Albany Project - Block 4F
Porcupine Mining District, Ontario

2013 Assessment Report
Reconnaissance Drilling
Pitopiko River and Feagan Lake Areas
NTS: 42K/01,02 and 42F/15,16

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February 12, 2014

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1.0 Summary

This report summarizes the 2013 Albany Project drilling program on the **Block 4F** claims, located in the James Bay Lowlands area (see Figures 1 and 2) of Northern Ontario, Canada. This program was initiated to explore for copper (Cu), nickel (Ni), graphite (C) and platinum group elements (PGE's) mineralization. The drilling included two diamond drill holes to investigate two electromagnetic (EM) conductors which were identified by the 2010 Geotech airborne electromagnetic (VTEM) and magnetic geophysical survey.

The 4F claim block is located in northwestern Ontario, Canada, within in the Porcupine Mining District and the entire claim block is presently held 100% by Zenyatta Ventures (see Figure 3). Block 4F is part of Zenyatta's larger non-contiguous group of seven Albany Project claim blocks, all located in the James Bay Lowlands area of Northern Ontario (Figure 2). Six of the other Albany claim blocks (1C, 2C, 3A, 3B, 4A and 4B) are held by Cliffs Natural Resources Exploration Canada Incorporated (CNRECI), under an agreement with CNRECI and Zenyatta Ventures.

Previously in 2010, Zenyatta contracted Geotech Limited to conduct an airborne magnetic and electromagnetic (VTEM) geophysical survey on all the 28 Albany Project claim blocks. Results of the airborne survey outlined several magnetic and EM geophysical anomalies that prompted Zenyatta's Phase I (2011) reconnaissance drilling program, totaling 26 diamond drill holes on eight claim blocks. In 2012, the Phase II program included nine drill holes all targeting the Albany graphite deposit within Block 4F. Drilling continued in 2013 on Zenyatta's Albany Graphite Deposit and the results of this program are described in a NI43-101 technical report (Ross and Masun, 2014).

The region's Precambrian geology has been interpreted by Ontario Geological Survey (OGS) geologist, Greg Stott. He interpreted the region's Precambrian geology (Stott et. al., 2007) based on government airborne geophysical surveys and limited geological data from exploratory diamond drill holes within the area. Stott grouped the Precambrian basement rocks into separate terranes and basins. Zenyatta's Block 4F overlies the boundary between the "Quetico Basins" in the south and the "Marmion Terrane" rocks in the north.

Previous mineral exploration in the Block 4F region has been limited over the years. A few documented assessment files available from the Ministry of Northern Development and Mines (MNDM) include the following: ground geophysical surveys by Nagagami River Prospecting in 1959; airborne and ground magnetometer surveys followed-up with diamond drilling in the 1960s by Algoma; and, drilling (1 DDH) in 1978 by Shell Canada Limited.

Zenyatta's 2013 drilling program described in this report was initiated to investigate two electromagnetic (EM) anomalies on two separate claims within Albany Block 4F. One EM anomaly is located on the east side of the Nagagami River within a southern claim; and a second anomaly is located in the western section of the 4F claim block. Results of the drilling program for these drill holes were disappointing as no mineralized zones of economic significance were intersected.

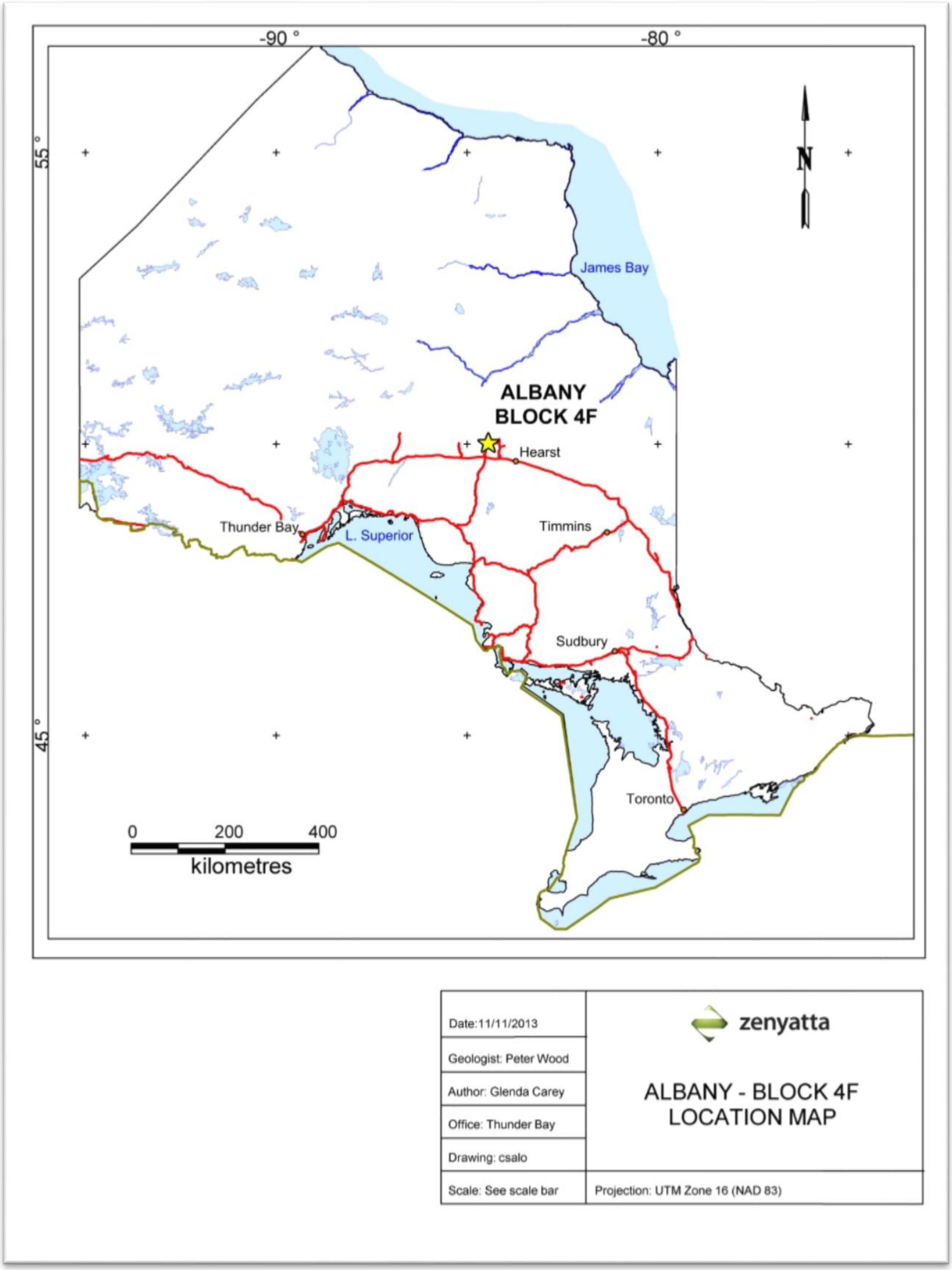


Figure 1: Albany Project Location Map

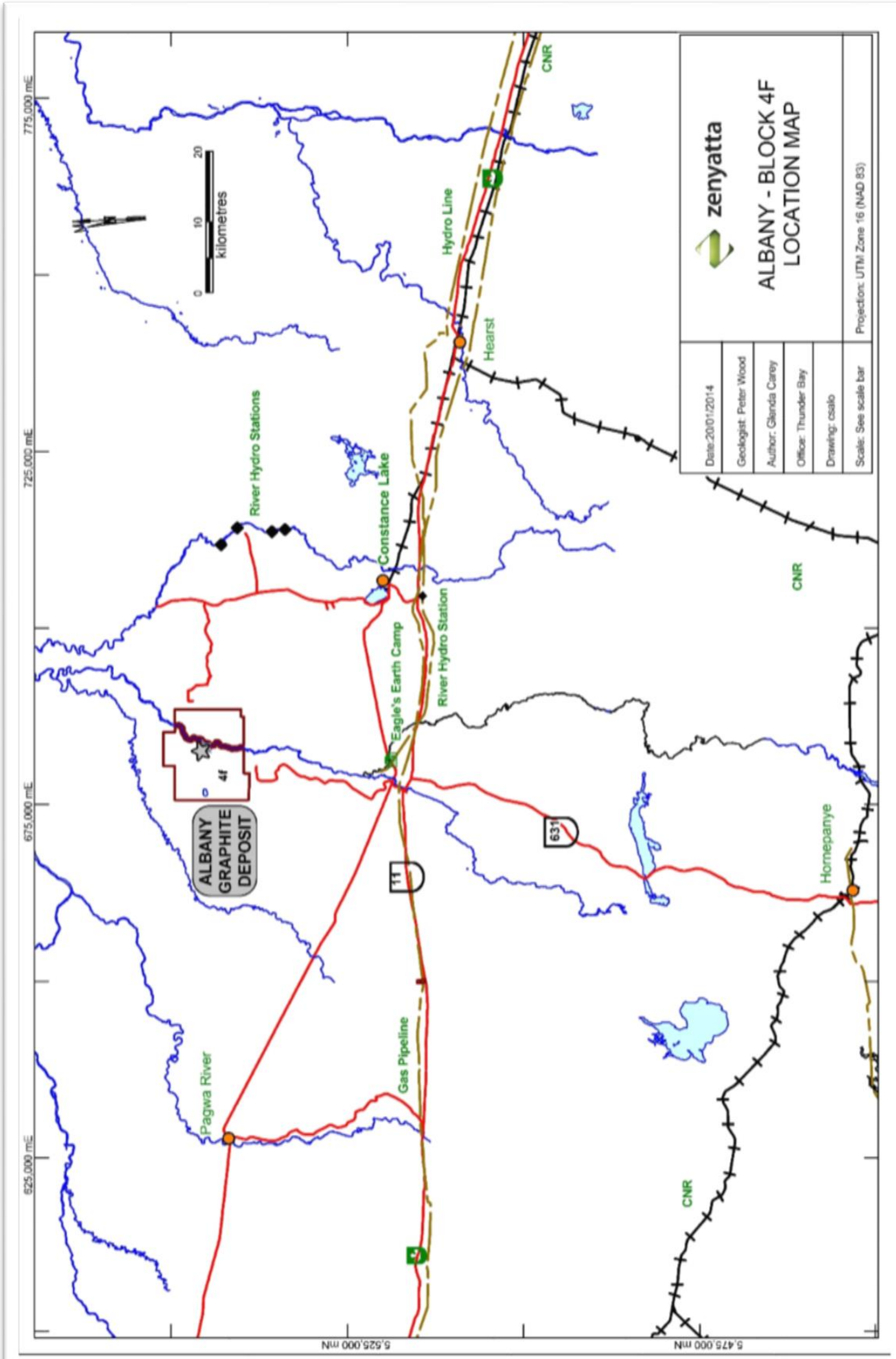


Figure 2: Albany Project - Block 4F Location and Local Infrastructure Map

2.0 Introduction

The 2013 reconnaissance drilling program was initiated to test two airborne geophysical anomalies on Albany Project - Block 4F. The two targets were identified by the 2010 Airborne Geophysical VTEM Survey flown by Geotech Limited of Aurora, Ontario. The Block 4F claims are located in the James Bay Lowlands Region of Northern Ontario (see Figure 3), approximately 25 km north of Highway 11 and 60 km northwest of the town of Hearst.

The drilling commenced on October 28, 2013 and was completed on November 4, 2013. The first EM target drilled was located within claim #4257740 on the east side of the Nagagami River. The second target drilled was located within claim #4257716 in the western section of the 4F claim block. The two 2013 drill targets are described below:

1) Target 4F-1 / Claim 4257740: this target was interpreted to be associated with a magnetic response striking N-S and was modeled as a thick plate, steeply dipping to the south. It was estimated to be at a depth of approximately 300 metres below surface and is best on Geotech flight line 28710. Drilling of Target 4F-1 **(DDH Z13-4F58)** intersected 3-5% finely disseminated pyrrhotite with minor disseminated and blebby pyrite at a depth of 348 m. This moderately conductive and weakly to moderately magnetic section could explain the airborne EM anomaly.

2) Target 4F-2 / Claim 4257716: this EM anomaly had good conductance and was located near a magnetic high feature. It was modeled as a shallow plate with a possible plunge to the west. Drilling of Target 4F-2 **(DDH Z13-4F59)** intersected, at a depth of 203 to 231m, disseminated and locally semi-massive sulphides composed mainly of pyrrhotite with minor pyrite and trace chalcopyrite. This highly magnetic and locally moderately conductive unit explains the airborne conductor.

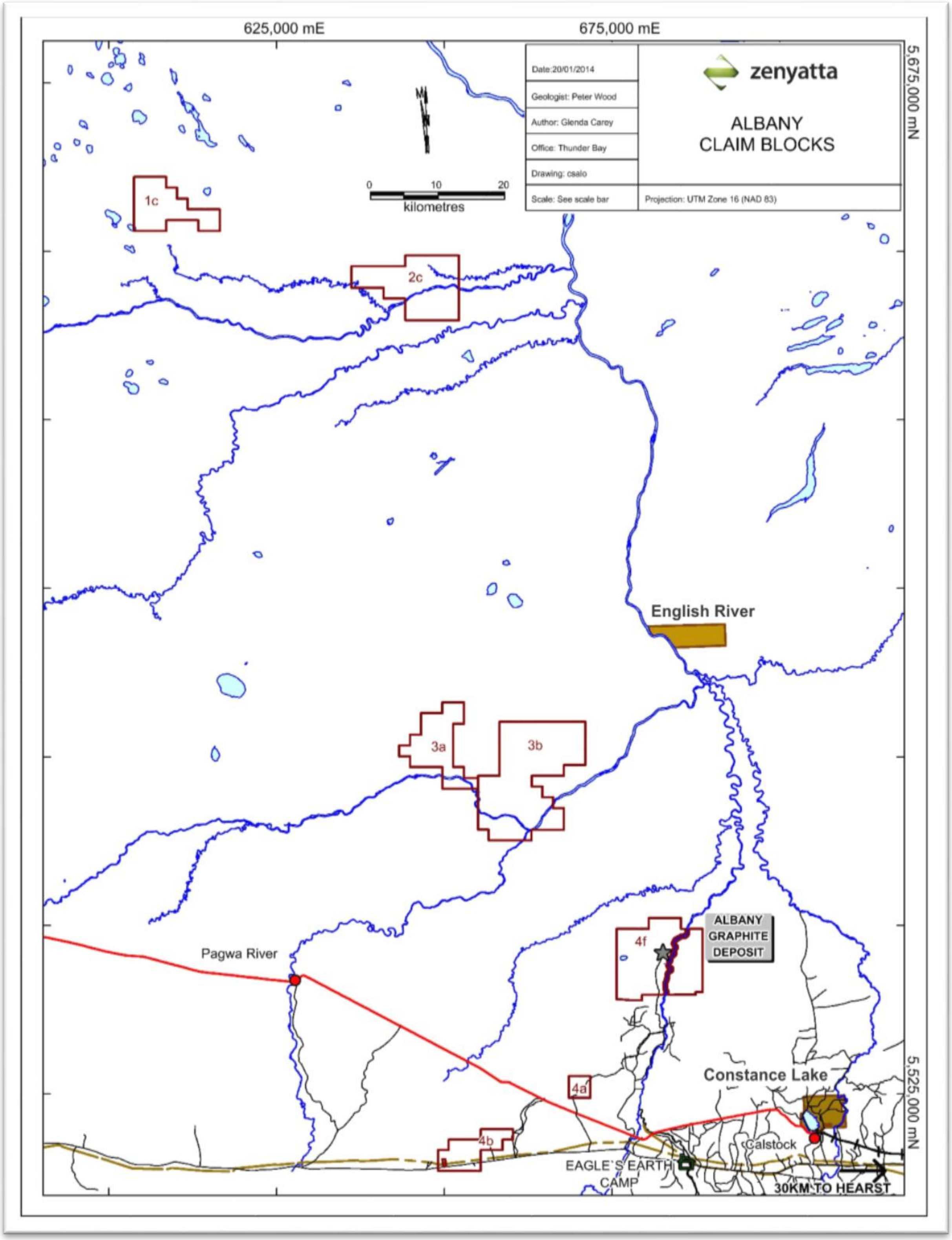


Figure 3: Albany Project - Claim Blocks Map

3.0 Property Description

The Albany Project **Block 4F** claim group is located north of Lake Superior and southwest of James Bay in northwestern Ontario, Canada. Most of the Block 4F claims are located in the Pitopiko River Area, with the westernmost claims located in the Feagan Lake Area. The claims are situated within NTS blocks 42K/01, 02 and 42F/15, 16.

Albany Block 4F (Figure 4) has a total of **61 claims, 826 claim units**, and covers **13,216 hectares**. The yearly work required costs to keep the entire claim group in good standing amounts to **$330,400.**

The majority of the claims were staked during the late summer and fall of 2009, followed by additional staking in the winter and spring of 2010. In November 2012, Zenyatta reached an agreement with CNRECI to acquire 100% ownership of Claim Block 4F. Prior to this date, and according to the agreement, Zenyatta had already exercised its right and acquired an 80% interest in Claim Block 4F by having spent a total of $10 million on exploration on the larger group of Albany Project claims. After acquiring Cliffs' remaining 20% interest in the Claim Block 4F, Zenyatta now holds a 100% interest. Pursuant to the terms of the transaction, Zenyatta and Cliffs agree to the following with respect to the Claim Block 4F:

a. Zenyatta will issue to Cliffs (or its designated affiliate) a total of 1,250,000 shares as follows: (i) 500,000 shares upon signing the agreement; (ii) 250,000 shares to be issued upon completion of a pre-feasibility study; and (iii) 500,000 shares to be issued upon completion of a feasibility study; and
b. Zenyatta will grant Cliffs an NSR royalty of 0.75% on the Claim Block 4F, of which 0.5% can be purchased by Zenyatta at any time for $500,000.

