

**2013 Assessment Report
for the
OGI Claim Property**

Soil Geochemistry

YMIP # 13-067

(180 Claims)

OGI 1 – OGI 2 (YD145301-YD145302)
OGI 3 – OGI 164 (YD145103-YD145264)
OGI 169 – OGI 184 (YD145269-YD145284)

**NTS Map Sheet: 116B01
Latitude: 64° 8' 36"N
Longitude: 138° 23' 50"W
Dawson Mining District**

Prepared for:

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October 24th, 2013

Period of work: July 22th-30th, 2013

Table of Contents

Summary	4
Introduction.....	5
Location and Access	6
Claim Information.....	6
Physiography and Climate.	10
Property History.....	11
Regional Geology	13
Introduction.....	13
Stratigraphy.....	13
Intrusive Rocks	14
Structure.....	15
Local Geology.....	15
Deposit Types and Mineralization Potential.....	16
Regional Geochemical Survey.....	16
2013 Exploration Program.....	20
North Gold Zone	23
Central Ridgeway Grid Zone	28
Southeast Grid Zone	32
Geochemical Survey and Analytical Method	37
Conclusions and Recommendations	38
Statement of Expenses	40
Statement of Qualifications.....	41
References.....	42

Figures

Figure 1 OGI Property Location	7
Figure 2 OGI Claims.....	8
Figure 3 OGI claims with exploration work 2013	9
Figure 4 OGI Camp and surrounding topography	10
Figure 5 Regional Geology	17
Figure 6 Local Geology Map	18
Figure 7 Regional Geochemical Survey (Gold PPB results)	19
Figure 8 2013 Exploration Areas	21
Figure 9 2012 Geochemical Survey Grid and Geological Structural Interpretation	22
Figure 10 North Gold Zone Historic Gold Values and 2013 Soil Sample Gold Results..	23
Figure 11 North Gold Zone Soil Sample IDs and Location	24
Figure 12 North Gold Zone Rock Sample IDs and Outcrop Locations.....	25
Figure 13 Mafic Dyke at Rock Sample Q007867 location North Gold Zone Area	26
Figure 14 2013 Rock Sample Descriptions; North Gold Zone and Southeast Grid Zone Area.....	27
Figure 15 North Gold Zone Rock Sample Locations for Petrographic Study	28
Figure 16 Trench at 2012 Soil Sample Site # M638313 (3700 ppb Au)	29
Figure 17 New Sample # Q007822 Taken at old Sample Site # M648313.....	29
Figure 18 Sample ID and Location Central Ridgeway Zone.....	30
Figure 19 Central Ridgeway 2013 Au Results and Trench Location	31
Figure 20 Cherty Argillite Outcrop at Rock Sample # Q007838 Location	32
Figure 21 Sample ID and Location Southeast Grid Zone.....	33
Figure 22 Southeast Zone Rock Sample IDs and Locations.....	34
Figure 23 Southeast Grid Zone Thematic Map for Silver PPM 2013	35
Figure 24 Southeast Grid Zone Thematic Map for Zinc.....	35
Figure 25 Southeast Grid Zone Thematic Map for Mo	36
Figure 26 Southeast Grid Zone Thematic Map for Cu	36

Appendices

Appendix I OGI Claim List

Appendix II Sample No. and Reference Location

Appendix III Metal Plots

Appendix IV Assay Certificates

Appendix V Petrographic Report

Summary

This technical report documents the qualifying mineral exploration work conducted during the 2013 exploration program, and has been provided to satisfy the reporting requirements for Yukon assessment reports and the Target Evaluation section of the Yukon Mining Incentive Program (YMIP). Partial funding for the 2013 exploration work conducted on the OGI property was provided through YMIP.

The OGI Property is located in the Dawson Mining District (NTS map sheet 116B01) with the center of the claims at longitude 64° 8' 36"N and latitude 138° 23' 50"W. The Property has the potential to host an intrusion related gold deposit similar to Golden Predator's Brewery Creek property, located approximately 4 kilometres to the southeast, that hosts a National Instrument Policy 43-101 compliant resource of 719,000 indicated gold ounces in 17,611,000 tonnes at 1.27 g/t Au and 825,000 inferred gold ounces in 21,717,000 tonnes at 1.18 g/t Au (Golden Predator news release, September 19, 2013).

The 2013 exploration program was conducted on the OGI property during the month of July. From July 22th to July 30th, a 2-person crew was mobilized by helicopter to the OGI property, constructed a seasonal camp, and completed a geochemical soil sampling survey as well as limited geological mapping, trenching and prospecting. 100 soil samples and 12 rock samples were collected for geochemical analysis. An additional 4 rock samples were collected from different sites on the property and sent to Vancouver Petrographics Ltd. for analysis.

Soil sampling was conducted using augers and mattocks. Sample intervals were at 25 metre stations and east-west oriented line spacing was 25 metres for follow up internal grid work at the Central Ridgeway Zone area, and 50 metre stations with 150 metre east - west oriented line spacing at the Southeast Grid Zone area. A small amount of trenching was done in the vicinity of the 2012 high grade soil sample site (3700 ppb Au) in the Central Ridgeway Zone area and an additional small soil sampling grid geochemical survey was conducted at the North Gold Zone area of the property at 50 metre station spacing and 250 metre east-west oriented line spacing, concurrent with geological mapping and prospecting.

The 2013 mineral exploration program on the OGI property was designed to follow up on the high grade 2012 geochemical grid soil sample assay result of 3700 ppb Au located approximately 200 metres uphill from the original minfile occurrence (a float quartz monzonite sample that assayed 895 ppb Au) within the Central Ridgeway Zone area, and to fill in and extend the existing 2012 geochemical survey grid in the Southeast Zone area where elevated silver and base metal values were returned in 2012. The 2013 exploration program also focused on getting a better resolution on the 1.0 km x 3.0 km > 10ppb gold corridor that has been defined from the work program conducted in 2012 and where previous exploration by other operators had defined a broad 3 km² 30 ppb gold geochemical stream silt anomaly coincident with a geophysical survey MAG high anomaly interpreted to be a buried intrusion, and also coincident with a low K/Th ratio radiometric geophysical survey anomaly interpreted to be caused by hydrothermal alteration (Van Damme et al.1997).

The 2013 exploration program also included initial follow up on historic anomalous gold in soil values documented in the northern part of the property (Van Damme et al.1997) not previously visited (the North Gold Zone).

Introduction

The OGI Property consists of 180 active quartz mining claims located in the Dawson Mining District (NTS map sheet 116B01) with the center of the claims at Longitude 64° 8' 36"N and Latitude 138° 23' 50"W (Figure 1).

The claims were staked in October, 2011 for Fox Exploration Ltd. to cover a target area where previous exploration by other operators resulted in a broad 3 km² 30 ppb gold geochemical anomaly coincident with a geophysical survey MAG high anomaly interpreted to be a buried intrusion, and also coincident with a low K/Th ratio radiometric geophysical survey anomaly over the same area that is interpreted to be caused by hydrothermal alteration (Van Damme et al.1997). The area also covers a historic MINFILE occurrence consisting of a quartz monzonite float grab sample that assayed 895 ppb Au (MINFILE # 116B165). In 2012, Fox Exploration conducted a YMIP supported exploration program consisting of a soil sampling geochemical survey comprised of 377 soil samples over the target area and limited traversing consisting of geological mapping, prospecting and rock sampling.

The 2013 exploration program was conducted on the OGI property during the month of July. From July 22th to July 30th, a 2-person crew was mobilized by helicopter to the OGI property, constructed a seasonal camp, and completed a geochemical soil sampling survey as well as limited geological mapping, trenching and prospecting. 100 soil samples and 12 rock samples were collected for geochemical analysis. An additional 4 rock samples were collected from different sites on the property and sent to Vancouver Petrographics Ltd. for analysis.

Soil sampling was conducted using augers and mattocks. Sample intervals were at 25 metre stations and east-west oriented line spacing was 25 metres for follow up internal grid work at the Central Ridgeway Zone area, and 50 metre stations with 150 metre east - west oriented line spacing at the Southeast Grid Zone area. A small amount of trenching was done in the vicinity of the 2012 high grade soil sample site (3700 ppb Au) in the Central Ridgeway Zone area and an additional geochemical survey grid was established at the North Gold Zone area of the property where soil samples were taken at 50 metre station spacing and 250 metre east-west oriented line spacing, concurrent with geological mapping and prospecting.

The 2013 mineral exploration program on the OGI property was designed to follow up on the high grade 2012 geochemical grid soil sample assay result of 3700 ppb Au located approximately 200 metres uphill from the original minfile occurrence (a float quartz monzonite sample that assayed 895 ppb Au) within the Central Ridgeway Zone area and to fill in and extend the existing 2012 geochemical survey grid in the Southeast Zone area

where elevated silver and base metal values were returned in 2012. The 2013 exploration program also focused on getting a better resolution on the 1.0 km x 3.0 km > 10ppb gold corridor that has been defined from the work program conducted in 2012 and where previous exploration by other operators had defined a broad 3 km² 30 ppb gold geochemical stream silt anomaly coincident with a geophysical survey MAG high anomaly interpreted to be a buried intrusion, and also coincident with a low K/Th ratio radiometric geophysical survey anomaly interpreted to be caused by hydrothermal alteration (Van Damme et al.1997).

The 2013 exploration program also included initial follow up on historic anomalous gold in soil values documented in the northern part of the property (Van Damme et al.1997) not previously visited (the North Gold Zone).

Samples were submitted to the ALS Minerals laboratory in Whitehorse for gold fire assay as well as a 35 element ICP analysis. Four rock samples were selected for petrographic analysis and submitted to Vancouver Petrographics Ltd. in Vancouver.

The exploration work was partially funded through the Yukon Mining Incentive Program.

Location and Access

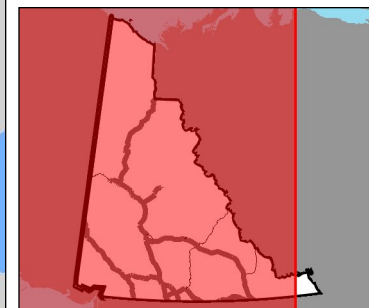
The OGI Property is located in the Dawson Mining District in the Yukon, approximately 51 kilometres east of Dawson City and 4 kilometres northwest of Golden Predator's Brewery Creek Mine. The property is located on NTS map sheet 116B01 and centered at latitude 64° 8' 36"N and longitude 138° 23' 50"W.

Access to within 8 kilometres of the OGI property is by paved road from Whitehorse to the Dempster Highway and then by good all season gravel road up the Dempster highway for 25 kilometres. A helicopter is then required for the remaining 8 kilometres east to the property (Figure 1).

Claim Information

The OGI Property is located in the Dawson Mining District and is comprised of 180 contiguous quartz claims acquired in accordance with the Yukon Quartz Mining Act. The claims are registered in the name of Fox Exploration Ltd. and were staked for Fox in October, 2011. A claim location map is shown in Figure 2. Appendix I lists the individual OGI claims, tag numbers and expiry dates. The 2013 exploration program was conducted on OGI claims 92, 125, 130, 159 and 160 (Figure 3).

OGI Location Map



Legend

Yukon Border - Surveyed
Places (Primary)

- City
- Town
- Municipality
- Village
- Community

Regional Overview

- Ocean
- Yukon
- Other



Fox Exploration
Ltd.
OGI Property Location



Scale: 1:11,903,803

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Figure 1 OGI Property Location

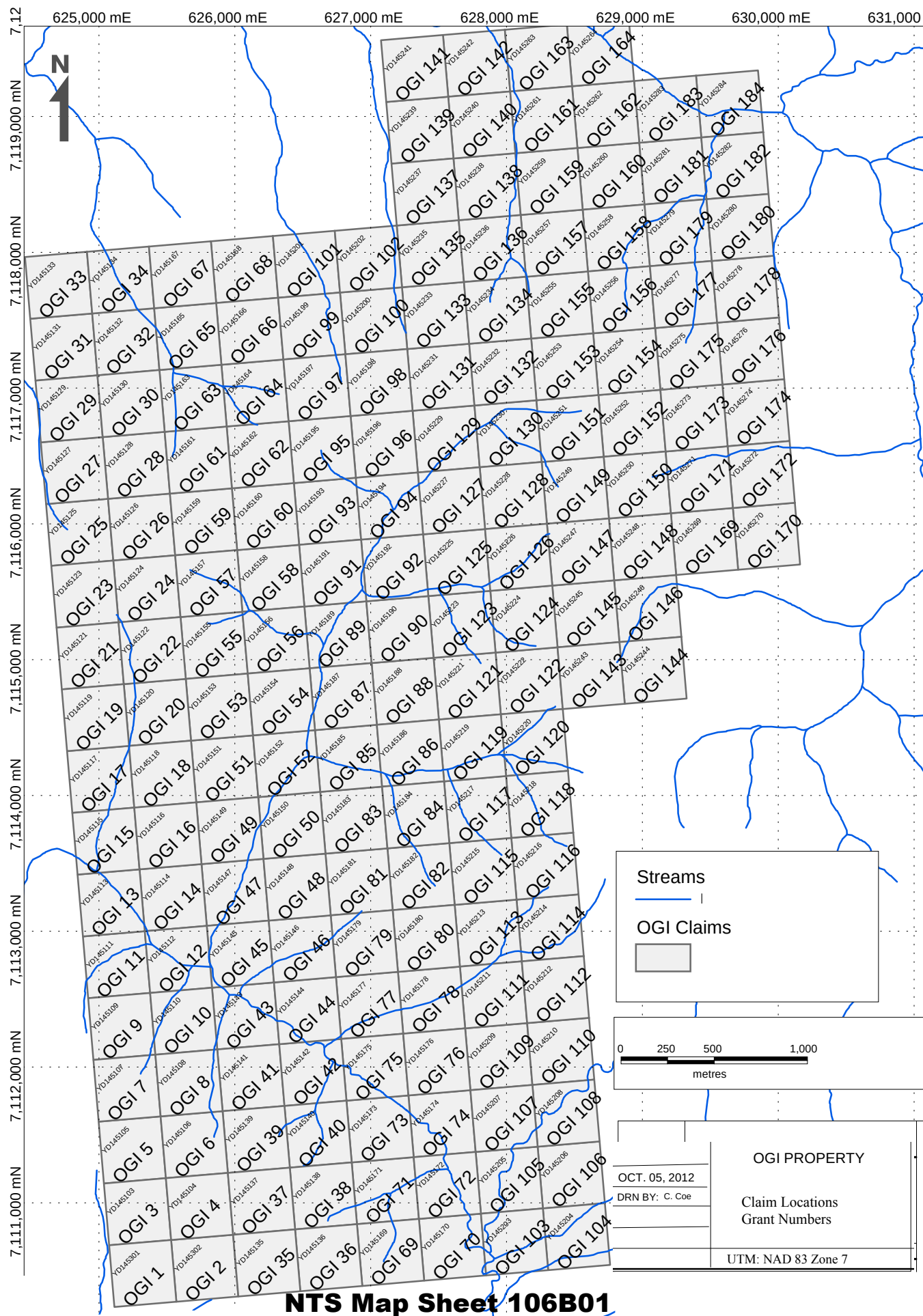


Figure 2 OGI Claims

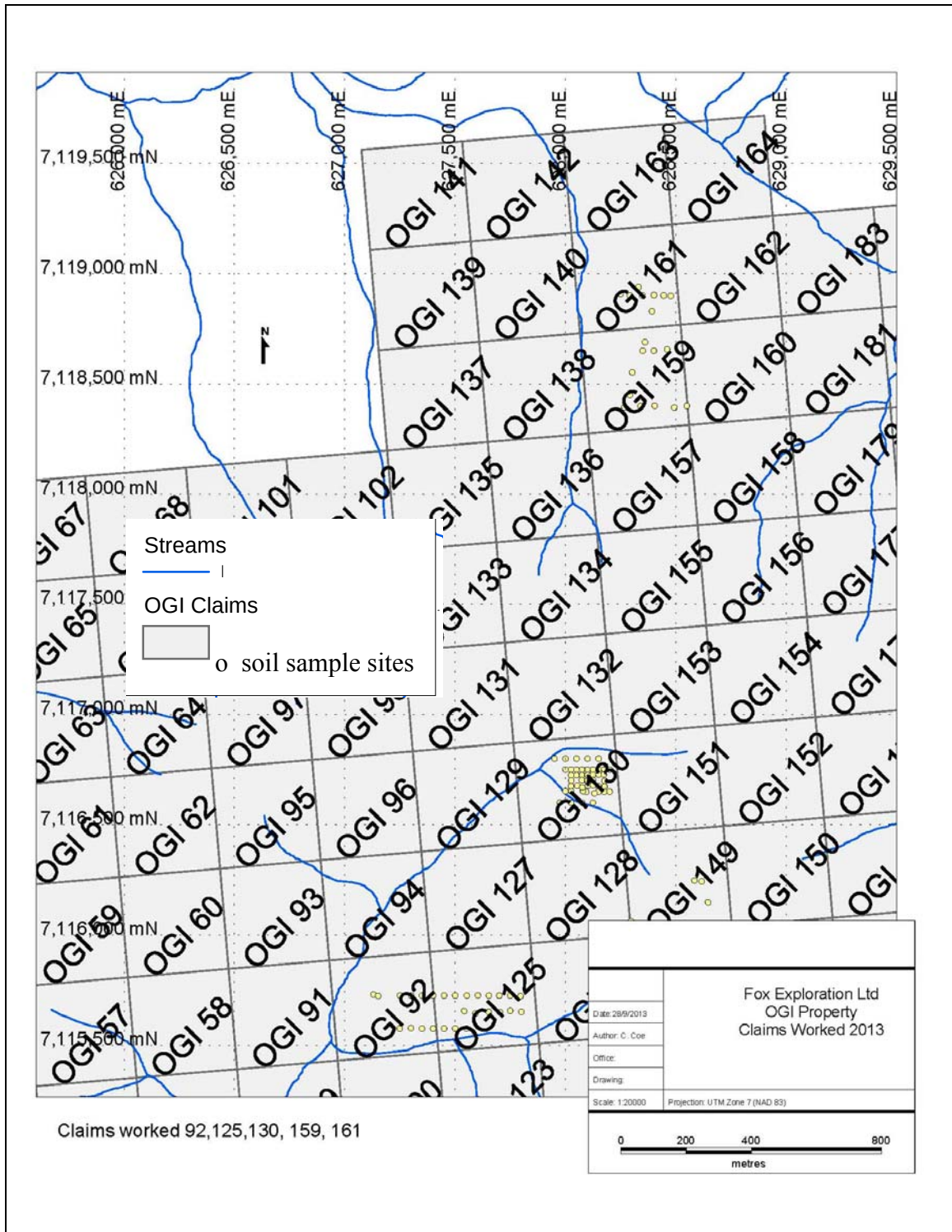


Figure 3 OGI claims with exploration work 2013

Physiography and Climate.

The OGI Property is located in the Ogilvie Mountains. The property is characterized by steep to moderate relief (Figure 4) and is generally less than 1200 metres in elevation. The property is covered by black spruce, pine, poplar, birch and alder trees with abundant willows and buck brush at lower elevations. Outcrop on the property is sparse and exists primarily along ridges and steeper areas of relief and in the creeks.

The climate of the property area is generally dry during the summer months with most precipitation occurring in July and August. Temperatures range from -45°C in the winter months to 30°C in the summer. Snow accumulation begins generally in late September and is mostly melted by mid May. The regional area was subject to weak glaciation and the surrounding area is known to have accumulations of loess up to 20 metres thick. Loess can prevent penetration to the proper sampling horizon and mask geochemical responses (Van Damme et al.1997).



Figure 4: OGI Camp and surrounding topography

Property History

The OGI Property area was originally staked as Mik 1-26 and 33-40 claims in December, 1989 by Tombstone Explorations Company Ltd., who carried out limited prospecting and geochemical silt sampling (8 samples) in 1990. Placer Dome Inc. carried out a single day of geochemical sampling (40 silt, 2 soil and 2 rock samples) in August, 1991 (MINFILE #116B 165).

Beginning in October, 1996, Nicholson and Associates under contract to Core Explorations carried out regional reconnaissance of the area and restaked the area with a large block of Oki claims (approximately 450 claims). The Oki claims are included in an area within the claim block identified as the Ridgeway prospect. Working outward from the Oki claims, Nicholson and Associates subsequently staked the Karl, Smoki, Doki, Obi, Loki, Lokey, Ob, Bulsi, Wow and Yes claims. The Oki-Doki project was optioned to International Kodiak Resources Ltd. in December, 1996 (MINFILE #116B 165). In the summer and fall of 1997 International Kodiak carried out a regional program of geochemical stream sediment sampling of secondary drainages, soil sampling of drainage divides, prospecting, geological mapping and airborne geophysical surveying (in conjunction with the Geological Survey of Canada). Concurrently with this work the company staked numerous fill-in claims around the earlier claims and expanded the project boundaries eastward and completed additional reconnaissance geochemical silt sampling. The OGI claims cover an area within the claim block historically identified as the Ridgeway prospect area.

In October, 2011, Fox Exploration Ltd. staked the OGI claims to cover the prospective area where the previous operators had identified a 3 km² 30 ppb gold silt geochemical anomaly coincident with a geophysical survey MAG high anomaly interpreted to be a buried intrusion, and also coincident with a low K/Th ratio anomaly from a radiometric geophysical survey conducted over the same area and interpreted to be caused by hydrothermal alteration (Van Damme et al.1997). Grab sample #3AR0235A taken by Kodiak from float in the center of the target area (the Ridgeway) returned 895 ppb Au, 1065 ppm As, 10 ppm Sb and 3650 ppm Hg (MINFILE #116B 165). A petrographic analysis report from a thin section prepared from the sample identified the rock as a very silicified altered feldspar porphyry (Van Damme et al.1997).

In 2012, Fox Exploration Ltd. conducted a soil sampling geochemical survey consisting of 13 east-west oriented lines with 50 metre station spacing and 150 metre line spacing over the Ridgeway target area. The exploration work was partially funded through the 2012 Yukon Mining Incentive Program.

Limited prospecting and geological mapping was also conducted. The purpose of the survey was to cover the target area. A total of 377 soil samples and 9 rock samples were submitted to the ALS Minerals laboratory in Whitehorse for gold fire assay as well as a 35 element ICP analysis.

The highest gold value returned was 3,700 ppb Au in soil sample #M648313, located about 200 metres up slope from MINFILE occurrence quartz monzonite float grab sample #3AR0235A that assayed 895 ppb Au. A northeast trending gold corridor that includes these samples and measures approximately 1.0 kilometre wide by 3.0 kilometre long within the survey grid area hosts numerous >10 ppb Au and >20ppb Au anomalies as well. There is minimal outcrop within this area of the property and no quartz monzonite outcrop has been identified to date. However, due to the proximity of the MAG high anomaly interpreted to be a buried intrusion (Van Damme et al.1997) within the target area and the historic MINFILE occurrence consisting of a grab sample (#3AR0235A) of quartz monzonite float rock that assayed 895 ppb Au (MINFILE 116B 165) and the high grade soil sample assaying 3700 ppb Au (Sample # 648313) 200 metres upslope, the possibility exists that the gold mineralization in this area is related to quartz monzonite dyke swarms and/or quartz veins/veinlets or skarns associated with and peripheral to the main intrusive. Other results from the geochemical survey indicate that multi-element mineralization may be structurally controlled or associated with a dominant inferred northeast fault that transects the property (Figure 9), with elevated background values of gold, copper, zinc, nickel, molybdenum and silver aligned within the eastern flank of the fault zone (C. Coe, 2012).

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The 2013 mineral exploration program on the OGI property was designed to follow up on the high grade 2012 geochemical grid soil sample assay result of 3700 ppb Au (sample # M648313) located approximately 200 metres uphill from the original minfile occurrence (MINFILE # 116B165), and to fill in and extend the existing 2012 geochemical survey grid in the Southeast Zone area where elevated silver and base metal values were returned in 2012. The 2013 exploration geochemical soil sample survey grid in filled the existing 2012 grid to on getting a better resolution on the 1.0 km x 3.0 km > 10ppb gold corridor that had been defined from the work program conducted in 2012 and where

previous exploration by other operators had defined a broad 3 km² 30 ppb gold geochemical stream silt anomaly coincident with a geophysical survey MAG high anomaly interpreted to be a buried intrusion, and also coincident with a low K/Th ratio radiometric geophysical survey anomaly interpreted to be caused by hydrothermal alteration (Van Damme et al.1997).

The 2013 exploration program also included initial follow up on historic anomalous gold in soil values documented in the northern part of the property (Van Damme et al.1997) but not previously visited (the North Gold Zone).

Samples were submitted to the ALS Minerals laboratory in Whitehorse for gold fire assay as well as a 35 element ICP analysis. Four rock samples were selected for petrographic analysis and submitted to Vancouver Petrographics Ltd. in Vancouver.

The exploration work was partially funded through the Yukon Mining Incentive Program.

Regional Geology

The regional geology of the area is taken from the January, 1998 assessment report #093768; *‘Geological, Geophysical, and Geochemical Assessment Report on the OKI-DOKI Project Claims, 1997. V.P.Van Damme, B.T. Malahoff and C.A. Kauss.’*

Introduction

The OGI project area is central to the Dawson-Mayo area. This area lies within the Selwyn Basin. The Selwyn Basin forms part of ancestral North America. This region is characterized by deep water offshore sedimentary strata that are transitional eastward and northward into shelf carbonate and clastic sedimentary rocks of the Mackenzie Platform. To the southwest the Selwyn Basin is separated from volcanic stratigraphy of the exotic Yukon Tanana Terrane by the Tintina Fault Zone (Green 1972; Poulson 1997).

Stratigraphy

Lithologies within the Selwyn Basin are late Proterozoic to Mississippian in age. Stratigraphy of the Dawson-Mayo area is comprised, in order from oldest to youngest, of Hyland Group, Gull Lake Formation, Rabbit Kettle Formation, Road River Group, Earn Group and Keno Hill quartzite lithologies (Murphy et al. 1997) (Figure 5).

Hyland Group

Proterozoic to lower Cambrian in age gritty metaclastic rocks of the Hyland Group can be divided into the Yuseyu and Narchilla Formations. The Yuseyu Formation is a succession of variably deformed fine to coarse grained rocks. Green gray phyllite is most common followed by metasandstone and less common conglomerate and calcareous rock. Rocks of the Narchilla Formation differ in that they are interbedded with variegated phyllite. A member of sandy white, gray and tan weathering occurs in the

middle of the formation. Both formations are considered to be turbidite successions.

