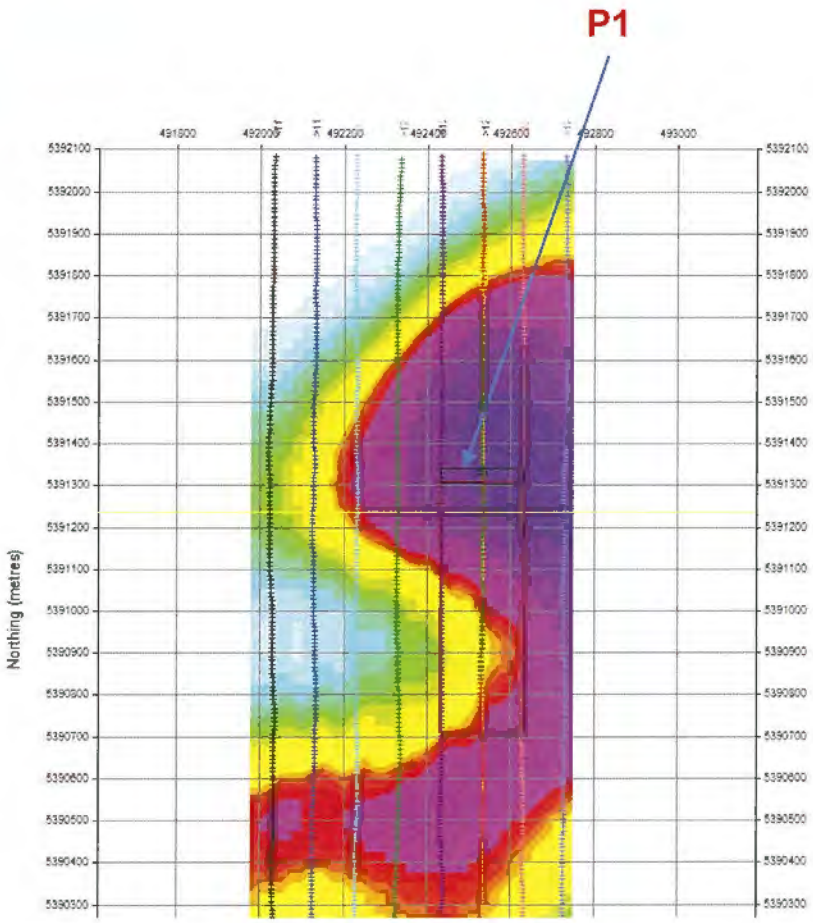
AIRBORNE GEOPHYSICAL SURVEYS

Area 1 - L1220



1D resistivity -300 m depth slice

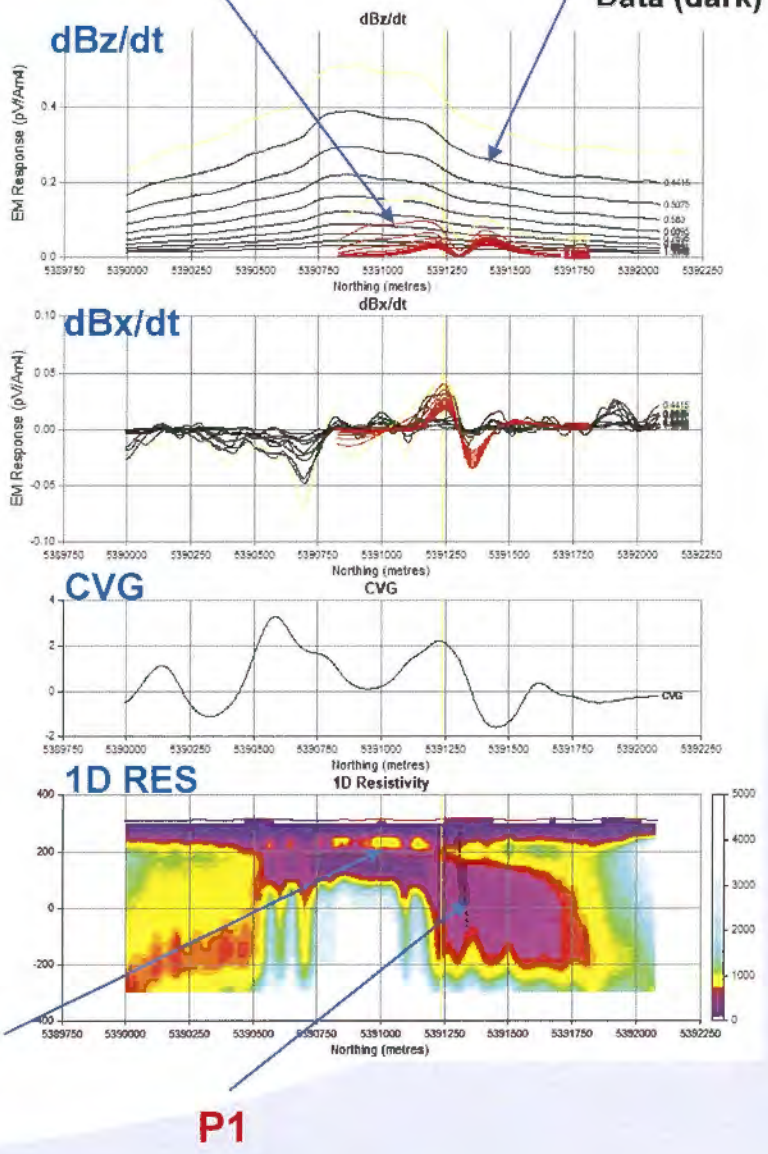
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS



L1220

Modeled Data (red)

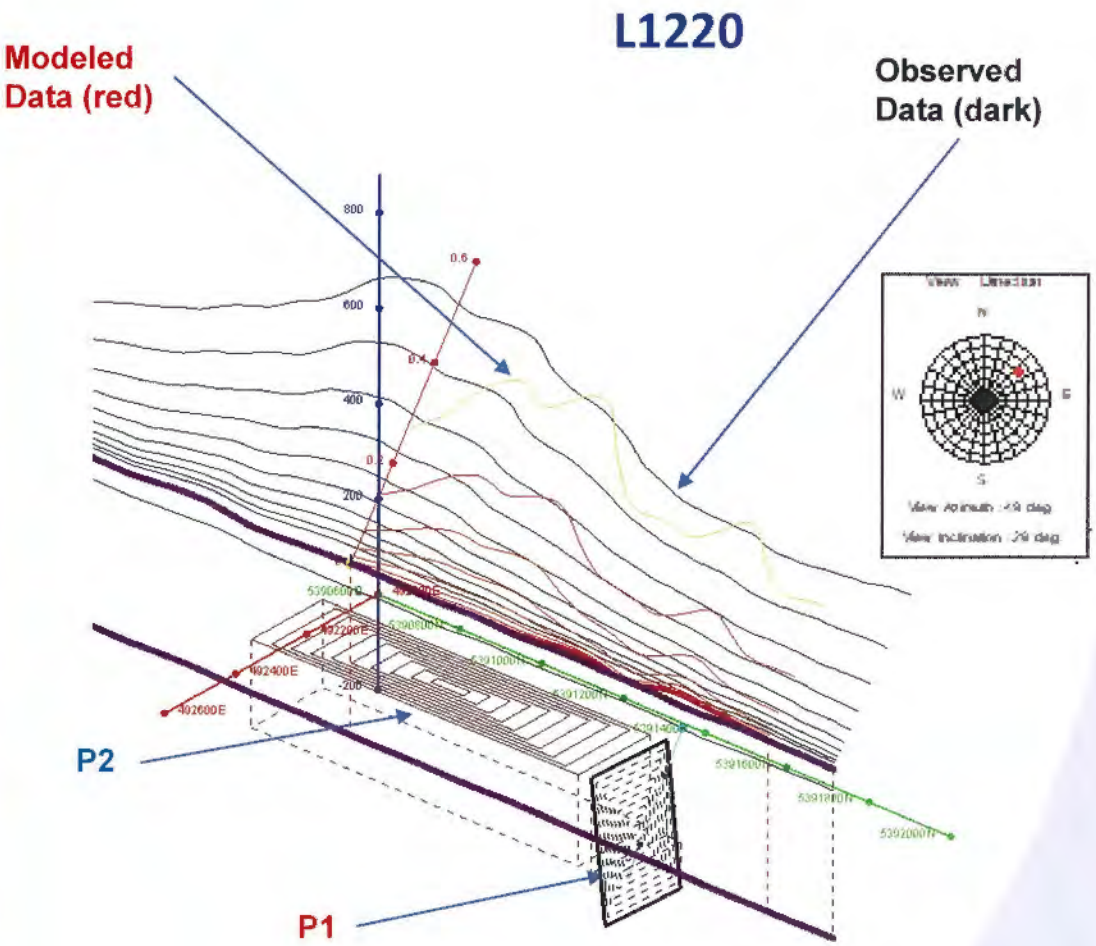
Observed Data (dark)



GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

Target Plate Parameters			
Parameter	P1	P2	**Units**
X	492531	492532	Meters
Y	5391305	5391310	Meters
Z	231	184	Meters
Depth	-80.9	-127.7	Meters
Dip	83.0	0.0	Degrees
Dip Direction	0.19	180.19	Degrees
Strike Direction	90.19	270.19	Degrees
Rotation	0	0	Degrees
Length	200	200	Meters
Depth Extent	300	600	Meters
Conductance	100.0	4.5	Siemens

x,y,z— coordinates of top-center point of the plate
depth—depth from surface to top-center of the plate

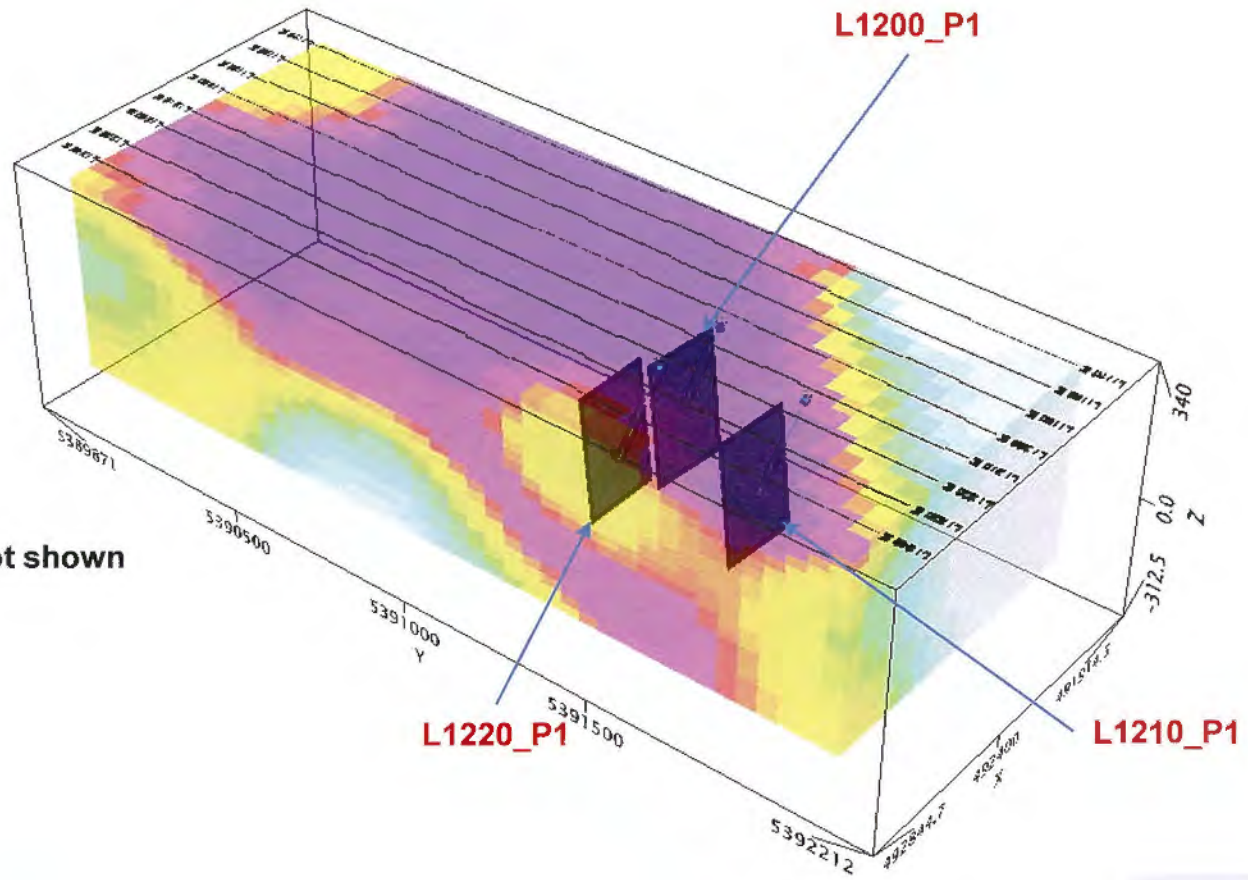


3D View of the plates

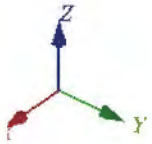
Planned drill-hole parameters appropriate plate P1							
Hole-ID	X (m)	Y (m)	Z (m)	Dip (deg)	Azimuth (deg)	Total Length (m)	Length To Plate (m)
L1220_DH	492530	5391430	310	70	180	380	294.5

GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

Area 1 - MX Plates and 1D Resistivity Voxel



Horizontal Plates not shown for clarity sake



3D View of the plates and drillholes

GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

Additional MX modeling for L1220

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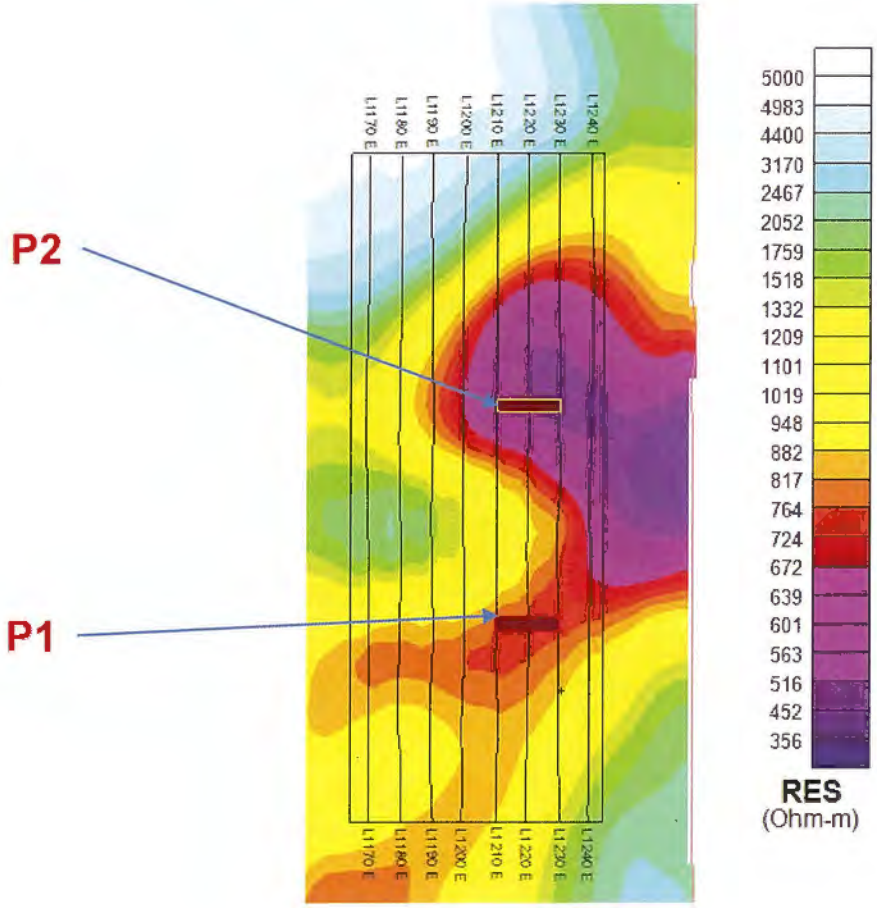
AIRBORNE GEOPHYSICAL SURVEYS

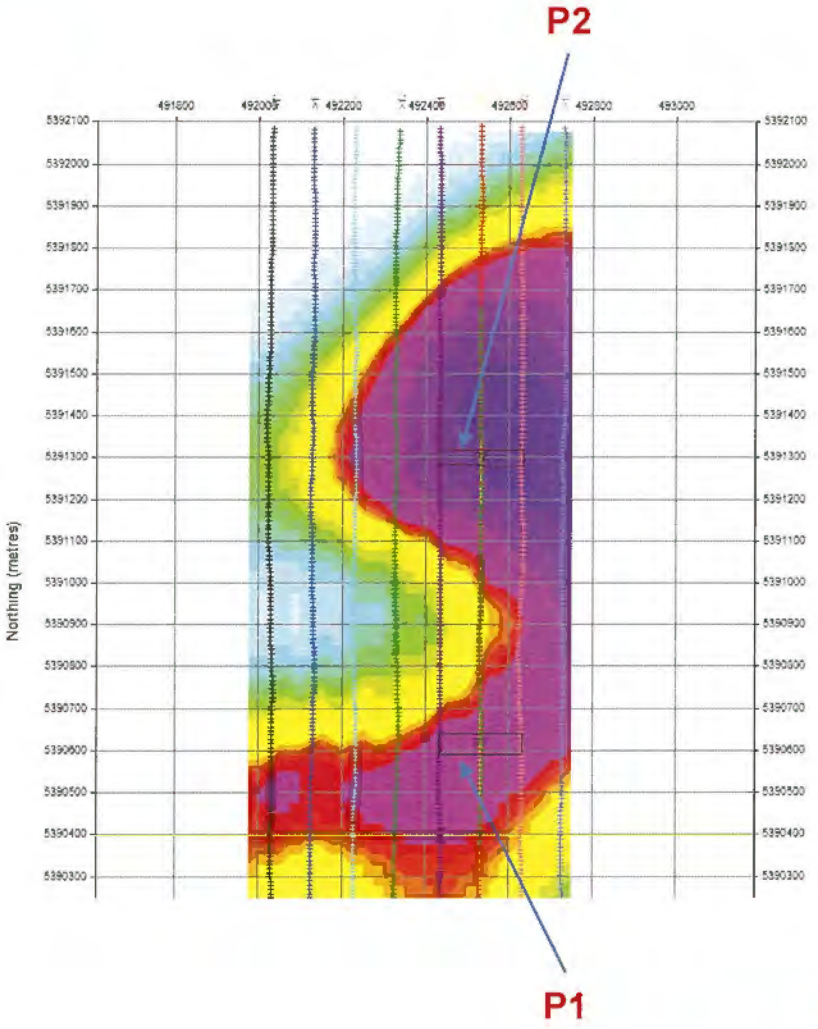
Area 1 - L1220 (extra)

The purpose of modeling the southern part of L1220 is to show the symmetry of the VTEM responses (possibly related to a fold), and the two MX plates, P1 and P2, could correspond to the fold limbs.