The Block 4F claim group is located in Constance Lake First Nations' (CLFN) Traditional Territory. On July 18, 2012, Zenyatta and CLFN announced that they had signed an Exploration Agreement for a mutually beneficial and co-operative relationship regarding exploration and pre-feasibility activities on the Albany Project. Among other things, CLFN will participate in an implementation committee and receive, along with certain other First Nation communities, preferential opportunities for employment and contracting. Zenyatta also agreed to contribute to a social fund for the benefit of CLFN children, youth, and elders.

The Block 4F property is not subject to any known environmental issues and no abandoned mine workings or tailings are present on the property. The forest on the east side of the Nagagami River has been locally harvested. The surface rights are owned by the crown. Table 2 lists the entire Block 4F claims and information.

Table 1: Block 4F Claim Status

ZENYATTA VENTURES - ALBANY BLOCK 4F CLAIMS - 2014							
Claim #	**Block #**	**# Units**	**Hectares**	**Recorded Date**	**Due Date**	**Work Required**	**Ownership**
4255101	4F	16	256	Mar17/2010	Feb 28/2014	$6,400	Zenyatta
4255102	4F	16	256	Mar17/2010	Feb 28/2015	$6,400	Zenyatta
4255103	4F	16	256	Mar17/2010	Feb 28/2015	$6,400	Zenyatta
4255104	4F	16	256	Mar17/2010	Feb 28/2015	$6,400	Zenyatta
4255105	4F	16	256	Mar17/2010	Feb 28/2019	$6,400	Zenyatta
4255106	4F	16	256	Mar17/2010	Feb 28/2015	$6,400	Zenyatta
4255107	4F	16	256	Mar17/2010	Feb 28/2015	$6,400	Zenyatta
4255108	4F	16	256	Mar17/2010	Feb 28/2014	$6,400	Zenyatta
4255109	4F	16	256	Mar17/2010	Feb 28/2015	$6,400	Zenyatta
4255110	4F	13	208	Mar17/2010	Feb 28/2015	$5,200	Zenyatta
4255111	4F	7	112	Mar17/2010	Feb 28/2014	$2,800	Zenyatta
4255112	4F	10	160	Mar17/2010	Feb 28/2014	$4,000	Zenyatta
4257701	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257702	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257703	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257704	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257705	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257706	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257707	4F	12	192	May10/2010	Feb 28/2014	$4,800	Zenyatta
4257708	4F	12	192	May10/2010	Feb 28/2014	$4,800	Zenyatta
4257709	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257710	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257711	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257712	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257713	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257714	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257715	4F	16	256	May10/2010	Feb 28/2015	$6,400	Zenyatta
4257716	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257717	4F	16	256	May10/2010	Feb 28/2015	$6,400	Zenyatta
4257718	4F	16	256	May10/2010	Feb 28/2015	$6,400	Zenyatta
4257719	4F	16	256	May10/2010	Feb 28/2015	$6,400	Zenyatta
4257720	4F	16	256	May10/2010	Feb 28/2015	$6,400	Zenyatta
4257721	4F	9	144	May10/2010	Feb 28/2014	$3,600	Zenyatta
4257722	4F	4	64	May10/2010	Feb 28/2015	$1,600	Zenyatta
4257723	4F	16	256	May10/2010	Feb 28/2015	$6,400	Zenyatta
4257724	4F	16	256	May10/2010	Feb 28/2015	$6,400	Zenyatta
4257725	4F	16	256	May10/2010	Feb 28/2015	$6,400	Zenyatta
4257726	4F	11	176	May10/2010	Feb 28/2015	$4,400	Zenyatta

4257727	4F	9	144	May10/2010	Feb 28/2015	$3,600	Zenyatta
4257728	4F	6	96	May10/2010	Feb 28/2015	$2,400	Zenyatta
4257730	4F	14	224	May10/2010	Feb 28/2014	$5,600	Zenyatta
4257731	4F	12	192	May10/2010	Feb 28/2014	$4,800	Zenyatta
4257732	4F	12	192	May10/2010	Feb 28/2014	$4,800	Zenyatta
4257733	4F	14	224	May10/2010	Feb 28/2014	$5,600	Zenyatta
4257734	4F	4	64	May10/2010	Feb 28/2014	$1,600	Zenyatta
4257735	4F	7	112	May10/2010	Feb 28/2014	$2,800	Zenyatta
4257736	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257737	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257738	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257739	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257740	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257741	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257742	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257743	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257744	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257745	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257746	4F	16	256	May10/2010	Feb 28/2014	$6,400	Zenyatta
4257747	4F	2	32	May10/2010	Feb 28/2014	$800	Zenyatta
3002472	4F	4	64	May10/2010	Feb 28/2014	$1,600	Zenyatta
3002473	4F	4	64	May10/2010	Feb 28/2014	$1,600	Zenyatta
4248214	4F	4	64	June4/2010	Feb 28/2016	$1,600	Zenyatta
61		***826***	***13216***			***$330,400***	

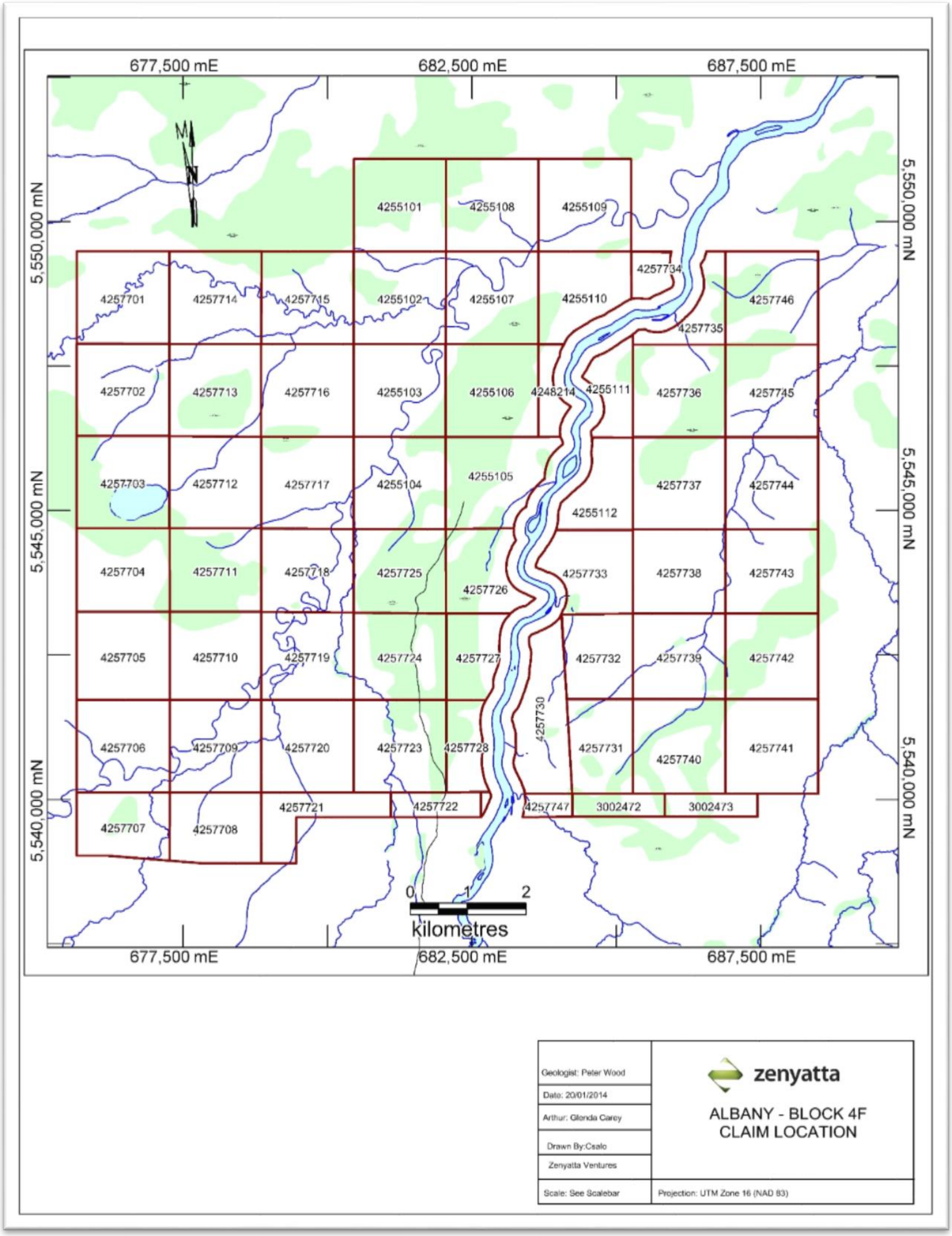


Figure 4: Albany Project - Block 4F Claim Map

4.0 Location, Access and Topography

Zenyatta's Albany Block 4F claims are situated within the Porcupine Mining District of northeastern Ontario, Canada. Most of the Block 4F claims are located in the Pitopiko River Area, with the westernmost claims in the Feagan Lake Area. The claims are unpatented and contiguous, and are situated within NTS blocks 42K/01, 02 and 42F/15, 16. The approximate central area of the 4F claim block is located at UTMs: 682025E, 5547885N, Zone 16, NAD 83.

The Block 4F claims are located approximately 24 km north of Highway 11 and approximately 65 km northwest of the town of Hearst, population of 5825 (see Figure 2). The town of Hearst has many facilities to keep an exploration camp well supplied. These include hotels, restaurants, a hospital, hardware stores, gas stations, and a mining supply store. Float plane and helicopter services, as well as an airport are also available in Hearst. Mining personnel, equipment, and supplies can also be accessed from Timmins, a major mining and exploration centre.

There is currently no permanent infrastructure on the Property. The nearest airport is in Hearst, approximately one hour away by car. The Timmins airport with scheduled flights is approximately four hours away by road.

Access to the 4F claim block can be gained by helicopter, but boat or canoe may be used in along the Nagagami River for access to the central area of the claim block during the warmer months. Old forestry logging roads reach the southeast boundary of the claim block, leading to several old quad trails through previously harvested forests just east of the Nagagami River. In winter, the central area of Block 4F can be reached via a winter road leading to the graphite deposit. This was added as a safety route to be used in emergency situations.

The claims are situated within the Hudson Bay-James Bay Lowlands area where the topography is essentially flat, low-lying and swampy. Overburden is approximately 35 metres thick in the region with little or no outcrop exposure. There are many creeks flowing between peat bogs throughout the area. The Nagagami River flows north through the property with several meandering tributaries flowing in from the east and west. The Pitopiko River flows into the west side of the Nagagami. Vegetation is dominated by wetlands with some areas of spruce and alder trees, and cedar swamps. Spruce and alder trees are also abundant along the banks of the Nagagami River and other smaller rivers.

Various climates and weather extremes occur in this region of northern Ontario. Most of the region has a continental climate with warm to hot summers (June, July and August; 25°C to 35°C) and cold winters (December to March, 10°C to -30°C with lows down to -45°C). Spring and autumn tend to be short seasons and have some of the weather of winter and summer. Annual precipitation ranges from 600 mm to 900 mm.

Generally, surface exploration work can be carried out during the months of May to November, possibly later if there is no snow accumulation. Airborne or ground geophysical surveys and diamond drill programs can be conducted year round.

5.0 Historical Work

Zenyatta's current Albany Project includes a total of seven claim blocks. The ground was selected based on geophysical information from OGS airborne magnetic maps, the geological interpretation (Greg Stott, 2007-2008) of these maps, and additional geological and geophysical data from historical exploration reports provided by the MNDM office in Timmins. Historical exploration work has been limited in this area and mostly consists of geophysical surveys and a few drilling projects. The historic drill holes that have been drilled in the Block 4F area are shown in Figure 5. The following is a brief summary of the reported historical exploration work carried out in the area of **Albany Project Block 4F**:

1959: A ground magnetic and electromagnetic survey was initiated on claims held by **Nagagami River Prospecting Syndicate** in the Feagan Lake/Pitopiko River Townships area. The geophysical survey was carried out by Koulomzine and Brossard Limited but was not fully completed because of an early spring breakup. Results of the survey showed three magnetic anomalies defining basement geology contacts and also several vertical-loop electromagnetic conductors. It was concluded by the company that "the general lenticular nature of the conductors and their occurrence in the vicinity of a diabase dyke, may suggest the presence of sulphide lenses that could contain base metals; one anomaly (magnetic & EM) could be due to some disseminated mineralization" (Koulomzine, 1959). They recommended drilling four holes to investigate the EM anomalies, but there is no record that these holes were ever drilled.

1961: **Algoma Ore Properties Limited** flew an airborne magnetic survey in the Nagagami River and Pitopiko Townships area. The survey outlined a horseshoe-shaped anomaly which was confirmed on the ground in the same year. This led to further exploration in 1963.

1963: **Algoma Ore Properties Limited** flew an airborne magnetometer survey in the Nagagami River area. The survey was flown by Hunting Survey Corporation and results indicated two large low intensity circular shaped anomalies (Anomalies #1 and #2) underlying the Paleozoic limestones. Interpretation of the anomalies inferred that they were caused by a complex syenitic to gabbroic intrusion. It was reported that Anomaly #1 could be associated with a basic intrusion hosting magnetite, and thought to be mildly interesting for iron ore, niobium, and sulphides. Anomaly #2 was interpreted to be associated with an alkaline and carbonatite complex and could contain columbium and other rare earth elements (REEs). Algoma recommended follow-up work to include a ground magnetometer survey over the anomalies and a diamond drill program (Venn, 1964).

1964 - 1967: **Algoma Ore Properties Limited** continued exploration in the Nagagami River area. Ground work involved grid cutting followed by a ground magnetometer survey and claim staking. Algoma drilled nine holes for a total of 4,868 feet (264.6 m). Holes 1-64 to 7-64 were drilled to the northeast of Block 4F. Two holes were drilled in Anomaly #2 (DDH's: 8-64 and 9-64) and reported to be located just north of Zenyatta's Block 4F. The drill core was sampled, and petrographic studies were also conducted. The core was tested with a scintillometer, and samples were taken where radioactive responses occurred; assay results indicated columbium (Cb_2O_5) content to be 0.02% to 0.04%. Drilling on Anomaly #2 intersected coarse syenite rock with 3-5% magnetite. It was concluded that the ground magnetometer survey and the diamond drilling verified the airborne survey fairly well, and although drilling did not intersect any ore minerals, the structure was still geologically interesting. Algoma reported that minerals of economic potential could possibly be associated with other parts of the structure and they recommended that the property be referred to other companies interested in intrusive structures (Venn, 1964).

1978: **Shell Canada Explorations Limited** initiated a diamond drill program in the area based on results of an airborne geophysical survey. A single hole, DDH 7609-78-1, was drilled within the Block 4F claim group and the drill log indicates that the hole intersected graphitic breccia. A drill log and approximate hole location was available from the MNDM core library, but no other geophysical or drilling report was submitted.

1999: The **Ontario Geological Survey (OGS)** released aeromagnetic geophysical maps for the Hudson Bay and James Bay Lowlands areas, *Geophysical Data Set 1036* (see Figure 5 for Block 4F area).

2008: The **Ontario Geological Survey (OGS)** Precambrian Geology Map P.3599 was published: *Hudson Bay and James Bay Lowlands Region Interpreted from Aeromagnetic Data*, G.M. Stott, 2007–2008 (see Figure 6 for Block 4F area).

2010 to 2012: Exploration work conducted by **Zenyatta Ventures Limited** includes the initial 2010 airborne geophysical survey which identified airborne EM and magnetic anomalies. Follow-up drilling during the fall of 2011 included one drill hole (Z11-4F1) in Albany Block 4F, intersecting several mineralized zones of graphitic breccia. In 2012, Zenyatta continued with a Phase II diamond drill program and drilled eight more holes (Z12-4F2 to Z12-4F9) on the graphite deposit, intersecting additional graphite mineralized zones.

2013: Exploration work conducted by **Zenyatta Ventures Limited** included a large loop surface DPEM survey by Crone Geophysics and Exploration Ltd. The survey confirmed the presence of two discrete breccia pipes and was used to plan the resource drill program. Between March and the November 2013, Zenyatta drilled a total of 54 holes totalling 22,463 m (Z13-4F10 to Z13-4F57 and Z13-4FM01 to Z13-4FM06) in the graphite deposit area.

