AGNERIAN CONSULTING LTD.

(647) 403-2738
hrayr.agnerian@rogers.com

82 Mentor Boulevard
North York, ON, M2H 2N1 Canada

TECHNICAL REPORT
on the
SHINING TREE PROPERTY, ONTARIO

PREPARED FOR
PLATINEX INC.

NI 43-101 Report

Author: Hrayr Agnerian, M.Sc. (Applied), P.Geo.

June 8, 2018

TABLE OF CONTENTS

PAGE

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDIX TABLES

1.0 SUMMARY

1.1 EXECUTIVE SUMMARY

Platinex Inc. (Platinex) has retained Agnerian Consulting Ltd. (Agnerian) to prepare an NI 43-101 Technical Report on the Shining Tree property. The purpose of this report is to provide an independent assessment of the potential for gold mineralization within the Shining Tree property, situated approximately 100 km south of Timmins, Ontario. This report conforms to NI 43-101 Standards of Disclosure for Mineral Projects.

Platinex is a publically listed company on the Canadian Securities Exchange (CSE), with its office in Newmarket, Ontario. The company is engaged in the acquisition, exploration, and development of mineral properties for mining of precious and base metals in Canada.

The Shining Tree property comprises 130 contiguous mineral claims (876 claim units), covering approximately 14,016 ha, and is situated approximately 600 km (by road) north of Toronto, and 40 km south-southwest of the Town of Gowganda, in the Larder Lake Mining Division of Ontario. Platinex has acquired the central part of the Shining Tree property through three agreements with independent vendors, Skead Holdings Ltd (April 2008), G.J. McBride (March 2012), and Ashley Gold Mines Limited and Skead Holdings Ltd. (August 2016). Platinex acquired the remainder of the claims by staking and direct claim purchase. Despite some historic underground mining and development on selected areas, the property is at an early stage of exploration with only some recent airborne geophysical surveys and geochemical sampling done by Platinex personnel. To date, there has been limited diamond drilling by Platinex or by previous operators to test geophysical and geochemical targets on the property. Platinex plans to carry out a thorough compilation of exploration results to date, to generate new drill targets for gold and base metal mineralization, and to test the geophysical and geochemical targets by drilling during the 2018 and 2019 exploration programs.

1.1.1 Conclusions

Based on the review of technical reports on past exploration and publications on regional geology, and recent exploration by Platinex, Agnerian concludes that:

- The Shining Tree area is located in the southwestern portion of the Abitibi greenstone belt and the metamorphic grade throughout the area is low to mid greenschist facies.

- Geological mapping in the Shining Tree area in the past has recognized three distinct Archean aged lithologic assemblages of supracrustal rocks consisting of an older Keewatin aged metavolcanic assemblage unconformably overlain by two Timiskaming type metasedimentary rock assemblages.
- Gold mineralization occurs in a variety of rock types associated with quartz-carbonate veins, including felsic metavolcanic rocks exhibiting intense carbonate alteration, mafic to intermediate metavolcanic rocks, metasedimentary and intrusive rocks. The more favourable hosts are metasedimentary and felsic metavolcanic rocks.
- Results of past exploration and recent research on styles of gold mineralization in the Abitibi region of Ontario suggest that there is potential for porphyry-style gold mineralization associated with alkali-rich felsic volcanic rocks (trachyte) and calc-alkalic felsic volcanic rocks (rhyolite) within the Shining Tree property. These results also suggest that there is potential for volcanogenic massive sulphide (VMS) mineralization within the Shining Tree property.
- There are numerous gold occurrences within the Shining Tree property, including:
    - Past producing mines, such as the Ronda Mine, the Tyranite Mine, the Bilmac Mine, and the Buckingham Mine.
    - Occurrences with underground development, such as the Herrick deposit, Caswell veins, Churchill veins, McBride Royal Mining, Clarke, and Knox gold showings.
    - Other surface showings, such as the Gold Corona vein, Pet vein, Kingston vein, Foisey vein, Miller-Adair vein, Speed Lake showing, Beilby Lake, and Northgate No. 4 showing.
- Results of glacial till studies on the Shining Tree property reveal that there are numerous samples with anomalous gold concentrations, with many pristine gold grains. These results may indicate the existence of regionally significant gold dispersion trains, the source of which is not yet certain.
- Results of trench sampling and diamond drilling at the Herrick deposit indicate that distribution of gold grades are similar in both sets of data.
- The QA/QC procedures used by Platinex and the check assay program used during the till sampling program have produced reliable results.
- Results of independent sampling by Agnerian indicate that for gold values, on average, the Platinex assays are slightly higher than the Agnerian assays.
- Past and recent exploration has established some favourable criteria suggesting the possibility of sizeable accumulations of gold, silver and copper sulphide minerals

within the metavolcanic rocks, at depths ranging from near surface to approximately 300 m below the surface.

- The most likely source of gold mineralization is hot fluids, which acted with wallrock along fractures within the metavolcanic rocks.
- The geological setting and styles of gold mineralization discovered in the past merit further exploration on the Shining Tree property.
- There are no risks or uncertainties regarding past or recent exploration data that could affect the reliability or confidence in those data.

1.1.2 Recommendations

Agnerian recommends that Platinex continue to explore for gold and base metals on the Shining Tree property with a systematic exploration program to assess the exploration potential for the existence of a vein-hosted gold deposit similar to other gold deposits, as well as for volcanogenic massive sulphide (VMS) deposits in the Abitibi region of Ontario, as follows:

- Phase One: A program of compilation of past exploration data during the summer or fall of 2018, airborne geophysical (LIDAR and gradient magnetic) surveys, trenching, and drilling to extend and test geophysical anomalies. Agnerian recommends the airborne survey lines be oriented northeast-southwest as well as northwest-southeast, to detect the postulated structural zones associated with the numerous lineaments and mineralized structures. The drilling would consist of approximately 3,000 m of diamond drilling in 15 drill holes. The exact collar locations are not yet determined at this time, but the drill targets are:
    - First priority targets along the postulated Tyrrell-Rideout Deformation Zone in the western part of the Shining Tree property, within Churchill Township.
    - Second priority targets, such as further testing the gold mineralization at depth at the Herrick, Ronda, and Caswell showings.
- Phase Two: A program of additional diamond drilling, depending on the results of the Phase One drilling, to extend the zones of mineralization at the known target areas. The total amount of drilling during Phase Two would consist of approximately 10,000 m of diamond drilling in 40 to 50 drill holes.

Agnerian has prepared a preliminary budget for the two-phase program to be carried out from 2018 through 2020, which is in the order of $2,135,000. The budget for Phase One is in the order of $635,000 (Table 1-1). Since the mineralized veins in the Shining Tree

area may be oriented both parallel as well orthogonal to the contact zones between the Keewatin Group metavolcanic rocks and Timiskaming Group metasedimentary rocks, Agnerian recommends that the geophysical surveys be conducted with lines oriented both parallel as well as orthogonal to the interpreted contact zones:

Table 1-1 Phase One Recommended Exploration Budget

Platinex Inc. – Shining Tree Property, Ontario		
Item	**Amount ($)**	**Remarks**
Compilation of previous exploration data	25,000	
Structural & geochemical studies	15,000	
Airborne LIDAR survey: 137 km^2 @ $300/$km^2$	48,600	Includes $7,500 for mob/demob.
Airborne gradient magnetic survey: 3,250 ln-km @ $40/km	137,500	Includes $7,500 for mob/demob.
Diamond drilling: 3,000 m @ $80/m	240,000	Drill testing geophysical targets.
Mob & demob for drilling program	10,000	
Geological support during drilling: 35 days @ $800/day	28,500	Includes, one geologist and one technician.
Assays: 500 samples @ $30/sample	15,000	
Accommodation & meals: 50 days @ $300/day	15,000	
Trenching and sampling	10,000	
Travel and related	5,000	
Technical Report	40,000	Includes resource modelling.
Supervision and G & A	15,000	
Subtotal, direct costs	604,100	
Contingencies @ ~5%	30,200	
Total	**634,300**	

A Phase Two program of drilling in the order of $1,500,000 may be carried out over other parts and new targets of the Shining Tree property upon successful results of the Phase One drilling.

1.2 TECHNICAL SUMMARY

1.2.1 Objective

Platinex's objective in the Shining Tree area in northeastern Ontario is to outline an economic gold deposit. The primary objective is lode gold and silver mineralization associated with quartz-carbonate veins, and vein stockworks associated with hydrothermal alteration adjacent to contact zones between Archean mafic volcanic rocks and metasedimentary rocks. Platinex's objective also is to discover porphyry-style gold-copper mineralization and VMS deposits associated with felsic volcanic rocks.

1.2.2 Property Status

The Shining Tree project is at an early stage of exploration despite the long history of exploration in the area, which spans more than a century. Several early operators, including Skead Holdings Ltd., Unocal Canada Limited, Onitap Resources Inc., Shining Tree Resources Inc., Asquith Resources Inc., and many others have sporadically explored the area since the mid-1950s. The current property consists of a nearly contiguous group of 130 unpatented mining claims, comprising 875 sixteen hectare (16 ha) units and one mining lease covering an area of approximately 14,016 hectares. Platinex has acquired the property through four option to purchase agreements with separate vendors, as follows:

- On April 11, 2008, Platinex signed an option to purchase agreement with Skead Holdings Ltd. (Skead) to acquire forty-four mining claims of the Shining Tree property, consisting of 133 claim units. This group now includes 47 mining claims consisting of 144 units that were staked on Crown Land by or for Skead. Under the terms of that agreement, Platinex had the right to earn a 100% interest in the Property by making cash payments totalling $250,000, transferring 250,000 shares in the capital of Platinex to Skead and incurring work expenditures of $850,000 by April 11, 2012. Platinex vested this agreement subject to annual advance royalty payments of $10,000 on April 11th of each year.
- On October 20, 2010, Platinex entered into a joint venture agreement with Creso Resources Inc. (Creso) regarding nine claims - five claims (11 claim units) owned by Platinex and four claims (10 claim units) owned by Creso. The agreement expired in 2011, as Creso could not fund exploration costs.
- On March 30, 2012, Platinex entered into an agreement with Gary John McBride and purchased a mining lease (Mining Lease L-106951) for 200,000 shares of

Platinex. This mining lease covers 16 ha in Churchill Township, and is situated in the central part of the Shining Tree property. Platinex renewed this lease with the Ontario MNDM on October 1, 2016 for a 21-year period.

- On August 17, 2016, Platinex acquired additional interests in 23 mining claims (62 claim units) through an option to purchase agreement with Ashley Gold Mines Limited (Ashley) and Skead. This agreement allows Platinex to earn a 100% interest in 22 mining claims (54 claim units) and a 50% interest in an additional claim (8 claim units) by providing Ashley and Skead (the vendors) 200,000 shares of Platinex, making staged option payments totalling $95,000, and completing $500,000 of work on the claims by August 17, 2020.
- On March 13, 2018, Platinex paid Skead $73,000 comprising $35,000 cash and issued 292,307 common shares to satisfy the earn-in requirements; annual advance royalties from April 2013 to April 2018.

Subsequent to the above agreements, from August 17, 2016 to June 20, 2017, Platinex acquired, by staking and claim purchase agreements, 100% interest in sixty claims (669 claim units) with no underlying interests.

1.2.3 Location and Access

Hwy 560 intersects the Shining Tree property just to the north and east of the hamlet of Shining Tree and at the convergence of the Townships of Fawcett, MacMurchy, Churchill, and Asquith. The centre of the Property is located in UTM Zone 17 at approximately 483,787 m East, 5,271,620 m North, 67 km west of the Town of Elk Lake (population 350), and 60 kilometres southwest of the Town of Matachewan (population 450). It is centrally located between the major mining centres of Timmins, 101 km to the north, and Sudbury, 114 km to the south. The closest major centre to the project area by road is the City of Timiskaming Shores, an amalgamation of the Towns of New Liskeard, Cobalt and Haileybury, located 114 km to the east.

1.2.4 Topography and Climate

The Shining Tree property is in an area of low hills, and topographic relief ranges from 25 m to 55 m. The elevation on the property ranges from 335 m to 400 m above mean sea level. The climate in the Shining Tree area and in northeastern Ontario is continental with significant differences in seasonal temperature. The average temperature during the winter months (November to March) is -8°C and ranges from -20°C to +0°C. The

average temperature during the spring, summer and fall (April to October) ranges from 5°C to 15°C within a range of 0°C to 25°C. The annual precipitation is approximately 930 mm, and the average monthly precipitation ranges from 40 mm to 100 mm, mostly as snow during the winter months and rain during the summer months. While Platinex may conduct field exploration work year-round, access for drilling programs in low-lying boggy areas is better during the frozen winter months. Periodic heavy rainfall or snowfall can hamper exploration at times during the summer or winter months.

1.2.5 Physiography and Land Use

Extensive overburden covers the Shining Tree property, especially along the flanks of low hills and swampy areas. Vegetation in the area is “mixed forest” as it is situated between the Northern Boreal Forest (of balsam, tamarack and black spruce) and the more temperate Great Lakes-St. Lawrence region, where pine and hardwood forests are more common. In low-lying areas, alder is also common. Overburden cover ranges from <20 cm to 3 m. Locally, however, overburden may be up to 10 m thick, especially in swampy areas.

1.2.6 Infrastructure

There is no infrastructure on the property. The closest community to the project area is the unincorporated Hamlet of Shining Tree, which consists of a handful of people who reside along the shores of West Shining Tree Lake. Services available at Shining Tree include meals and lodgings, equipment outfitting, and the ability to purchase basic foodstuffs and fuel at local commercial hunting and fishing camps.

Shining Tree is centrally located between the major mining centres of Timmins, 101 km to the north, and Sudbury, 114 km to the south, and the agricultural community of Timiskaming Shores, 114 km to the east. Most supply and service needs, including emergency medical attention, are available in any of those three communities, although the City of Timiskaming Shores is the closest by road.

The project area is near two major power transmission lines between Timmins and Sudbury, Ontario. To the east is a 500kV line and to the west is a 115kV line. In addition, Ontario Power Generation maintains a high voltage distribution station in the Shining Tree area.

Several gold milling facilities are in operation within a 150 km radius of the property including the Young-Davidson Mine of Alamos Gold Inc., located in Matachewan, some

116 km to the northeast, IAMGOLD Corporation's Coté Lake Mine, approximately 50 km to the west, and Tahoe Gold Corporation's West Timmins mine, 172 km to the north.

1.2.7 History

Exploration for base metals, gold, and silver in northeastern Ontario dates back to the late-19th century A.D. Exploration in the general area of the property commenced upon the discovery of gold by prospecting in the early 1900s. In 1905, the Ontario Government completed the Timiskaming and Northern Ontario Railway (now the Ontario Northland Railway) from North Bay to New Liskeard. This opened up the region to settlement and development and led to the discoveries of gold, copper, nickel, and in particular silver, near the Town of Cobalt.

Exploration in the general area of the Shining Tree property commenced upon the discovery of gold by prospecting in the early 1900s, when Fred Gosselin, a prospector, made the first discovery of gold. The discovery zone consisted of two auriferous quartz veins, the Gosselin Vein and the Main Vein. The mineralized zone of these two veins is 50 cm to 22 m wide, trending at Azimuth 345º, dipping 60º due west, and extends approximately 2.4 km along strike. Subsequent to the discovery, Gosselin Gold Mines Ltd. sank a 45-ft shaft on an offshoot of the Main Vein and carried out extensive trenching and sampling, but no diamond drilling.

There are numerous records of past exploration filed at the MNDM. Early operators focused most of the exploration activity on auriferous quartz veins, commonly discovered by prospecting. These veins pinch and swell, and it appears that many operators in the past did not pay enough attention to define and study structural continuity beyond the surface extension of many veins. The many gold showings, some of which have underground development in the past include:

- Herrick Zone: In 1918, J.A. Knox discovered the Kingsley Vein, a north-trending auriferous quartz vein, west of the south end of Michiwakenda Lake, in the southeastern part of Churchill Township. In 1919, Herrick Gold Mines Limited acquired the property and carried out trenching and sampling, and 955 m of diamond drilling in four holes. During the following two decades, the property changed hands several times with companies including, Grantland Gold Limited (1935), Sylvanite Gold Mines (1940), Matachewan Canadian Gold Limited (1962), Triton Exploration Limited (1960), 751160 Ontario Inc. (1988), a private company, and Unocal Canada Limited (1989). Diamond drilling by Platinex in 2009 and 2010 commonly intersected one or two mineralized veins with assay values ranging from 0.23 g/t Au to 3.55 g/t Au over widths ranging from 0.30 m to 5.0 m. Drill hole HP10-44 intersected 1.46 g/t Au over 10.5 m and ended in mineralization. In general, the host rocks are greywackes.

- Ronda Vein: In 1912, two prospectors discovered gold, which subsequently became known as the Ronda (or Ribble) Vein. Average grades for the different parts of the Ribble Vein are as follows:
    - North Part (69.5 m long): 3.92 g/t Au over average horizontal width of 1.66 m.
    - Middle Part (64.0 m long): 4.49 g/t Au over average horizontal width of 5.64 m.
    - South Part adjacent to shaft (48 m long): 4.74 g/t Au over average horizontal width of 2.56 m.

- Foisey Vein: Early records indicate that approximately 525 m of trenching was done on this vein in 1919, but additional data are not available.
- Miller-Adair Vein: Early records indicate that this vein was discovered in 1916, but no follow-up work was done until 1954.
- Caswell No. 1 Vein: This 30 cm east trending vein extends approximately 300 m along strike across the Michiwakenda (Caswell) Lake and just east of the Michiwakenda Fault. Sampling in 1969 indicated 101.15 g/t Au over 1.5 m on the west shore and 302.8 g/t Au over 25 cm on the east shore of the lake. On either side, the vein is bounded by 30 cm to 75 cm wide schist (shear zone?). The operator at the time sank a 12 m (40-ft) shaft on the east shore and assay results of sampling ranged from 4.25 g/t Au over 2.13 m to 648.5 g/t Au over 30.5 cm.
- Caswell No. 4 (Saville) Vein: This northwest trending and moderately southwest dipping vein extends approximately 3.8 km along strike. Sampling of 7 diamond drill holes testing the Saville Vein reported high grade values, including:
    - 185.2 g/t Au over 1.5 m at 50 m depth on one hole to 158.8 g/t Au over 3 m at 213 m depth in another hole. Agnerian is uncertain if the operator oriented these drill holes in the same direction in the section to test the same target.
    - 20.9 g/t Au over 1.5 m at approximately 34 m depth in one drill hole to 195.5 g/t Au over 1.5 m at approximately 91 m depth in another drill hole situated at the east shore of the lake.
- Caswell No. 7 Vein: In 1938, an operator sank the No. 1 shaft on Vein No. 7 and carried out underground development on the 92-ft, 240-ft, and 500-ft levels.
- Cochrane Veins: In early 1919, prospectors discovered three 25 cm to 30 cm wide auriferous quartz veins hosted in iron formation in Churchill Township. No. 1 Vein comprises sugary quartz cutting across an iron formation, and an assay result indicates 9.8 g/t Au over 2 m. No. 2 Vein extends approximately 200 m along strike and exhibits a horsetail structure by separating into many small veinlets within a brecciated zone.
- Gold Corona Vein: This vein is situated in Churchill Township, but its discovery date is not known.
- Pet Vein: This vein is situated close to the Gold Corona Vein. It is 30 cm to 2 m wide, approximately 60 m long, trending west (Az 260º), and dips 50º to the south. Results of stripping, trenching, pitting, and channel sampling indicate values ranging from 10.3 g/t Au to 134.7 g/t Au.
- Buckingham Mine: This mine is situated on four old leased claims in eastern Asquith Township. Gold mineralization occurs in intermittent outcrops of quartz veins within an east trending shear zone, which extends approximately 525 m along strike. Vein width varies from 30 cm to 3 m, within intensely schistose, crenulated carbonate-rich,

pale green mafic volcanic rocks. In 1928, the original operator sank an inclined (65º) shaft over the mineralized vein and carried out approximately 164 m of underground development at the 100-ft level. In 1988, Ego Resources Limited (Ego) optioned the property from Asquith, collected 301 samples along the shear, and reported two areas with significant gold mineralization. Assay results of 3-ft to 4-ft samples across the main vein range from 1.9 g/t Au to 66.5 g/t Au.

- Knox Lake Showing: In 1996, Robin Whelan carried out stripping and trenching across mineralized outcrops at Knox Lake in MacMurchy Township. Assay results, however, indicate low concentrations of gold ranging from 0.24 g/t Au to 0.52 g/t Au.
- Kingston Vein: This vein is situated in MacMurchy Township. Six diamond drill holes completed by Greater Temagami Mines Ltd. in 1987 intersected mineralized zones with values ranging from 1.7 g/t Au over 2.5 m to 90.5 g/t Au over 30 cm.
- Northgate No. 4 Showing: In 2004, Roy Annett of Shining Tree, carried out prospecting and trenching, and discovered a 5 m wide mineralized zone within sheared, pale grey, very siliceous rhyolite with fine-grained disseminated pyrite. Sampling across the altered rhyolite indicate values ranging from 0.04 g/t Au to 8.23 g/t Au.

1.2.8 Geological Setting and Mineralization

The Shining Tree property is situated within the Abitibi greenstone belt, which forms part of the Superior Province of the Canadian Shield in northeastern Ontario. The Abitibi greenstone belt is composed of east-trending basins of mainly volcanic rocks and intervening domes cored by synvolcanic and/or syntectonic plutonic rocks, such as gabbro-diorite, granite, and tonalite (quartz diorite), alternating with east-trending bands of clastic sedimentary rocks, such as turbiditic wackes. Most of the volcanic and sedimentary rocks dip vertically, and are generally separated by east-trending faults with variable dips. Some of these faults, such as the Porcupine-Destor Fault (PDF) and Cadillac-Larder Lake Fault (CLLF), display evidence for overprinting deformation events including early thrusting, later strike-slip, and extension events.

Gold mineralization in the Shining Tree area occurs in quartz and quartz-carbonate veins, shear zones, and carbonate-fuchsite zones in Archean ultramafic to intermediate metavolcanic rocks and metasedimentary rocks. Younger granitic and mafic intrusives were emplaced in the deformed rocks. Huronian sedimentary rocks unconformably overlie the older Archean rocks.

Exploration work to date has not yet detected major regional faults, similar to the PDF or CLLF deformation zones. Results of airborne magnetic surveys, however, may indicate similar west-northwest to east trending lineaments, which may indicate contact zones and/or major structures between Timiskaming metasedimentary rocks and Keewatin metavolcanic rocks.

The Ronda, Herrick, Caswell Lake, Seville, Foisey, and Bennett occurrences form a 2.5 km (north-south) by 5 km (east-west) cluster of gold and gold-silver showings and deposits in MacMurchy and Churchill Townships. A second cluster is centered around and to the southeast of the Village of Shining Tree, 7 km to the southwest. Although many companies carried out significant amounts of surface as well as underground exploration on these showings, only Ronda achieved any production. In all these showings, gold occurs in quartz veins.

There are three main vein orientations; about Az 130º, north-south, and Az 070º. Most veins are within mafic volcanic rocks and associated with varying intensity of carbonate alteration, and minor sericite alteration.

1.2.9 Exploration Programs

The exploration methodology applied in the past by early operators, and during the exploration programs from the early 1950s to date, including work by Platinex, has been to carry out geological mapping and prospecting, together with ground geophysical surveys, and evaluate the targets by drilling.

1.2.9.1 Geophysical Surveys

In July of 2008, Platinex contracted Terraquest Inc. (Terraquest) to conduct a fixed-wing airborne survey on the Shining Tree property. Terraquest completed 491 line-km of airborne magnetic survey with the following sensors:

- High resolution aeromagnetic.
- Horizontal magnetic gradiometer.
- XDS VLF-EM.
- Radiometrics (gamma ray spectrometer).

Platinex has completed several ground geophysical surveys on the property, including magnetometer and induced polarization (IP) surveys. In the past, many operators have carried electromagnetic (EM) and magnetometer surveys at various times and locations on the current Shining Tree claim blocks. Platinex completed these surveys on small blocks of land. Agnerian is of the opinion that the project requires comprehensive compilation of ground geophysical surveys.

1.2.9.2 Geochemical Surveys

In the summer of 2008, Platinex carried out a geochemical till sampling program. Platinex also carried out subsequent till sampling in 2010 and 2011. For all three

surveys, Platinex collected the glacial till samples from hand-dug surface pits. The sampling pattern took advantage of highway, logging road, trail and lake access, and focused on the central, west and northern portions of the property. In total, Platinex collected 446 till samples and sent them to Overburden Drilling Management (ODM) for processing. Results indicate that the samples contain 4,792 gold grains, of which 737 are modified, and 595 are pristine.

Platinex has outlined a large area of dispersion for these gold grains in till, but has not yet determined the source of these anomalies. It is possible that they may reveal multiple sources, given the complex history of glaciation in northern Ontario; studies suggest that three directions of glial advance, north-south, northeast, and north-northwest, are present in the area of the Shining Tree property.

1.2.9.3 Diamond Drilling

From 2009 to 2011, Platinex completed 6,071 m of diamond drilling in 51 holes on the Herrick deposit and strike extensions, and 1,070 m in 7 holes on the Caswell occurrences. In 2012 Platinex completed 870 m of drilling in five holes to follow up coincident gold in till and IP anomalies in the Clark, Beilby and McBride areas.

Together with the historical drilling by other companies, total drilling completed on the Shining Tree property is in the order of 20,525 m in approximately 150 drill holes, a very small number considering the large size of the property. Agnerian cannot state the exact number of the drill holes, because some of the past records do not include drill statistics.

1.2.10 Exploration Potential

Despite the extensive mineral exploration and limited mining carried out in the past, the Shining Tree property is at an early stage of exploration. Numerous operators have carried out geological mapping, prospecting, geochemical sampling, geophysical surveys, trenching, diamond drilling and some underground development, but the early operators carried out this work on a number of showings over small areas within the currently vast property held by Platinex. Platinex, like most other junior companies started its exploration in 2008 on a small target, with limited success. Based on recent literature search on reports of assessment work at the MNDM, Platinex is of the opinion that the Shining Tree property exhibits favourable structural and geological characteristics to host gold and base metal sulphide deposits, similar to economic deposits in the Abitibi region of Ontario and Québec. Agnerian concurs with this opinion.

2.0 INTRODUCTION

Platinex Inc. (Platinex) has retained Agnerian Consulting Ltd. (Agnerian) to prepare a NI 43-101 Technical Report on the Shining Tree property. The purpose of this report is to provide an independent assessment of the potential for gold mineralization within the Shining Tree property, situated approximately 100 km southeast of Timmins, Ontario (Figure 2-1). This report conforms to NI 43-101 Standards of Disclosure for Mineral Projects.

Platinex is a publically listed company on the Canadian Securities Exchange (CSE), with its office in Newmarket, Ontario. The company is engaged in the acquisition, exploration, and development of mineral properties for mining of precious and base metals in Canada.

The Shining Tree property comprises 130 contiguous mineral claims (876 claim units), covering approximately 14,016 ha, and is situated approximately 600 km (by road) north of Toronto, in Fawcett, MacMurchy, Asquith, Churchill, Connaught, Kelvin, and Cabot Townships, 60 km southwest of the Town of Matachewan, in the Larder Lake Mining Division of Ontario. Access is by the Trans-Canada Highway (Hwy 17) and/or Ontario Hwy 11, then by Hwy 144 and Hwy 560, and gravel road. Despite some historic underground mining and development on selected areas, the property is at an early stage of exploration with only some recent airborne geophysical surveys and geochemical sampling done by Platinex personnel. To date, there has been limited diamond drilling to test geophysical and geochemical targets on the property. Platinex plans to carry out a thorough compilation of exploration results to date, to generate new drill targets for gold and silver mineralization, and to test the geophysical and geochemical targets by drilling during the 2018 and 2019 exploration programs.

Platinex's objective in the Shining Tree area in northeastern Ontario is to discover and outline an economic gold deposit. The exploration targets are primarily orogenic gold deposits, such as gold mineralization associated with quartz-carbonate veins in greenstone terrains, and syenite-associated gold mineralization. Platinex's objective also is to discover porphyry-style gold and copper mineralization on the Shining Tree property.

2.1 TERMS OF REFERENCE

This report is prepared under the terms of a proposal to Platinex by Agnerian, dated April 19, 2018. For this report, Mr. Hrayr Agnerian, M.Sc. (Applied), P.Geo., President of Agnerian Consulting Ltd., carried out a site visit to the Shining Tree property on May 26 and 27, 2018, and reviewed results of past exploration by Platinex and other operators. Past work includes geological mapping and prospecting, airborne geophysical (magnetic and EM) surveys,

ground geophysical (magnetometer and VLF-EM) surveys, trenching, channel sampling, and diamond drilling. Agnerian also reviewed results of early reconnaissance geological mapping by the Ontario Geological Survey (OGS) in the 1960s and 1970s, and geochemical till sampling on much of the property by Platinex from 2008 to 2010, and other technical reports. Agnerian did not carry out a title search for the claims or review legal, environmental, political, surface rights, water rights, or other non-technical aspects that might indirectly relate to this report.

2.2 SCOPE OF SITE INSPECTION

Agnerian carried out the site visit on May 26 and 27, 2018, which comprised geological inspection of a number of outcrops to verify the geological setting of the Shining Tree property. Agnerian also examined some diamond drill core from the Herrick showing. Messrs. D. Jamieson, D. Cutting, and L. Burden of Platinex accompanied Mr. Agnerian during the site visit.

2.3 AGNERIAN QUALIFICATIONS

Agnerian Consulting Ltd. is an independent firm providing consulting services to the mineral exploration industry. Our business primarily involves providing independent opinions on mineral resources, technical aspects, and valuation of mineral exploration properties. Agnerian maintains a database of mineral property transactions worldwide.

2.4 SOURCES OF INFORMATION

For this report, Platinex supplied information related to the terms of acquisition for the Shining Tree property. Mr. David Jamieson, B.Sc., P.Geo., supplied technical information on the Shining Tree property, including geochemical till sampling and geophysical survey results, and miscellaneous maps. Mr. D. Cutting, B.Sc., P.Geo., supplied diamond drill hole data. Platinex acquired most of the digital information on the historical work completed on this property, and adjacent areas, from the Assessment File Retrieval and Inquiry (AFRI) records of the Ministry of Northern Development and Mines (MNDM) of the Ontario Government. Platinex obtained additional information from the hard copy files of the Resident Geologist's Office of the OGS in Kirkland Lake, ON. This report lists technical documents and other sources of information in Item 27, References.

In this report, Agnerian also presents a summary of significant amendments to the Ontario Mining Act 2009 (Appendix A).

The Qualified Person for this report is Mr. Hrayr Agnerian, M.Sc. (Applied), P.Geo., who is responsible for all of the sections included in this Technical Report. Other professionals who contributed in the preparations of this report are:

- Mr. James R. Trusler, P.Geo., and Chairman of Platinex, has prepared Assessment reports on the Shining Tree property in 2008, 2009, and 2011, and a Summary Report in 2012.
- Mr. Lorne Burden, P.Geo., a Director of Platinex, prepared a draft technical report on the Shining Tree property.
- Mr. David Jamieson, P.Geo., an Associate of Platinex and President of D.R. Jamieson Geological Consulting Ltd., supervised past exploration work on the Shining Tree property for Platinex.
- Mr. Dean Cutting, P.Geo., an Associate of Platinex, provided diamond drill hole data on the Herrick, Ronda and Caswell areas. Mr. Cutting also visited the property in 2016 and supervised part of the diamond drilling program in 2012, including the core logging and sampling, and Quality Assurance and Quality Control (QA/QC) procedures.
- Mr. Patrick Toth, P.Geo., an Associate of Platinex.

All of these professionals provided material for Items 4 to 12 of this report.

Units of measurements used in this report conform to the SI (metric) system. For results of historic work, units using the Imperial system are also used. All currency in this report is in Canadian dollars (C$) unless otherwise noted. Table 2-1 provides the list of abbreviations used in this report.

Table 2-1 List of Abbreviations

Platinex Inc. – Shining Tree Property, Ontario

a	Annum (Latin for year)	lb.	Pound (weight)
°C	degree Celsius	µ	Micron
C$	Canadian dollars	µg	Microgram
Cal	Calorie	m	Metre
cm	Centimetre	M	mega (million)
cm^2	square centimetres	m^2	square metres
cm^3	cubic centimetres	m^3	cubic metres
ft.	Feet	masl	metres above sea level
g	Gram	mi	Miles
G	giga (billion)	mm	Millimetres
g/l	grams per litre	mV	Millivolt
g/t	grams per tonne	nT	nanotesla (measure of magnetic susceptibility: one-trillionth tesla)
ha	Hectare	oz/ton	ounce per ton
Hz	Hertz (frequency)	pH	measure of acidity of solutions
K	kilo (thousand)	ppm	parts per million
Kg	Kilogram	s	second (time)
kHz	Kilohertz	T	metric tonne
Km	Kilometre	tpd	Tons per day
km^2	square kilometres	US$	United States Dollar
KW	Kilowatt	V	Volt
L	Litre	ybp	Years before present
		yr	Year

Figure 2-1 Location Map

Source: Jamieson, 2018.

3.0 RELIANCE ON OTHER EXPERTS

Agnerian Consulting Ltd. has prepared this report for Platinex Inc. (Platinex). The information, conclusions, and opinions contained herein are based on:

- Information available to Agnerian at the time of preparation of this report,
- Assumptions, conditions, and qualifications as set forth in this report, and
- Data, reports, and other information supplied by Platinex and its representatives.

For the preparations of the Figures in this report, Agnerian relied on the services of Mr. David Jamieson, an Associate of Platinex and a resident of Peterborough, ON, and Mr. Iain Trusler, Geographic Information Systems Consultant of Richmond Hill, ON.

Agnerian has formed its opinions on the potential for gold mineralization on the Shining Tree property primarily based on the technical information and results of the past and recent exploration programs.

For information related to the ownership and status of the Shining Tree property claims, Agnerian has relied on Mr. L. Burden, a Director of Platinex, who provided data contained in, and the information on title documents, supplied by MNDM of Ontario. Agnerian has not checked the status of the claims, because MNDM is in a transition phase of changing the recording and maintaining mineral claims in Ontario from the old (traditional) physical staking to map staking (digital) recording of the claims. Agnerian understands that MNDM allows the claim holders to report the claims status in accordance with the old system until December 31, 2018.

Agnerian has not reviewed agreements under which Platinex holds title to the mineral claims of the Shining Tree property, and offers no legal opinion as to the mineral titles claimed. Agnerian provides a description of the property, and ownership thereof, for general information only.

While exercising all reasonable diligence in checking, confirming and testing, Agnerian has relied on the technical material supplied by Platinex in formulating its opinion on the Shining Tree property.

Agnerian comments on the state of environmental conditions, liability, and estimated costs, where required by NI 43-101, but has relied on the work of other experts it understands to be appropriately qualified, and offers no opinion on the state of the environment on the property. Agnerian provides these statements for information purposes only.

4.0 PROPERTY DESCRIPTION AND LOCATION

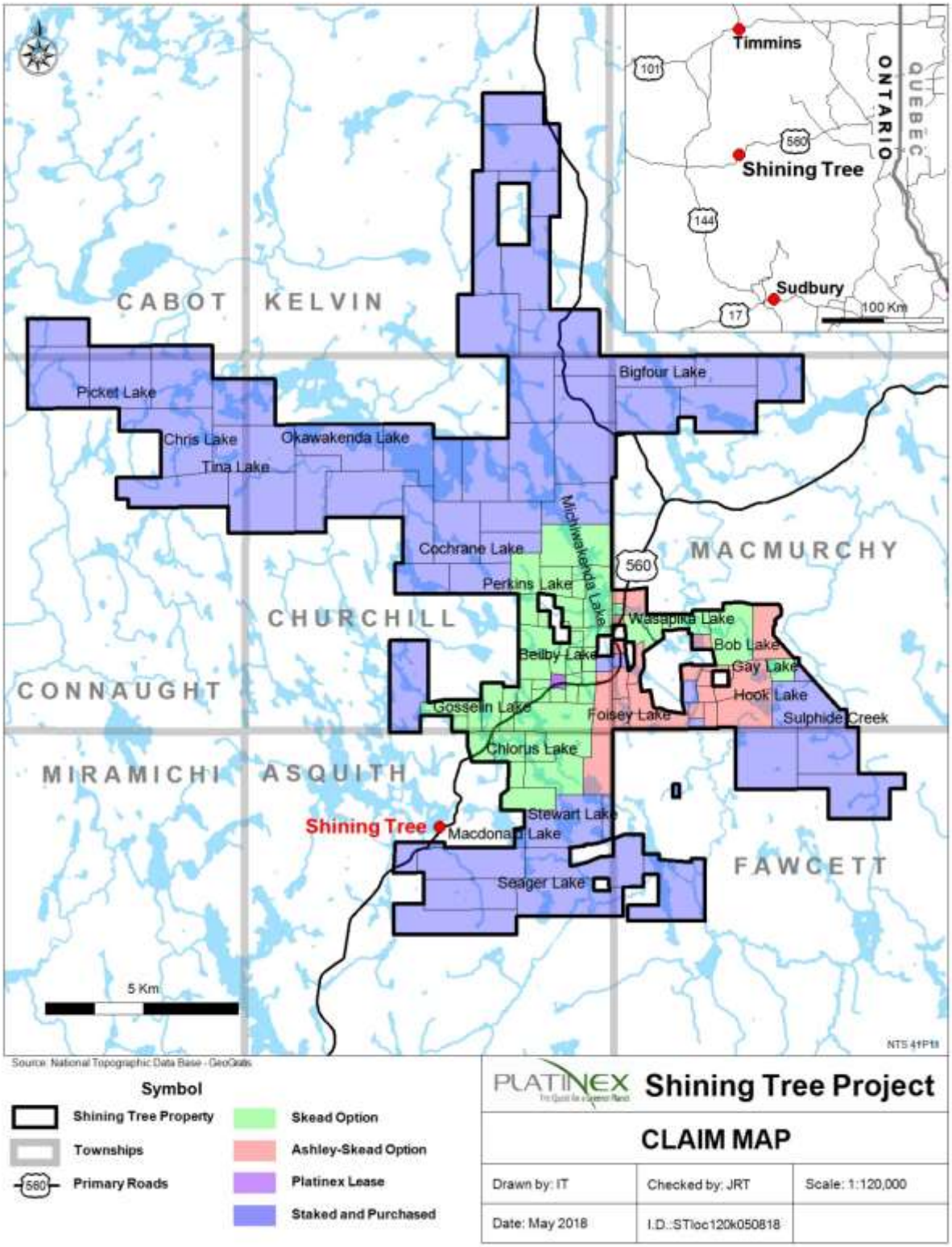
4.1 LOCATION

The Shining Tree property consists of a near contiguous group of 130 unpatented mining claims, comprising 875 sixteen hectare (16 ha) units, and one mining lease covering an area of approximately 14,016 ha. Hwy 560 intersects the property just to the north and east of the hamlet of Shining Tree and at the convergence of the Townships of Fawcett, MacMurchy, Churchill, and Asquith. The property also includes an isolated mining claim containing one unit located in Fawcett Township (Figure 4-1).

The centre of the property is located in UTM Zone 17 at approximately 483,787 m East, 5,271,620 m North, 67 km west of the Town of Elk Lake (population 350), and 40 kilometres southwest of the Town of Gowganda. It is centrally located between the major mining centres of Timmins, 100 km to the north, and Sudbury, 114 km to the south. The closest major centre to the project area by road is the City of Timiskaming Shores, an amalgamation of the Towns of New Liskeard, Cobalt and Haileybury, located 114 km to the east, with a population of approximately 10,700.

The property is located within the Montreal River water shed, an area constituting part of a traditional land use area of both the Matachewan First Nation and the Mattagami First Nation.

Figure 4-1 Shining Tree Property Map



Source: Toth et al., 2017.

4.2 PROPERTY DESCRIPTION

4.2.1 Status of Mining Claims

The property consists of 130 mining claims and one mining lease located in the Townships of Churchill, Asquith, MacMurchy, Haultain, Fawcett, Connaught, Cabot, and Kelvin of the Larder Lake Mining Division, in the District of Sudbury. One hundred and seven mining claims, comprising 813 claim units and one mining lease, are currently registered at 100% interest to Platinex Inc. An additional 23 claims, consisting of 62 units, are held under option from Ashley Gold Mines Limited (Ashley) and Skead Holdings Ltd. (Skead). Table 4-1 provides the list of mining claims forming the Shining Tree property, as well as the status and ownership as of the effective date of this report. Figure 4-1 depicts the approximate location of the Property as recorded by the MNDM.

Table 4-1 lists the individual claims on the property as being Active (A). As per MNDM documentation, active claims are under no encumbrances, and the operator is allowed to carry out low impact exploration at most times. In April of 2013, MNDM implemented new regulations, which stipulate where exploration may have an impact, such as where geophysical programs use a generator, survey lines are cut greater than 1.5 m in width, or where programs of stripping, pitting, trenching or diamond drilling are expected, an exploration plan must be submitted to the MNDM for approval before work commences. On October 4, 2017, Platinex submitted an Exploration Plan covering all 130 mining claims and the one mining lease that are part of the Shining Tree Project to the MNDM, as part of the Exploration Permit process. Platinex received the Exploration Permits and they remain valid for a three-year period.

In the Province of Ontario, after the second anniversary date, eligible work expenditures of $400 per 16-ha claim unit must be completed in each year to maintain mining claims in good standing. Work filed in excess of this minimum requirement may be held in reserve for application in future years, or for distribution onto contiguous claims on record on the date of filing of the eligible work.

With respect to the current claims, a core group of 46 claims, comprising the original Skead Holdings claim group, have significant amount of work credits available to draw from to keep them in good standing for over 20 years. Claims acquired after the most recent eligible work programs, are precluded from drawing down from pre-existing work credits. To maintain the current claim group, Platinex must carry out and file eligible work in the amount of $400 before December 13, 2018, and an additional $28,800 before February 11, 2019 on the Ashley-Skead optioned claims. In addition, Platinex must carry out and file $28,800 of exploration before December 5, 2018 and an additional $238,800 before February 7, 2019, on the recently

acquired Platinex claims. In total, Platinex must carry out exploration work amounting to at least $296,800 to maintain the current claim group beyond February 11, 2019 (Burden, 2018).