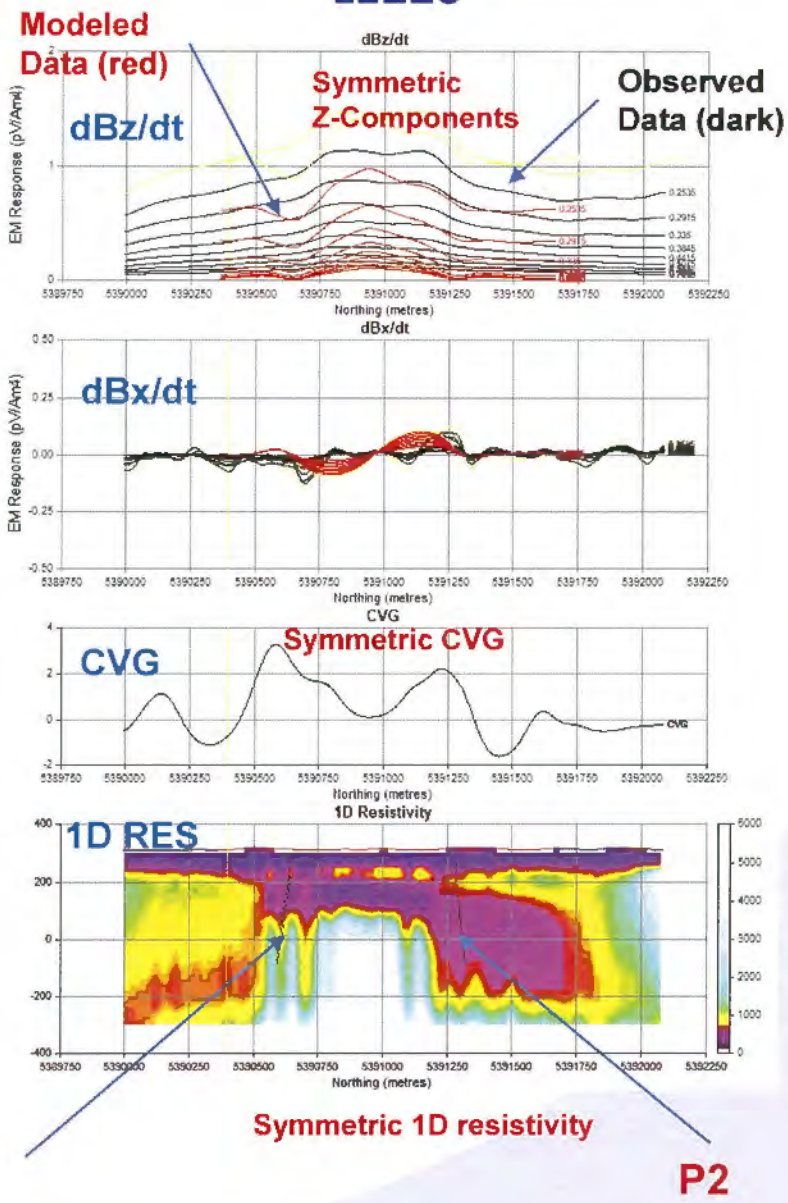


1D resistivity -300 m depth slice

GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS



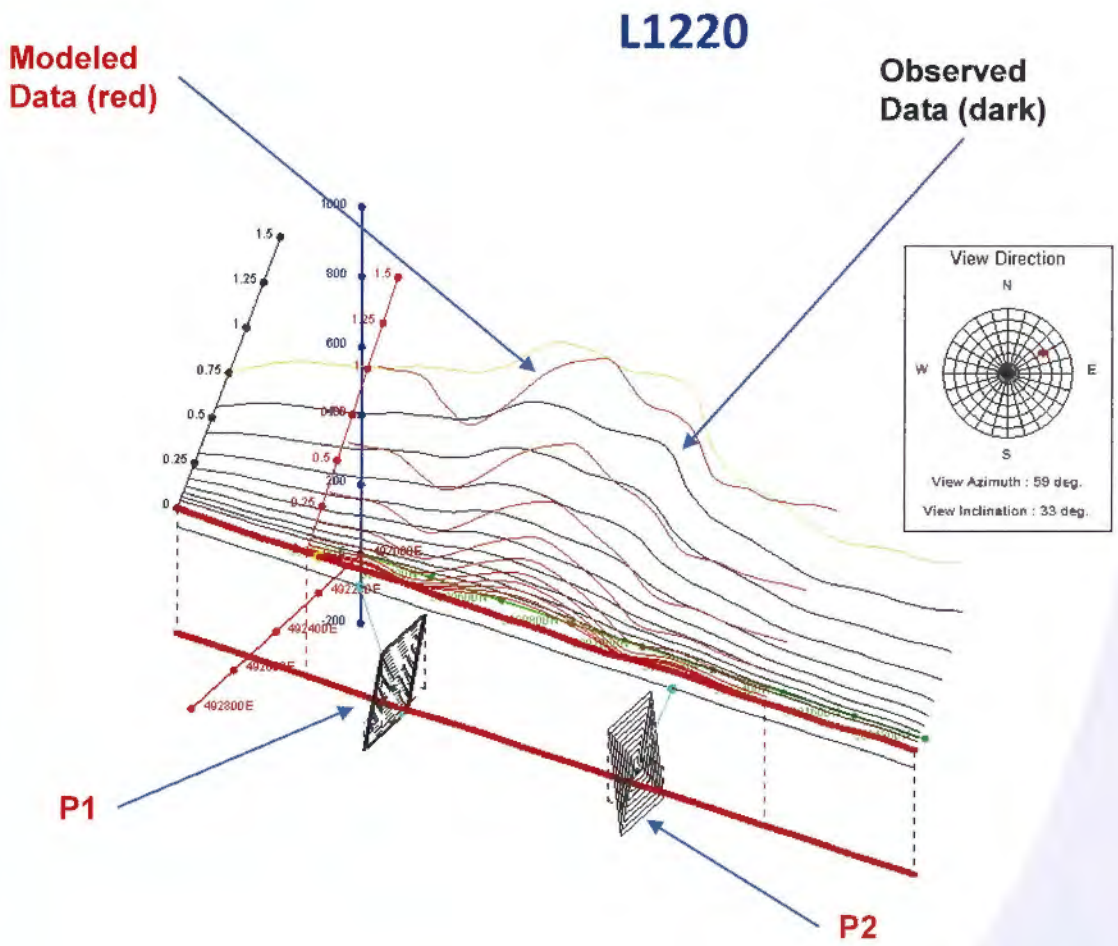
L1220



GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

Target Plate Parameters			
Parameter	P1	P2	**Units**
X	492532	492533	Meters
Y	5390640	5391282	Meters
Z	214	208	Meters
Depth	-95.2	-104.3	Meters
Dip	80.5	83.0	Degrees
Dip Direction	180.1	0.1	Degrees
Strike Direction	270.1	90.1	Degrees
Rotation	0	0	Degrees
Length	200	200	Meters
Depth Extent	300	300	Meters
Conductance	100.0	100.0	Siemens

x,y,z— coordinates of top-center point of the plate
depth—depth from surface to top-center of the plate