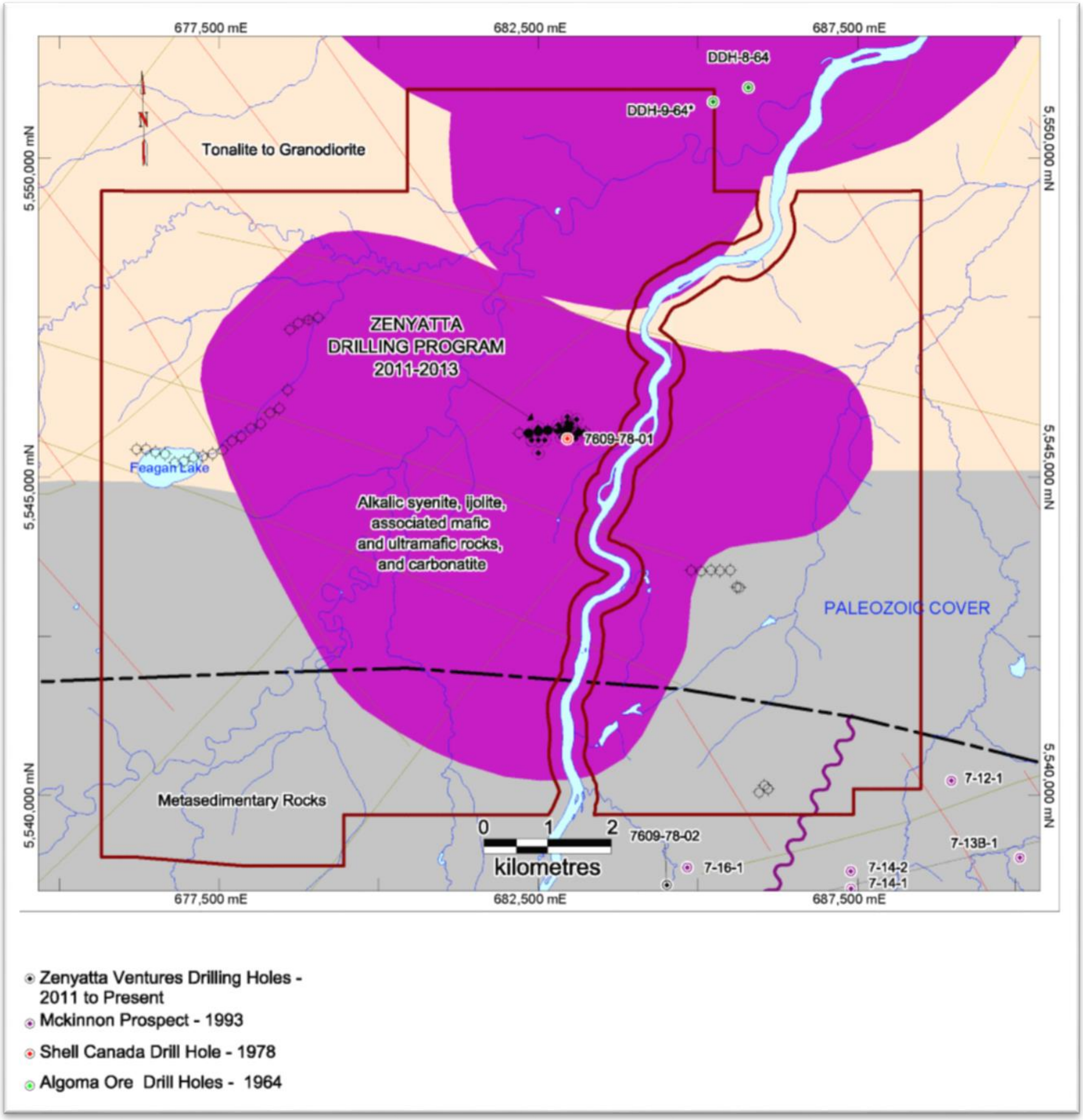


Figure 5: Albany Project - Block 4F Compilation of Previous Drilling

6.0 Geological Setting

6.1 Regional Geology

The following are excerpts from Stott's (2007-2008) "Marginal Notes", Map P3599, describing the interpreted Precambrian Geology of the Hudson Bay and James Bay Lowlands Region:

"The relatively flat-lying Hudson Bay and James Bay Lowlands, consist mostly of carbonates of Paleozoic to Mesozoic age. These sediments cover a significant portion of the Precambrian rocks of Northern Ontario and therefore, have impeded the understanding of the Precambrian geology and the tectonic framework across this region of Ontario. The regions Precambrian geology is based mainly on available reprocessed aeromagnetic data and limited drill hole information. The results provide a general framework of interpreted supracrustal belts, plutonic subdivisions, major faults and Proterozoic mafic dikes" (see Figure 6).

"In the James Bay Lowland area, the most significant feature is the aeromagnetic expression of the Uchi domain greenstone belts, along the southern flank of the Sachigo superterrane trending northeast under the James Bay Lowland and wrapping around the eastern end of the Island Lake domain, a portion of the Sachigo superterrane. This greenstone trend merges with the Oxford–Stull domain near the western margin of the James Bay Lowland just east of the McFaulds Lake massive sulphide deposits. This combined array of Neoarchean greenstone belts continues east, narrowing under the James Bay Lowland, towards the Eastmain greenstone–granite domain in Quebec."

"The Northern Superior superterrane forms a 1000 km long band of distinctively strong magnetic intensity. A marked magnetic discontinuity can be traced eastward roughly midway under the Hudson Bay Lowland between a region of high magnetic relief and complexity that characterizes the Northern Superior superterrane to the south and a region of relatively flat magnetic character that more closely resembles the magnetic signature of the Trans-Hudson Orogen. However, a significant portion of the interpreted Trans-Hudson Orogen resembles an extension of the Northern Superior superterrane and is interpreted as an area of Archean crust that was overprinted by the Trans-Hudson Orogen. The Sutton Inliers have been reinterpreted by comparing the aeromagnetic data and the outcrops mapped by Bostock. Current regional geology maps of Ontario portray the Sutton Inlier as a single large mass. This new interpretation recognizes a set of ridges forming several crescent-shaped inliers that dip shallowly northward. They appear to be discontinuously related to similar narrow, folded magnetic anomalies within the Trans-Hudson Orogen under the Paleozoic rocks closer to the Hudson Bay coast."

"The Island Lake domain is largely plutonic with some Mesoarchean to Neoarchean volcanic belts with geophysical characteristics that show some relationship to the belts within the North Caribou Terrane. The boundaries of the Island Lake domain are probably the least understood and remain the most contentious. At the northern margin of the Sachigo superterrane, the narrower, ribbon-like Oxford–Stull domain (OSD) stretches from Manitoba to the James Bay Lowland (see Figure 4). The OSD displays some evidence of Mesoarchean mid-ocean ridge basalt (MORB)-like sequences concurrent with continental magmatic growth within Northern Superior superterrane and NCT margins to the north and south, respectively. At the edge of the

James Bay Lowland in Ontario, the Oxford-Stull Domain includes a calc-alkaline metavolcanic sequence containing volcanic-hosted massive sulphide deposits at McFaulds Lake."

"The Uchi domain forms the southern part of the North Caribou terrane within the Uchi Subprovince. The Uchi domain was constructed largely by autochthonous, episodic additions of volcanic assemblages and accompanying plutons during the Neoarchean era (Stott and Corfu, 1991). The eastern extent of the Uchi domain underlies the James Bay Lowland where, from high-resolution aeromagnetic images, it appears to merge with the OSD. The resulting merged greenstone–granite domain continues eastward under the James Bay Lowland on strike with the Eastmain greenstone–granite domain of Quebec."

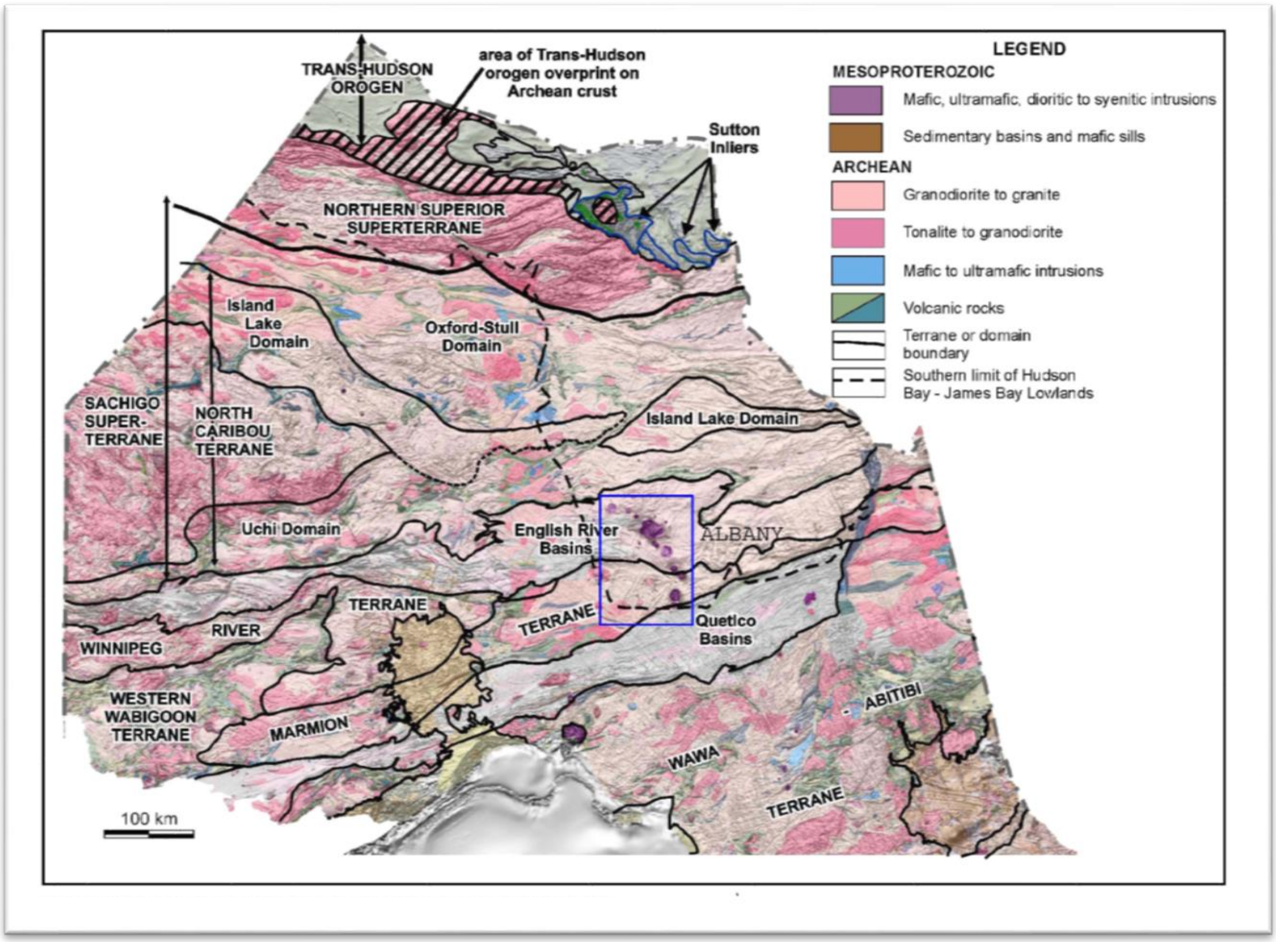


Figure 6: Regional Tectonic Subdivisions of Northern Ontario (after Stott et al. 2007)

6.2 Local Geology – Block 4F

According to Stott's (2007) regional tectonic subdivisions map, Zenyatta's **Block 4F** covers parts of the **Marmion Terrane** in the north section of the claim block, and the **Quetico Basins** of the Superior Province of the Canadian Shield in the south (see Figure 8).

> **Marmion Terrane/Subprovince:** "This terrane consists predominately of metamorphosed felsic intrusive rocks. The 3.0 to 2.7 billion year old rocks are interpreted as an assemblage of continental fragments. These rocks were once also interpreted as part of the Western Wabigoon and Winnipeg River terranes" (MNDM, Government of Ontario).
>
> **The Quetico Subprovince:** "The Quetico Subprovince is an east-northeast trending, 10 to 100 km wide by 1200 km long belt of variably metamorphosed and deformed clastic metasedimentary rocks and granitoids located in the west-central part of the Superior Province. The metamorphic grade varies from greenschist to amphibolite to local granulite facies. The metasedimentary rocks were deposited before 2696 Ma. The Quetico intrusions near Atikokan are typically small (<1km^2) and form spills, plugs, and small stocks composed of a variety of lithologies, mainly wehrlites, clinopyroxenites, hornblendites, monzodiorites, syenites, foidites and silicocarbonatites. They are locally enriched in Ni-Cu and PGEs" (Vaillancourt et. al., 2003).

Drill hole **Z13-4F58** intersected alternating layers of paragneiss and felsic dykes in the upper part of the hole, with mostly mafic dykes alternating with paragneiss and schist in the mid to lower parts of the hole. A 3.3 metre wide mineralized zone was intersected at a depth of 348 m and consisted of 3-5 % of finely disseminated and minor blebby pyrite.

Drill hole **Z13-4F59** intersected alternating layers of gneiss, amphibolite, porphyry, with iron formation and mafic dykes; two sections of iron formation were intersected at 121 m and 144 m. A 3.0 m section, at 219 m, intersected stringer to locally semi-massive and net-textured pyrrhotite with minor pyrite and trace chalcopyrite. Refer to the accompanying drill logs in Appendix I (back of report) for detailed descriptions of rock types and mineralization observed in drill core.

The two Zenyatta drill holes (Z13-4F58 and Z13-4F59) are presented below superimposed over the OGS calculated vertical gradient (CVG) magnetic data (Figure 7) and over OGS interpreted geology (Figure 7).

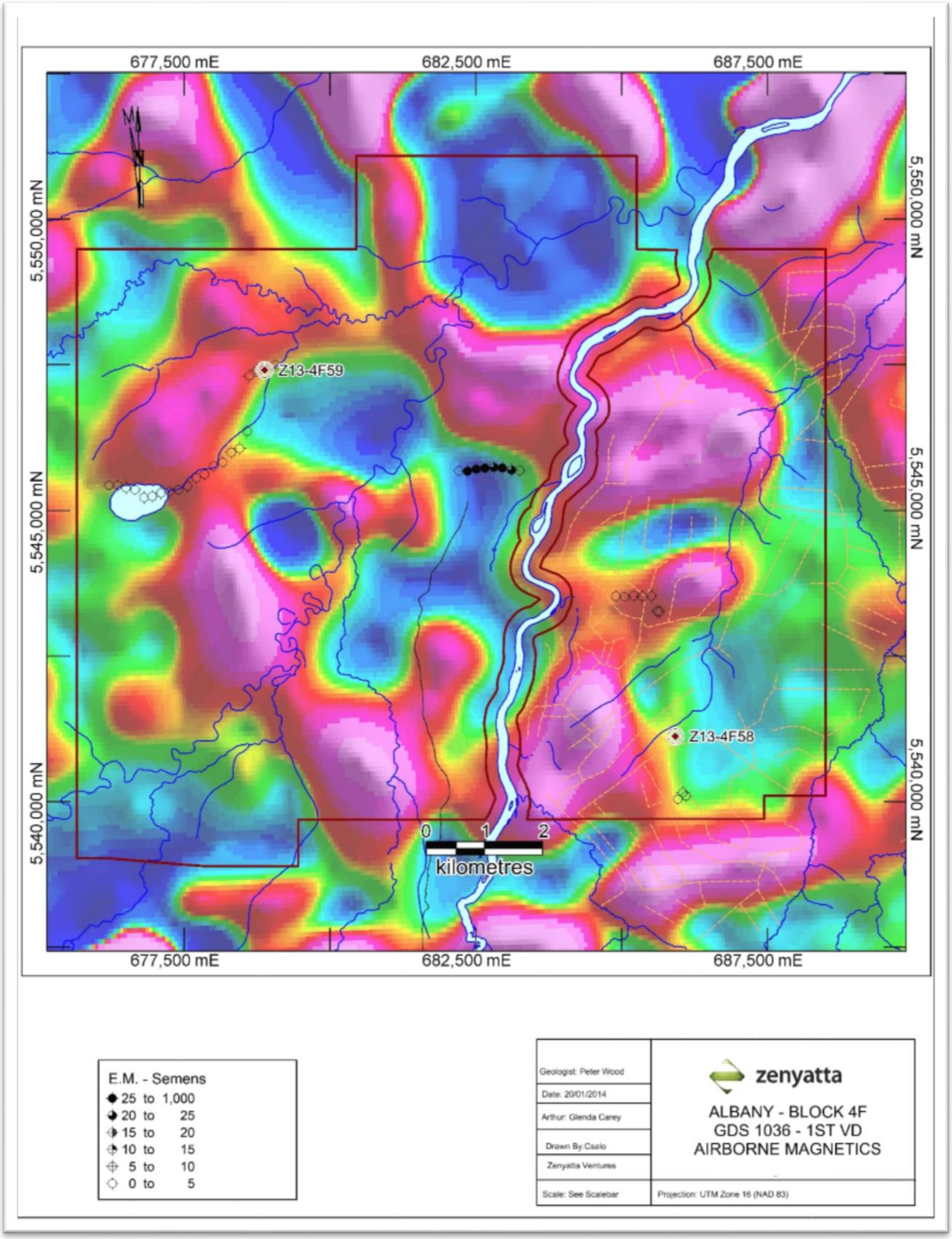


Figure 7: Block 4F CVG Airborne Magnetic Data with VTEM Anomalies and Zenyatta Drill Holes