Table 4-1 List of Claims

Platinex Inc. – Shining Tree Property, Ontario

Township	Claim No.	No. of Claims	Recording Date	Work Due date	Status	Owner of Record	Percent Interest	Option	Work Required	Work Applied	Total Credits
ASQUITH	4274132	5	2014-Jun-24	2019-Jun-24	A	Ashley-Skead	100%	Ashley-Skead	$2,000	$4,000	$0
CHURCHILL	4283353	1	2015-May-14	2019-May-14	A	Ashley-Skead	100%	Ashley-Skead	$400	$400	$0
CHURCHILL	4283355	3	2015-May-14	2019-May-14	A	Ashley-Skead	100%	Ashley-Skead	$1,200	$1,200	$0
MACMURCHY	4212960	8	2007-Jun-11	2019-Jun-11	A	Ashley-Skead	50%	Ashley-Skead	$3,200	$28,800	$0
MACMURCHY	4225630	2	2008-Feb-11	2019-Feb-11	A	Ashley-Skead	100%	Ashley-Skead	$800	$5,600	$0
MACMURCHY	4240411	2	2008-Jul-08	2019-Jul-08	A	Ashley-Skead	100%	Ashley-Skead	$800	$5,600	$0
MACMURCHY	4240412	5	2008-Jul-08	2019-Jul-08	A	Ashley-Skead	100%	Ashley-Skead	$2,000	$14,000	$0
MACMURCHY	4245803	3	2008-Nov-14	2019-Nov-14	A	Ashley-Skead	100%	Ashley-Skead	$1,200	$7,200	$0
MACMURCHY	4258163	9	2012-Mar-23	2023-Mar-23	A	Ashley-Skead	100%	Ashley-Skead	$2,810	$11,590	$2,151
MACMURCHY	4263893	6	2015-Mar-20	2019-Mar-20	A	Ashley-Skead	100%	Ashley-Skead	$2,400	$0	$1,214
MACMURCHY	4266555	1	2011-Dec-13	2018-Dec-13	A	Ashley-Skead	100%	Ashley-Skead	$400	$2,000	$0
MACMURCHY	4270305	1	2015-Jul-24	2019-Jul-24	A	Ashley-Skead	100%	Ashley-Skead	$400	$0	$0
MACMURCHY	4270307	1	2015-Jul-24	2019-Jul-24	A	Ashley-Skead	100%	Ashley-Skead	$400	$0	$0
MACMURCHY	4274139	1	2014-Jun-09	2019-Jun-09	A	Ashley-Skead	100%	Ashley-Skead	$400	$400	$0
MACMURCHY	4274141	2	2014-Jul-17	2019-Jul-17	A	Ashley-Skead	100%	Ashley-Skead	$800	$800	$0
MACMURCHY	4282171	3	2016-Feb-23	2019-Mar-16	A	Ashley-Skead	100%	Ashley-Skead	$1,200	$0	$0
MACMURCHY	4282178	1	2016-Mar-16	2019-Mar-16	A	Ashley-Skead	100%	Ashley-Skead	$400	$0	$0
MACMURCHY	4282389	1	2016-Apr-26	2019-Apr-26	A	Ashley-Skead	100%	Ashley-Skead	$400	$0	$0
MACMURCHY	4282524	2	2016-Jul-28	2019-Jul-28	A	Ashley-Skead	100%	Ashley-Skead	$800	$0	$0
MACMURCHY	4282527	1	2016-Jul-28	2019-Jul-28	A	Ashley-Skead	100%	Ashley-Skead	$400	$0	$0
MACMURCHY	4283351	2	2015-May-14	2019-May-14	A	Ashley-Skead	100%	Ashley-Skead	$800	$0	$1,165
MACMURCHY	4283352	1	2015-May-14	2019-May-14	A	Ashley-Skead	100%	Ashley-Skead	$400	$0	$0
MACMURCHY	4283354	1	2015-Jul-24	2019-Jul-24	A	Ashley-Skead	100%	Ashley-Skead	$400	$0	$0
ASQUITH	3011745	3	2004-Aug-17	2023-Aug-17	A	Platinex	100%	Skead	$1,200	$20,400	$0
ASQUITH	4201206	4	2005-Nov-29	2023-Nov-29	A	Platinex	100%	Skead	$1,600	$25,600	$0
ASQUITH	4203475	2	2005-Nov-29	2023-Nov-29	A	Platinex	100%	Skead	$800	$12,800	$158
ASQUITH	4207969	4	2005-May-30	2023-May-30	A	Platinex	100%	Skead	$1,600	$25,600	$0
ASQUITH	4209215	4	2006-Jan-03	2023-Jan-03	A	Platinex	100%	Skead	$1,600	$24,000	$28,647
ASQUITH	4211939	3	2006-Nov-20	2023-Nov-20	A	Platinex	100%	Skead	$1,200	$18,000	$0
ASQUITH	4217643	9	2007-Jan-19	2023-Jan-19	A	Platinex	100%	Skead	$3,600	$50,400	$768
CHURCHILL	1192177	2	2002-Jul-22	2023-Jul-22	A	Platinex	100%	Skead	$800	$15,200	$20,691
CHURCHILL	1199655	2	2002-May-14	2023-May-14	A	Platinex	100%	Skead	$800	$15,200	$0
CHURCHILL	1217520	1	1996-Nov-25	2023-Nov-25	A	Platinex	100%	Skead	$400	$10,000	$4,198
CHURCHILL	1217521	1	1996-Nov-25	2023-Nov-25	A	Platinex	100%	Skead	$400	$10,000	$387
CHURCHILL	1225095	1	1997-Jun-18	2023-Jun-18	A	Platinex	100%	Skead	$400	$9,600	$0
CHURCHILL	1226938	1	1998-Jun-15	2023-Jun-15	A	Platinex	100%	Skead	$400	$9,200	$54
CHURCHILL	1227175	1	1998-Sep-29	2023-Sep-29	A	Platinex	100%	Skead	$400	$9,200	$0
CHURCHILL	1235004	1	2000-Aug-16	2023-Aug-16	A	Platinex	100%	Skead	$400	$8,400	$246
CHURCHILL	1235157	2	2000-Jun-13	2023-Jun-13	A	Platinex	100%	Skead	$800	$16,800	$0
CHURCHILL	1238874	1	1999-Jun-18	2023-Jun-18	A	Platinex	100%	Skead	$400	$8,800	$0
CHURCHILL	1238875	1	1999-Jun-17	2023-Jun-17	A	Platinex	100%	Skead	$400	$8,800	$0
CHURCHILL	1238881	2	1999-Jun-21	2023-Jun-21	A	Platinex	100%	Skead	$800	$17,600	$0

Table 4-1 List of Claims

Platinex Inc. – Shining Tree Property, Ontario

Township	Claim No.	No. of Claims	Recording Date	Work Due date	Status	Owner of Record	Percent Interest	Option	Work Required	Work Applied	Total Credits
CHURCHILL	1242019	1	2000-Jun-22	2023-Jun-22	A	Platinex	100%	Skead	$400	$8,400	$581,285
CHURCHILL	1242194	1	2001-Apr-10	2023-Apr-10	A	Platinex	100%	Skead	$400	$8,000	$0
CHURCHILL	1242933	1	2000-Nov-29	2023-Nov-29	A	Platinex	100%	Skead	$400	$8,400	$563
CHURCHILL	1242934	1	2000-Nov-27	2023-Nov-27	A	Platinex	100%	Skead	$400	$8,400	$0
CHURCHILL	3004540	1	2002-Sep-12	2023-Sep-12	A	Platinex	100%	Skead	$400	$7,600	$0
CHURCHILL	3011224	2	2003-Apr-28	2023-Apr-28	A	Platinex	100%	Skead	$800	$14,400	$0
CHURCHILL	3011227	3	2003-Jul-23	2023-Jul-23	A	Platinex	100%	Skead	$1,200	$21,600	$0
CHURCHILL	3011743	4	2004-Aug-17	2023-Aug-17	A	Platinex	100%	Skead	$1,600	$27,200	$0
CHURCHILL	3014015	8	2005-Jan-05	2023-Jan-05	A	Platinex	100%	Skead	$3,200	$51,200	$0
CHURCHILL	3014016	1	2005-Jan-05	2023-Jan-05	A	Platinex	100%	Skead	$400	$6,400	$0
CHURCHILL	4203474	4	2005-Jan-05	2023-Jan-05	A	Platinex	100%	Skead	$1,600	$25,600	$0
CHURCHILL	4207970	2	2005-May-30	2023-May-30	A	Platinex	100%	Skead	$800	$12,800	$0
CHURCHILL	4207971	3	2005-May-30	2023-May-30	A	Platinex	100%	Skead	$1,200	$19,200	$20,924
CHURCHILL	4207972	2	2005-May-30	2023-May-30	A	Platinex	100%	Skead	$800	$12,800	$0
CHURCHILL	4209217	1	2006-Jan-03	2023-Jan-03	A	Platinex	100%	Skead	$400	$6,000	$0
CHURCHILL	4209231	3	2008-Dec-03	2023-Dec-03	A	Platinex	100%	Skead	$1,200	$15,600	$0
CHURCHILL	4211938	10	2006-Nov-20	2023-Nov-20	A	Platinex	100%	Skead	$4,000	$60,000	$2,288
CHURCHILL	4217645	6	2007-Jan-19	2023-Jan-19	A	Platinex	100%	Skead	$2,400	$33,600	$0
CHURCHILL	4217646	12	2007-Jan-19	2023-Jan-19	A	Platinex	100%	Skead	$4,800	$67,200	$0
CHURCHILL	4245864	1	2008-Dec-03	2023-Dec-03	A	Platinex	100%	Skead	$400	$5,200	$11,235
CHURCHILL	4283370	5	2015-Jun-08	2019-Jun-08	A	Platinex	100%	Skead	$2,000	$2,000	$0
MACMURCHY	1192173	1	2002-Oct-29	2023-Oct-29	A	Platinex	100%	Skead	$400	$7,600	$0
MACMURCHY	4201272	3	2007-Aug-24	2023-Aug-24	A	Platinex	100%	Skead	$1,200	$16,800	$34,683
MACMURCHY	4203531	3	2005-Feb-24	2023-Feb-24	A	Platinex	100%	Skead	$1,200	$19,200	$38,350
MACMURCHY	4207973	2	2005-May-30	2023-May-30	A	Platinex	100%	Skead	$800	$12,800	$0
MACMURCHY	4207974	3	2005-May-30	2023-May-30	A	Platinex	100%	Skead	$1,200	$19,200	$0
MACMURCHY	4217644	12	2007-Jan-19	2023-Jan-19	A	Platinex	100%	Skead	$4,800	$67,200	$0
MACMURCHY	4252127	3	2009-Dec-07	2018-Dec-07	A	Platinex	100%	Skead	$1,102	$8,498	$0
ASQUITH	4278433	1	2016-Dec-06	2018-Dec-06	A	Platinex	100%	Staked/Purchased	$400	$0	$0
ASQUITH	4278654	15	2016-Jun-07	2019-Jun-07	A	Platinex	100%	Staked/Purchased	$6,000	$0	$0
ASQUITH	4278655	3	2016-Jun-07	2019-Jun-07	A	Platinex	100%	Staked/Purchased	$1,200	$0	$0
ASQUITH	4280051	16	2017-Feb-07	2019-Feb-07	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
ASQUITH	4280355	15	2016-Dec-06	2018-Dec-06	A	Platinex	100%	Staked/Purchased	$6,000	$0	$0
ASQUITH	4280356	12	2016-Dec-06	2018-Dec-06	A	Platinex	100%	Staked/Purchased	$4,800	$0	$0
ASQUITH	4285846	5	2017-Feb-07	2019-Feb-07	A	Platinex	100%	Staked/Purchased	$2,000	$0	$0
CABOT	4287260	8	2017-Jun-15	2019-Jun-15	A	Platinex	100%	Staked/Purchased	$3,200	$0	$0
CABOT	4287261	16	2017-Jun-15	2019-Jun-15	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
CABOT	4287262	16	2017-Jun-15	2019-Jun-15	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
CABOT	4287267	16	2017-Jun-19	2019-Jun-19	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
CHURCHILL	4277271	8	2015-Jun-25	2019-Jun-25	A	Platinex	100%	Staked/Purchased	$3,200	$3,200	$0
CHURCHILL	4278322	1	2016-May-02	2019-May-02	A	Platinex	100%	Staked/Purchased	$400	$0	$0
CHURCHILL	4282741	7	2016-Dec-05	2018-Dec-05	A	Platinex	100%	Staked/Purchased	$2,800	$0	$0

Table 4-1 List of Claims

Platinex Inc. – Shining Tree Property, Ontario

Township	Claim No.	No. of Claims	Recording Date	Work Due date	Status	Owner of Record	Percent Interest	Option	Work Required	Work Applied	Total Credits
CHURCHILL	4282742	12	2016-Dec-05	2018-Dec-05	A	Platinex	100%	Staked/Purchased	$4,800	$0	$0
CHURCHILL	4282743	10	2016-Dec-05	2018-Dec-05	A	Platinex	100%	Staked/Purchased	$4,000	$0	$0
CHURCHILL	4285847	8	2017-Feb-07	2019-Feb-07	A	Platinex	100%	Staked/Purchased	$3,200	$0	$0
CHURCHILL	4285848	16	2017-Feb-07	2019-Feb-07	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
CHURCHILL	4285849	11	2017-Feb-07	2019-Feb-07	A	Platinex	100%	Staked/Purchased	$4,400	$0	$0
CHURCHILL	4285850	16	2017-Feb-07	2019-Feb-07	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
CHURCHILL	4286628	14	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$5,600	$0	$0
CHURCHILL	4286631	15	2017-Mar-28	2019-Mar-28	A	Platinex	100%	Staked/Purchased	$6,000	$0	$0
CHURCHILL	4286632	16	2017-Jun-19	2019-Jun-19	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
CHURCHILL	4286633	15	2017-Jun-19	2019-Jun-19	A	Platinex	100%	Staked/Purchased	$6,000	$0	$0
CHURCHILL	4286635	8	2017-Mar-28	2019-Mar-28	A	Platinex	100%	Staked/Purchased	$3,200	$0	$0
CHURCHILL	4286715	12	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$4,800	$0	$0
CHURCHILL	4286716	12	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$4,800	$0	$0
CHURCHILL	4286724	15	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$6,000	$0	$0
CHURCHILL	4286733	8	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$3,200	$0	$0
CHURCHILL	4286734	10	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$4,000	$0	$0
CHURCHILL	4287236	12	2017-Jun-19	2019-Jun-19	A	Platinex	100%	Staked/Purchased	$4,800	$0	$0
CONNAUGHT	4286634	12	2017-Jun-19	2019-Jun-19	A	Platinex	100%	Staked/Purchased	$4,800	$0	$0
CONNAUGHT	4287268	16	2017-Jun-19	2019-Jun-19	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
FAWCETT	4267019	15	2016-Dec-06	2018-Dec-06	A	Platinex	100%	Staked/Purchased	$6,000	$0	$0
FAWCETT	4277278	1	2016-Aug-11	2019-Aug-11	A	Platinex	100%	Staked/Purchased	$400	$0	$0
FAWCETT	4277645	15	2016-Aug-11	2019-Aug-11	A	Platinex	100%	Staked/Purchased	$6,000	$0	$0
FAWCETT	4280368	16	2016-Nov-08	2019-Nov-08	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
FAWCETT	4285875	16	2017-Feb-07	2019-Feb-07	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
KELVIN	4286718	15	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$6,000	$0	$0
KELVIN	4286719	16	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
KELVIN	4286720	16	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
KELVIN	4286721	16	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
KELVIN	4286722	8	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$3,200	$0	$0
KELVIN	4286723	15	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$6,000	$0	$0
KELVIN	4286737	8	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$3,200	$0	$0
MACMURCHY	4277241	12	2016-Aug-11	2019-Aug-11	A	Platinex	100%	Staked/Purchased	$4,800	$0	$0
MACMURCHY	4277246	16	2016-Aug-11	2019-Aug-11	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
MACMURCHY	4277247	12	2016-Aug-11	2019-Aug-11	A	Platinex	100%	Staked/Purchased	$4,800	$0	$0
MACMURCHY	4277272	1	2016-May-02	2019-May-02	A	Platinex	100%	Staked/Purchased	$400	$0	$0
MACMURCHY	4278437	2	2016-Aug-11	2019-Aug-11	A	Platinex	100%	Staked/Purchased	$800	$0	$0
MACMURCHY	4278661	1	2016-Oct-06	2019-Oct-06	A	Platinex	100%	Staked/Purchased	$400	$0	$0
MACMURCHY	4280556	2	2016-Jul-21	2019-Jul-21	A	Platinex	100%	Staked/Purchased	$800	$0	$0
MACMURCHY	4280559	2	2016-Jul-26	2019-Jul-26	A	Platinex	100%	Staked/Purchased	$800	$0	$0
MACMURCHY	4286626	8	2017-Mar-28	2019-Mar-28	A	Platinex	100%	Staked/Purchased	$3,200	$0	$0
MACMURCHY	4286627	16	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
MACMURCHY	4286629	12	2017-Mar-28	2019-Mar-28	A	Platinex	100%	Staked/Purchased	$4,800	$0	$0

Table 4-1 List of Claims

Platinex Inc. – Shining Tree Property, Ontario

Township	Claim No.	No. of Claims	Recording Date	Work Due date	Status	Owner of Record	Percent Interest	Option	Work Required	Work Applied	Total Credits
MACMURCHY	4286630	12	2017-Mar-28	2019-Mar-28	A	Platinex	100%	Staked/Purchased	$4,800	$0	$0
MACMURCHY	4286645	14	2017-Mar-15	2019-Mar-15	A	Platinex	100%	Staked/Purchased	$5,600	$0	$0
MACMURCHY	4286646	9	2017-Mar-15	2019-Mar-15	A	Platinex	100%	Staked/Purchased	$3,600	$0	$0
MACMURCHY	4286717	16	2017-Apr-19	2019-Apr-19	A	Platinex	100%	Staked/Purchased	$6,400	$0	$0
CHURCHILL	L104641	1			Mining Lease	Platinex	100%	Staked/Purchased			

Source: Burden, 2018.

Under the new Ontario Mining Act, the claim holdings are required to be converted to a North-South / East-West grid using the Universal Transverse Mercator (UTM) coordinates. During the transition period, which has commenced already and will last part way into 2018, all active mining claims will be "grandfathered" to extend any expiring claims for one additional year (Table 4-1, reflects this extension).

There are no known formal native land claims covering the Shining Tree property. The mining claims, however, are within traditional land use areas of both the Matachewan First Nation and the Mattagami First Nation, as recognized by the MNDM. It is important for anyone planning to work on traditional aboriginal lands to engage the communities early in the exploration process to build relationships, and where appropriate, formalize commitments through arrangements.

Agnerian understands that Platinex has, and continues to engage both the Matachewan and Mattagami First Nations. Platinex and the two First Nations have entered into a Memorandum of Understanding (MOU) concerning work and developments on the Shining Tree property with each community.

Agnerian also understands that there are no other significant factors and risks that may affect access, title, or the right or ability to perform work on the property. Agnerian notes, however, that the eastern boundary of the claim in MacMurchy Township abuts the MacMurchy Township End Moraine Provincial Park and care should be taken when approaching that boundary (Burden, 2018).

4.2.2 Shining Tree Property Agreements

4.2.2.1 Skead Agreement

On April 11, 2009, Platinex signed an option to purchase agreement with Skead Holdings Ltd. (Skead) to acquire 44 mining claims of the Shining Tree property, consisting of 133 claim units. This group now includes 47 mining claims consisting of 144 units that were staked on Crown Land by or for Skead. Under the terms of that agreement, Platinex had the right to earn a 100% interest in the Property by making cash payments totalling $250,000, transferring 250,000 shares in the capital of Platinex to Skead, and incurring work expenditures of $850,000 by April 11, 2012. The agreement also entitled Skead to hold a 3% Net Smelter Return (NSR) royalty on future production and annual advanced royalty payments of $10,000, commencing on April 11, 2013. Platinex satisfied the terms of that agreement and acquired a 100% interest in the Skead property in April 2012. In addition, this agreement allowed Platinex to retain the right to purchase 50% of Skead's retained NSR royalty at any time for the aggregate sum of $1,200,000. Furthermore, should Skead wish to sell its NSR royalty interests to a third party, Platinex maintained a right of first refusal on the purchase of NSR royalty.

On November 21, 2015, Platinex and Skead amended the original (April 2008) agreement to extend the time for payment of the annual advance royalties from April 11, 2013 to April 11, 2018, at which time a payment of $73,000 will be due. On March 13, 2018, Platinex paid Skead $73,000 comprising $35,000 cash and 292,307 common shares to satisfy the earn-in requirement. Platinex may also make a final advance royalty payment of $100,000 at any time. Furthermore, this amendment allows Platinex to purchase up to two-thirds of the 3% NSR royalty for $1,750,000, which would reduce the NSR royalty to 1.0% (Burden, 2018).

4.2.2.2 Ashley Agreement

On August 17, 2016, Platinex acquired additional interests in 23 mining claims (62 claim units) through an option to purchase agreement with Ashley Gold Mines Limited (Ashley) and Skead. This agreement allows Platinex to earn a 100% interest in 22 mining claims (54 claim units), and a 50% interest in an additional claim (8 claim units) by providing Ashley and Skead (the vendors) with 200,000 shares of Platinex, making staged option payments totalling $95,000, and completing $500,000 of work on the claims by August 17, 2020. Upon fulfilment of the option to purchase agreement, Ashley and Skead will retain a combined 2% NSR royalty on any future production on the claims. In addition, this agreement allows Platinex the right to purchase 50% of the NSR royalty at any time for the aggregate sum of $500,000.

Furthermore, should either or both Ashley or Skead wish to sell its NSR royalty interests to a third party, Platinex maintains a right of first refusal on the purchase of NSR royalty.

4.2.2.3 McBride Agreement

On March 30, 2012, Platinex entered into an agreement with Gary John McBride and purchased a mining lease (Mining Lease L-106951) for 200,000 shares of Platinex. This mining lease covers 16 ha in Churchill Township, and is situated in the central part of the Shining Tree property. Platinex renewed this lease on October 1, 2016 for a 21-year period.

4.2.2.4 Creso Agreement

On October 20, 2010, Platinex entered into a joint venture agreement with Creso Resources Inc. (Creso) with the provision that Creso produce a more formal agreement within 3 months. Creso did not produce a formal agreement, but in a technical committee meeting in 2011, representatives from both companies agreed that each party would be responsible for exploring its own claims. Claims belonging to Platinex were subject to the joint venture, but there was no current certainty that the joint venture would be continuous. Five of Platinex's claims, comprising 11 claim units, which are subject to the joint venture include L1227175, L1235004, L4209213, L4207972 and L4217645. Four claims held by Creso, comprising 10 claim units, which were also subject to the joint venture agreement, include L1242013, L1242014, L1242015 and L4225667. The agreement expired in 2011 as Creso could not reconcile the cumulative royalties that would be imposed on its claims.

Subsequent to the above agreements, from August 17, 2016 to June 20, 2017, Platinex acquired, by staking and claim purchase agreements, 100% interest in sixty claims (669 claim units) with no underlying interests (Burden, 2018).

4.3 ENVIRONMENT AND PERMITTING

On April 1, 2013, the MNDM introduced a new regulation for exploration plans and permits, with graduated requirements applying to early exploration activities with low to moderate impact undertaken on mining claims, mining leases, and licenses of occupation. These new regulations state that parties planning to carry out exploration must provide maps of the general location of the project and the proposed exploration activity. Other requirements related to the protection of the environment and land use during exploration, are as follows:

- Operators must confirm that they have a qualified supervisor who has completed the Mining Act Awareness Program (MAAP). MNDM requires that proponents provide notice of their intent to conduct early exploration activities, and should include with

that notice a draft copy of the exploration permit application to those whose property is within the mining claim, lease or licence of occupation area planned for exploration.

- Upon receiving an application for an exploration permit, MNDM will provide a copy to Aboriginal communities and request that those communities provide comments. MNDM and the early exploration proponent will consider comments provided from Aboriginal communities and the proponent may be required to take additional steps to consult with communities, as directed by MNDM. Applications will also be posted on the Environmental Registry and comments received through that process, and any comments received from surface rights owners, will be considered. Comments received will assist MNDM in making a decision regarding whether to issue an exploration permit, and may result in site-specific terms and conditions being included in an exploration permit.
- The time to process an application for an early exploration permit may range from 31 days to 50 days from the initial posting. The period for approval may be extended to allow additional time for further consultation with Aboriginal communities. Unless the process has been placed under a temporary hold, the Director of Exploration is required to make a decision whether to issue the permit and, if so, under what site specific terms and conditions, within 50 days of the posting date. Early exploration proponents may commence their activities when they receive an exploration permit. All exploration permit activities must be performed in accordance with Provincial Standards for Early Exploration. An exploration permit will be effective for a period of three years from the day issued (Burden, 2018).
- MNDM requires that operators obtain a permit to cross a stream for access to a work area. However, no permit is required if crossing a small or intermittent stream that drains an area of less than five square kilometres. However, it is best to consult with the MNR before making any crossing to avoid any potential misunderstandings. In addition, Operational Statements should annually be filed with Fisheries and Oceans Canada on all proposed stream crossings.
- Prior to commencement of any drilling programme, under the Occupational Health and Safety Act regulations for Mine and Mining Plants, notification must be provided to the Ministry of Labour.

Presently, Platinex maintains a two-year renewable land use permit issued by the MNR for a bridge crossing on the Shining Tree property.

Agnerian did not assess safety and environmental concerns on any of the historic exploration and mining workings on the Shining Tree property. Agnerian understands, however, that the MNDM has identified and recorded in the Abandoned Mines Inventory System (AMIS) database several known historic mine shafts, pits, trenches, and unconfined tailings on the property, including a few considered to be hazardous.

Agnerian understands that the Shining Tree property is not subject to any other known environmental encumbrances or liabilities.

5.0 ACCESS, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESS

Access to the Shining Tree property is by Hwy 560, which traverses it from southwest to northeast. Hwy 560 is the main access route between Hwy 144 located to the west of Shining Tree, and Hwy 65 to the east at Elk Lake. Active logging and bush access roads stemming from Hwy 560 provide access to the central portions of the property. Access to the eastern part of the property is by 4-wheel drive truck or all-terrain vehicles (ATV) from a network of logging roads and hunting trails. Outside of the core area, however, the northern, western and southern areas are poorly accessible. Access to the northwestern portion of the property is about to improve as a new forest access road is scheduled for 2018. Commercial air travel, from domestic and international destinations, is available from Timmins and Sudbury. Charter air service is available at the nearby community of Earlton. Travel time by car from Toronto to Shining Tree is approximately 8 hours.

5.2 CLIMATE

The climate in the Shining Tree area and in northeastern Ontario is continental with significant differences in seasonal temperature. The average temperature during the winter months (November to March) is -8°C and ranges from -20°C to +0°C. The average temperature during the spring, summer and fall (April to October) ranges from 5°C to 15°C within a range of 0°C to 25°C. The annual precipitation is approximately 930 mm, and the average monthly precipitation ranges from 40 mm to 100 mm, mostly as snow during the winter months and rain during the summer months (Environment Canada website, 2017).

While Platinex may conduct field exploration work year-round, the winter season provides better access for diamond drilling equipment, especially in low-lying boggy areas. Periodic heavy rainfall or snowfall can hamper exploration at times during the summer or winter months. In addition, when rainfall is scarce, extreme fire conditions can result in cease work orders from the Ministry of Natural Resources for many forms of field work. Precipitation in the fall typically increases as temperatures drop below zero in the evenings resulting in the accumulation of snow as early as late October.

5.3 FAUNA AND FLORA

Wildlife on the property is typical for the region and consists of moose, black bear, wolf, fox, beaver, and small game. Vegetation is characteristic of the southern boundary of the boreal

forest range, consisting of white spruce, black spruce, white pine, red pine, jack pine, poplar, white birch and maple with alder, cedar and swamp maple growing in the lower wet areas. During recent years, some companies have carried out commercial logging on certain sections of the property, which contain immature second growth consisting of fir, spruce, cedar, birch and willow. Water for diamond drilling programs is available from several creeks, beaver ponds and lakes scattered across the property and pumped to the drill sites.

5.4 LOCAL RESOURCES AND INFRASTRUCTURE

The closest community to the project area is the unincorporated Hamlet of Shining Tree, which consists of a handful of people who reside along the shores of West Shining Tree Lake in the District of Sudbury. Services available in Shining Tree include meals and lodgings, equipment outfitting, and the ability to purchase basic foodstuffs and fuel at local commercial hunting and fishing camps.

Shining Tree is centrally located between the major mining centres of Timmins, 101 km to the north, and Sudbury, 114 km to the south, and the agricultural community of Timiskaming Shores, 114 km to the east. Most supply and service needs, including emergency medical services, are available in any of those three communities, although the City of Timiskaming Shores is the closest by road.

The project area is near two major power transmission lines between Timmins and Sudbury, Ontario. To the east is a 500kV line and to the west is an 115kV line. In addition, Ontario Power Generation maintains a high voltage distribution station in the Shining Tree area.

Several gold milling facilities are in operation within a 150 km radius of the Shining Tree property. These include the Young-Davidson Mine of Alamos Gold Inc. near Matachewan, approximately 116 km to the northeast, IAMGOLD Corporation's Coté Lake Mine, located 50 km to the west, and the West Timmins mine of Tahoe Resources Inc., located 172 km to the north (Burden, 2008).

5.5 PHYSIOGRAPHY

The topography of the area consists of flat-topped ridges, rolling hills, lakes, and several expansive low marshy areas. Elevations range from 335 metres above mean sea level (masl) on the West Montreal River to a high of 400 m along a northwest-southeast trend that crosses the Perkins Lake area in the northwestern part of the property, northwest of Hwy 560, to the southeast (Figure 5-1). The West Montreal River is the dominant drainage feature in the area, and it flows north across the eastern part of the property and has a wider section called Wasapika Lake. Michiwakenda Lake, Shining Tree Creek, and Caswell Lake all drain

into the West Montreal River from the northwest. Other significant lakes on the property include Okawakanda Lake, Perkins Lake, Gosselin Lake, Cryderman Lake, Chlorus Lake, Wasapika Lake, Knox Lake, and Bob Lake.

There are three sources of glacial debris recorded on the Shining Tree property. These are from the north, northeast and northwest. Implications regarding the source of the anomalous gold values in glacial till samples are discussed in Item 9, Exploration.

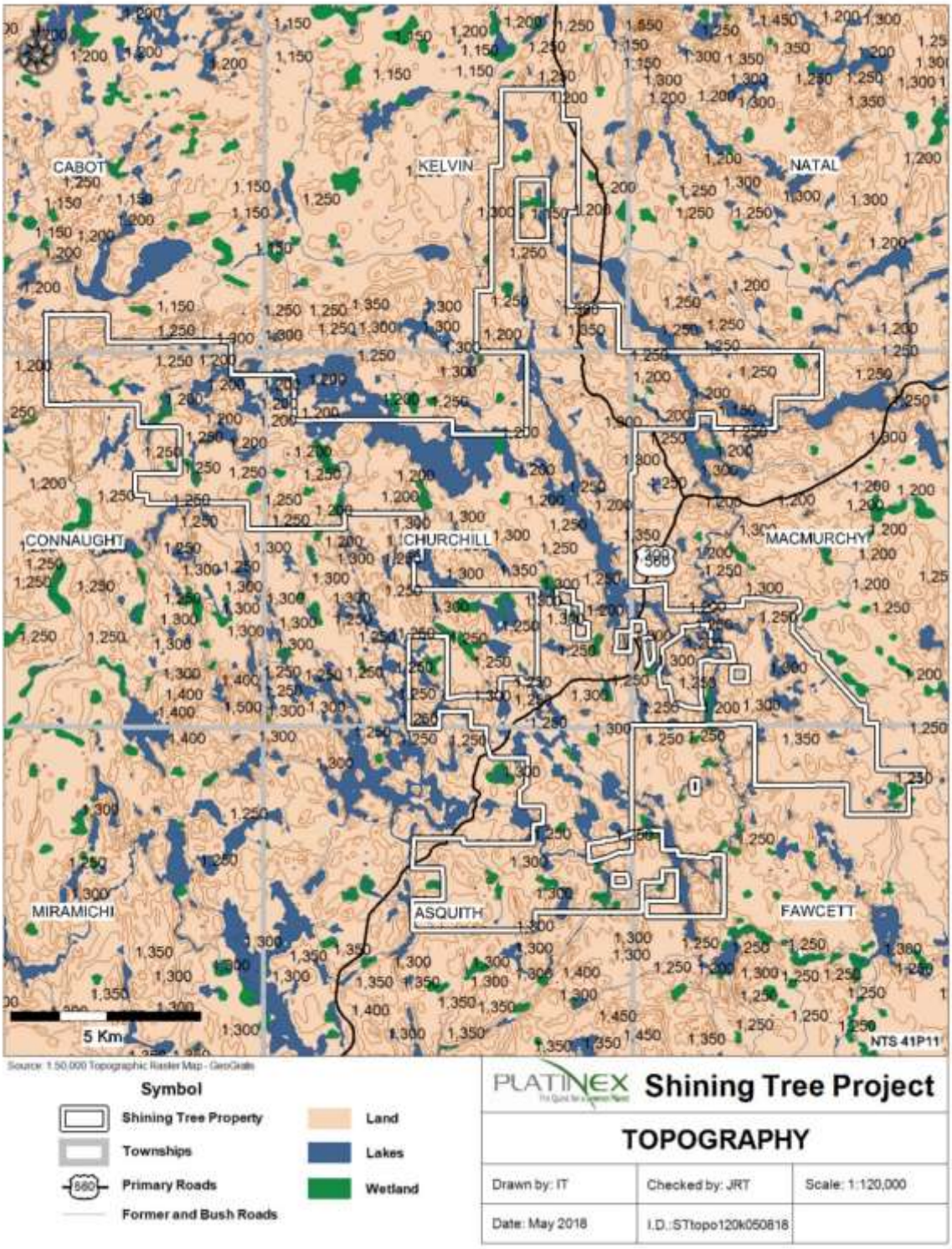
The property area is covered with extensive overburden, especially along the flanks of low hills and swampy areas. Vegetation in the area is “mixed forest” as it is situated between the Northern Boreal Forest (of balsam, tamarack and black spruce) and the more temperate Great Lakes-St. Lawrence region, where pine and hardwood forests are more common. In low lying areas, alder is also common (Figure 5-2). Overburden cover ranges from <20 cm to 3 m. Locally, however, overburden may be up to 10 m thick, especially in swampy areas.

An estimated 85% of the property is underlain by a ground moraine till with bedrock knobs and some recent peat and muck organic terrain. The area has moderate relief, is locally knobby and hummocky, and is generally dry. The extreme northern portion of the main block and the eastern half of the eastern block, however, are mostly flat. In contrast, extensive glaciofluvial and glaciolacustrine deposits described as sand overlie the remaining 15% of the property at the eastern extremity, and gravel outwash plain as an apron about an esker, with associated kame moraine ice contact stratified drift. These deposits are situated in an area of low relief and dry surface conditions. The extreme northeastern part of the property is similar with superimposed recent peat organic terrain and a mix of wet and dry drainages (Roed and Hallet, 1979).

Roed and Hallet (1979) reported that the Keewatin lobe of the Laurentide ice sheet advanced through the area at the beginning of the Wisconsinan (100,000 ybp) and that deglaciation of the area was completed by approximately 9,000 years ago. The authors classified the area as bedrock terrain with either exposed bedrock or bedrock covered by only one to two metres of ground moraine, whereas it may exceed 7 m in thickness elsewhere. Glacial striae measurements confirm that the glacial advance was from the north.

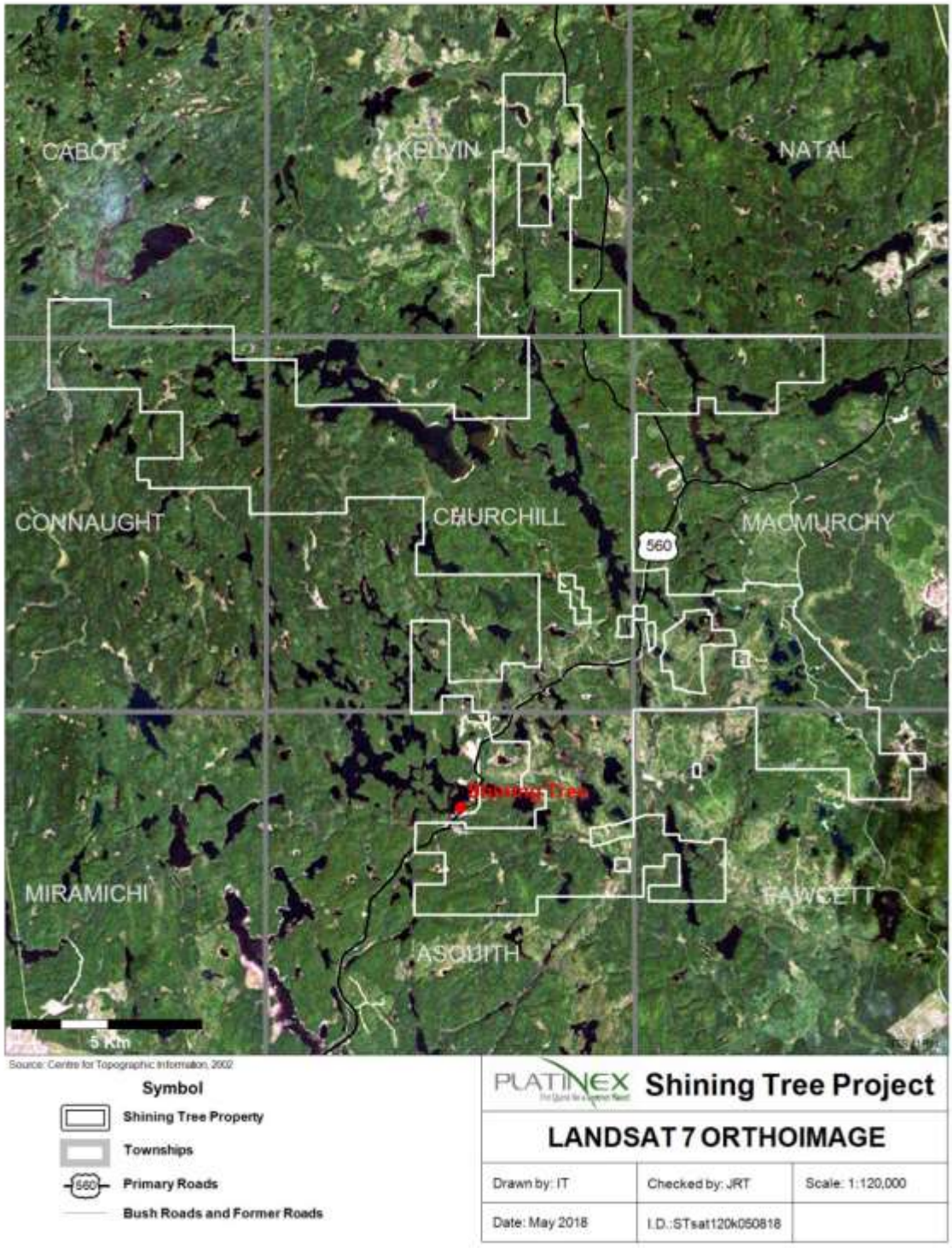
The closest linear glacial features are north-south trending eskers located approximately 8 km west and approximately 10 km east of the property. Roed and Hallet (1979) also reported that a section of the Sultan Scarp is present approximately 3 km south of the property and they interpreted it to be terminal moraine associated with a halt in the last Wisconsinan glaciation.

Figure 5-1 Topography Map in the Shining Tree Area



Source: Toth et al., 2017.

Figure 5-2 Landsat Image of the Shining Tree Area



Source: Toth et al., 2017.

6.0 HISTORY

6.1 EARLY EXPLORATION: 1900-1950

Exploration for base metals, gold, and silver in northeastern Ontario dates back to the late-19th century A.D. Exploration in the general area of the property commenced upon the discovery of gold by prospecting in the early 1900s, when Fred Gosselin, a prospector, made the first discovery of gold in the Shining Tree area. The gold zone consisted of two quartz veins, the Gosselin Vein and the Main Vein. The mineralized zone of these two veins is 50 cm to 22 m wide, trend at Azimuth 345º, dipping 60º due west and extends approximately 2.4 km along strike. Subsequent to the discovery, Gosselin Gold Mines Ltd. sank a 45-ft shaft on an offshoot of the Main Vein and carried out extensive trenching and sampling, but no diamond drilling (Narex, 1985).

There are numerous records of past exploration filed at the MNDM. Early operators restricted most of the exploration activity on auriferous quartz veins, commonly discovered by prospecting. These veins pinch and swell, and it appears that they paid little attention to define and study the structural continuity beyond the surface extension of many veins. Furthermore, it does not appear that many operators in the past paid adequate importance in the hydrothermal alteration and associated disseminated sulphide mineralization as a guide to gold mineralization (White, 2010). A brief discussion of early discoveries of gold mineralization in the area is, as follows:

- Ronda Vein: In 1912, two prospectors discovered gold, which subsequently became known as the Ronda (or Ribble) Vein. In 1913, Sharin Mines Ltd. carried out trenching, but no assays are available either from trenching or by underground development work. From 1916 to 1923, T. R. Jones carried out shaft sinking, but the area remained dormant for more than a decade. In 1935, another operator deepened the shaft, and carried out underground development by drifting and crosscuts. The mine was active for only one year (1939-1940) with production of 2,727 oz gold and 4,830 oz silver. In 1996, Haddington Resources (Haddington) tested the Ribble vein by 16 diamond drill holes (White, 2010 and Beecham, 1994). Average grades for the different parts of the Ribble Vein are as follows:
    - North Part (69 5 m long): 3.92 g/t Au over average horizontal width of 1.66 m.
    - Middle Part (64.0 m long): 4.49 g/t Au over average horizontal width of 5.64 m.
    - South Part adjacent to shaft (48 m long): 4.74 g/t Au over average horizontal width of 2.56 m (Beecham, 1994).

- Foisey Vein: Early records indicate that approximately 525 m of trenching was done on this vein in 1919, but additional data are not available. In 1971, J.J. Moore carried out channel sampling on this vein, and in 1975 ground geophysical (magnetometer and VLF-EM) and two diamond drill holes were completed immediately south of the vein. In 1994, A.W. Beecham reported, "*The south part of the Foisey, where it is well exposed, consists of 8 m to 9 m wide vein with 1/3 to ½ quartz. Although one good assay (16 g/t Au) of trench muck was returned from the preliminary sampling, only low values were found from channel sampling. Several check assays were done. However, the inconsistency of the initial high grab sample and the later channel assays has not yet been resolved*".
- Miller-Adair Vein: Early records indicate that this vein was discovered in 1916, but no follow-up work was done until 1954. Upon release of the Land Caution on the Temagami region by the Ontario Government, Haddington carried out channel sampling in 1994.
- Caswell No. 1 Vein: In 1916, J. Messer (*in* Edgar 2001) reported that this 30 cm thick east trending vein extended approximately 300 m along strike across the Michiwakenda (Caswell) Lake. Sampling indicated 101.15 g/t Au over 1.5 m on the west shore and 302.8 g/t Au over 25 cm on the east shore of the lake. On either side, the vein is bounded by 30 cm to 75 cm wide schist (shear zone?). The operator at the time sank a 12 m (40-ft) shaft on the east shore and assay results of sampling ranged from 4.25 g/t Au over 2.13 m to 648.5 g/t Au over 30.5 cm.
- Caswell No. 4 (Saville) Vein: In 1923, R.W. Demorest (*in* Edgar 2001) reported that this northwest trending and moderately southwest dipping vein extends approximately 3.8 km along strike. Demorest (1923, *in* Edgar 2001) also reported that 20 veins, eight of which with visible gold, occur within a 6 m wide northwest trending shear zone near the southern part of the lake. Sampling of 11 of these veins indicated values ranging from 4.1 g/t Au over 75 cm to 1,068.5 g/t Au over 1.2 m. Subsequent to Demorest's work, C. Baycroft (1925, *in* Edgar 2001) carried out 1,000 m of sampling of 7 diamond drill holes testing the Saville Vein, and reported high grade values, including:
    - 185.2 g/t Au over 1.5 m at 50 m depth on one hole to 158.8 g/t Au over 3 m at 213 m depth in another hole. Agnerian is uncertain if the operator oriented these drill holes in the same direction in the section to test the same target.
    - 20.9 g/t Au over 1.5 m at approximately 34 m depth in one drill hole to 195.5 g/t Au over 1.5 m at approximately 91 m depth in another drill hole situated at the east shore of the lake. Baycroft (1925, *in* Edgar 2001) also noted, "The best values are not obtained until after a thousand or more feet in depth have been reached".