Gull Lake Formation

Overlying and in discontinuity with the Hyland Group, the Cambrian Gull Lake Formation consists of four members; a basal mafic volcanic and volcanoclastic member, a quartzite and phyllite member, a phyllite member and a calcareous clastic member suggesting basinal sedimentation characterized by localized rifting progressing into marginal platformal outgrowth.

Rabbit Kettle Formation

Unconformably overlying older lithologies, the Cambro-Ordovician Rabbit Kettle Formation forms a prominent laterally continuous white weathering carbonate marker horizon. The limestone is primarily a platy thin to medium marble rock with lesser dolomitic phyllite deposited in a transitional setting.

Road River Group

Overlying the Rabbit Kettle Formation is the Silurian-Ordovician Road River Group. This group is further subdivided into the Duo Lake and Steel Formations. The Duo Lake Formation comprises gray to black to brown, brown weathering, phyllitic shale, cherty shale, chert and rare quartz augen phyllite. The Steel Formation consists of limy mudstone, phyllitic mudstone and siltstone with lesser fine grained calcareous quartz sandstone and thin sandy limestone. This rock is generally massive with distinctively orange weathering. Deposition of both formations was in a deep basinal environment.

Earn Group

The Devonian-Mississippian Earn group unconformably succeeds the Road River Group and comprises mostly dark gray to black shale with subordinate and variable amounts of chert, siltstone, sandstone, limestone, bedded barite, chlorite muscovite phyllite and chert pebble conglomerate. Deposition was likely deep marine basin in nature.

Keno Hill Quartzite

Overlying the Earn Group are massive to well foliated and lineated quartzite units of the Mississippian aged Keno Hill Quartzite.

Younger Rocks

All of the above formations are locally unconformably overlain by undifferentiated Upper Paleozoic to Triassic rocks and Jurassic clastic rocks in the north and northeast limits of the Dawson-Mayo area.

Intrusive Rocks

Stratigraphy of the area has been interrupted by volumetrically minor mafic sills which intruded Hyland group rocks in the Cambrian and Earn and Keno Hill group rocks during the Triassic. During the Cretaceous widespread locally large intrusive bodies of the felsic to intermediate Tombstone and McQueston Suites were emplaced (Murphy 1997).

Tombstone Suite

The Tombstone intrusions consist of two compositional and textural types. Quartz poor to quartz absent massive coarse grained hornblende-biotite syenite, quartz syenite, quartz monzonite, and granite defines one group. A second group is defined by quartz bearing, weakly porphyritic medium to coarse grained granite and granodiorite. The intrusions are variably magnetic with aeromagnetic signatures extending into hornfelsed contact aureoles. Tombstone intrusions occur at all stratigraphic levels in the area defining a southwest trending topographically prominent belt and were emplaced between 90-94 Ma.

McQueston Suite

McQueston intrusions occur in the southern limits of the area defining an east-northeast trending belt and are confined to the Hyland group. These intrusions comprise medium to coarse grained potassium feldspar megacrystic biotite-muscovite granite and quartz monzonite. The McQueston intrusions were emplaced between 64-67 Ma.

Structure

Rocks of the Selwyn Basin occur in three tectonic sheets. These are separated by the Dawson, Tombstone and Robert Service low angle thrust faults. The rocks in each sheet are folded into upright to locally inclined, moderate to tight folds. The age of folding is constrained between the Jurassic age of the youngest strata present and the late Cretaceous age of the post deformation granitoid intrusion. This deformation is attributed to north-south shortening associated with terrane accretion.

Northeast trending folds and associated thrusts are associated with the Dawson and Tombstone sheets whereas west-northwest and east-southeast folds are most common in the Robert Service sheet. This regional pattern is disrupted in the south by the east-northeast trending McQueston anticline.

The youngest deformation is attributed to Eocene and younger dextral strike slip motion on the Tintina Fault (Poulson 1997).

Local Geology

The OGI claims cover a 500 gamma magnetic anomaly in an area of Ordovician to Lower Devonian Road River formation comprised of chert, siltstone and argillite (Figure 6). The anomaly is inferred to represent a buried Cretaceous intrusion. A silt sample taken by Tombstone Exploration near the southeast edge of the magnetic anomaly was weakly anomalous in gold, copper, zinc and mercury. Sampling by International Kodiak revealed a Au, Sb and Hg geochemical silt anomaly associated with this occurrence that defines a source area greater than 3 square kilometres and is coincident with two radiometric anomalies. Grab sampling returned two samples with Au >100 ppb, with the best sample returning 895 ppb Au, 1 065 ppm As, 10 ppm Sb and 3650 ppm Hg (MINFILE 116B 165) (Figure 6).

Deposit types and mineralization potential

The OGI claims lie within the Tombstone Gold Belt where Fort Knox style mineralization is known to be associated with Tombstone Suite intrusions. Intrusion related gold mineralization is also evident at Clear Creek, Red Mountain and Dublin Gulch. Mineralization may also be structurally controlled and associated with northeast trending faults as evident at Brewery Creek and Mike Lake.

Regional Geochemical Survey

The regional government geochemical stream silt sampling survey shows anomalous gold values within the area of the OGI claims with a 30 ppb Au sample taken in the southern portion of the claim block and a 20 ppb Au sample assay taken approximately 600 metres east of the property's eastern boundary (Figure 7). Anomalous Hg, Sb and As is also present in the RGS data in this area.

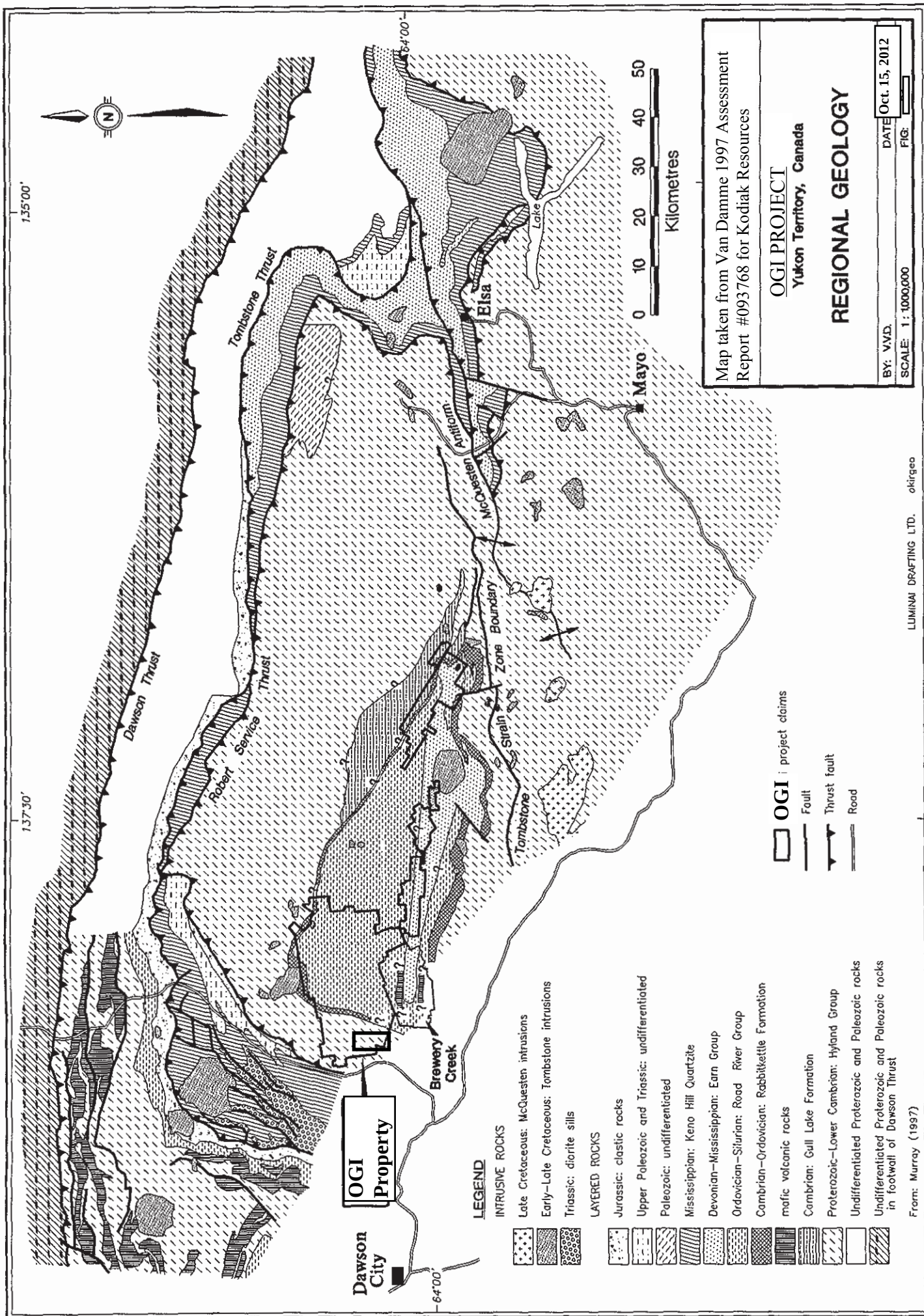
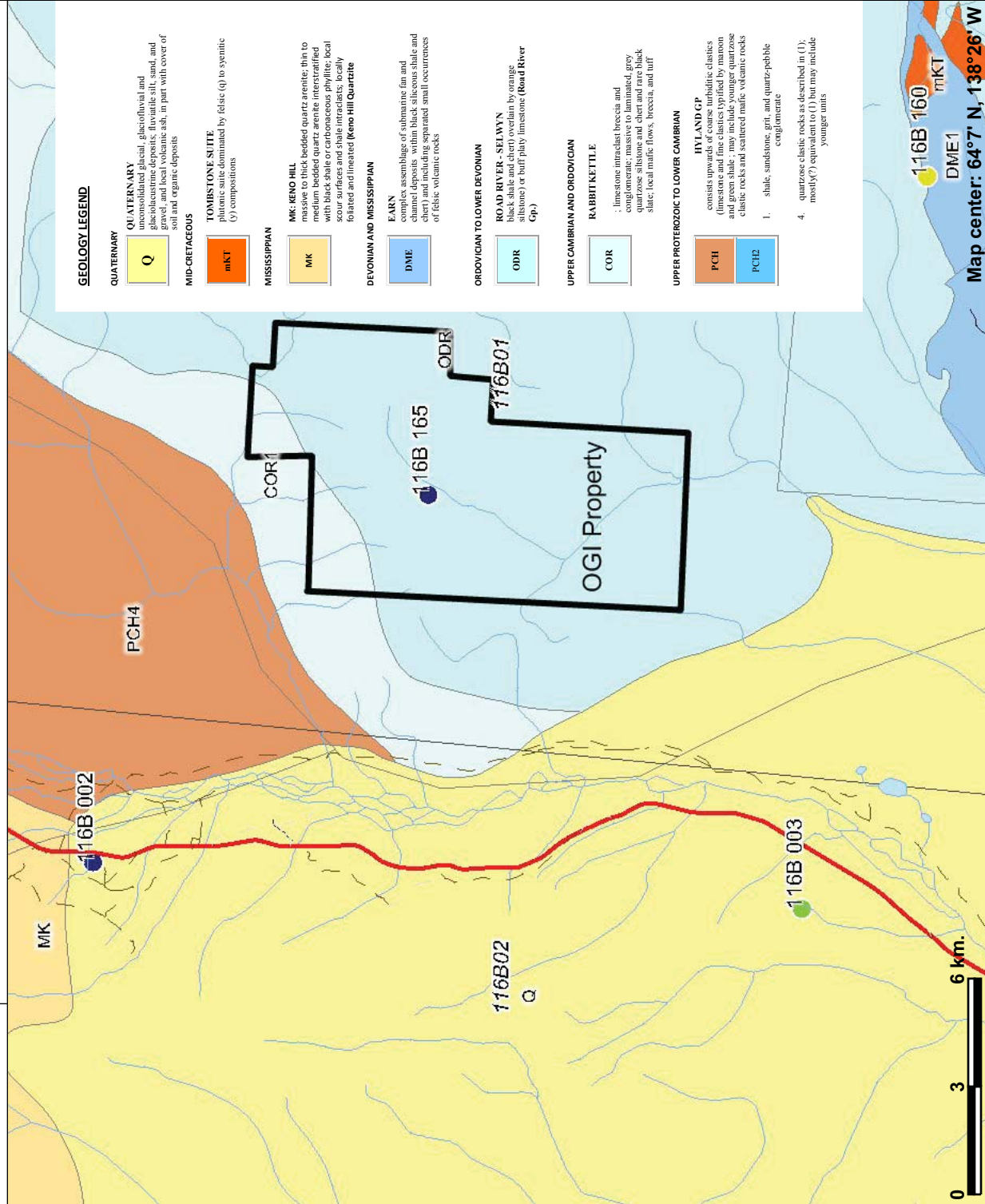


Figure 5 Regional Geology Map

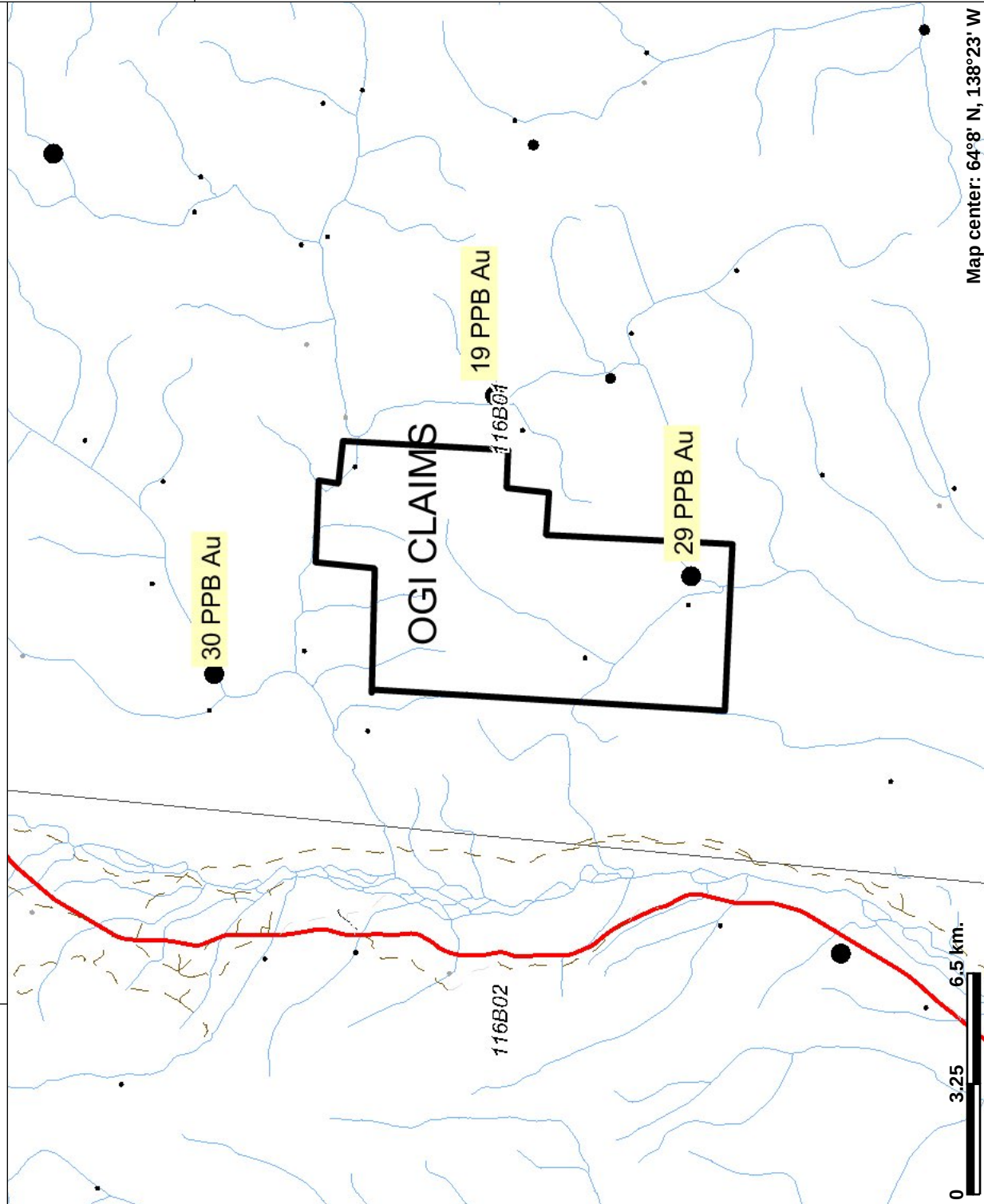
OGI Local Geology Map



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Figure 6 Local Geology Map

Regional Geochemistry Au PPB



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Legend

CSW RGS_SB_2003_Au_ina

- less than 50 %: 1 - 4 ppb
- 50-90%: 4 - 12 ppb
- 90-95%: 12 - 17 ppb
- 95-99%: 17 - 51.5 ppb
- greater than 99%: 51.5 - 805 ppb

Yukon Border - Surveyed

National Road Network - All Roads

- Expressway / Highway
- Arterial
- Collector
- Ramp
- Resource / Recreation
- Local / Street
- Local / Unknown
- Alley or Service Lane
- Service Lane
- Winter
- Watercourses (250k)
- Regional Overview

Ocean

Yukon

Other

Scale: 1:177,359

Figure 7 Regional Geochemical Survey (Gold PPB results)

2013 Exploration Program

The 2013 exploration program was conducted on the OGI property during the month of July. From July 22th to July 30th, a 2-person crew was mobilized by helicopter to the OGI property, constructed a seasonal camp, and completed a geochemical soil sampling survey as well as limited geological mapping, trenching and prospecting. 100 soil samples and 12 rock samples were collected for geochemical analysis. An additional 4 rock samples were collected from different sites on the property and sent to Vancouver Petrographics Ltd. for analysis.

Soil sampling was conducted using augers and mattocks. Sample intervals were at 25 metre stations and east-west oriented line spacing was 25 metres for follow up internal grid work at the Central Ridgeway Zone area (Fig. 8), and 50 metre stations with 150 metre east -west oriented line spacing at the Southeast Grid Zone area (Fig.8). A small amount of trenching was done in the vicinity of the 2012 high grade soil sample site (3700 ppb Au) in the Central Ridgeway Zone area and an additional small soil sampling grid and contour geochemical survey was conducted at the North Gold Zone area of the property at 50 metre station spacing and 250 metre east-west oriented line spacing, concurrent with geological mapping and prospecting (Fig.10).

The 2013 mineral exploration program on the OGI property was designed to follow up on the high grade 2012 geochemical grid soil sample assay result of 3700 ppb Au (sample # M648313), located approximately 200 metres uphill from the MINFILE occurrence consisting of a grab sample (#3AR0235A) of quartz monzonite float rock that assayed 895 ppb Au (MINFILE 116B 165) within the Central Ridgeway Zone area, and to fill in and extend the existing 2012 geochemical survey grid in the Southeast Zone area where elevated silver and base metal values were returned in 2012. The 2013 exploration program also focused on getting a better resolution on the 1.0 km x 3.0 km > 10ppb gold corridor that has been defined from the work program conducted in 2012 and where previous exploration by other operators had defined a broad 3 km² 30 ppb gold geochemical stream silt anomaly coincident with a geophysical survey MAG high anomaly interpreted to be a buried intrusion, and also coincident with a low K/Th ratio radiometric geophysical survey anomaly interpreted to be caused by hydrothermal alteration (Fig.9) (Van Damme et al.1997).

The 2013 exploration program also included initial follow up on historic anomalous gold in soil values documented in the northern part of the property (Van Damme et al.1997) not previously visited (the North Gold Zone).

Samples were submitted to the ALS Minerals laboratory in Whitehorse for gold fire assay as well as a 35 element ICP analysis. Four rock samples were selected for petrographic analysis and submitted to Vancouver Petrographics Ltd. in Vancouver. The Sample tag ID locations are included in Figures 10, 11 and 12.

The exploration work was partially funded through the Yukon Mining Incentive Program.

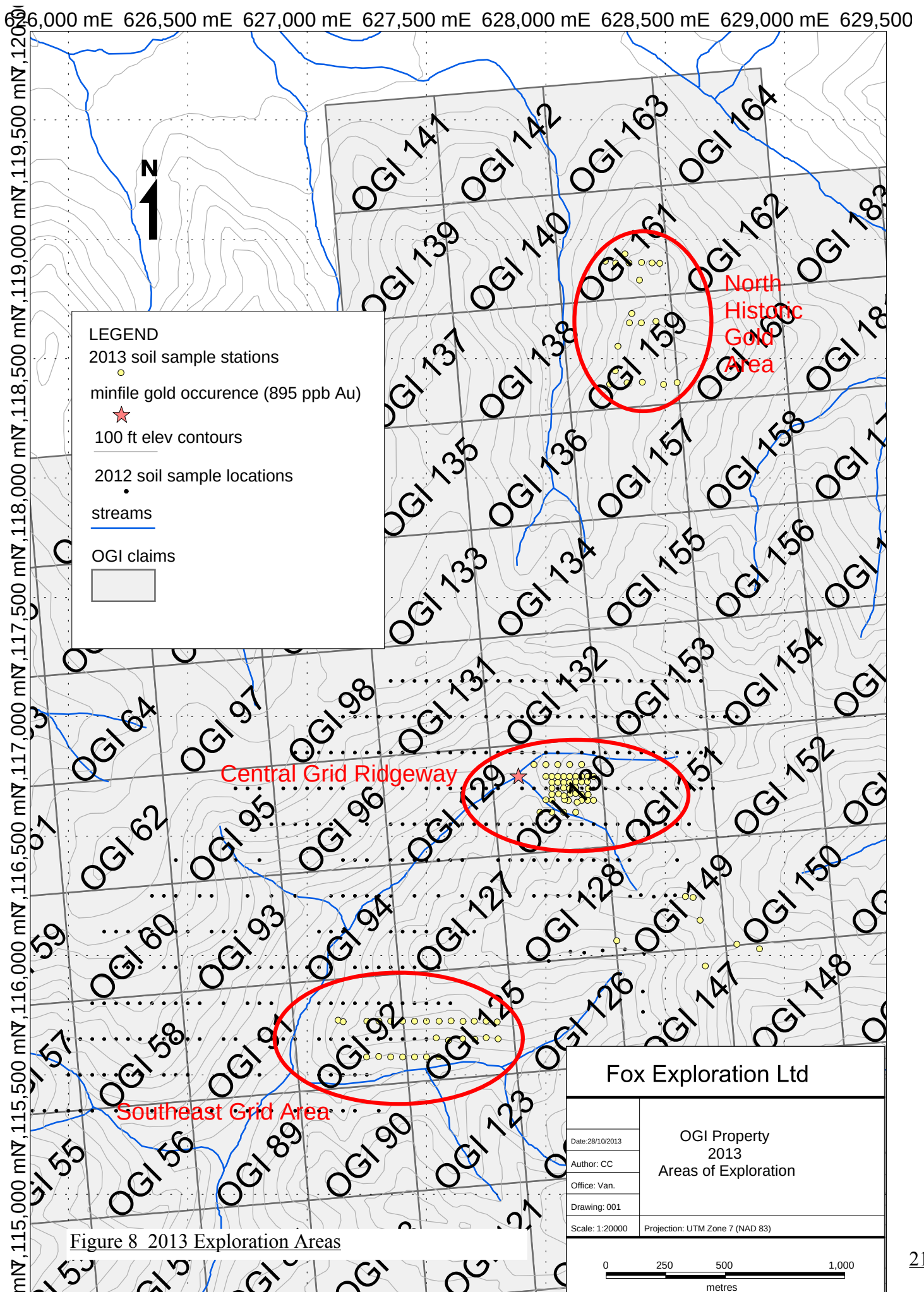


Figure 8 2013 Exploration Areas

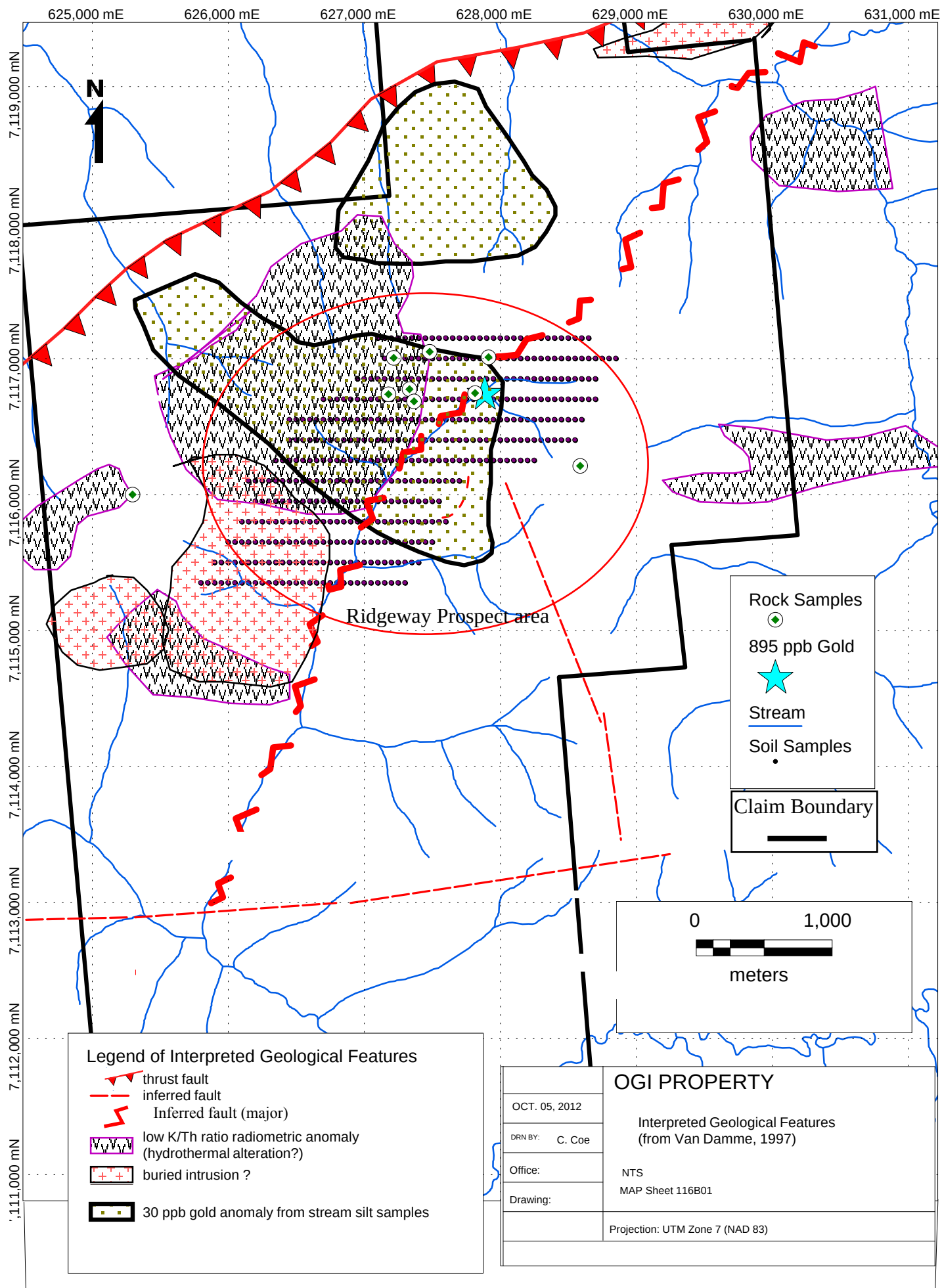


Figure 9 Geochemical Survey Grid and Geological Structural Interpretation from Geophysics (Van Damme, 1997)

North Gold Zone

A small geochemical soil sampling survey grid was completed in the North Gold Zone area where previous historical soil samples collected by International Kodiak Resources returned anomalous gold values up to 167 ppb Au (Fig. 10) (Van Damme et al.1997). Grid lines were oriented east-west and approximately 250 metres apart. Spacing of the samples along the line was at 25 metres but some samples were abandoned due to permafrost and others were taken where possible distal to the preferred site location if a location could be found with no permafrost. A total of 19 soil samples were taken (Figure 10). Soil Sample ID locations are shown in Figure 11.