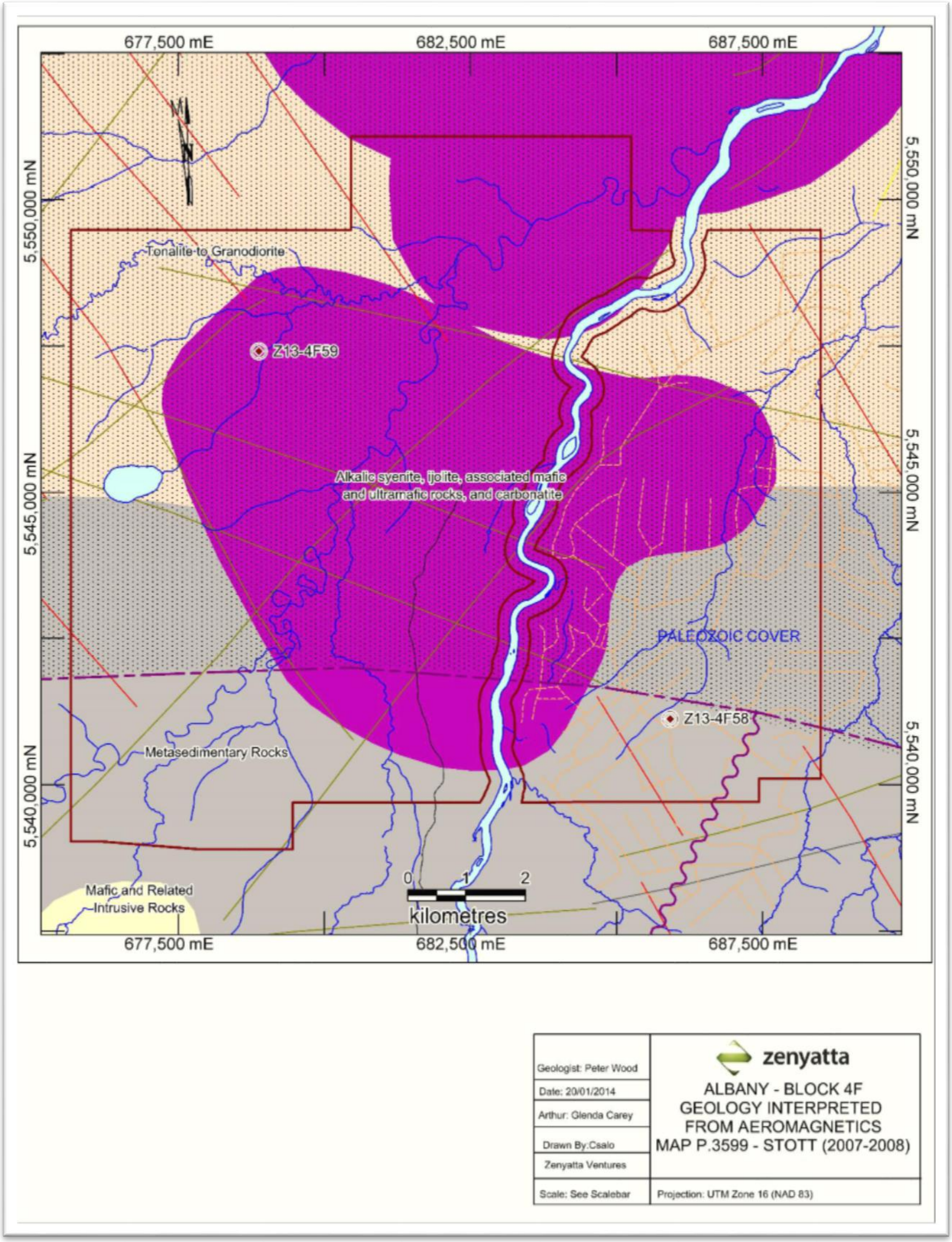


Figure 8: Block 4F OGS Interpreted Geology with Zenyatta Drill Holes

7.0 Deposit Models - Albany Project

7.1 Mafic-Ultramafic Intrusion Hosted Cu-Ni-PGM

Mafic-ultramafic intrusion hosted Cu-Ni-PGM deposits range in age from Archean to Tertiary (mainly Archean and Proterozoic in Ontario), are stratabound, and host copper, nickel and/or platinum-group sulphides. These deposits generally occur in two types of cratonic settings: (1) as complexes related to flood basalts in an intracontinental rift environment; and (2) as large strataform complexes either sheet-like or dyke-like. Host rocks include (commonly layered) norite, gabbro, quartz diorite, pyroxenite, amphibolite, diabase, peridotite, anorthosite, dunite, troctolite and harzburgite.

The principal mineralogy includes pentlandite, chalcopyrite, pyrrhotite, cubanite, and millerite; other minerals may include pyrite, marcasite, valleriite, bornite, cobalt sulphides and sphalerite. Platinum group minerals may include sulphides, tellurides, arsenides, antimonides and alloys. Generally, the more mafic the composition of the rock is, the higher the Ni/Cu ratio. The texture and style of the mineralization is typically disseminated, net textured, sulphide matrix breccia and massive sulphides that occur as stratabound to stratiform, tabular layers or lenses. The ore minerals are commonly located at or near the base of the host intrusion and sulphide veins and disseminations usually occur in the footwall rocks. PGM rich horizons generally occur at a significant distance above the base of the intrusion.

7.2 Epigenetic Graphite Deposit (Conly, 2014)

Most economic geologists and geophysicists are familiar with graphite as a nuisance in geophysical exploration due to its excellent electric conductivity that produces an identical geophysical response to that of massive sulphide mineralization. Graphite commonly occurs in metasedimentary rocks as a result of the conversion of organic matter through regional or contact metamorphism. Graphitization of organic matter is well understood, however, the heating and compression of organic matter in situ is only one of the ways in which graphite is produced in nature. Another is the precipitation of solid carbon (i.e., graphite) from natural carbon-fluids such as those containing CO_2, CO, and/or CH_4.

Somewhat simplified, there are three different processes leading to the formation of economic graphite deposits (Harben and Kuzvart, 1996):

1. Contact metamorphism of coal deposits - Graphite formed under these conditions is characterized by incomplete structural ordering and crystallization, resulting in low value “amorphous” graphite with its main market in foundry applications.
2. Syngenetic flake graphite deposits - The formation of these deposits involves the alteration of carbonaceous organic matter to graphite during regional metamorphism.
3. Epigenetic graphite deposits - The formation of these deposits is associated with migrating supercritical carbon-bearing (C-O-H) fluids or fluid-rich magmas. The formation of the carbon-bearing fluids is most often a consequence of high temperature (granulite facies) metamorphism, but magmatic degassing can also produce graphite. Fluid precipitated graphite is well-ordered and can be a source of highly valued crystalline lump or vein-type graphite.

The Albany deposit is a unique example of an epigenetic graphite deposit in which a large volume of highly crystalline, fluid-deposited graphite occurs within an igneous host. The deposit is interpreted as a vent pipe breccia that formed from CO_2-rich fluids that evolved due to pressure-related degassing of syenites of the Albany Alkalic Complex and is described below (Conly, 2014):

STAGE 1 – Emplacement of Host Syenites Forming the Albany Alkalic Complex:

Emplacement of the Albany breccia pipes is estimated to be Mesoproterozoic to Neoproterozoic based on cross-cutting relationship with the Paleoproterozoic Matachewan and Hearst quartz diabase dyke swarms and Mesoproterozoic Sudbury olivine tholeiite dyke swarm. Magma emplacement may also be structurally controlled by the Gravel River Fault, which in part defines the southern margin Albany Alkalic Complex and separates the Marmion Terrane (to the north) and the Quetico Subprovince (to the south).

STAGE 2 – Fluid Generation and Breccia Pipe Development:

The two breccia pipes formed as a result of a degassing magma, resulting in segregation of a CO_2-bearing fluid, which occurred in response to depressurization of the magma at mid to shallow crustal levels, and accumulation of CO_2 at the top of the ascending dyke. Possible sources for the carbon include: i) generation of primary CO_2-rich syenite; and ii) assimilation of carbonaceous Quetico metasedimentary rock by syenitic magmas. The co-existence of angular to rounded breccia fragments is evidence of mixing of juvenile fragments with earlier entrained material which has been subject to a greater extent of mechanical erosion due to rapid and turbulent upflow of the CO_2-fluid.

STAGE 3 – Graphite Deposition:

Graphite deposition likely occurred rapidly due to the sudden depressurization and quenching (from supercritical fluid to gas) of the CO_2-fluid which, in turn, is due to the dyke head breaking the surface and venting CO_2 gas (Figure 9). Surface venting is evidenced from the extent of the graphite breccias to the unconformity with the overlying Paleozoic rock. Such rapid depressurization would have also imploded the walls of the vent complex; it is consistent with the higher proportion of angular syenite fragments relative to rounded syenite fragments and fragments of Archean country rock, and with localized production of xenoliths with minimal transport. Rapid deposition of graphite inferred from its fine-crystal size (laths typically 100 μm to 300 μm long) and high abundances of discrete crystals and fine crystal aggregates. Coinciding with the changes in pressure, a rapid decrease in temperature would have inhibited growth of coarser-crystalline graphite and led to the crystallizing of the degassing syenite magma at depth.

STAGE 4 –Post Mineralization Magmatic and Erosional Events:

Post-mineralization events include the following (listed in temporal succession):

- Emplacement of late-stage barren olivine-aegirine syenite sills
- Intrusion of aplite and other felsic dykes
- Erosion of upper levels of the Albany Alkalic Complex and supergene alteration
- Deposition of Paleozoic carbonate rocks and Quaternary glacial sediments

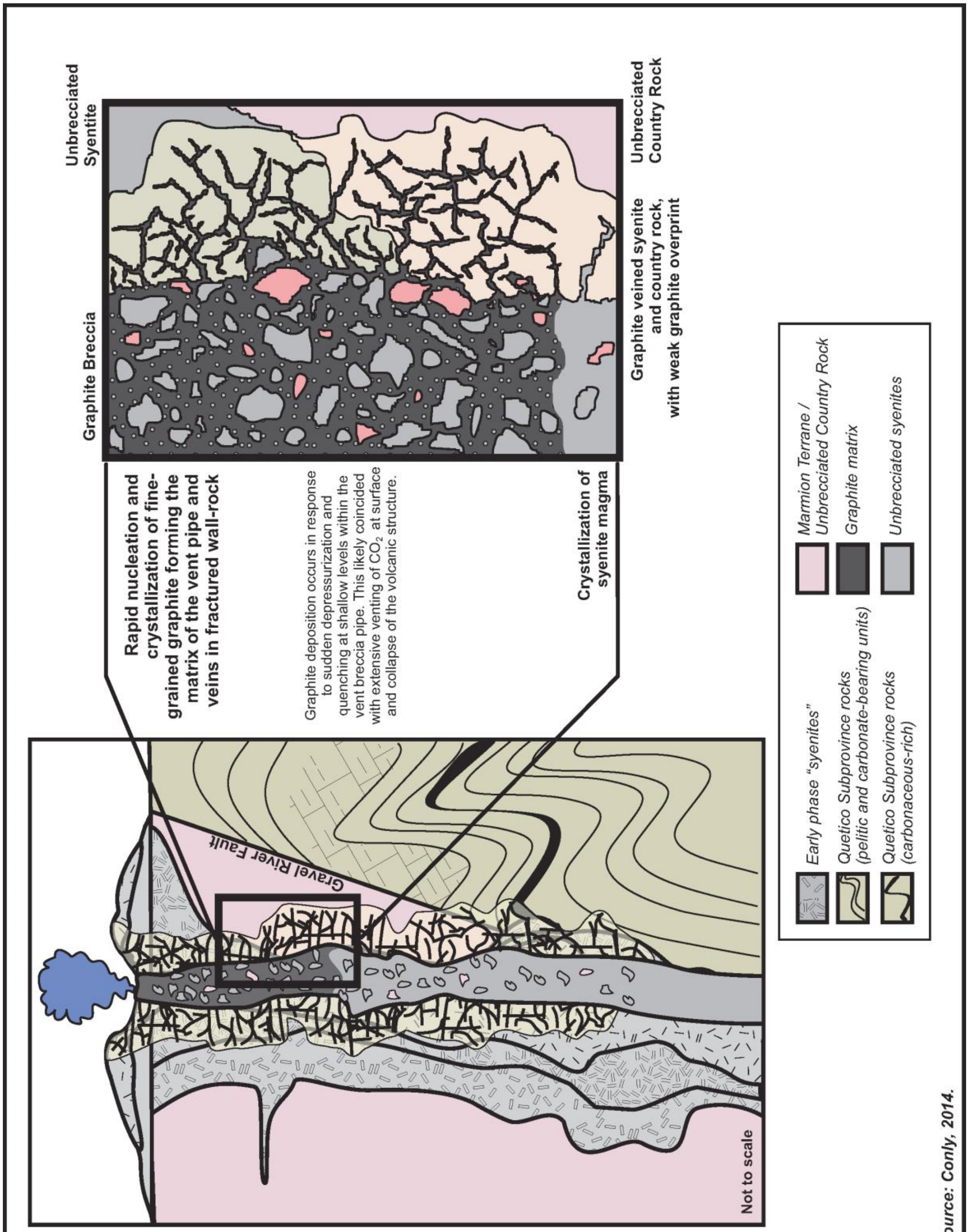


Figure 9: Albany Graphite Deposit Model

8.0 2013 Diamond Drill Program

The diamond drilling program conducted by Zenyatta Ventures in 2013 consisted of two drill holes to explore for nickel (Ni), copper (Cu), platinum group metals (PGMs) and graphite (C). The drilling program began on October 26, 2013 and ended November 6, 2013 and the two holes **Z13-4F58 and Z13-4F59** totaled **702 m** of drilling. These holes were spotted using Garmin GPSmap 76S, with an accuracy of 3 to 5 m. Core logging was completed near the claim site using a laptop computer and the X-Logger program. Below is a summary of each drill hole:

> **DDH Z13-4F58** was drilled on the southeastern section of the 4F claim block (east of the Nagagami River) to test a target which was modeled as a thick plate, steeply dipping to the south. Drill hole Z13-4F58 intersected a thick package of quartz-feldspar-biotite gneiss and quartz-sericite-biotite +/-garnet schist intruded by thin mafic and intermediate dykes. From 348m to 351.3m this drill hole intersected 3-5% finely disseminated pyrrhotite associated with minor disseminated and blebby pyrite. This 3.3 m thick, moderately conductive and weakly to moderately magnetic section occurs within a quartz-sericite-biotite schist just below a 30 m thick, fine-grained, moderately magnetic diabase dyke. Conductivity values range from 5-10 S/m in pyrite and locally up to 180 S/m associated with very fine pyrrhotite. This moderately conductive section could explain the airborne EM anomaly especially with the dyke above which would act as an insulator; this will result in a good conductivity contrast and likely current channeling below the dyke.

> **DDH Z13-4F59** was drilled on the western part of the 4F claim block. The purpose of this drill hole was to test an EM conductor located near a magnetic high feature that was defined based on the airborne survey conducted by Geotech Ltd. From 121.5 to 150 m down hole this drill hole intersected a highly magnetic and locally moderately conductive unit. From 203 to 231 m Z13-4F59 intersected bands of disseminated and locally semi-massive sulphides composed mainly of pyrrhotite with minor pyrite and trace chalcopyrite. The highest amount of sulphides, 20-25% pyrrhotite, was intersected from 219 to 222 m; this interval is also very conductive with conductivity ranging from 50-150 S/m in bands of disseminated pyrrhotite, up to 7000 and 20,000 S/m in semi-massive to massive pyrrhotite sections. This sulphide interval is most likely the cause of the airborne conductor. This drill hole was stopped at 330 m in granite.

The location, azimuth, dip, and length of each drill hole are listed in Table #2. Locations of the drill holes on claims #4257740 and #4257716 are illustrated on Maps 1a and 1b (drill hole location maps) inserted at the back of this report. Also included with this report are the drill sections (Maps #2 and #3) showing drill holes in cross-section, rock types, and any sulphide mineralization sulphides intersected.

Drill core samples were collected in intervals of 1.0 to 2.0 metres. Split drill core saw samples were procured on site and a total of 40 core samples were collected from both holes. The samples were sent to ALS Minerals in Thunder Bay, Ontario for sample preparation work, and then sent to ALS Canada Limited in Vancouver, British Columbia for analysis of 48 elements (four acid ICP-MS; ALS Code ME-MS61) plus Au (FA-AA finish; ALS Code Au-AA23). All the drill core samples are listed in the drill logs in Appendix 1. Refer to Appendix 2 for the signed certificates of analysis (COAs) from ALS Minerals which contain all analytical results for the core samples.

Table 2: Block 4F - 2013 Drill Hole Locations

	UTM's (NAD 83, Zone 16)				Length	
Hole #	**Easting**	**Northing**	**Azimuth**	**Dip**	**(m)**	**Samples**
Z13-4F58	685915	5541140	0	-70	372	16
Z13-4F59	678875	5547425	0	-75	330	24

9.0 Sample Preparation, Analysis and Security

All core samples were identified with a sample identification (ID) number tag that was placed in the plastic bag. Samples were first split using a Vancon core saw; half the sample was put in the bag to be sent for assaying and the other half returned to the core box. The sample ID number was also written on the outside of each sealed sample bag. The sample bags were grouped together and placed into larger rice bags which were also sealed before being shipped for sample preparation. Samples were shipped directly from Zenyatta's core shack at the site to the ALS Minerals facility in Thunder Bay, Ontario, for sample preparation (ALS protocol PREP-31B). Each bagged core sample is dried, crushed to better than 70% passing 2mm and a 1000g split of the crushed material is pulverized to better than 85% passing 75 microns for assaying. The sample pulps were then shipped to the ALS Minerals laboratory in Vancouver, British Columbia for assay. ALS Minerals has ISO 9001:2008 and ISO 17025 Accreditation as per the Standards Council of Canada at all of its global laboratories.

See Appendix 2, at back of this report for all geochemical analytical results (COAs). Blanks and duplicates were inserted into the sample stream in order to test the analytical quality control. These are listed below in Table #3:

Table 3: Control Samples		
HOLE ID	**SAMPLE ID**	**DESCRIPTION**
Z13-4F58	N551689	Blank sample
Z13-4F59	N551655	Duplicate sample
Z13-4F59	N551666	Blank sample

10.0 Interpretation and Conclusions

Zenyatta drilled two exploration reconnaissance holes within the Block 4F claim group in order to investigate two separate airborne EM conductors. In both holes (Z13-4F58 and Z13-4F59), the EM conductors were explained by zones of disseminated pyrrhotite and/or by zones of massive pyrrhotite mineralization. The drilling did not intersect any mafic to ultramafic intrusive rocks that commonly host large sulphide mineralized zones, and no economically significant sulphide mineralization (nickel, copper or PGMs) was intersected.

Interestingly, the interpreted geology in Figure 8 suggests that hole Z13-4F59 should have intersected intrusive rocks that are related to the alkali complex but this was not the case. This hole appears to have intersected Marmion Terrane rocks and this indicates that the boundaries of the southernmost intrusion are not well constrained. This is also supported by the magnetic data which does not show well defined contacts for the intrusion.