- Caswell No. 7 Vein: In 1938, F. Austin (*in* Edgar 2001) reported that an operator sank the No. 1 shaft on Vein No. 7 and carried out underground development on the 92-ft, 240-ft, and 500-ft levels. Subsequent reporting by M.C. Newbury (*in* Edgar 2001) included results of bulk sampling of 250 kg vein material containing 101.5 g/t Au. Agnerian notes, however, that there is no mention as to the source of this bulk sample.
- Cochrane Veins: In early 1919, prospectors discovered three 25 cm to 30 cm wide auriferous quartz veins hosted in iron formation in Churchill Township. No. 1 Vein comprises sugary quartz cutting across an iron formation, and an assay result indicates 9.8 g/t Au over 2 m. No. 2 Vein extends approximately 200 m along strike and exhibits a horsetail structure by separating into many small veinlets within a brecciated zone. Assay results, however, show only trace amounts of gold. No. 3 Vein is situated west of Vein 2. Assay results, however, indicate low values ranging from trace to 0.7 g/t Au (Forbes, 1982).
- Gold Corona Vein: This vein is in Churchill Township, but its discovery date is not known. In 1916, the Mining Corporation of Canada optioned and sampled the vein. The property changed hands, first in 1936 to Sylvanite Gold Mines Limited, and later in 1945, to Wright-Hargraves, who carried out diamond drilling of 13 holes. Drill results indicated relatively good values ranging from 1.4 g/t Au to 5.8 g/t Au over widths of 90 cm to 1.6 m (Hinse, 1982).
- Pet Vein: This vein is close to the Gold Corona Vein. It is 30 cm to 2 m wide, approximately 60 m long, trending west (Az 260º), and dips 50º to the south. Results of stripping, trenching, pitting, and channel sampling indicate values ranging from 10.3 g/t Au to 134.7 g/t Au. Diamond drilling carried out by Shiningtree Gold Resources Inc. in 1982, however, indicate lower values ranging from 1 g/t Au to 31.2 g/t Au over intersections ranging from 60 cm to 1.7 m (Hinse, 1982).
- Herrick Zone: In 1918, J.A. Knox discovered the Kingsley Vein, a north-trending auriferous quartz vein, west of the south end of Michiwakenda Lake, in the southeastern part of Churchill Township. In 1919, Herrick Gold Mines Limited acquired the property and carried out trenching and sampling, and 955 m of diamond drilling in four holes. In addition, the company sank a two-compartment shaft to a depth of 94 m, underground development comprising 80 m of crosscutting, and 190 m of drifting along four levels, at 15 m, 30 m, 60 m, and 90 m depths. In 1933, Consolidated Ontario Mines Limited planned to deepen the shaft to 235 m, but could not carry out this work. During the following two decades the property changed hands several times, as follows:

- In 1935, Grantland Gold Limited acquired the property, but did not carry out any work.
- In 1940, Sylvanite Gold Mines acquired the property and carried out trench sampling.
- In 1962, Matachewan Canadian Gold Limited acquired the property, but did not carry out any work.
- In 1969, Triton Exploration Limited assumed ownership until 1974, when the patented land reverted to the Crown in lieu of payment of taxes.
- In 1988, 751160 Ontario Inc., a private company, acquired the property by staking.
- In 1989, Unocal Canada Limited carried out line cutting, ground geophysical (magnetometer and VLF-EM) surveys, geological mapping, stripping, channel sampling, and completed 1,473 m of diamond drilling in 11 holes (White, 2010).

- Buckingham Mine: This mine is situated on four old leased claims in eastern Asquith Township. Gold mineralization occurs in intermittent outcrops of quartz veins within an east trending shear zone, which extends approximately 525 m along strike. Vein width varies from 30 cm to 3 m, within intensely schistose, crenulated carbonate-rich, pale green mafic volcanic rocks. In 1928, the original operator sank an inclined (65º) shaft over the mineralized vein and carried out approximately 164 m of underground development at the 100-ft level. Subsequently, the property changed hands several times. In 1987, Asquith Resources Inc. (Asquith) optioned the property and carried out geological and geophysical surveys. In 1988, Ego Resources Limited (Ego) optioned the property from Asquith and carried out diamond drilling, testing a 150 m segment of the mineralized vein. Assay results indicated that many samples contained visible gold associated with carbonate-rich shear zones, injected with blue-grey quartz veins accompanied by pyrite and tourmaline. Ego, however, had difficulty in correlating the mineralized intersections from one drill hole to another, and carried out stripping and washing to better correlate the mineralized zones. Ego collected 301 samples along the shear and reported two areas with significant gold mineralization. Assay results of 3-ft to 4-ft samples across the main vein range from 1.9 g/t Au to 66.5 g/t Au (Tindale, 1990).
- Knox Lake Showing: In 1996, Robin Whelan carried out stripping and trenching across mineralized outcrops at Knox Lake in MacMurchy Township. Assay results, however, indicate low concentrations of gold ranging from 0.24 g/t Au to 0.52 g/t Au.
- Kingston Vein: This vein is situated in MacMurchy Township. Six diamond drill holes completed (total, 862 m) by Greater Temagami Mines Ltd. in 1987 intersected mineralized zones with values ranging from 1.7 g/t Au over 2.5 m to 90.5 g/t Au over 30 cm (Scott, 1987).

- Northgate No. 4 Showing: In 2004, Roy Annett of Shining Tree, carried out prospecting and trenching, and discovered a 5 m wide mineralized zone within sheared, pale grey, very siliceous rhyolite with fine-grained disseminated pyrite. Sampling across the altered rhyolite indicate values ranging from 0.04 g/t Au to 8.23 g/t Au (Tindale, 2004).

6.2 EXPLORATION WORK 1950-2000

The bulk of exploration on the Shining Tree property as well as in the general area has been carried out since 1950. Table 6-1 provides a summary of exploration carried out by various operators on the claims of the Shining Tree property. Information from past work includes Cluff (1990a and 1990b), De La Roche et al. (1980), Edmond (1990), Geoterrex (1983), Hope (1996), Hopkins (1920), Hunter (1990), MacGregor (1996a and 1996b, and 1999a and 1999b), MacKenzie (1990), Madill (1996), McAuley (1988), McDougald (1968), Mullen et al. (1994), Parres (1981, Paulsen et al. (2000), Tindale (1988), Wahl (1983), and Whelan (1994).

Exploration work done during the period 1950-2000 has shown that, in general, quartz veins are commonly oriented northeast to north-south, with most of the gold related to the more northerly trending veins. Visible gold is common in the veins, but it is difficult to establish continuity of gold mineralization along strike. In addition, despite the considerable amount of channel sampling, the distribution of gold at some showings is erratic. Many veins are cut by dikes or faults, and appear to be disconnected, but may be connected over several kilometres, such as the Herrick Zone or Ronda Zone (White, 2010).

Table 6-1 Summary of Exploration

Platinex Inc. – Shining Tree Property, Ontario

Year	Company	Type of Work	Author and/or Results	Document No.
1950	L. Jefferson	Diamond drilling, MacMurchy Twp.	L. Jefferson	N/A
1975	Gold Belle Mines Limited	Diamond drilling	J.D. Cannell	N/A
1975	Tri-Bridge Consolidated Gold Mines Limited	Geological mapping and diamond drilling on Gosselin Rift zone	J.D. McConnell: 26 g/t Au over 12.2 m in quartz vein, also 3.1 g/t Au over 3 m.	N/A
1981	Shining Tree Gold Resources Inc.	Confidential geological evaluation	J.R. Parres	MNDM 63.4601
1981	Patino Mines Ltd.	Diamond drilling, Churchill Twp.	Alice Born	N/A
1982	Shining Tree Gold Resources Inc.	Geological evaluation	G.J. Hinse	MNDM 63.4601
1982	Shining Tree Gold Resources Inc.	Summary report	C.P. Forbes	N/A
1983	Silver Princess Resources	IP Survey & diamond drilling	N/A	N/A
1984	Onitap Resources Inc.	Geological survey	N/A	N/A

Table 6-1 Summary of Exploration				
Platinex Inc. – Shining Tree Property, Ontario				
Year	**Company**	**Type of Work**	**Author and/or Results**	**Document No.**
1985	Onitap Resources Inc.	Soil sampling, stripping & trenching & Metallurgical test work; Gosselin zone	Peter Born; 89.8% - 94.1% gold recovery, head grade: 56.4 g/t Au, 210 g/t Ag; other samples: 5 ppb Au to 43.55 g/t Au	N/A
1987	Onitap Resources Inc.	Diamond drilling on Gosselin Showing	Results: 39 ppb Au – 5,500 ppb Au	N/A
1987	Greater Temagami Mines Ltd.	Geophysical surveys (VLF-EM, magnetometer & IP-resistivity) & diamond drilling on Kingston Showing	S.A. Scott	MNDM 63.5019
1988	Chesbar Resources	Diamond drilling 17 holes (total: 1,388 m)	Trace values to 3.3 g/t Au over 1.5 m.	N/A
1988	Asquith Resources Inc.	Geological & VLF-EM surveys	J.L. Tindale	N/A
1988	Norwin Resources Ltd.	Geological assessment	J.L. Tindale	N/A
1989	Unocal Canada Ltd.	Geological report & diamond drilling on Churchill Twp.	R. Cluff	N/A
1989	Unocal Canada Ltd.	Power stripping & washing	R. Cluff	MNDM W8909.332
1990	LaForest-Hlava Exploration Services Limited	Geophysical (magnetometer) survey	C.D. MacKenzie	MNDM 2.13264
1990	Earthhunt Resources Inc.	Geological report on Gosselin Showing	D. Hunter	N/A
1990	Asquith Resources Inc., Agnico Eagle of Canada, & Ego Resources Limited	Geological mapping & sampling, geophysical & geochemical surveys in Hologden Shaft & Caswell Lk area	J.L. Tindale	OMIP 90-050
1990	Unocal Canada Limited	Geophysical (magnetometer & VLF-EM) surveys	R. Cluff	MNDM 2.13031
1990	Northgate Exploration Limited	Landsat Structural Study	B.A. Edmond	N/A
1991	Skead Holdings Ltd.	Geology, geophysical (magnetometer & VLF-EM) surveys, Churchill Twp.	R.A. MacGregor	MNDM 2.14264, 2.13992, 2.14160, 2.14237, 2.15898
1991	Goldfields Canadian Holdings, American Barrick, & BHP-Utah Mines	Stripping & trench sampling, Churchill Twp.	R.A. MacGregor	MNDM 2.13917
1994	Jim Whelan	Trenching on Knox Showing	J. Whelan: Values trace to 1 g/t Au	MNDM 2.15442
1994	Trinity Exploration	Geological mapping, prospecting & sampling: Elephant Head Lake (Saville Showing), Connaught Twp.	G. Mullen & R. Ferderber	N/A
1995	Golden Trump Resources	Sampling & evaluation of Ronda, Foisey & Miller-Adair Claims	A.W. Beecham	MNDM 2.16049
1996	Skead Holdings Ltd.	Geological mapping & magnetometer surveys on Asquith & Churchill Twps.	R.A. MacGregor	MNDM 2.16875, 2.16909
1996	Skead Holdings Ltd.	Stripping & trenching	B.H. Madill	MNDM 2.17023
1996	Strike Minerals Inc.	Diamond drilling at Ronda Prospect	P.J. Hope: Trace values to 3 g/t Au	N/A
1997	Royal Oak Mines Inc.	Diamond drilling, Young-Davidson Mine area	R. Pressacco	MNDM 2.17158
1998	Roy Annett	Assessment work report	J.L. Tindale	MNDM 2.18474

Table 6-1 Summary of Exploration				
Platinex Inc. – Shining Tree Property, Ontario				
Year	**Company**	**Type of Work**	**Author and/or Results**	**Document No.**
1999	Skead Holdings Ltd.	Geophysical (magnetometer & VLF-EM) surveys on Beilby Lake area	R.A. MacGregor	MNDM 2.19163, 2.19530
2000	Skead Holdings Ltd.	Prospecting & rock geochemical sampling	R.A. MacGregor	MNDM 2.20385, 2.20598
2000	KRL Resources Corp.	Diamond drilling on MacMurchy Twp.	J.J. Watkins: Results; trace values	MNDM 2.20469
2001	Skead Holdings Ltd.	Geological mapping	R.A. MacGregor	MNDM 2.20930, 2.20872, 2.21635
2001	Thomas O'Connor	Power stripping, Asquith Twp.	T. O'Connor	MNDM 2.22182
2001	Roy Annett	Stripping & trenching	J.L. Tindale	N/A
2001	Bruce Edgar	Caswell Property geological compilation	B. Edgar	N/A
2002	Skead Holdings Ltd.	Geological surveys & rock geochemistry	R.A. MacGregor	MNDM 2.23808, 2.23782, 2.23726, 2.23727, 2.24522
2002	Thomas O'Connor	Power stripping	T. O'Connor	N/A
2003	Roy Annett	Assessment report	J.I. Tindale	N/A
2003	Skead Holdings Ltd.	Reconnaissance geological mapping & sampling	R.A. MacGregor	N/A
2004	Skead Holdings Ltd.	Reconnaissance geological mapping & sampling	R.A. MacGregor	MNDM 2.28481
2004	Roy Annett	Prospecting	J.I. Tindale	MNDM 2.28349
2005	Skead Holdings Ltd.	Geological mapping & prospecting, interpretation of VLF-EM results	R.A. MacGregor	MNDM 2.30287, 2.31016
2006	Skead Holdings Ltd.	Magnetometer & VLLF-EM surveys on Gosselin project area, East & West mine grids	J. Ploeger	MNDM 2.32724, 2.33850
2007	Skead Holdings Ltd.	Diamond drilling, Churchill Twp.	R.A. MacGregor	MNDM 2.35013
2008	Skead Holdings Ltd.	Reconnaissance geological mapping, trench sampling & prospecting	R.A. MacGregor. Values: 0.01 ppm Au - 1.13 ppm Au	MNDM 2.37943, 2.38652
2008	Platinex Inc.	Trench sampling in Caswell Lake area	J. Trusler	N/A
2009	Platinex Inc.	Diamond drilling & assessment report	D. Jamieson	MNDM 2.41955
2010	Goldeye Exploration Limited	Diamond drilling on Tyrell Showing (Big Dome property)	G. Hobbs	MNDM 2.49448
2010	Platinex Inc.	Resistivity & magnetometer surveys, Herrick grid area	JVX Geophysical Surveys and Consultants	N/A
2010	Platinex Inc.	Till sampling	D. Jamieson	N/A
2011	Platinex Inc.	Lithogeochemical sampling	F.W. Gittings	N/A

Source: Platinex Inc., 2018.

Note: Twp: Township.

There are many drill holes completed by various companies on selected targets of the Shining Tree property, such as the Herrick, Ronda, and other areas. Table 6-2 summarizes the historic drilling.

Table 6-2 Summary of Historic Diamond Drilling				
Platinex Inc. – Shining Tree Property, Ontario				
Year	**Company**	**Area / Township**	**No. of Holes**	**Total length (m)**
1919	Herrick Gold Mines	Churchill	4	955
1936	Wright-Hargraves	Churchill	13	N/A
1938	Ronda Gold Mines	Ronda	8	506
1939	Ronda Gold Mines	Ronda	17 (U/G)	1,304
1975	Chesbar Resources Ltd.	Caswell	N/A	1,926
1983	Silver Princess Resources Inc.	Churchill	N/A	876
1987	Greater Temagami Mines Ltd	MacMurchy	6	862
1988	New Bedford Development	Caswell	2	N/A
1988	N/A	Chesbar-Tut	18	1,467
1989	Unocal Canada Limited	Herrick	11	1,473
1989	Unocal Canada Limited	Churchill	4	461
1996	Strike Minerals Inc. Copperquest Inc., & Golden Trump Resources Inc.	Ronda	16	3,209
1996	Strike Minerals Inc.	Foisey	5	951
Total			**104**	**13,990**

Note: Information is not available regarding the diameter of many drill holes, i.e., BQ, NQ, etc.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

The following discussion on the regional geology of the Shining Tree area is taken largely from Hart (2011) who provides a description of the Abitibi greenstone belt, which he extracted from the works of Ayer et al. (2002, 2005) and Thurston et al. (2008) and on the references included in those publications.

The Abitibi greenstone belt is composed of east-trending basins of mostly volcanic rocks surrounding domes of synvolcanic and/or syntectonic plutonic rocks - gabbro-diorite, granite, and tonalite (quartz diorite) - alternating with east-trending bands of clastic sedimentary rocks, such as turbiditic wackes (Figure 7-1). Most of the volcanic and sedimentary rocks dip vertically and are generally separated by east-trending faults with variable dips. Some of these faults, such as the Porcupine-Destor Fault (PDF), display evidence for deformation events, including early thrusting, later strike-slip, and extension events. Numerous late-tectonic plutons from syenite and gabbro to granite with lesser dikes of lamprophyre and carbonatite cut the belt (Table 7-1).

7.1.1 Lithologic Assemblages

Ayer et al. (2002) subdivided the Archean metavolcanic and metasedimentary rocks of the Abitibi greenstone belt into a series of assemblages. In ascending order, they are as follows:

- The Pacaud Assemblage (2,747 Ma to 2,736 Ma): Is the oldest supracrustal unit in the southern Abitibi, comprising of rhyolites and other metavolcanic rocks. It occurs on the flanks of the Round Lake batholith with a basal intrusive contact with granitoid units. The thickest remnant of the Pacaud assemblage occurs in the Shining Tree area, where it comprises tholeiitic mafic volcanic rocks with lesser komatiite and calc-alkaline intermediate to felsic volcanic rocks.
- Deloro Assemblage (2,730 Ma to 2,724 Ma): Units of this assemblage occur as homoclinal panels underlain by the Pacaud assemblage on the northeastern flank of the Round Lake batholith, and on the northern flank of the Ramsey-Algoma batholith in the Shining Tree and Swayze areas. The Deloro assemblage is comprised of calc-alkaline flows and pyroclastic rocks capped by a sedimentary interface zone consisting of a regionally extensive iron formation and related hydrothermal breccias and debris flows.
- Stoughton-Roquemaure Assemblage (2,723 Ma to 2,720 Ma): This assemblage is located on the southeast flank of the Round Lake batholith and is characterized by broad

regions of tholeiitic basalts, komatiitic basalts, and komatiites with several relatively minor felsic volcanic centres.

- Kidd-Munro Assemblage (2,719 Ma to 2,711 Ma): Felsic calc-alkaline volcanic rocks are dominant in the lower part of this assemblage, and tholeiitic and the upper part contains komatiitic units with graphitic metasedimentary rocks and localized felsic volcanic centres. In the Shining Tree area, 2,717 Ma rocks of this assemblage occur in Tyrrell Township.
- Tisdale Assemblage (2,710 Ma to 2,706 Ma): This assemblage consists of mafic tholeiitic flows with locally developed komatiite and intermediate to felsic calc-alkaline volcanic rocks and iron formation, and has been correlated with 2,707 Ma rocks in the northwest portion of the Shining Tree area. Calc-alkaline intermediate to felsic volcanic rocks of the 2,701 Ma to 2,696 Ma upper Blake River assemblage occur in the Kirkland Lake and central Swayze areas.

Table 7-1 Lithologic Units of the Shining Tree and Surrounding Area

PHANEROZOIC

Cenozoic: Pleistocene and Recent

Unconformity

PRECAMBRIAN

Middle Precambrian: Mafic intrusive rocks (Diabase and quartz diabase)

Intrusive Contact

Huronian Supergroup: Cobalt Group (Conglomerate, greywacke), Quirke Lake Group (Limestone)

Early to Late Precambrian: Mafic intrusive rocks (Diabase dikes)

Intrusive Contact

Early Precambrian: Felsic to Intermediate Intrusive Rocks (Biotite granodiorite, quartz monzonite)

Intrusive Contact

Metamorphosed Ultramafic to Mafic Rocks (Serpentinized dunite, gabbro)

Intrusive Contact

Metavolcanic and Metasedimentary Rocks:

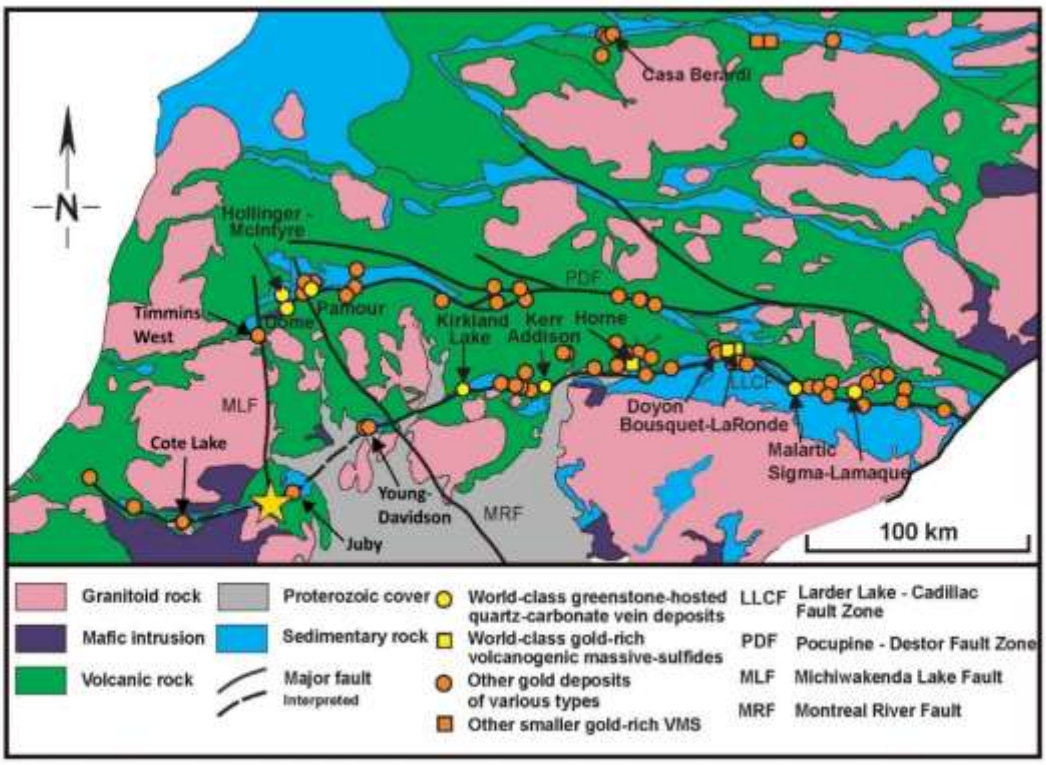
Metavolcanic: Alkalic rocks (Trachyte)

Subalkalic (rhyolite, andecite-dacite, basalt)

Metasedimentary Rocks (Argillite, siltstone, conglomerate, chert, etc.)

Source: Carter, 1980.

Figure 7-1 Regional Geology of the Abitibi Greenstone Belt

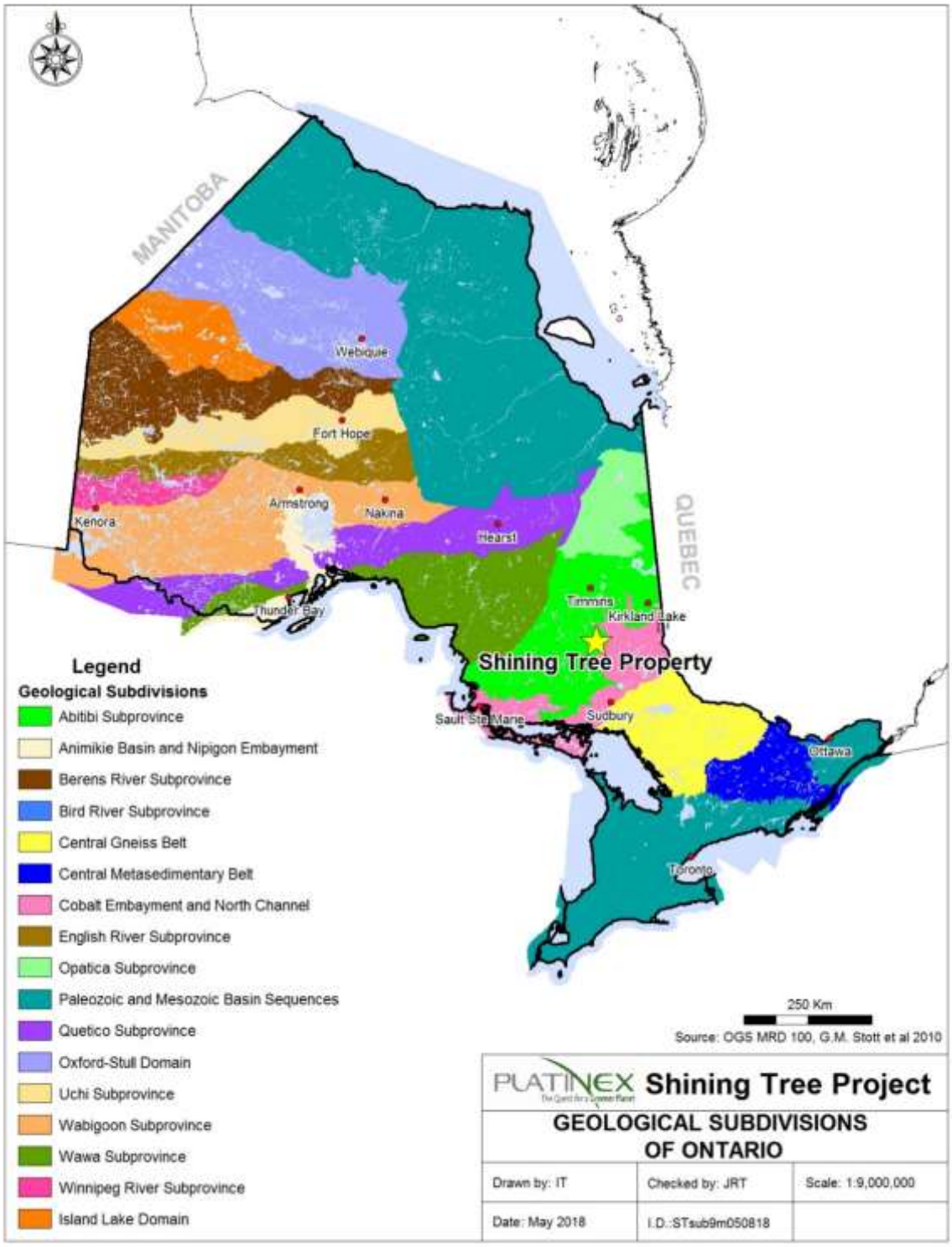


Simplified Geological Map of the Abitibi Greenstone Belt Showing Distribution of Major Fault Zones and Gold Deposits (after Dube and Gosselin, 2005; Poulsen et al, 2000). ★ Platinex Shining Tree Gold Property

Source: Toth et al., 2017.

There are two ages of unconformable successor basins; early, widely distributed “Porcupine-style” basins of fine-grained clastic rocks, followed by later “Timiskaming-style” basins of coarser clastic and minor volcanic rocks, which are largely proximal to major strike-slip faults, such as the PDF and Cadillac-Larder Lake Fault (CLLF). The 2,690 Ma to 2,685 Ma age Porcupine-type basins form wacke-dominated, kilometre-scale sequences, unconformably overlying the metavolcanic and metasedimentary rocks and are transitional into much more extensive basins (e.g., Pontiac subprovince). In the northern Shining Tree area, the 2,687 Ma Natal Group consists of proximal volcanic flows and breccias of shoshonitic affinity in the southeast grading to fine-grained volcaniclastic rocks and turbidites. The 2,677 Ma to 2,670 Ma Timiskaming assemblage includes alluvial-fluvial conglomerates, sandstones, turbidites, and alkalic to calc-alkaline volcanic rocks that unconformably overlie metavolcanic rocks and/or Porcupine assemblage units. Figure 7-2 shows the geological subdivisions of Ontario.

Figure 7-2 Geological Subdivisions of Ontario



Source: Toth et al., 2017.

The Indian Lake Group, in the Shining Tree area, consists of 2,740 Ma to 2,702 Ma immature, coarse grained, quartz rich, lithic arenites and conglomerates locally with 2,688 Ma felsic volcanic rocks. The volcanic rocks and coeval plutons range from ultrapotassic to shoshonitic and closely resemble potassic-rich rocks.

Ayer et al. (2005) subdivided the plutonic rocks of the Abitibi greenstone belt into three groups, as follows:

- Synvolcanic intrusions: These include felsic to intermediate intrusions and mafic to ultramafic intrusions.
    - Felsic to intermediate synvolcanic intrusions range in age from approximately 2,745 Ma to 2,696 Ma, and are coeval with, and geochemically similar to, the volcanic assemblages. These intrusions typically occur as foliated tonalite to granodiorite within the larger granitic complexes, such as the Ramsey–Algoma batholith and Round Lake batholith.
    - Mafic to ultramafic synvolcanic intrusions range from approximately 2,740 Ma to 2,700 Ma in age and mainly occur as peridotite to gabbro and diorite sills or lenticular units that cut stratigraphy at a low angle.
- Syn-tectonic intrusions: These may be related to the deformational events and can be subdivided into early and late series.
- Post-tectonic intrusions.

7.1.1.1 Plutonic Rocks

Plutonic rocks younger in age (2,695 Ma to 2,685 Ma), such as tonalite, granodiorite, diorite and feldspar±quartz porphyries with adakitic (intermediate to felsic volcanic rocks) geochemistry similar and coeval to the Porcupine assemblage volcanic rocks, occur as stocks within the greenstone belt and as major portions of the surrounding batholithic complexes. Other rocks with ages ranging from 2,680 Ma to 2,672 Ma occur as relatively small syntectonic intrusions and are broadly coeval with the Timiskaming assemblage, in close proximity to the main faults, such as LLCF. These intrusions are typically alkalic, and consist of monzonite, syenite and albitite, with the more mafic phases including diorite, gabbro, clinopyroxenite, hornblendite, and lamprophyre. Late-tectonic intrusions range in age from approximately 2,670 Ma to 2,660 Ma, and are typically massive and occur within batholiths and the greenstones. They consist of “Algoman-type” biotite granite, pegmatite and biotite-muscovite S-type granite.

7.1.1.2 Dikes

A number of mafic dikes swarms cut the rocks of the Abitibi greenstone belt (Osmani 1991). The 2,454 Ma Matachewan dikes are north trending, vertical to sub-vertical, composed of quartz diabase, and commonly contain plagioclase phenocrysts up to 20 cm in length. West to northwest trending vertical dikes of the 1,238 Ma Sudbury dike swarm are generally medium to coarse-grained with ophitic to subophitic textures of olivine tholeiites. The 1,140 Ma east to northeast- trending olivine gabbro to monzodiorite dikes of the Abitibi dike swarm may be related to the Keewanawan Midcontinent Rift event.

7.1.1.3 Huronian Supergroup

Archean rocks of the Abitibi greenstone belt are unconformably overlain by Paleoproterozoic rocks of the Huronian Supergroup, deposited in a north trending graben referred to as the Cobalt Embayment in the area (Figure 7-2). The Huronian Supergroup consists of an assemblage of sedimentary and minor volcanic rocks that were deposited between 2,500 Ma and 2,220 Ma ago, and is subdivided into four stratigraphic groups, which in ascending order, are the Elliot Lake Group, Hough Lake Group, Quirke Lake Group, and Cobalt Group. The Cobalt Group contains four formations, the Gowganda, Lorrain, Gordon Lake, and Bar River (Bennett et al., 1991). Bennett et al further subdivided the Gowganda Formation into:

- The lower Coleman Member, consisting of clast and matrix supported conglomerate. These rocks are interpreted to have been glacial or alternatively debris flows or turbidity currents, and
- The upper Firstbrook Member, consisting of pebbly wacke, wacke, siltstone, mudstone, and arenite. These finer sediments are interpreted to have been deposited in a deltaic environment.

Arkose and quartz arenites of the Lorrain Formation conformably overlie the Gowganda Formation and sedimentary structures found in this formation would support either a shallow marine or fluviatile depositional environment.

The 2,219 Ma gabbroic rocks of the Nipissing Intrusive event intrude all older rocks of the Cobalt Embayment forming sills, dikes and undulating sheets up to a few hundred metres thick (Bennett et al., 1991). A two-pyroxene gabbro is the most common rock type in the Nipissing Intrusive, but olivine gabbro, hornblende gabbro, feldspathic pyroxenite, leucogabbro, and granophyric gabbro are also present.

7.1.2 Structural Interpretation

Supracrustal rock units in the Abitibi greenstone belt commonly occur in east trending volcanic and sedimentary assemblages and east trending Archean deformation zones and folds. Larger batholithic complexes external to the supracrustal rocks (e.g., Round Lake) represent centres of structural domes. The intervening areas define belt-scale synclinoria that deformed during a number of distinct periods. Superimposed on the older plutonic and supracrustal rocks are the Porcupine and Timiskaming assemblages, which unconformably overlie the older assemblage. Older syntectonic intrusions (2,695 Ma to 2,685 Ma) may be related to the compressive stresses that induced early folding and faulting related to the onset of continental collision between the Abitibi and older sub provinces to the north. Younger syntectonic intrusions (2,680 Ma to 2,670 Ma) are coeval with the Timiskaming assemblage, and are spatially associated with the PDF and LLCF deformation zones. The late tectonic intrusions (2,670 Ma to 2,660 Ma) are possibly synchronous with D4 folding within the Timiskaming assemblage rocks in the Timmins area, and represent the final stage in transgressional deformation along the PDF deformation zone and may be correlative with the D2 event identified in the Kirkland Lake–Larder Lake area. The regional deformation zones commonly occur at assemblage boundaries and are spatially closely associated with long linear belts representing the sedimentary assemblages (i.e., Porcupine and Timiskaming). Some authors have proposed that the regional association of the Porcupine Destor and Larder Lake Cadillac deformation zones and major assemblage boundaries are proximal to the locus of early synvolcanic extensional faults.

7.2 LOCAL AND PROPERTY GEOLOGY

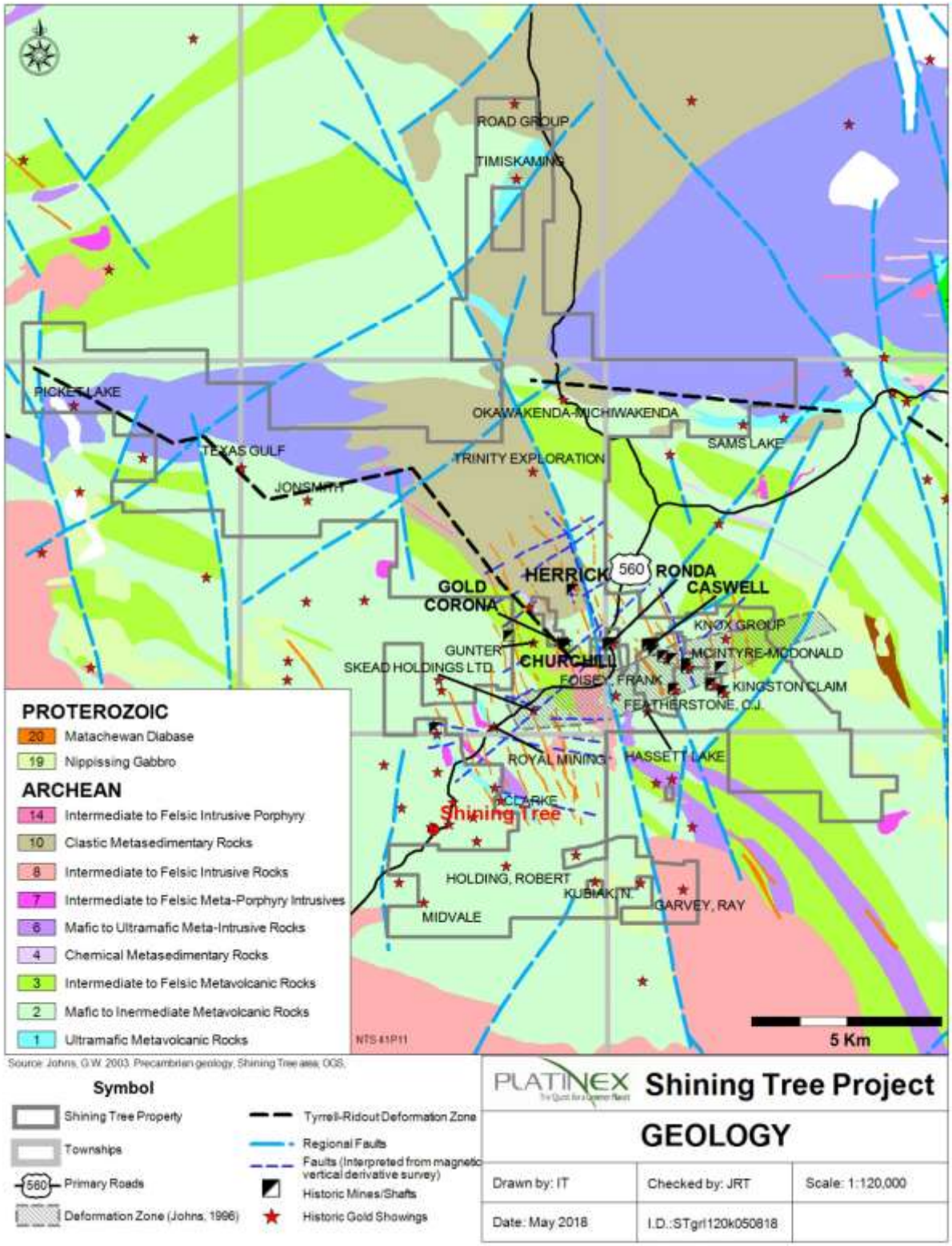
The Shining Tree area is located in the southwestern portion of the Abitibi greenstone belt and the metamorphic grade throughout the area is low to mid greenschist facies (Oliver et al., 1998). A major north-northwest trending structure, Michiwakenda Lake Fault, divides the property into two halves and separates the lithologic assemblages. Outcrop patterns indicate that the left lateral displacement along the Michiwakenda Lake Fault is in the order of 3.5 km to 4 km. Other faults with similar orientation are present in the western part of Churchill Township – one which passes through the Village of Shining Tree and Connaught Township, with much smaller left lateral displacement, in the order of <1 km. Other major northeast trending faults cut the various lithologic assemblages, with right lateral displacements ranging from <500 m to 1.5 km, and west-northwest trending faults are present in the western part of the property (OGS Map 2205, Timmins-Kirkland Lake).

To the southwest and northeast, the property is underlain by Archean mafic to intermediate volcanic rocks and intermediate to felsic intrusive rocks. Numerous bands of ultramafic to mafic intrusive rocks (Matachewan diabase) trend north-northwest, i.e., subparallel to the Michiwakenda Lake Fault. In the northwestern part of the property, Archean clastic metasedimentary rocks (mostly greywacke of the Timiskaming Group) are predominant (Figure 7-3). Mafic volcanic rocks with amygdules, filled with chlorite, carbonate or quartz are common. Extensive saussuritization of feldspars in mafic flows and intrusions are common in the area. The metamorphic grade of the youngest sequence, the Timiskaming assemblage, is lower than that of the older rocks. Near major intrusive bodies, however, higher grade amphibolite facies and contact metamorphism are present, such as adjacent to the Miramichi and Togo batholiths (Ayer, 2000).

Geological mapping in the Shining Tree area by Johns and Amelin (1990) recognized three distinct Archean aged groups of supracrustal rocks consisting of an older Keewatin aged assemblage unconformably overlain by two Timiskaming type successor groups.

Information on the geology and exploration results on the Shining Tree property is also included in Ayer (1999), Ayer et al. (1999), Beakhouse (2007), Ernst (2007), Fraser (2006), Gittings (2011), Hobbs (2010), Huneault (2011), Jamieson (2009, 2010a, 2010b and 2018), JVX (2010), Larder Geophysics (2006), MacGregor (2000a, 2000b, 2001a and 2001b, 2002a, 2002b and 2002c, 2003a and 2003b, and 2004), Tindale 2001 and 2003), and White and Harron (2010).

Figure 7-3 Property Geology



Source: Toth et al., 2017.

7.3 MINERALIZATION

7.3.1 Gold Mineralization

Gold mineralization in the Shining Tree area occurs in quartz and quartz-carbonate veins, shear zones, and carbonate-fuchsite zones in Archean ultramafic to intermediate metavolcanic rocks and metasedimentary rocks. Younger granitic and mafic intrusives were emplaced in the deformed rocks. Huronian sedimentary rocks unconformably overlie the older Archean rocks (Kaiser, 1985).

Exploration work to date on the Shining Tree property has not yet detected major regional faults, similar to the Porcupine-Destor or Cadillac-Larder Lake deformation zones. Results of airborne magnetic surveys, however, indicate similar west-northwest to east trending lineaments, which suggest that contact zones and/or major structures between Timiskaming metasedimentary rocks and Keewatin metavolcanic rocks may occur on the western part of the property.

There are almost equal numbers of gold occurrences and showings on the east and west sides of the Michiwakenda Fault. The Ronda, Herrick, Caswell Lake, Seville, Foisey, and Bennett occurrences form a 2.5 km (north-south) by 5 km (east-west) cluster of gold and gold-silver showings and deposits in MacMurchy and Churchill Townships. A second cluster is centered around and to the southeast of the Village of Shining Tree, 7 km to the southwest. Although many companies carried out significant amounts of surface as well as underground exploration on these showings, only Ronda and Tyranite achieved any production. In all these showings, gold occurs in quartz veins. The following is a description of the main gold showings and prospects within the Shining Tree property and nearby Townships.