Limited mapping and prospecting was also conducted. Mafic dyke outcrop locations with rock sample sites are shown in Figure 12.

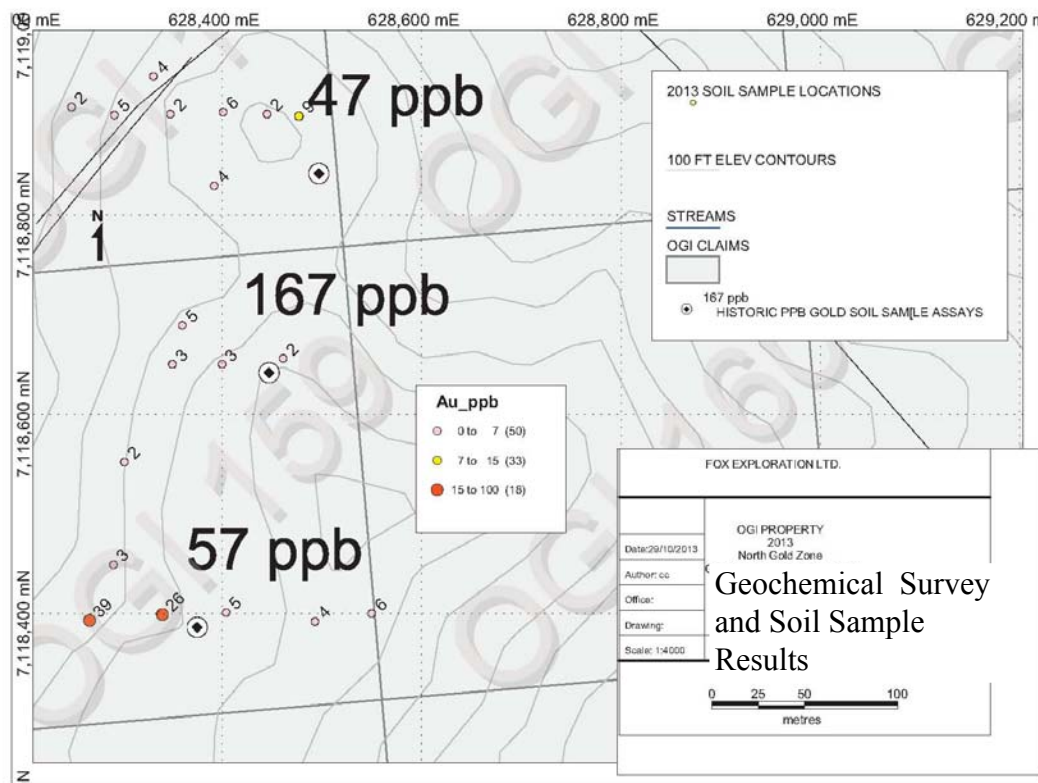


Figure 10 North Gold Zone Historic Gold Values and 2013 Soil Sample Gold Results

Eight rock samples were collected during mapping and prospecting in the Gold Zone area. The location of these samples and sample tag IDs are shown in Figure 12. A table of the rock descriptions are included in Figure 13 and analytical results are in Appendix IV.

Four rock samples were collected for petrographic analysis and sent to Vancouver Petrographics Ltd. in Vancouver, B.C. The location of these samples is shown in Figure 13.

A report on the results from the petrographic analysis of these rocks is included in Appendix V.

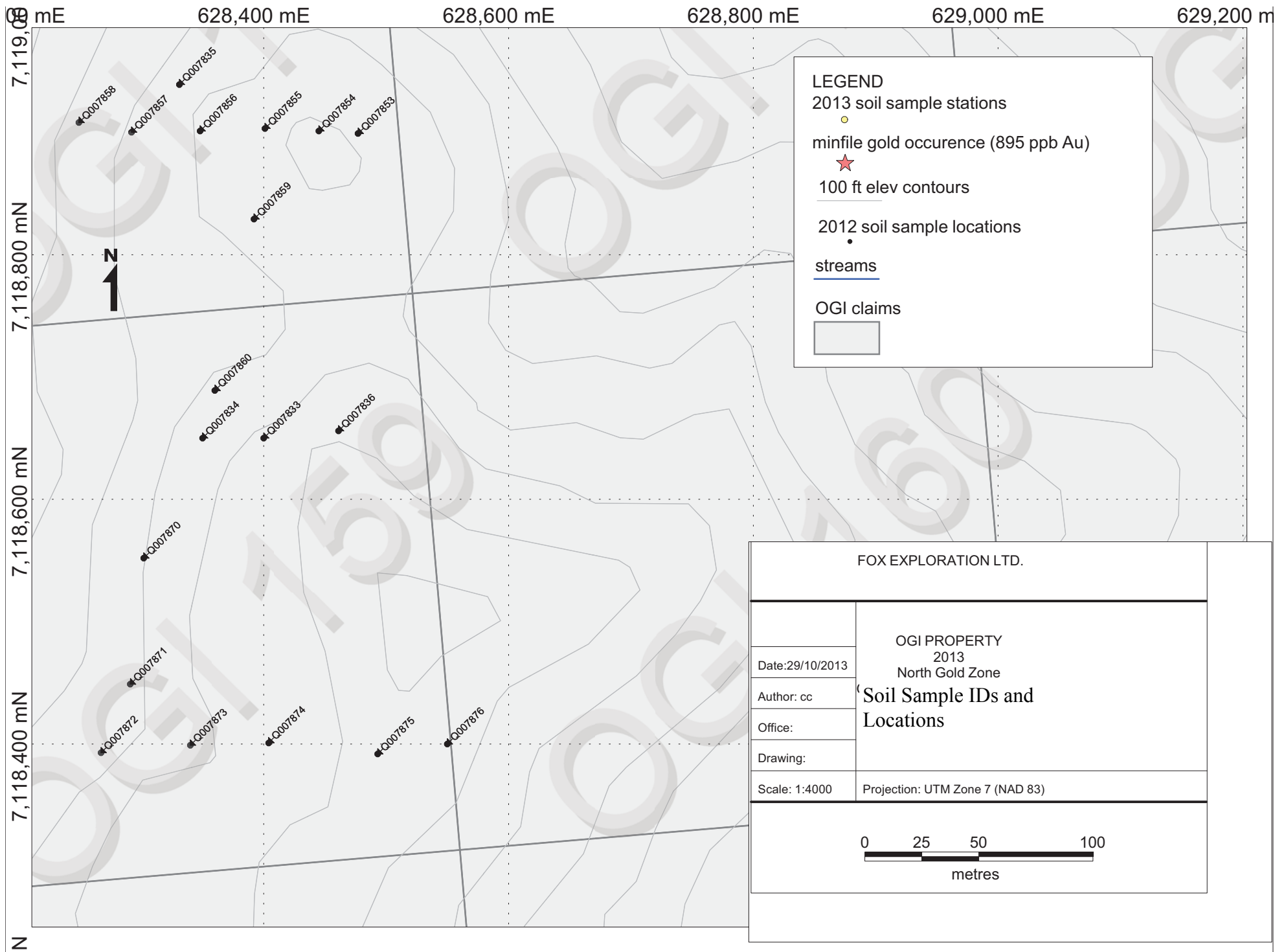


Figure 11 North Gold Zone Sample IDs and Locations

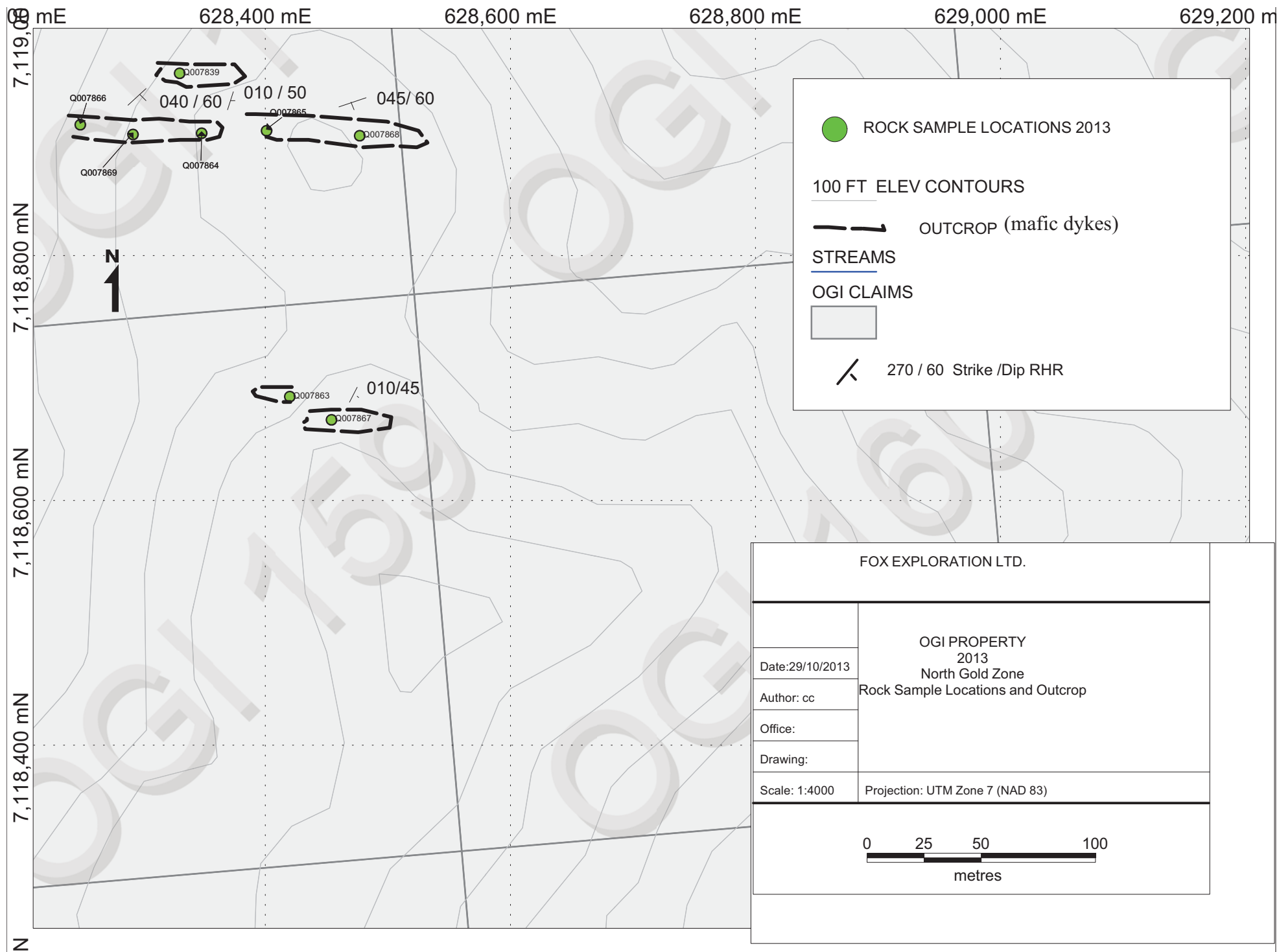


Figure 12 North Gold Zone Rock Sample IDs and Outcrop Locations



Figure 13 Mafic Dyke at Rock Sample Q007867 location North Gold Zone Area

OGI PROPERTY 2013 ROCK SAMPLE DESCRIPTIONS				
ROCK SAMPLES/ PETROGRAPHIC SAMPLE	NORTHING	EASTING	AU PPB	DESCRIPTION
	UTM NAD 83 ZN 7			
Q007861	627300	7115577	6	Outcrop. Cherty argillite with qtz veining ; vuggy with limonite staining
Q007862	627400	7115575	9	Outcrop. Black argillite with micro qtz veining.
Q007863 / 7842	628420	7118686	3	Outcrop. Grey augite-phyric basalt. Fine grained mass with dess. py. Oxidized and some calcite filled cavities.
Q007864	628348	7118901	4	Outcrop. Grey-green augite-phyric basalt
Q007865/ 7840	628401	7118903	2	Outcrop. Grey-green augite-phyric basalt; dess. Py and vossicular cavities
Q007866	628249	7118908	2	Outcrop. augite-phyric basalt. Fine grained mass with dess. py. Oxidized and some calcite filled cavities. Grey-grn fine grained mass.
Q007867	628454	7118667	3	Outcrop. Grey-green augite-phyric basalt
Q007868	628477	7118899	2	Float. Grey-green augite-phyric basalt
Q007869/ 7841	628292	7118900	3	Outcrop. Grey-green augite-phyric basalt; dess. Py and vossicular cavities
Q007838	627197	7115738	9	Outcrop. Cherty argillite with interbedded shale.
Q007839	628330	7118950	2	Outcrop. Hornfels.
Q007823	628096	7116710	3	Outcrop. Cherty argillite with qtz veining ; vuggy with limonite staining
No sample / 7843	628340	7118490		Augite microgabbro

Figure 14 Rock Sample Descriptions North Gold Zone and Southeast Grid Zone Areas.

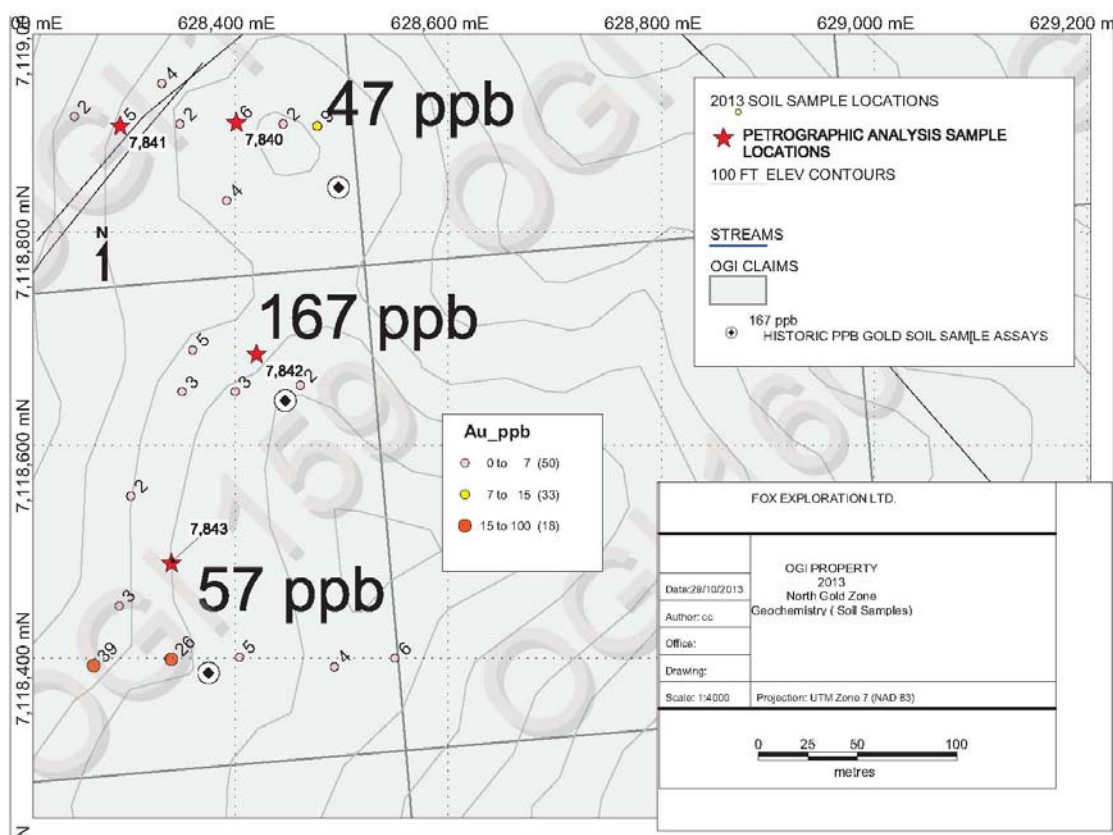


Figure 15 North Gold Zone Rock Sample Locations for Petrographic Study

Central Ridgeway Grid Zone

The 2013 mineral exploration program within the Central Ridgeway Zone area on the OGI property was designed to follow up on the high grade 2012 geochemical grid soil sample assay result of 3700 ppb Au (#M648313) located approximately 200 metres uphill from the original minfile occurrence (a float quartz monzonite sample that assayed 895 ppb Au). A grid was established with lines oriented east-west with 25 metre line spacing and 25 metre station spacing distal in a north and south direction from the high grade soil sample location. The high grade soil sample location was also trenched and re-sampled (the location of the auger hole was found). A total of 46 soil samples were taken for geochemical analysis. Soil sample locations and IDs are shown in Figure 18. The locations of the trench and soil sample gold results in ppb are shown in Figure 19.



Figure 16 Trench at 2012 Soil Sample Site # M638313 (3700 ppb Au)



Figure 17 New Sample # Q007822 Taken at old Sample Site # M648313

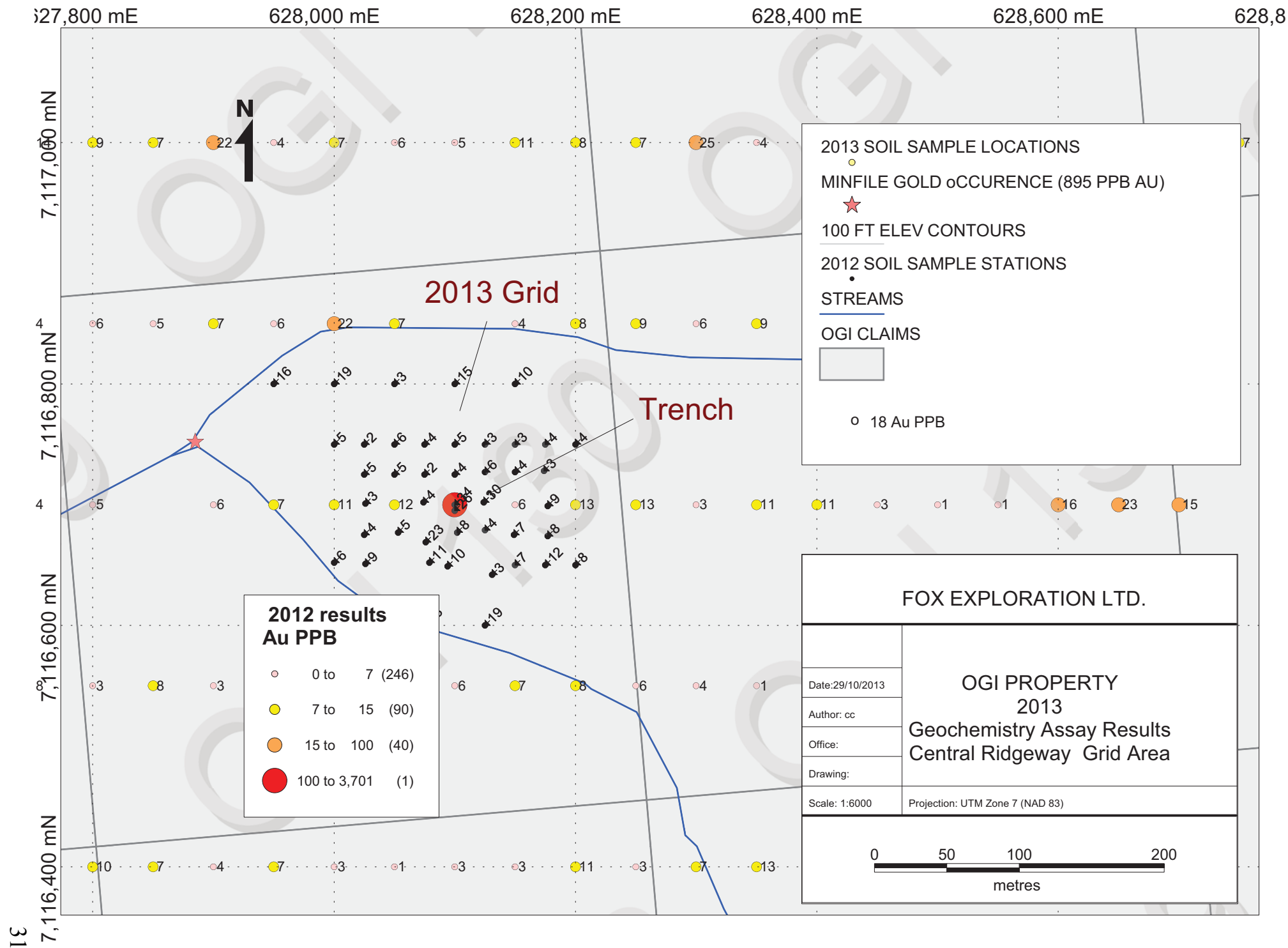


Figure 19 Central Ridgeway 2013 Au Results and Trench Location

Southeast Grid Zone

Exploration work in 2013 focused on filling in and extending the existing 2012 geochemical survey grid in the Southeast Zone area where elevated silver and base metal values were returned in 2012. The grid lines were oriented east west with sample site stations at 50 metre spacing. 27 soil samples were taken. In addition, 3 rock samples were taken for geochemical analysis.