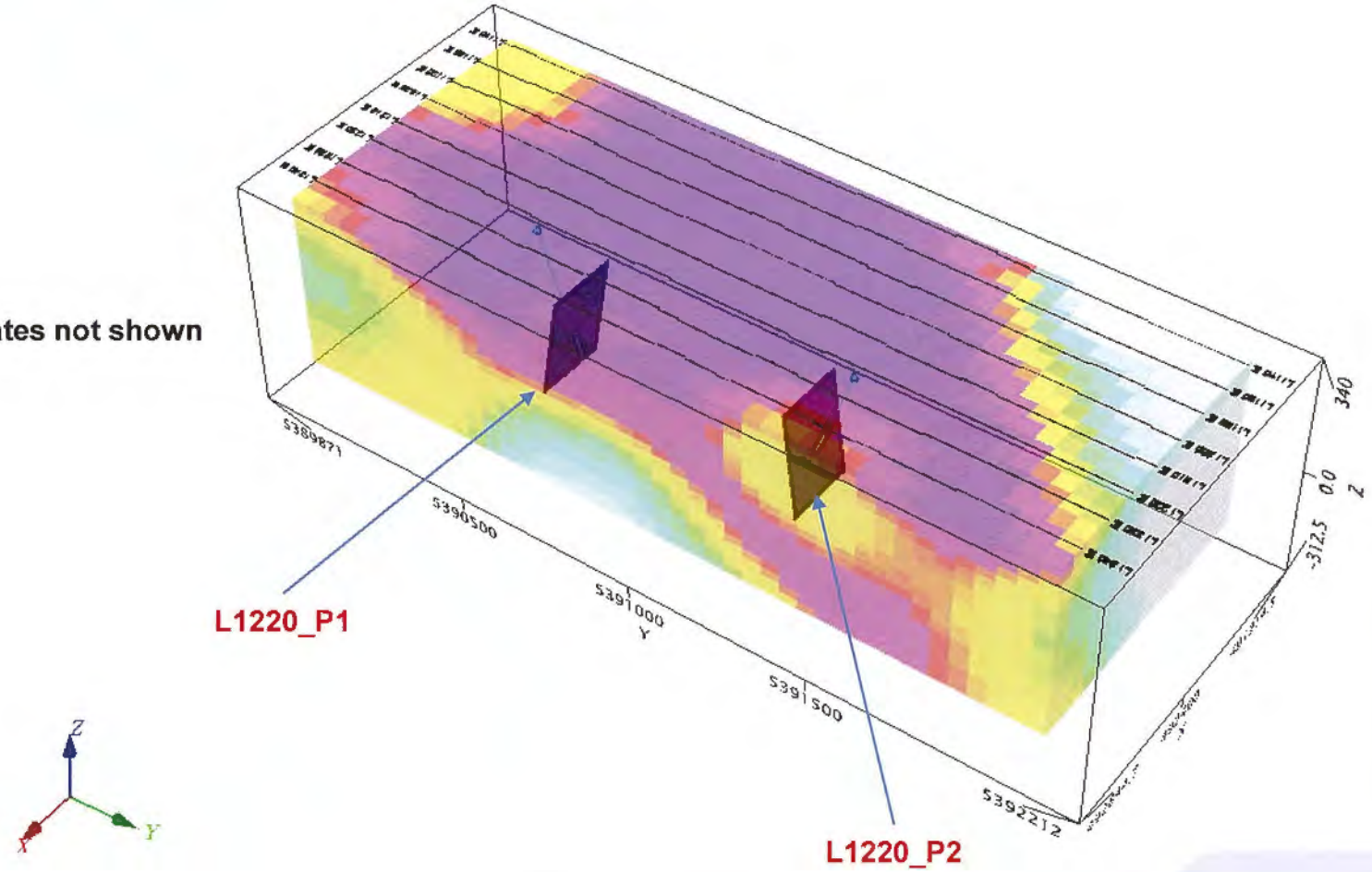
3D View of the plates

Planned drill-hole parameters appropriate plate P1							
Hole-ID	X (m)	Y (m)	Z (m)	Dip (deg)	Azimuth (deg)	Total Length (m)	Length To Plate (m)
L1220_DH1	492535	5390518	310	70	0	350	276.5
	492532	5391402	309	70	180	380	289.5

GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

Area 1 – L1220 Plates and 1D Resistivity Voxel

Horizontal Plates not shown



3D View of the plates and drillholes

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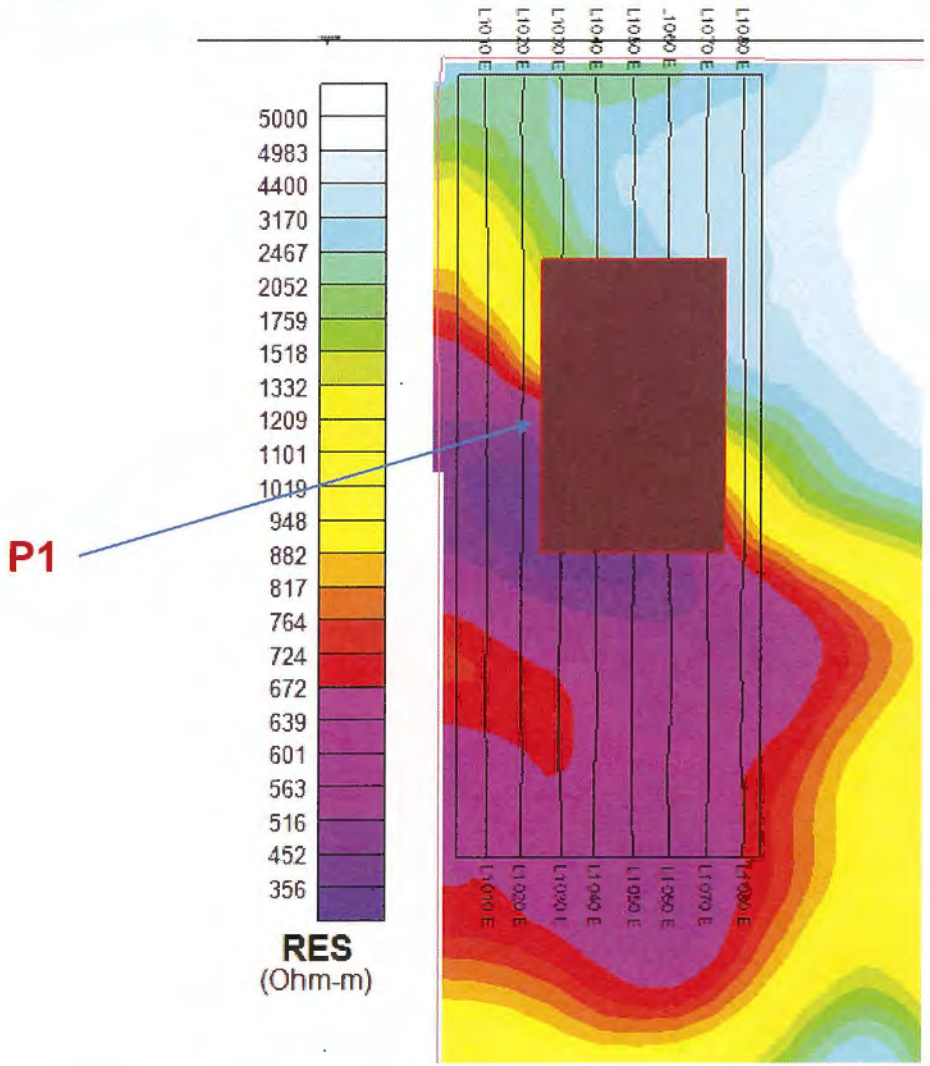
AIRBORNE GEOPHYSICAL SURVEYS

Area 2

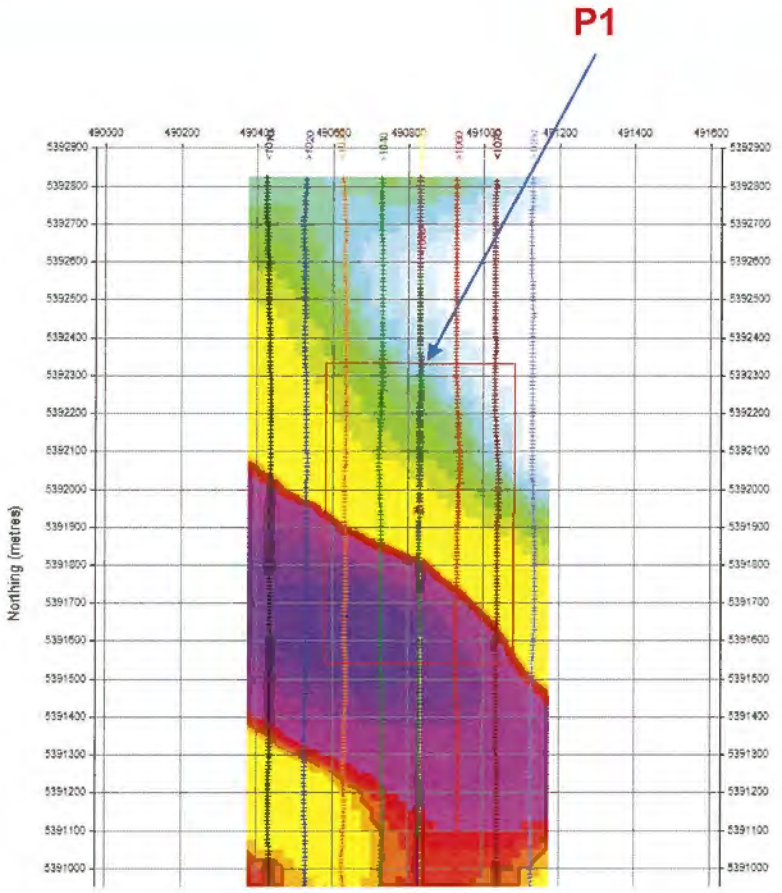
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