7.3.1.1 Past Producing Mines

7.3.1.1.1 Ronda Mine

The Ronda Mine, associated with the Ribble quartz vein, is located in MacMurchy Township near Ribble Lake, and is partially located on Platinex's Shining Tree property, a short distance southeast of the north part of the central claim block (Figure 7-4). The vein trends north with a 60° dip to the west. It is exposed almost continuously for 760 m along strike, and has an average width of 1.5 m (MNR, 1979). The vein is intensely crumpled, folded, and enclosed in carbonatized and pyritized schistose pillow lava. Intermittent development work occurred from 1912 to the commencement of production in 1939. Production occurred only in 1939 and amounted to 2,727 oz. Au and 4,830 oz. Ag from 24,592 tons at an average grade of 0.11 oz/t Au. Level plans of the workings indicate a westerly plunge to the

mineralization, which is projected to extend into the Shining Tree property at a depth of approximately 300 m (Figure 7-5). In 2016, Platinex acquired the claims encompassing shaft 2 and the southern half of the underground workings (Toth et al., 2017). The following is a historical account regarding exploration and development of the Ronda Mine:

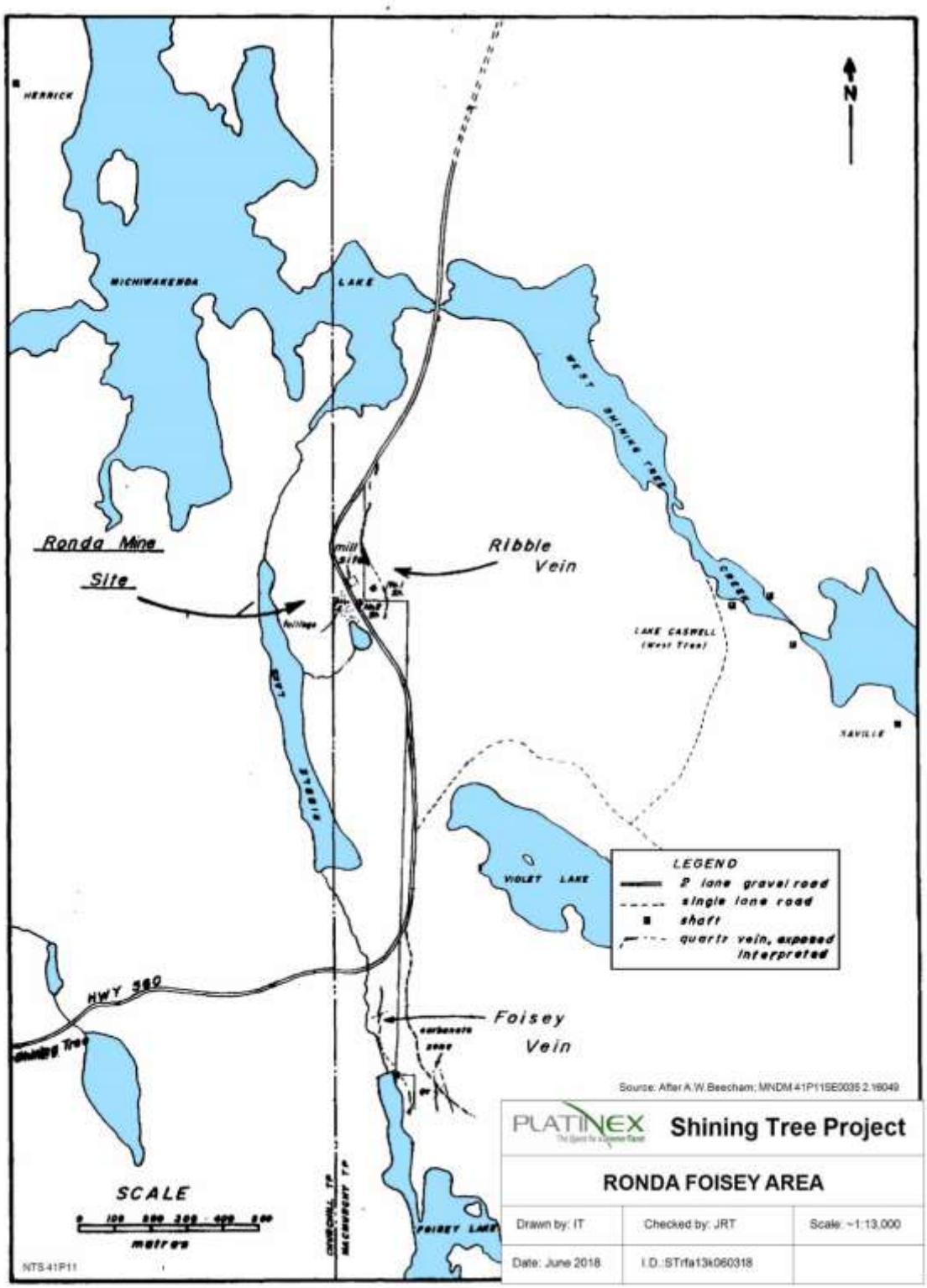
- 1912: Two prospectors, who were "grubstaked" by Mrs. Ada Ribble, discovered the gold showing.
- 1913: Sharon Mines Ltd. carried out trenching, shaft sinking, carried out development on two levels, and built a mill east of the shaft.
- 1916-1917: T.R. Jones of Buffalo Mines, Cobalt, carried out surface stripping and trenching.
- 1918-1923: A new operator carried out sinking of 2-compartment Shaft No. 1 to 150 ft. and crosscutting on the 100-ft. level. Later, the company deepened the shaft to 208 ft.
- 1934-1935: Neville Canadian dewatered the mine workings, carried out drifting and sampling, and installed a 100-tpd mill.
- 1935-1939: The new operator deepened the No. 1 shaft to 325 ft., developed levels at 100 ft., 200 ft., and 300 ft. depth, completed a vertical winze from 300 ft. to 700 ft. depth, and a raise to surface. The operator also sank the No. 2 shaft, with levels at 300 ft., 425 ft., 550 ft., and 675 ft. depth, with 5,379 ft. of drifting, 535 ft. of surface drilling (3 holes), and 5,401 ft. of underground drilling (22 holes). Finally, the operator constructed a 125-tpd mill.
- 1939-1940: The Ronda Mine produced 2,727 oz. gold and 4,830 oz. silver from 22,309 tonnes of ore. The mine shut down at the end of 1940 because of the lack of personnel due to World War II.
- 1994-1996: Strike Minerals Inc., Copperquest Inc., and Golden Trump Resources Inc. acquired the property and carried out ground geophysical (magnetometer and VLF-EM) surveys, geological mapping, stripping and trenching, and completed 3,208.6 m of diamond drilling in 16 holes. Table 7-2 provides a summary of the mineralized intersections in drill holes predominantly in tuffaceous rocks with quartz-carbonate alteration. Some of the holes have several mineralized gold intersections.

Table 7-2 Ronda Mine Diamond Drilling Summary			
Platinex Inc. – Shining Tree Property, Ontario			
Drill Hole No.	**Total Length (m)**	**Intersection (g/t Au)**	**Interval (m)**
R96-01	218.4	1.22	9.00
R96-02	218.4	1.73	1.64
R96-03	182.9	2.56	1.64
R96-04	N/A		
R96-05	N/A		
R96-06	313.4	82.08	1.50
R96-06		2.27	0.30
R96-06		50.10	5.56
R96-07	172.5	Low values	
R96-08	161.0	1.61	3.30
R96-08		1.63	6.56
R96-09	114.8	2.43	1.61
R96-10	287.2	16.53	0.20
R96-10		6.09	1.64
R96-10		2.98	1.64
R96-10		3.29	1.64
R96-10		1.96	3.28
R96-11	251.5	3.44	4.92
R96-11		3.79	6.56
R96-12	264.3	Low values	
R96-13	280.6	2.09	16.4
R96-14	175.7	Low values	
R96-15	202.0	6.21	0.49
R96-16	365.9	Low values	
Total	**3,208.6**		

Source: Hope, 1996.

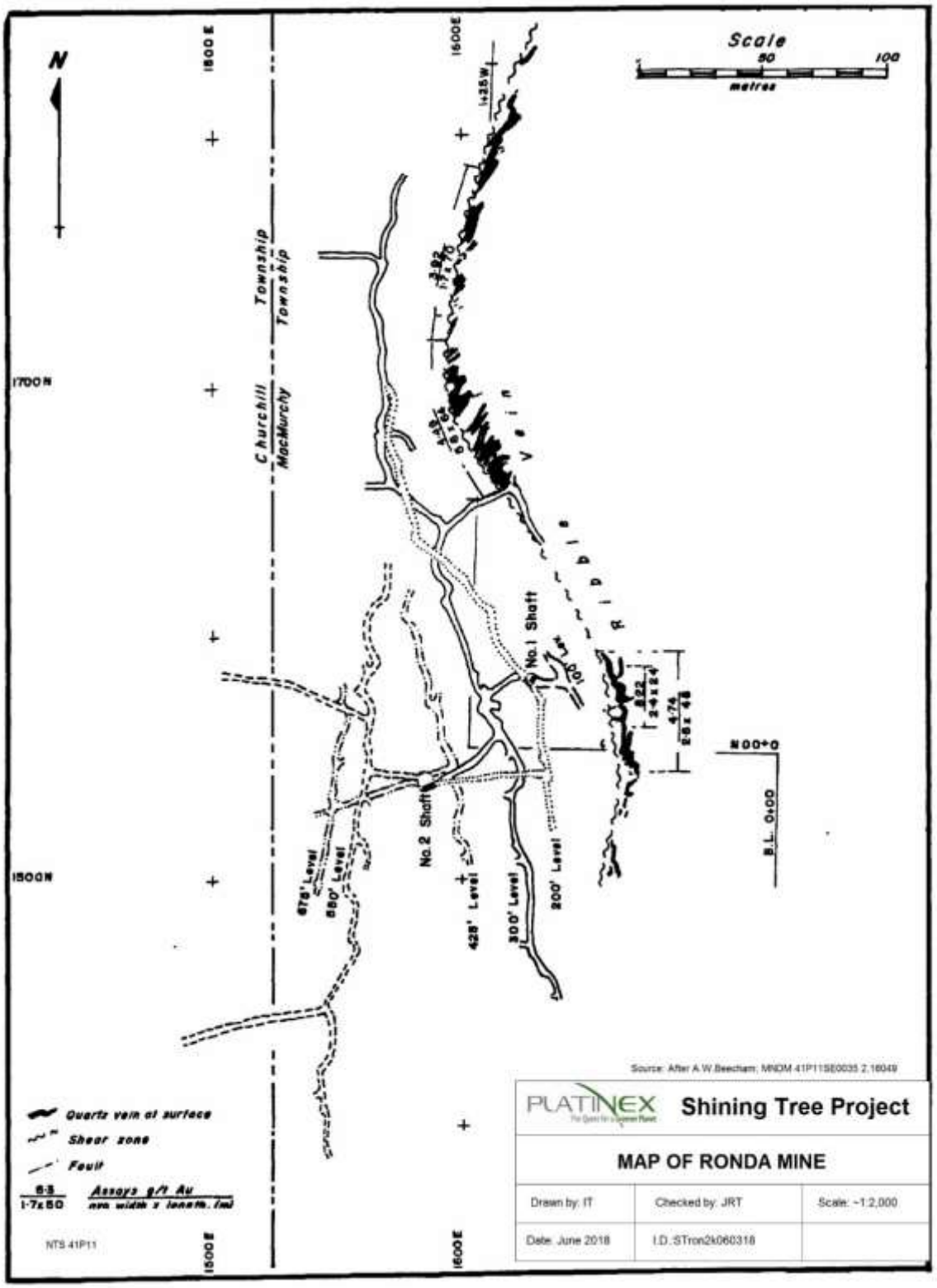
Note: Drill hole lengths are converted from Imperial numbers (ft.).

Figure 7-4 Ronda Mine Area



Source: Beecham, 1994.

Figure 7-5 Ronda Mine Composite Level Plan



Source: Beecham, 1994.

7.3.1.1.2 Tyranite Mine

The old Tyranite Mine is located in the northeastern part of MacMurchy Township, a short distance south of the east-west boundary between Tyrell and Knight Townships, and 10 km west of the Platinex Shining Tree property. The original showing was discovered in 1930 was known as the Hedlund property. From 1930 to 1942, several companies produced 31,352 oz. Au and 4,860 oz. Ag from 223,810 tons of ore at an average grade of 0.14 oz/ton Au. The ore occurred as pods and lenses in two parallel, north-trending carbonatized and pyritized shear zones, oriented at Azimuth N20°W with a 70° westerly dip. The south ore body was 120 m by 12 m and the north orebody was 60 m by 8 m wide. The shaft extended to 350 m depth and development occurred on seven levels.

7.3.1.1.3 Bilmac Mine

The Bilmac prospect had production associated with the Evelyn and Saville Veins in 1922 and 1933. It is within the Shining Tree property and Platinex interprets it to be the extension of the Caswell veins Total reported production was $1,607 for gold and silver combined (MNR, 1979).

7.3.1.2 Mineral Occurrences with Past Underground Development

7.3.1.2.1 Herrick Deposit

The Herrick deposit is located in the east-central part of Churchill Township, close to the eastern margin of a body of Timiskaming metasedimentary rocks, which coincide with the Michiwakenda Fault. Gold mineralization at the Herrick Deposit is associated with quartz veins, pyrite, tourmaline and arsenopyrite, with better gold values often occurring in pyritic quartz vein breccias. The quartz veins occur along a north trending zone of high strain that has displaced trachytic volcanic rocks and clastic sedimentary rocks, and provided a conduit for hydrothermal fluids. Exploration work by Unocal Canada Ltd. (Unocal) delineated this high strain zone along a strike length of 300 m and a maximum width of 80 m (Toth et al., 2017). The following is a historical account regarding exploration and development of the Herrick deposit as reported by Cluff (1989):

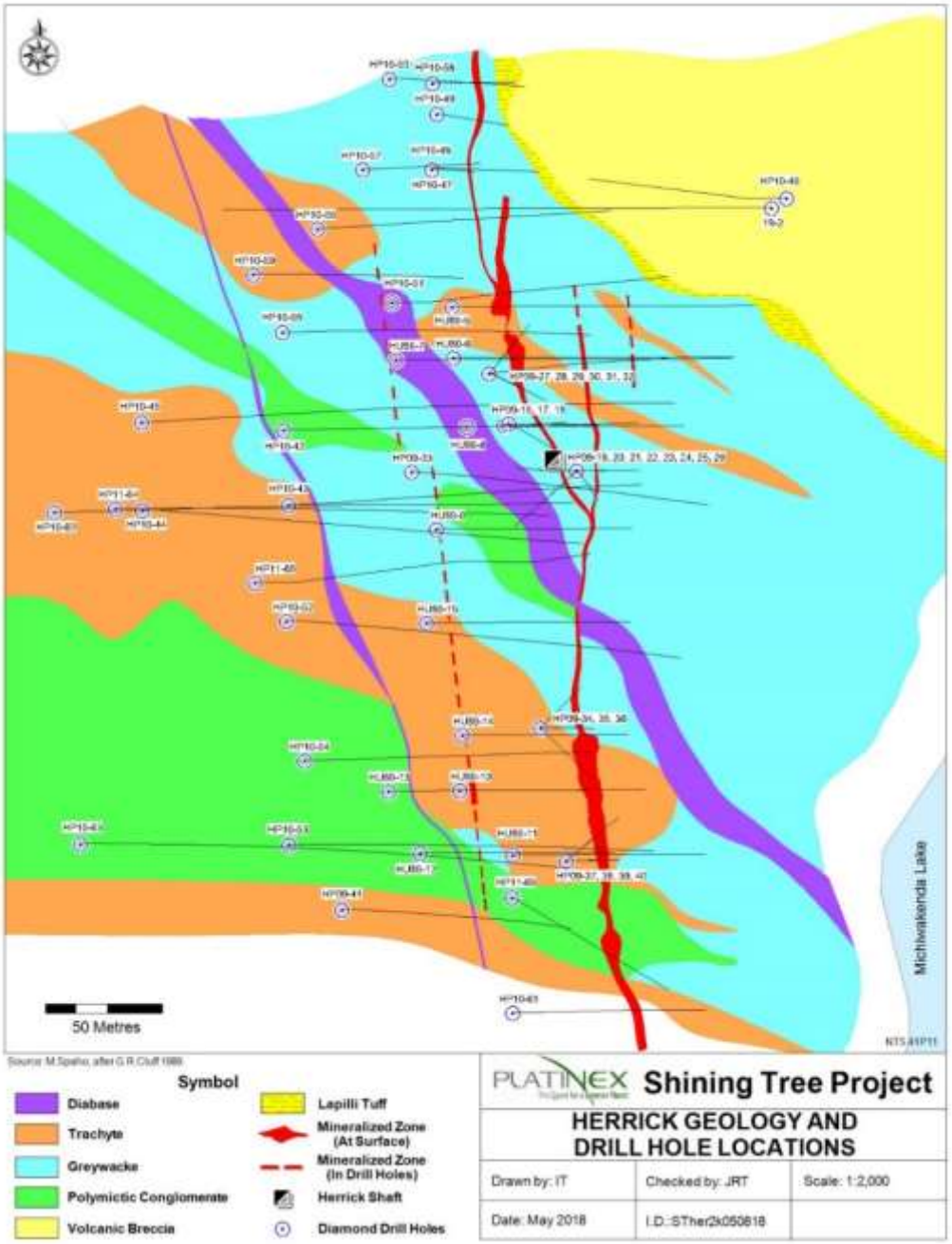
- 1918: J.A. Knox discovered the Kingsley Vein. Herrick Gold Mines acquired the property and completed work, including 4 drill holes (955 m), trenching, sampling, and sinking a two-compartment shaft to 15 m depth.
- 1919: F.V. Marsden recognized that high gold values commonly occur in the deposit.
- 1921: In a report for Herrick Gold Mines, P. McDonald noted that the shaft had been sunk to 120 ft., with limited lateral work; stations in shaft at 50 ft. and 100 ft., and with 40 ft. of drifting. In addition, surface sampling was done by cutting channels at 5-foot intervals.

Metallurgical test work indicates the free milling character of the ore; with indicated extraction of over 90% of gold with fine grinding and cyanidation, and low cyanide consumption.

- 1923: Work ceased on the shaft at 300 ft., with levels at 50 ft., 95 ft. (including 250 ft. of drifting), 200 ft., and 300 ft. (including 290 ft. of crosscutting, and 600 ft. of drifting).
- 1923: Shutdown of the Herrick Mine, as reported by Henderson Bros. Mine contractors, who noted that the mine shaft should have been sunk to 500 ft. Henderson also stated that the sampling results were understated.
- 1933: Consolidated Ontario Gold Mines Ltd. made plans to deepen the shaft to 700 ft. in order to explore the high gold values (0.16 oz/ton Au over 50 ft.) intersected in one drill hole. The planned work, however, was not carried out.
- 1933: Kindle (Consulting geologist) noted that along 259 ft. of crosscutting and 631 ft. of drifting on the 300-foot level, the vein was in the face of the last round, according to last shift of workers. Drifting at the 100-foot level followed the vein for 250 ft. Kindle also mentions that additional drilling discovered “ore” at the 25-foot level. This indicated that the vein at shallow depths was offset to the west by a low angle fault passing through the shaft. Kindle collected 11 samples, which averaging $10.20/ton gold (approximately 15 g/t Au), similar to Marsden’s report (average value of $77.20 for a grab sample and $13.40 across 2 ft.) and recommended further underground development.
- 1935: Grantland Gold acquired the property and carried out compilation of data. In April 1935, Erie Canadian Mines prepared a level plan of the 300-foot level.
- 1940: Sylvanite Gold Mines examined the property and carried out re-sampling of surface exposures. However, there is no documentation of this work.
- 1962: Matachewan Canadian Gold Ltd. acquired the property.
- 1969: Triton Exploration Ltd. acquired the property.
- 1988: 751160 Ontario Limited, a private company, acquired the property by staking.
- 1988-89: Unocal started an exploration program and noted that previous work indicated that the Herrick deposit had the potential to host mineable reserves of 1,732 tonnes per vertical foot at an average grade of 7.2 g/t Au over a 1.8 m width, with 50% dilution. Unocal carried out power-stripping, mapping, geophysical surveys, channel sampling, and completed 1,473 m of diamond drilling in 11 holes.
- 1990: Fort Knox Resources examined the property as part of regional exploration work.

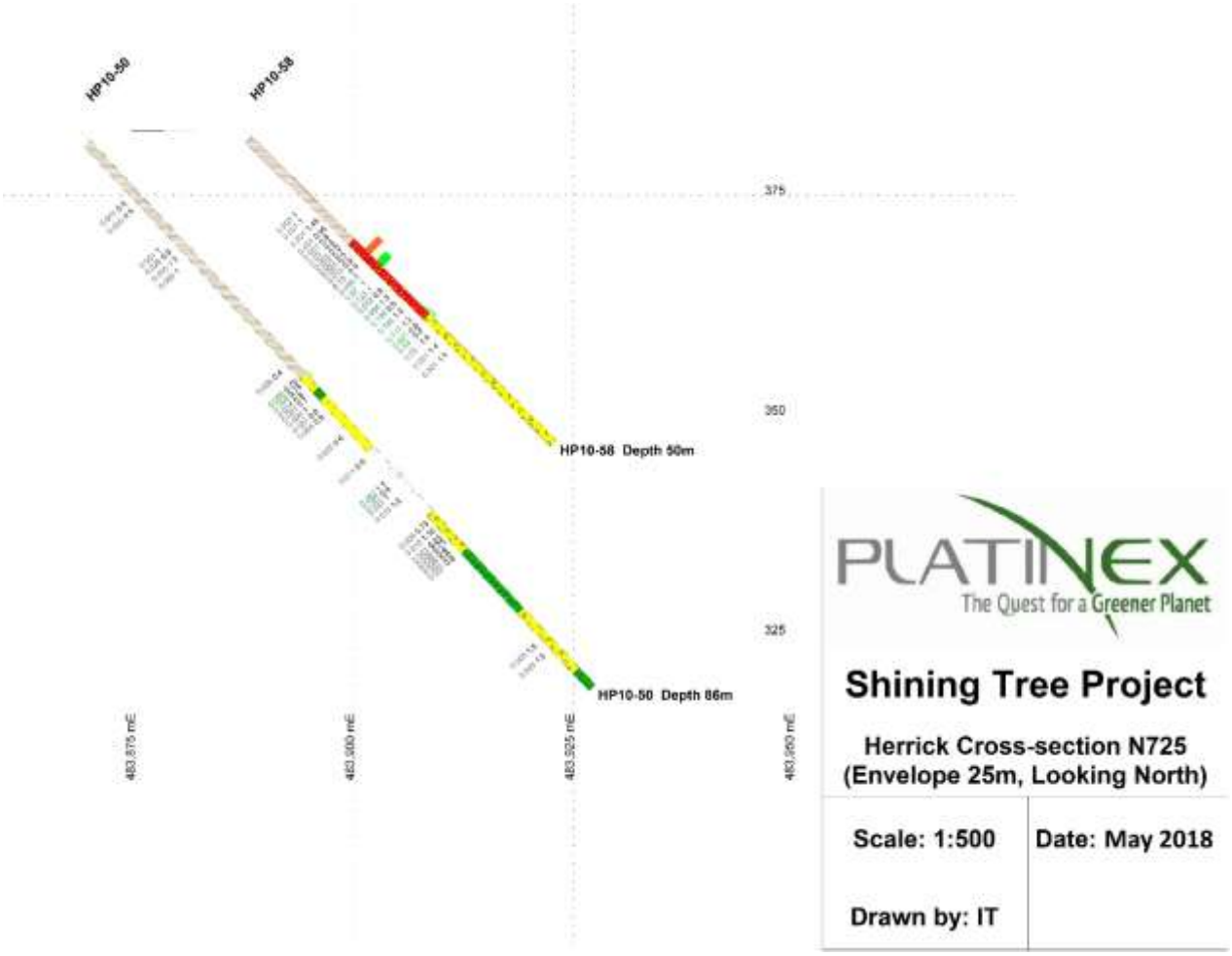
Unocal delineated several types of porphyritic intrusive/extrusive rock types at Herrick. Figure 7-6 is the plan view, Figure 7-7 is a cross section, and Figure 7-8 is a longitudinal section of the deposit. Unocal described the main units of interest as trachytes (K-feldspar-rich volcanic rock with minor biotite, hornblende, or pyroxene) in surface mapping or red porphyry in drill logs. The trachyte or red porphyry may also be synvolcanic intrusive sill that has been subjected to metre to tens of metre-scale movements along an earlier north-trending (Herrick vein) structure, and later movement along northwest and west-northwest trending faults. The trachytic rocks exhibit high strain, strong carbonate alteration, strong to intense quartz veining, and localized mineralization of pyrite, tourmaline, green mica, and minor arsenopyrite (Toth et al., 2017).

Figure 7-6 Herrick Deposit Geology



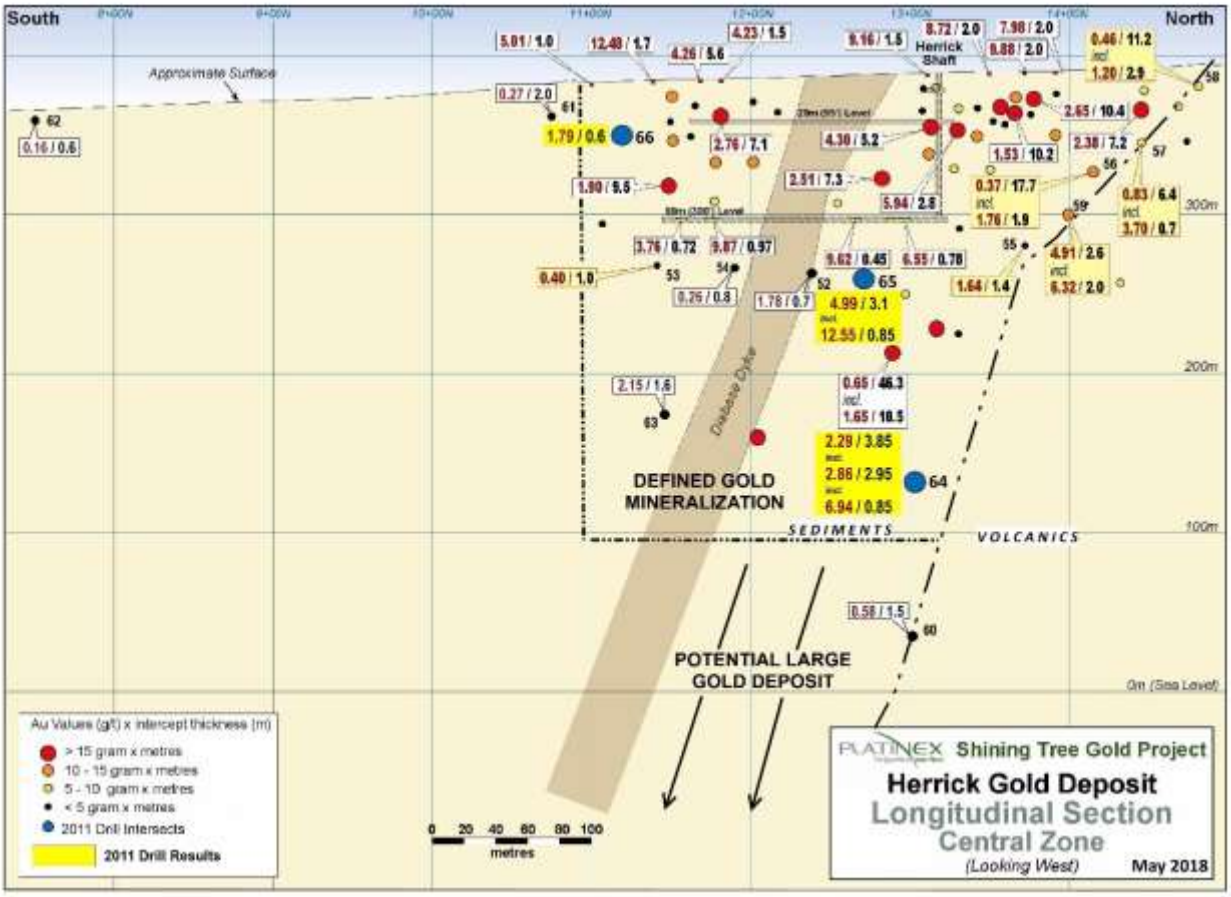
Source: Toth et al., 2017.

Figure 7-7 Herrick Deposit Cross Section N72



Source: Toth et al., 2017.

Figure 7-8 Herrick Deposit Vertical Longitudinal Section



Source: Toth et al., 2017

7.3.1.2.2 Caswell Area

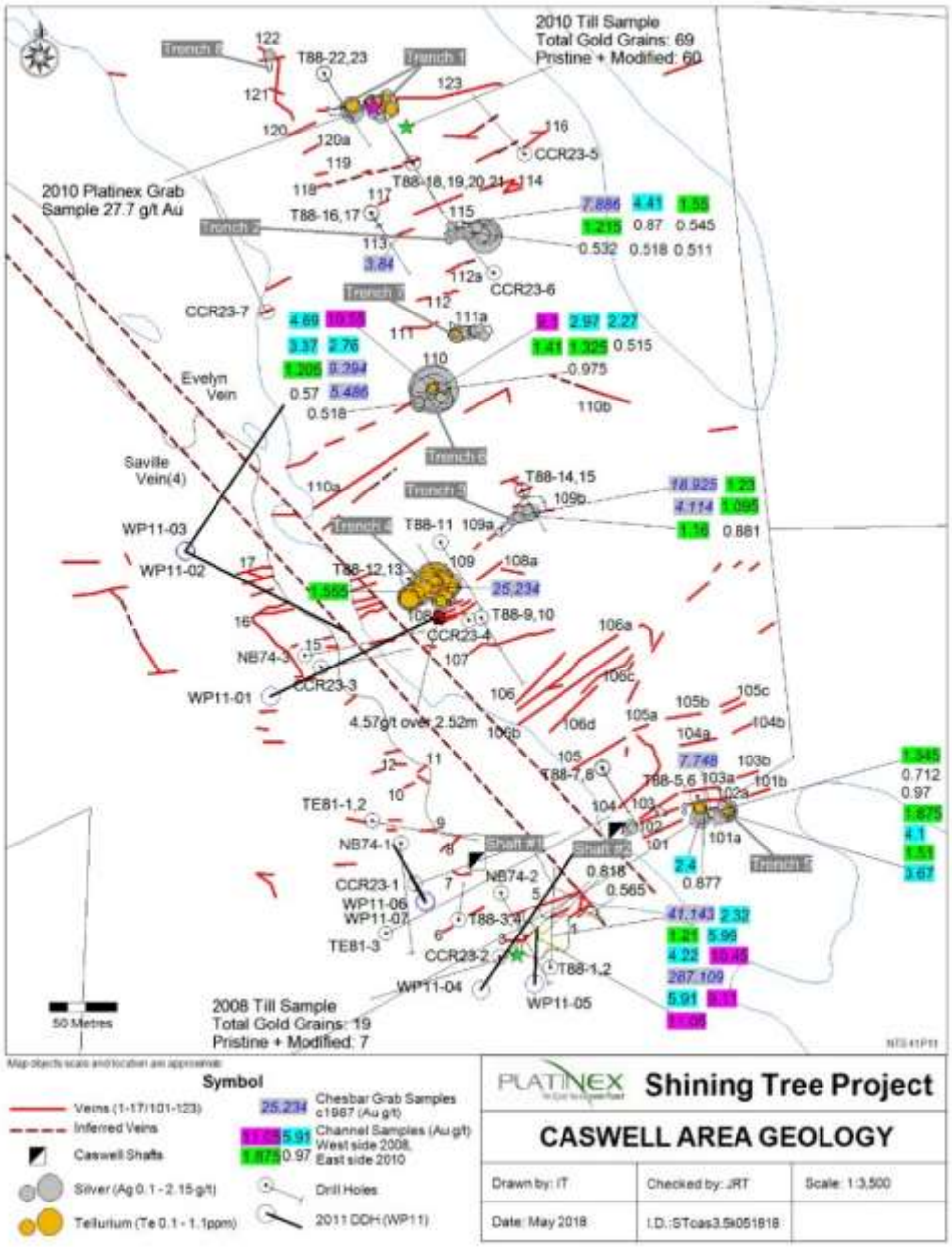
The Caswell veins are located in the southwestern part of MacMurchy Township, in an area if many northwest trending diabase dikes (Figure 7-3). Gold occurs in narrow quartz veins and lenses along shears oriented in a variety of directions, but generally either in a northwest or east-northeast direction. These veins exhibit both compressional (drag folds) and tensional (boudinage) strain. Quartz veins generally contain trace amounts to 2% pyrite, local dark seams of chlorite, and possibly very fine-grained tourmaline. Wall rock to the veins is often sheared and fractured, with strong iron carbonate alteration extending for several metres away from the vein (Figure 7-9). Early operators have reported visible gold in this area.

The Saville vein occurs as part of the regional northwest shear structure, which hosts the Caswell veins and numerous occurrences to the southeast. Where exposed along the edge of Caswell Lake, the vein is up to a metre wide with quartz stringers developed in adjacent iron carbonate-rich schist. Platinex detected anomalous gold values from chip and channel sampling done on the vein in 2008. Drilling by Platinex in 2010, however, revealed that the Saville and Evelyn veins both appear to be graphitic and pyritic interflow sedimentary units (Toth et al., 2017). The following is a historical account regarding exploration and development of the Caswell veins as reported by Edgar (2001).

- 1916: J. Messer reported on sampling that yielded numerous assays greater than 1 oz/ton. Assays from a 40-foot shaft sunk on the east shore (No. 2 shaft) yielded assays ranging from 1 oz/ton Au to 19 oz/ton over 12 inches. No plans or maps exist for these data.
- 1923: R.W. Demorest reviewed the work done on the property and carried out sampling on 11 veins. Assay results ranged from 0.12 oz/ton Au over 30 in to 31.16 oz/ton Au over 48 in.
- 1925: C. Baycroft reported on a diamond drill program by Canadian Champion Reef Mining Company Limited (Champion Reef). The company also sank a 92-foot deep shaft on the east side of the lake and completed 178 ft. of drifting from the bottom of the shaft.
- 1929: Canadian Champion Reef Mining Company Limited sank the No 1 shaft to 520 ft. with 1,105 ft. of drifting. There is little documentation of sampling results.
- 1933: Champion Reef re-organized itself into Burvan Gold Mines Ltd. and carried out resampling and prospecting.
- 1938: F. Austin examined the data available for the Caswell property; and noted lack of sampling correlation and documentation.
- 1975: New Bedford Mining re-sampled several of the veins and drilled three holes. Results indicate visible gold in two of the holes, with the best gold assay of 0.085 oz/ton Au over 2.5 ft. Limited bulk sampling near No. 2 shaft returned assays of 2.96 oz/ton Au and 1,206 oz/ton Ag.
- 1980: Tut Explorations partially dewatered the No.1 shaft and carried out limited underground sampling.

- 1987: Chesbar Resources examined the property and available data, and collected 106 grab samples. Eleven samples returned values greater than 0.1 oz/ton Au.
- 1988: Chesbar Resources drilled a total of 5,874 ft. on veins 1 to 4 and 101 to 122.
- 2001: Practical Exploration and Development Corporation compiled available data on the property and performed limited power-stripping and sampling.

Figure 7-9 Caswell Area Geology



Source: Toth et al., 2017.

7.3.1.2.3 Speed Lake Area

In the Speed Lake area, also known as Gosselin trend, gold occurs in quartz veins and stockworks within green carbonate or iron carbonate-altered mafic to ultramafic volcanic rocks in contact with northwest trending diabase dikes (Figure 7-3). Sulphide minerals are generally a minor component of green carbonate-hosted mineralization, but are common in veins within more mafic rocks. A few hundred metres west of the Shining Tree property, the Gosselin vein strikes 150° and has been traced along strike for several kilometres. It consists of white quartz-carbonate material with sporadic sulphide and gold mineralization. In places, the vein is greater than 10 m wide (Carter, 1980, *in* Toth et al., 2017).

7.3.1.2.4 Churchill Occurrence

This showing is situated near the southeastern corner of Churchill Township, approximately 500 m northwest of the northern edge of a small pluton of felsic to intermediate intrusive rocks. Agnerian notes that the eastern margin of the small intrusive body coincides with the Michiwakenda Fault. Exploration work on the Churchill vein commenced in 1918 and continued until 1936, by sinking a 38-foot deep pit on one of the veins and a 7-foot by 9- foot two-compartment vertical shaft to a depth of 110 ft. on the No. 3 vein. Subsequently, the operators set up a level at 109-foot level and completed 70 ft. of drifting and 154 ft. of crosscutting.

In 1989, Unocal acquired the property and carried out geological mapping, power stripping, channel sampling, and completed 461 m of diamond drilling in four holes.

7.3.1.3 Other Underground Development Sites

Two gold prospects with underground development, the Jefferson Lake and the Gosselin (Fred) prospects are located west of the Platinex Shining Tree property, in Churchill Township. Four other gold prospects, the Atlas, McIntyre-McDonald, Bennett, and Kingston gold occurrences are located southeast of the Caswell shafts, in MacMurchy Township, and were all evaluated with underground workings. Most of the underground development work on these prospects dates from the early days of the Shining Tree gold camp. No major exploration programs have followed, but sporadic stripping, trenching, re-sampling and minor drilling have taken place during periods of high gold prices (Trusler and Trusler, 2012).

7.3.1.4 Other Occurrences and Prospects on the Shining Tree Property

7.3.1.4.1 Royal Mining Occurrence

This showing is located at the southern tip of a small body of felsic intrusive with porphyritic texture, close to the southern boundary of Churchill Township. In 1971, Barringer Research Limited (Barringer) carried out geological and geophysical mapping and outlined a shear zone in an east-west to east-northeast direction, immediately north of Highway 560 (Carter, 1980 *in* Trusler, 2012).

7.3.1.4.2 Clarke Gold Occurrence

The Clarke gold occurrence is located near the southwest border of the property, in Asquith Township, and near the western margin of a narrow, northwest trending ultramafic body, in an area of northwest trending diabase dikes. Data on sampling or past exploration are not available.

7.3.1.4.3 Knox Gold Showing

The Knox showing is located in the southwestern part of MacMurchy Township, adjacent to Knox Lake, in the eastern part of a group of northwest trending diabase dikes. In the early days of exploration in the Shining Tree area, this showing was known as the Wood claims. Hopkins (1920) described the occurrence as "*two narrow east-west rusty schist zones which contain a few parallel quartz veins, all being cut by a north-south diabase dyke. A little gold occurs in the north vein immediately east of the diabase and in the south vein directly west of the diabase.*"

Sampling done in 2004 and reported in the Mineral Resources Inventory (MDI) for the Knox veins (two of 14 samples) returned assays of 0.029 oz/ton Au and 0.018 oz/ton Au from trench 1A and sampling by R.C. Whelan returned values ranging from trace to 804 ppb Au (Trusler, 2012).

7.3.1.5 Mineral Occurrences in the General Area

There are other gold occurrences in the general area of the Shining Tree property. These include the Gunter, Gold Corona, Cochrane, and Onitap (Churchill Township), and Foisey, Featherstone, and Kingston (MacMurchy Township) (Figure 7-3).

7.3.1.6 General Comments

There are three main vein orientations within the Shining Tree property. These are; about Az 130º, north-south, and Az 070º. Most veins are within mafic volcanic rocks and associated with varying intensity of carbonate alteration, and minor sericite alteration. In 1994, A. W. Beecham reported, "*The host rocks for some of the deposits within the zones of green carbonatized rock, such as at Gosselin, and the eastern vein at Foisey, may be komatiitic basalts or ultramafic flows. East of the Ronda Mine, some of the showings in the Az 130º trend along the West Shining Tree appear to be associated with a 3.5 km long zone of quartz porphyry intrusive. Many of the actual veins in this 130º zone are in cross fractures striking about 070º. The common metallic minerals associated with the gold are pyrite, chalcopyrite and sphalerite. The gold is native. Some cobalt minerals are reported at Saville, further suggesting overprinting of a Co-Ag-Au event"*.

Gold occurrences on the Shining Tree property are spatially, and likely structurally, related but have been worked historically as separate areas. Gold mineralization occurs in a variety of rock assemblages, and structural styles. The strong spatial association of the Ronda, Herrick, Churchill, Gold Corona, Buckingham and associated smaller gold occurrences on both sides of the Michiwakenda Fault implies a strong genetic association (Toth et al., 2017).

The Herrick vein system is controlled by, what appears to be, a cross-cutting structure that displaces Timiskaming age sedimentary and volcanic rocks. Alkali-rich porphyritic rocks (trachytic flows or intrusives) have been mapped and intersected in drill core at both the Herrick and Churchill prospects.

The Churchill vein system is located toward the top of the Deloro assemblage, close to the unconformable contact with the Kidd-Munro assemblage to the north (Ayer et al., 2002). Felsic fragmental rocks, cherty pyrite-rich sedimentary rocks, and sulphide facies iron formation, are all associated with this assemblage contact. Work by Unocal in 1989 included geological mapping and diamond drilling of both the Churchill and Herrick vein systems. Timiskaming-aged volcanic rock types described by the field names "altered trachyte" and "red porphyry" were noted by Unocal in both the Churchill and Herrick vein systems and show a strong association with elevated gold values (Toth et al., 2017).

The Speed Lake or the Gosselin trend, which appears to be continuous from southeast Churchill Township into central Asquith Township, is located in the Pacaud assemblage. This trend is closely aligned with a trend of ultramafic rocks, presumed to be composed mainly of komatiitic flows, which have undergone deformation and alteration to form locally

gold-bearing quartz-stockworks in fuchsitic carbonate alteration zones (green quartz-carbonate).

The Caswell vein system is part of a larger shear system that apparently trends southeast, similar to the gold-bearing Tyrrell shear zone further east near Gowganda. The host rocks are intermediate to mafic intrusive and extrusive volcanic rocks, which have undergone complex brittle to ductile deformation, are variably carbonate-altered, and locally silicified with associated gold-bearing, locally pyritic, quartz-carbonate veins, both parallel and discordant to the main shear orientation. Toth et al. (2017) observed that the N60°E to N85°E shear system at Caswell might be a more important target for gold mineralization. In contrast to other locations proximal to the historic large gold production areas, the Shining Tree area has received no comprehensive exploration campaigns and very little exploration below a depth of 250 m.

7.3.2 VMS Mineralization

Results of Unocal's work in 1989 indicate that there is potential for base metal deposits in the Shining Tree area (Cluff, 1989). In 1989, Cluff noted that drill hole and surface observations exhibit strong sulphide mineralization in cherty horizons, and pyritic, silicified argillaceous sediments contain traces of sphalerite associated with pyrite, chloritization and weakly anomalous gold values (e.g., 11.75 m of "Sulphidic Rhyolite" in hole CU89-17). There are also anomalous widespread gold values within chert horizons (logged as 10.6 m and 4.5 m of chemical sedimentary rock, chert, sulphide iron formation in holes CU89-17 and 19).

Regionally, these felsic and chemical sediment rocks intersected in the Churchill area occur at the top of the felsic volcanic dominated, 2,730 Ma to 2,725 Ma Deloro assemblage, and at the base of the 2,717 Ma to 2,712 Ma Kidd-Munro assemblage. Portions of this assemblage contact occur on the Shining Tree property between the Churchill and MacMurchy Township boundary, and an area just north of Perkins Lake. Agnerian notes that the dates of mineralization of major VMS deposits in the Southern Abitibi Sub-province are similar to those on the Shining Tree property, e.g., Noranda – 2,700 Ma; Kam Kotia – 2,707 Ma to 2,705 Ma; Kidd Creek and Potter – 2,717 Ma to 2,714 Ma.

8.0 DEPOSIT TYPES

8.1 LODE GOLD MINERALIZATION

The principal exploration target on the Shining Tree property is lode gold mineralization hosted by Archean intrusive and metavolcanic rocks, which outcrop across the project area. The Abitibi greenstone belt hosts numerous world-class economic lode gold deposits, such as Hollinger-McIntyre, Kerr Addison, LaRonde, and Macassa Mines, with total production in excess of 180 million oz of gold to date. Recent work indicates that gold mineralization discovered on the Shining Tree property may also lead to a number of different gold deposit models. These include the greenstone-hosted quartz-carbonate vein deposit type (Dubé and Gosselin 2007 and Dubé et al, 2011), the syenite-associated disseminated gold deposit type (Robert, 2001), and the gold and copper-gold porphyry deposit type (Sinclair, 2007) that may be important guides for exploration on this property.