Figure 20 Cherty Argillite Outcrop at Rock Sample # Q007838 Location

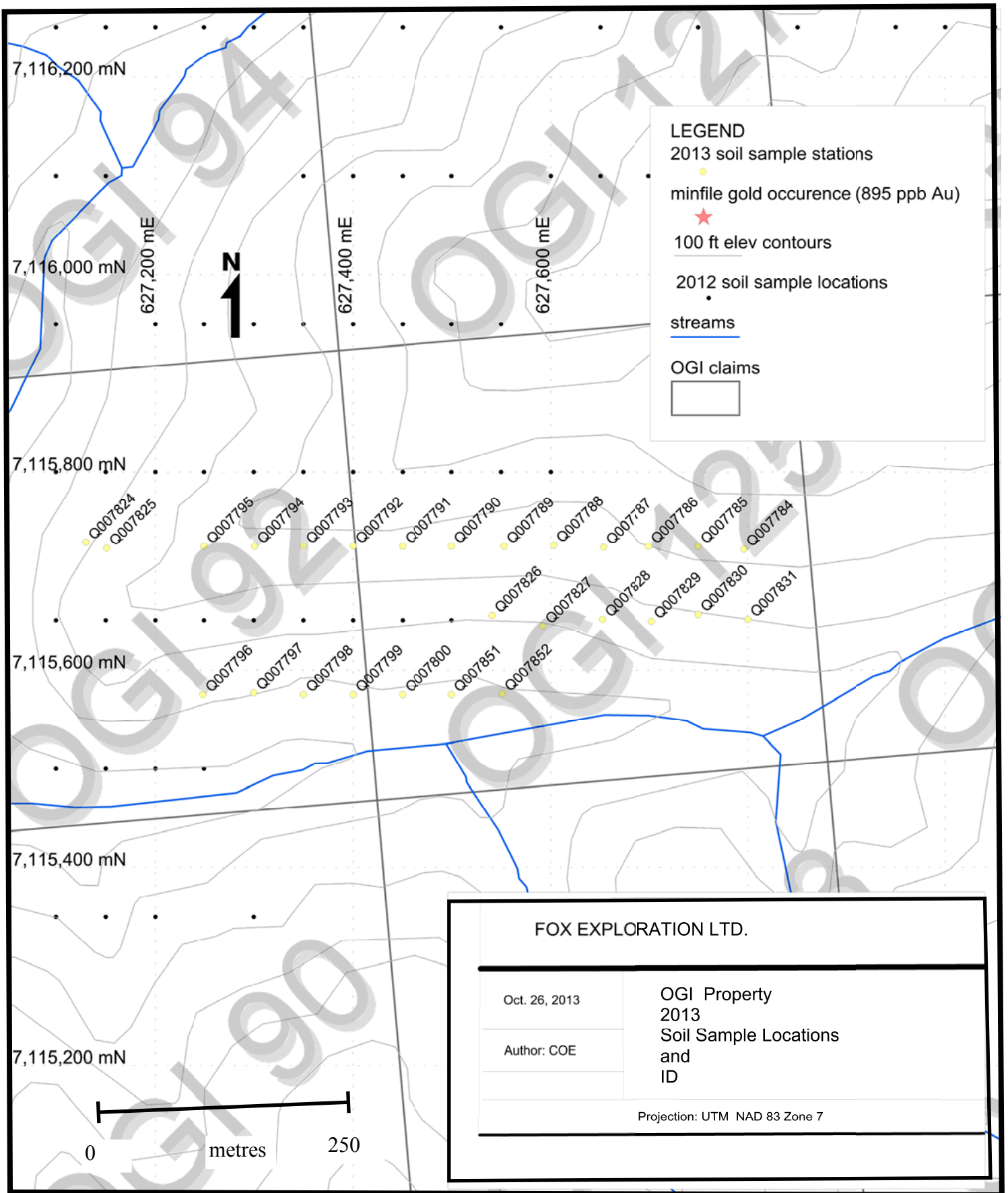


Figure 21 Sample ID and Location Southeast Grid Zone

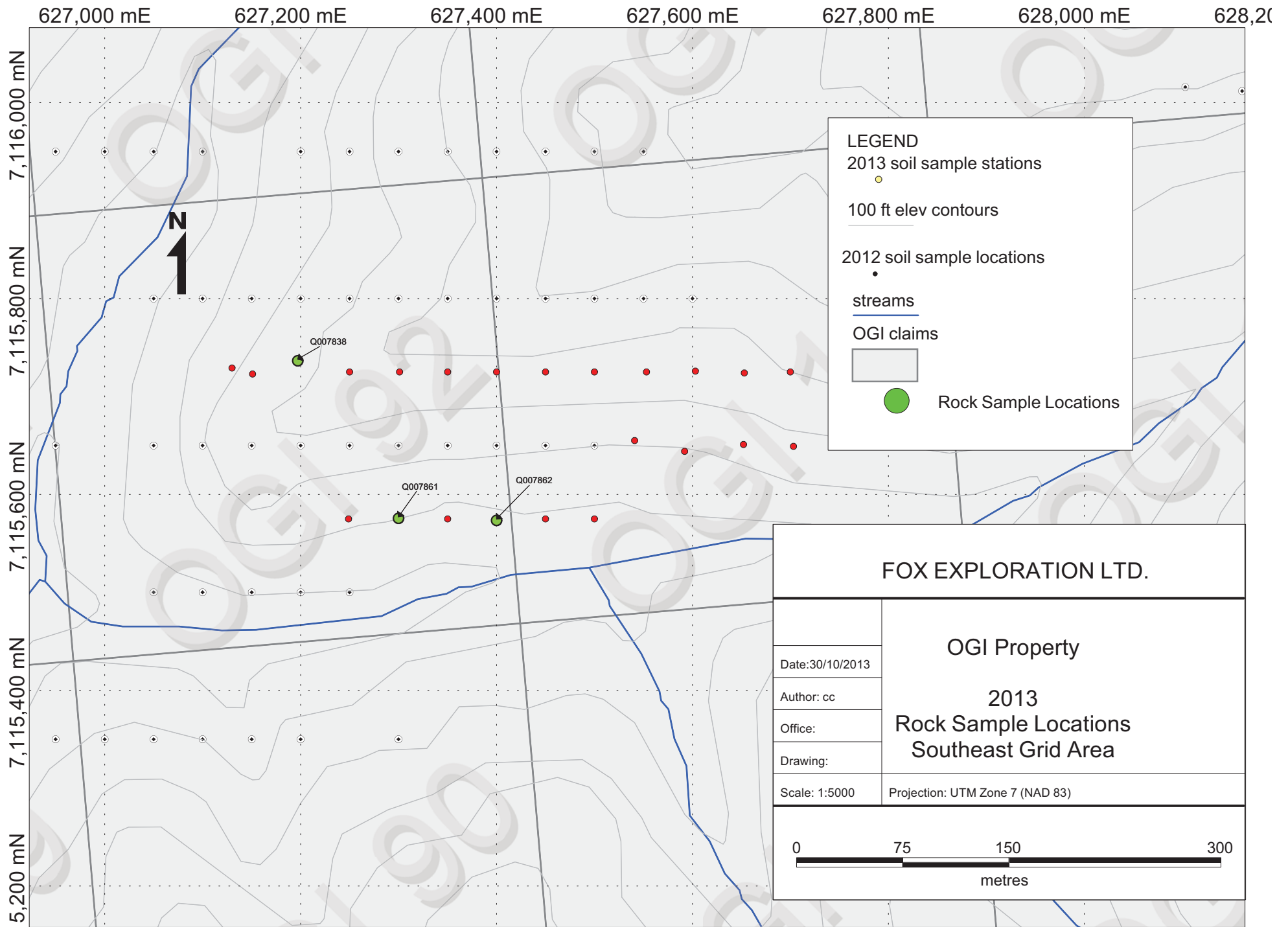


Figure 22 Southeast Zone Rock Sample IDs and Locations

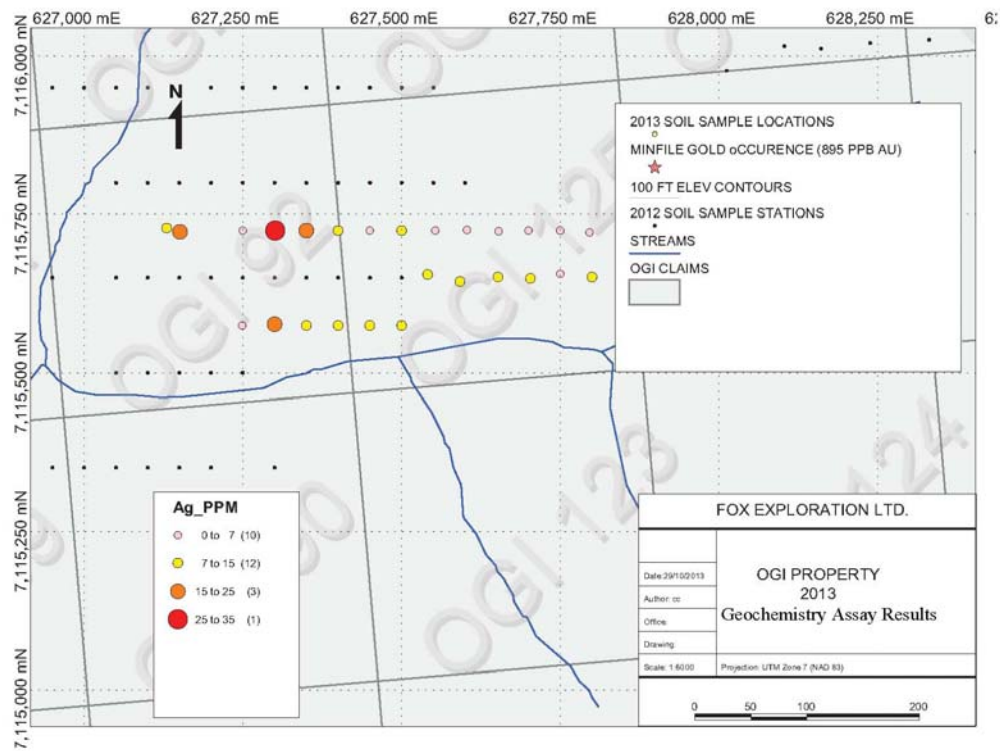


Figure 23 Southeast Grid Zone Thematic Map for Silver PPM 2013

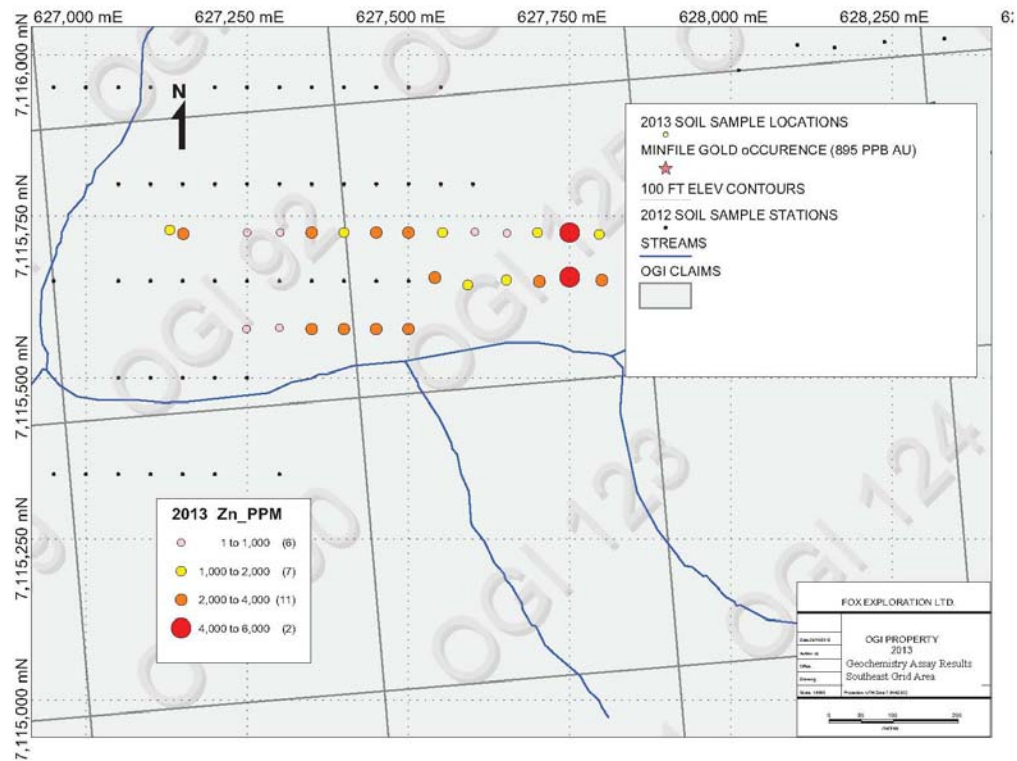


Figure 24 Southeast Grid Zone Thematic Map for Zinc

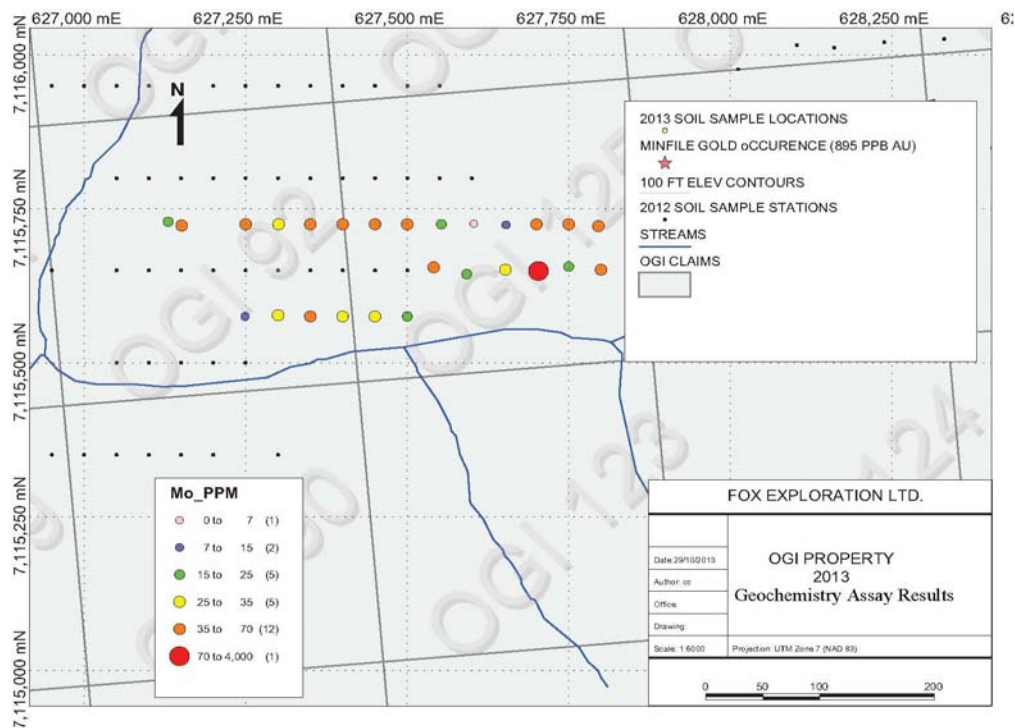


Figure 25 Southeast Grid Zone Thematic Map for Mo

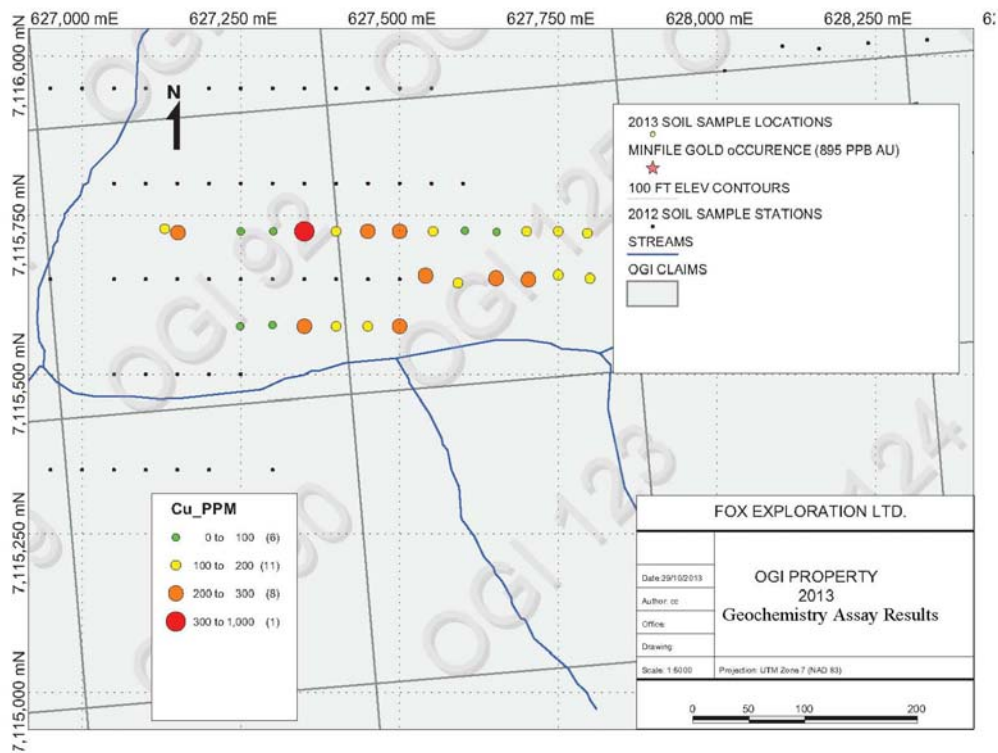


Figure 26 Southeast Grid Zone Thematic Map for Cu

Geochemical Survey and Analytical Method

Soil and rock Geochemistry Analytical Certificates are in Appendix IV.

A total of 100 soil geochemistry samples were collected. Individual sample locations were uploaded from a spreadsheet to non- differential hand- held GPS units and navigated to the field site by the soil sampler. The projection used for field GPS was NAD 83 and any deviation in the physical sample location was entered in the operator's field notes. UTM coordinates of sample locations are included in Appendix II.

Soil samples were collected with hand augers and also with a madok when needed. Station sample number ID's were permanently marked in the field with aluminum tags. Samples were collected from the 'B' Horizon with depths ranging from 30 -100 cm. Loess and or permafrost prohibited some samples from being collected. The samples were collected in individual kraft paper soil sample bags and dried at camp in one of the canvass tents where a wood stove was used for heat. The samples were then packed in large plastic bags and placed in rice bags for transport to ALS Minerals' laboratory in Whitehorse. Chain of custody of the samples remained with the geologist until delivery of the samples to the lab.

A description of the analytical methods used was obtained from the ALS Minerals website. At the ALS Minerals lab in Whitehorse, the entire sample was dried and then dry-sieved using a 180 micron (Tyler 80 mesh) screen. The prepared sample was then sent to ALS Minerals' Vancouver lab for analysis. Two methods of analysis were performed on each sample.

For gold detection, method Au-ICP21 was used whereby a 30 gram split of the prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required, inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead. The bead is digested in 0.5 mL dilute nitric acid in the microwave oven. 0.5 milliliters L of concentrated hydrochloric acid is then added and the bead is further digested in the microwave at a lower power setting. The digested solution is cooled, diluted to a total volume of 4 milliliters with de-mineralized water, and analyzed by inductively coupled plasma atomic emission spectrometry against matrix-matched standards.

The second analytical method performed on all samples was method ME-ICP41 for 35 elements. A prepared sample was digested with aqua regia in a graphite heating block. After cooling, the resulting solution was diluted to 12.5 mL with deionized water, mixed and analyzed by inductively coupled plasma-atomic emission spectrometry. The analytical results were corrected for inter-element spectral interferences. ALS Minerals' Whitehorse lab and Vancouver lab are certified to standards within ISO 9001:2008.

Conclusions and Recommendations

The 2013 YMIP funded exploration program on the OGI property, consisting of geological mapping, prospecting and a geochemical soil sampling grid surveys, focused on the North Gold Zone area, the Central Ridgeway Grid area and the Southeast Grid area (Fig.9). Previous claim owners of the OGI Property had identified a 3 km² area 30 ppb gold geochemical anomaly coincident with a geophysical survey MAG high anomaly interpreted to be a buried intrusion, and also coincident with a low K/Th ratio anomaly from a radiometric geophysical survey taken over the same area (Figure 9) and interpreted to be caused by hydrothermal alteration characteristic of intrusion related activity (Van Damme et al.1997). A historic grab sample (#3AR0235A) taken from float in the center of the Ridgeway prospect area returned 895 ppb Au, 1065 ppm AS, 10 ppm Sb and 3650 ppm Hg (MINFILE 116B 165). A petrographic analysis report from a thin section prepared from the sample identified the rock as a very silicified altered feldspar porphyry (Van Damme et al.1997).

In 2012 Fox, Exploration Ltd. conducted exploration work on the OGI property consisting primarily of a geochemical survey grid totalling 377 samples. Figure 9 show the location of the 2012 geochemical survey relative to the above geological information. Results from the 2012 geochemical survey included one soil sample up slope from the historic MINFILE occurrence that assayed 3700 ppb Au (sample # M648313) and also anomalous silver and base metal values in the southeast area of the grid (Coe, 2012).

The 2013 mineral exploration program on the OGI property was designed to follow up on the high grade 2012 geochemical grid soil sample assay result of 3700 ppb Au (sample # M648313), located approximately 200 metres uphill from the MINFILE occurrence within the Central Ridgeway Zone area, and to fill in and extend the existing 2012 geochemical survey grid in the Southeast Zone area where elevated silver and base metal values were returned in 2012. The 2013 exploration program also focused on getting a better resolution on the 1.0 km x 3.0 km > 10ppb gold corridor that has been defined from the work program conducted in 2012 and where previous exploration by other operators had defined a broad 3 km² 30 ppb gold geochemistry stream silt anomaly coincident with a geophysical survey MAG high anomaly interpreted to be a buried intrusion, and also coincident with a low K/Th ratio radiometric geophysical survey anomaly interpreted to be caused by hydrothermal alteration (Fig.9) (Van Damme et al.1997).

The 2013 exploration program also included initial follow up on historic anomalous gold in soil values documented in the northern part of the property by International Kodiak Resources Ltd. (Van Damme et al.1997). This area has been named the North Gold Zone area.

The soil sampling geochemical survey conducted in the North Gold Zone area of the property returned anomalous gold up to 39 ppb Au in the vicinity of the historic gold values of up to 167 ppb Au (Figure 15). Geological mapping conducted during prospecting in the North Gold Zone area also provided outcrop rock samples from mafic dykes for petrographic analysis. The report from Vancouver Petrographics Ltd. is

included in Appendix VI. Significant gold mineralization is not present in the dyke rocks where sampled.

Results from the 2013 trenching and the soil sampling geochemical survey conducted in the Central Ridgeway Grid area failed to duplicate the previous 3700 ppb Au soil sample result returned in the 2012 exploration program (Coe, 2012), although the highest value in this area was directly in the area of the high grade sample (39 ppb Au).

Metal plots for the 2013 geochemical survey conducted in the Southeast Grid area of the OGI property for gold, silver, copper, zinc, molybdenum, and antimony are included in Appendix III. Elevated silver and based metal values are present.

Additional work is warranted on the OGI property and should focus on follow up prospecting, soil sampling and mapping in the North Gold Zone area where anomalous gold values of up to 39 ppb Au are present in the area of historic gold values (up to 167 ppb Au).

Additional soil sampling, prospecting and geological mapping is warranted in the Southeast Grid area that returned elevated silver and base metal background values.

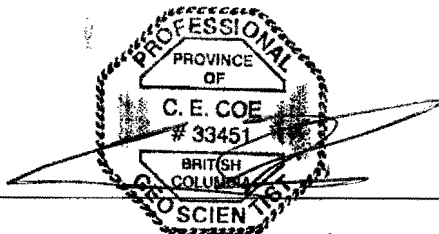
Prospecting should also be implemented in other areas of the property where historic data shows elevated gold values.

Statement of Expenses for OGI Project 2013

		Amount
WAGES		
	Prep time (project organizing, assembling supplies, hiring, admin)	
	Geologist 5 days @ \$500/day	\$ 2,500.00
	(1) Geotech 2 days @ \$350/day	\$ 700.00
	Field Time July 16 - July 24, 2012	
	(1) Senior Geologist; 9 days @ \$500/day	\$ 4,500.00
	(1) Geotech /Sampler; 9 days @ \$350/day	\$ 3,150.00
	Mob / Demob (1) Geotech 2 days @ \$350/day	\$ 700.00
	(1) Senior Geologist; 4 days @ \$500/day	\$ 2,000.00
ANALYTICAL	ALS Chemex ALS package AU-ICP21 and ME-ICP41 + PREP 100 soils samples and 12 rock samples	\$ 2,973.43
	Vancouver Petrographics Ltd. Petrographic analysis and report (4 samples)	\$ 1,127.00
TRAVEL	Helicopter Dawson return to OGI x 3 including mob / demob	\$ 3,194.60
	Truck 1 4x4 rental	\$ 2,500.00
	Fuel / Accomodation	\$ 1,359.74
PER DIEM (camp, food, radio and internet communication, field sampling consumables & equip.)	28 MAN DAYS x \$100/day	\$ 2,800.00
SHIPPING	Samples and Supplies	\$ 462.68
REPORT PREPARATION		<u>\$ 2,500.00</u>
TOTAL		\$ 30,467.45

Statement of Qualifications

- 1) I, Corwin Edward Coe, of 1701 Robert Lang Drive, Courtenay, B.C. V9N 1A2, am self-employed as a consultant geologist and am responsible for the discussions and work proposal outlined in this report.
- 2) I am a graduate from Simon Fraser University, Burnaby, B.C., with a B.Sc. in Earth Science.
- 3) I am a graduate Mining Technologist with a diploma in Mining Technology from the British Columbia Institute of Technology.
- 4) I am a Professional Geoscientist registered with the Association of Professional Engineers and Geoscientists of British Columbia (#33451).
- 5) I have over 30 years experience working in the mining industry focused primarily in mineral exploration.
- 6) I was responsible for the 2013 exploration program as outlined for the OGI property.



Corwin (Cor) Coe, P. Geo.
Project Geologist,
Fox Exploration Ltd.

References

FOX EXPLORATION LTD., 2012. Assessment Report on the OGI Property / Soil Geochemistry, C. Coe

GEOLOGICAL SURVEY OF CANADA, 1998. Airborne geophysical survey (NTS 116 B/1,A/4 and 115 P/13), Brewery Creek Area, Yukon Territory. Open Files 3551 and 3607.

GEOLOGICAL SURVEY OF CANADA, 1997. Lode Gold Deposits of the World, C.L. Jenkins, R.Vincent, F. Robert, K.H. Poulson, D.F. Garson and J.A. Blonde.

GEOLOGICAL SURVEY OF CANADA, 1972. Geology of Nash Creek, Larson Creek and Dawson map-areas, Yukon Territory (106D, 116A, 116B, and 116 (E1/2)); Operation Ogilvie, L.H. Green.

INTERNATIONAL KODIAK RESOURCES INC., 1997. Geological, Geophysical, and Geochemical Assessment Report on the OKI-DOKI Project Claims, V.P. Van Damme, B.T. Malahoff and C.A. Kauss.

PLACER DOME EXPLORATION LTD, 1992. Report on the 1991 Assessment on the Mix Claims, D.M. Strain.

TOMBSTONE EXPLORATIONS COMPANY LTD, 1991. Report on the 1990 Assessment on the MIK Claims, H.J. Keyser.

YUKON EXPLORATION AND GEOLOGY, 1997. Page 27, 36.

YUKON GEOLOGICAL SURVEY, 1997. Geological Map of Keno Hill area, Yukon (105M/14) , D. C. Murphy and C. F. Roots.

YUKON GEOLOGICAL SURVEY, 2002. MINFILE 116B 165; name: Ridgeway.