Overall, the best core sample assay was a slightly anomalous value of **1040ppm Zn (0.10%)** for sample #N551690 from DDH Z13-4F58. The best copper (Cu) values in core samples were weakly anomalous **(442ppm and 429ppm Cu)** in DDH Z13-4F59. There were no elevated gold or silver (Au or Ag) values in the assay results. Zenyatta geologists did not observe any graphite mineralization during logging of the core and therefore did not assay for graphite (C) in either of the two holes. These disappointing results do not justify any further exploration in either of these claim areas.

To date, a total of 65 holes have been drilled by Zenyatta Ventures in Albany Block 4F; two holes described in this report (Z13-4F58, Z13-4F59) and 63 holes drilled (2011-2013) targeting the Albany graphite (C) zones. The results of the graphite deposit resource drill program are described in a recent NI43-101 Technical Report (Ross and Masun, 2014).

11.0 Recommendations

The 2013 exploration drilling program did not reveal any economically significant mineralized zones in either of the areas drilled by drill holes Z13-4F57 or Z13-4F58. Overall the assay results were disappointing and did not show any anomalous values of significance and, at this time, Zenyatta Ventures does not recommend any follow-up drilling on either of these claims.

12.0 References

Algoma Steel Corporation (1963-1966): MNDM Assessment Report File T-4267, Nagagami River File – Alkaline Ring Complexes, Hearst Area.

Conly, A., (2014): Albany Graphite Deposit Genetic Model, Zenyatta Ventures Ltd. Internal company memorandum, 8p.

Harben, P.W., and Kuzvart, M., (1996): A Global Geology. Industrial Minerals Information Ltd., London, 462 p.

Jagodits, F. & Paterson, N. (1964): Hunting Survey Corporation Limited for Algoma Ore Properties Limited, Airborne Magnetic Survey, MNDM Assessment Report File T-343, Nagagami River Area.

Koulomzine, T. (1959): MNDM Assessment File #42K01SW0004; Ground Geophysical Report for Nagagami River Prospecting, Pitopiko River area.

Ontario Geological Survey (1999): Aeromagnetic Geophysics, Geophysical Data Set 1036.

Ross, D. and Masun, K.M. *(2014):* Technical Report on the Albany Graphite Deposit, Northern Ontario, Canada, NI43-101 Resource Estimate Technical Report by RPA Inc. for Zenyatta Ventures Ltd., 133p.

Sage, R.P. (1988): Nagagami River Alkalic Rock Complex, Ontario Geological Survey, Study #43.

Shell Canada Explorations Limited (1978): Mulloy Project Drill Logs, MNDM Assessment Report T-3102.

Stott, G.M. (2007-2008): Ontario Geological Survey Map P3599, Hudson Bay and James Bay Lowlands Region Interpreted From Aeromagnetic Data, South Sheet.

Vaillancourt, C., Sproule, R.A., MacDonald, C.A., and Lesher, C.M. (2003): Investigation of Mafic-Ultramafic Intrusions in Ontario and Implications for Platinum Group Element Mineralization: Operation Treasure Hunt; Ontario Geological Survey Open File Report 6102.

Venn, V.R. (1965): Algoma Ore Properties Division, MNDM Assessment Report File T-338; Report on the Nagagami River Alkaline Ring Complexes, Hearst Area.

Venn, V.R. (1967): Algoma Ore Properties Division, MNDM Assessment Report File T-351; Report on the McGale Copper Prospect, Nagagami River Area.

13.0 Certificate of Qualifications

I, **Glenda Carey**, of 218 London Drive, Thunder Bay, Ontario, do hereby certify that:

1. I hold a **Bachelor of Science Degree in Earth Science (1989*)*** from Memorial University of Newfoundland, St. Johns, Newfoundland and Labrador;

2. I have practiced my profession in Newfoundland and Labrador, NWT, Alberta, Nunavut and Ontario since 1989 and have been employed directly by mining and exploration companies and the Government of Nunavut, and Government of Newfoundland and Labrador;

3. I am presently an employee of Zenyatta Ventures Limited based in Thunder Bay, Ontario as a Geologist for the company;

Date: February 12, 2014 at Thunder Bay, Ontario

Glenda Carey, Geologist
Zenyatta Ventures Limited
1224 Amber Drive, Thunder Bay, Ontario, P7B 6M5
Tel: (807) 346.1660 Fax: (807) 345.4412

APPENDIX 1

DIAMOND DRILL LOGS
Z13-4F58, Z13-4F59

Drillhole Log

Units Meters

Zenyatta Ventures Ltd.

Hole Type	Reconnaissance hole	Claim/Permit	4257716	Length	330.00
Project	Albany Block 4F	District	Porcupine	Date Started	01/11/2013
Province/State/Region	Ontario	Area	Pitopiko River	Date Completed	04/11/2013
Zone/Prospect	Graphite Deposit	Collar Survey	Hand-held GPS	Date Logged	05/11/2013

Co-ordinate System	UTM NAD83 Canada Zone 16	UTM North	5547425	Local Grid E		Azimuth Grid (°)	
Grid ID	None	UTM East	678875	Local Grid N		Azimuth Astro. (°)	0.00
NTS Sheet	42K01	UTM Elevation	130.00	Grid Elevation		Dip (°)	-75.00

Logged By	Ardian Peshkepia	Core Storage	Eagles Earth		
Project Supervisor	Ardian Peshkepia	Core Size	NQ		Finalized ☐
Drill Contractor	Chibougamau Diamond Drilling Lt	Core Reduction(s)	1> 268	2>	By

Casing 1	Steel	62.00
Casing 2		

Casing Pulled ☐

Makes Water ☐

Plugged ☐ *Plug Depth*

Capped ☑

Pulsed ☐ *Pulse Depth*

Geophysics Contractor: Geotech Ltd.

Purpose

Test VTEM conductor (A2) on 4F claim block.

Results

This drill hole intersected highly conductive disseminated and locally semi-massive po with minor Py and trace Cpy; 10-15% sulphides overall from 203 to 222m in a weakly altered amphibolite. This likely explains the airborne EM conductor.

Comments

Distance	*Azimuth (°) Grid*	*Azimuth (°) Astronomic*	*Dip (°)*	*Use Test*	*Survey Method*	*Mag. Field (nT)*	*Comments*
75.00		356	-74.5	☑	Reflex EZ	57996	
78.00		355.5	-75	☑	Reflex EZ	57890	
81.00		356	-74.7	☑	Reflex EZ	57844	
84.00		356.3	-74.9	☑	Reflex EZ	57753	
87.00		356.3	-74.4	☑	Reflex EZ	57705	
90.00		358.4	-74.7	☑	Reflex EZ	57631	
93.00		356.2	-74.9	☑	Reflex EZ	57698	
96.00		357	-74.5	☑	Reflex EZ	57265	
99.00		356.6	-74.6	☑	Reflex EZ	56743	
102.00		356.9	-74.3	☑	Reflex EZ	57826	
105.00		357	-74.5	☑	Reflex EZ	57808	
108.00		357	-74.3	☑	Reflex EZ	58004	
111.00		358.3	-74.7	☑	Reflex EZ	57931	
114.00		356.5	-74.9	☑	Reflex EZ	57682	
117.00		356.9	-74.4	☑	Reflex EZ	57765	
120.00		358.1	-74.3	☑	Reflex EZ	56822	
123.00		357.7	-74.5	☑	Reflex EZ	57837	
126.00		357.5	-74.8	☑	Reflex EZ	57337	
129.00		357.9	-74.9	☑	Reflex EZ	57227	
138.00		358.7	-74.5	☑	Reflex EZ	57245	
147.00		1.2	-74.6	☑	Reflex EZ	60770	
153.00		359.7	-74.7	☑	Reflex EZ	57654	
156.00		0.1	-74.8	☑	Reflex EZ	57518	
159.00		0.2	-74.2	☑	Reflex EZ	57743	
162.00		0.5	-74.4	☑	Reflex EZ	57628	
165.00		359.9	-74.4	☑	Reflex EZ	57591	
168.00		0.7	-74.1	☑	Reflex EZ	57243	
171.00		2	-74.3	☑	Reflex EZ	56660	
174.00		359.6	-74.6	☑	Reflex EZ	57966	
177.00		3.6	-74.1	☑	Reflex EZ	56657	
180.00		1	-74.2	☑	Reflex EZ	56846	
183.00		358.6	-72	☑	Reflex EZ	57491	
186.00		1.7	-74	☑	Reflex EZ	57154	
189.00		0.5	-73.9	☑	Reflex EZ	57503	
192.00		359.5	-74.5	☑	Reflex EZ	56751	
195.00		1.8	-74.5	☑	Reflex EZ	57326	

Distance	Azimuth (°) Grid	Azimuth (°) Astronomic	Dip (°)	Use Test	Survey Method	Mag. Field (nT)	Comments
198.00		0.4	-74	☑	Reflex EZ	57367	
201.00		0.4	-74.5	☑	Reflex EZ	57039	
204.00		360	-73.9	☑	Reflex EZ	56778	
210.00		1.6	-74.2	☑	Reflex EZ	57033	
213.00		5.2	-74.4	☑	Reflex EZ	53567	
216.00		6.7	-73.9	☑	Reflex EZ	57793	
219.00		7.8	-73.9	☑	Reflex EZ	56178	
225.00		8.3	-73.7	☑	Reflex EZ	57763	
228.00		8.3	-73.7	☑	Reflex EZ	57745	
231.00		3.3	-73.8	☑	Reflex EZ	57736	
234.00		358.6	-73.7	☑	Reflex EZ	57742	
237.00		2	-73.9	☑	Reflex EZ	57364	
240.00		359.7	-74.1	☑	Reflex EZ	58311	
243.00		1.3	-73.7	☑	Reflex EZ	57108	
246.00		0.8	-73.9	☑	Reflex EZ	57717	
249.00		0.7	-73.8	☑	Reflex EZ	57337	
252.00		0.2	-74.1	☑	Reflex EZ	57927	
255.00		1.9	-73.6	☑	Reflex EZ	57748	
258.00		1.2	-73.8	☑	Reflex EZ	57731	
261.00		2	-73.6	☑	Reflex EZ	57777	
264.00		1.7	-73.5	☑	Reflex EZ	57681	
267.00		1.7	-74	☑	Reflex EZ	57729	
273.00		1.4	-74	☑	Reflex EZ	57622	
276.00		1.8	-73.9	☑	Reflex EZ	57749	
282.00		3.1	-73.4	☑	Reflex EZ	57733	
294.00		2.3	-73.5	☑	Reflex EZ	57818	
297.00		3.4	-73.2	☑	Reflex EZ	57706	
300.00		3.3	-73.3	☑	Reflex EZ	57801	
303.00		3.5	-73.4	☑	Reflex EZ	57685	
306.00		3.2	-73.2	☑	Reflex EZ	57806	
309.00		3	-73.4	☑	Reflex EZ	57783	
312.00		3.7	-73.2	☑	Reflex EZ	57806	
315.00		3.5	-73.7	☑	Reflex EZ	57832	
318.00		2.7	-73.9	☑	Reflex EZ	57781	
321.00		3.1	-73.4	☑	Reflex EZ	57801	
327.00		2.6	-73.6	☑	Reflex EZ	57685	

Distance	Azimuth (°)		Dip (°)	Use Test	Survey Method	Mag. Field (nT)	Comments
	Grid	Astronomic					
330.00		2.9	-73.9	☑	Reflex EZ	57767	

Lithology From	To		Sample #	From	To	Len.	Cu (G) ppm	Ni(G) ppm	Zn (G) ppm	Au (G) ppm	Ag (G) ppm
0.00	59.00	**OB Overburden** from 0 to 58.4 unknown overburden. From 58.4 to 59m boulders of gneiss, granite and limestone.									
59.00	63.15	**SED Sediment** Whitish-beige vuggy limestone down to 61.8. from61.8 to 6315 greenish-grey well bedded siltstone									
63.15	84.55	**PGN Paragneiss** Medium grey, fine grained, well foliated quartz-feldspar-biotite paragneiss. Paleo-weathering from 63.15 to 73.3 soft crumbly core sections. Foliation at 55 dca. Few 1015 cm dark green mafic sections dykes(?) from 76.2 to 78m. Pink coarse feldspathic dykes 5-15cm from 79.8 to 82.8.									
84.55	91.30	**GN Gneiss** Light to medium grey, well banded fine grained quartz-feldspar-sericite+/- garnet gneiss. Banding at 50 dca. Trace finely disseminated pyrite from 90.6 to 91m.									
91.30	92.00	**MD Mafic Dyke** Dark green, fine grained massive mafic dyke. Fine grained amphibole. Weak foliation cut by thin granitic dykes 2-3cm. Thick.									
92.00	107.70	**GN Gneiss** Light to medium grey, well banded quartz-feldspar-garnet-biotite gneiss. Coarse pegmatitic, milky white to pink feldspathic dykes up to 30cm thick from 99.2 to 104. Foliation/banding at 55 dca. From 105.93 to 106.84 brecciated section with dark brown biotite rich subrounded fragments in pale green to grey, quartz-epidote matrix. UC sharp at 40 dca. LC sharp at 70 dca.									

Lithology From	To		Sample #	From	To	Len.	Cu (G) ppm	Ni(G) ppm	Zn (G) ppm	Au (G) ppm	Ag (G) ppm
107.70 -	117.47	**AMPH Amphibolite** Medium grey to greenish grey, fine grained amphibolite (?). Well foliated/banded at 50 dca. Original rock probably of mafic origin. Very hard. Few thin pegmatitic feldspathic dykes 5-10 cm thick. Not magnetic. Lower contact sharp at 90 dca.									
117.47 -	121.60	**QFP Quartz-Feldspar Porphyry** Medium grey coarse quartz-feldspar porphyry. Milky white subhedral feldspars 2-5cm in smoky grey quartz matrix with interstitial fine grained biotite. Lower contact sharp at 30 dca. Magnetite veinlets and 20cm quartz vein at 121.2m									
121.60 -	140.30	**IF Iron Formation** Medium grey, fine grained well banded iron formation. Moderately to locally strongly magnetic from 126 to 140. Locally weakly to moderately conductive due to very finely disseminated pyrrhotite. 3-5% sulphides from 138.9 to 104.1m. Foliation/banding at 35 dca.									
140.30 -	144.30	**GN Gneiss** Medium grey, fine grained, well banded qtz-fsp-garnet gneiss. Banding at 50 dca. 3-5% sulphides as mm thick pyrite veinlets along banding planes. Locally moderate to strongly magnetic 70 SI due to fine grained magnetite.									
144.30 -	150.00	**IF Iron Formation** Medium to dark grey, fine grained, quartz, fine grained, magnetite. 5-10% sulphides from 145 to 147.2 as disseminated pyrite and minor pyrrhotite. Numerous thin 2-5cm quartz veins. Magnetic susceptibility. 50-160 SI; conductivity generally low locally strong as at 145.4m up to 403 S/m due to fine grained po.									

Lithology From	To		Sample #	From	To	Len.	Cu (G) ppm	Ni(G) ppm	Zn (G) ppm	Au (G) ppm	Ag (G) ppm
150.00 -	156.40	**MD Mafic Dyke** Greenish-grey, soft altered mafic unit(?) fracture filling quartz-carbonate veinlets; moderately fractured core with minor fault gouge from 151 to 152.2. Could be a weak fault zone. 20-30cm pink coarse feldspathic dykes from 155.3 to 156.2									
156.40 -	190.65	**AMPH Amphibolite** Medium to dark grey, fine grained, weakly foliated amphibolite (?). Fine grained hornblende/actinolite plus feldspar. Locally weakly magnetic. From 167.5 to 169.3 3% sulphides as disseminated py+po. Foliation at 40 dca. Cross-cut by numerous thin 2-25cm coarse feldspathic dykes at high angle to ca.									
190.65 -	191.37	**QFP Quartz-Feldspar Porphyry** Medium grey, QFP dyke with pink pegmatitic feldspar and quartz vein at the upper contact. Upper contact sharp at 65 dca. Lower contact sharp at 70 dca.									
191.37 -	202.95	**AMPH Amphibolite** Dark grey to greenish-grey, fine gained amphibolite. Hornblende/actinolite plus feldspar give a fine salt and pepper texture. Very hard. Weak foliation at 40 dca. Cut be numerous thin felsic dykes 2-15cm thick at high angle the ca.									
202.95 -	203.64	**FD Felsic Dyke** Pinkish-white pegmatite. Coarse feldspar and interstitial quartz. Upper contact sharp at 60 dca. Lower contact sharp at 90 dca.									