In 2011, the Geological Survey of Canada (GSC), together with the Ontario Geological Survey (OGS) commenced the fourth phase of the Targeted Geoscience Initiative (TGI-4) Lode Gold project (Dubé et al., 2011). The objective of this project is to focus on data-rich, established and emerging mining camps in Canada to optimize exploration-related geoscience knowledge development in order to enhance the effectiveness of exploration for hidden mineral deposits. The main goals of the program are to:

- Improve exploration models where knowledge gaps exist in our understanding of Canada's major mineral systems.
- Improve the effectiveness for detecting the presence of hidden mineral deposits.
- Train and mentor students in order to increase the number of highly qualified personnel available to government, agencies, and Canadian mineral industry, research institutes and university faculties.

8.1.1 Quartz-Carbonate Vein Deposits

Gold mineralization on the Shining Tree property is, in many respects, consistent with the greenstone-hosted quartz-carbonate vein deposit type. This is a subtype of lode gold deposits, which is also known as mesothermal, orogenic, lode gold, shear-zone-related quartz-carbonate or gold-only deposits (Dubé and Gosselin, 2007, and Dubé et al, 2011). This style of mineralization consists of simple to complex networks of gold-bearing, laminated quartz-carbonate fault or fracture-filled veins in moderately to steeply dipping, compressional brittle-ductile shear zones and faults, with locally associated extensional

veins and hydrothermal breccias. Gold occurs mainly in vein networks, but may also be present in significant amounts in iron-rich sulphidized wall rock selvages, or within silicified and arsenopyrite-rich replacement zones. The host rocks are dominantly mafic rocks of greenschist to locally lower amphibolite facies, but may also include a wide variety of rock types, including mafic and ultramafic volcanic rocks, competent iron-rich differentiated tholeiitic gabbroic sills, granitoid intrusions, porphyry stocks and dikes, and clastic sedimentary rocks. Mineralization is syn- to late-deformation and typically post-peak greenschist-facies or syn-peak amphibolite facies metamorphism, and generally formed at depths ranging from 5 km to 10 km.

8.1.2 Syenite Associated Disseminated Gold Deposits

Diverse types of gold deposits commonly occur next to, or hosted by, magmatic rocks, including intrusive related (or associated) deposits (Dubé et al, 2011). Gold mineralization observed on the Shining Tree property exhibits close relationship to strongly syntectonic potassic altered metavolcanic rocks. Robert (2001) describes a group of Archean gold deposits, spatially associated with quartz-monzonite to syenite stocks and dikes, which occur mainly along major fault zones (e.g., Duparquet, Matachewan, Harker-Holloway, Ross) as syenite-associated disseminated gold deposits. Gold mineralization is associated with disseminated sulphide replacement zones with irregularly developed stockworks of quartz-carbonate+/-K-feldspar veinlets, within zones of carbonate, albite, K-feldspar, and sericite alteration that occur within composite syenitic stocks or along their margins, along satellite dikes and sills, and along faults and lithologic contacts away from intrusions. In these types of gold deposits, the syenitic intrusions are broadly synchronous with deposition of Timiskaming sedimentary rocks, which have undergone subsequent regional folding and related penetrative cleavage. These gold deposits are distinct from quartz-carbonate vein deposits, which can also occur within pre-Timiskaming syenitic intrusions.

The intrusions associated with these types of deposits range in composition from quartz-monzonite to syenite, forming small stocks, commonly elongated subparallel to the overall structural trend, and generally, numerous satellite dikes surround these small stocks. Agnerian notes that these features are present on the Shining Tree property.

Gold mineralization in nearby Tyrrell, Natal, and Knight Townships, just to the east of the Shining Tree property, is spatially associated with syenite stocks and dikes as well as intense carbonate alteration along north-northwest-trending faults and northwest-trending cross faults (Johns and Amelin 1990).

8.1.3 Gold and Cu-Au Porphyry Deposits

A third type of gold deposit within the Shining Tree property is gold and copper-gold porphyry-type mineralization. Porphyry deposits are large, low to medium-grade deposits, with primary ore minerals dominantly structurally controlled and spatially and genetically related to felsic to intermediate porphyritic intrusions (Sinclair, 2007). The mineralized zones in these types of deposits occur in large, structurally controlled stockworks, veins, vein sets, fractures, and breccias spatially associated with intrusions that may be the source of the magmatic hydrothermal fluids. Mineralized stockworks may occur within the exterior portion of the intrusion and immediately adjacent portions of the country rock. Sinclair (2007) described the hydrothermal alteration as typically zoned on a deposit scale, as well as around individual veins and fractures. The typical deposit scale alteration zones consist of an inner potassic zone characterized by K-feldspar and/or biotite and an outer propylitic zone consisting of quartz, chlorite, epidote, calcite and, locally, albite. Phyllic (quartz + sericite + pyrite) and argillic (quartz + illite + pyrite ± kaolinite ± smectite ± montmorillonite ± calcite) zones may occur between the potassic and propylitic zones, or as younger irregular or tabular zones superimposed on older alteration and sulphide assemblages. Phyllic alteration, however, is not always present, and in many deposits, it is overprinted by earlier potassic alteration. Alteration mineralogy is controlled by the composition of the host rocks and the mineralizing system. Alteration in mafic host rocks with significant Fe and Mg contain biotite (± minor hornblende) in the potassic alteration zone, and felsic rocks are dominated by K-feldspar.

Economic sulphide zones are closely associated with potassic alteration. The main ore minerals in Cu-Au porphyries are chalcopyrite, bornite, chalcocite, tennantite, native Au, electrum, and tellurides, with associated minerals that may include pyrite, arsenopyrite, and magnetite. More oxidized environments contain pyrite, magnetite (± hematite), and reduced environments contain pyrrhotite (Sinclair (2007)).

There are few Archean gold deposits classified as porphyries, and identification of these deposits is often based on the presence of mineralization with an age similar to the age of the intrusion, such as Troilus and Lamaque (Beakhouse, 2007) and the McIntrye Mine (Ayer et al., 2005). In the case of Troilus, potassic, propylitic, and phyllic alteration styles are associated with gold mineralization, similar to a porphyry model.

8.2 VOLCANOGENIC MASSIVE SULPHIDE DEPOSITS

Another type of mineralization present on the Shining Tree property is volcanogenic massive sulphide (VMS) type, which is commonly associated with the upper part of a mafic to felsic volcanic sequence of calc-alkaline affinity. World-class deposits of this type have been mined in the Abitibi region, particularly in the Timmins and Noranda mining camps.

There is varying terminology for these essentially Cu-Zn-Pb-Ag dominated systems, such as volcanic associated, volcanic-hosted, and volcano-sedimentary-hosted massive sulphide deposits. These deposits occur in submarine environments at or near the seafloor, as lenses of polymetallic massive sulphide mineralization. The mechanism for formation varies, but the key process is the discharge of hot, metal-bearing, hydrothermal fluids that have developed from sub-seafloor fluid convection.

VMS deposits belong to the larger group of exhalative deposits, which include iron formation and sedimentary-exhalative (SEDEX) deposits. Most VMS deposits consist of a tabular, stratabound accumulation of sulphide minerals, quartz and accessory oxide and silicate minerals, stratigraphically above a discordant system of sulphide veins, and disseminations. Both the stratabound and discordant “pipes” have characteristic alteration halos, which can extend significant distances from the sulphide accumulations, thus providing an important consideration in designing exploration programs for these types of deposits.

Another component of a VMS system is the heat source that provides the energy to develop the convection of fluids needed to scavenge and eventually concentrate metals. This generally takes the form of a subvolcanic intrusion, occurring a few kilometres below the seawater interface. These heated intrusions are extensive, and result in the development of base metal “camps” consisting of numerous VMS deposits of varying sizes.

The process of delivering heated hydrothermal fluids into a column of seawater creates thin but regionally extensive iron-rich chemical sediment or “exhalites” that cap or are part of the VMS sequence. These units provide critical markers in VMS exploration programs.

9.0 EXPLORATION

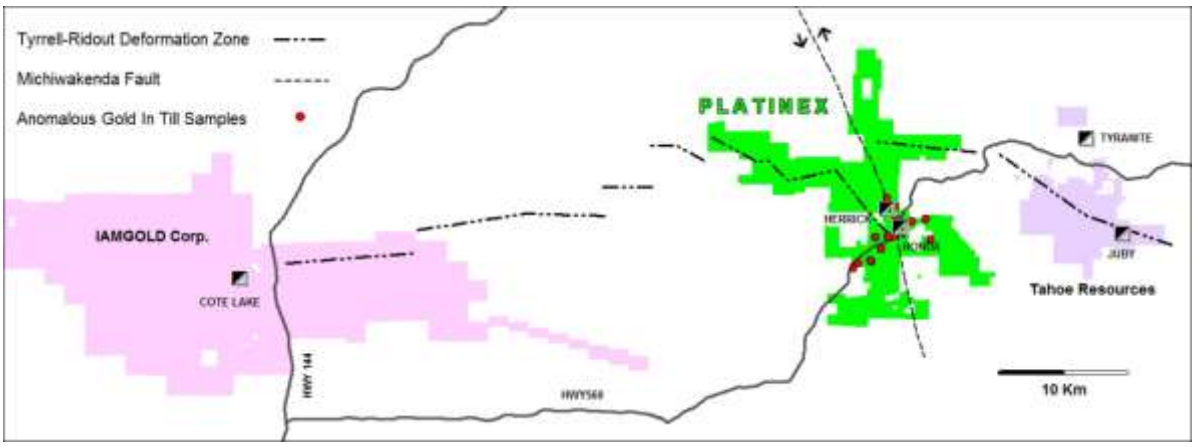
9.1 EARLY EXPLORATION

A number of mining companies have carried out exploration in the past, but these were intermittent, on different parts of the vast Shining Tree property, and on small claim groupings owned by different individuals or corporations. Previous work has shown that there are many surface gold showings on the property. Although this work has not been successful in outlining any zones of economic mineralization, it does provide very clear indications from geological, structural and geochemical evidences, that the much larger and contiguous land package, which now comprises the Shining Tree project area, does have the necessary attributes to host an economic gold deposit.

The exploration methodology applied in the past by early operators, and during the exploration programs from the early 1950s to date, including those by Platinex, has been to carry out geological mapping and prospecting, together with ground geophysical surveys, and evaluate the targets by drilling.

A large portion of the project area lies along, or is proximal to, the first order Tyrell-Rideout Deformation Zone (or Fault). This fault is projected to lie along or near to the unconformable contact between the Timiskaming-like metasedimentary rocks (Figure 9-1) and the older Kidd-Munro and Deloro group metavolcanic rocks. The Timiskaming-like metasedimentary rocks are generally poorly sorted conglomerates, sandstones and silts, associated with alkalic metavolcanic flows (trachyte) and intrusions (syenite), which filled first order faults. These rocks commonly define the general location of first order faults across the Abitibi sub-province.

Figure 9-1 Regional Deformation Zones in the Shining Tree Area



Source: Trusler, 2018.

On the Shining Tree property, the Michiwakenda Lake Fault cuts the Tyrell-Rideout Deformation Zone, with apparent displacement of more than 5 km. The top of the Deloro metavolcanic sequence, locally defined by a lean iron formation, lies in a northwest trending contact with Timiskaming-like metasedimentary rocks from the shores of Michiwakenda Lake in the east into Connaught Township and beyond in the west. Located immediately along this trend are both the Churchill and Gold Corona gold occurrences. In addition, local geological mapping and diamond drilling has identified alkali rocks (trachyte and syenite) at both the Churchill, and the Herrick gold occurrence (approximately 1,200 m to the north). Dubé and Gosselin (2007) interpret that Timiskaming-like regional unconformities, along major faults or stratigraphic discontinuities, are typical of large gold camps, and with the emplacement of synvolcanic and syn- to late tectonic intrusions along these discontinuities, may have induced anisotropy in the layered stratigraphy. It is also possible that these intrusions provided the thermal energy contributing to large-scale and long-lived hydrothermal fluid circulation, which contributed to the presence of large-scale iron-carbonate alteration a characteristic at the district scale for gold camps.

Platinex plans to carry out extensive compilation of historical exploration data sets and integrate them for future exploration.

9.2 RECENT EXPLORATION

9.2.1 Geophysical Surveys

9.2.1.1 Airborne Geophysical Surveys

In 1990, the Ontario Geological Survey (OGS) commissioned Geoterrex Limited (Geoterrex) to carry out an airborne magnetic and time domain electromagnetic (TDEM) survey over the Shining Tree area. Geoterrex carried out the survey with a fixed-wing configuration, which included both a magnetometer system and GEOTEM II TDEM system with a 200 m line separation. This survey identified several magnetic features, including:

- A magnetic anomaly, coincident with a diabase dike on the vicinity of the Herrick gold zone. The feature extends intermittently south, through the area just west of the Ronda Mine, and south-southeast beyond the property.
- A stronger magnetic response, typical of mafic to ultramafic volcanic rocks, in the southwestern part of the property.
- A magnetic high and flanking magnetic low in the area northwest of the Herrick gold zone, which may reflect a folded feature, commonly associated with the Timiskaming-like sedimentary rocks identified by the OGS.

- Magnetic lows along most of Michiwakenda Lake that extend from north-northwest to south-southeast are indicative of a major fault.
- Distinctive, narrow, north-northwest trending magnetic highs that cross the property indicate the existence of unmapped diabase dikes. In addition, northwest trending magnetic highs may be expressions of formational contacts between different rock units.
- A magnetic low also coincides with the northwesterly trend of the showings that have had underground development, including the Caswell gold zone.
- An electromagnetic anomaly extends for approximately 2 km appears to correlate with the Churchill, Gold Corona and Cochrane showings, which are proximal to the top of the Deloro assemblage.

9.2.1.2 Platinex Airborne Survey

In July of 2008, Platinex contracted Terraquest Inc. (Terraquest) to conduct a fixed-wing airborne survey on the Shining Tree property (Figure 9-2). Terraquest completed 491 line-km of airborne magnetic survey with the following sensors:

- High resolution aeromagnetic.
- Horizontal magnetic gradiometer.
- XDS VLF-EM
- Radiometrics (gamma ray spectrometer).

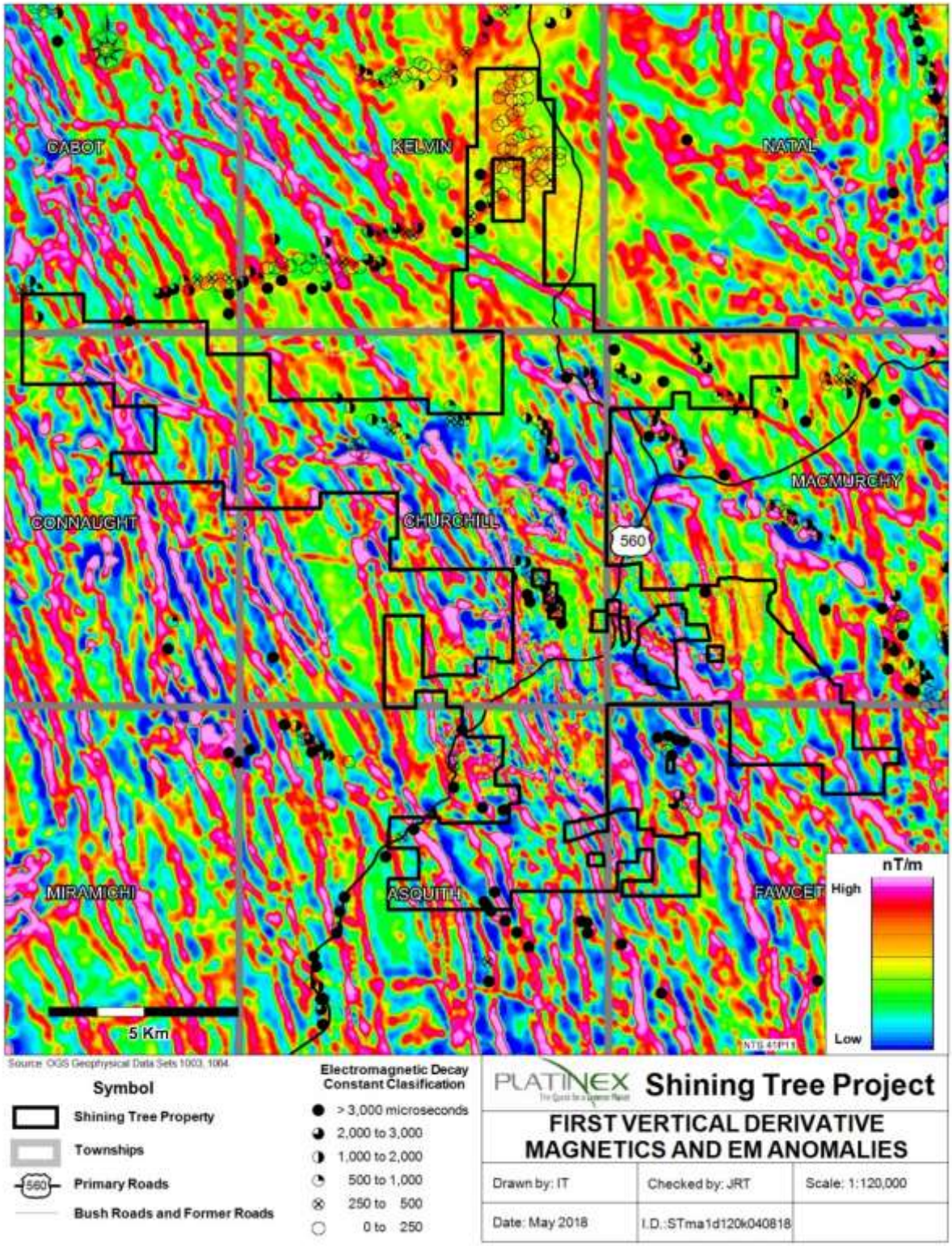
Terraquest also carried out the interpretation of the airborne geophysical survey as shown in Figure 9-3. These results, which mostly corroborated the earlier OGS 1990 survey results, indicate that:

- The numerous north-northwest trending linear magnetic highs coincide with the diabase dikes.
- The west-northwest trending magnetic anomaly, west of the Herrick showing, may be the expression of the contact zone between Timiskaming-like metasedimentary rocks and metavolcanic rocks, a favourable environment of gold mineralization in the Abitibi region of Ontario.
- Four somewhat circular radiometric (potassium) anomalies (RK1 to RK4), with diameters in the order of 500 m, are present just southwest of a river joining Michiwakenda Lake and Wasapika Lake, in the southwestern part of MacMurchy Township. The Terraquest map does not give the reason for these radiometric anomalies. Agnerian notes, however, that three of these circular anomalies line up along a northwest trend and coincide with the eastern flank, and the fourth one with

the western flank, of a northwest trending magnetic anomaly. In addition, they are somewhat coincident with the line of old small shafts, such as at Caswell, Atlas, McIntyre-McDonald, Bennett, and Kingston showings. Agnerian also notes the general direction of the inferred veins at Caswell (northwest) as shown in Figure 7-8 and discussed in Item 7.

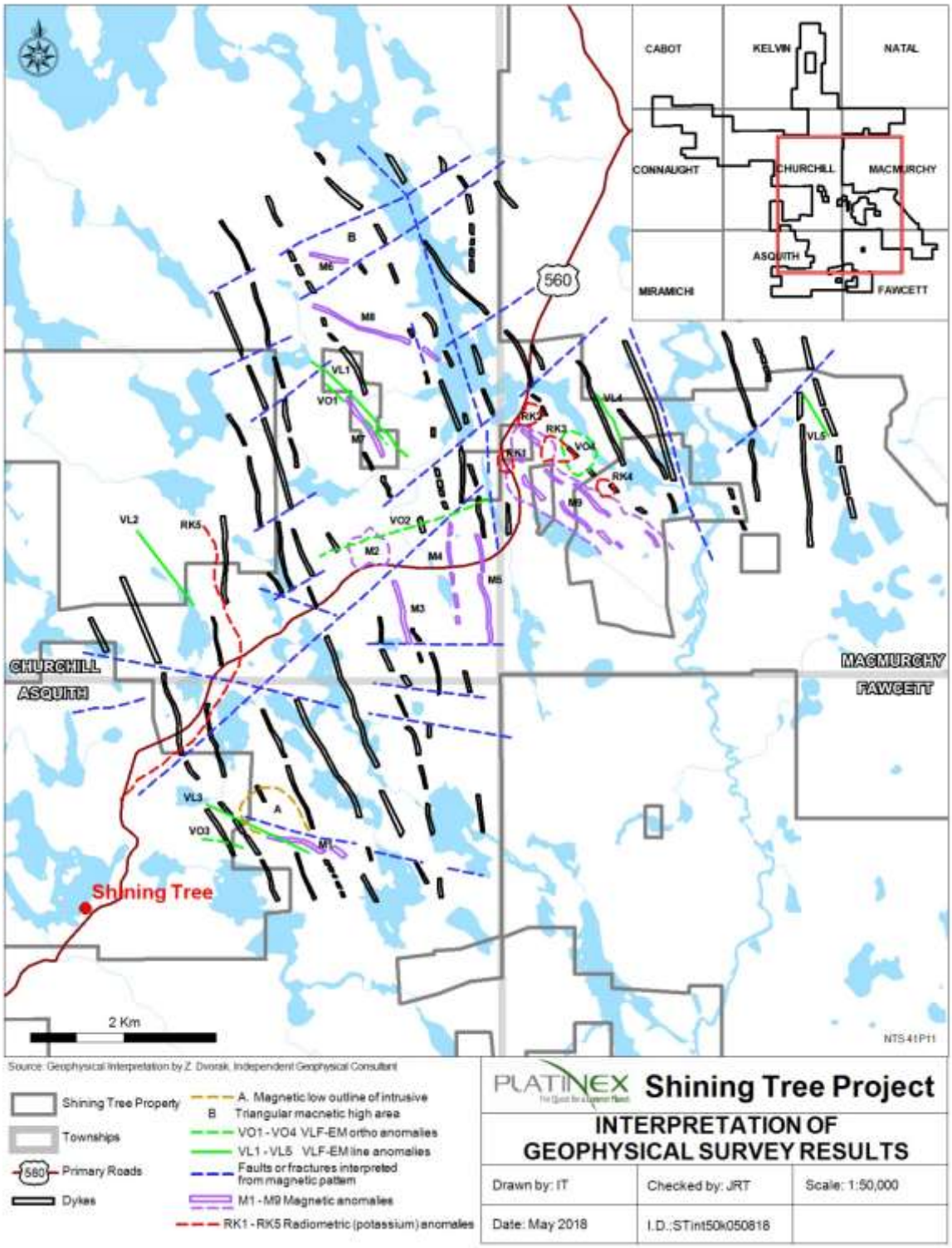
- A linear radiometric anomaly (RK5) extends from a point on Hwy 560, near the old O'Connor-Forbes showing, along a crescent-shaped line and passing through the old Royal Mining showing (Figure 9-3). Terraquest did not provide an explanation for this anomaly.
- A number of VLF-EM anomalies scattered throughout the property, some of which coincide with linear magnetic anomalies, whereas others appear to intersect them and/or represent east-northeast trending faults.

Figure 9-2 Shining Tree Airborne Geophysics



Source: Toth et al., 2017.

Figure 9-3 Interpretation of Airborne Geophysics, Shining Tree Area



Source: Toth et al., 2017.

9.2.1.3 Platinex Ground Geophysical Surveys

Platinex has completed several ground geophysical surveys on the property, including magnetometer and induced polarization (IP) surveys. In the past, many operators have carried electromagnetic (EM) and magnetometer surveys at various times and locations on the current Shining Tree claim blocks. This work was done on small blocks of land. Agnerian is of the opinion that the project requires comprehensive compilation of ground geophysical surveys.

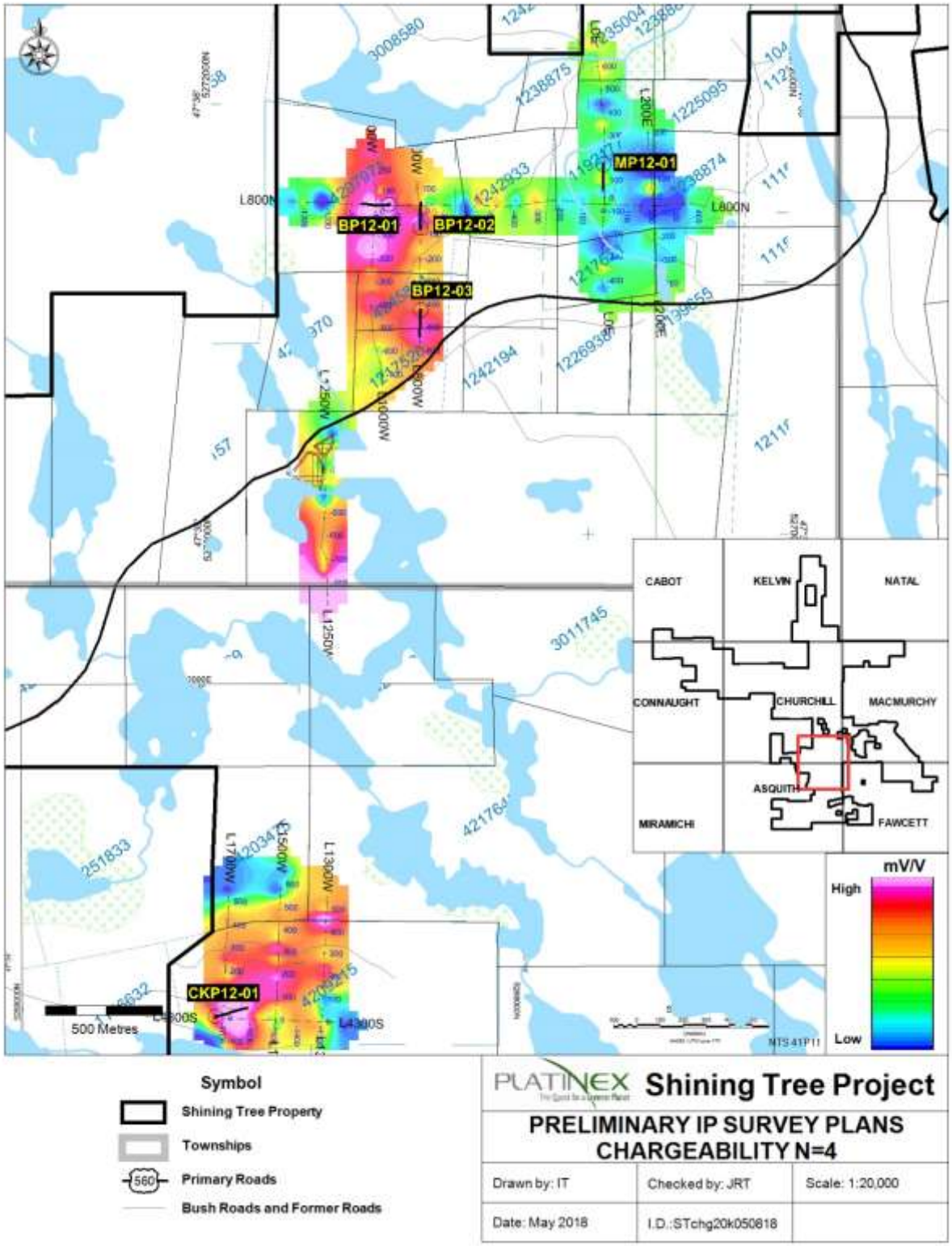
In 2010 and 2011, Platinex contracted JVX Geophysical Surveys and Consultants (JVX) of Richmond Hill, Ontario, to conduct an IP and magnetometer survey over the Herrick deposit and a small area near the old McBride showing, southeastern corner area of Churchill Township (Figure 9-4). JVX carried out 3.075 km of IP resistivity and 6.818 km of magnetometer surveys. Results of the IP survey indicate that the Herrick deposit does not display anomalous chargeability at surface, but other parallel anomalies were detected, specifically to the east of the Herrick Central zone that warrant follow up work (Trusler, 2012).

In 2011, JVX conducted ground magnetometer surveys over Michiwakenda Lake and Perkins Lake, covering 70 line-km and 33.5 line-km, respectively. The line spacing was variable but approximately 12.5 m, and JVX recorded the readings every second, or at approximately 2 m intervals, coupled with Global Positioning Stations (GPS) readings. The survey data enable accurate mapping of the diabase and trachyte, and enable identification of structures (Trusler, 2012).

In 2010, JVX also carried out a downhole IP survey for Platinex. JVX surveyed six holes (HP09-33, HP10-43, HP10-44, HP10-45, HU89-6 and HU89-9) and reported that IP responses vary from hole to hole, but detected one prominent anomaly in HP09-33 at the bottom of the hole and to the south of the drill hole. Platinex notes that this zone is related to a chloritized zone in core, which has not yet been assayed (Trusler, 2012).

In 2011, Platinex contracted DGI Geoscience Inc. (DGI) to conduct downhole surveys of six holes on the Caswell prospect. DGI used a multi test process down the hole to provide structural orientation, and used an IP probe and a natural gamma log probe to provide information on chargeability, resistivity and alteration (dominantly potassic).

Figure 9-4 IP Chargeability Survey Results



Source: Toth et al., 2017.

9.2.2 Geochemical Surveys

9.2.2.1 Government Geochemical Surveys

The Ontario Geological Survey (OGS) and the Geological Survey of Canada (GSC) have performed a regional lake sediment and lake water survey in the Shining Tree area. In 2001, the OGS released the results of the multi-element analyses of lake sediment and lake water samples from the Shining Tree area, in a report by Russell and Hamilton. The analytical method to determine the metal contents was Inductively Coupled Plasma (ICP-MS) technique for a wide variety of elements for both the lake sediments and lake water samples. For the determinations of gold, platinum, and palladium, the laboratories used the combined fire assay (FA /ICP-MS) technique.

The above survey identified two anomalous areas in close proximity to, but not coincident with, the Shining Tree property. The ”Area B“ anomaly is comprised of 15 lakes from South Sandstrum Lake, approximately 3 km east of the main block, to Jerry Lake in the northeast, approximately one kilometre south of the east extremity of the east block. Anomalous elements included the platinum group metals (PGM) and some base metals. Most pertinent to this project is the indication that anomalous gold was present down-ice from the eastern portion of the Platinex Shining Tree property. Sites 277 and 382, however, returned above background concentrations of 5 ppb Au to 7 ppb Au (Trusler, 2012).

Another location, Site 279, adjacent to anomalous site 277 did not return anomalous gold in the OGS survey, but had returned a value of 95 ppb Au in a GSC survey (Hornbrook and Friske, 1988, *in* Trusler, 2012). The presence of a gold occurrence on the western shore of the lake may, or may not negate the possibility of gold occurrences in the up-ice direction. It is also worth noting that there are no lakes between Jerry Lake and the West Montreal River, i.e., in the down-ice direction from the southeastern part of the east portion of the Platinex property (Trusler, 2012).

Platinex notes that the bedrock geology in this area is a northwest trending band of intermediate to felsic tuff breccia, which is dissected by a gabbroic intrusion. “*A number of small Matachewan diabase intrusions are also present. The geophysical data for the area show a number of small, discontinuous magnetic highs, which may be expressions of additional intrusions at depth. Nearly all of the geochemical anomalies are within lakes entirely or partially underlain by the metavolcanic rocks. In addition, much of the area is covered with ice-contact glacial deposits. The materials which make up the ice-contact deposits are not necessarily sourced proximal to the area, and may also have some influence on some of the lake sediment results. The fact that the anomalies show some correlation to*

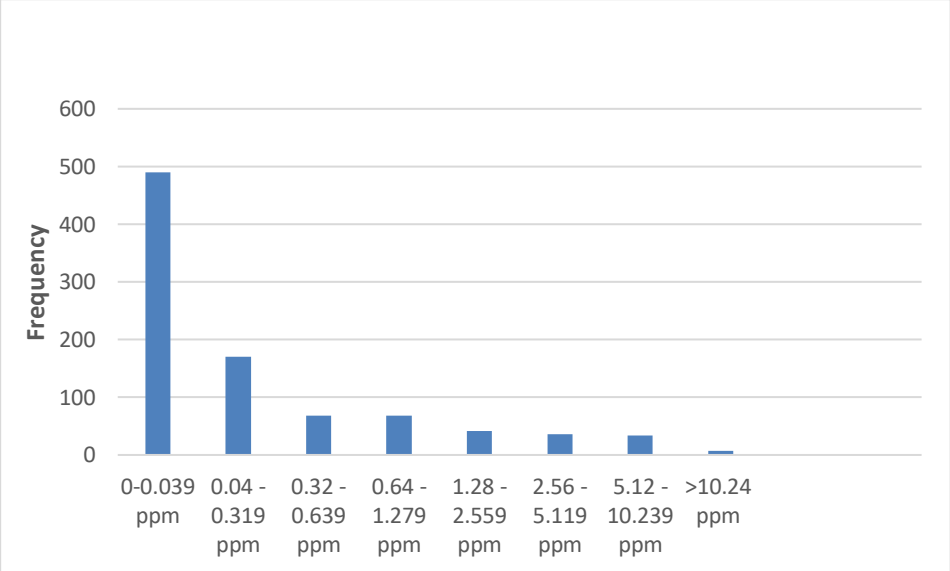
the underlying bedrock and are not scattered throughout the area is encouraging" (Trusler, 2012).

The second anomalous area, referred to as "Area 12: West Shining Tree Area", was located west of the Platinex property. Nine to seventeen lakes had elevated to anomalous Cu, Cd, Zn, and rare earth elements (REE). One of the three most anomalous lakes (Site 1037) had a high-grade sample containing 205.2 ppm Cu, 273 ppm Zn, 3.62 ppm Cd, 133 ppm Cr, and highly anomalous REEs (Y and Be). The base metal anomalies indicate the associated volcanic stratigraphy could host base metal deposits. Platinex noted the suggestion by the OGS that the anomalous REE results may represent an area of hydrothermal alteration of the mafic to intermediate volcanic bedrock (Trusler, 2012).

9.2.2.2 Platinex Geochemical Surveys

In the summer of 2008, Platinex carried out a geochemical till sampling program. Figure 9-5 shows the distribution of gold in this original survey).

Figure 9-5 Distribution of Gold in Geochemical Samples



Source: ALS Chemex, 2008.

Platinex also carried out subsequent till sampling surveys in 2010 and 2011. For all three surveys, Platinex collected the till samples from hand dug surface pits. The sampling pattern took advantage of Hwy 560, logging road, trail and lake access, and focused on the central, west and northern portions of the property. In total, Platinex collected 446 till samples and sent them to Overburden Drilling Management (ODM) for processing. Results indicate that,

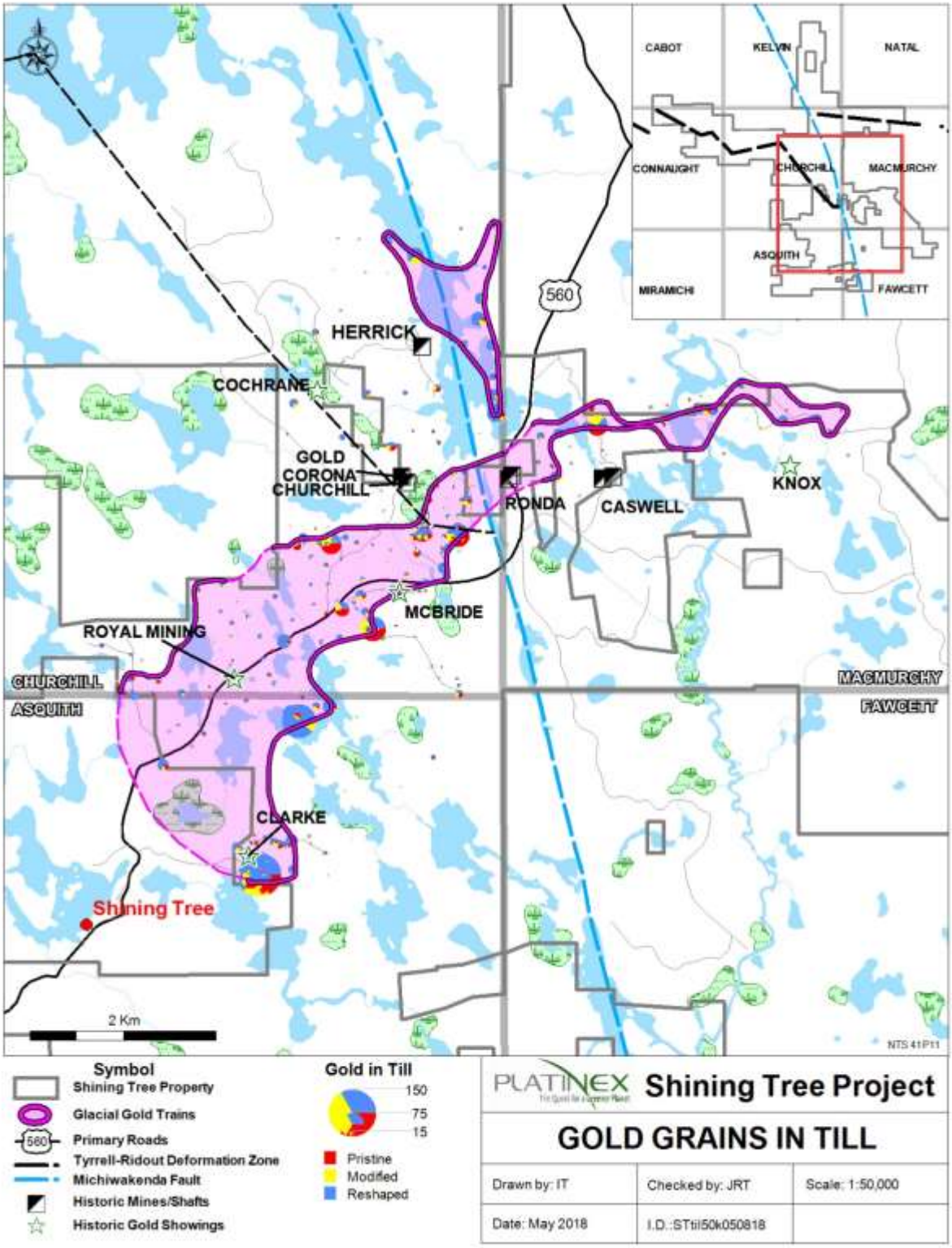
in total, the samples contain 4,792 gold grains, of which 737 are modified, and 595 are pristine.

For these surveys, Platinex collected 12 kg to 15 kg samples from beige, relatively non-oxidized till, close to or on the bedrock/till interface (basal till). Platinex screened each sample by reducing pebbles and cobbles larger than 6 mm, which reduced shipping and handling costs, and included a representative sample of > 6 mm pebbles for each sample site. The backhoe sampling achieved smaller average samples of 5 kg to 8 kg after screening.

All samples were processed for gold grain recovery and 12 samples were also processed for kimberlite indicator minerals. Gold grain recovery data are presented as the number of individual grains for each sample that fall into the shape categories of round, modified and pristine. Pristine grains have delicate features preserved, modified grains retain some form of the delicate features, and round grains exhibit no original features. These criteria enable an estimate of grain transport in addition to defining gold dispersal trains based on numbers of grains. Results of the till sampling program are summarized in Table 31-1, Appendix B

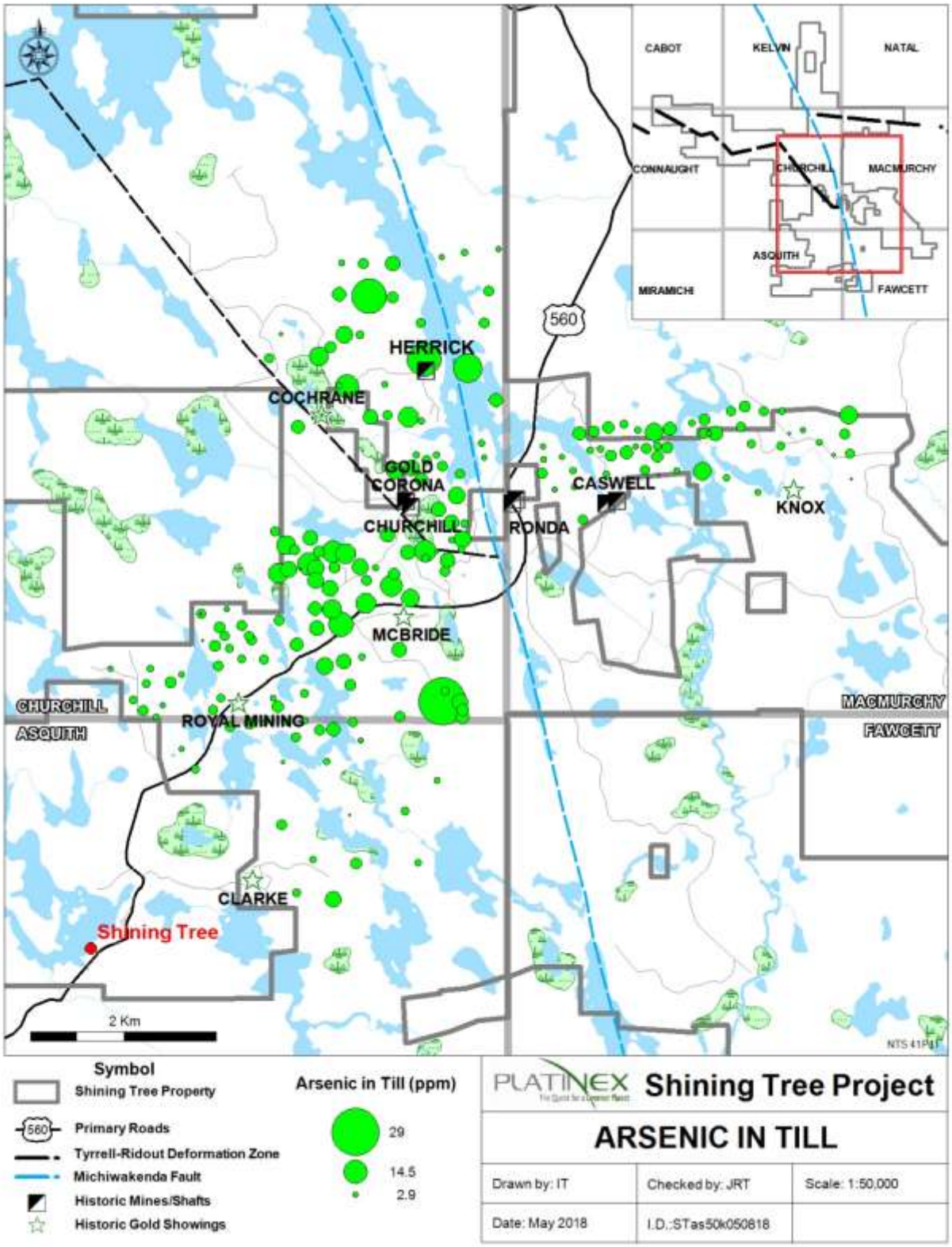
Platinex has outlined a large area of dispersion for these gold grains in till, but has not yet determined the source of these anomalies. It is possible that they will reveal multiple sources. Given the complex history of glaciation in northern Ontario, studies suggest that three directions of glacial advance, north-south, northeast, and north-northwest, are present in the area of the Shining Tree property (Figure 9-6). The coincident values of As, Cu, and Ni are shown in Figures 9-7 to 9-9).