Appendix I

OGI Claims

District	GrantNumber	ClaimName	ClaimNbr	Claim Owner	OperationRecordii	StakingDate	ClaimExpiryDate	Status	NTS MapNumber
Dawson	YD145301	OGI	1	Fox Exploration Ltd.	10/28/2011	10/22/2011	10/28/2014	Active	116B01
Dawson	YD145302	OGI	2	Fox Exploration Ltd.	10/28/2011	10/22/2011	10/28/2014	Active	116B01
Dawson	YD145103	OGI	3	Fox Exploration Ltd.	10/28/2011	10/22/2011	10/28/2014	Active	116B01
Dawson	YD145104	OGI	4	Fox Exploration Ltd.	10/28/2011	10/22/2011	10/28/2014	Active	116B01
Dawson	YD145105	OGI	5	Fox Exploration Ltd.	10/28/2011	10/22/2011	10/28/2014	Active	116B01
Dawson	YD145106	OGI	6	Fox Exploration Ltd.	10/28/2011	10/22/2011	10/28/2014	Active	116B01
Dawson	YD145107	OGI	7	Fox Exploration Ltd.	10/28/2011	10/22/2011	10/28/2014	Active	116B01
Dawson	YD145108	OGI	8	Fox Exploration Ltd.	10/28/2011	10/22/2011	10/28/2014	Active	116B01
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Dawson	YD145111	OGI	11	Fox Exploration Ltd.	10/28/2011	10/22/2011	10/28/2014	Active	116B01
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APPENDIX II

Sample No. and Reference Location

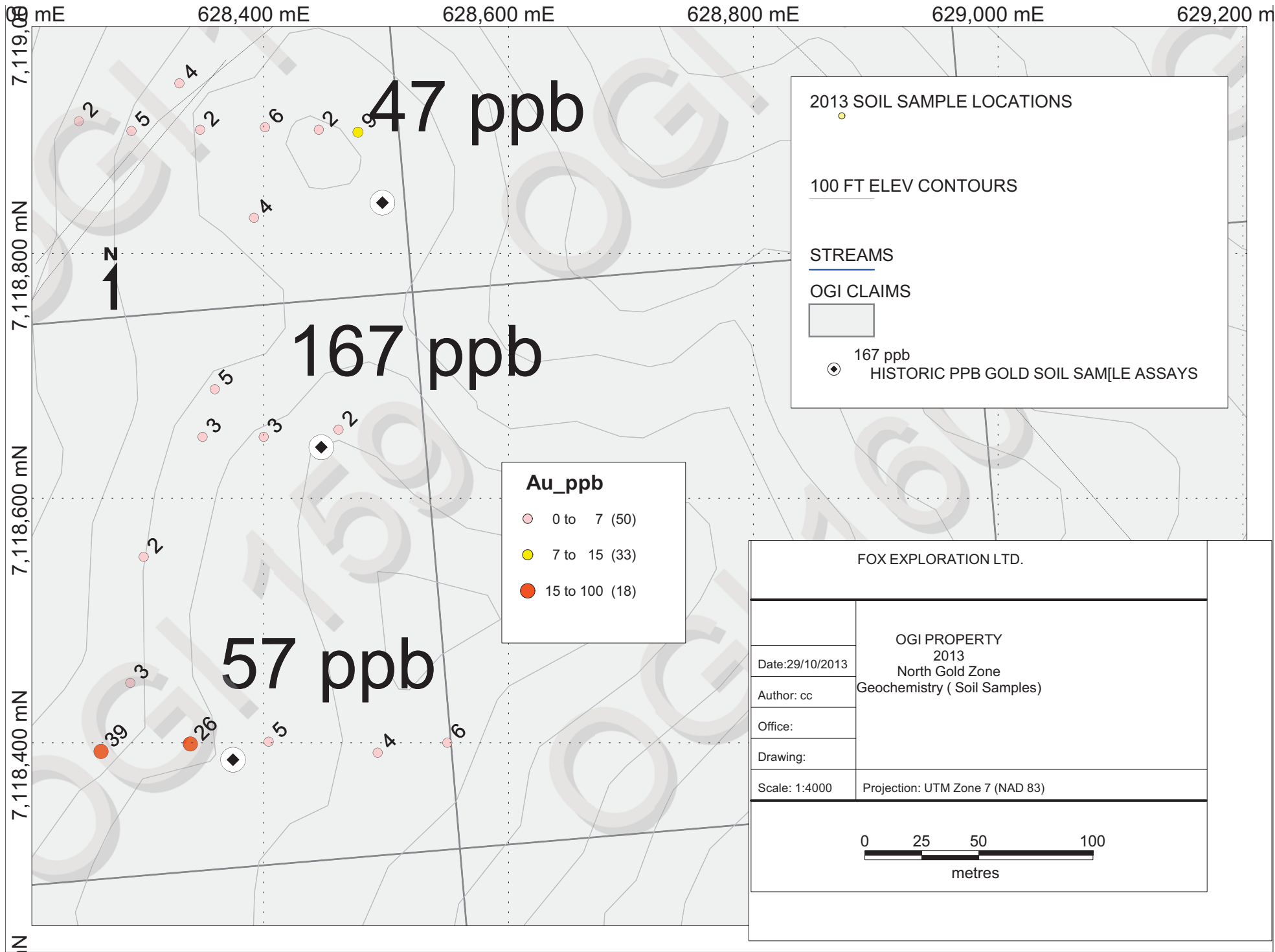
OGI SAMPLE NUMBER AND WAYPOINT REFERENCE LOCATION (2013)

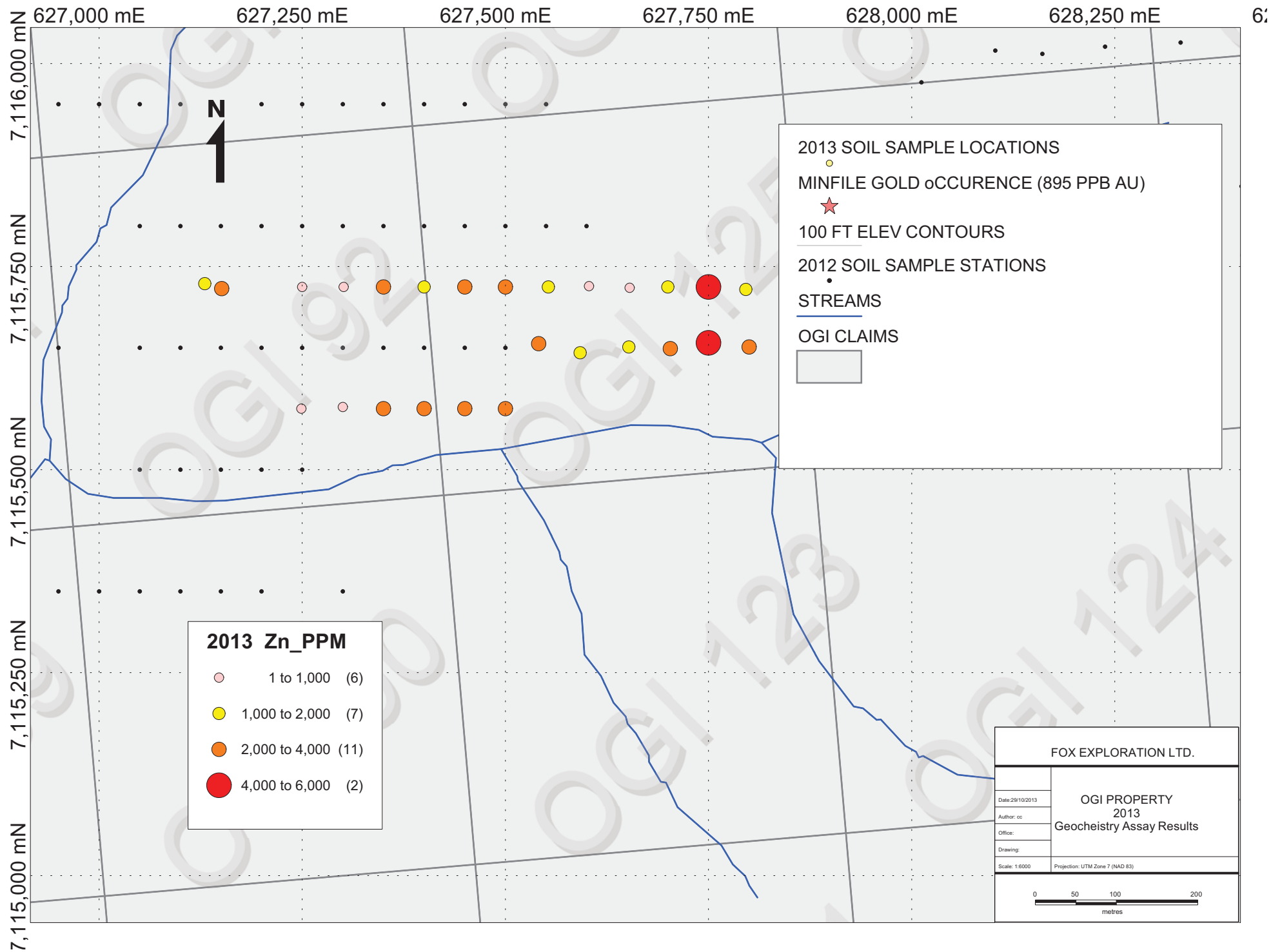
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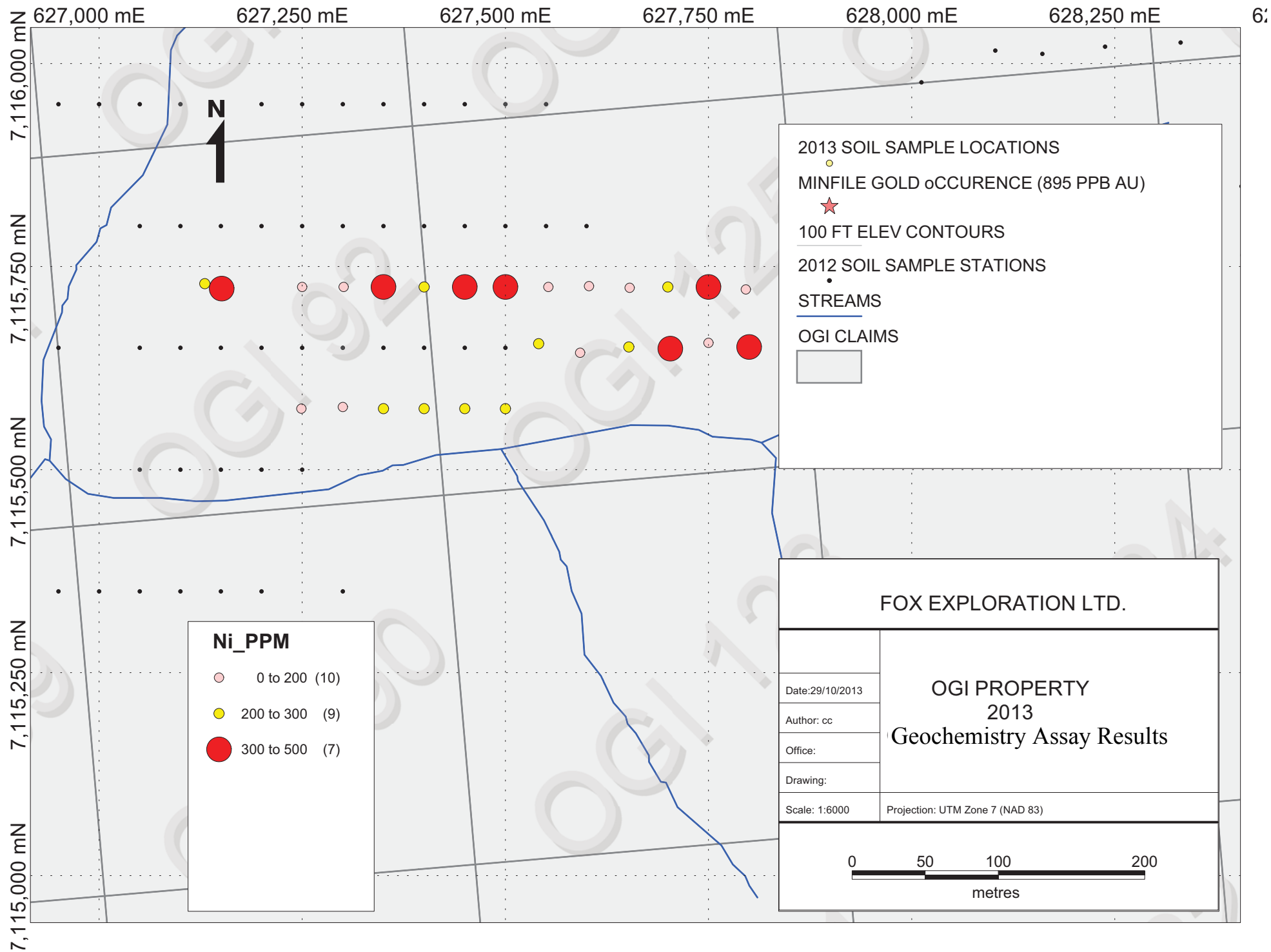
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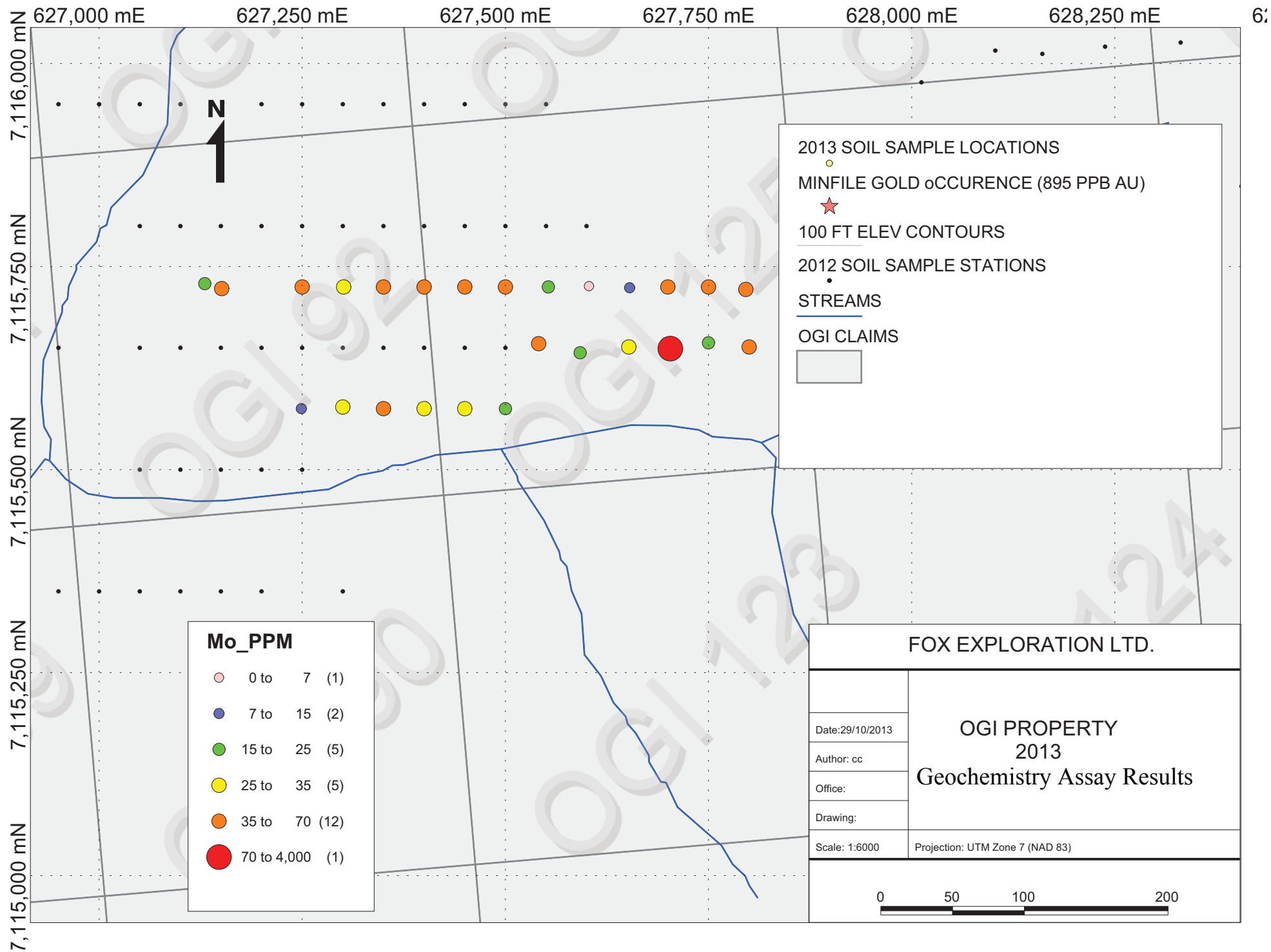
APPENDIX III