Lithology From	To		Sample #	From	To	Len.	Cu (G) ppm	Ni(G) ppm	Zn (G) ppm	Au (G) ppm	Ag (G) ppm
203.64 -	207.50	**STRS Stringer Sulphides** Greenish-grey, fine grained, well foliated actinolite+quartz +sulphides. Overall 5-10% sulphides as finely disseminated po and locally as semi-massive bands 5-15cm thick at 205 and 207m. Minor pyrite as blebby. Trace chalcopyrite as specks within a 15cm semi-massive po section at 207m.	N551651	203.64	204.60	0.96	115.5	59.9	162	0.0025	0.12
			N551652	204.60	205.50	0.90	239	61.9	279	0.0025	0.28
			N551653	205.50	206.50	1.00	144.5	60.6	214	0.0025	0.25
			N551654	206.50	207.50	1.00	442	78.3	128	0.0025	0.4
207.50 -	215.15	**AMPH Amphibolite** Medium to dark grey with a light greenish hue amphibolite. Fine grained hornblende/actinolite, feldspar +/- quartz. Weak foliation at 50 dca. Cut by thin 10 to 15cm felsic dykes and high angle to ca. From 214.24 to 214.64 pegmatite dyke. Upper contact sharp at 75 dca. Lower contact sharp at 50 dca.	N551656	207.50	209.00	1.50	48.4	65.6	82	0.0025	0.09
			N551657	209.00	210.50	1.50	45.4	62.5	92	0.0025	0.08
			N551658	210.50	212.00	1.50	70	62.1	127	0.0025	0.15
			N551659	212.00	213.50	1.50	34.5	52.6	134	0.0025	0.13
			N551660	213.50	214.50	1.00	35.1	48.6	108	0.0025	0.09
			N551661	214.50	215.85	1.35	24.7	29.5	85	0.0025	0.12
215.15 -	215.85	**QFP Quartz-Feldspar Porphyry** QFP dyke at high angle to ca. 15cm pegmatitic section at the lower contact.									
215.85 -	219.00	**AMPH Amphibolite** Greenish-grey fine grained, moderately foliated amphibolite. Actinolite plus quartz. 5% sulphide as bands of finely disseminated po with minor pyrite from 216.45 to 218.5.	N551662	215.85	217.00	1.15	56.4	64.7	149	0.0025	0.19
			N551663	217.00	218.00	1.00	37.9	58.8	146	0.0025	0.25
			N551664	218.00	219.00	1.00	221	64.8	237	0.0025	0.52
219.00 -	222.00	**STRS Stringer Sulphides** Stringer to locally semi-massive and net-textured po with minor pyrite a trace chalcopyrite. 15-20% sulphides. Highly conductive up 20,000 S/m. Probably the cause of the EM aeromagnetic anomaly. The matrix is mainly quartz. Pegmatite dyke from 220.3 to 220.77 at 90 dca.	N551665	219.00	220.00	1.00	415	94.9	146	0.0025	0.66
			N551667	220.00	221.00	1.00	50.1	29	89	0.0025	0.16
			N551668	221.00	222.00	1.00	247	82.2	322	0.0025	0.61

Lithology From	To		Sample #	From	To	Len.	Cu (G) ppm	Ni(G) ppm	Zn (G) ppm	Au (G) ppm	Ag (G) ppm
222.00 -	231.00	**AMPH Amphibolite** Moderately altered amphibolite. Light green, epidote patches. Up to 5% po as finely disseminated bands. Blocky core, minor fault from 229.5 to 230.2.	N551669	222.00	223.50	1.50	47.6	70.5	161	0.0025	0.16
			N551670	223.50	225.00	1.50	114.5	79.5	244	0.0025	0.23
			N551671	225.00	226.50	1.50	96.7	96	222	0.0025	0.16
			N551672	226.50	228.00	1.50	53.7	104.5	169	0.0025	0.1
			N551673	228.00	229.00	1.00	114	172	234	0.0025	0.16
			N551674	229.00	230.00	1.00	256	180	202	0.0025	0.75
			N551675	230.00	231.00	1.00	247	100.5	120	0.0025	0.61
231.00 -	235.75	**GN Gneiss** Medium grey, fine grained, quartz-feldspar-biotite gneiss. Gneissic banding at 70 dca.	N551676	231.00	231.97	0.97	78.6	75.7	100	0.0025	0.12
235.75 -	257.32	**AMPH Amphibolite** Greenish-grey, fine grained, moderate foliation at 55 dca. Hornblende/actinolite amphibolite plus fine grained feldspar. Cut by numerous light grey to pink granitic dykes at high angle to ca and cross foliation. Dykes range in thickness from 10 to 40 cm .									
257.32 -	258.30	**FD Felsic Dyke** Pink, fine grained aphanitic, massive felsic dyke. Upper contact sharp at 70 dca. Broken core at lower contact.									
258.30 -	260.78	**AMPH Amphibolite** Greenish-grey, fine grained, moderately foliated amphibolite.									

Lithology From	To		Sample #	From	To	Len.	Cu (G) ppm	Ni(G) ppm	Zn (G) ppm	Au (G) ppm	Ag (G) ppm
260.78 -	261.75	**FD Felsic Dyke** Light pink pegmatite. Coarse pink to milky white feldspar; interstitial quartz and minor biotite.									
261.75 -	287.46	**AMPH Amphibolite** Medium to dark grey, fine grained well foliated amphibolite. Foliation at 50 dca. Cut by numerous granitic dykes some pegmatitic that range in thickness form 4cm up to 60cm. They cut the core at high angle and cross foliation									
287.46 -	293.80	**GR Granite** Pink, medium to coarse grained granite. Weak to moderate foliation. Both contacts sharp at 70 dca. From 292.02 to 292.63 amphibolite section foliated at 60 dca.									
293.80 -	301.25	**AMPH Amphibolite** Greenish-grey fine grained amphibolite. Moderate foliation at 60 dca. Cross cut by several thin granitic dykes at high angle to ca cross foliation. Lower contact sharp at 60 dca.									
301.25 -	330.00	**GR Granite** Light grey to pink, medium to coarse grained, massive granite. Moderate foliation near the upper contact from 301.25 to 304m. Foliation at 50 dca. Blocky core from 307 to 308 and few fractures subparallel to ca from 310 to 316.5. Pink coloured down to 318.17. From 318.17 to 330 light grey, massive granodiorite; coarse feldspar, amphibole, quartz. Blocky core from 320.8 to 321.4m. EOH 330m									

zenyatta

Drillhole Log

Units **Meters**

Zenyatta Ventures Ltd.

Hole Type	Reconnaissance hole	*Claim/Permit*	4257740	*Length*	372.00
Project	Albany Block 4F	*District*	Porcupine	*Date Started*	28/10/2013
Province/State/Region	Ontario	*Area*	Pitopiko River	*Date Completed*	30/10/2013
Zone/Prospect	VTEM Target Drilling	*Collar Survey*	Hand-held GPS	*Date Logged*	02/11/2013

Co-ordinate System	UTM NAD83 Canada Zone 16	*UTM North*	5541140	*Local Grid E*		*Azimuth Grid (°)*	
Grid ID	None	*UTM East*	685915	*Local Grid N*		*Azimuth Astro. (°)*	0.00
NTS Sheet	42F16	*UTM Elevation*	130.00	*Grid Elevation*		*Dip (°)*	-70.00

Logged By	Ardian Peshkepia	*Core Storage*	Eagles Earth		
Project Supervisor	Ardian Peshkepia	*Core Size*	NQ		*Finalized* ☐
Drill Contractor	Chibougamau Diamond Drilling Lt	*Core Reduction(s)*	1> 336	2>	*By*

Casing 1	Steel	36.00
Casing 2		

Casing Pulled ☐

Makes Water ☐

Plugged ☐ *Plug Depth*

Capped ☑

Pulsed ☐ *Pulse Depth*

Geophysics Contractor Geotech Ltd.

Purpose

Test VTEM conductor (D) on 4F claim block.

Results

This drill hole intersected 3-5% disseminated po+py in moderately conductive qtz-sericte-bio schist from 348 to 351.3. This likely explains the weak EM conductor.

Comments

Distance	Azimuth (°) Grid	Azimuth (°) Astronomic	Dip (°)	Use Test	Survey Method	Mag. Field (nT)	Comments
39.00		1.1	-68.7	☑	Reflex EZ	59233	
42.00		1.2	-68.8	☑	Reflex EZ	57920	
45.00		1.2	-68.8	☑	Reflex EZ	57765	
48.00		1.2	-68.8	☑	Reflex EZ	57539	
57.00		1.7	-69.1	☑	Reflex EZ	57510	
60.00		2.2	-70.3	☑	Reflex EZ	57612	
63.00		2.2	-69.1	☑	Reflex EZ	56594	
66.00		3	-68.6	☑	Reflex EZ	57378	
72.00		2.8	-68.6	☑	Reflex EZ	57518	
75.00		2.7	-68.9	☑	Reflex EZ	57521	
78.00		2.2	-68.8	☑	Reflex EZ	57567	
81.00		2.4	-69	☑	Reflex EZ	56614	
84.00		3.1	-68.4	☑	Reflex EZ	57999	
87.00		3.3	-68.8	☑	Reflex EZ	57576	
90.00		2.5	-68.8	☑	Reflex EZ	57674	
93.00		3	-68.5	☑	Reflex EZ	57690	
96.00		2.5	-68.6	☑	Reflex EZ	57681	
99.00		2.4	-68.8	☑	Reflex EZ	57680	
102.00		2.7	-68.5	☑	Reflex EZ	57677	

Distance	Azimuth (°) Grid	Astronomic	Dip (°)	Use Test	Survey Method	Mag. Field (nT)	Comments
105.00		2.8	-68.9	✓	Reflex EZ	57668	
108.00		2.7	-68.7	✓	Reflex EZ	57665	
111.00		3.1	-68.5	✓	Reflex EZ	57662	
117.00		3	-68.3	✓	Reflex EZ	57640	
120.00		3	-67.9	✓	Reflex EZ	57634	
123.00		2.7	-68.5	✓	Reflex EZ	57668	
126.00		3.2	-68.1	✓	Reflex EZ	57664	
129.00		2.9	-68.7	✓	Reflex EZ	57665	
132.00		2.7	-68.1	✓	Reflex EZ	57666	
135.00		3.3	-68	✓	Reflex EZ	57691	
138.00		3.3	-68.1	✓	Reflex EZ	57719	
141.00		3.8	-68	✓	Reflex EZ	57683	
144.00		3.8	-68.3	✓	Reflex EZ	57676	
147.00		3.6	-68	✓	Reflex EZ	57690	
153.00		4.4	-67.7	✓	Reflex EZ	57701	
156.00		4.8	-67.7	✓	Reflex EZ	57691	
159.00		4.4	-67.9	✓	Reflex EZ	57689	
162.00		5	-67.4	✓	Reflex EZ	57693	
165.00		4.9	-67.7	✓	Reflex EZ	57637	
168.00		5.4	-67.5	✓	Reflex EZ	57702	
171.00		5.4	-67.3	✓	Reflex EZ	57694	
174.00		6.2	-66.9	✓	Reflex EZ	57700	
177.00		6.3	-66.8	✓	Reflex EZ	57694	
183.00		6.5	-66.7	✓	Reflex EZ	57697	
186.00		7.1	-66.7	✓	Reflex EZ	57714	
189.00		6.8	-66.9	✓	Reflex EZ	57705	
192.00		7.1	-66.6	✓	Reflex EZ	57534	
198.00		7.7	-66.6	✓	Reflex EZ	57690	
201.00		7.9	-66.6	✓	Reflex EZ	57779	
204.00		8.5	-66.2	✓	Reflex EZ	57715	
207.00		8.4	-66.3	✓	Reflex EZ	57698	
210.00		8	-66	✓	Reflex EZ	57701	
213.00		8.3	-66.1	✓	Reflex EZ	57780	
216.00		7.9	-65.9	✓	Reflex EZ	57729	
219.00		7.4	-66.2	✓	Reflex EZ	57742	
222.00		7.8	-65.7	✓	Reflex EZ	57742	

Distance	Azimuth (°) Grid	Astronomic	Dip (°)	Use Test	Survey Method	Mag. Field (nT)	Comments
225.00		7.9	-66.1	✔	Reflex EZ	57747	
228.00		8	-66	✔	Reflex EZ	57748	
231.00		7.5	-65.8	✔	Reflex EZ	57738	
234.00		7.3	-65.9	✔	Reflex EZ	57727	
237.00		7.9	-65.9	✔	Reflex EZ	57745	
240.00		8.1	-65.7	✔	Reflex EZ	57730	
243.00		8.4	-65.8	✔	Reflex EZ	57707	
246.00		8.5	-65.8	✔	Reflex EZ	57706	
249.00		8.4	-66	✔	Reflex EZ	57696	
252.00		8.6	-65.5	✔	Reflex EZ	57694	
255.00		8.6	-65.9	✔	Reflex EZ	57673	
258.00		8.7	-65.9	✔	Reflex EZ	57701	
261.00		8.6	-65.5	✔	Reflex EZ	57685	
264.00		9	-65.4	✔	Reflex EZ	57683	
267.00		8.4	-65.7	✔	Reflex EZ	57667	
270.00		9.3	-65.4	✔	Reflex EZ	57679	
273.00		8.8	-65.4	✔	Reflex EZ	57661	
276.00		9.3	-65.3	✔	Reflex EZ	57682	
279.00		9.1	-65.6	✔	Reflex EZ	57668	
282.00		9.6	-65.2	✔	Reflex EZ	57698	
285.00		9.2	-65.5	✔	Reflex EZ	57716	
288.00		9.2	-65.5	✔	Reflex EZ	57721	
291.00		9.9	-65.4	✔	Reflex EZ	57728	
294.00		9.7	-65.3	✔	Reflex EZ	57707	
297.00		5.9	-63.1	✔	Reflex EZ	57640	
300.00		9.8	-65.4	✔	Reflex EZ	57589	
303.00		10.8	-65.2	✔	Reflex EZ	57611	
306.00		10.5	-65.4	✔	Reflex EZ	57735	
309.00		10.6	-64.9	✔	Reflex EZ	57796	
312.00		10.5	-64.9	✔	Reflex EZ	57832	
315.00		10.2	-64.9	✔	Reflex EZ	57801	
318.00		11.2	-65.4	✔	Reflex EZ	57601	
321.00		10.1	-65.1	✔	Reflex EZ	57929	
327.00		11.9	-64.9	✔	Reflex EZ	57829	
330.00		13.1	-64.8	✔	Reflex EZ	57973	
336.00		12.9	-64.9	✔	Reflex EZ	57197	

Distance	Azimuth (°) Grid	Azimuth (°) Astronomic	Dip (°)	Use Test	Survey Method	Mag. Field (nT)	Comments
339.00		12.9	-64.9	☑	Reflex EZ	57889	
342.00		11.5	-64.8	☑	Reflex EZ	57248	
345.00		11.5	-64.9	☑	Reflex EZ	57682	
354.00		11.4	-64.4	☑	Reflex EZ	58485	
357.00		10.5	-64.6	☑	Reflex EZ	57451	
360.00		10.9	-64.7	☑	Reflex EZ	57608	
363.00		11.4	-64.5	☑	Reflex EZ	57621	
366.00		11.5	-64.4	☑	Reflex EZ	57351	
369.00		11.9	-64.1	☑	Reflex EZ	57606	
372.00		11.2	-64.4	☑	Reflex EZ	57635	

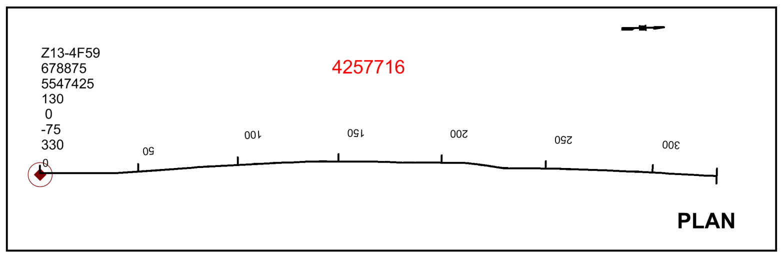
Lithology From	To		*Sample #*	*From*	*To*	*Len.*	*Cu (G)* ppm	*Ni(G)* ppm	*Zn (G)* ppm	*Au (G)* ppm	*Ag (G)* ppm
0.00	34.10	**OB Overburden** Unknown overburden.									
34.10	34.50	**SED Sediment** Limestone. Boulder size rounded core pieces.									
34.50	76.40	**PGN Paragneiss** Greenish-grey with white bands paragneiss. Fine to locally medium grained. Amphibole, feldspar and biotite assemblage reflecting a probably mafic to intermediate composition of the original rock. Moderate foliation as green amphibole bands alternate with whitish feldspathic bands/sections that range in thickness from a few mm to several cm. Moderate hardness. Foliation at 35 to 50 dca.									
76.40	77.73	**FD Felsic Dyke** Light pink, fine grained with weak gneissic banding felsic intrusive. Upper contact sharp at 40 dca. Lower contact sharp at 65 dca. Trace pyrite as isolated specks.									
77.73	80.04	**ID Intermediate Dyke** Greenish-white, salt and pepper texture, medium grained, massive mafic to intermediate unit. Moderately magnetic. 50/50 amphibole and feldspar. Lower contact sharp at 40 dca.									
80.04	84.85	**PGN Paragneiss** Medium green with white bands, fine to locally medium grained paragneiss. Mainly amphibole and feldspar and minor biotite. Moderate foliation/banding at 40 dca. Lower contact sharp at 35 dca.									