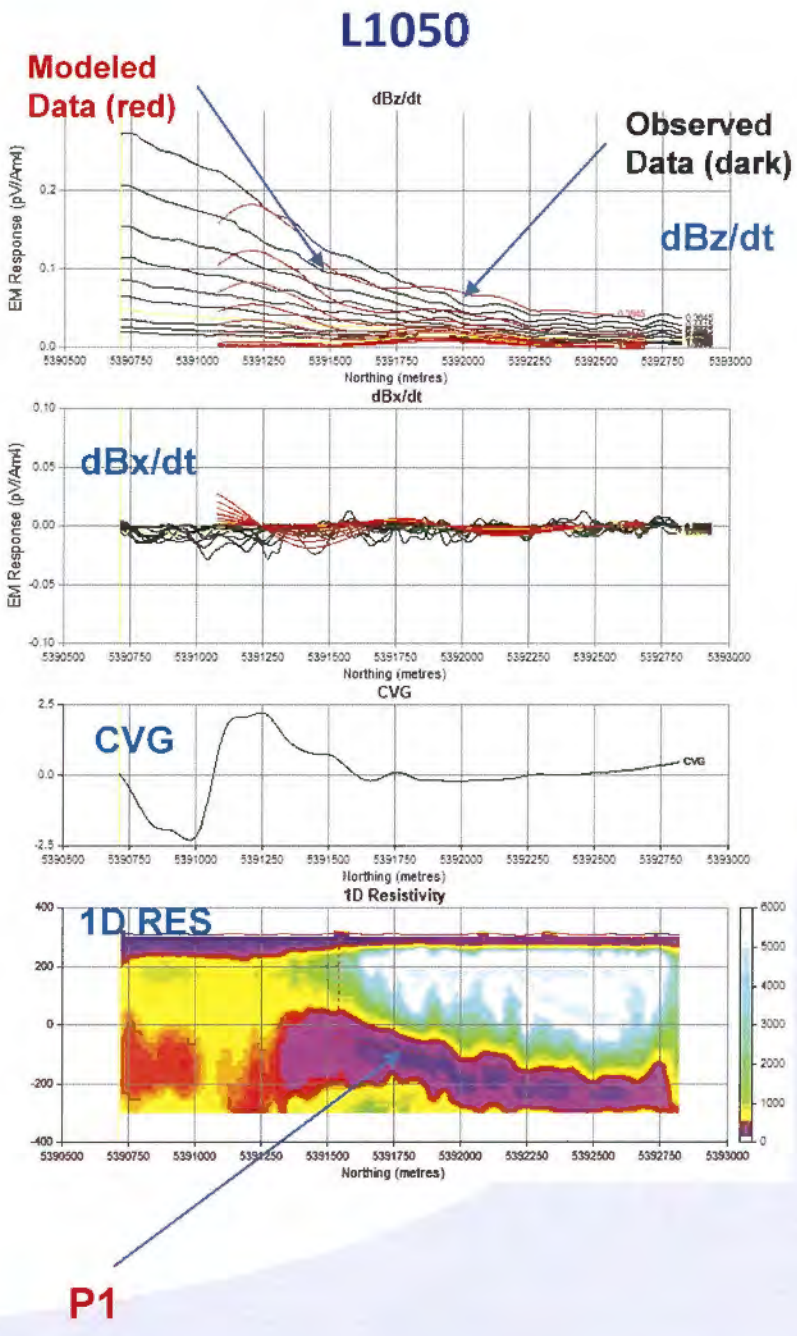
Area 2 - L1050 (L1030 & L1070 added)