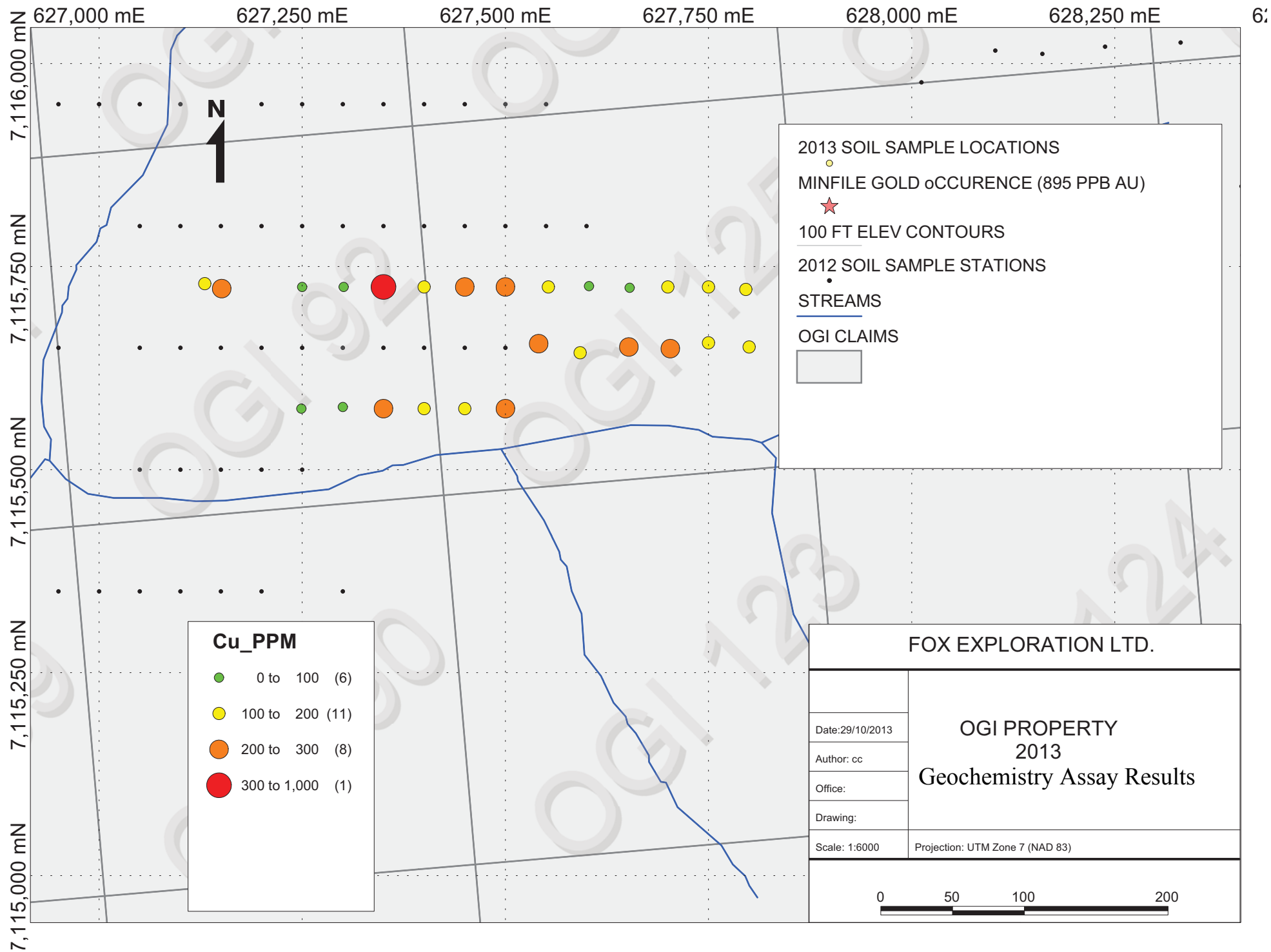
Metal Plots

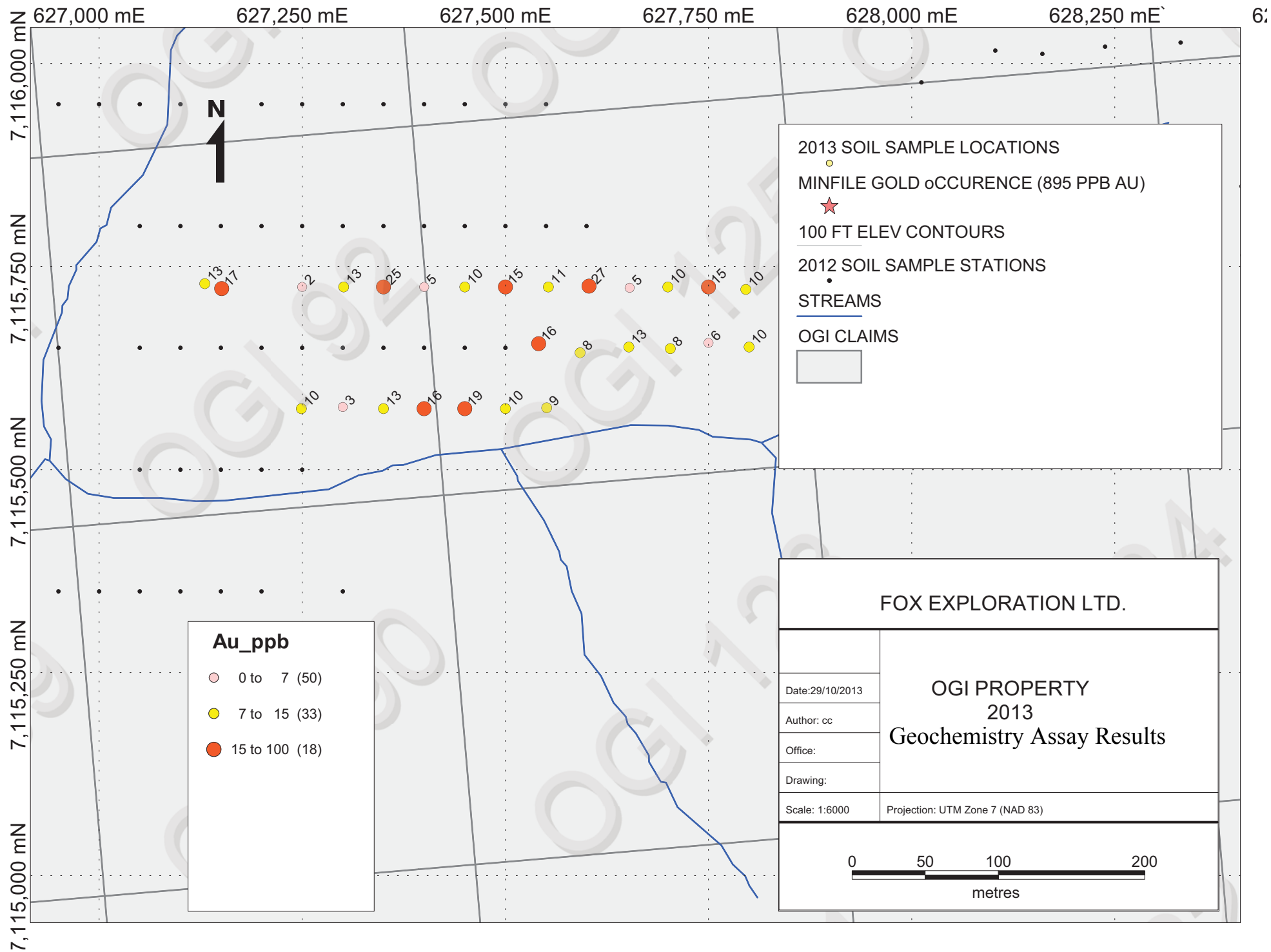


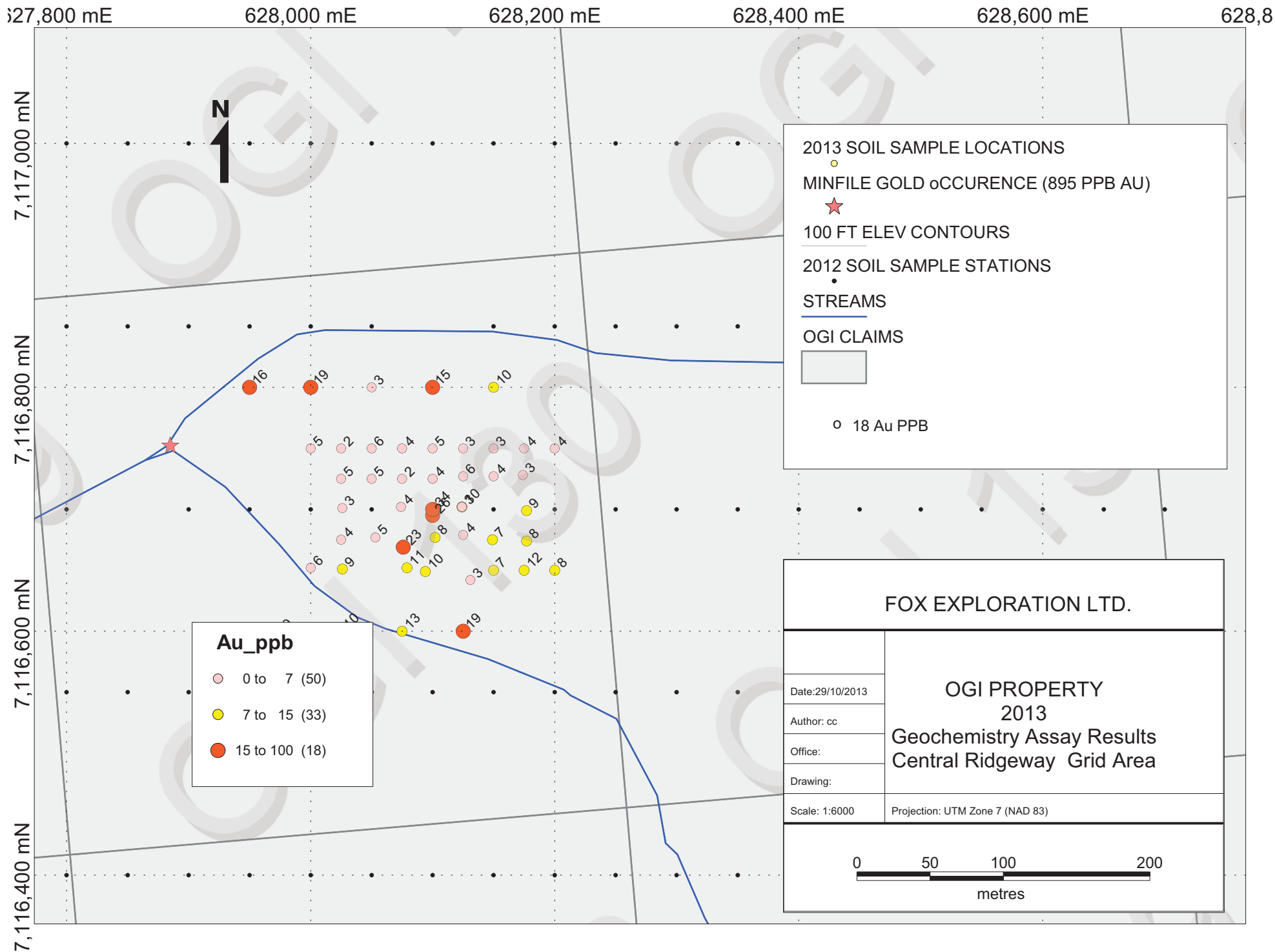


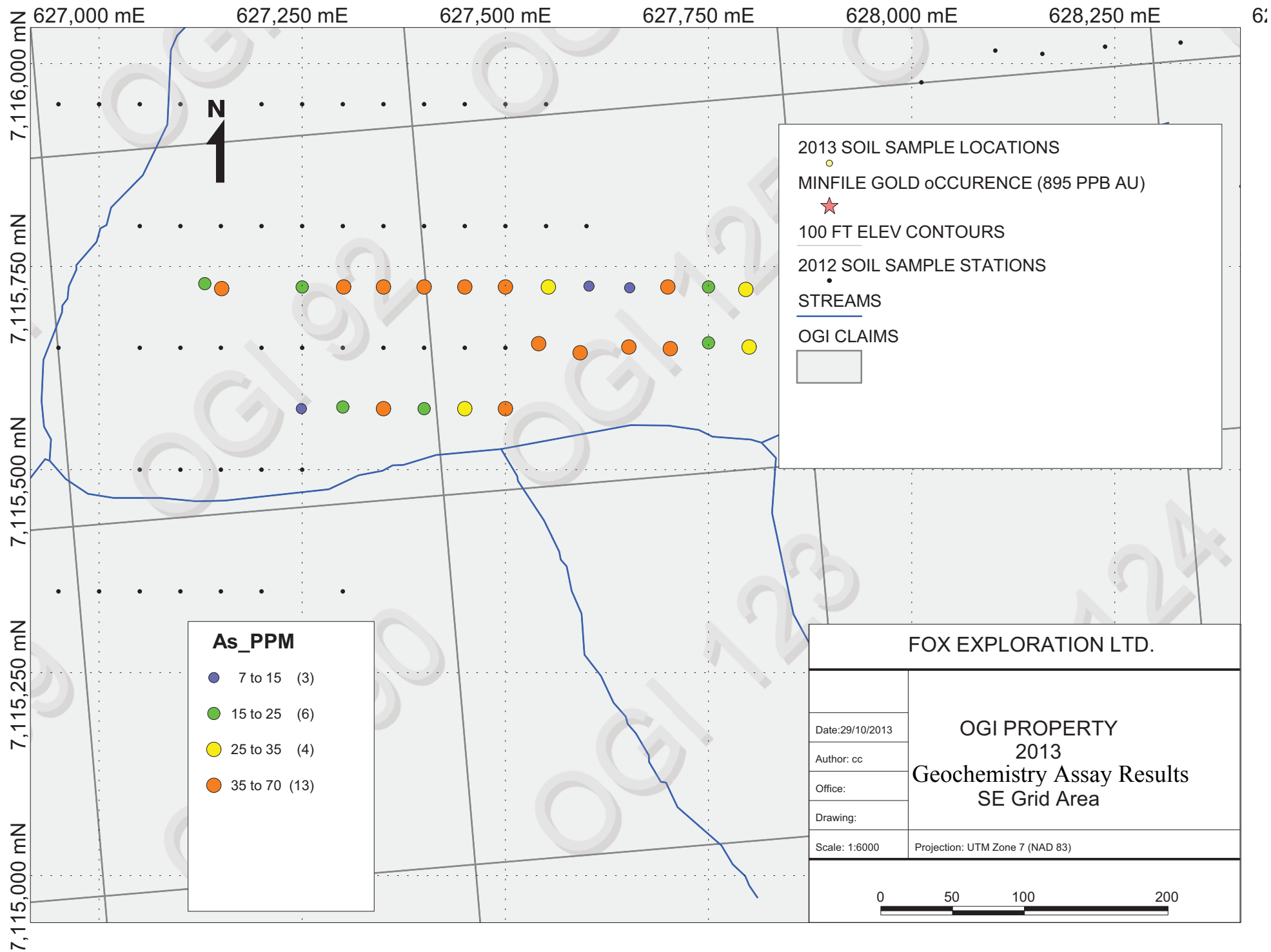


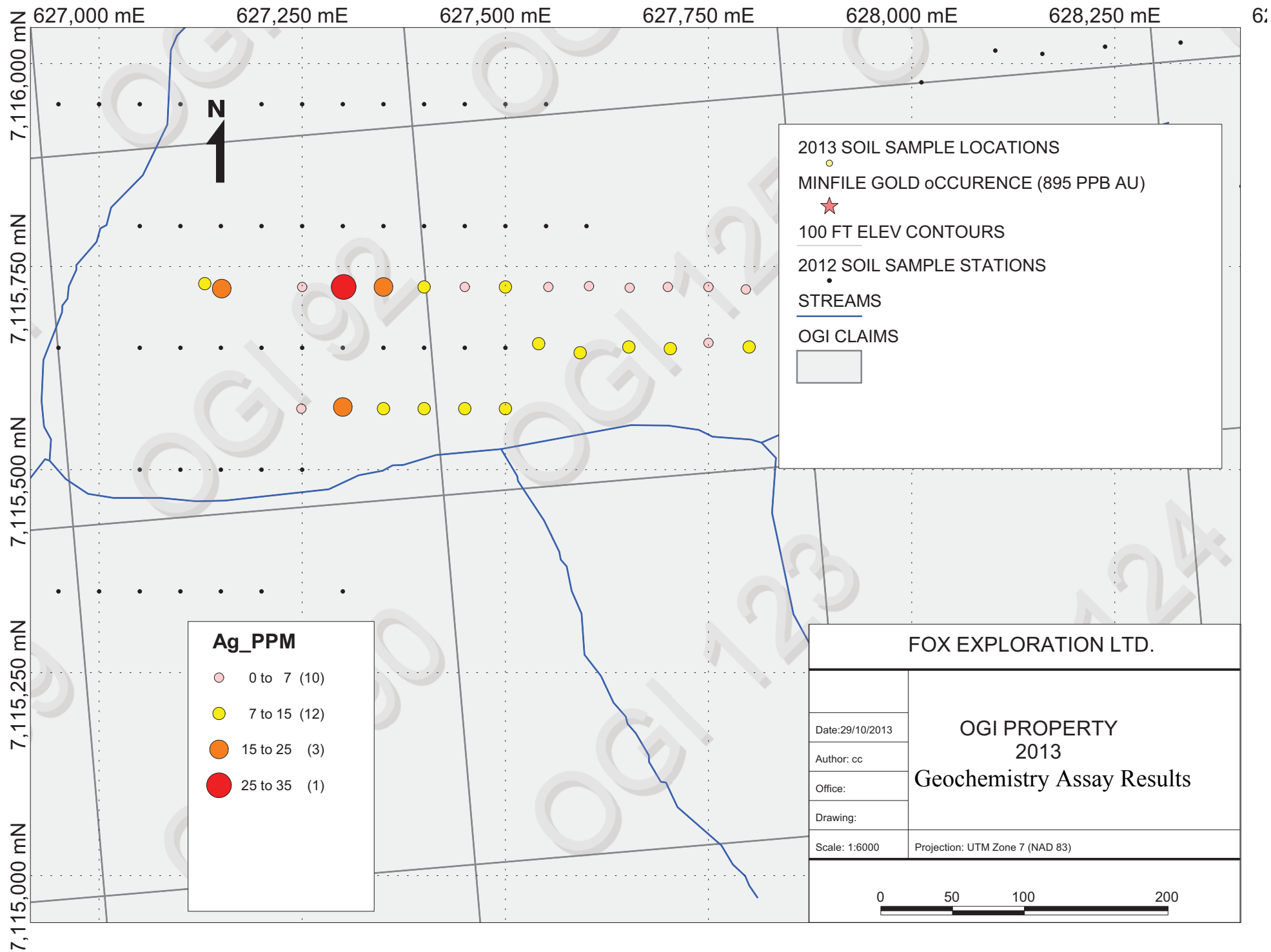












APPENDIX IV

Assay Certificates



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1701 ROBERT LANG DRIVE
COURTENAY BC V9N 1A2

Page: 1
Finalized Date: 25-SEP-2013
Account: COELVE

CERTIFICATE WH13170828

Project: OGI Project
P.O. No.:
This report is for 26 Soil samples submitted to our lab in Whitehorse, YT, Canada on 20-SEP-2013.

The following have access to data associated with this certificate:

CORWIN COE

RYAN COE

CORWIN COE

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND-02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

To: COELTON VENTURES LTD
ATTN: CORWIN COE
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COURTENAY BC V9N 1A2

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

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



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Page: 2 - A
 Total # Pages: 2 (A - C)
 Plus Appendix Pages
 Finalized Date: 25-SEP-2013
 Account: COELVE

Project: OGI Project

CERTIFICATE OF ANALYSIS WH13170828

Sample Description	Method Analyte Units LOR	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1
Q007796		0.4	2.22	9	<10	730	0.8	<2	0.08	0.9	17	37	71	4.40	10	<1
Q007797		15.6	1.04	24	10	930	1.0	<2	0.31	3.0	2	188	67	3.41	10	<1
Q007798		13.0	0.89	39	20	3060	2.2	<2	3.13	33.4	2	229	217	1.79	10	1
Q007799		8.4	1.19	18	<10	2270	1.3	<2	4.30	25.9	6	138	199	2.00	10	2
Q007800		9.0	0.73	33	10	1770	1.1	<2	2.93	17.6	3	151	197	1.73	<10	2
Q007784		4.9	1.50	29	<10	1820	1.1	<2	2.98	18.6	6	106	138	2.92	<10	2
Q007785		4.2	2.04	24	10	2690	1.4	<2	1.36	43.2	36	159	133	4.59	10	1
Q007786		4.7	1.72	38	10	3010	1.7	<2	0.57	19.5	13	122	167	3.85	<10	1
Q007787		0.4	1.11	11	<10	770	<0.5	<2	0.23	2.7	11	26	43	2.98	<10	<1
Q007788		0.5	1.08	7	<10	910	0.6	<2	0.61	0.8	20	18	78	3.97	<10	<1
Q007789		4.8	1.61	29	<10	1270	0.9	<2	0.62	18.2	11	97	128	3.26	10	1
Q007790		11.4	1.06	35	10	5300	1.8	<2	8.4	31.4	10	208	227	2.36	10	2
Q007791		6.6	1.73	56	10	3070	2.2	<2	0.95	36.8	6	237	201	2.45	10	1
Q007792		11.3	1.61	47	<10	2150	1.5	<2	0.38	29.1	7	275	134	3.00	10	1
Q007793		18.6	1.40	47	10	660	1.6	<2	3.87	54.8	20	202	394	4.00	10	3
Q007794		31.3	1.61	61	10	440	1.3	<2	0.31	3.0	1	311	98	3.07	10	1
Q007795		4.2	0.99	20	<10	1440	0.8	<2	0.21	3.8	5	148	62	1.96	10	<1
Q007851		9.4	1.10	39	10	2070	1.8	<2	1.91	27.0	4	201	200	2.09	10	1
Q007824		10.8	0.64	16	10	2570	1.5	<2	4.00	20.7	6	154	167	0.99	<10	2
Q007825		17.9	1.21	42	10	1540	1.8	<2	4.79	18.9	4	216	202	2.08	10	3
Q007826		12.7	1.03	37	10	2160	1.5	<2	4.40	47.0	5	212	217	2.43	10	2
Q007827		9.1	0.91	37	10	2590	1.5	<2	1.71	21.4	4	196	160	1.83	10	1
Q007828		8.1	1.02	61	10	2780	2.0	<2	3.58	43.0	<1	225	231	1.86	10	2
Q007829		8.6	0.89	57	10	3140	2.5	<2	1.39	22.2	3	228	209	2.16	10	1
Q007830		3.6	1.31	16	<10	4690	0.9	<2	1.78	68.6	15	84	101	2.82	<10	1
Q007831		9.5	1.36	31	<10	2690	1.6	<2	1.31	24.3	19	163	165	3.03	10	1

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To: COELTON VENTURES LTD
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Page: 2 - B
Total # Pages: 2 (A - C)
Plus Appendix Pages
Finalized Date: 25-SEP-2013
Account: COELVE

Project: OGI Project

CERTIFICATE OF ANALYSIS WH13170828

Sample Description	Method Analyte Units LOR	ME-ICP41 K %	ME-ICP41 La ppm	ME-ICP41 Mg %	ME-ICP41 Mn ppm	ME-ICP41 Mo ppm	ME-ICP41 Na %	ME-ICP41 Ni ppm	ME-ICP41 P ppm	ME-ICP41 Pb ppm	ME-ICP41 S %	ME-ICP41 Sb ppm	ME-ICP41 Sc ppm	ME-ICP41 Sr ppm	ME-ICP41 Th ppm	ME-ICP41 Ti %
		0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	20	0.01
Q007796		0.23	10	0.56	368	8	0.01	109	500	16	0.13	2	5	42	<20	0.04
Q007797		0.24	20	0.12	273	26	0.01	70	3150	20	0.38	10	3	96	<20	0.02
Q007798		0.13	30	0.34	252	41	<0.01	297	1840	10	0.14	23	4	333	<20	0.01
Q007799		0.08	30	0.44	270	26	0.01	215	3170	8	0.15	12	5	475	<20	0.02
Q007800		0.09	20	0.29	196	27	<0.01	218	2340	8	0.25	13	3	305	<20	0.01
Q007784		0.20	30	0.39	374	37	0.01	161	2430	14	0.18	13	7	352	<20	0.03
Q007785		0.13	40	0.33	2280	49	0.01	361	4160	12	0.12	11	8	229	<20	0.03
Q007786		0.15	40	0.25	1710	53	<0.01	200	2520	15	0.14	20	5	204	<20	0.02
Q007787		0.12	10	0.22	1615	7	<0.01	38	850	12	0.03	2	2	37	<20	0.03
Q007788		0.07	20	0.36	1370	5	<0.01	92	540	13	0.03	<2	7	39	<20	0.02
Q007789		0.11	20	0.35	850	24	0.01	132	1520	11	0.14	7	5	100	<20	0.03
Q007790		0.11	40	0.60	485	66	0.01	326	4480	11	0.13	24	4	764	<20	0.02
Q007791		0.10	40	0.34	491	63	<0.01	322	1470	12	0.08	31	7	172	<20	0.02
Q007792		0.09	20	0.22	297	65	<0.01	209	3130	14	0.09	33	3	80	<20	0.02
Q007793		0.13	30	0.39	959	56	0.01	472	4470	13	0.45	24	10	616	<20	0.01
Q007794		0.20	40	0.18	69	33	0.01	34	2330	22	0.54	7	4	226	<20	0.01
Q007795		0.12	20	0.13	500	36	<0.01	70	1490	16	0.12	16	2	110	<20	0.02
Q007851		0.12	20	0.30	218	23	<0.01	214	2070	10	0.10	19	4	211	<20	0.02
Q007824		0.07	20	0.26	436	15	0.01	275	1590	8	0.17	9	3	404	<20	0.01
Q007825		0.14	40	0.35	305	49	<0.01	330	3210	14	0.29	22	4	500	<20	0.01
Q007826		0.10	40	0.34	427	41	<0.01	260	3380	13	0.18	23	5	448	<20	0.01
Q007827		0.10	30	0.22	219	24	<0.01	159	1730	11	0.10	22	3	227	<20	0.01
Q007828		0.10	50	0.31	136	34	<0.01	237	2580	13	0.08	26	4	424	<20	0.01
Q007829		0.12	40	0.23	147	76	<0.01	306	2140	14	0.09	30	6	240	<20	0.02
Q007830		0.05	20	0.32	864	20	<0.01	192	1790	10	0.09	6	2	194	<20	0.03
Q007831		0.10	30	0.29	1445	39	<0.01	301	2590	11	0.09	15	4	205	<20	0.02

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Page: 2 - C
 Total # Pages: 2 (A - C)
 Plus Appendix Pages
 Finalized Date: 25-SEP-2013
 Account: COELVE

Project: OGI Project

CERTIFICATE OF ANALYSIS WH13170828

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Ti	U	V	W	Zn
		ppm 10	ppm 10	ppm 1	ppm 10	ppm 2
Q007796		<10	<10	65	<10	713
Q007797		<10	<10	668	<10	540
Q007798		<10	10	1750	<10	3340
Q007799		<10	10	678	<10	2270
Q007800		<10	20	913	<10	2140
Q007784		<10	<10	681	<10	1480
Q007785		<10	10	822	<10	5760
Q007786		<10	10	1090	<10	1060
Q007787		<10	<10	116	<10	329
Q007788		<10	<10	38	<10	221
Q007789		<10	<10	580	<10	1950
Q007790		10	10	1285	<10	3030
Q007791		10	10	2330	<10	2210
Q007792		10	10	1665	<10	1340
Q007793		<10	20	923	<10	3600
Q007794		<10	10	653	<10	208
Q007795		<10	<10	838	<10	679
Q007851		<10	10	1650	<10	2160
Q007824		<10	10	1065	<10	1950
Q007825		<10	10	1080	<10	3720
Q007826		<10	10	1180	<10	2530
Q007827		<10	10	1530	<10	1240
Q007828		<10	10	2550	<10	1710
Q007829		<10	10	2220	<10	2350
Q007830		<10	10	553	<10	4310
Q007831		<10	10	1095	<10	3590

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Page: 1
Finalized Date: 14-AUG-2013
Account: COELVE

CERTIFICATE WH13139656

Project: OGI Project
P.O. No.: Batch 2013-002
This report is for 20 Soil samples submitted to our lab in Whitehorse, YT, Canada on 1-AUG-2013.

The following have access to data associated with this certificate:

CORWIN COE

RYAN COE

CORWIN COE

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

To: COELTON VENTURES LTD
ATTN: CORWIN COE
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



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 Total # Pages: 2 (A - C)
 Plus Appendix Pages
 Finalized Date: 14-AUG-2013
 Account: COELVE

Project: OGI Project

CERTIFICATE OF ANALYSIS WH13139656

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	Au-ICP21 Au ppm	ME-ICP41 Ag ppm	ME-ICP41 Al %	ME-ICP41 As ppm	ME-ICP41 B ppm	ME-ICP41 Ba ppm	ME-ICP41 Be ppm	ME-ICP41 Bi ppm	ME-ICP41 Ca %	ME-ICP41 Cd ppm	ME-ICP41 Co ppm	ME-ICP41 Cr ppm	ME-ICP41 Cu ppm	ME-ICP41 Fe %
		0.02	0.001	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01
Q007870		0.60	0.002	<0.2	2.43	12	<10	420	0.8	<2	0.52	<0.5	22	22	28	9.39
Q007871		0.48	0.003	<0.2	3.59	3	<10	1930	1.4	<2	1.17	<0.5	32	16	19	7.04
Q007872		0.69	0.039	2.5	1.40	15	<10	550	0.6	<2	0.58	1.4	13	37	76	3.51
Q007873		0.55	0.026	<0.2	1.66	5	<10	220	<0.5	<2	0.21	<0.5	26	37	38	3.77
Q007874		0.50	0.005	<0.2	1.51	7	<10	290	<0.5	<2	0.10	<0.5	18	44	32	4.41
Q007875		0.56	0.004	0.4	1.69	6	<10	360	0.6	<2	0.32	<0.5	22	31	33	4.68
Q007876		0.52	0.006	0.3	2.21	6	<10	500	0.8	<2	0.12	0.9	25	51	41	4.67
Q007833		0.19	0.003	<0.2	1.57	9	<10	280	<0.5	<2	0.23	<0.5	10	21	12	3.76
Q007834		0.13	0.003	<0.2	1.38	4	<10	400	<0.5	<2	0.32	<0.5	7	16	8	3.29
Q007835		0.41	0.004	0.4	1.31	2	<10	280	0.5	<2	1.46	<0.5	7	30	37	1.79
Q007836		0.65	0.002	<0.2	1.78	6	<10	370	<0.5	<2	0.41	<0.5	15	20	11	3.66
Q007852		0.36	0.009	8.9	0.64	20	<10	7840	1.3	<2	4.15	26.0	4	151	144	1.37
Q007853		0.07	0.009	0.2	2.16	3	<10	470	0.8	<2	2.15	<0.5	32	52	41	4.75
Q007854		0.30	0.002	<0.2	2.32	5	<10	460	0.5	<2	0.50	0.5	36	51	33	6.04
Q007855		0.27	0.006	<0.2	2.18	8	<10	290	0.5	<2	0.23	<0.5	18	36	21	4.32
Q007856		0.26	0.002	<0.2	2.59	8	<10	500	0.5	<2	0.62	<0.5	23	52	28	4.13
Q007857		0.23	0.005	<0.2	2.99	7	<10	450	0.9	<2	1.50	<0.5	31	36	51	5.58
Q007858		0.20	0.002	<0.2	2.19	3	<10	220	0.6	<2	1.31	<0.5	28	35	40	5.88
Q007859		0.49	0.004	<0.2	2.01	4	<10	410	0.5	<2	2.21	<0.5	25	57	53	4.67
Q007860		0.62	0.005	<0.2	2.17	8	<10	710	0.9	<2	0.51	0.9	32	16	31	10.40

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



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 COURTENAY BC V9N 1A2

Page: 2 - B
 Total # Pages: 2 (A - C)
 Plus Appendix Pages
 Finalized Date: 14-AUG-2013
 Account: COELVE

Project: OGI Project

CERTIFICATE OF ANALYSIS WH13139656

Sample Description	Method Analyte Units LOR	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1	ME-ICP41 Sr ppm 1
Q007870		10	<1	0.06	50	0.55	1555	6	0.01	27	1400	11	0.06	<2	6	50
Q007871		10	<1	0.07	100	1.53	2500	5	<0.01	13	1080	10	0.07	<2	8	36
Q007872		<10	1	0.14	20	0.49	269	8	0.01	48	1300	14	0.23	4	6	51
Q007873		10	<1	0.05	10	0.62	756	1	<0.01	40	690	10	0.02	<2	4	19
Q007874		10	<1	0.06	10	0.36	994	2	<0.01	19	1100	11	0.05	<2	3	14
Q007875		<10	<1	0.09	20	0.44	686	1	<0.01	37	670	14	0.03	<2	5	21
Q007876		10	<1	0.07	20	0.50	923	3	0.01	29	890	13	0.08	<2	4	25
Q007833		10	<1	0.05	10	0.33	625	3	0.01	14	600	7	0.04	<2	2	16
Q007834		10	<1	0.03	10	0.19	475	2	0.01	8	630	8	0.04	<2	2	22
Q007835		<10	<1	0.03	10	0.26	90	1	0.01	18	1040	5	0.11	<2	5	39
Q007836		10	<1	0.05	20	0.34	960	2	0.01	13	1070	8	0.03	<2	2	24
Q007852		10	1	0.06	30	0.48	315	14	<0.01	159	2600	8	0.12	13	2	429
Q007853		10	<1	0.03	10	0.83	1390	2	0.01	32	810	5	0.09	<2	5	42
Q007854		10	<1	0.03	10	0.93	1800	2	0.01	27	770	7	0.03	<2	6	20
Q007855		10	<1	0.04	10	0.73	775	1	0.01	24	500	7	0.02	<2	4	12
Q007856		10	<1	0.04	10	0.68	1255	1	0.01	45	400	8	0.02	<2	5	25
Q007857		10	<1	0.03	20	0.99	2460	1	0.01	43	670	8	0.06	<2	9	32
Q007858		10	<1	0.03	10	0.63	1085	2	0.01	26	790	6	0.07	<2	6	35
Q007859		10	<1	0.04	20	0.88	1770	2	0.01	49	600	5	0.07	<2	6	49
Q007860		<10	<1	0.08	50	0.35	3550	8	0.03	41	2600	12	0.21	<2	5	108

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Page: 2 - C
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 Plus Appendix Pages
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 Account: COELVE

Project: OGI Project

CERTIFICATE OF ANALYSIS WH13139656

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Th	Ti	Ti	U	V	W
		ppm 20	% 0.01	ppm 10	ppm 10	ppm 1	ppm 10
Q007870		<20	0.11	<10	<10	48	<10
Q007871		<20	0.27	<10	<10	64	<10
Q007872		<20	0.03	<10	<10	127	<10
Q007873		<20	0.08	<10	<10	67	<10
Q007874		<20	0.11	<10	<10	117	<10
Q007875		<20	0.03	<10	<10	51	<10
Q007876		<20	0.02	<10	<10	109	<10
Q007833		<20	0.08	<10	<10	58	<10
Q007834		<20	0.09	<10	<10	71	<10
Q007835		<20	0.08	<10	<10	38	<10
Q007836		<20	0.10	<10	<10	49	<10
Q007852		<20	0.01	<10	10	1080	<10
Q007853		<20	0.22	<10	<10	129	<10
Q007854		<20	0.31	<10	<10	170	<10
Q007855		<20	0.22	<10	<10	112	<10
Q007856		<20	0.17	<10	<10	110	<10
Q007857		<20	0.31	<10	<10	139	<10
Q007858		<20	0.33	<10	<10	154	<10
Q007859		<20	0.15	<10	<10	95	<10
Q007860		<20	0.17	<10	<10	44	<10

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Page: 1
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Account: COELVE

CERTIFICATE WH13139655

Project: OGI Project
P.O. No.: Batch 2013-002
This report is for 12 Rock samples submitted to our lab in Whitehorse, YT, Canada on 1-AUG-2013.