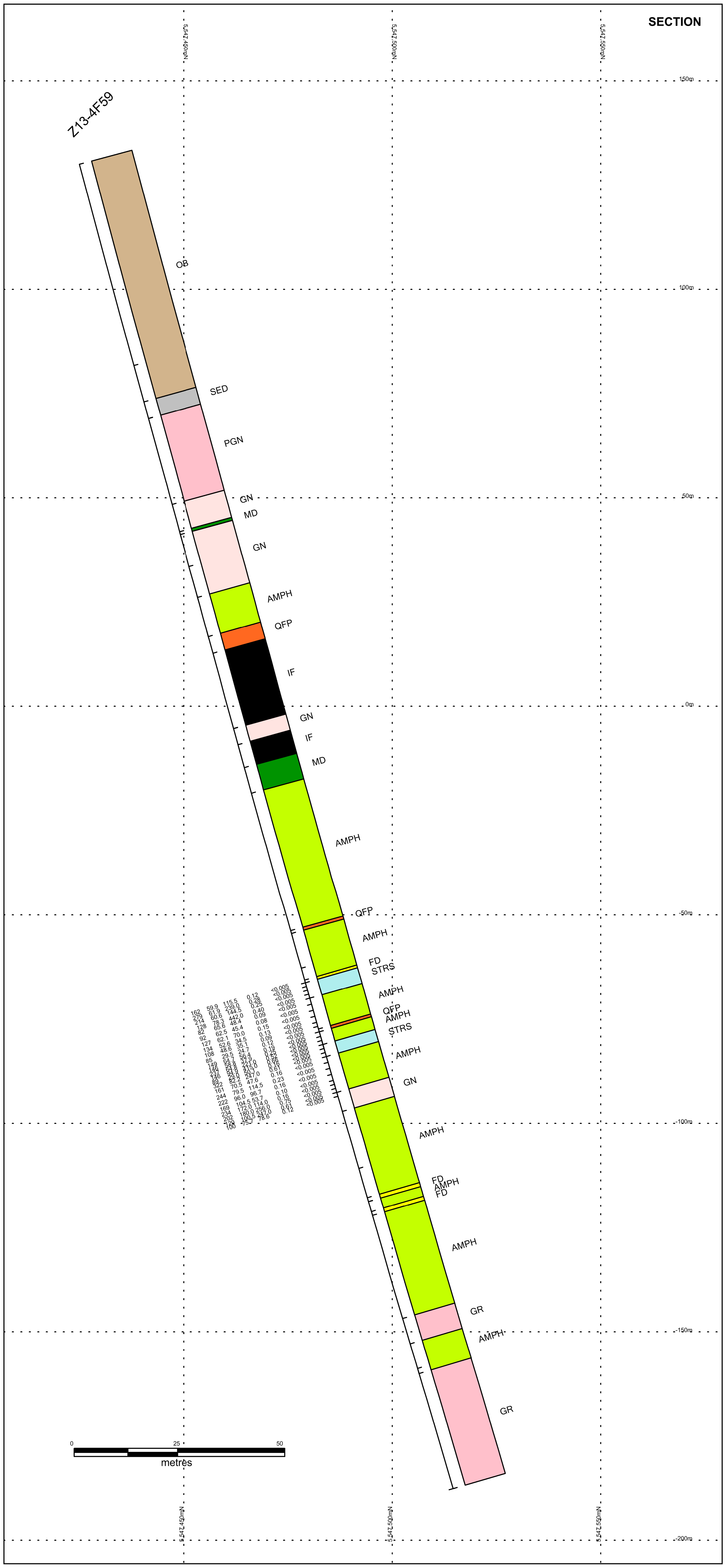
Lithology From	To		Sample #	From	To	Len.	Cu (G) ppm	Ni(G) ppm	Zn (G) ppm	Au (G) ppm	Ag (G) ppm
84.85 -	85.92	**FD Felsic Dyke** Pinkish-grey, fine grained, weakly banded felsic intrusive. Lower contact irregular.									
85.92 -	95.48	**GN Gneiss** Greenish to light brownish-grey, fine grained well foliated mafic to intermediate rock. Amphibole, biotite, feldspar. More feldspathic from 86.5 to 89.2 paragneiss with medium to coarse amphibole crystals in a feldspathic matrix. More regular banding/foliation from 89.2 to the lower contact. Foliation at 50 dca. Trace pyrite at 94.15. Lower contact sharp at 50 dca.									
95.48 -	97.52	**FD Felsic Dyke** Light pink, fine grained with weak gneissic banding felsic intrusive. Lower contact sharp at 40 dca.									
97.52 -	106.34	**PGN Paragneiss** Greenish-grey, fine grained, moderately foliated paragneiss. Foliation at 30 dca. Fine grained, biotite, amphibole and feldspar assemblage. Moderate hardness. The amount of biotite appear to increase downhole.									
106.34 -	107.40	**FD Felsic Dyke** Light pink, fine grained, massive with weak gneissic banding felsic intrusive. Upper contact sharp at 35 dca. Lower contact sharp at 30 dca.									

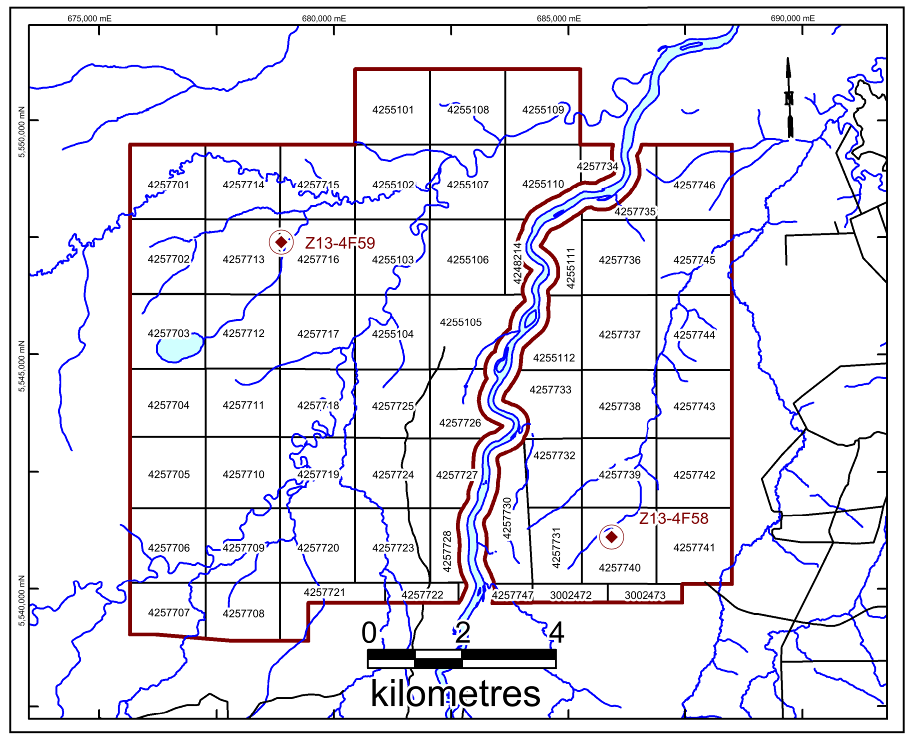
Lithology From	To		Sample #	From	To	Len.	Cu (G) ppm	Ni(G) ppm	Zn (G) ppm	Au (G) ppm	Ag (G) ppm
107.40 -	136.45	**PGN Paragneiss** Brownish-grey, fine grained with weak to moderate foliation paragneiss. Mostly fine grained biotite and feldspar with minor amphibole. Light grey to white feldspar porphyroblasts subrounded stretched along foliation planes range in size from 1-25mm. Foliation at low angle to subparallel to ca. 10cm quartz veins of irregular shape from 114 to 114.5.									
136.45 -	137.35	**MD Mafic Dyke** Brownish-green, massive mafic dyke. Fine grained biotite. 10-15cm sugary quartz veins from upper contact to 137m.									
137.35 -	170.20	**PGN Paragneiss** Brownish-grey with minor greenish-grey sections met sediment. Fine grained biotite-qtz-feldspar paragneiss. Moderate foliation at 20 dca. Few quartz-feldspathic veins <10cm of irregular shape from 145.6 to 147.5									
170.20 -	180.55	**MD Mafic Dyke** Greenish-grey fine grained, aphanitic mafic dyke. Fracture filling, irregular quartz-carbonate veinlets. Brecciated from 176.4 to 177.									
180.55 -	216.00	**PGN Paragneiss** Medium to dark grey to brownish-grey, fine grained , moderately foliated met sediment. Fine grained. Biotite-quartz-feldspar paragneiss. Locally cherty as dark grey to black banded silica from 203 to 205. From 196 to 201 localized pervasive sericite and fracture filling epidote veinlets.									

Lithology From	To		Sample #	From	To	Len.	Cu (G) ppm	Ni(G) ppm	Zn (G) ppm	Au (G) ppm	Ag (G) ppm
216.00	297.53	**SCH Quartz-Sericite-Biotite schist** Brownish-grey, fine grained, moderate foliation. Biotite-sericite-quartz+/-garnet schist. Upper contact gradual marked by increased sericite. Blocky core, moderate fracturing from 221.2 to 222. Foliation at 20-30 dca. Trace sulphides as specks of chalcopyrite and hairline fracture filling pyrite veinlets in the most sericitic sections from 238 to 239.8 and from 274 to 276. Minor garnet as light pink subhedral 1-3mm crystals. Moderate hardness.									
297.53	299.24	**MD Mafic Dyke** Greenish-grey, fine grained, massive mafic dyke. Fine grained, biotite, amphibole. Minor quartz-carbonate veinlets trace pyrite at 290.3. Upper contact sharp at 40 dca. Lower contact sharp at 50 dca.									
299.24	309.36	**SCH Quartz-Sericite-Biotite schist** Whitish-grey, quartz-sericite-biotite schist. Not conductive. Moderate foliation at 50 dca.									
309.36	310.40	**FD Felsic Dyke** Light grey, fine to medium grained, salt and pepper texture, granodiorite dyke. Upper contact sharp at 60 dca. Lower contact sharp subparallel to ca.	N551677	309.36	310.40	1.04	8	21.9	59	0.0025	0.58
310.40	317.35	**SCH Quartz-Sericite-Biotite schist** Whitish-grey, fine grained sericite-quartz-biotite schist. Weakly conductive (~80Sm) due to finely disseminated po+py from 311 to 312 and from 317 to 317.35. Possible cause of the weak EM conductor?!	N551678	310.40	311.50	1.10	69.2	35.5	36	0.0025	0.85
			N551679	311.50	313.00	1.50	45.1	43.8	24	0.0025	0.62
			N551680	313.00	314.50	1.50	42.2	43.8	27	0.0025	1.15
			N551681	314.50	316.00	1.50	72.1	16.8	49	0.0025	0.86
			N551682	316.00	317.35	1.35	203	24.4	66	0.017	2.54

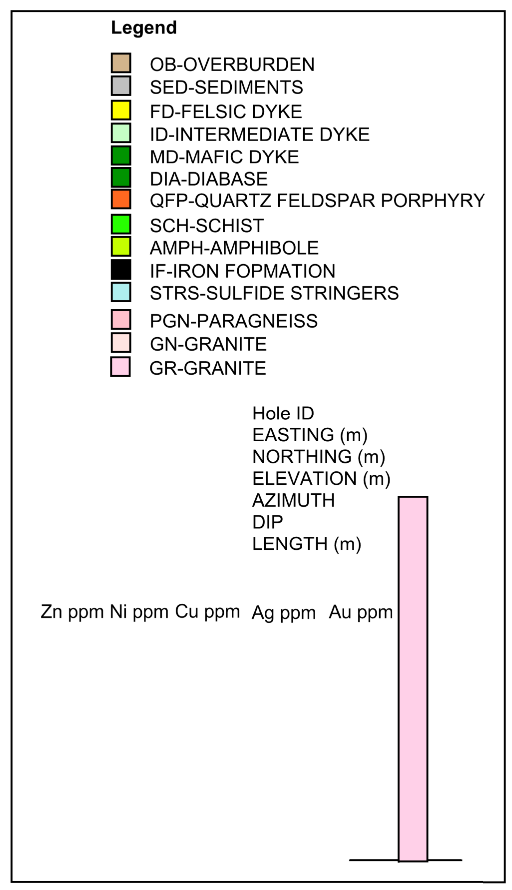
Lithology From	To		*Sample #*	*From*	*To*	*Len.*	*Cu (G)* ppm	*Ni(G)* ppm	*Zn (G)* ppm	*Au (G)* ppm	*Ag (G)* ppm
317.35 -	323.00	**MD Mafic Dyke** Medium green, fine grained, massive mafic dyke. Irregular milky quartz veins mixed with fine grained biotite from upper contact to 318.8. Upper contact sharp at 25 dca. Weak foliation at the contact. Not magnetic or conductive. Lower contact sharp at 18 dca.	N551683	317.35	318.40	1.05	18.7	63.5	84	0.0025	0.56
			N551684	318.40	319.50	1.10	50.9	74.1	64	0.0025	0.66
			N551685	319.50	320.43	0.93	60.4	93.3	66	0.0025	0.65
323.00 -	348.00	**DIA Diabase** Medium grey, fine grained , massive diabase dyke. Moderately magnetic. Fairly uniform. Slightly coarser grained salt and pepper texture at the centre of the dyke from 329 to 343m. Fine to very fine grained aphanitic chilled margin from 344 to 348m. Lower contact sharp at 22 dca.	N551686	345.00	346.50	1.50	188	61.8	130	0.0025	0.22
			N551687	346.50	348.00	1.50	180.5	61.8	131	0.0025	1.73
348.00 -	369.38	**SCH Quartz-Sericite-Biotite schist** Light grey to whitish grey with brownish streaks qtz-bio-sericite schist. Moderate foliation at 50 dca. The amount of biotite increases downhole and minor garnet porphyroblasts appear starting from 361.4. Weakly to moderately conductive from 348 to 351.3 due to finely disseminated pyrrhotite and hairline fracture filling and minor blebs of pyrite. Overall 3-5% sulphides. Conductivity ranges from 37 to 382 S/m with associated moderate mag 5-40 SI. Could explain the weak EM conductor. Milky quart bands with trace pyrite from 366.4 to 369.38. Lower contact sharp at 70 dca.	N551688	348.00	349.00	1.00	104.5	59.1	436	0.088	39.6
			N551690	349.00	350.00	1.00	175	44.5	1040	0.025	30.5
			N551691	350.00	351.00	1.00	154.5	54.8	247	0.015	17.2
			N551692	351.00	352.00	1.00	58.2	29.5	208	0.008	13.05
			N551693	352.00	353.00	1.00	26	18.1	178	0.0025	3.88
369.38 -	372.00	**MD Mafic Dyke** Medium green to brownish-green, moderately foliated mafic dyke. Fine grained chlorite and biotite. Minor 2-3cm milky quartz veins. Foliation 40-60 dca. EOH 372m									