Figure 9-6 Basal Till Sampling Results



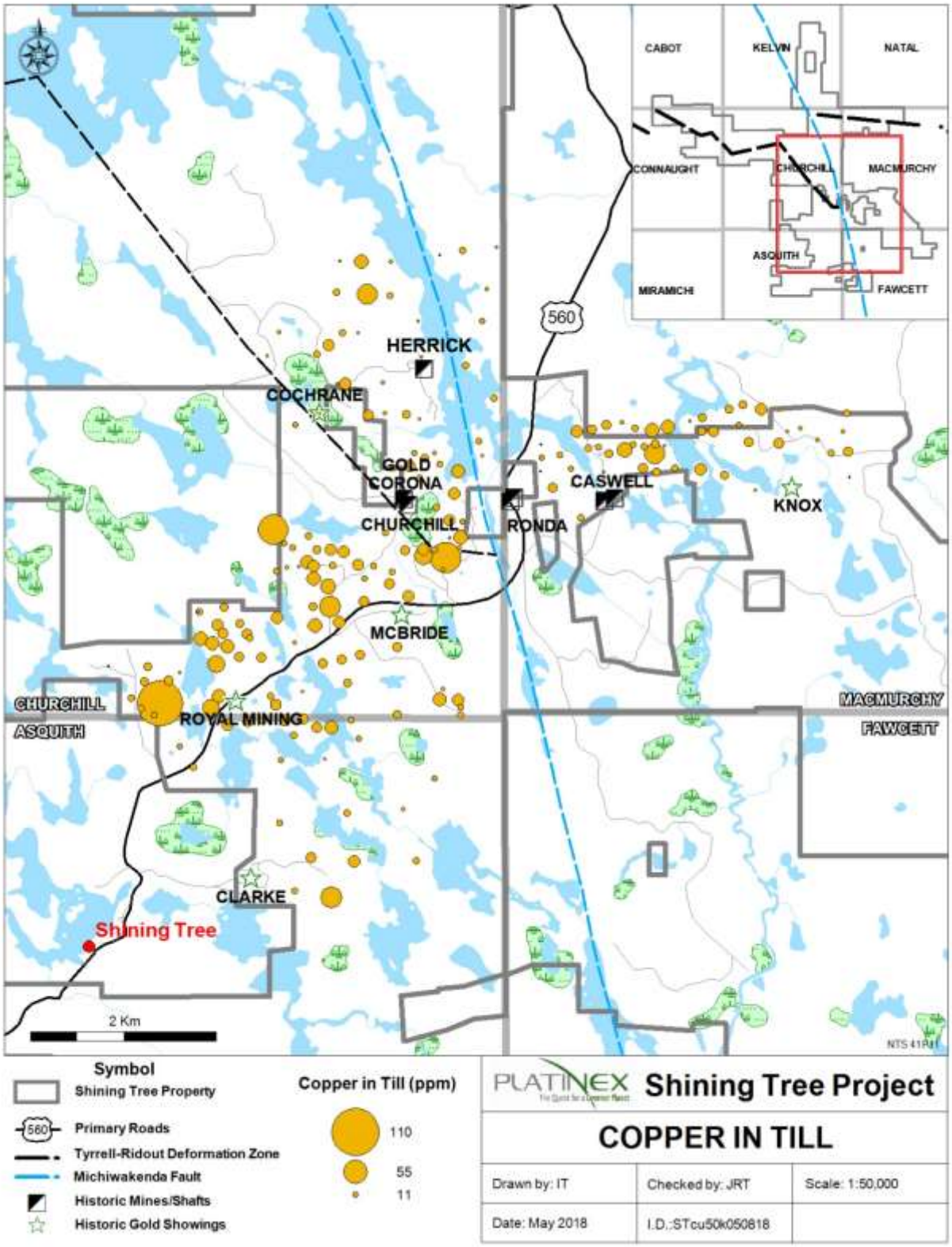
Source: Toth et al., 2017.

Figure 9-7 Distribution of Arsenic in Basal Till Samples



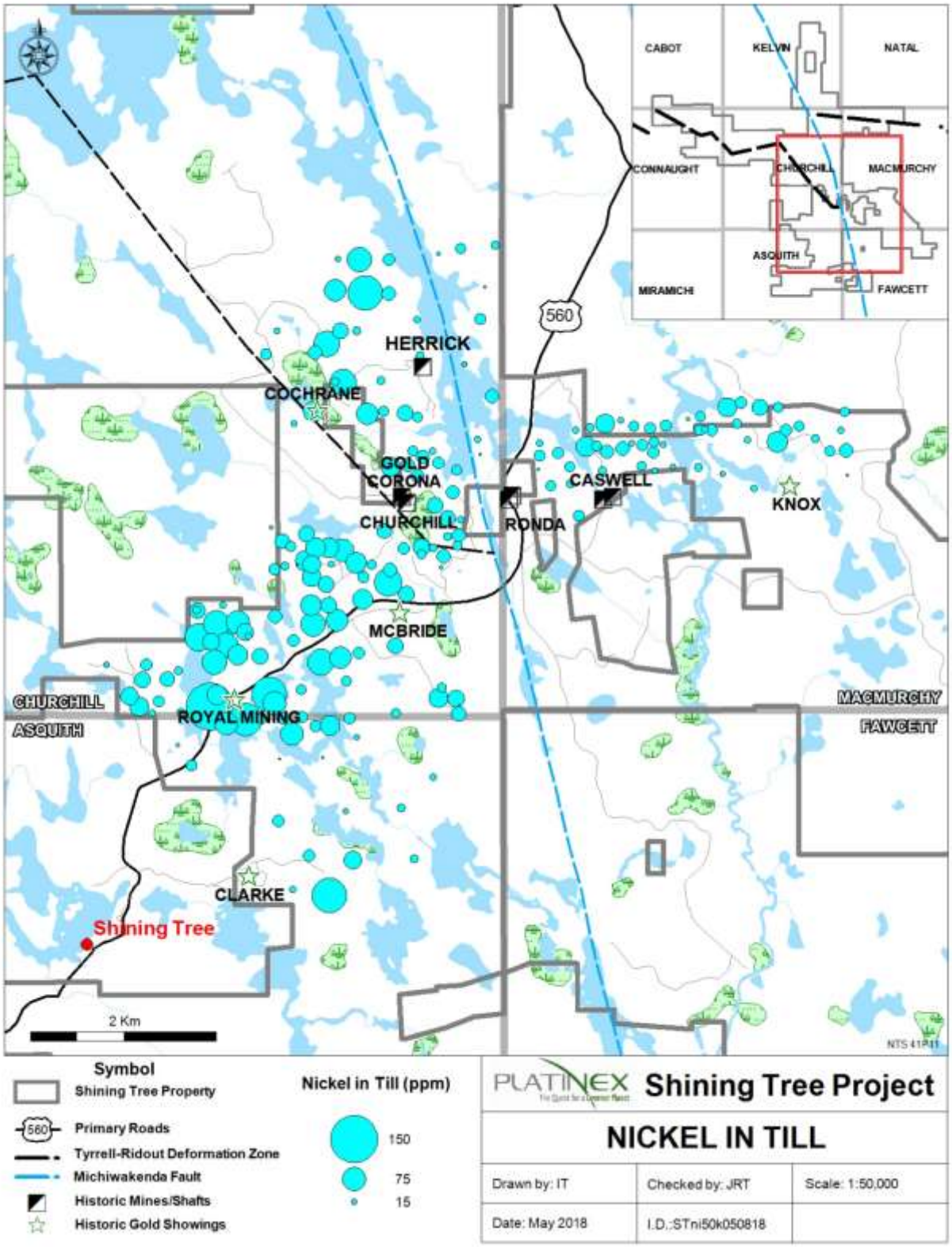
Source: Toth et al., 2017.

Figure 9-8 Distribution of Copper in Basal Till Samples



Source: Toth et al., 2017.

Figure 9-9 Distribution of Nickel in Basal Till Samples



Source: Toth et al., 2017.

Despite the anomalous concentrations of various elements in till samples, there appears to be little correlation between different elements (Figures 9-10 and 9-11).

Figure 9-10 Correlation of Au vs. Ag in Basal Till Samples

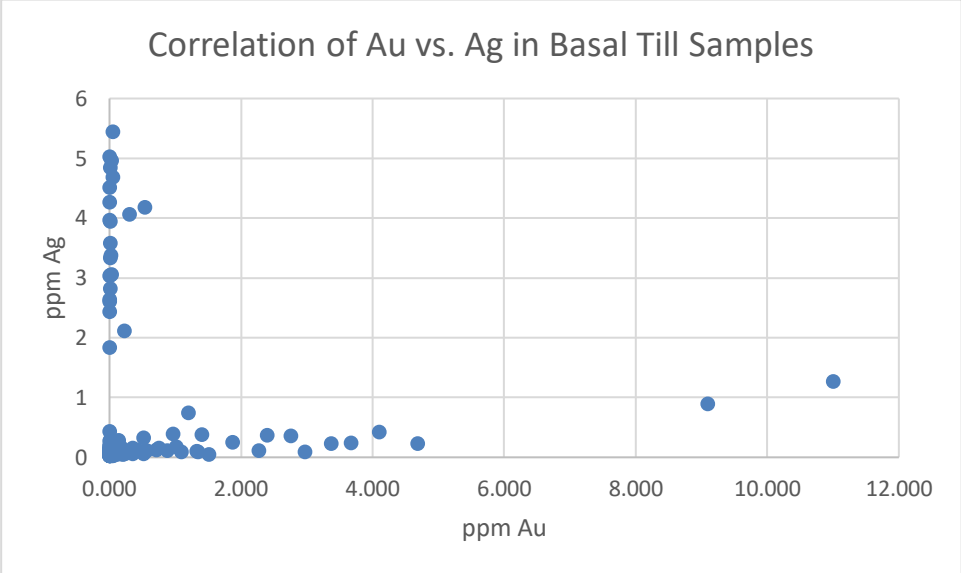
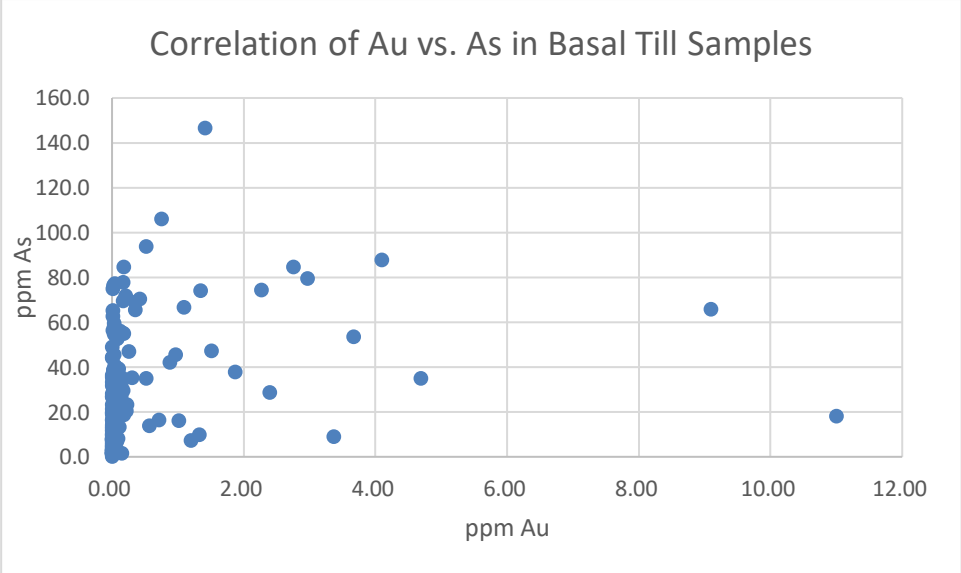


Figure 9-11 Correlation of Au vs. As in Basal Till Samples



9.2.3 Platinex 2011 Exploration Work

In 2011, Platinex carried out a variety of work on the Shining Tree property. In total, Platinex completed:

- 1,721 m of diamond drilling in 10 holes.
- 2,525 sq. m of stripping.
- 100.21 m of channel sampling.
- 15,720 m of trenching.
- 70 km of magnetic survey.
- Collecting 111 till samples (Table 9-1).

Table 9-1 Platinex 2011 Exploration Work

Platinex Inc. - Shining Tree Property, Ontario

Type of Work	Area or Showing	Amount	Results and/or Remarks
Diamond drilling	Caswell (7 DH)	1,070 m	18.75 g/t Au/0.5 m
Diamond drilling	Herrick (3 DH)	651 m	12.55 g/t Au/0.85 m
Till sampling		111 samples	5 pristine gold grains
Stripping	Beilby	800 sq. m	
Stripping	Northern Knox	1,000 sq. m	
Stripping	Clark SE	25 sq. m	
Stripping	Iron Formation	700 sq. m	
Channel sampling	Beilby	22.03 m	32 samples from 18 channels
Channel sampling	North Knox	7.05 m	12 samples from 9 channels
Channel sampling	Speed Lake	23.6 m	31 samples from 11 channels
Channel sampling	Clark SE	4.10 m	8 samples from 6 channels: 0.3
Channel sampling	Iron Formation	14.65 m	21 samples from 7 channels: low values to 0.3 g/t Au /1 m
Channel sampling	Iron Formation	28.78 m	44 samples from 12 channels: low values to 26 g/t Au / 1.35 m
Trenching	Clark	1,250 m	TR1-1-7, TR2-1-20
Trenching	Speed Lake	1,450 m	TR3-1-10, TR4-1-4, TR5-1-11
Trenching	South Beilby	1,200 m	TR6-1-9, TR8-1-9, TR2401-11
Trenching	McBride	1,750 m	TR9-1-25
Trenching	Hwy560/McBride	820 m	TR10-1-17

Table 9-1 Platinex 2011 Exploration Work			
Platinex Inc. - Shining Tree Property, Ontario			
Type of Work	**Area or Showing**	**Amount**	**Results and/or Remarks**
Trenching	Hwy560/Cryderman	670 m	TR11-1-11
Trenching	Ribble	510 m	TR12-1-11
Trenching	Ribble	460 m	TR13-1-8
Trenching	Hwy560/Chlorus	1,830 m	TR14-1-31
Trenching	Caswell	320 m	TR18-1-6
Trenching	Gosselin	270 m	TR22-1-3
Trenching	North Knox	670 m	TR23-1-9
Trenching	McBride	120 m	TR25-1-5
Trenching	Ribble	630 m	TR-26-1-22
Trenching	Clark	150 m	TR27-1-4
Trenching	Clark	200 m	TR28-1-5
Trenching	Clark	150 m	TR29-1-7
Trenching	Foisey	250 m	
Trenching	Foisey	600 m	
Trenching	Foisey	380 m	
Trenching	Corona/Pet: JV land	700 m	TR7-1-14
Trenching	Iron Formation	330 m	TR19-1-6
Trenching	Iron Formation	560 m	TR20-1-10
Trenching	Iron Formation	450 m	TR21-1-9
Grab sampling	Clark & Foisey		186 samples; trace to 181 g/t Au
Geophysics: Mag.	Michiwakenda Lake	70 km	
Prospecting			

Source: Cutting, 2018.

The trenching results are shown in Figures 9-12 and 9-13. These results indicate that there is poor correlation between gold and silver values.

Figure 9-12 Correlation of Au vs. Ag in Herrick Zone Trench Samples

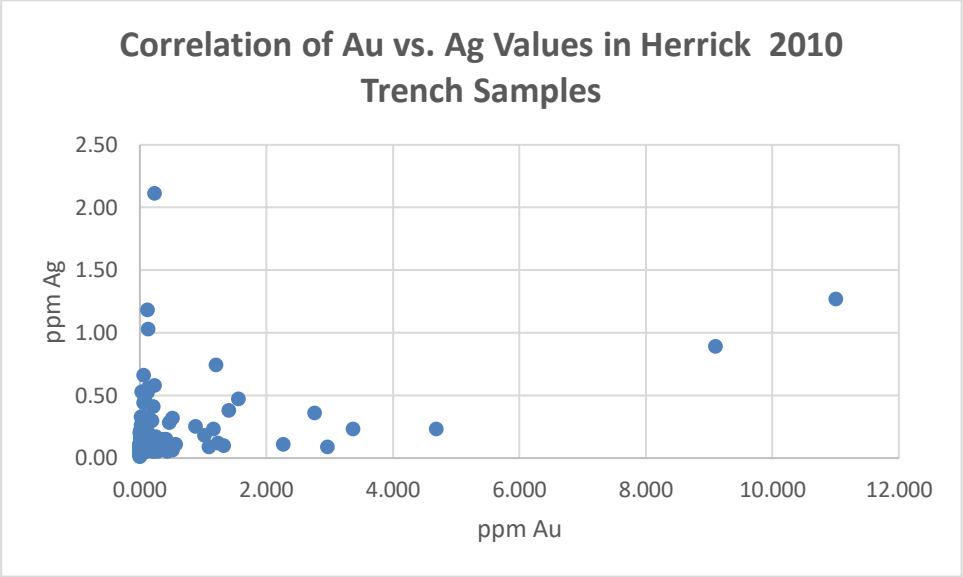
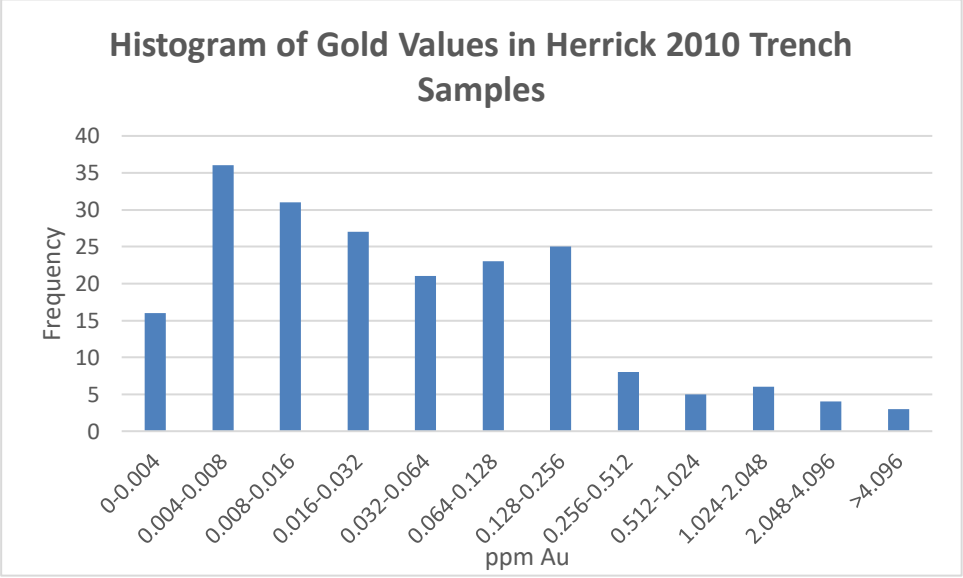


Figure 9-13 Distribution of Gold Assay Values in Herrick Zone Trench Samples



10.0 DRILLING

An account of historic drilling is presented in Table 6-2, in Item 6, History.

From 2009 to 2011, Platinex completed 6,071 m of diamond drilling in 51 holes on the Herrick deposit and strike extensions, and 1,070 m in 7 holes on the Caswell occurrences. In 2012 Platinex completed 870 m of drilling in 5 holes to follow up coincident gold in till and IP anomalies in the Clark, Beilby and McBride areas. Drilling contractor for all three campaigns was Laframboise Drilling Inc. (Laframboise) of Earlton, ON, and Laframboise recovered NQ diameter core. In addition, Laframboise surveyed the drill holes by FlexIT instruments developed by RockTech Exploration Products, USA. Due to budget limitations, Platinex could not complete the logging, sampling of all five holes, and carried out only selective work after a quick log of all five holes.

10.1 HERRICK DEPOSIT

Figure 10-1 shows distribution of the gold assays in diamond drill core at the Herrick Zone, which is similar to the gold assays in trench samples at the Herrick Zone (Figure 9-13).

Figure 10-1 Distribution of Gold Assay Values in Herrick Drill Core Samples

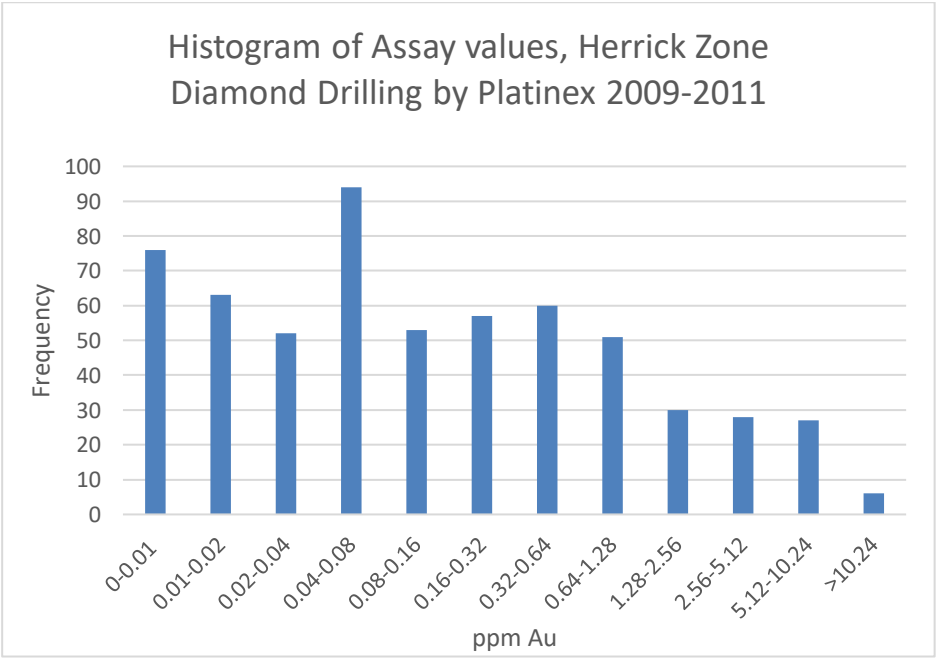


Figure 7-5 in Item 7, Geological Setting and Mineralization, shows the locations of all 62 Platinex drill holes testing the Herrick zone. Table 10-1 shows a summary of the Platinex

diamond drilling on the Herrick showing, with significant mineralized intersections. The breakdown of diamond drilling is as follows:

- 2009 drilling: 1,129 m completed in 25 drill holes (Drill holes HP09-16 to HP09-41). Eighteen holes tested the northern portion and 7 holes tested the southern portion of the Herrick veins. In general, these were shallow holes, with total lengths ranging from 23 m to 80 m (average 45.2 m, one drill hole was 110 m long) and the drill holes intersected one or two mineralized veins with assay values ranging from 0.29 g/t Au to 6.84 g/t Au over widths ranging from 0.30 m to 5.0 m. In general, the host rocks are greywackes. Drill hole HP09-29 intersected 2.63 g/t Au over 10.4 m and ended in mineralization. The average grade of all drill hole intersections in 2009 was 1.71 g/t Au.
- 2010 drilling: 4,291 m completed in 24 drill holes (Drill holes HP10-42 to HP10-64). Twenty-one holes tested the northern portion and three holes tested the southern portion of the Herrick veins. In general, these were shallow holes, with total lengths ranging from 44 m to 278 m (average 178.2 m, one drill hole was 455 m long) and the drill holes intersected one or two mineralized veins with assay values ranging from 0.23 g/t Au to 3.55 g/t Au over widths ranging from 0.30 m to 5.0 m. Drill hole HP10-44 intersected 1.46 g/t Au over 10.5 m and ended in mineralization. In general, the host rocks are greywackes. The average grade of all drill hole intersections in 2010 was 3.41 g/t Au, almost exactly double the average grade of the intersections in 2009. Since the majority of the drill holes tested the same (northern) portion of the Herrick veins, Agnerian recommends a detailed review of the assay database to check if this difference represents a bias between the two laboratories, Swastika in 2009 and ALS Chemex in 2010. This would involve a set of samples with Swastika results being assayed at the ALS Chemex laboratory.
- 2011 drilling: 651 m completed in three holes, all of them testing the northern portion of the Herrick veins.

Table 10-1 Herrick Deposit Diamond Drilling Summary							
Platinex Inc. – Shining Tree Property, Ontario							
DDH No.	**Az. (°)**	**Inclination (°)**	**Total Length (m)**	**Intersection (m)**		**Interval (m)**	**Grade (g/t Au)**
				From	**To**		
HP09-16	091	-46	62	22.0	25.5	3.5	0.51
				48.2	49.8	1.6	3.84
HP09-17	090	-70	80	27.3	27.8	0.5	1.92
				33.5	37.7	4.2	1.90
HP09-18	120	-45	32	22.3	23.3	1.0	5.68
HP09-19	090	-45	38	10.0	11.2	1.2	1.24
HP09-20	090	-70	35	12.1	12.7	0.6	0.54
HP09-21	146	-45	23	12.7	14.0	1.3	6.84
HP09-22	145	-65	32	13.3	21.4	8.1	0.67
HP09-23	270	-45	23	4.8	5.4	0.6	0.69
				14.4	16.2	1.8	4.13
HP09-24	270	-65	62	7.2	7.8	0.6	1.42
				15.7	16.2	0.5	1.12
				32.0	32.5	0.5	0.52
				35.6	37.0	1.4	1.50
HP09-24	270	-65	62	40.8	46.0	5.2	4.11
HP09-25	227	-45	23	6.0	6.3	0.3	2.33
				12.9	16.7	3.8	1.15
HP09-26	227	-60	74	7.6	8.8	1.2	1.72
				17.0	18.5	1.5	1.47
HP09-27	039	-45	29	18.6	29.0	10.4	2.63
HP09-28	039	-65	41	24.9	26.3	1.4	1.94
				36.1	38.6	2.5	0.66
HP09-29	084	-45	110	14.0	16.5	2.5	1.01
				19.0	20.5	1.5	5.81
				23.0	24.0	1.0	1.44
				32.0	33.0	1.0	1.23
				40.3	41.8	1.5	1.50
				52.8	55.2	2.4	1.51
HP09-30	084	-65	38	18.2	22.0	3.8	3.42
				27.4	28.4	1.0	2.25
HP09-31	116	-45	31	17.3	19.5	2.2	1.37
				24.2	31.4	7.2	1.75
HP09-32	116	-65	47	25.8	31.0	5.2	0.57
HP09-33	095	-45	80	8.5	9.9	1.4	1.04
HP09-34	090	-45	32	7.8	9.0	1.2	0.47
				22.8	24.0	1.2	0.35
				27.3	29.6	2.3	1.97

Table 10-1 Herrick Deposit Diamond Drilling Summary							
Platinex Inc. – Shining Tree Property, Ontario							
DDH No.	**Az. (º)**	**Inclination (º)**	**Total Length (m)**	**Intersection (m)**		**Interval (m)**	**Grade (g/t Au)**
				From	**To**		
HP09-35	045	-45	35	8.7	9.7	1.0	0.57
HP09-36	135	-45	44	9.5	12.0	2.5	0.29
				24.1	44.0	19.9	1.57
HP09-37	090	-45	32	18.4	24.0	5.6	1.90
HP09-38	085	-70	41	19.0	32.0	13.0	0.57
HP09-39	050	-45	41	20.8	24.5	3.7	0.83
HP09-40	093	-70	44	22.0	25.0	3.0	0.31
				28.0	38.5	10.5	0.75
HP09-41	093	-45	140	111.2	111.5	0.3	0.32
				125.0	125.5	0.5	0.82
HP10-42	090	-45	218	143.2	144.0	0.8	3.55
				156.1	157.1	1.0	1.36
HP10-43	090	-45	215	84.3	85.3	1.0	2.18
				127.2	127.9	0.7	2.19
				171.8	174.6	2.8	1.96
				176.9	180.6	3.7	0.51
HP10-44	090	-47	272	206.1	209.6	3.5	1.70
				225.2	226.9	1.7	1.29
				233.5	237.2	3.7	1.16
				241.9	252.4	10.5	1.46
HP10-45	090	-45	341	167.9	168.7	0.8	0.56
				206.0	208.2	2.2	1.40
HP10-46	270	-47	125	97.6	100.1	2.5	0.52
HP10-47	090	-45	65	12.8	18.0	5.2	1.02
HP10-48	090	-70	56	18.6	25.8	7.2	2.38
HP10-49	090	-45	44	24.7	29.7	5.0	0.98
HP10-50	090	-47	86	37.6	38.3	0.7	0.40
HP10-51	090	-50	182	38.3	45.3	7.0	1.57
				74.8	75.6	0.8	0.87
				81.4	82.2	0.8	0.47
				142.5	143.5	1.0	0.55
				149.9	151.4	1.5	0.32
HP10-52	090	-52	278	68.2	71.0	2.8	0.40
				105.9	107.6	1.7	2.00
				158.2	159.9	1.7	0.82
HP10-53	090	-52	254	62.5	63.5	1.0	0.40
				162.8	163.7	0.9	0.23
HP10-54	090	-53	206	75.8	76.8	1.0	0.26
				152.3	153.1	0.8	0.26

Table 10-1 Herrick Deposit Diamond Drilling Summary							
Platinex Inc. – Shining Tree Property, Ontario							
DDH No.	**Az. (°)**	**Inclination (°)**	**Total Length (m)**	**Intersection (m)**		**Interval (m)**	**Grade (g/t Au)**
				From	**To**		
HP10-55	090	-47	188	83.0	84.2	1.2	1.30
				103.2	104.6	1.4	1.64
				159.6	160.3	0.7	0.34
				162.4	163.3	0.9	0.65
HP10-56	090	-47	188	62.3	64.2	1.9	1.80
				73.2	75.4	2.2	0.29
				78.3	80.0	1.7	1.48
HP10-57	090	-60	104	62.3	68.7	6.4	0.83
HP10-58	090	-45	50	19.1	22.0	2.9	1.20
				28.7	30.3	1.6	0.48
HP10-59	090	-60	185	97.8	100.3	2.5	4.91
				107.2	108.2	1.0	0.28
HP10-60	090	-60	455	32.3	33.2	0.9	0.43
				155.1	160.5	5.4	0.84
				326.1	326.7	0.6	0.34
				381.5	383.0	1.5	0.58
HP10-61	090	-45	119	55.5	56.8	1.3	0.33
HP10-62	070	-47	149		No significant values		
HP10-63	090	-55	371	287.2	288.3	1.1	0.37
				293.0	294.6	1.6	2.14
				296.9	299.3	2.4	0.20
HP10-64	090	-55	329	121.9	124.5	2.6	0.69
				264.5	266.2	1.7	0.64
				301.5	312.5	11.0	1.01
HP10-65	090	-46	209	77.6	79.8	2.2	0.63
				174.1	176.7	2.6	0.34
				184.4	185.8	1.4	0.54
				190.0	196.6	6.6	2.58
HP10-66	120	-47	113	47.4	48.8	1.4	1.12
Total Drilling			**6,071**				

Source: Cutting, 2018.

Notes:

1. Samples for Holes HP09-16 to HP09-41 were assayed at Swastika Laboratories, a non-ISO accredited laboratory, in Swastika, Ontario.
2. Samples for Holes HP09-42 to HP09-66 were assayed at ALS Chemex Laboratories in Vancouver, BC.
3. Drill holes HP09-27 and HP-10-44 ended in mineralization.
4. Minimum average grade for mineralized intersection is 0.20 g/t Au.

10.2 CASWELL SHOWING

In 2011, Platinex completed 1,070 m in seven holes on the Caswell occurrences. Mineralized intersections ranged from 0.20 g/t Au over 1.6 m to 0.38 g/t Au over 6.7 m (Table 10-2).

Table 10-2 Caswell Showing Diamond Drilling Summary

Platinex Inc. – Shining Tree Property, Ontario

DDH No.	Az. (°)	Inclination (°)	Total Length (m)	Intersection (m)		Interval (m)	Grade (g/t Au)
				From	To		
WP11-01	60	-47	224	55.2	59.3	4.1	0.64
				65.0	66.7	1.7	0.20
				118.0	119.1	1.1	0.29
				190.1	193.1	3.0	0.29
				199.0	201.5	2.5	4.52
				203.0	206.0	3.0	0.44
WP11-02	115	-50	218	23.0	24.9	1.9	0.66
WP11-03	30	-47	203	16.4	17.9	1.5	0.28
				39.3	43.0	3.7	0.25
WP11-04	30	-47	212	179.9	182.0	2.1	0.35
WP11-05	360	-47	68	10.0	11.0	1.0	0.37
				49.3	49.8	0.5	0.22
				55.4	56.1	0.7	0.40
WP11-06	330	-46	74	54.6	55.1	0.5	0.28
				61.0	67.7	6.7	0.38
WP11-07	330	-70	71	35.9	37.5	1.6	0.20
				42.4	44.0	1.6	0.64
				48.0	50.0	2.0	0.28
Total Drilling			**1,070**				

Note: Platinex did not intersect high-grade gold values similar to historic results.

Together with the historical drilling by other companies, total drilling completed on the Shining Tree property is in the order of 21,130 m in approximately 160 drill holes, a very small number considering the large size of the property. Agnerian cannot state the exact number of the drill holes, because some of the past records do not include drill statistics.

11.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY

Descriptions of sample preparation, analysis and security for work carried out by various operators prior to 1989 are not available.

11.1 PROCEDURES USED BY FORMER OPERATORS (1989-1990)

In 1989, during its exploration programs on the Herrick and Churchill areas, Unocal sent the channel samples and split diamond drill core to Swastika Laboratories in Kirkland Lake, Ontario. Drill core was of NQ size and mechanically split, with one assay tag remaining in the core box. Core is stored at "Camp 560" located on the north side of Hwy 560, between the Bay Lumber Road and Houston Lake tourist camp.

Agnerian has not reviewed sampling procedures used during the pre-Platinex operations, but Platinex reports that Unocal mapped the channels accurately and used industry standard sampling procedures and "*Splitting/sampling of drill core appeared carefully and well done, with blocks and sample tags generally still intact. Wooden boxes are beginning to weather badly in a few cases, but are well labelled. It is perceived especially in view of drilling by Platinex that all of the core in the vicinity of the veins on Herrick should be systematically assayed*" (Trusler, 2012).

In 1990, Fort Knox Corp. carried out a check assay program of channel sampling of the areas previously sampled by Unocal, and sent them to Swastika Laboratories in Kirkland Lake, Ontario. Information regarding the sampling procedures, however, is not available.

11.2 PROCEDURES USED BY PLATINEX (2008-2011)

In 2008, Platinex carried out a program of grab sampling, chip sampling, and channel sampling on various areas, but focused on the Herrick showing of the Shining Tree property as part of a due diligence program and a preliminary phase of exploration. Platinex also collected grab samples and chip samples considered representative material from historic muck piles.

Platinex sampled the power-stripped areas, during and after mapping of the bedrock, using a gas-powered masonry saw, and utilizing a water-cooled diamond impregnated blade. Sampled material was chipped bedrock. Sampling procedures included recording the sample lengths in assay books placing them in individual heavy-duty plastic sample bags, with labels. Personnel from Katrine Exploration Services (Katrine), Larder Lake, ON, under supervision from Platinex field geologists, carried out the channel cutting and sampling. Each sample received a pre-numbered assay tag from the assay book, and an aluminum

tag labelled with the corresponding sample number was placed at the end of each channel cut. Katrine personnel then gathered the rock samples in heavy plastic rice bags or large plastic pails, transferred them to Platinex personnel at the camp, who sealed the bags (or pails), and sent them to ALS Chemex sample preparation laboratory in Sudbury, ON (Trusler, 2012).

As noted above, during the 2008 till sampling surveys, Platinex collected 12 kg to 15 kg samples from beige, relatively non-oxidized till, close to or on the bedrock/till interface (basal till). Platinex screened each sample by reducing pebbles and cobbles larger than 6 mm, which reduced shipping and handling costs, and included a representative sample of > 6 mm pebbles for each sample site. The backhoe sampling achieved smaller average samples of 5 kg to 8 kg after screening. The samples were sealed in plastic pails and shipped by Manitoulin Transport to Overburden Drilling Management in Nepean, ON**.**

Platinex reports that it “is unaware of any drilling, sampling or recovery factor that could materially impact the accuracy and reliability of the results. Furthermore, it is also unaware of any factors that may have resulted in sample biases” (Trusler, 2012).

12.0 DATA VERIFICATION

12.1 DATA VERIFICATION BY PLATINEX

From August 6 to 8, 2008, a team consisting of Messrs J.G. Bryant and D. Jamieson, on behalf of Platinex, carried out a site visit to the Shining Tree property. They inspected three areas for evidence of prior work, independently collected some outcrop chip samples from prior channel sample locations and outcrops, examined, and sampled archived core from the Unocal drill program on the Herrick zone. The following is a summary account of their site visit as reported by Trusler (2012).

12.1.1 Herrick Deposit Site Visit

- Most of the extensive cleared, stripped and washed areas of quartz, quartz-carbonate and quartz-carbonate-sulphide zones were well exposed.
- The shaft was partially blocked within several metres of surface.
- Abandoned equipment including a winch, boiler and stack were present in the overgrown brush southeast of the shaft.
- There was excellent correlation of the detailed, map-identified geology with observed features.
- The team confirmed the locations of the Unocal channel sample locations and sample intervals.
- The team collected composite chip samples from certain anomalous segments of the Unocal drill core, labelled and hand-delivered them to the ALS Chemex sample preparation laboratory in Sudbury, ON, for sample preparation. After sample preparation, the Sudbury laboratory sent aliquots of the samples to the ALS Chemex laboratory in Vancouver, BC, for sample analysis. As for the till sampling program, at ALS Chemex used the ICP-MS analytical method to determine the metal contents. For the determinations of gold, platinum, and palladium, the laboratories used the combined fire assay (FA /ICP-MS) technique.
- The Platinex team noted the locations of the drill hole casings for collars of Unocal holes HU89-6, HU89-9, HU89-11, and HU89-12 by hand held GPS units.
- The Platinex team also carried out a check assay program on pulps of channel samples and diamond drill core, and had them assayed at the Swastika Laboratories, Swastika, ON.

Tables 12-1 to 12-6 are representations of site inspection in 2008 by the Platinex team.

Table 12-1 Platinex 2008 Validation Sampling Results (Herrick Drill Core)

Platinex Inc. - Shining Tree Property, Ontario						
Unocal Channel Sample Results (1989)				**Platinex (BGC) Check Sampling Results (2008)**		
Section	Sample No.	Interval (m)	Grade (g/t Au)	Sample No.	Length (m)	Grade (g/t Au)
14+10N	7649	0.4	6.96	982	0.4	9.87
13+72N	7606	N/A	7.2	983	0.4	7.58
13+51N	6139	0.9	14.67	984	0.9	23.90
12+90N	6127	N/A	16.77			
12+93N	6129	N/A	4.8			
12+90N-12+93N	Composite (*)	None	Not sampled	980	3.0	15.4

Source: Trusler, 2012.

Note: (*): Composite chip sample from quartz-carbonate vein with sulphide minerals.

Table 12-2 Platinex 2008 Validation Sampling Results (Herrick Waste Dump)

Platinex Inc. - Shining Tree Property, Ontario		
Sample Location	Sample No.	Grade (g/t Au)
Grab sample: Quartz and minor carbonate vein (suspected gold sheen on broken surface)	981	10.9
Composite of fine crushed and broken rock from waste pile	982	2.63

Source: Trusler, 2012.

Notes:

- BGC samples collected by G. Bryant, assays conducted by Swastika Laboratories; not an ISO-accredited laboratory.
- Platinex has not independently conducted validation tests to supplement data verification by Bryant and Jamieson. However, independent qualified persons who have adopted appropriate sample handling and analysis procedures to ensure quality control at all times have supervised all of the subsequent work to that reviewed by Bryant and Jamieson.

Table 12-3 Platinex 2008 Check Assays on Pulps (Herrick Channel Samples)						
Platinex Inc. - Shining Tree Property, Ontario						
	First Pulp		Second Pulp		Third Pulp	
Sample No.	g/t Au	Check- g/t Au	g/t Au	Check- g/t Au	g/t Au	Check- g/t Au
6519	34.35	26.57	25.41	22.22		
7481	23.18	27.57	25.54	26.64		
6082	7.44	7.27	7.10	6.72		
6063	18.51	16.83	19.27	19.20		
6093	9.60	8.74	11.31	9.15		
6126	61.03	67.20	33.43	31.20	73.71	72.69
9604	11.73	11.90	11.73	12.21		
Average difference		**10%**		**7%**		

Source: Trusler, 2012.

Table 12-4 Platinex 2008 Check Assays on Pulps (Herrick Drill Core Samples)					
Platinex Inc. - Shining Tree Property, Ontario					
	First Pulp		Second Pulp		
Sample No.	g/t Au	Check- g/t Au	g/t Au	Check- g/t Au	Screened Metallics Assay Pulp: g/t Au
14521	4.66	4.87	4.25	4.29	
14608	6.34	8.30	8.47	8.54	
14654	17.14	15.12	15.81	16.73	
14684	15.50	16.46	17.21	15.67	
14713	8.47	8.81	7.47	7.75	8.09
14815	6.24	6.62	6.93	6.86	7.08
14922	6.48	7.06	9.36	10.01	8.25
14956	4.25	5.66			5.96
14950	6.38	6.31	7.10	6.41	5.56
14875	2.30	2.33			2.87
14865	7.47	7.03	6.58	7.37	7.87
Average difference		**11%**		**6%**	

Source: Trusler, 2012.

Table 12-5 Platinex 2008 Screened Metallics Assays on Pulps (Herrick Drill Core Samples)				
Platinex Inc. - Shining Tree Property, Ontario				
Sample No.	Grade (g/t Au) +100 mesh	Grade (g/t Au) -100 mesh	Grade (g/t Au) -100 mesh	Calc. Grade (g/t Au)
14875	8.08	2.91	2.81	2.87
14914	9.65	5.49	5.42	5.56
14922	5.67	7.95	8.57	8.25
14950	4.71	5.62	5.52	5.56
14713	16.32	7.10	8.81	8.09

Source: Trusler, 2012.

Note: Assaying done at Swastika Laboratories, a non-ISO-accredited laboratory.

Table 12-6 Platinex 2008 Check Assays on Fort Knox Channel Samples				
Platinex Inc.- Shining Tree Property, Ontario				
	First Pulp		Second Pulp	
Sample No.	Grade (ppb Au)	Check Assay (ppb Au)	Grade (ppb Au)	Check Assay (ppb Au)
122935	9,297	6,994		
122846	24,754	27,566		
122847	22,766	22,566	30,515	28,252
122869	13,714	12,412		
122870	18,103	19,543	17,966	19,474
Average difference		**8%**		

Source: Trusler, 2012.

Agnerian notes that check sampling and assay results obtained by Platinex during its 2008 site verification compare well with the results reported by Unocal.