The following have access to data associated with this certificate:

CORWIN COE

RYAN COE

CORWIN COE

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

To: COELTON VENTURES LTD
ATTN: CORWIN COE
1701 ROBERT LANG DRIVE
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



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Page: 2 - A
 Total # Pages: 2 (A - C)
 Plus Appendix Pages
 Finalized Date: 14-AUG-2013
 Account: COELVE

Project: OGI Project

CERTIFICATE OF ANALYSIS WH13139655

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01
Q007861		0.25	0.006	2.0	0.14	12	<10	800	<0.5	<2	0.03	<0.5	1	30	17	1.05
Q007862		0.24	0.009	2.9	0.11	16	<10	690	<0.5	<2	0.26	2.2	1	42	46	0.78
Q007863		0.24	0.003	<0.2	2.36	12	<10	490	0.6	<2	5.06	<0.5	15	15	14	4.37
Q007864		0.36	0.004	<0.2	2.51	5	<10	960	0.5	<2	6.59	<0.5	29	64	90	4.37
Q007865		0.22	0.002	<0.2	3.11	5	<10	710	0.8	<2	2.43	<0.5	17	12	15	5.34
Q007866		0.33	0.002	<0.2	2.51	4	<10	370	0.6	<2	7.7	<0.5	26	27	58	4.64
Q007867		0.44	0.003	<0.2	1.67	13	<10	1660	<0.5	<2	4.71	<0.5	11	13	10	2.85
Q007868		0.33	0.002	<0.2	3.93	4	<10	1300	0.7	<2	2.82	<0.5	44	134	71	7.52
Q007869		0.04	0.003	<0.2	3.32	2	10	130	0.8	2	5.60	<0.5	50	35	74	7.90
Q007838		0.98	0.009	0.4	0.19	<2	<10	4400	<0.5	<2	>25.0	1.5	1	15	8	0.31
Q007839		0.38	0.002	<0.2	3.44	4	10	250	<0.5	<2	1.54	<0.5	35	57	74	5.67
Q007823		0.66	0.003	<0.2	0.19	4	<10	310	<0.5	<2	0.09	<0.5	1	18	20	1.18

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Page: 2 - B
 Total # Pages: 2 (A - C)
 Plus Appendix Pages
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 Account: COELVE

Project: OGI Project

CERTIFICATE OF ANALYSIS WH13139655

Sample Description	Method Analyte Units LOR	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1	ME-ICP41 Sr ppm 1
Q007861		<10	<1	0.08	<10	0.02	85	3	0.01	9	340	12	0.15	4	1	24
Q007862		<10	1	0.04	<10	0.01	63	5	<0.01	22	940	31	0.26	4	1	84
Q007863		10	1	0.14	50	1.71	1050	1	0.04	9	3810	8	0.05	<2	4	140
Q007864		10	1	0.11	20	2.40	827	1	0.13	94	1690	6	0.15	<2	8	147
Q007865		20	1	0.08	50	3.86	705	<1	0.04	11	3850	7	0.02	2	5	66
Q007866		10	<1	0.05	20	3.09	501	1	0.03	33	1920	6	0.13	2	12	146
Q007867		10	1	0.20	40	0.93	929	1	0.06	7	3440	5	0.06	2	4	104
Q007868		20	<1	0.07	20	4.35	845	1	0.04	87	1860	3	0.24	<2	17	60
Q007869		10	<1	0.27	20	2.87	801	1	0.18	60	2240	7	2.23	2	13	162
Q007838		<10	3	0.01	<10	3.56	223	5	0.02	21	470	2	0.09	3	1	2320
Q007839		10	1	0.12	20	3.91	651	1	0.10	110	1540	3	0.07	2	5	81
Q007823		<10	<1	0.02	<10	0.05	77	1	<0.01	8	50	7	<0.01	<2	1	9

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Page: 2 - C
 Total # Pages: 2 (A - C)
 Plus Appendix Pages
 Finalized Date: 14-AUG-2013
 Account: COELVE

Project: OGI Project

CERTIFICATE OF ANALYSIS WH13139655

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Th	Ti	TI	U	V	W	Zn
		ppm 20	% 0.01	ppm 10	ppm 10	ppm 1	ppm 10	ppm 2
Q007861		<20	<0.01	<10	<10	39	<10	63
Q007862		<20	<0.01	<10	<10	105	<10	161
Q007863		<20	0.42	<10	<10	115	<10	114
Q007864		<20	0.76	<10	<10	161	<10	71
Q007865		<20	0.73	<10	<10	140	<10	103
Q007866		<20	0.86	<10	<10	201	<10	82
Q007867		<20	0.36	<10	<10	90	<10	80
Q007868		<20	0.97	<10	<10	278	<10	94
Q007869		<20	1.18	<10	<10	239	<10	104
Q007838		<20	0.04	<10	<10	271	<10	132
Q007839		<20	0.44	<10	<10	136	<10	63
Q007823		<20	0.01	<10	<10	7	<10	24

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Page: 1
Finalized Date: 14-AUG-2013
Account: COELVE

CERTIFICATE WH13138746

Project: OGI Project

P.O. No.:

This report is for 81 Soil samples submitted to our lab in Whitehorse, YT, Canada on 1-AUG-2013.

The following have access to data associated with this certificate:

CORWIN COE

RYAN COE

CORWIN COE

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

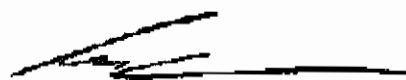
ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

To: COELTON VENTURES LTD
ATTN: RYAN COE
1701 ROBERT LANG DRIVE
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

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

Signature:


Colin Ramshaw, Vancouver Laboratory Manager



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Page: 2 - A
 Total # Pages: 4 (A)
 Plus Appendix Pages
 Finalized Date: 14-AUG-2013
 Account: COELVE

Project: OGI Project

CERTIFICATE OF ANALYSIS WH13138746

Sample Description	Method Analyte Units LOR	WEI-21	Au-ICP21
		Recvd Wt. kg 0.02	Au ppm 0.001
Q007796		0.31	0.010
Q007797		0.50	0.003
Q007798		0.55	0.013
Q007799		0.48	0.016
Q007800		0.39	0.019
Q007770		0.32	0.004
Q007771		0.34	0.003
Q007772		0.31	0.009
Q007773		0.44	0.010
Q007774		0.36	0.003
Q007751		0.42	0.016
Q007752		0.36	0.019
Q007753		0.34	0.003
Q007754		0.34	0.015
Q007755		0.53	0.010
Q007756		0.38	0.004
Q007757		0.38	0.004
Q007758		0.41	0.003
Q007759		0.48	0.003
Q007760		0.39	0.005
Q007781		0.45	0.002
Q007782		0.43	0.004
Q007783		0.52	0.009
Q007784		0.42	0.010
Q007785		0.53	0.015
Q007786		0.63	0.010
Q007787		0.38	0.005
Q007788		0.51	0.027
Q007789		0.45	0.011
Q007790		0.38	0.015
Q007791		0.49	0.010
Q007792		0.35	0.005
Q007793		0.43	0.025
Q007794		0.43	0.013
Q007795		0.45	0.002
Q007766		0.40	0.005
Q007767		0.31	0.002
Q007768		0.34	0.004
Q007769		0.36	0.008
Q007775		0.38	0.004

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Page: 3 - A
 Total # Pages: 4 (A)
 Plus Appendix Pages
 Finalized Date: 14-AUG-2013
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CERTIFICATE OF ANALYSIS WH13138746

Sample Description	Method Analyte Units LOR	WEI-21	Au-ICP21
		Recvd Wt. kg 0.02	Au ppm 0.001
Q007776		0.56	0.003
Q007777		0.45	0.012
Q007778		0.40	0.004
Q007779		0.43	0.002
Q007780		0.43	0.015
Q007851		0.47	0.010
Q007815		0.48	0.004
Q007816		0.55	0.005
Q007817		0.61	0.023
Q007818		0.48	0.008
Q007819		0.32	0.004
Q007820		0.43	0.007
Q007821		0.47	0.008
Q007822		0.42	0.026
Q007824		0.39	0.013
Q007825		0.35	0.017
Q007826		0.36	0.016
Q007827		0.43	0.008
Q007828		0.39	0.013
Q007829		0.45	0.008
Q007830		0.38	0.006
Q007831		0.38	0.010
Q007809		0.41	0.003
Q007810		0.54	0.010
Q007811		0.46	0.011
Q007812		0.64	0.014
Q007813		0.57	0.009
Q007814		0.59	0.006
Q007801		0.51	0.034
Q007802		0.61	0.009
Q007803		0.42	0.010
Q007804		0.39	0.013
Q007805		0.57	0.019
Q007806		0.40	0.008
Q007807		0.48	0.012
Q007808		0.44	0.007
Q007761		0.36	0.004
Q007762		0.38	0.006
Q007763		0.26	0.002
Q007764		0.39	0.005

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Plus Appendix Pages
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CERTIFICATE OF ANALYSIS WH13138746

Sample Description	Method Analyte Units LOR	WEI-21	Au-ICP21
		Recvd Wt.	Au
		kg	ppm
Q007765		0.02	0.001
		0.37	0.005

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

APPENDIX V

Petrographic Report 2013



Vancouver Petrographics Ltd.

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Report 130646

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Petrographic Report on Four Samples from OGI Property, Yukon, Canada

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Table of Contents

1. Introduction.....	3
2. Results.....	3
3. Reference list.....	6
4. Petrographic Descriptions.....	7
Sample 1: 7840.....	7
Sample 2: 7841.....	10
Sample 3: 7842.....	15
Sample 4: 7843.....	18

1. Introduction

Mr. Cor Coe submitted four rock samples to Vancouver Petrographics for petrographic analysis. Together with the samples, the client provided the sampling location for each sample and the results of the geochemical analysis (multielemental ICP) of three of the four samples.

Samples 1 and 2 were collected about 100 m apart. Sample 3 was collected about 200 m south of Sample 1, and Sample 4 from the southernmost outcrop—about 200 m south-southwest of Sample 3. All the samples were collected from an area that the Yukon Geological Survey attributes to the Road River Group. This Group was deposited from the Late Ordovician through Early Devonian and is made up of black siliceous mudstone, chert, siltstone, and limestone (Cecile and Norford 1991).

The objective of the petrographic analysis is to determine the mineralogic composition of the samples, petrographically classify the rock types, describe the geometrical arrangement of the minerals, and recognize the alteration assemblages.

The attached “Petrographic Descriptions” section provides the following for each sample: the petrographic rock classification; a brief microstructural description; a table with the modal percentage and average grain size for each mineral; and a detailed description of the minerals in decreasing order of abundance.

Samples 1–4 (see Table 1) were cut and prepared as ~20 × 40 mm polished thin sections (see the image on the first page of each description).

2. Results

The four samples are medium- to fine-grained hypabyssal rock with abundant plagioclase and no quartz. The modal compositions of the magmatic minerals and the alteration minerals are schematically summarized in Figures 1 and 2 respectively.

The petrographic classification follows the recommendations of Gillespie and Styles (1999) and Gillespie et al. (2011). I classified the four samples as **microgabbroic** rock for several reasons: fine- to medium-sized grains are abundant; the microstructure is porphyritic (in Sample 4); I assume that the calcite-rich pseudomorphs replaced magmatic phenocrysts (in Samples 1–3); plagioclase is abundant (Samples 3 and 4); and I interpret the fine-grained prismatic crystals as representing completely altered plagioclase.

Petrographic analysis distinguished two different magmatic suites. The first suite (Samples 1–3) is made up of sub-rounded to amoeboid pseudomorphs immersed within a fine-grained groundmass. The pseudomorphs are made up of calcite and probably replaced magmatic phenocrysts. Within the pseudomorphs, the calcite is associated with lesser amounts of chlorite, epidote, and pyrite. The calcite-rich pseudomorphs are associated with subordinate fine- to very fine-grained aggregates of clay, chlorite, calcite, and epidote, all of which partially to completely replaced the fine-grained plagioclase within the groundmass. The magmatic

origin of Sample 1 arises out of the observation of rare subhedral pseudomorphs that are completely replaced by calcite-chlorite-epidote-pyrite. I interpret these pseudomorphs as the replacement of magmatic phenocrysts. Sample 2 shows rare subhedral phenocrysts of augite. Within the strongly to intensely altered groundmass of this sample, it is still possible to distinguish the outline of randomly oriented elongate prisms that I interpret as magmatic plagioclase. Within Sample 3, the randomly oriented plagioclase prisms are weakly altered by potassium-bearing clay, calcite, and probable epidote. The differences among these three samples can be attributed to the effect of different intensity of alteration. The presence of olivine relicts in Sample 2 and the presence of chlorite in Samples 1 and 2, which I interpret as replacing primary olivine, suggest that this suite included augite and olivine(?) as a primary minerals.

Sample 4 is set apart by its coarser grain size, its weaker alteration, and by the higher percentage of primary minerals, namely plagioclase, olivine, and augite. The plagioclase is moderately altered by clay and white mica, and the olivine is partially to completely replaced by chlorite. Accessory amounts of iron oxides, which partially to completely replaced pyrrhotite, complete the alteration assemblage.

Table 1: List of samples with their magnetic susceptibility and petrographic classification.¹

Sample No.	Sample ID	Magnetic Susceptibility ($\cdot 10^{-3}$)	Rock Type	Alteration
1	7840	0.148	Microgabbroic-rock	strong/intense: clay-chlorite-calcite-epidote-pyrite-pyrrhotite-chalcopyrite
2	7841	0.114	Augite?-bearing microgabbroic-rock	strong: calcite-chlorite-pyrite-pyrrhotite-chalcopyrite
3	7842	0.066	Microgabbroic-rock	moderate: calcite-clay-epidote(?) -pyrite-white mica
4	7843	0.219	Augite microgabbro	moderate: white mica/clay-iron oxide-chlorite-calcite

The magnetic susceptibility (see Table 1) was measured with a hand-held KT Magnetic Susceptibility Meter, and is intended to provide only an approximate estimate of the relative content of magnetic minerals within the sample.

¹ Rock classification after Gillespie et al. 2011, Gillespie and Styles 1999.

Figure 1: The modal composition of the magmatic minerals within the analyzed samples.

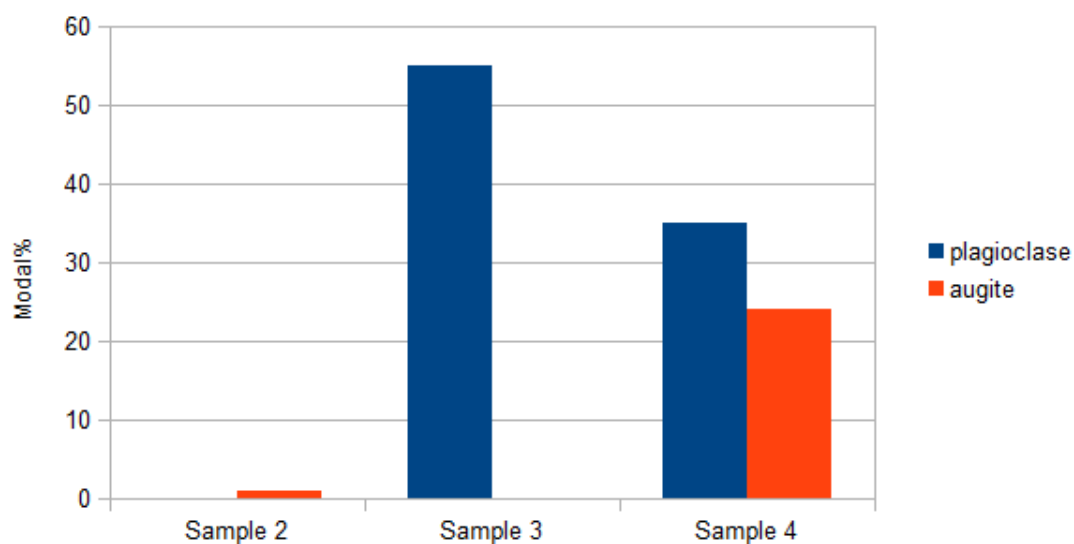
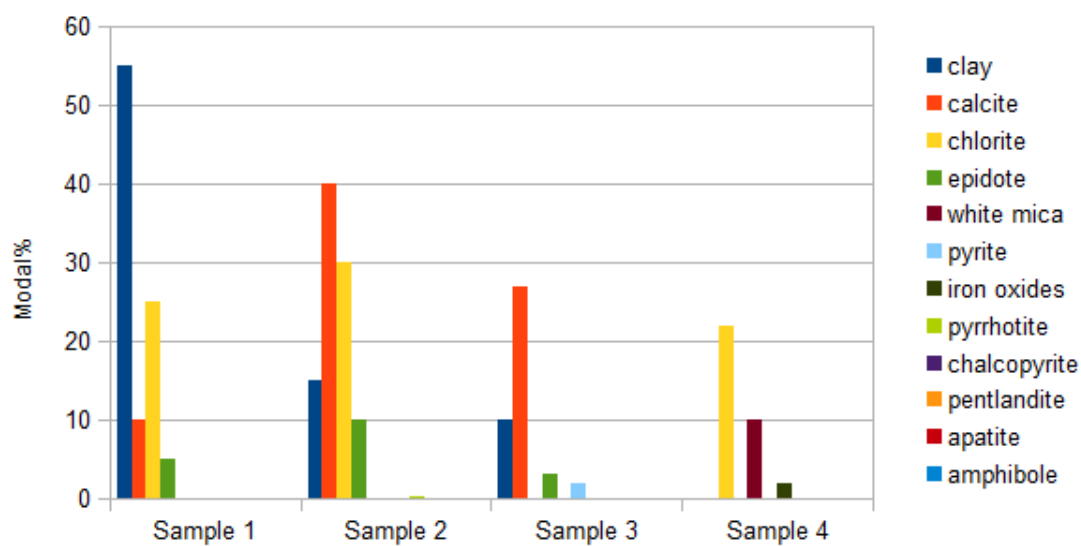


Figure 2: The modal composition of the alteration minerals within the analyzed samples.



3. Reference list

- Cecile, M.P. and Norford, B.S., 1991, Ordovician and Silurian assemblages, in Cambrian to Middle Devonian Assemblages, Chapter 7, in Geology of the Cordilleran Orogen in Canada, H. Gabrielse and C.J. Yorath (ed.), Geological Survey of Canada, Geology of Canada series, no. 4, p. 184–196
- Delvigne, J.E., 1998, Atlas of Micromorphology of Mineral Alteration and Weathering: The Canadian Mineralogist Special Publication No. 3. Mineralogical Association of Canada, 494 p.
- Gillespie, M.R., Barnes, R.P., and Milodowski, A., 2011, British Geological Survey Scheme for Classifying Discontinuities and Fillings: British Geological Survey Research Report, RR/10–05, 56 p.
- Gillespie, M.R., and Styles, M.T, 1999, British Geological Survey Rock Classification Scheme Volume 2 Classification of igneous rocks: British Geological Survey Research Report (2nd edition), RR/99–06, 52 p.
- Passchier, C.W., and Trouw, R.A.J., 1998, Microtectonics: Springer, 289 p.
- Ramdohr, P., 1980, The Ore Minerals and Their Intergrowths, 2nd edition, Vol. 1 and 2: Pergamon Press, 1207 p.
- Tröger, W.E., 1979, Optical Determination of Rock-Forming Minerals. Part 1, Determinative Tables: E. Schweizerbart'sche Verlagsbuchhandlung (Nägele u. Obermiller), 188 p.
- Vernon, R.H., 2004, A Practical Guide to Rock Microstructure: Cambridge University Press, 594 p.
- Yukon Geological Survey – Map Maker Online
<http://mapservices.gov.yk.ca/YGS/WebMap.aspx>

Signed by

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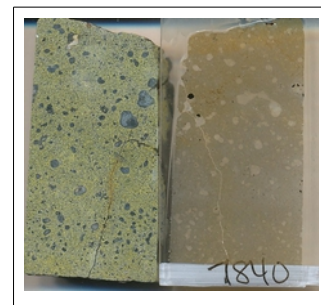
Web: www.petrographically.com

4. Petrographic Descriptions

Sample 1: 7840

Microgabbroic-rock

Alteration: strong/intense–clay-chlorite-calcite-epidote-pyrite-pyrrhotite-chalcopyrite



This sample consists of sub-rounded to amoeboid pseudomorphs (up to 1 mm) of chlorite and calcite-clay-chlorite, all of which completely replaced possible phenocrysts and are immersed within a strongly altered groundmass. The groundmass is made up of fine-grained and randomly oriented prisms of strongly altered feldspar, and a xenoblastic aggregate of clay, chlorite, and epidote.

Mineral	Modal %	Main Size Range (mm)
clay(?)	55 – 58	cryptocrystalline
chlorite	25 – 27	up to 0.1
calcite	10 – 11	up to 0.1
epidote (?)	5 – 6	up to 0.05
pyrite	0.1	up to 1
pyrrhotite	tr	up to 0.1
chalcopyrite	tr	up to 0.08

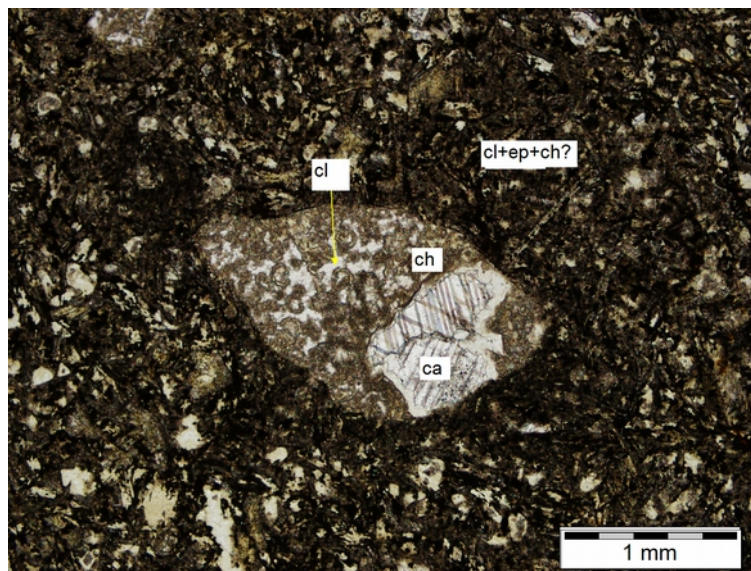
A cryptocrystalline unresolved aggregate completely replaced subhedral and elongated prisms of feldspar (plagioclase?), and is dispersed within the strongly altered a groundmass in association with chlorite and probable epidote. Because of its mineral association and type of replacement, I tentatively interpret the cryptocrystalline aggregate as a mixture of clay and probable epidote. I highly recommend spectroscopic analysis to confirm the presence of clay.

Mg-chlorite forms fine-grained aggregates that completely replaced sub-tabular crystals and are finely intergrown with the clay and the epidote within the groundmass. Within the pseudomorphs replacing the magmatic phenocrysts, the chlorite is associated with the calcite and subordinate serpentine. The chlorite shows a negative elongation, indicating its magnesium-rich composition.

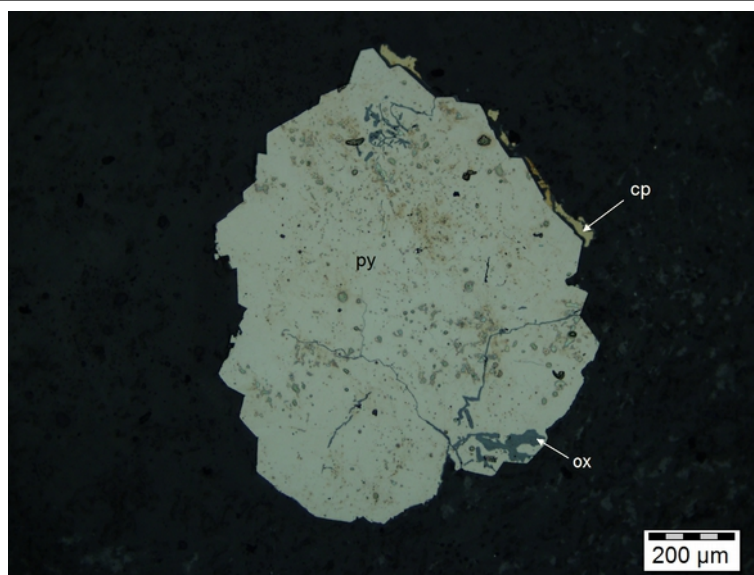
Pyrite occurs as fine-grained subhedral crystals heterogeneously dispersed as irregular

crystal clusters within the groundmass. In some cases, coarser (up to 1 mm) crystals occur within the calcite-rich pseudomorphs. These pyrite crystals are rimmed by subordinate and fine-grained **chalcopyrite** (see Photomicrograph 1b). The pyrite is subtly altered by **iron oxides**.

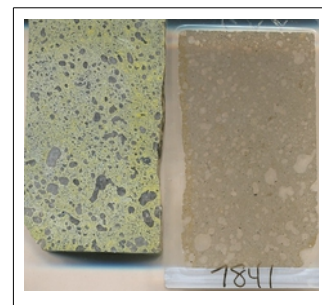
Pyrrhotite forms anhedral to poikilitic crystals of up to 0.1 mm heterogeneously dispersed within the groundmass.



Photomicrograph 1a: Sub-rounded pseudomorphs of clay (cl), chlorite (ch), and calcite (ca) replaced possible ferromagnesian phenocrysts and are immersed within a fine-grained aggregate of clay, possible epidote, and chlorite (cl+ep+ch?). Plane-polarized transmitted light.



Photomicrograph 1b: Subhedral pyrite (py) crystallized within calcite-rich pseudomorphs and is rimmed by fine-grained chalcopyrite (cp). The pyrite is subtly replaced by cryptocrystalline iron oxides. Plane-polarized reflected light.

Sample 2: 7841**Augite-bearing microgabbroic-rock****Alteration: strong–calcite-chlorite-pyrite-pyrrhotite-chalcopyrite**

Sub-rounded to amoeboid pseudomorphs (up to 3 mm) of calcite and rare augite are immersed within a fine-grained groundmass. The groundmass is made up of fine-grained and randomly oriented elongated prisms (feldspar?) completely replaced by clay, calcite, chlorite, and probably epidote.

Mineral	Modal %	Main Size Range (mm)
calcite	40 – 44	up to 0.5
chlorite	30 – 32	up to 0.1
clay(?)	15 – 18	cryptocrystalline
epidote(?)	10 – 12	up to 0.05
augite?	1 – 2	up to 1.2
pyrrhotite	0.2 – 0.3	up to 0.1
pyrite	tr	up to 0.1
pentlandite	tr	up to 0.02

Calcite forms monomineralic pseudomorphs as medium-grained polygonal to interlobate aggregate crystals. The sub-rounded to amoeboid shape of the aggregates suggests that some of them may have completely replaced magmatic phenocrysts. Because of the presence of anhedral to subhedral relicts of olivine, I tentatively interpret the calcite pseudomorphs as replacement after pyroxene. Calcite is also abundant within the groundmass, where, in association with chlorite, epidote, and probable **clay**, it completely replaced the elongated prisms of possible feldspar.

Chlorite occurs as fine-grained replacement aggregates in association with calcite. In some cases, the chlorite forms radial aggregates indicating its crystallization is coeval with the calcite. Very fine- to fine-grained chlorite is intergrown with calcite, probable epidote, and clay as a complete replacement of the elongated prisms of feldspar.

Epidote forms fine-grained crystals that preferentially replaced the prismatic crystals of probable feldspar. Epidote was distinguished by its high relief and very high birefringence. I suspect the presence of cryptocrystalline epidote within the earthy and unresolved aggregate

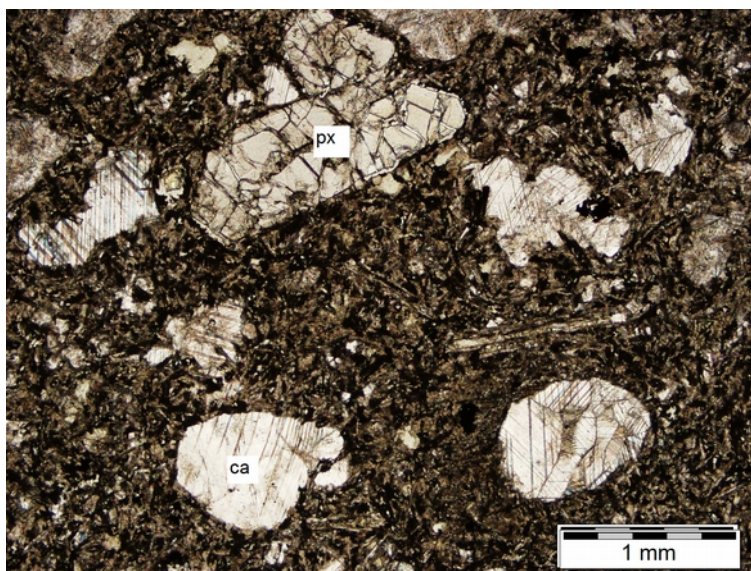
that replaced the interstices within the groundmass.