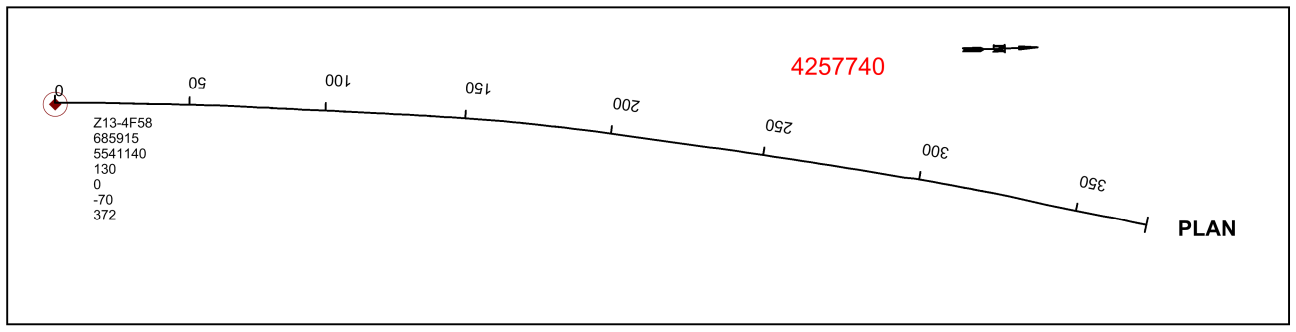


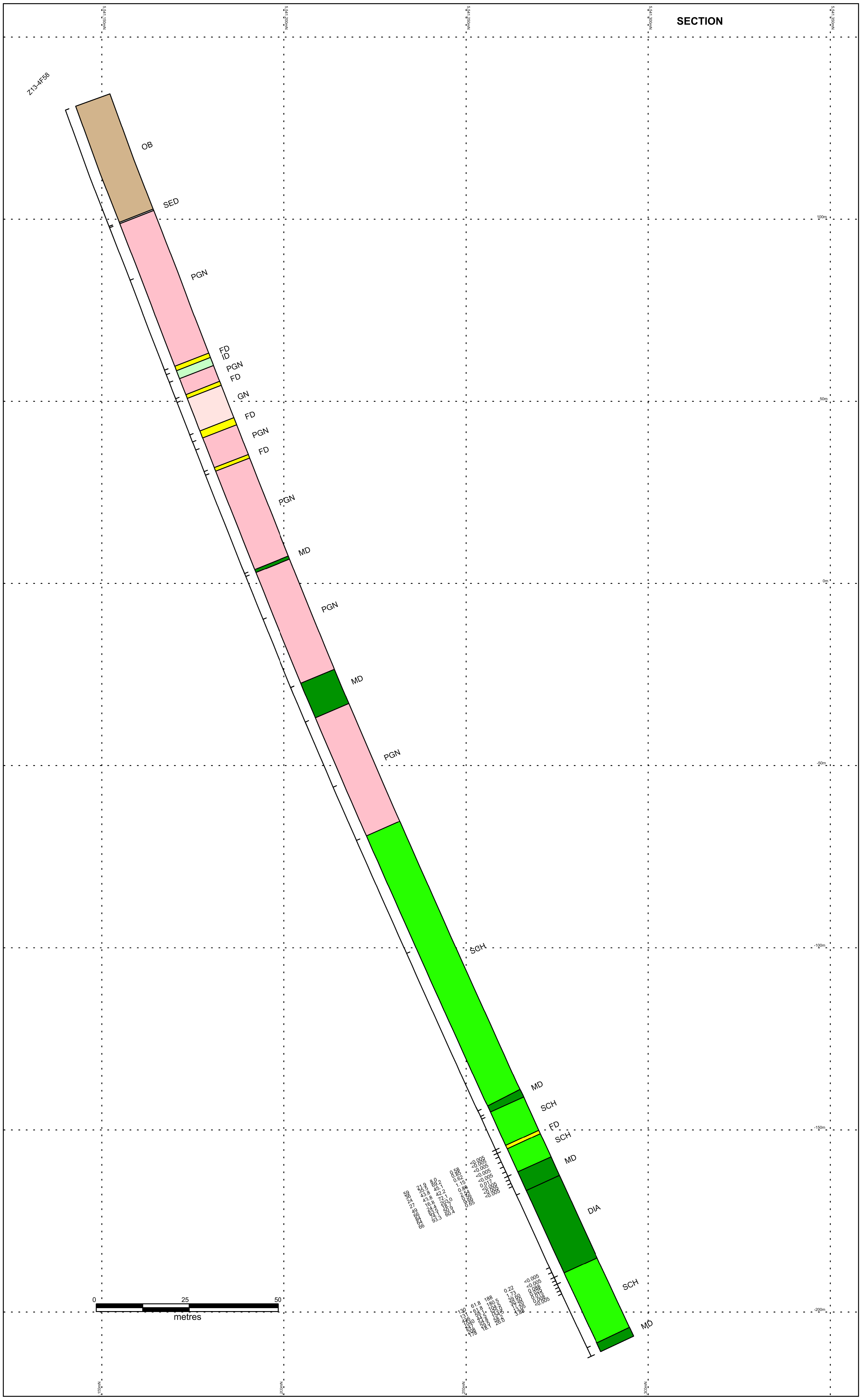


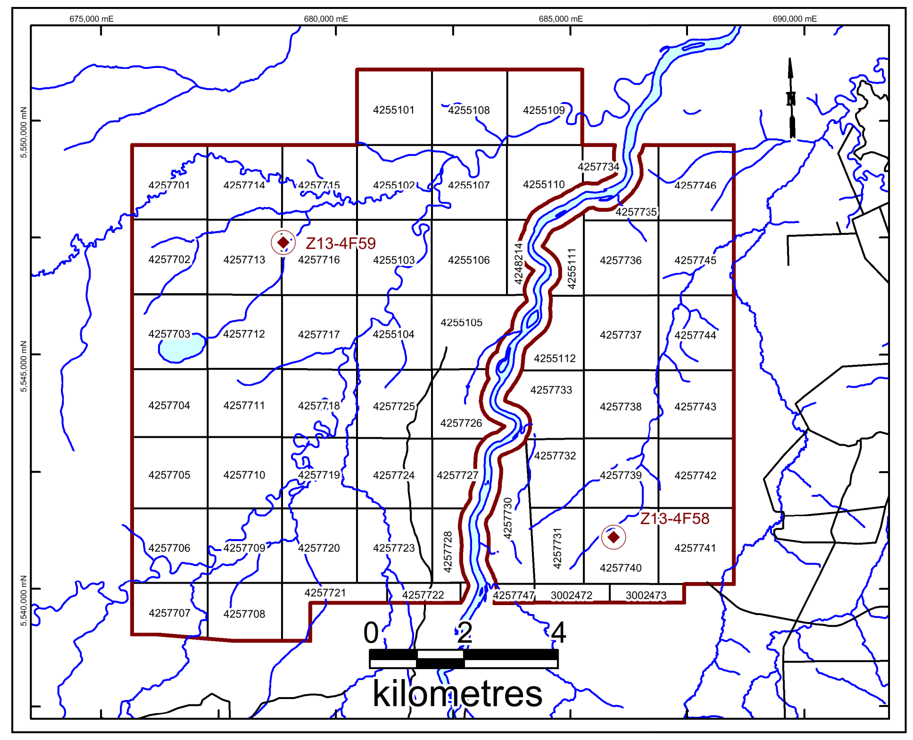
DRILLHOLE LOCATION PLAN



Geologist: Peter Wood	zenyatta
Date:20/01/2014	**ZENYATTA PROPERTY DRILL SECTIONS Z13-4F59 MAP 3**
Author: Glenda Carey	
Office: Thunder Bay	
Drawing: csalo	
Scale:1:1,000	Projection: Nad 83, UTM Zone







DRILLHOLE LOCATION PLAN

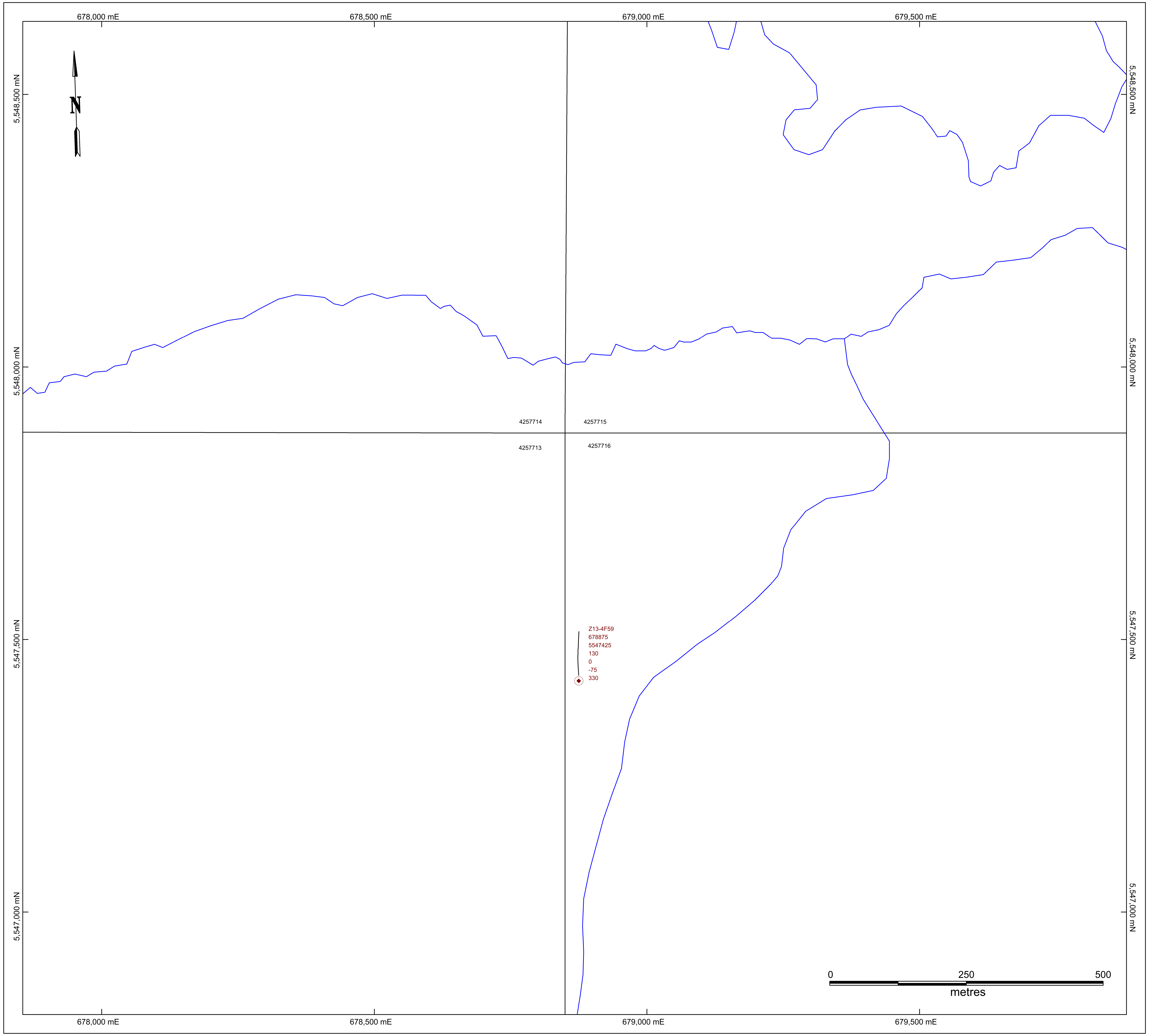
Legend

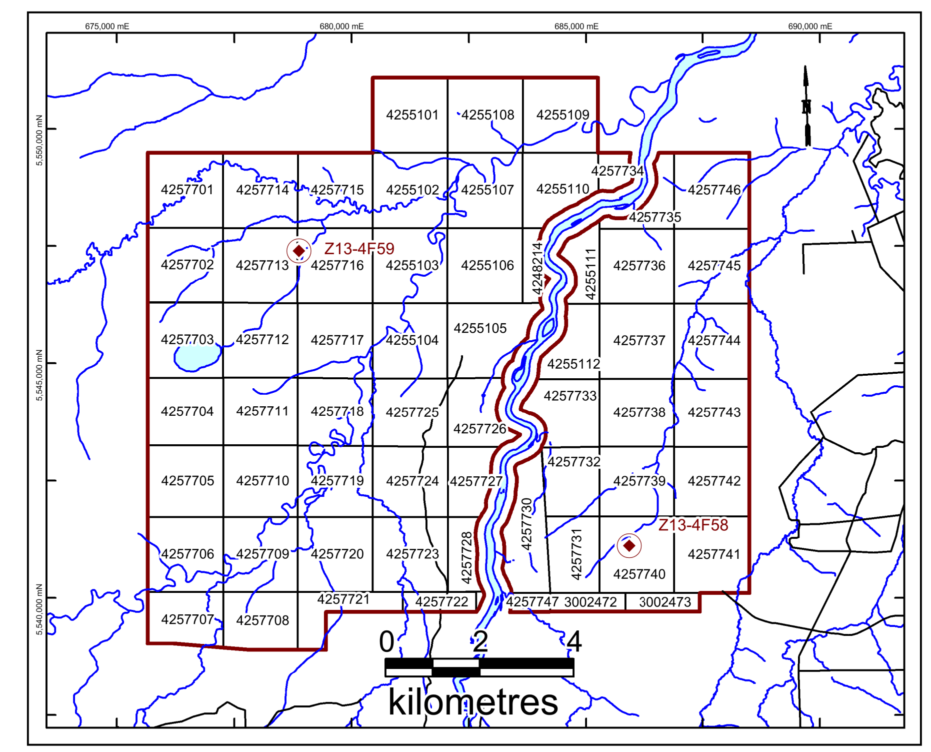
- OB-OVERBURDEN
- SED-SEDIMENTS
- FD-FELSIC DYKE
- ID-INTERMEDIATE DYKE
- MD-MAFIC DYKE
- DIA-DIABASE
- QFP-QUARTZ FELDSPAR PORPHYRY
- SCH-SCHIST
- AMPH-AMPHIBOLE
- IF-IRON FOPMATION
- STRS-SULFIDE STRINGERS
- PGN-PARAGNEISS
- GN-GRANITE
- GR-GRANITE

Hole ID
EASTING (m)
NORTHING (m)
ELEVATION (m)
AZIMUTH
DIP
LENGTH (m)

Zn ppm Ni ppm Cu ppm Ag ppm Au ppm

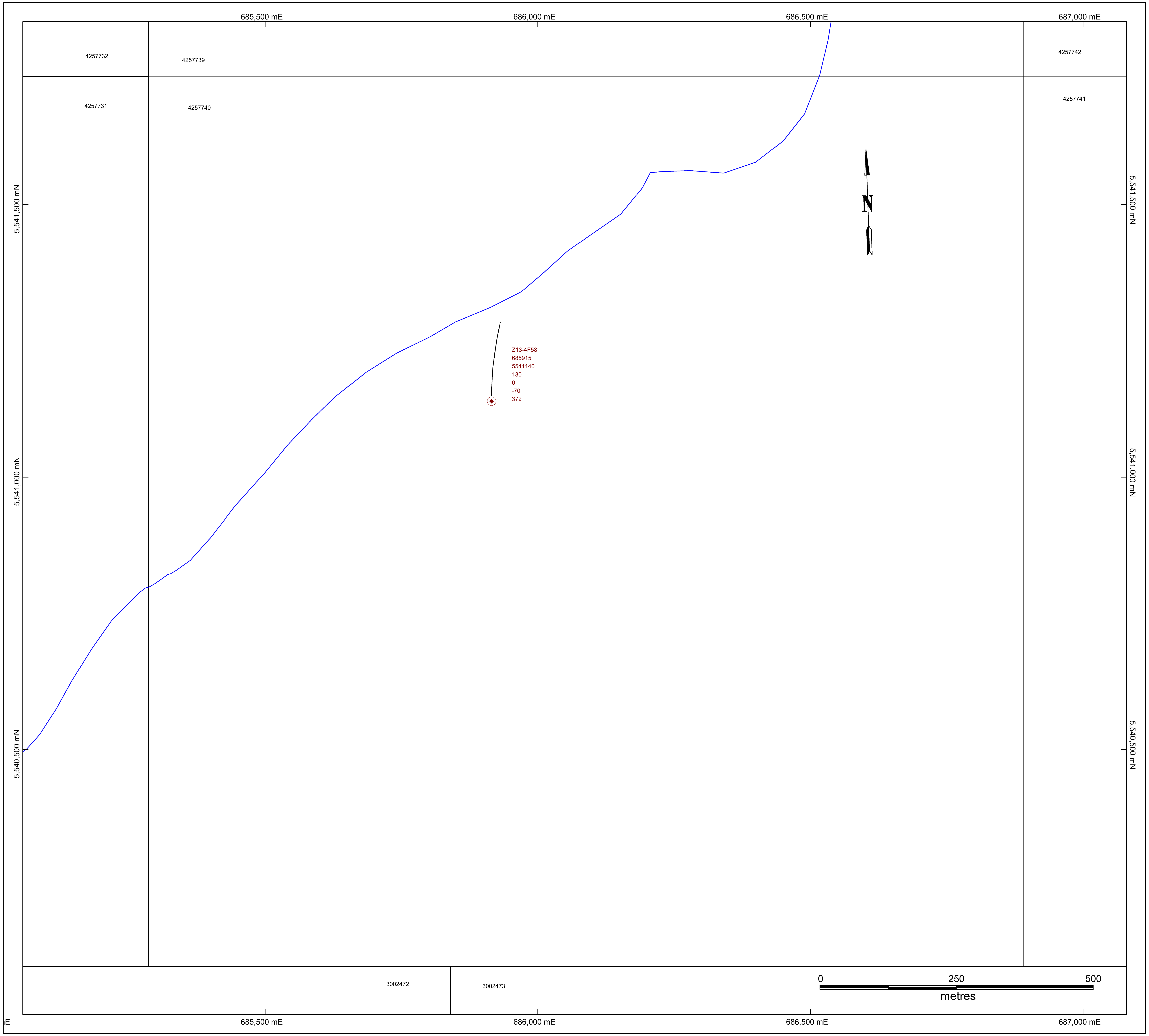
Geologist: Peter Wood	zenyatta **ZENYATTA PROPERTY DRILL SECTIONS Z13-4F58 MAP 2**
Date:20/01/2014	
Author: Glenda Carey	
Office: Thunder Bay	
Drawing: csalo	
Scale:1:1,000	Projection: Nad 83, UTM Zone

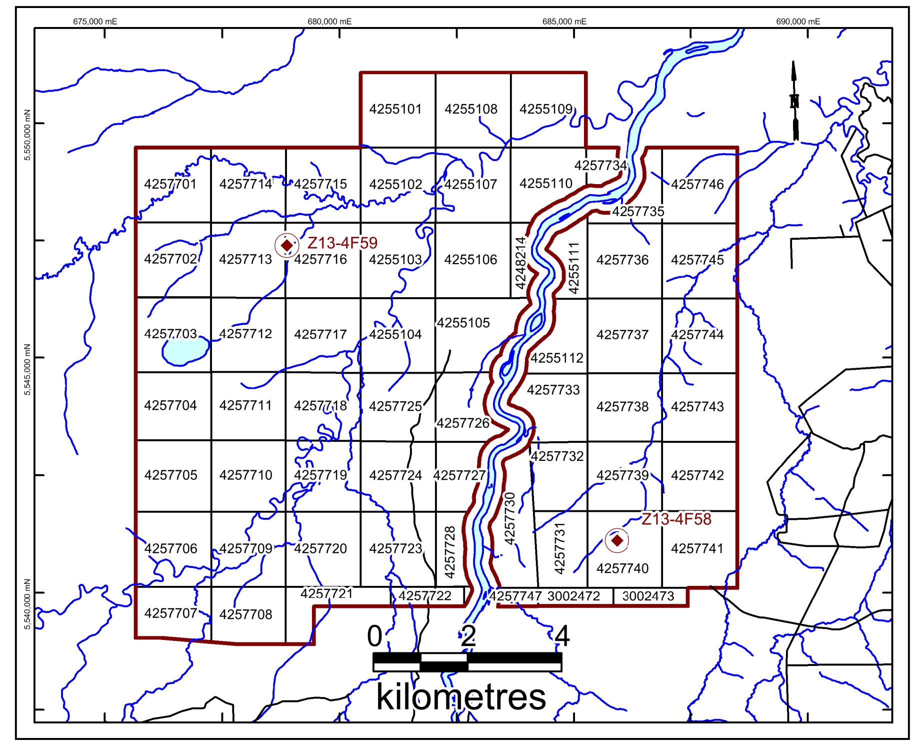




DRILLHOLE LOCATION MAP
CLAIMM BLOCK 4F

Geologist: Peter Wood	zenyatta **ZENYATTA PROPERTY DRILL HOLE LOCATION Z13-4F59 MAP 1b**
Date:20/01/2014	
Author: Glenda Carey	
Office: Thunder Bay	
Drawing: csalo	
Scale:1:5,000	Projection: Nad 83, UTM Zone





DRILLHOLE LOCATION MAP
CLAIMM BLOCK 4F

Geologist: Peter Wood	zenyatta **ZENYATTA PROPERTY** **DRILL HOLE LOCATION** **Z13-4F58** **MAP 1a**
Date:20/01/2014	
Author: Glenda Carey	
Office: Thunder Bay	
Drawing: csalo	
Scale:1:5,000	Projection: Nad 83, UTM Zone

APPENDIX 2

CERTIFICATE OF ANALYSIS
Z13-4F58 & Z13-4F59