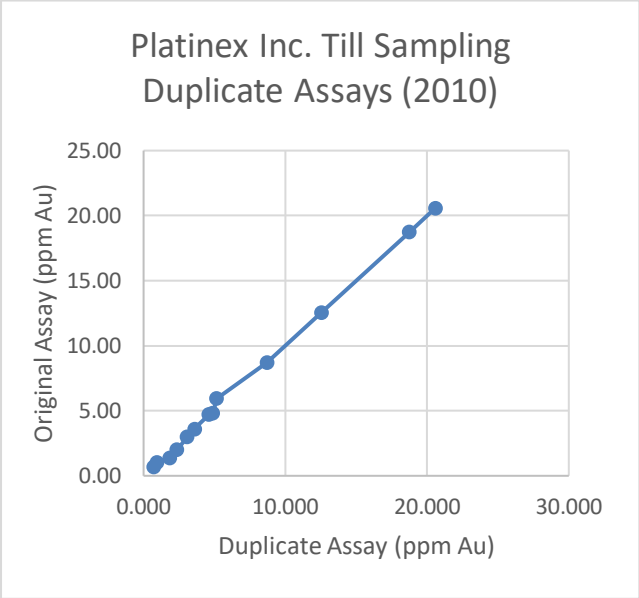
12.1.2 Geochemical Till Sampling (2010)

As part of its Quality Control and Quality Assurance (QA/QC) procedures on assay results from the 2010 geochemical till sampling survey, Platinex carried out two types of check assays, as follows:

- Duplicate assays on a number of samples, ranging in very low to high gold values (Figure 12-1).

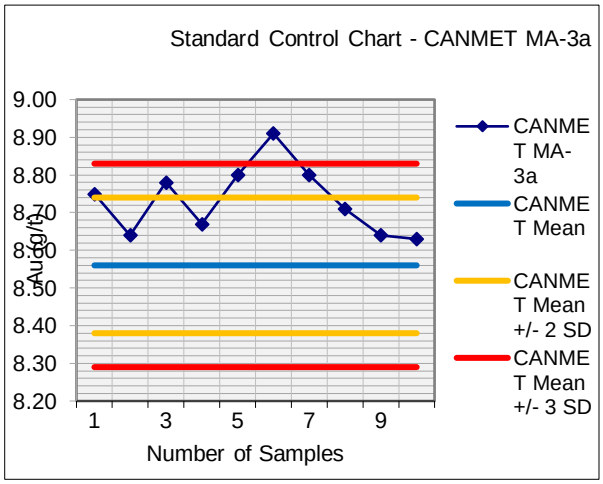
- Submitting various standards of known concentrations together with regular drill core samples to ALS Chemex. Results are shown below in Figures 12-2, 12-3, and 12-4.

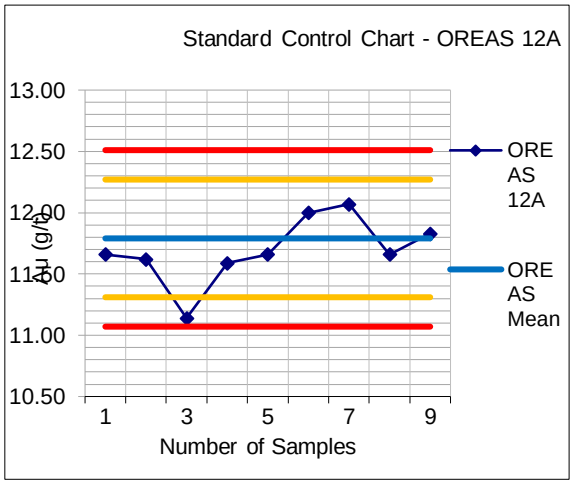
Figure 12-1 Platinex Duplicate Check Assays on Till Samples



Source: ALS Chemex, 2010.

Figure 12-2 Platinex Check Assays on Standards Canmet MA 3A & Oreas 12A





Source: Toth et al., 2017.

Figure 12-3 Platinex Check Assays on Standard Oreas 13P

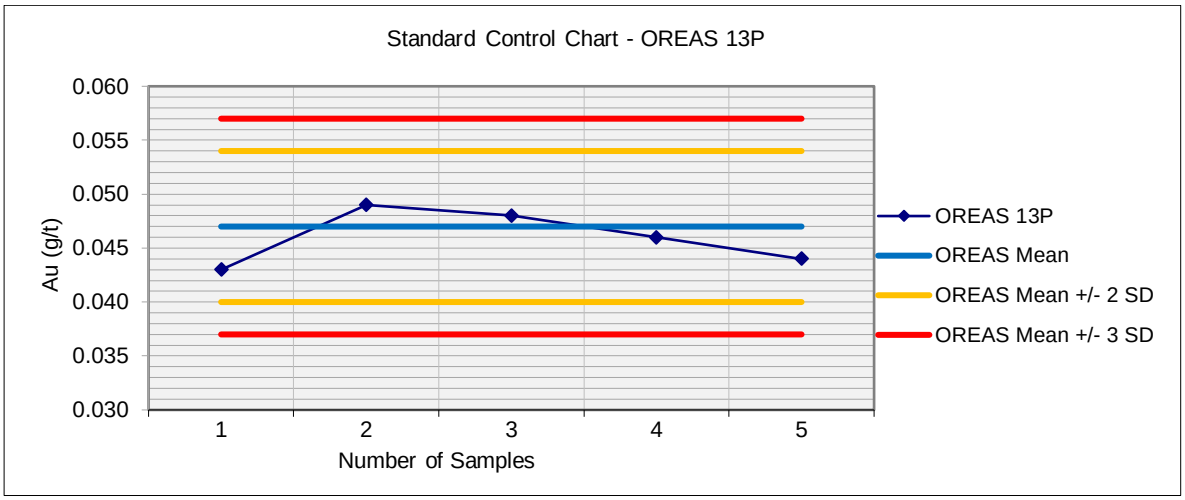
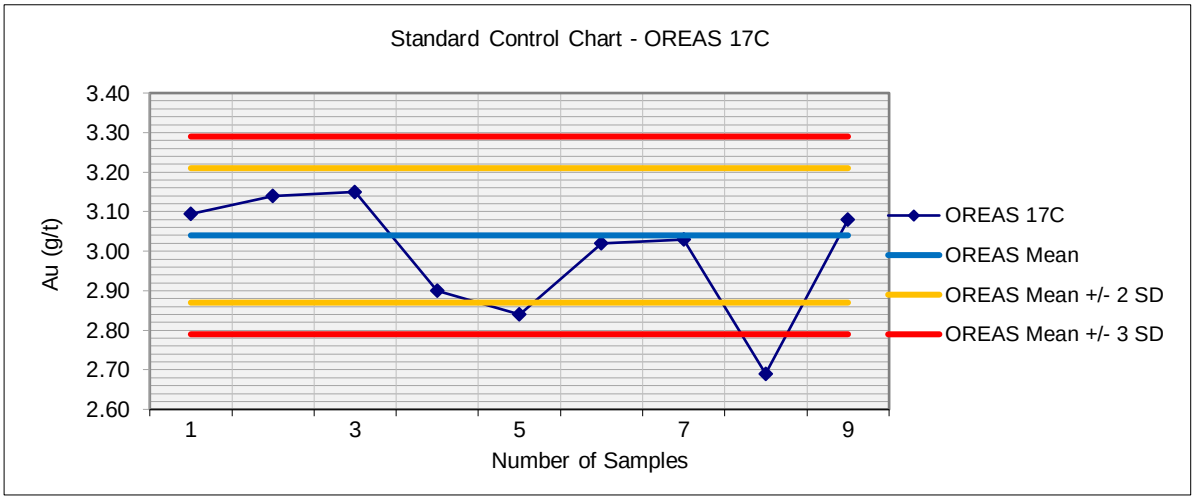


Figure 12-4 Platinex Check Assays on Standard Oreas 17C



Source: Toth et al., 2017.

The above results indicate that the duplicate assays show excellent correlation with original assay values, and almost all of the check assays on various standards were within the limits as reported by the laboratory.

12.2 DATA VERIFICATION BY ALS CHEMEX

Data verification at the ALS Chemex (now ALS Minerals) Laboratories includes systematic use of internal standards after every 10 regular samples received from clients. Quantitative analysis provides an estimate of the "certified" value of the standard and always involves some level of uncertainty. The certified value of a standard is the best estimate of the concentration available from the certification data. The confidence interval defines the range of values, calculated from the mean and standard deviation, which is expected to include the population mean with a stated level of confidence. The 95% confidence interval quoted denotes that if the certification program were to be repeated many times, the certified mean value would be expected to fall within the defined limits 95 times out of every 100 tests.

12.3 DATA VERIFICATION BY AGNERIAN

Agnerian carried out verification of the Platinex assay data, and during the site visit, Agnerian examined drill holes HP09-24, HP09-27, HP09-31 and HP09-37 of the Herrick deposit and collected 10 samples of split (sewn) diamond drill core for independent assays at SGS laboratories in Lakefield, ON. Sample weights range from 0.44 kg to 2.3 kg, and sample lengths range from 39 cm to one metre, with nine samples in the range from 39 cm to 60 cm. Agnerian also visited a number of outcrops along several logging roads on the Shining Tree property, as well as the "Iron Formation" Zone at the southeastern part of Churchill Township. Table 12-7 shows that the Agnerian values compare well with those reported by Platinex. Agnerian also notes that the QA/QC procedures used by Platinex and the check assay program used during the till sampling program have produced reliable results.

	Table 12-7 Agnerian Independent Sampling Results							
	Platinex Inc. – Shining Tree Property, Ontario							
Drill Hole No.	Platinex Sample No.	From (m)	To (m)	Interval (m)	Platinex	Agnerian		% Diff.
					g/t Au	g/t Au	g/t Ag	(Au)
HP09-31	4005	24.20	24.70	0.50	4.80	4.93	<0.30	-2.67
HP09-31	4007	24.70	25.00	0.30	0.65	0.34	0.73	48.0
HP09-31	4011	28.00	29.00	1.00	3.46	3.49	0.39	-0.90
HP09-37	4022	21.94	22.33	0.39	0.23	1.71	<0.30	-642.6
HP09-24	4347	41.80	42.30	0.50	8.09	7.50	<0.30	7.32
HP09-24	4348	42.30	42.90	0.60	13.35	14.22	0.53	-6.52
HP09-24	4349	42.90	43.30	0.40	2.09	2.69	0.54	-28.47
HP09-27	4391	25.90	26.30	0.40	0.84	1.00	0.42	-19.05
HP09-27	4392	26.30	26.80	0.50	13.27	11.13	1.44	16.13
HP09-27	4393	26.80	27.30	0.50	4.77	4.65	0.81	2.43
Average								**-62.63**

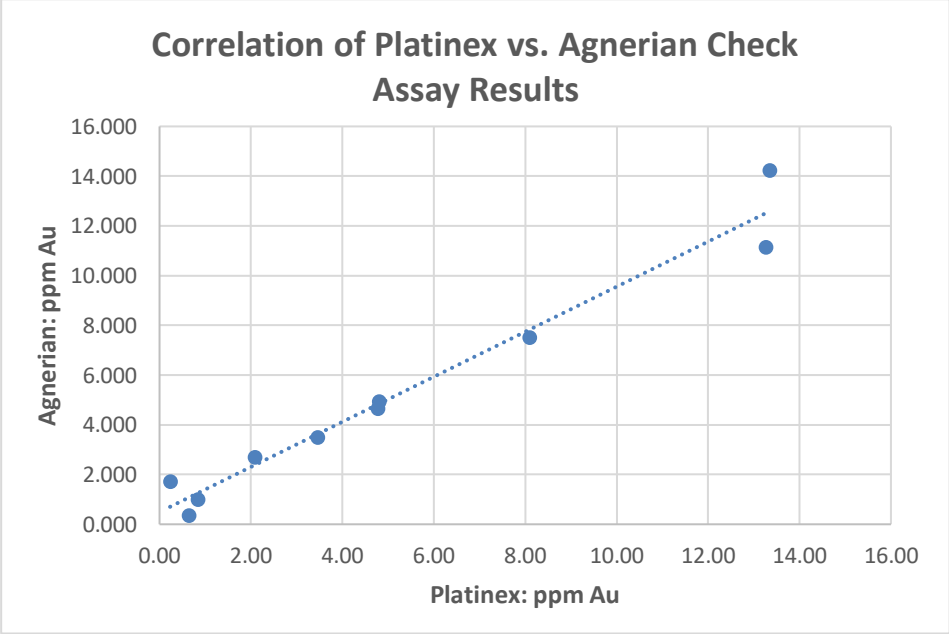
Source: Cutting, 2018.

Notes:

1. Platinex samples were half-core (NQ) and were assayed at ALS Chemex Laboratories in Val d'Or, PQ, in 2009.
2. Agnerian samples are half as well as quartered NQ core and are assayed at SGS Laboratories in Lakefield, ON.

Results of independent sampling indicate that for gold values, on average, the Platinex assays are slightly higher than the Agnerian assays (Figure 12-5).

Figure 12-5 Agnerian Independent Sampling Results



13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

This Item is not applicable to this report.

14.0 MINERAL RESOURCE ESTIMATE

This Item is not applicable to this report.

15.0 MINERAL RESERVE ESTIMATE

This Item is not applicable to this report.

16.0 MINING METHODS

This Item is not applicable to this report.

17.0 RECOVERY METHODS

This Item is not applicable to this report.

18.0 PROJECT INFRASTRUCTURE

This Item is not applicable to this report.

19.0 STUDIES AND CONTRACTS

This Item is not applicable to this report.

20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

This Item is not applicable to this report.

21.0 CAPITAL AND OPERATING COSTS

This Item is not applicable to this report.

22.0 ECONOMIC ANALYSIS

This Item is not applicable to this report.

23.0 ADJACENT PROPERTIES

There are a number of adjacent properties to the Shining Tree mineral claims as defined by NI 43-101 (Figure 23-1). From west to east, exploration properties immediately adjacent to the Shining Tree property are, as follows:

- The Elephant Head Property jointly owned by Canadian Gold Miner Corp. (Canadian Gold Miner) and Transition Metals Corp. (Transition). It is located in Connaught Township, near the western tip of the Shining Tree property. On March 6, 2017, Canadian Gold Miner and Transition announced that Trelawney Mining and Exploration Inc. (Trelawney), a wholly owned subsidiary of IAMGOLD Corporation (IAMGOLD), had agreed to earn up to 80% interest in this property, which is situated approximately 40 km east of the Coté gold deposit, along the Rideout Deformation Zone, near Gogama, ON. Results of prospecting and sampling in 2012 and 2014, by Canadian Gold Miner revealed variable sulphide and gold mineralization in grab samples of bedrock, ranging from low values to 57.3 g/t Au, in an area 400 m by 1,000 m. Under the terms of the option agreement, Trelawney may earn an initial 51% interest in the Elephant Head property by paying $80,000 cash and spending $850,000 over three years on the Elephant Head as well as the nearby Jumping Moose property (Canadian Gold Miner Press Release, March 6, 2017). Agnerian understands that IAMGOLD is currently carrying out exploration work on this property and has reported results of channel sampling, including 5.5 g/t Au over 33 m (Canadian Gold Miner Press Release, June 5, 2018).

- Golden Valley Mines Ltd. (Golden Valley) holds a claim block adjacent to the western tip of the Shining Tree property in Cabot Township. Agnerian is not aware of any current exploration activity on this property.

- Golden Harp Resources Inc. (Golden Harp): This company holds a large group of claims (Block A) in MacMurchy, Natal, Knight, and Tyrrell Townships, adjacent to the eastern boundary of the Shining Tree property. There are no recent work recorded, but in 2009, Benton Resources Corp. (Benton) optioned it from Golden Harp and carried out a 7-hole, 1,625 m diamond drilling program on the extension of the Cook Zone, discovered in the 1930s. Results indicated mineralized intersections of 0.89 g/t Au over 44.0 m in Drill hole GH-025 and 3.6 g/t Au over 9.0 m in Drill hole GH-019 (Benton Resources Corp. Press Release, June 4, 2009). Agnerian notes that many of the claims in the northeastern part of the property are oriented in a northeastern direction, presumably covering a northeast trending structure. Agnerian is not aware of any current exploration activity on this property.

- Treasury Metals Incorporated (Treasury): This company holds a northwest-southeast oriented group of claims in Fawcett Township, adjacent to the southeastern boundary of the Shining Tree property, as well as east trending claims in Leonard and Tyrrell Township. In its June 30, 2017 Management Discussion and Analysis (MD&A), Treasury disclosed that it had not planned any exploration work for that year (Treasury Metals Inc., 2017).

- Ursa Major Minerals Incorporated (Ursa Major): This company holds a block of 40 claims, covering approximately 648 ha, in the northwestern corner of Fawcett Township and adjacent to the southern border of the Shining Tree property. In early 2006, Ursa Major reported that this property hosts a mineral deposit (Shining Tree

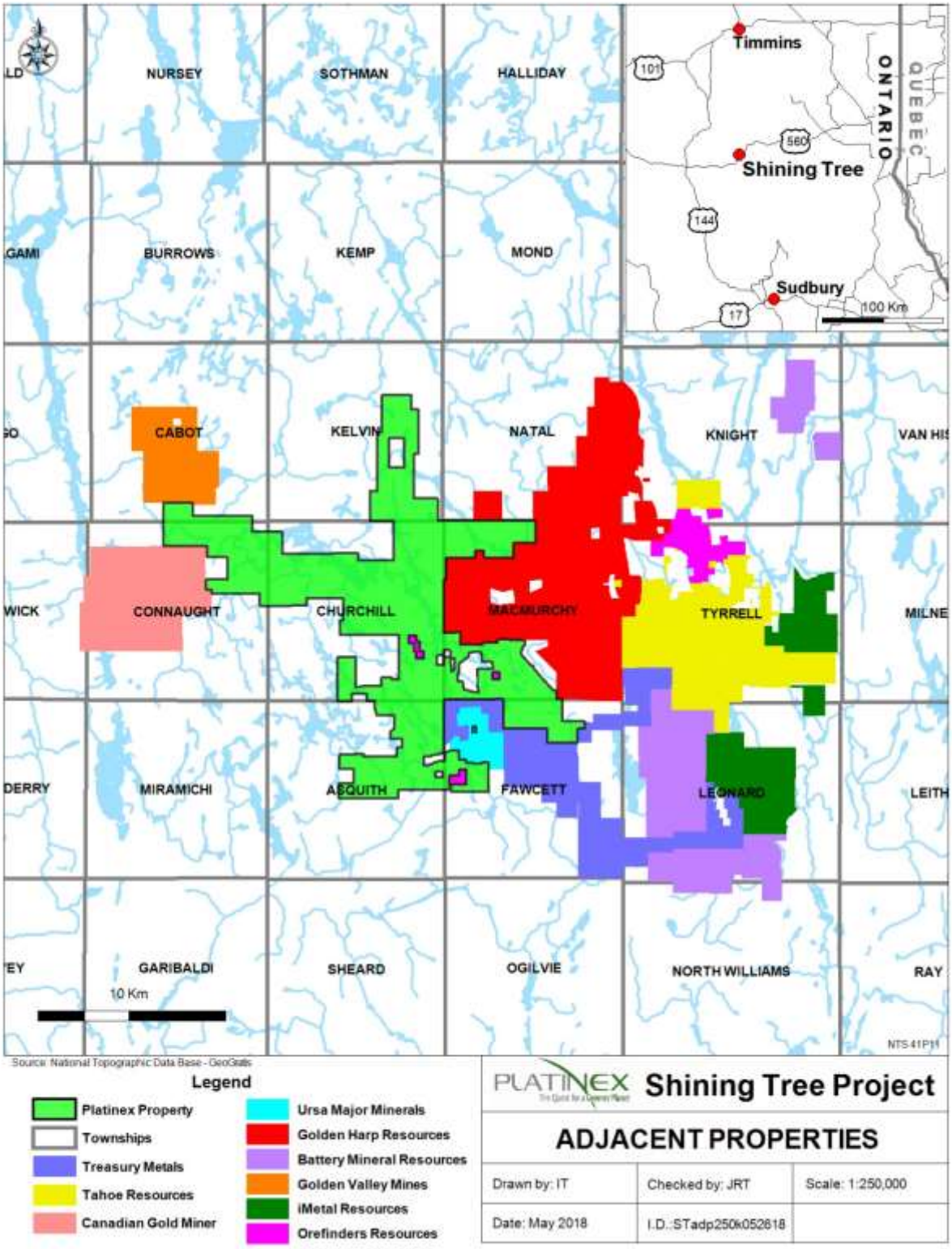
deposit). At a cut-off grade of 0.30% Nickel equivalent (NiEq), the deposit contains 1.02 million tonnes of Indicated Mineral Resources at an average grade of 0.71% Ni, 0.36% Cu, and 0.02% Co, plus 1.49 million tonnes of Inferred Mineral Resources at an average grade of 0.67% Ni, 0.36% Cu, and 0.03% Co. Subsequent to this mineral resource estimate, Ursa Major carried out further diamond drilling, and reported results ranging from 0.62% Ni, 0.19% Cu and 0.02% Co to 1.40% Ni, 1.10% Cu and 0.06% Co over widths ranging from 2.2 m to 36.6 m. In 2006, Ursa Major also engaged Micon International (Micon) to carry out a Preliminary Economic Assessment (PEA) on the near-surface in-pit portion of the Shining Tree deposit, which contains approximately 398,000 tonnes at an average grade of 0.68% Ni and 0.33% Cu. Agnerian notes that the steeply plunging mineralization extends further at depth. In 2007, Ursa Major engaged Golder Associates Ltd. (Golder) to conduct an environmental baseline study as part of its plan to develop its Shining Tree deposit (Ursa Major Incorporated website, 2018). Since the studies by Micon and Golder, Ursa Major has not released plans for the development of the Ni-Cu-Co deposit.

- Battery Mineral Resources (Battery) and IMetal Resources Inc. (IMetal): These two companies hold contiguous blocks of claims in Leonard and Tyrrell Townships. During the spring and summer of 2017, field crews carried out prospecting, and reported 2.6 g/t Au near a north-trending zone in quartz porphyry. Assay results of 58 other grab samples range from 0.01 g/t Au to 6.47 g/t Au (O'Connor, 2017). Agnerian is not aware of any current exploration activity on this property.

- Tahoe Resources Inc. (Tahoe): The claim block held by Tahoe covers much of Tyrrell Township, east of the Platinex Shining Tree property. In 2014, Temex Resources Corp. (Temex), a subsidiary of Tahoe, reported that its Juby deposit contains approximately 26.6 million tonnes of Indicated Mineral Resources at an average grade of 1.28 g/t Au, containing approximately 1.09 million ounces of gold, and approximately 96.2 million tonnes of Inferred Mineral Resources, containing approximately 2.91 million ounces of gold (Campbell et al., 2014). The Juby deposit is situated near the southeastern corner of Tyrrell Township, and at the southern end of the west-northwest trending Tyrrell Structural Zone (TRZ). A number of other gold showings also occur along the TRZ. Tahoe has not yet announced its plan to develop the Juby deposit.

- Orefinders Resources Inc. (Orefinders): There are a number of claims in Churchill, MacMurchy, and Fawcett Townships that are surrounded by Platinex claims, but are not part of the Shining Tree property. Stripping and channel sampling in the past carried out along the northwest trending "Iron Formation" zone revealed gold values ranging from 0.01 g/t Au to 0.29 g/t Au over channel widths ranging from 35 cm to one metre. Agnerian is not aware of any current exploration activity on this property.

Figure 23-1 Adjacent Properties



Source: Platinex, 2018.

24.0 OTHER RELEVANT DATA AND INFORMATION

To the best of the author's knowledge, all known relevant data and information regarding the Shining Tree Property is included in other sections of this technical report.

25.0 INTERPRETATION AND CONCLUSIONS

Despite the extensive mineral exploration and limited mining carried out in the past, the Shining Tree Property is at an early stage of exploration. Numerous operators have carried out geological mapping, prospecting, geochemical sampling, geophysical surveys, trenching, diamond drilling and some underground development, but the early operators carried out this work on a number of showings within the currently vast property held by Platinex. Platinex, like most other junior companies, started its exploration in 2009 on a small target, with limited success. Based on recent literature search on reports of assessment work at the MNDM, Platinex is of the opinion that the Shining Tree property exhibits favourable structural and geological characteristics to host gold deposits, similar to economic gold and base metal deposits in the Abitibi region of Ontario and Québec.

Based on the review of technical reports on past exploration and publications on regional geology, and recent exploration by Platinex, Agnerian concludes that:

- The Shining Tree area is located in the southwestern portion of the Abitibi greenstone belt and the metamorphic grade throughout the area is low to mid greenschist facies.
- Geological mapping in the Shining Tree area in the past has recognized three distinct Archean-aged lithologic assemblages of supracrustal rocks consisting of an older Keewatin-aged metavolcanic assemblage unconformably overlain by two Timiskaming-type metasedimentary rock assemblages.
- Gold mineralization occurs in a variety of rock types associated with quartz-carbonate veins, including felsic metavolcanic rocks exhibiting intense carbonate alteration, mafic to intermediate metavolcanic rocks, and intrusive rocks. The most favourable hosts are felsic metavolcanic rocks and metasedimentary rocks.
- Results of past exploration and recent research on styles of gold mineralization in the Abitibi region of Ontario suggest that there is potential for porphyry-style gold mineralization associated with alkali-rich felsic volcanic rocks (trachyte) within the Shining Tree property. These results also suggest that there is potential for volcanogenic massive sulphide (VMS) mineralization within the Shining Tree property.
- There are numerous gold occurrences within the Shining Tree property, including:
    - Past producing mines, such as the Ronda Mine, Tyranite Mine, Bilmac Mine, and the Buckingham Mine.
    - Occurrences with underground development, such as the Herrick deposit, Caswell veins, Churchill veins, McBride Royal Mining, Clarke, and Knox gold showings.

  - Other surface showings, such as the Gold Corona vein, Pet vein, Kingston vein, Foisey vein, Miller-Adair vein, Speed Lake showing, Beilby Lake, and Northgate No. 4 showing.

- Results of till studies on the Shining Tree property reveal that there are numerous samples with anomalous gold concentrations, with many pristine gold grains. These results may indicate the existence of regionally significant gold dispersion trains, the source of which is not yet certain.
- Results of trench sampling and diamond drilling at the Herrick deposit indicate that distribution of gold grades are similar in both sets of data.
- The QA/QC procedures used by Platinex and the check assay program used during the till sampling program have produced reliable results.
- Results of independent sampling by Agnerian indicate that for gold values, on average, the Platinex assays are slightly higher than the Agnerian assays.
- Past and recent exploration has established some favourable criteria suggesting the possibility of sizeable accumulations of gold, silver and copper sulphide minerals within the metavolcanic rocks, at depths ranging from near surface to approximately 300 m below the surface.
- The most likely source of gold mineralization is hot fluids, which acted with wallrock along fractures within the metavolcanic rocks.
- There are no risks or uncertainties regarding past or recent exploration data that could impact the reliability or confidence in those data.

26.0 RECOMMENDATIONS

Agnerian recommends that Platinex continue to explore for gold and base metals on the Shining Tree property with a systematic exploration program to assess the exploration potential for the existence of vein-hosted gold deposit similar to other gold deposits, as well as for volcanogenic massive sulphide (VMS) deposits in the Abitibi region of Ontario, as follows:

- Phase One: A program of compilation of past exploration data during the summer or fall 2018, airborne geophysical (LIDAR and gradient magnetic) surveys, trenching, and drilling to extend and test geophysical anomalies. Agnerian recommends the airborne survey lines to be oriented northeast-southwest as well as northwest-southeast, to detect the postulated structural zones associated with the numerous lineaments and mineralized structures. The drilling would consist of approximately 3,000 m of diamond drilling in 15 drill holes. The exact collar locations are not yet determined at this time, but the drill targets are:
    - First priority targets along the postulated Tyrrell-Rideout Deformation Zone in the western part of the Shining Tree property, within Churchill Township.
    - Second priority targets, such as further testing the gold mineralization at depth at the Herrick, Ronda, and Caswell showings.
- Phase Two: A program of additional diamond drilling, depending on the results of the Phase One drilling, to extend the zones of mineralization at the known target areas. The total amount of drilling during Phase Two would consist of approximately 10,000 m of diamond drilling in 40 to 50 drill holes.

Agnerian has prepared a preliminary budget for the two-phase program to be carried out from 2018 through 2020, which is in the order of $2,000,000. The budget for Phase One is in the order of $635,000 (Table 26-1). Since the mineralized veins in the Shining Tree area may be oriented both parallel as well orthogonal, the contact zones between the Keewatin Group metavolcanic rocks and Timiskaming Group metasedimentary rocks, Agnerian recommends that the geophysical surveys be conducted with lines oriented both parallel as well as orthogonal to the interpreted contact zones.

Table 26-1 Phase One Recommended Exploration Budget		
Platinex Inc. – Shining Tree Property, Ontario		
Item	**Amount ($)**	**Remarks**
Compilation of previous exploration data	25,000	
Structural & geochemical studies	15,000	
Airborne LIDAR survey: 137 km^2 @ $300/$km^2$	48,600	Includes $7,500 for mob/demob.
Airborne gradient magnetic survey: 3,250 ln-km @ $40/km	137,500	Includes $7,500 for mob/demob.
Diamond drilling: 3,000 m @ $80/m	240,000	Drill testing geophysical targets.
Mob & demob for drilling program	10,000	
Geological support during drilling: 35 days @ $800/day	28,000	Includes one geologist and one technician.
Assays: 500 samples @ $30/sample	15,000	
Accommodation & meals: 50 days @ $300/day	15,000	
Trenching and sampling	10,000	
Travel and related	5,000	
Technical Report	40,000	Includes resource modelling.
Supervision and G & A	15,000	
Subtotal, direct costs	604,100	
Contingencies @ ~5%	30,200	
Total	**634,300**	

A Phase Two program of drilling in the order of $1,500,000 may be carried out over other parts and new targets of the Shining Tree property upon successful results of the Phase One drilling.

27.0 REFERENCES

ALS Chemex Laboratories, 2008, Geochemical Results.

Ayer, J.A. 1999. Geological compilation of the Abitibi greenstone belt in Ontario; toward a revised stratigraphy based on compilation and new geochronology results; Summary of Field Work and Other Activities, Ontario Geological Survey, Miscellaneous Paper 169, p.14-24.

Ayer, J.A., Berger, B., Johns, G. W., Trowell, N., Born, P. and Mueller, W.I., 1999, Late Archean Rock Types and Controls on Gold Mineralization in the Southern Abitibi Greenstone Belt of Ontario: GAC.MAC Joint Annual Meeting, Sudbury 1999, Field Trip 83 Guidebook, 73 p.

Ayer, J.A. 2000. The Abitibi greenstone belt: a program overview; in Summary of Field Work and Other Activities 2000, Ontario Geological Survey, Open File Report 6032, p 6-1 to 6-14.

Ayer, J.A., Amelin, Y., Corfu, F., Kamo, S., Ketchum, J., Kwok, K., and Trowell, N., 2002, Evolution of the Southern Abitibi greenstone belt on U-Pb geochronology: autochtonous volcanic construction followed by plutonism, regional deformation and sedimentation: Precambrian Research, 115 p., 63-95.

Ayer, J.A., Thurston, P.C., Dubé, B., Gibson, H.L., Hamilton, M.A., Hathway, B., Hocker, S.M., Houlé, M.G., Hudak, G., Ispolatov, V.O., Lafrance, B., Lesher, C.M., MacDonald, P.J., Péloquin, A.S., Piercey, S.J., Reed, L.E., and Thompson, P.H., 2005, Overview of results from the Greenstone Architecture Project: Discover Abitibi Initiative*:* Ontario Geological Survey Open File Report 6154, 146 p.

Beakhouse, G.P., 2007, Structurally Controlled Magmatic Hydrothermal Model for Archean Lode Gold Deposits, A Working Hypothesis: Ontario Geological Survey Open File Report 6193.

Beecham, A.W., 1994, Sampling and Evaluation of the Ronda, Foisey and Miller-Adair Claims, MacMurchy and Churchill Townships, Shining Tree Area, Sudbury District, Ontario: Report for Golden Trump Resources Ltd., September 20, 1994.

Bennett, G., Dressler, B.O., and Robertson, J.A., 1991, The Huronian Supergroup and Associated Intrusive Rocks: Ontario Geological Survey Special Volume 4, Part 1, 1991.

Benton Resources Corp., 2009, Press Release, June 4, 2009.

Burden, L., 2018, Personal Communication.

Campbell, J., Sexton, A., and Studd, D., 2014, Technical Report on the Updated Mineral Resource Estimate for the Juby Gold Project, Tyrrell Township, Shining Tree Area, Ontario: Report for Temex Resources Corp., February 24, 2014.

Canadian Gold Miner Corp., 2017, Press Release, March 6, 2017.

Carter, M.W., 1977, Geology of Fawcett and Leonard Townships, District of Sudbury and Timiskaming: Ontario Division of Mines, GR 146, 50 p.

Carter, M.W., 1980, Geology of Connaught and Churchill Townships, District of Sudbury: Ontario Geological Survey Report 190, 81 p.

Carter, M.W. 1987. Geology of the Shining Tree Area, districts of Sudbury and Timiskaming; Ontario Geological Survey, Report 240, 48 p.

Cluff, G.R., 1989, Geological Report on Claim L1048573 Churchill Township, Larder Lake Mining Division, Ontario: Report for Unocal Canada Limited, October 4, 1989.

Cluff, G.R., 1990a, Geophysical Report on Claims L1035894 and L1078781, Churchill Township, Larder Lake Mining Division, Ontario: Report for Unocal Canada Limited, January 15, 1990, MNDM AFRI File 2.13031.

Cluff, G.R., 1990b, Exploration Activities – 1989 Herrick/Churchill Properties, Churchill Township Ontario: Report for JRB Parres, March 27, 1990.

Cutting, D.R., 2018, Personal Communication.

De la Roche, H., Leterrier, J., Grandclaude, P., and Marchal, M., 1980, A classification of volcanic and plutonic rocks using R1R2-diagram and major element analysis – its relationships with current nomenclature: Chemical Geology 29, 1980.

Dubé. B. and Gosselin, P., 2007, Greenstone-hosted quartz-carbonate vein deposits, *in* Goodfellow. W.D. ed., Mineral Deposits of Canada; A System of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, 9, p 49-73, 2007.

Dubé, B., Mercier-Langevin, P., Castonguay, S., McNicoll, V.J., Pehrsonn, S.J., Bleeker, W., Schetselaar, E.M. and Jackson, S., 2011, Targeted Geoscience Initiative 4. Lode Gold Deposits in Ancient, Deformed and Metamorphosed Terranes – Footprints and Exploration Implications: A Preliminary Overview of Themes, Objectives and Targeted Areas: Summary of Field Work and Other Activities 2011, Ontario Geological Survey, Open File Report 6270, p.38-1 to 38-10.

Edgar, B., 2001, Caswell Property Compilation/Highlights & Property Visit: Report for Practical Exploration & Development Corporation, June 28, 2001.

Edmond, B.A., 1990, Shining Tree Gold Project Landsat Structural Study: Report for Northgate Exploration Limited, June 1990.

Environment Canada, 2017, Website.

Ernst, R.E., 2007, Large igneous provinces in Canada through time and their metallogenic potential, *in* Goodfellow. W.D. ed., Mineral Deposits of Canada; A System of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p 929-937, 2007.

Forbes, C.P., 1982, Summary Report for the 1981 Field Season on the Churchill Township Property: Report for Shiningtree Gold Resources Inc., February 8, 1982.

Fraser, D., 2005, Logistical and Basic Interpretive Report for Magnetic Geophysical Surveys Performed on the Shining Tree Properties, Shining Tree, Northern Ontario: Report for Skead Holdings Ltd., November 30, 2005, MNDM AFRI File 2.31016.

Geoterrex Limited, 1983, Induced Polarization Survey: Report for Silver Princess Resources Inc., April 1983.

Gittings, F.W., 2011, Report on the Lithogeochemical Mapping Project of the Shining Tree Property, Larder Lake Mining Division, Churchill, MacMurchy and Asquith Townships, Ontario, UTM Grid Zone 17, NAD 83: Report for Platinex Inc., February 2011.

Hart, T.R., 2011, 43-101F1 Technical Report on the Haultain Property, Haultain and Nichol Townships – Gowganda, Ontario (NTS 41P10): Report for Transition Metals Corporation,

January 13, 2011.

Hinse, G.J., 1982, A Report on the Churchill Township Property, Larder Lake Mining Division, Ontario: Report for Shiningtree Gold Resources Inc., September 6, 1982.

Hobbs, L.G., 2010, A Report at the Big Dome Property October 2009 to March 2010: Report for Goldeye Explorations Limited, August 10, 2010, MNDM AFRI File. 2.49448.

Hope, P.J., 1996, Diamond Drill Logs: Assessment Report for Strike Minerals Inc., June 1996, MNDM AFRI File 2.18744.

Hopkins, P.E., 1920, West Shining Tree Gold Area: Ontario Dept. Mines, Vol. 29, pt.3, p.28-52.

Huneault, R., 2011, Report on Analysis of Till Samples by Overburden Drilling Management Limited: Report for Platinex Inc., January 20, 2011.

Hunter, D., 1990, Fort Knox Gold – Shining Tree Project, General Geological/Geochemical Observations: Report by Earthunt Resources Inc., November 1990.

Jamieson, D., 2009, Diamond Drilling Assessment Report on the Herrick Gold Deposit, Churchill Township, Larder Lake Mining Division, Ontario, Canada: Report for Platinex Inc., June 19, 2009, MNDM AFRI File.2.41955.

Jamieson, D., 2010a, Till Sampling on the Shining Tree Project for Platinex Inc., Churchill, Asquith and MacMurchy Townships, Ontario, Canada: Report for Platinex Inc., May 15, 2010.

Jamieson, D., 2010b, Diamond Drilling Assessment Report on the Herrick Gold Deposit, Churchill Township, Larder Lake Mining Division, Ontario, Canada: Report for Platinex Inc., December 19, 2010.

Jamieson, D., 2018, Miscellaneous Technical Data.

Johns, G.W. and Amelin, Y., 1990, Project Unit 96-003, Reappraisal of the Geology of the Shining Tree East (East Part), Districts of Sudbury and Timiskaming: Ontario Geological Survey, Misc. Paper 169, p. 43-50, 1990.

JVX Geophysical Surveys and Consulting, 2010, Report on Line Cutting, IP/Resistivity and Magnetic Surveys, Herrick Gold, Shining Tree Project, Ontario: Report for Platinex Inc., June 2010.

JVX Geophysical Surveys and Consulting, 2010b, Report on Borehole Induced Polarization Surveys, Herrick Gold, Shining Tree Project, Churchill Township, Northern Ontario: Report for Platinex Inc., December 2010.

Kaiser, C.J., 1985, Final Report on the Shining Tree Prospects (Gosselin Claim Blocks); Report for Onitap Resources Inc., January 16, 1985.

Larder Geophysics Ltd., 2006, Magnetometer and VLF Surveys Over the Gosselin Project, Churchill and Asquith Townships, Ontario: Report for Skead Holdings Ltd., July 2006.

MacGregor, R.A., 1996a, Report on Magnetometer Churchill Township, Ontario: Report for Skead Holdings Ltd., October 16, 1996, MNDM AFRI File 2.16875.

MacGregor, R.A., 1996b, Report on Magnetometer Asquith Township, Ontario: Report for Skead Holdings Ltd., November 21, 1996, MNDM AFRI File 2.16909.

MacGregor, R.A., 1999a, Report on Magnetometer and Geology Surveys, Beilby Lake Property, Churchill & Asquith Townships, Ontario: Report for Skead Holdings Ltd., May

28, 1999, MNDM AFRI File 2.20385.

MacGregor, R.A., 1999b, Report on Geological Survey, Claim 1235059, Churchill Township, Ontario: Report for Skead Holdings Ltd., June 15, 1999, MNDM AFRI File 2.19535.

MacGregor, R.A., 2000a, Report on Geological, VLF-EM and Rock Geochemical Surveys, Asquith Township, Ontario: Report for Skead Holdings Ltd., June 9, 2000, MNDM AFRI File 2.20385.

MacGregor, R.A., 2000b, Report on Prospecting, Sampling Claim L1238875, Churchill Township, Ontario: Report for Skead Holdings Ltd., September 25, 2000, MNDM AFRI File 2.20598.

MacGregor, R.A., 2001a, Report on Prospecting, Sampling Claims L1217897 and 1225769, Asquith Township, Ontario: Report for Skead Holdings Ltd., January 9, 2001.

MacGregor, R.A., 2001b, Report on Geological Survey, Claim L1242194, Churchill Township, Ontario: Report for Skead Holdings Ltd., June 19, 2001.

MacGregor, R.A., 2002a, Report on Preliminary Geological Survey, Claim L1235157, Churchill Township, Ontario: Report for Skead Holdings Ltd., June 7, 2002, MNDM AFRU File 2.23727.

MacGregor, R.A., 2002b, Report on Preliminary Geological Survey, Claim L1235161, Asquith Township, Ontario: Report for Skead Holdings Ltd., June 25, 2002, MNDM AFRI File 2.23808.

MacGregor, R.A., 2002c, Report on Rock Sampling, Beilby Lake Property, Churchill Township, Ontario: Report for Skead Holdings Ltd., November 15, 2002.

MacGregor, R.A., 2003a, Report on Reconnaissance Geology and Sampling, Shining Tree Area Churchill Ontario: Report for Skead Holdings Ltd., September 26, 2003.

MacGregor, R.A., 2003b, Report on Geology Survey and Sample Analysis, Churchill Township, Ontario: Report for Skead Holdings Ltd., December 19, 2003.

MacGregor, R.A., 2004, Report on Geology, Sampling and Analysis, Churchill and Asquith Townships, Ontario: Report for Skead Holdings Ltd., September 20, 2004.

MacKenzie, C.D., 1990, Report on Geophysical Surveys, Magnetometer and VLF-EM, Churchill Township, Larder Lake Mining Division: Report for LaForest-Hlava Explo Services Ltd., April 10, 1990, MNDM AFRI File 2.13264.

Madill, B.H., 1996, Report on Stripping/Trenching and Sampling, MacMurchy Township, Ontario: Report for R. Whelan, December 1996, MNDM AFRI File 2.17028.

McAuley, J., 1988, Geological Report for Assessment Cryderman Lake Property, Claims 969625 and 969626, Asquith Township, Larder Lake Mining Division, Ontario: Report for Norwin Resources Limited, June 1988.

McDougald, R., 1968, The 'Big Four' Group: Ministry of Northern Development, Mines and Forestry Assessment File, Kirkland Lake Resident Geologist's Office, No. CO1662, 1968.

Ministry of Natural Resources (MNR), 1979, Ontario Geological Survey (OGS) Mineral Deposits Circular 18, Part 2, p.75-76, 1979.

Mullen, G.J. and Ferderber, R., 1994, Elephant Head Lake Property, Connaught Township, Ontario Shining Tree Area – Larder Lake Mining Division Final Report - Ontario Prospectors Assistance Program, Geological Mapping, Prospecting & Sampling

Program Magnetometer, VLF-EM & Max-Min Surveys: Report for Trinity Exploration Ltd., January 31, 1994.

Narex Ore Search Consultants Inc., 1985, Bedrock Stripping Trenching, Sampling and Soil Sampling, Gosselin Property, Churchill and Asquith Townships, Larder Lake Mining Division, District of Sudbury, Ontario: Report for Onitap Resources Inc., January 1985.

O'Connor, T., 2017, Prospecting & Sampling Report on Gowganda West Claims 2017: MNDM Assessment Report 2.58118.

Oliver, H.S., Johns, G.W., Thurston, P.C., Hughes, D.J. and Hall R.P. 1998, Ontario Geological Survey, Preliminary geochemistry of the Shining Tree area; Abitibi Sub-province, Ontario; *in* Summary of Field Work and Other Activities 1998, Miscellaneous Paper 169, p.51-58.

Osmani, I.A., 1991, Proterozoic Mafic Dyke Swarms in the Superior Province of Ontario, *in* Geology of Ontario: Ontario Geological Survey, Special Volume 4, Part 1, p. 627-660, 1991.