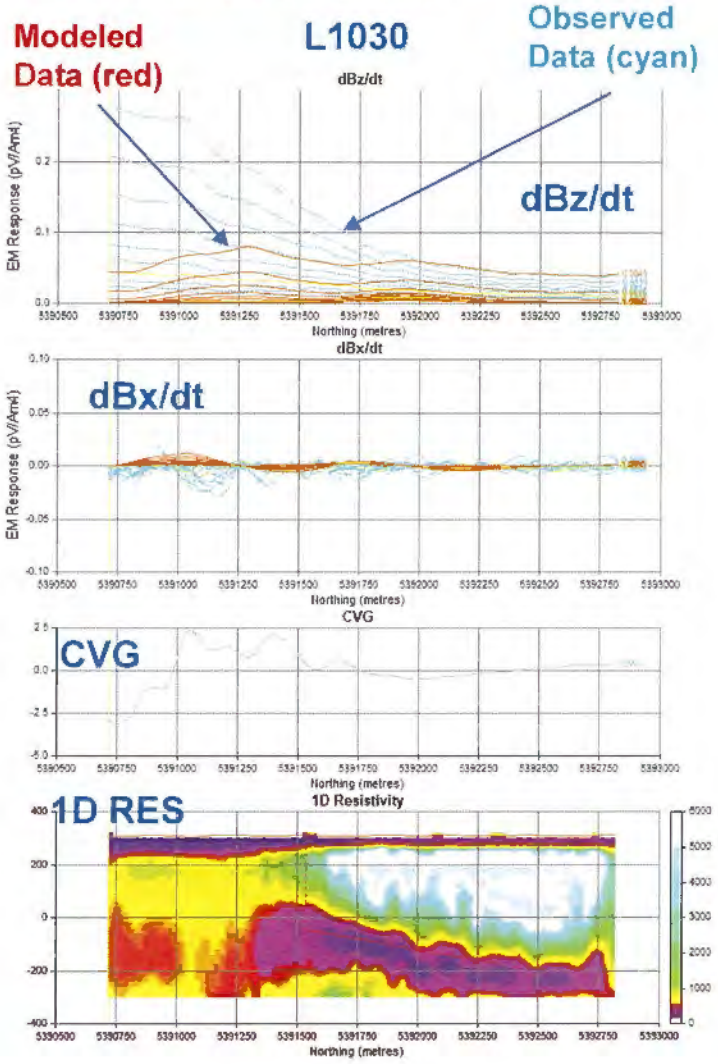
1D resistivity -300 m depth slice

GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

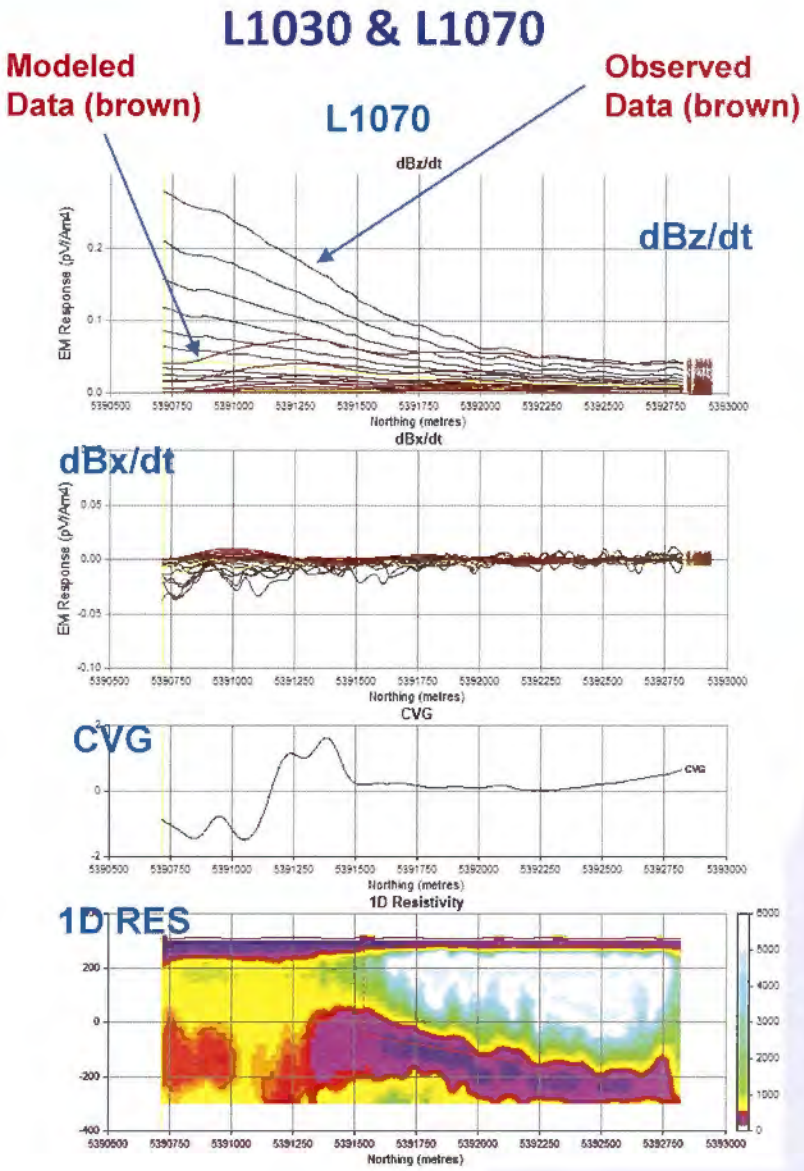




GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS



L1050 1D Res Section



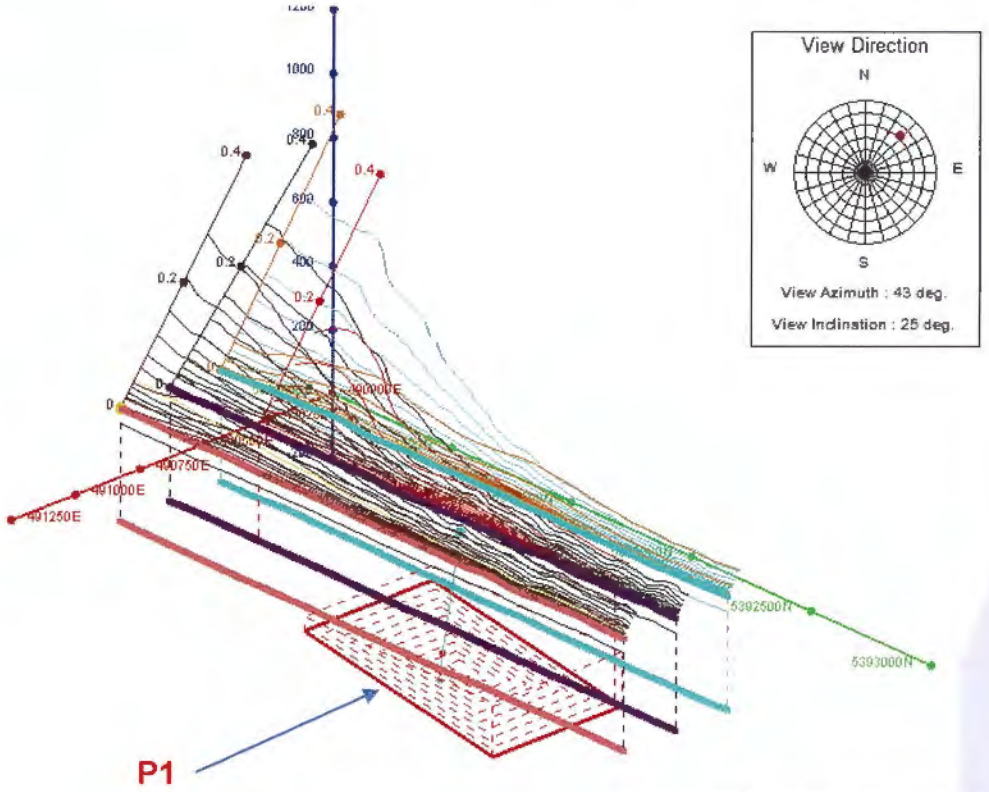
L1050 1D Res Section

GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

L1050 (L1030 & L1070 added)

Target Plate Parameters			
Parameter	P1	P2	**Units**
X	490830	490829	Meters
Y	5391542	5390784	Meters
Z	-45	141	Meters
Depth	-356.6	-164.1	Meters
Dip	9.0	8.0	Degrees
Dip Direction	0.09	0.09	Degrees
Strike Direction	90.09	90.09	Degrees
Rotation	0	0	Degrees
Length	500	500	Meters
Depth Extent	800	1000	Meters
Conductance	10.0	3.0	Siemens

x,y,z— coordinates of top-center point of the plate
depth—depth from surface to top-center of the plate



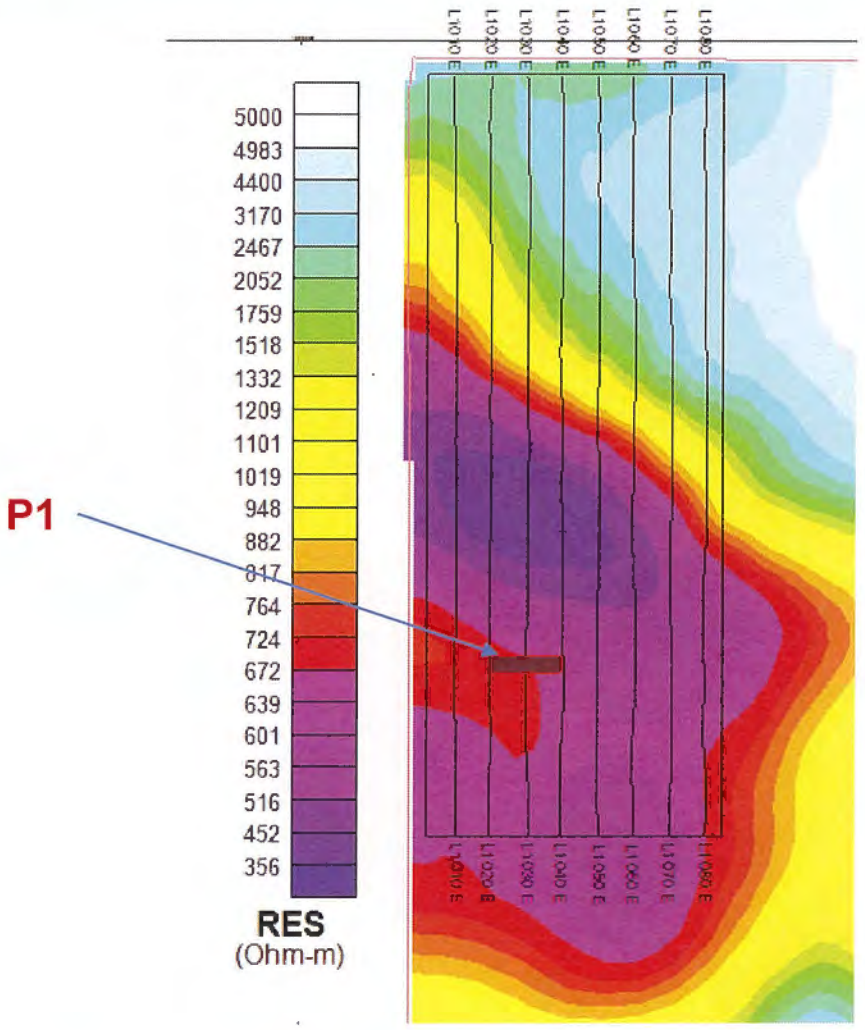
Horizontal Plate P2 not shown

3D View of the plates

Planned drill-hole parameters appropriate plate P1							
Hole-ID	X (m)	Y (m)	Z (m)	Dip (deg)	Azimuth (deg)	Total Length (m)	Length To Plate (m)
L1050_DH	490823	5391915	308	80	180	500	407.1

GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

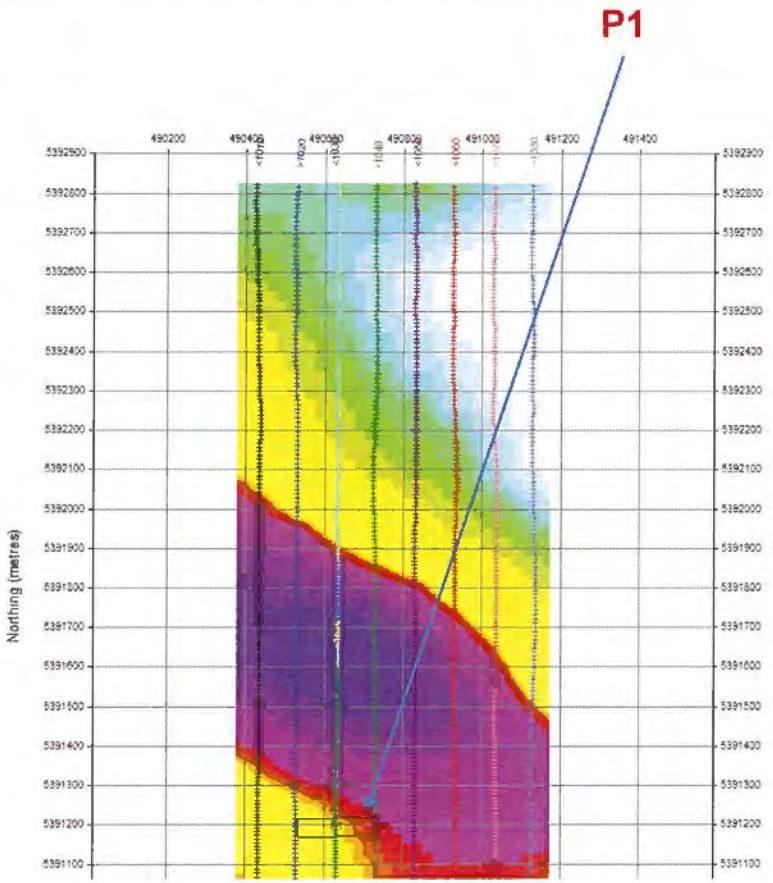
Area 2 - L1030

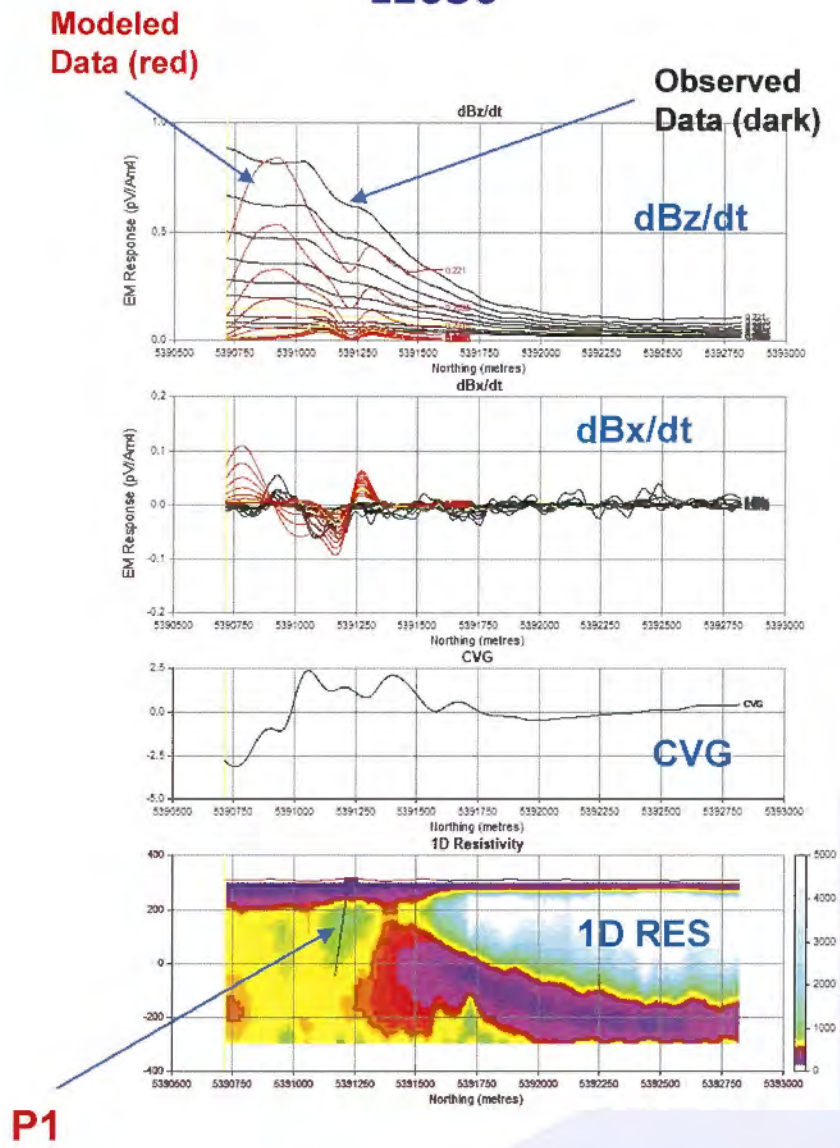


1D resistivity -300 m depth slice

GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

L1030

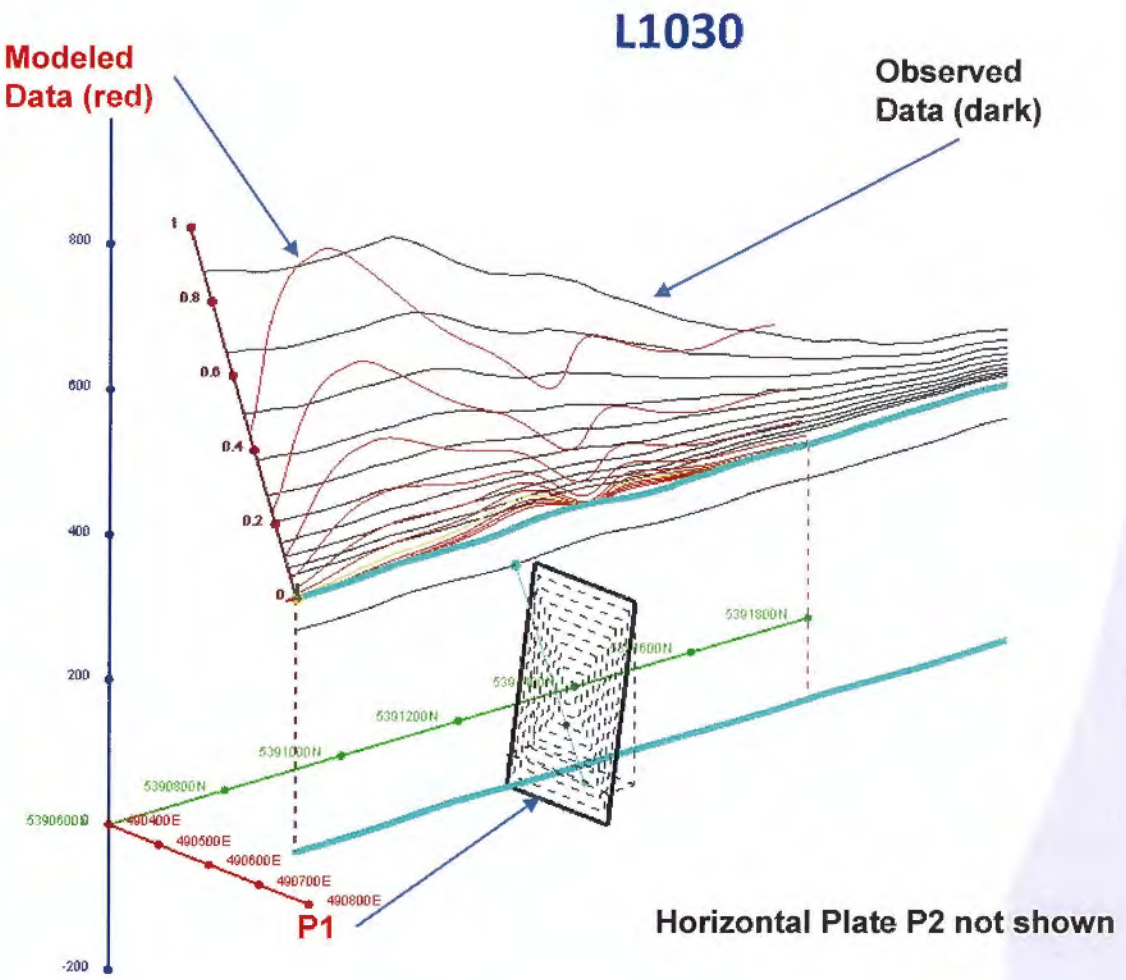




GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

Target Plate Parameters			
Parameter	P1	P2	**Units**
X	490633	490635	Meters
Y	5391217	5390673	Meters
Z	252	229	Meters
Depth	-58.7	-76.5	Meters
Dip	81.0	7.0	Degrees
Dip Direction	180.0	0.0	Degrees
Strike Direction	270.0	90.0	Degrees
Rotation	0	0	Degrees
Length	200	200	Meters
Depth Extent	300	500	Meters
Conductance	20.0	3.0	Siemens

x,y,z-- coordinates of top-center point of the plate
depth—depth from surface to top-center of the plate