Augite(?) forms rare anhedral, skeletal, and in one case, subhedral relicts of up to 1.2 mm. These are fractured, weakly to strongly altered by calcite and probable **chlorite**, and are characterized by high relief, the absence of a good cleavage, and very high birefringence (third-order red).

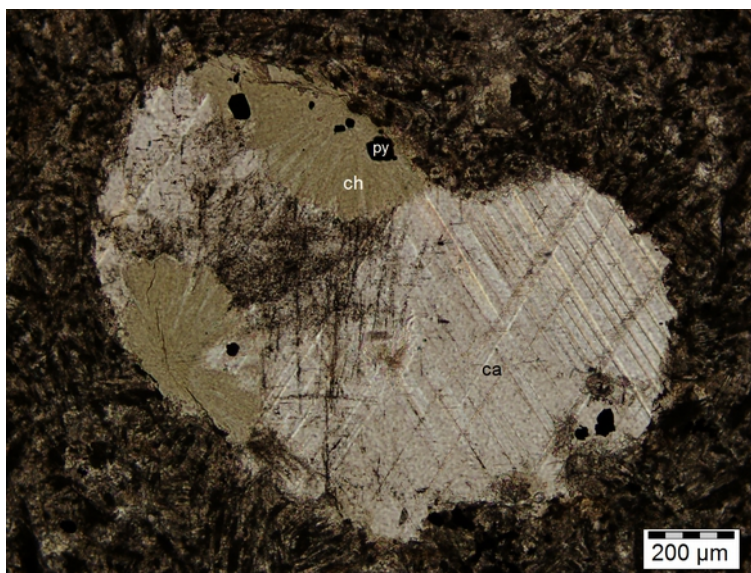
Pyrrhotite is heterogeneously dispersed within the fine-grained groundmass as anhedral to skeletal crystals of up to 0.1 mm (Photomicrographs 2c, 2d and 2f).

Pyrite is subordinate to the pyrrhotite. Pyrite crystals are preferentially crystallized within the calcite-chlorite replacement patches and pseudomorphs and occur as fine-grained (up to 0.1 mm) subhedral crystals (Photomicrographs 2d, 2e and 2f).

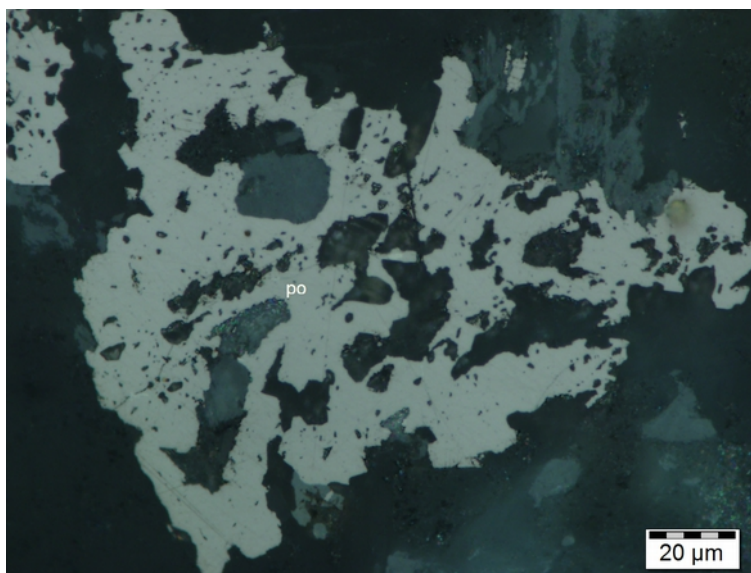
Very rare fine-grained **pentlandite** occurs as flame exsolutions within some of the pyrrhotite crystals.



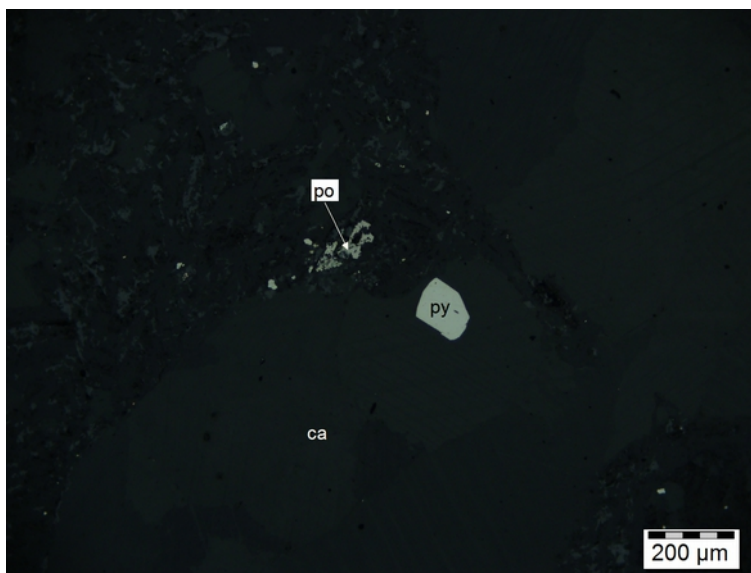
Photomicrograph 2a: Sub-rounded pseudomorphs of calcite (ca) and subhedral phenocrysts of augite? (px) are immersed within a strongly altered groundmass. Plane-polarized transmitted light.



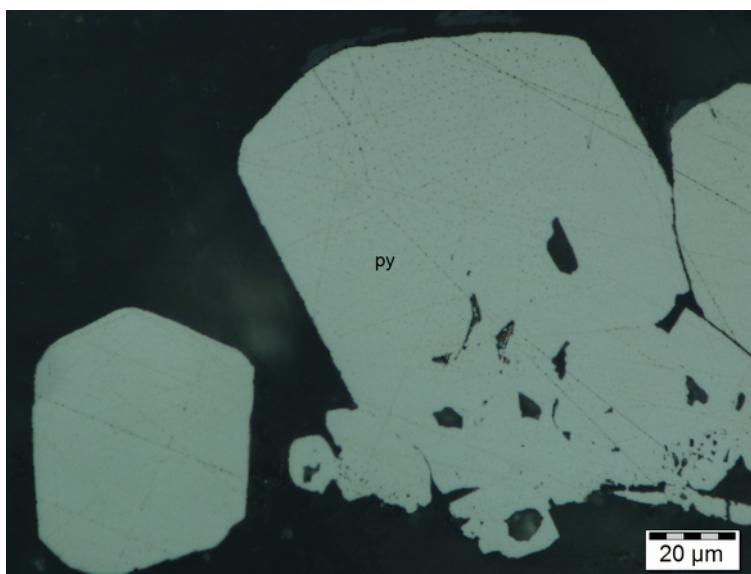
Photomicrograph 2b: In some cases within the sub-rounded to amoeboid pseudomorphs, the calcite (ca) is associated with subordinate chlorite (ch) and pyrite (py). Plane-polarized transmitted light.



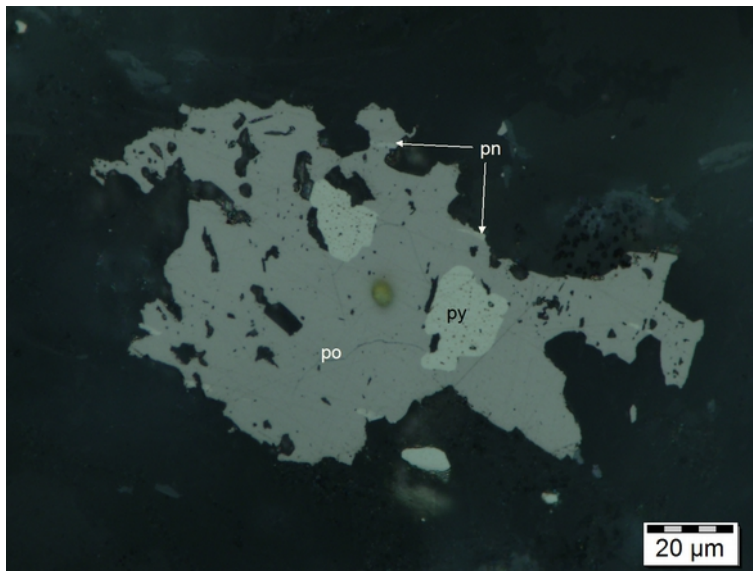
Photomicrograph 2c: Pyrrhotite (po) shows anhedral and poikilitic habits and is preferentially dispersed within the strongly altered groundmass. Plane-polarized reflected light.



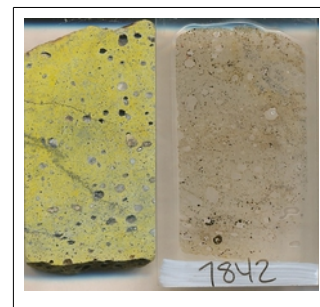
Photomicrograph 2d: Anhedral pyrrhotite (po) is preferentially dispersed within the strongly altered groundmass. Subhedral pyrite (py) is preferentially crystallized within the calcite-rich pseudomorphs (ca). Plane-polarized reflected light.



Photomicrograph 2e: Subhedral pyrite (py) probably replaced poikilitic crystals of pyrrhotite, as suggested by the lower part of the crystal on the central right part of the photomicrograph. Plane-polarized reflected light.



Photomicrograph 2f: Anhedra and poikilitic pyrrhotite (po) is overgrown by blocky crystals of pyrite (py). Very fine-grained exsolutions of pentlandite (pn) are rare within the pyrrhotite. Plane-polarized reflected light.

Sample 3: 7842**Microgabbroic-rock****Alteration: moderate—calcite-clay-epidote(?)—pyrite-white mica**

Sub-rounded to amoeboid pseudomorphs are made up of medium-grained calcite and, in some cases, pyrite. The pseudomorphs are immersed within a groundmass made up of elongate prisms of plagioclase and interstitial aggregates of clay, calcite, and epidote. The pyrite preferentially crystallized within and along the edges of the calcite-rich pseudomorphs and is heterogeneously dispersed within the moderately altered groundmass.

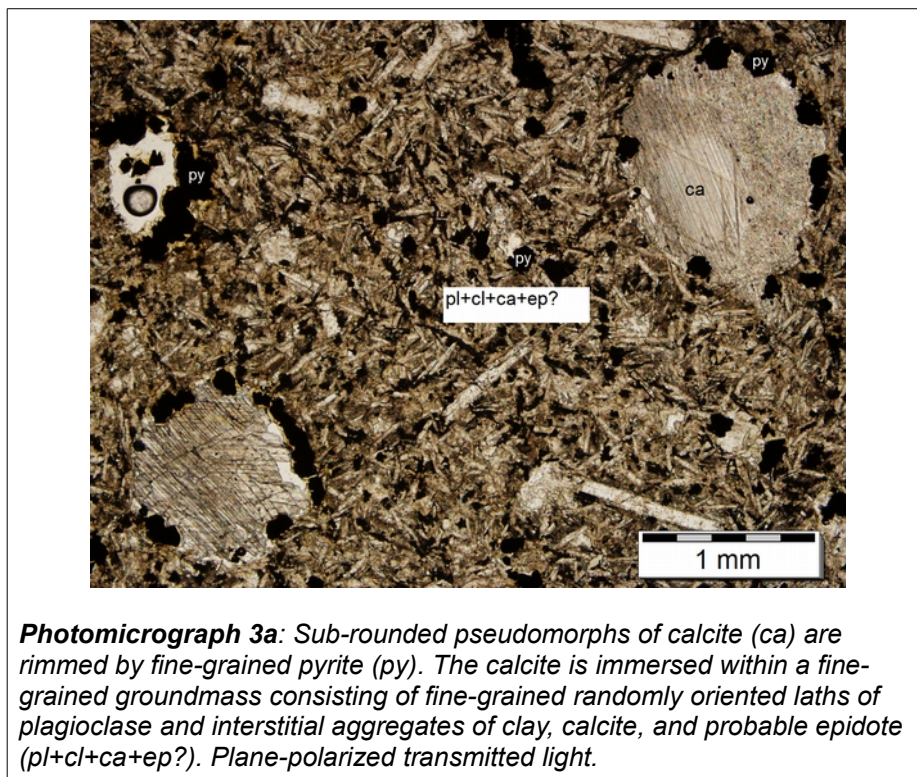
Mineral	Modal %	Main Size Range (mm)
plagioclase	55 – 57	up to 0.5 mm long; rarely up to 1 mm long
calcite	27 – 29	up to 1.2
clay	10 – 12	cryptocrystalline
epidote	3 – 4	cryptocrystalline
pyrite	2 – 3	up to 0.1; rare up to 1.2
white mica	tr	up to 0.02
iron oxides	tr	cryptocrystalline

Plagioclase occurs as fine-grained (up to 0.5 mm; rarely up to 1 mm long) randomly oriented laths with an aspect ratio of about 10:1. The plagioclase shows low relief and simple twinning according to the Albite law. I attribute the yellow staining on the offcut to the clay alteration, which in association with probable epidote, is dispersed within the groundmass as very fine-grained aggregates.

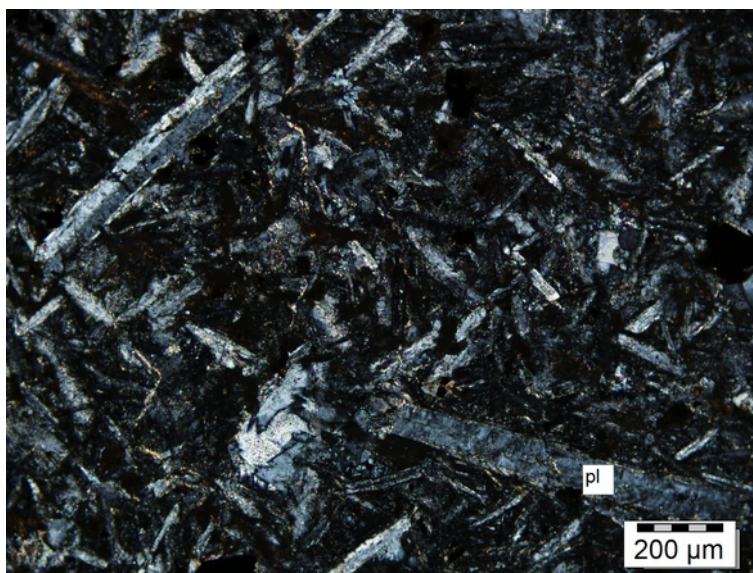
Calcite forms medium-grained, inequigranular monomineralic aggregates that completely replaced sub-rounded to amoeboid domains. I interpret these domains, by analogy with Samples 1 and 2, as pseudomorphs after magmatic phenocrysts; however, the recurrent sub-rounded shape may also indicate that the calcite filled in empty magmatic vesicles. The calcite within the pseudomorphs shows interlobate shapes and moderate to strong undulose extinction. The calcite was distinguished by its high relief, extreme birefringence, and brisk reaction to cold dilute (10%) HCl. In some cases, fine-grained white mica rims the calcite-rich pseudomorphs in association with fine-grained pyrite.

Pyrite occurs as anhedral crystals heterogeneously dispersed within the moderately altered groundmass and is concentrated within the calcite-rich pseudomorphs. In some cases, the

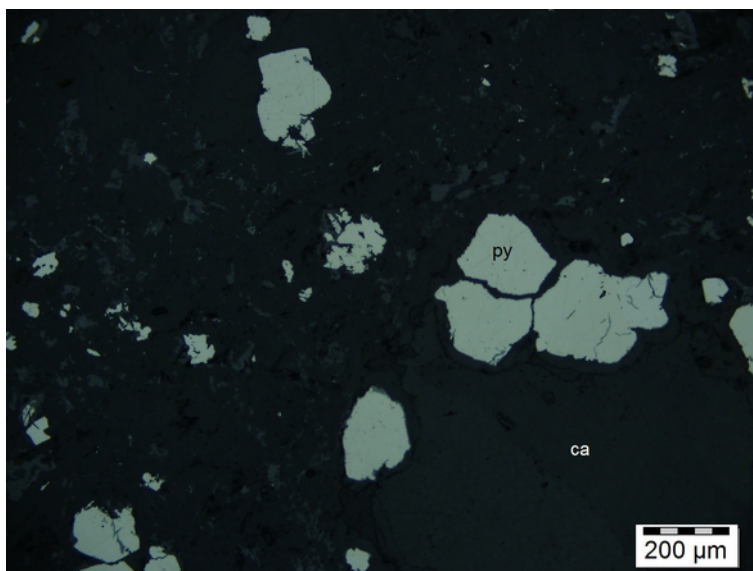
pyrite forms irregular coronae within the sub-rounded pseudomorph domains. The pyrite is subtly altered by iron oxides.



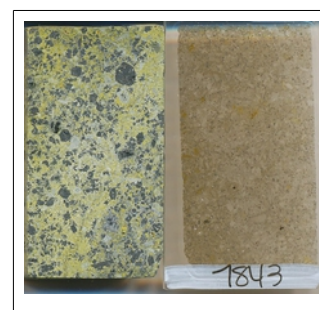
Photomicrograph 3a: Sub-rounded pseudomorphs of calcite (ca) are rimmed by fine-grained pyrite (py). The calcite is immersed within a fine-grained groundmass consisting of fine-grained randomly oriented laths of plagioclase and interstitial aggregates of clay, calcite, and probable epidote (pl+cl+ca+ep?). Plane-polarized transmitted light.



Photomicrograph 3b: Elongate laths of plagioclase (pl) are randomly oriented within the groundmass and show Albite twinning. Crossed Nicols transmitted light.



Photomicrograph 3c: Anhedral pyrite (py) is preferentially crystallized within the calcite-rich pseudomorphs (ca, in the right part of the photomicrograph) and heterogeneously dispersed within the moderately altered groundmass. Plane-polarized transmitted light.

Sample 4: 7843**Augite microgabbro****Alteration: moderate—white mica/clay-iron oxides-chlorite**

This sample shows a medium-grained granular microstructure defined by anhedral to subhedral phenocrysts of augite; subhedral pseudomorphs of white mica after plagioclase, and subordinate anhedral to subhedral pseudomorphs of iron oxides. The medium- to fine-grained phenocrysts are immersed within a groundmass of fine-grained plagioclase, clay, and white mica.

Mineral	Modal %	Main Size Range (mm)
plagioclase	35 – 37	up to 1 × 0.5; rare up to 2.5 × 0.2
augite	24 – 26	up to 1.2, rare up to 3
chlorite	22 – 24	up to 0.05
white mica	10 – 11	up to 0.02
iron oxides	2 – 2.5	cryptocrystalline
chlorite	1 – 1.5	up to 0.1
apatite	tr	up to 0.2
amphibole?	tr	up to 0.2
pyrrhotite	tr	up to 0.05

White mica partially to completely replaced medium-grained (up to 1 × 0.5 mm; rare up to 2.5 × 0.2 mm) euhedral crystals of feldspar (plagioclase?). The pseudomorphs after feldspar are rimmed by a very fine-grained to cryptocrystalline aggregate of **clay**, as suggested by its brownish colour under plane-polarized transmitted light. The clay is potassium-rich, as indicated by the yellow staining that rims most of the feldspar pseudomorphs. The interstices between the euhedral pseudomorphs are occupied by fine-grained anhedral to sub-prismatic crystals with low birefringence that I interpret as weakly to moderately altered **plagioclase**. These crystals show euhedral growth zonation and simple (Albite?) twinning.

Augite forms inequigranular (up to 1.2 mm; rarely up to 3) anhedral to subhedral phenocrysts immersed within the fine-grained groundmass. The augite shows high relief and weak pleochroism with pale green tints under plane-polarized transmitted light. Some of the phenocrysts show euhedral growth zoning and birefringence up to third-order blue. The augite

is distinguished by the presence of two well-developed perpendicular cleavage systems, and its positive optical sign and medium (45° – 60°) 2V.

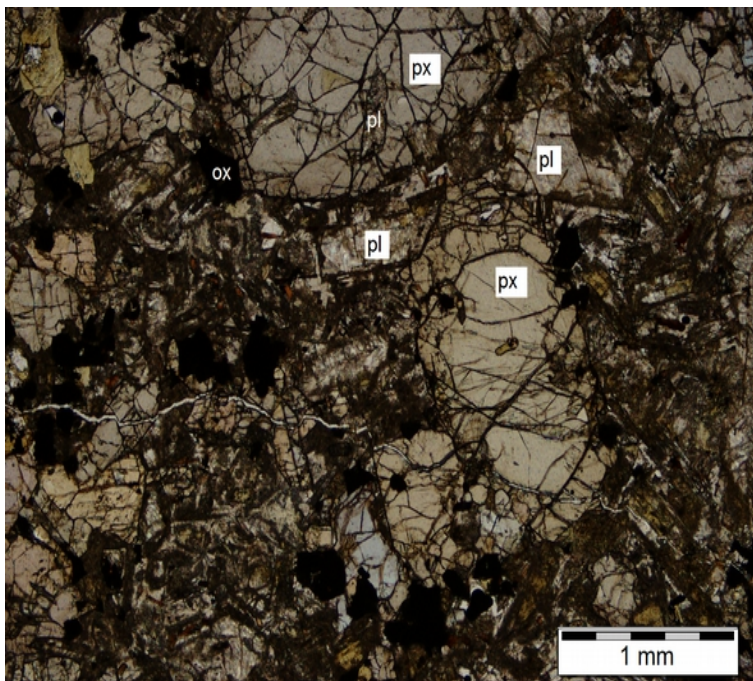
Inequigranular and anhedral pseudomorphs after probable olivine are made up of a very fine- to fine-grained aggregate of **chlorite**.

Fine-grained (up to 0.2 mm) subhedral to anhedral pseudomorphs of **iron oxides** completely replaced a magmatic mineral, as indicated by their euhedral shape and their inclusion within the olivine and clinopyroxene.

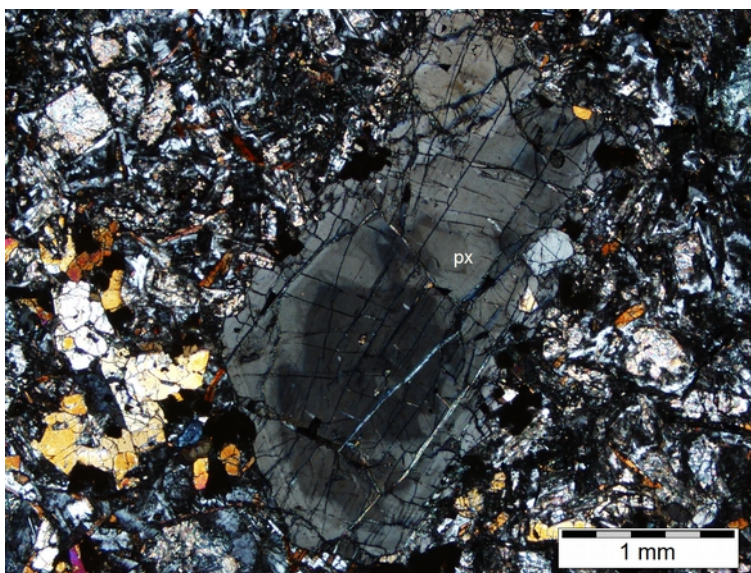
Amphibole? occurs as fine-grained (up to 0.2 mm long) columnar prisms that are dispersed within the groundmass and are intergrown with some of the phenocrysts. The fine-grained crystals are characterised by their high relief, strong pleochroism (X: yellow brown; Y: red brown; Z: dark red brown), weakly developed cleavage, and birefringence up to second-order red. Most of the crystals shows very low (smaller than 5°) extinction angles, some crystals show oblique extinction with angles (c:Z) up to 15° . Most of the crystals shows normal birefringence.

Very rare fine-grained (up to 0.05 mm) **pyrrhotite** occurs as skeletal crystals partially replaced by iron oxides and preferentially hosted within anhedral pseudomorphs of serpentine after olivine.

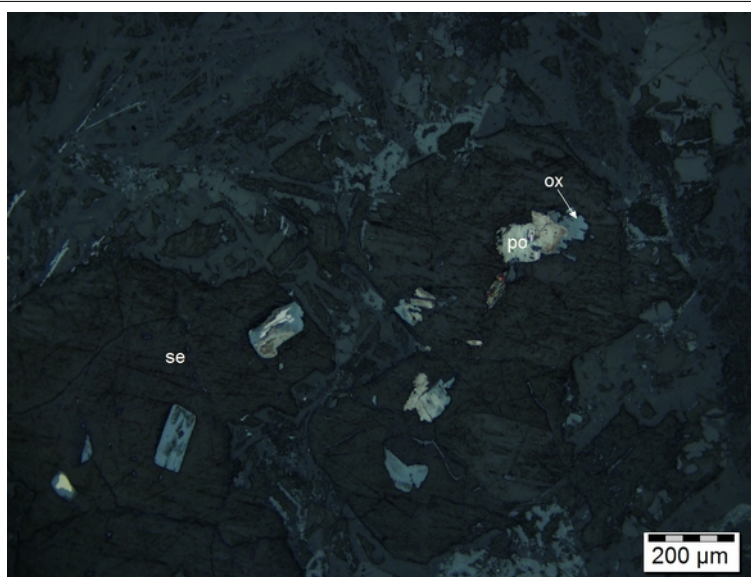
Elongate and fine-grained (up to 0.4×0.01 mm) lamellae with a high aspect ratio are unresolved. I tentatively interpret them as iron oxide replacement after hematite or ilmenite.



Photomicrograph 4a: Anhedral phenocrysts of augite (px) are associated with subhedral pseudomorphs of white mica after plagioclase (pl) and subhedral pseudomorphs of iron oxides (ox). Plane-polarized transmitted light.



Photomicrograph 4b: Augitic pyroxene (px) shows strong magmatic growth zoning and is immersed within a groundmass made up of finer-grained and partially to completely altered plagioclase laths. Crossed Nicols transmitted light.



Photomicrograph 4c: Very rare pyrrhotite (po) is partially to completely replaced by iron oxides and is preferentially hosted within pseudomorphs of serpentine (se) after olivine. Plane-polarized reflected light.