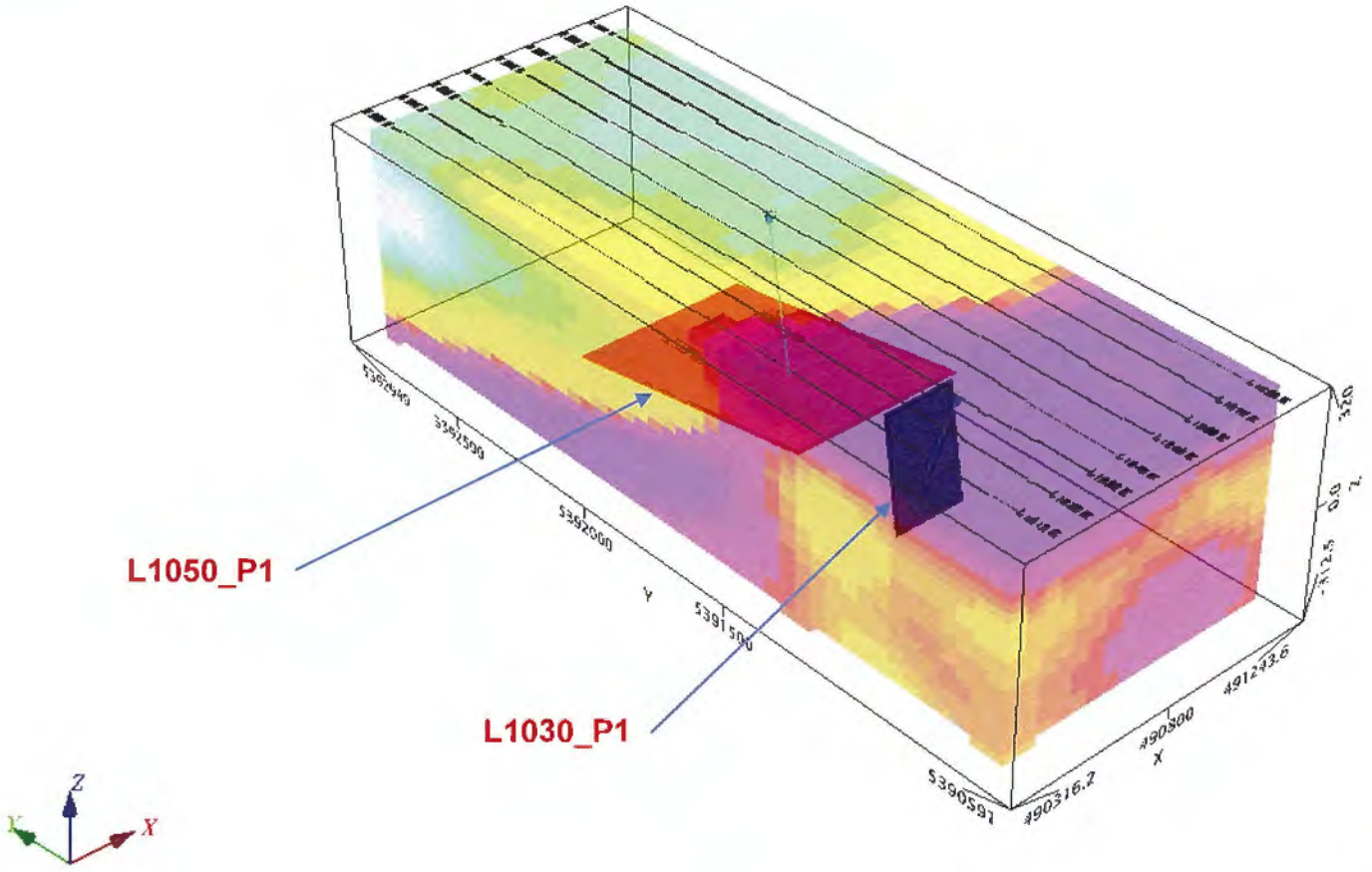


3D View of the plates

Planned drill-hole parameters appropriate plate P1							
Hole-ID	X (m)	Y (m)	Z (m)	Dip (deg)	Azimuth (deg)	Total Length (m)	Length To Plate (m)
L1030_DH	490631	5391099	303	70	0	350	256.8

GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

Area 2 – MX Plate2 and 1D Resistivity Voxel



3D View of the plate and drillhole

GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

Comments

1. The Maxwell (MX) modeling has been carried out for the VTEM anomalies in the two areas of interest in the Gowan Project located in Timmins, ON for Pelangio Exploration Inc. The modeling is based on the interpreter's understanding of the VTEM data without geological constraints. If additional geological information for the anomalies becomes available, the models may be revised.

2. Due to the conductive overburden and near surface horizontal conductors, the dBz/dt responses of the sub-vertical conductors in Area 1 are subtle but can be observed in L1220. The dBx/dt data played a critical role in determining the location and dip of the sub-vertical conductors.

3. The conductance of steeply dipping thin conductors, which is the product of conductivity and thickness, is well determined by Maxwell modeling.

4. The modelled conductors in Area 1 are steeply dipping, probably corresponding to mineralized fold limbs. The modelled conductor in Area 2 is sub-horizontal and deep.

5. For sub-horizontal conductors, the most reliable plate parameter is the depth to the top of the conductor. The thickness of the sub-horizontal conductor, and therefore the conductivity, cannot be well-resolved by Maxwell modeling.

6. If test drilling of the anomalies are to be carried out, it is recommended that the relatively high conductance sub-vertical targets in Area 1 should be drilled first.

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Karl.kwan@geotechairborne.com

Gowan 2022 Work Summary of Drilling Program Costs & Additional Geophyisics Interpretation Costs (All Costs Exclude HST Charges)

Contractor and Work Summary Receipts for Gowan Drill Program

Contractors	Reference	$ Amount	Subtotals	Comments
Helicopter				
Expedition Helicopeters	Inv 107189	**3573.15**	**3573.15**	**Reconnaissance of road access for drill.**
Drilling Related Costs				
NPLH Drilling	Inv 6495	229153.78		**Actual Drilling & Road Access Cost**
Exsics Exploration	Inv 2031	6425		**Flagging or route for dozer and field assistance**
Bigelow Concrete	BC00863	14482.5		**Nodwell Work for packing wet drill pad locations**
Bigelow Concrete	BC00863	675		**Clearing Drill Road of snow for crew access**
		250736.28	**250736.28**	
Map and Section Work				
Superior Geospatial	inv 2021 -90	814		
Superior Geospatial	inv 2021-109	185		
Superior Geospatial	inv 2021-113	148		
Superior Geospatial	inv 2022-001	770		
Superior Geospatial	inv 2022-002	269.5		
Superior Geospatial	inv 2022-010	500.5		
Superior Geospatial	inv 2022-021	1309		**Cost of map and section work to be incurred Mar.1-15/22**
Superior Geospatial	inv 2022-065	731.5		**final map and section work for final assesment report**
		4727.5		
Geology				
Filo Exploration	inv921717	800		**re geological consulting re review of geophysics data**
Filo Exploration	inv921732	1750		**Drill program preperation work with drillers and geophysical consultants**
Filo Exploration	inv921735	3375		**Drill program preperation work with drillers and geophysical consultants**
Filo Exploration	inv921737	5625		**Drill program supervision and core logging**
Filo Exploration	inv921738	4375		**Drill program supervision and core logging**
Filo Exploration	inv 921740	5250		**Final report cost to be incurred march 1 to march 15/22**
Filo Exploration	inv921744	1500		**geo consulting re assay compilation and petrography sample selection**
Filo Exploration	inv921946	3250		**final revised report for assessment and jv purposes**
First Geolas	px202201	1752		**Costs associated with slide prep for petrography and whole rock**
First Geolas	px202202	3700		
		31377	**31377**	
Equipment and Supplies				
Supplies				
Category	Reference			
Core shack supply	Filo ex inv 921736	390.01		**sample bags, markers etc for core sampling**
Core shack supply	Filo ex inv 921736	100.9		**twist ties for bags, other sampling supplies**
coresplitter transport	Filoex inv 921739	185.37		**transport return of core splitter to noranda**
Assay standards	Filo ex inv 921736	380.56		**standards for assay lab checks**
Core shack supply	Filo ex inv 921739	44.96		**material for core shack**
		1101.8	**1101.8**	
Rentals				
Truck rental for core	M. Lilko exp report	3907.96		**see attached receipts**
Core splitter rental jan	Filo ex inv 921736	575		**splitter to split core for assay**
Core splitter rental feb	Filo ex inv 921739	575		**splitter to split core for assay**
Biglow loader re snow	BC00871	600		**snow removal at core shack for access**
Biglow loader re snow	BC00876	300		**snow removal at core shack for access**
Core shack rental	ingamar inv 2022-01	3000		**logging facilities**
		8957.96	**8957.96**	
Transportation				
Category	Reference			
Filoex jeep km charge	Filo ex inv 921732	88		**transport to and from logging facilities**
Filoex jeep km charge	Filo ex inv 921736	484		**transport to and from logging facilities**
Filoex jeep km charge	Filo ex inv 921737	807.4		**transport to and from logging facilities**
Filoex jeep km charge	Filo ex inv 921738	561		**transport to and from logging facilities**
fuel for truck rental	M.lilko exp acct	491.23		**fuel for truck for core pick up and job access**
Filoe jeep km charge	Filo ex inv 921740	55		**transport to and from logging facilities**
Filoe jeep km charge	Filo ex inv 921741	55		**transport to and from logging facilities**
Filoex jeep km charge	Filo ex inv 921724	55		**transport to and from logging facilities**
Fedex shipment of core	Filo ex inv 921744	215.32		**petrographic sample shipping**
		2811.95	**2811.95**	
Pelangio Employee Labour Cost				
Matt Lilko	No invoice payroll	**5550**	**5550**	**field labour & core splitter work**
(Note Payroll data to be suplied by				
company CFO on request)				
Assay Costs				
Category	Reference			
Actlabs	see attached section	17698.75		**Actlabs assay costs**
	with invoices			
		17698.75	**17698.75**	
			321806.89	

Contractor and Work Summary Receipts for Geophysical Program (IP) and Additional VTEM Interpretation Work

Geophysical Related Costs (Contractors)				
Category	Reference			
Stratagex	inv21007	2175		**reinterpretation of airborne VTEM data**
Geotech	inv 99861	1350		**Maxwell plate modelling of VTEM data**
Geotech	inv 996852	1800		**inversion of IP data**
		5325	**5325**	**Total Geophysical Expenditures**

Total Cost of Gowan Program (Drilling and Geophysic 327131.84