Parres, J.R.B., 1981, Confidential Report Churchill Township Property: Report for Shiningtree Resources Inc., 1981.

Paulsen, K.H., Robert, F., and Dubé, B., 2000, Geological Classification of Canadian Gold Deposits: Geological Survey of Canada Bulletin 540, 113 p, 2000.

Robert, F., 2001, Syenite-associated disseminated gold deposits in the Abitibi greenstone belt, Canada: Mineralium Deposita, 36, pp. 503-516, 2001.

Roed, M.A. and Hallett, D.R., 1979, Northern Ontario Engineering Geology Terrain Study, Volumes 16-19: Ministry of Natural Resources, Ministry of Northern Affairs, 1979.

Scott, S.A., 1987, Report on Geophysical Surveys and Diamond Drilling, Triton Property of Nu-Dawn Resources Inc., MacMurchy Township, Larder Lake Mining Division: Report for Greater Temagami Mines Ltd., August 1987.

Sinclair, W.D., 2007, Porphyry Deposits, *in* Goodfellow. W.D. ed., Mineral Deposits of Canada; A System of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p 223-243, 2007

Thurston, P.C., Ayer, J.A. and Hamilton, M.A., 2008, Depositional Gaps in Abitibi Greenstone Belt Stratigraphy; A Key to Exploration for Syngenetic Mineralization: Economic Geology Vol. 103, p. 1097-1134, 2008.

Tindale, J.L, 1988, Report on Geological and VLF-EM Survey, Asquith Township Property, District of Sudbury, Larder Lake Mining Division: Report for Asquith Resources Inc., November 17, 1988.

Tindale, J.L, 1990, Summary Report, The 1990 Exploration Program on the Asquith Township Property, Shining Tree Area, Ontario: Report for Asquith Resources Inc., Asarco Exploration Co. of Canada Inc. and Ego Resources Limited, October 1990.

Tindale, J.L., 2001, Report on Stripping, Trenching and Sampling Program on the Churchill Township Property of Roy Annett During Summer of 2001, Churchill Township, District of Sudbury, Larder Lake Mining Division: Report for Roy Annett, November 2001.

Tindale, J.L., 2003, Report on Program of Stripping, Trenching, Sampling and Geological Mapping on the Historic McIntyre McDonald Property of Roy Annett, Prospector in MacMurchy Township, Larder Lake M.D.: Report for Roy Annett, March 2003.

Tindale, J.L., 2004, Assessment Report on Prospecting on Claims in Churchill Township: Report for Roy Annett of Shining Tree, August 2004, MNDM AFRI File 2.28344.

Toth, P., Jamieson, D., and Cutting, D.R., 2017, Technical Report on the Geology, Mineral Potential and Exploration of the Shining Tree Property, Ontario, Canada: Unpublished Report for Platinex Inc., November 2017.

Treasury Metals Incorporated, 2017, Management Discussion and Analysis, June 30, 2017.

Trusler, I. and Trusler, J., 2012, Assessment Report on Diamond Drilling of the Herrick Gold Deposit, Churchill Township, Larder Lake Mining Division, Ontario, Canada: Report for Platinex Inc., March 12. 2012.

Trusler, J., 2012, Shining Tree Summary Report, Shining Tree Project, Shining Tree, Ontario, Canada: Platinex Inc., June 18, 2012.

Ursa Major Minerals Incorporated, 2018, Company website.

Wahl, H., 1983, Report on Diamond Drilling, Churchill Project, Larder Lake Mining Division, District of Sudbury, Ontario, Churchill Township, NTS 41-P-11: Report for Silver Princess Resources Inc., May 28, 1983.

Whelan, J., Report on Exploration on Claims Held by Jim Whelan in MacMurchy Township, Larder Lake Mining Division: OPAP File No. OP93-664, January 31, 1994.

White, M.V. and Harron, G.A., 2010, Technical Report on Creso's Duggan, Tyranite & Minto Properties, Knight and Tyrell Townships, Shining Tree District, Ontario: Report for Willowstar Capital, Inc., March 23, 2010.

White, M.V, 2010, Assessment Report on Creso's Claims, Asquith, Churchill, Connaught, Miramichi, Fawcett Townships, Shining Tree District, Ontario: Report Written for Creso Resources Inc., December 14, 2010.

28.0 SIGNATURE PAGE

This report titled “Technical Report on the Shining Tree Property, Ontario” and dated June 8, 2018, was prepared and signed by this author:

“(Signed) Hrayr Agnerian”

Dated at Toronto, Ontario
June 8, 2018

Hrayr Agnerian, M.Sc.(Applied), P.Geo.
Consulting Geologist and President
Agnerian Consulting Ltd.

29.0 CERTIFICATE OF QUALIFIED PERSON

I, Hrayr Agnerian, M. Sc. (Applied), P. Geo., as the author of this report entitled "Technical Report on the Shining Tree Property, Ontario", prepared for Platinex Inc., and dated June 8, 2018, do hereby certify that:

1. I am a Consulting Geologist and President of Agnerian Consulting Ltd. of 82 Mentor Boulevard, Toronto, ON, M2H 2N1.
2. I am a graduate of: the American University of Beirut, Lebanon, with a Bachelor of Science in Geology (1966); the International Centre for Aerial Surveys and Earth Sciences, Delft, the Netherlands, with a diploma in Mineral Exploration (1967), and; McGill University, Montréal, Québec, Canada, with a Master of Science (Applied) in Geological Sciences (1972).
3. I am registered as a Professional Geoscientist in the Province of Ontario (Reg. # 0757). Until recently, I was also registered as a Professional Geoscientist in British Columbia (Reg. # 36864), Newfoundland and Labrador (Reg. # 06152), Saskatchewan (Reg. # 4305) and in the Province of Québec (Reg. # 302). I have worked as a geologist for more than 50 years since my first graduation. My relevant experience for the purpose of the Technical Report is:
    - Review and report as a consultant on more than one-hundred and fifty mining and exploration projects around the world for due diligence and regulatory requirements. A number of these projects include estimation of Mineral Resources of gold, silver, base metal, uranium, and industrial minerals projects in Canada, Europe, the United States of America, South America, Africa, and Asia.
    - Project/Exploration Geologist for several Canadian exploration companies.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I visited the Project site on May 26 and 27, 2018.
6. I am responsible for all the Items and overall preparation of the Technical Report.

7. I am independent of the Issuer Platinex Inc. as well as of the Property, applying the test set out in Section 1.5 of National Instrument 43-101.
8. I have had no prior involvement with the property that is the subject of the Technical Report.
9. I have read National Instrument 43-101F1, and the Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.
10. To the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated 8th day of June, 2018
"(Signed) Hrayr Agnerian"
Hrayr Agnerian, M.Sc.(Applied), P.Geo.
Consulting Geologist and President
Agnerian Consulting Ltd.

30.0 APPENDIX A

AMENDMENTS TO THE ONTARIO MINING ACT

The following are excerpts from a summary of amendments to the Ontario Mining Act as prepared by Matthew German and Joshua Chad of McMillan LLP (2013).

"In 2009, Ontario introduced Bill 173 to amend the *Mining Act*.[1] These amendments are being phased in with the goal of having them all in force by the end of 2014. On November 1, 2012, a large number of these changes went into effect. These changes include new protections for surface rights owners and Aboriginal lands, as well as more stringent duty to consult requirements. In addition, a large portion of land has been withdrawn from mining use or has had its ability to be used in mining operations severely restricted. The following is a summary of some of the more significant amendments to the *Mining Act* and their impact on prospectors and mining companies in Ontario.

The *Mining Act* provides that MNDM may withdraw from prospecting, staking, selling or leasing, or any combination of them, any lands, mining rights, or surface rights that are the property of the Crown. The 2009 amendments went further and automatically withdrew from prospecting, lands in Southern Ontario where there is a surface rights' holder and the Crown owns the mineral rights. There is an exception allowing pre-existing mining rights held at the time the provision took force to remain in effect. Surface rights' owners in Southern Ontario who want their lands to be open to staking may apply to the Crown to re-open their lands for mining activities. In Northern Ontario, surface rights' owners can apply to MNDM to have the Crown withdraw their lands from mining activities.

Surface rights refer to any right in land that is not a mining right. The Mining Act sets out requirements for how owners of mining rights are to interact with the owners of surface rights. Where the surface rights are privately owned, the 2009 amendments require a prospector to notify the surface rights holder of the confirmation of staking. The prospector and surface rights holder must agree to appropriate compensation to be paid to the surface rights holder for the use of the land.

The 2009 amendments will also require prospectors to submit an exploration plan or exploration permit application to MNDM before engaging in assessment work and to notify surface rights holders of the application. As of November 1, 2012, prospectors can voluntarily submit these applications, but they are not required to do so. However, on April

1, 2013, prospectors who do not have the appropriate exploration plan or permit approved will not be permitted to conduct assessment work. Low impact activities require exploration plans whereas moderate impact activities require exploration permits. In both cases, MNDM will forward the application to any applicable Aboriginal communities that may be affected by the activities. The surface rights holder and the Aboriginal communities will have a chance to provide comments and MNDM can then choose to accept the plan or permit as is, impose terms and conditions on the application, or reject the application.

Mining Tenures

There are multiple mining tenures available that permit mineral development and production. The most prominent choice of tenure in Ontario is the mining lease.

Mining Lease

A mining lease gives the lessee the right to locate and extract minerals from the land. A claim holder can apply to MNDM to convert a mining claim into a mining lease once the first unit of assessment work has been completed. Under a 2009 amendment that will be proclaimed into force on April 1, 2013, this requirement will be adjusted to require the fifth unit of assessment work to have been completed before applying to convert to a lease. Additionally, the claim holder must submit any required agreements of surface rights compensation, a plan of survey and the stipulated fee. The claim holder has the exclusive right to make this application and is entitled to have its claim converted to a mining lease.

The lease has a prescribed rental rate and a term of 21 years. The lease may be renewed as a right if the lease-holder can demonstrate continuous production of minerals for at least one year since the issuance or if the lease-holder can show that it has taken a reasonable effort to bring the property into production.

A mining lease is subject to a number of restrictions and reservations. The lease cannot be transferred or mortgaged without the prior written consent of MNDM. Additionally, a lease contains reservations for public interest matters such as roads, waterways and pipelines.

Mining Patent

Another type of tenure is a mining patent issued by the Crown. With a patent, the holder obtains a freehold interest in the minerals themselves. Historically, mining patents were frequently granted, but more recently, MNDM has moved towards mining leases. MNDM still retains the power to issue mining patents, but only in special circumstances.

Prospectors often prefer mining leases as there is less likelihood for environmental liability. If a patent is desired, prospectors can also apply to the Ministry of Natural Resources ("MNR") for this type of tenure.

License of Occupation

Mining licenses of occupation are a type of mining tenure that allows for the mining of minerals located under beds of water. The majority of these licenses were issued prior to the amending of the *Mining Act* in 1964 when the act was updated to make these licenses essentially unnecessary. Nevertheless, MNDM still retains the ability to issue mining licences of occupation for mining lands or mining rights on any terms deemed appropriate, though this rarely occurs.

Land Use Permit

If desired, prospectors can apply to the MNR for a land use permit. This type of tenure is the weakest form of Crown tenure available. The MNR retains future control of the land and the permit is for a term of ten years or less. Additionally, no extensive or valuable improvements to the land can be completed and the permit cannot be mortgaged or transferred. While this type of tenure does not seem very useful, there are instances when such tenure is desirable to prospectors such as for building temporary infrastructure associated to mining.

Closure plan requirement for advanced exploration and mine production activities

No matter what type of mining tenure is held, a prospector must meet additional requirements before engaging in advanced exploration and mine production activities. To engage in these activities, a prospector must file a certified closure plan with the Director including providing the required financial assurance. In order to submit a closure plan, a prospector must provide the Director with notice in the prescribed form as well as provide notice to the public (where applicable). As of November 1, 2012, a prospector is also required to engage in consultation with Aboriginal communities before submitting a closure plan.

A closure plan is a plan submitted to MNDM that outlines the tasks that will be required to rehabilitate the land during the life of a project and after mining operations have ceased. There are technical standards of rehabilitation that are required to be met and each type of

proposed mine hazard has its own required rehabilitation tasks. Additionally, a prospector must submit financial assurance to guarantee the costs of the future rehabilitation".

31.0 APPENDIX B

GEOCHEMICAL SAMPLING RESULTS

TABLE 31-1 GEOCHEMICAL TILL SAMPLING PROGRAM 2011, SAMPLE DESCRIPTIONS

Platinex Inc. – Shining Tree Property, Ontario

Sample No.	Northing	Easting	Total Norm.	Round Norm.	Modified Norm.	Pristine Norm.	HMCwt	Assay M	2 mm Clasts
914	5270246	480773	12	12	0	0	51.2	0.00	0.8
920	5272201	484375	16	14	0	2	73.6	0.00	0.4
923	5273827	481769	9	9	1	0	63.6	<1	2.9
944	5271221	482524	3	3	0	0	28.8	0.00	0.6
945	5269063	481488	2	1	1	0	52.0	4.00	1.1
947	5272156	485372	34	26	7	1	35.2	12.00	0.8
948	5272040	485925	17	11	4	2	45.6	7.00	0.6
949	5270517	483384	79	27	22	30	40.0	57.00	1.5
953	5272381	484827	21	19	1	1	48.4	4.00	0.4
954	5271097	484176	26	23	1	1	39.2	10.00	2.7
956	5270116	484032	6	6	1	0	55.6	<1	2.2
970	5270132	481842	11	8	1	2	41.6	1.00	0.8
919	5271016	483953	20	17	2	0	50.4	6.00	0.3
922	5274271	482456	10	10	0	0	35.2	0.00	1.8
924	5273373	482106	5	4	1	1	45.2	<1	0.7
925	5272621	482467	11	7	0	4	33.2	0.00	2.1
926	5272238	483704	6	6	1	0	43.2	<1	1.3
927	5272004	483482	9	8	1	0	48.8	13.00	0.1
928	5272582	483067	19	19	0	0	32.0	0.00	3.4
929	5271526	484309	75	36	10	29	34.8	31.00	3.2
930	5271596	483426	12	10	1	2	42.0	1.00	2.6
931	5271783	482442	1	0	0	1	44.0	0.00	1.4
932	5271045	483557	1	0	0	1	41.2	0.00	2.3
933	5270890	483105	3	3	0	0	36.8	0.00	2.0
934	5271703	482824	5	5	0	0	38.4	0.00	1.1
935	5270687	482874	12	4	5	4	44.0	4.93	1.3
936	5270386	482423	43	39	1	3	54.8	0.89	3.5
937	5269059	481115	37	27	5	5	44.0	7.01	2.1
938	5269397	481548	11	8	1	2	48.8	<1	1.1
939	5269786	481616	9	4	2	3	39.2	0.75	1.7
940	5269842	480687	14	6	1	7	35.2	5.46	1.8
941	5270711	481064	23	13	5	4	36.4	4.00	0.3
942	5269490	481046	0	0	0	0	33.2	0.00	7.8
943	5269997	482004	6	5	1	0	31.6	3.00	2.7

TABLE 31-1 GEOCHEMICAL TILL SAMPLING PROGRAM 2011, SAMPLE DESCRIPTIONS

Platinex Inc. – Shining Tree Property, Ontario

Sample No.	Northing	Easting	Total Norm.	Round Norm.	Modified Norm.	Pristine Norm.	HMCwt	Assay M	2 mm Clasts
950	5272836	485139	11	3	8	0	45.6	12.00	1.5
951	5272856	485003	9	8	0	1	36.4	0.00	1.1
952	5273452	485226	20	16	4	0	40.0	4.00	1.8
955	5270422	483855	4	4	1	0	55.6	2.00	2.9
957	5270434	483598	4	2	2	0	44.8	5.00	1.9
958	5272650	484179	4	4	0	0	37.2	0.00	1.0
959	5275374	483167	0	0	0	0	42.4	0.00	1.0
960	5274541	483856	51	33	15	4	32.0	29.00	0.6
961	5273787	484048	8	5	3	1	44.4	3.00	0.8
962	5273111	484084	25	8	9	8	39.6	9.00	0.8
963	5272841	484724	58	48	4	5	39.6	2.00	0.5
964	5275228	483883	26	20	3	3	40.0	<1	1.0
965	5274469	484337	8	6	2	0	38.8	2.00	0.3
966	5273857	484533	42	34	5	3	44.4	6.00	1.0
967	5273576	484683	35	29	3	3	26.0	3.00	2.1
968	5273035	484697	34	29	3	2	37.2	5.00	1.1
969	5269970	480610	10	4	5	0	37.2	3.00	1.0
921	5271908	484398	30	18	8	4	52.4	8.00	0.2
1239	5272293	484655	3	2	0	1	48.4	0.00	1.0
1240	5272048	484264	6	5	1	1	50.4	2.00	0.7
1241	5271277	483042	9	6	0	3	38.8	0.00	1.9
1247	5270737	483207	9	8	0	1	44.0	0.00	2.5
1248	5270709	483303	22	17	3	2	44.0	1.00	0.7
1249	5270576	483355	6	3	1	2	49.6	87.00	0.4
1250	5270554	483404	8	6	2	0	45.6	1.00	1.0
971	5273518	483809	11	9	1	1	37.6	2.17	2.0
972	5273435	483670	4	4	0	0	40.0	0.00	0.9
1251	5270506	483372	12	8	2	2	49.2	2.00	2.0
1252	5270886	483292	9	6	1	2	48.4	<1	2.1
1259	5270899	483583	23	20	1	2	38.4	1.00	2.9
1255	5270238	481848	3	2	1	0	42.0	15.00	0.3
1253	5270589	481859	12	9	2	1	58.4	7.00	1.0
1257	5272314	485177	19	14	2	2	54.0	1.00	0.3
1258	5272463	485104	14	8	5	1	48.4	6.00	1.4
1245	5271252	487345	50	31	9	10	65.6	33.00	1.5
1244	5272046	488708	5	3	1	1	42.4	<1	2.5
1243	5272759	487828	27	15	7	6	41.2	4.00	1.3
1262	5267882	481931	6	5	2	0	44.0	13.00	0.9

TABLE 31-1 GEOCHEMICAL TILL SAMPLING PROGRAM 2011, SAMPLE DESCRIPTIONS

Platinex Inc. – Shining Tree Property, Ontario

Sample No.	Northing	Easting	Total Norm.	Round Norm.	Modified Norm.	Pristine Norm.	HMCwt	Assay M	2 mm Clasts
1263	5268015	482222	9	7	2	1	52.0	7.00	2.3
1261	5267652	482269	4	3	1	0	46.8	1.00	0.0
1260	5267050	482269	10	5	6	0	42.0	4.00	0.1
1242	5273431	488098	5	1	3	0	34.4	12.26	1.0
1254	5270440	481849	5	3	2	0	42.0	1.00	0.9
1256	5270186	481865	6	4	1	1	48.4	2.00	2.3
1246	5274862	488955	19	14	4	1	46.8	2.00	0.2
54054	5273062	483741	15	14	0	1	34.0	0.00	3.0
54055	5272590	483933	0	0	0	0	40.4	0.00	2.9
54059	5270942	481480	20	16	3	1	38.0	76.00	3.2
54060	5270993	481763	16	12	4	0	48.4	9.00	0.7
54061	5270659	482037	15	12	3	1	44.4	1.00	0.9
54062	5267925	482512	34	24	7	2	38.0	160.00	3.5
54063	5270288	481278	14	11	2	1	45.6	4.00	1.0
54064	5272505	483772	3	2	1	0	39.2	2.00	2.9
54065	5273085	482756	8	8	0	0	40.4	0.00	3.6
54066	5273085	482756	3	3	0	0	45.2	0.00	1.4
54067	5273948	483221	3	3	0	0	38.4	0.00	2.4
54068	5272466	486920	10	10	0	0	34.4	0.00	3.3
54069	5272397	487180	4	3	0	1	40.0	0.00	0.9
54070	5272740	486434	8	6	2	0	38.8	1.00	1.3
54071	5272476	486643	12	12	0	0	38.8	0.00	2.8
54072	5272705	485818	64	8	21	34	43.2	36.00	2.3
54073	5273082	483509	3	3	0	0	42.4	0.00	1.4
54074	5274387	482990	4	4	0	0	39.2	0.00	2.6
54075	5272240	487517	5	5	0	0	43.6	0.00	0.6
54076	5272873	486992	30	17	9	3	47.2	9.00	0.5
54077	5272733	486196	0	0	0	0	41.6	0.00	1.8
54078	5272482	486299	3	2	1	0	34.4	1.00	2.1
54079	5272434	486444	7	6	2	0	43.6	1.00	0.1
54080	5268248	483830	1	1	0	0	37.2	0.00	2.0
54081	5268803	483691	9	9	0	0	46.0	0.00	1.7
54082	5269134	484036	17	13	0	5	41.6	0.00	3.6
54083	5267857	482908	8	8	0	0	35.2	0.00	3.5
54084	5268662	482356	3	3	0	0	35.2	0.00	2.3
54085	5268288	482692	7	6	1	0	37.6	<1	2.1
54086	5268767	483087	9	5	3	1	46.0	3.00	0.4
54087	5268242	483161	6	6	0	0	32.0	0.00	3.3

TABLE 31-1 GEOCHEMICAL TILL SAMPLING PROGRAM 2011, SAMPLE DESCRIPTIONS

Platinex Inc. – Shining Tree Property, Ontario

Sample No.	Northing	Easting	Total Norm.	Round Norm.	Modified Norm.	Pristine Norm.	HMCwt	Assay M	2 mm Clasts
54742	5269336	482371	0	0	0	0	33.2	0.00	3.8
54743	5269763	482175	6	4	3	0	43.6	8.00	2.2
54744	5269348	482843	3	3	0	0	34.4	0.00	3.0
54746	5269567	483213	5	5	1	0	44.4	<1	0.7
54747	5269769	483131	2	2	0	0	36.0	0.00	3.0
54748	5269687	482764	20	12	6	2	34.4	26.00	3.6
54749	5269785	482613	14	10	1	3	41.2	5.00	1.5
54750	5270079	482608	2	2	0	0	40.0	0.00	2.2
54751	5270353	480933	1	1	0	0	38.4	0.00	2.1
54752	5270356	480506	5	5	0	0	43.6	0.00	1.3
54753	5273399	482991	2	2	0	0	40.8	0.00	1.7
54754	5273718	482772	22	16	3	2	38.8	1.00	4.6
54755	5273812	482899	4	4	0	0	43.6	0.00	3.4
54756	5270170	483098	5	5	0	0	34.8	0.00	2.9
54757	5274717	483573	24	22	1	0	54.0	13.00	2.0
54758	5274782	484107	1	1	0	0	36.8	0.00	3.0
54759	5274416	484610	19	18	1	0	43.2	4.00	3.1
54760	5274074	484563	35	28	8	0	42.0	9.00	2.4
54761	5274072	483873	18	18	0	0	37.2	0.00	2.6
54762	5273681	483907	3	3	0	0	46.4	0.00	2.8
54763	5273589	484386	22	21	1	0	36.8	1.00	5.1
54764	5273241	484688	26	24	0	2	42.0	0.00	3.0
54765	5273018	483879	2	2	0	0	43.2	0.00	2.9
54766	5272649	484042	4	3	0	1	50.0	0.00	1.4
54767	5272617	484558	5	5	0	0	36.4	0.00	3.3
54768	5272775	484527	1	1	0	0	46.4	0.00	0.9
54769	5272436	485877	6	3	0	2	50.0	0.00	0.9
54770	5272297	485533	5	4	1	1	54.0	4.00	1.0
54771	5271946	485625	7	6	1	0	36.0	2.00	2.1
54772	5272449	485188	2	1	1	0	40.8	16.00	2.5
54773	5273701	482237	4	4	0	0	41.6	0.00	1.2
54774	5273955	482363	1	1	0	0	33.6	0.00	3.3
54775	5273411	483484	3	3	0	0	40.4	0.00	1.6
54776	5273395	483074	8	5	2	1	47.2	<1	3.8
54777	5271729	484201	12	10	3	0	46.0	<1	0.9
54778	5271606	484042	7	7	1	0	42.8	<1	1.8
54779	5271538	483917	56	12	21	23	34.4	573.00	3.6
54780	5272484	483589	28	15	5	8	38.0	4.00	3.0

TABLE 31-1 GEOCHEMICAL TILL SAMPLING PROGRAM 2011, SAMPLE DESCRIPTIONS

Platinex Inc. – Shining Tree Property, Ontario

Sample No.	Northing	Easting	Total Norm.	Round Norm.	Modified Norm.	Pristine Norm.	HMCwt	Assay M	2 mm Clasts
54781	5272954	482540	27	21	5	1	38.8	7.00	2.0
54782	5272734	485197	16	14	2	0	48.4	<1	1.6
54783	5273951	483048	7	6	1	0	50.8	2.00	3.9
54784	5273058	483331	23	19	3	1	34.4	5.00	3.5
54785	5274833	484350	11	10	1	0	33.6	1.00	3.1
54786	5274869	484722	22	17	4	1	38.4	6.00	2.6
54787	5271437	482937	70	15	24	31	40.8	19.00	1.9
54788	5271426	482570	30	5	13	12	39.6	21.00	2.8
54789	5269524	482585	110	98	10	2	36.8	44.00	4.2
54790	5269901	484319	17	13	4	1	41.6	1.00	1.9
54791	5269827	483634	4	4	0	0	44.4	0.00	1.5
54792	5269829	480998	14	9	2	3	47.6	<1	2.8
54793	5269837	481309	23	19	3	1	38.4	5.00	1.4
54794	5274717	483254	7	7	0	0	39.2	0.00	2.8
54795	5274726	483021	5	4	1	0	39.2	<1	1.1
54796	5274361	483318	6	4	2	0	38.8	5.00	3.0
54797	5271738	484320	18	13	4	1	46.0	18.00	4.1
54798	5271392	484130	5	3	1	1	40.8	2.00	3.5
54799	5274350	483570	6	6	0	0	43.6	0.00	2.1
5651	5273113	487583	5	5	0	0	40.0	0.00	3.7
5652	5272898	485747	21	10	4	7	39.6	2.00	2.0
5653	5269817	484315	23	11	6	6	37.6	3.00	2.1
5654	5270551	483632	4	1	1	2	39.6	<1	3.1
5655	5270425	483033	21	21	0	0	35.6	0.00	2.7
5656	5270473	483232	4	2	1	0	34.0	1.00	1.4
5657	5270456	481924	4	4	0	0	39.6	0.00	2.2
5658	5270812	481926	9	7	1	0	32.8	<1	2.1
5659	5270700	482006	9	6	3	0	35.2	2.00	1.6
5660	5270565	481795	3	1	1	0	30.4	3.00	4.2
5661	5272382	483879	3	2	1	0	42.0	1.00	2.2
5662	5273113	487785	11	9	2	0	51.2	24.00	2.0
5663	5272870	487864	4	3	0	1	36.4	0.00	4.9
5664	5272907	488007	9	8	1	0	38.4	<1	3.0
5665	5272741	487771	19	13	6	0	38.0	27.00	8.4
5666	5272378	488532	4	3	1	0	41.6	2.00	0.4
5667	5271921	484203	4	4	0	0	36.8	0.00	2.8
5668	5270705	481743	14	14	0	0	50.0	0.00	2.2
5669	5272637	485929	1	1	0	0	39.6	0.00	2.1

TABLE 31-1 GEOCHEMICAL TILL SAMPLING PROGRAM 2011, SAMPLE DESCRIPTIONS

Platinex Inc. – Shining Tree Property, Ontario

Sample No.	Northing	Easting	Total Norm.	Round Norm.	Modified Norm.	Pristine Norm.	HMCwt	Assay M	2 mm Clasts
5670	5272271	485321	13	8	2	3	57.6	2.00	1.1
5671	5272596	485202	19	14	3	2	40.0	1.00	1.8
5672	5270201	481158	1	1	0	0	37.2	0.00	2.6
5673	5269958	481067	19	6	4	8	43.2	3.00	1.1
5674	5272065	484064	23	19	1	3	30.8	1.00	2.5
5675	5271912	483992	25	15	4	6	40.0	1.00	0.7
5676	5270873	482330	17	15	0	2	38.0	0.00	2.2
5677	5272942	487337	8	7	1	0	41.6	15.00	1.3
5678	5273112	487232	4	4	0	0	28.0	0.00	3.9
5679	5272872	487061	41	38	0	2	36.4	0.00	2.6
5680	5272871	486933	28	23	3	2	75.2	6.00	1.7
5681	5273020	486940	8	6	1	0	32.0	3.00	3.0
5682	5272986	486807	10	3	3	3	36.4	1.00	2.6
5683	5272891	486398	12	8	4	0	29.9	22.00	3.6
5684	5272921	486567	8	5	2	1	33.2	5.00	3.4
5685	5272717	486535	17	9	4	3	48.0	3.00	1.5
5686	5271585	483057	12	6	4	1	31.2	1.00	3.4
5687	5271610	482912	9	9	0	0	32.8	0.00	3.5
5688	5271376	482324	20	18	2	0	38.0	101.00	0.9
5689	5271416	482438	0	0	0	0	40.0	0.00	0.5
5690	5271611	483919	11	8	0	2	34.0	0.00	3.0
5691	5271599	483725	7	6	2	0	43.6	1.00	0.7
5692	5273065	488506	3	1	1	0	32.0	3.00	2.4
5693	5272867	488463	16	14	2	0	36.8	5.00	2.2
5694	5272759	487448	4	4	0	0	38.8	0.00	1.1
5695	5272675	486098	26	17	8	2	50.4	19.00	3.5
5696	5272943	485904	26	24	2	0	38.0	<1	2.9
5697	5272974	486074	9	9	0	0	34.4	0.00	2.4
5698	5272711	486312	9	9	0	0	31.6	0.00	3.2
5699	5272913	486217	7	7	0	0	38.8	0.00	1.5
5700	5272631	486429	7	6	1	0	34.4	1.00	3.0
54089	5269265	481422	7	3	2	2	39.6	1.00	1.4
54090	5270824	483004	7	7	0	0	35.6	0.00	4.3
54091	5270991	482907	17	12	5	0	44.8	19.00	3.6
54092	5271213	482883	17	13	1	3	40.8	1.00	2.0
54093	5269486	481272	6	5	0	1	45.6	0.00	0.5
54094	5269904	481616	10	7	1	2	34.4	1.00	4.1
54095	5271429	483381	9	6	1	1	31.2	6.00	3.9

TABLE 31-1 GEOCHEMICAL TILL SAMPLING PROGRAM 2011, SAMPLE DESCRIPTIONS

Platinex Inc. – Shining Tree Property, Ontario

Sample No.	Northing	Easting	Total Norm.	Round Norm.	Modified Norm.	Pristine Norm.	HMCwt	Assay M	2 mm Clasts
54096	5271790	483511	7	6	1	0	42.4	<1	2.3
54097	5270015	480751	28	23	0	5	43.2	0.00	3.2
54098	5270030	481698	4	4	0	0	40.0	0.00	2.9
54099	5269719	481794	7	4	0	3	38.0	0.00	4.3
62201	5272208	484257	20	15	4	1	37.6	2108.00	2.9
62202	5271909	484342	5	3	0	2	44.0	0.00	1.4
62203	5271626	484306	24	17	2	6	43.6	2.00	1.7
62204	5271516	484160	18	12	4	3	31.2	4.00	4.3
62205	5271104	483752	13	8	3	1	38.0	5.00	3.7
62206	5271052	483276	16	10	5	0	38.4	1.00	2.8
62207	5270191	480891	9	8	1	0	35.2	<1	3.4
62208	5269903	480858	10	10	0	0	40.0	0.00	3.5
62209	5271447	483210	18	14	2	2	39.2	5.00	2.6
62210	5271294	483283	5	3	2	0	42.8	3.00	2.0
62211	5270031	482263	19	14	2	3	45.2	4.00	1.6
62212	5270941	481489	7	6	0	1	38.0	0.00	2.9
62213	5270797	481690	2	2	0	0	37.2	0.00	3.3
62214	5270651	481502	8	7	1	0	34.0	6.00	4.2
62215	5270600	481635	3	3	0	0	42.8	0.00	1.4
62216	5270379	481670	10	8	1	1	34.8	<1	6.6
62217	5271831	482290	5	3	2	0	42.4	2.00	1.8
62218	5271682	482413	3	3	0	0	44.0	0.00	3.1
62219	5271629	482504	4	4	0	0	39.2	0.00	1.3
62220	5271756	482672	2	2	0	0	40.4	0.00	2.2
62221	5271609	482767	7	2	3	2	38.0	1.00	2.3
62222	5271473	482661	26	21	3	2	40.0	1.00	4.8
62223	5271434	482730	2	2	0	0	39.6	0.00	2.6
62224	5271297	482727	15	12	2	1	53.2	2.00	3.6
62225	5270993	482720	13	13	0	0	41.6	0.00	2.1
62226	5270787	482741	6	6	0	1	43.2	0.00	2.6
62227	5269755	482010	18	16	1	1	34.8	2.00	3.0
62228	5270445	482165	13	12	1	0	37.2	<1	2.5
62229	5271237	483552	10	5	5	0	31.2	4.00	4.4
62230	5270609	482525	13	13	0	0	34.0	0.00	3.8
62231	5271368	483576	8	5	1	2	44.8	1.00	1.1
62232	5272446	484298	3	1	2	0	47.2	8.00	1.4
62233	5272527	484102	13	7	3	3	42.8	1.00	2.6
62234	5272651	483824	9	5	1	4	43.2	<1	1.9

TABLE 31-1 GEOCHEMICAL TILL SAMPLING PROGRAM 2011, SAMPLE DESCRIPTIONS

Platinex Inc. – Shining Tree Property, Ontario

Sample No.	Northing	Easting	Total Norm.	Round Norm.	Modified Norm.	Pristine Norm.	HMCwt	Assay M	2 mm Clasts
62235	5269771	482412	6	6	0	0	44.4	0.00	2.5
62236	5269605	482510	56	50	3	4	40.4	1.00	1.9
62237	5269691	482918	43	36	3	3	34.8	5.00	4.2
62238	5269937	482318	13	10	2	0	38.4	3.00	3.2
62239	5270377	482825	15	13	2	0	39.2	<1	2.8
62240	5272475	485522	7	5	2	0	50.4	<1	1.1
62241	5272623	485397	30	27	2	1	46.8	<1	3.3
62242	5272695	485702	33	29	4	0	40.0	20.00	3.0
62243	5272875	485588	3	3	0	0	40.0	0.00	1.8
62244	5269988	484095	7	3	2	1	36.0	2.00	3.5
62245	5269979	484288	6	5	0	2	24.8	0.00	6.2
62246	5270101	484128	8	6	2	1	48.4	1.00	0.5
62247	5272650	488517	8	8	0	0	34.4	0.00	3.5
62248	5272638	488338	16	12	1	3	57.2	<1	1.9
62249	5272776	488184	30	22	7	1	41.6	10.00	2.7
62250	5273162	487382	37	31	4	2	39.2	3.00	4.6
209301	5267808	482190	52	30	8	14	30.8	45.00	2.7
209302	5267814	482142	35	20	4	11	32.0	12.00	0.5
209303	5267812	482101	105	66	21	19	23.2	43.00	1.3
209304	5267818	482056	58	19	19	20	23.6	22.00	3.2
209305	5268215	482049	18	6	6	6	39.7	7.00	9.6
209306	5268222	482113	16	6	3	6	25.2	3.00	2.5
209307	5268244	482154	3	2	2	0	23.6	1.00	4.2
209308	5268270	482210	17	11	2	5	26.0	1.00	2.9
209309	5268251	482243	10	10	0	0	28.0	0.00	4.3
209310	5268230	482300	20	15	3	2	23.6	2.00	3.6
209311	5268201	482360	33	16	8	9	40.4	22.00	2.5
209312	5268201	482390	14	14	0	0	29.6	0.00	1.5
209313	5268204	482451	22	17	2	4	21.6	0.00	0.5
209314	5268239	482503	35	26	4	4	27.2	18.00	2.5
209315	5269804	480802	21	20	1	0	32.0	1.00	2.6
209316	5269850	480790	11	11	0	0	32.0	0.00	2.5
209317	5269923	480621	10	3	2	5	24.8	1.00	6.0
209318	5269851	480676	25	21	3	1	45.2	4.00	2.9
209319	5270350	480500	0	0	0	0	16.0	0.00	3.3
209320	5270352	480447	15	13	0	2	19.2	0.00	4.1
209321	5271334	483871	19	3	5	11	25.2	10.00	1.7
8201	5271437	482986	0	0	0	0	23.6	0.00	2.8

TABLE 31-1 GEOCHEMICAL TILL SAMPLING PROGRAM 2011, SAMPLE DESCRIPTIONS

Platinex Inc. – Shining Tree Property, Ontario

Sample No.	Northing	Easting	Total Norm.	Round Norm.	Modified Norm.	Pristine Norm.	HMCwt	Assay M	2 mm Clasts
8202	5271468	482978	6	3	3	0	27.6	5.91	3.3
8203	5271483	482943	6	5	2	0	24.8	0.98	3.1
8204	5271476	482888	9	9	0	0	27.2	0.00	3.4
8205	5271437	482888	12	10	1	0	27.2	3.00	3.9
8206	5271437	482809	18	12	3	3	37.2	8.01	1.9
8207	5271476	482809	6	6	0	0	31.6	0.00	2.8
8208	5271476	482710	6	5	2	0	26.4	0.92	2.2
8209	5271513	482705	9	9	0	0	34.8	0.00	2.7
8210	5271513	482661	10	9	1	0	32.0	11.66	4.7
8211	5271517	482630	24	22	0	1	28.8	0.00	2.7
8212	5270517	483333	14	10	0	3	23.2	0.00	3.0
8213	5270537	483360	10	9	2	0	23.2	8.28	3.1
8214	5270537	483384	8	8	0	0	31.2	0.00	1.8
8215	5270537	483409	21	15	5	0	29.2	32.32	3.0
8216	5270517	483434	7	3	3	0	23.6	30.61	2.3
8217	5271610	483869	4	3	0	1	30.4	0.00	1.8
8218	5271541	483913	37	21	8	9	36.4	25.58	2.4
8219	5271538	483968	35	24	5	6	32.0	14.73	1.0
8220	5271612	483969	14	10	1	3	28.4	6.77	0.8
8221	5271516	484320	7	6	1	0	28.4	2.87	2.3
8223	5271622	484246	2	0	2	0	21.2	17.60	4.0
8226	5271820	484204	5	5	0	0	23.6	0.00	3.7
8227	5271819	484155	7	5	2	0	22.8	8.43	3.5
8228	5271824	484100	0	0	0	0	28.4	0.00	4.2
8229	5267870	482050	4	3	1	0	55.2	1.92	0.3
8231	5267870	482150	144	69	49	25	22.0	770.82	4.1
8232	5267870	482200	8	7	1	0	38.0	2.15	0.2
8233	5267916	482021	16	12	4	0	20.4	0.87	2.7
8234	5267914	482064	4	4	0	0	27.2	0.00	1.6
8236	5267920	482175	4	0	3	1	28.0	3.78	1.1
8237	5267920	482225	1	1	0	0	30.4	0.00	1.9
8239	5268305	482144	11	11	0	0	26.4	0.00	3.1
8241	5268298	482101	8	1	5	2	34.0	11.17	0.9
8244	5268310	482200	2	2	0	0	22.0	0.00	4.8

Source: Huneault, 2011.

Notes: Total Norm: Total normalized grains; Round Norm: Rounded normalized grains; Pristine Norm: Pristine grains; HMCwt: Heavy mineral content in grams; Assay M: Calculated assay (g/t Au).

32.0 APPENDIX C

PROCEDURES FOR SAMPLE PREPARATION AND ASSAYS AT ALS CHEMEX LABORATORIES

FIRE ASSAY PROCEDURE – Au-AA23 and Au-AA24

Fire Assay Fusion

Sample Decomposition: Fire Assay Fusion

Analytical Method: Atomic Absorption Spectroscopy (AAS)

A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required in-quarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead.

The bead is digested for half an hour in dilute nitric acid. Hydrochloric acid is then added and the solution is digested for an additional hour. The digested solution is cooled, diluted to 7.5 ml with demineralized (distilled) water, homogenized and then analyzed by atomic absorption spectrometry.

International Units:

Routine Code	Rush Code	Element	Sample Weight (g)	Symbol	Detection Limit	Upper Limit
983	991	Gold	30	Au	5 ppb	10,000 ppb
99	1091	Gold	30	Au	0.005 ppm	10 ppm
494	1209	Gold	30	Au	0.005 g/t	10 g/t
3583		Gold	50	Au	5 ppb	10,000 ppb
3584		Gold	50	Au	0.005 ppm	10 ppm
3594		Gold	50	Au	0.005 g/t	10 g/t

American/English Units:

Routine Code	Rush Code	Element	Sample Weight (g)	Symbol	Detection Limit (oz/ton Au)	Upper Limit (oz/ton Au)
877	1977	Gold	30	Au	0.0002	0.3

ME-ICP41M

Sample decomposition is achieved with a nitric acid-aqua regia digestion. One portion of the sample digest is analyzed by ICP-AES for all elements except mercury. In order to obtain a low detection for mercury, a second portion of the sample digest is analyzed by flameless AAS.

Au-SCR21 (Screen Metallics Method)

The sample pulp (1,000 g) is passed through a 100 µ (Tyler 150 mesh) stainless steel screen. Any material remaining on the screen (+100 µ fraction) is retained and assayed in its entirety by the fire assay method with gravimetric finish, and reported as the **plus** fraction. The material passing through the screen (-100 µ fraction) is homogenized and two sub-samples are analyzed by the fire assay method with AAS finish (AA25 and Au-AA25D methods). The average of the two AAS

results is taken and reported as the **minus** fraction result. All three values are used in calculating the combined gold content of the **plus** and **minus** fractions. The gold values for both the +100 µ and -100 µ fractions are reported together with the weight of each fraction to calculate the total gold content of the sample.

ASSAY PROCEDURE – ME-AA46

Evaluation of Ores & High Grade Materials by Aqua Regia Digestion – AAS

Sample Decomposition: Aqua Regia Digestion

Analytical Method: Atomic Absorption Spectroscopy (AAS)

A prepared sample (0.4 to 2.00 grams) is digested with concentrated nitric acid for one half hour. After cooling, hydrochloric acid is added to produce Aqua Regia and the mixture is then digested for an additional hour and a half. An ionization suppressant is added if molybdenum is to be measured. The resulting solution is diluted to volume (100 or 250 ml) with demineralized (distilled) water, mixed and then analyzed by atomic absorption spectrometry against matrix-matched standards.

ALS Minerals Method Code	Element	Symbol	Detection Limit	Upper Limit	Units
As-AA46	Arsenic	As	0.01	30	%
Bi-AA46	Bismuth	Bi	0.001	30	%
Cd-AA46	Cadmium	Cd	0.001	10	%
Co-AA46	Cobalt	Co	0.01	50	%
Cu-AA46	Copper	Cu	0.01	50	%
Fe-AA46	Iron	Fe	0.01	30	%
Pb-AA46	Lead	Pb	0.01	30	%
Mo-AA46	Molybdenum	Mo	0.001	10	%
Mn-AA46	Manganese	Mn	0.01	50	%
Ni-AA46	Nickel	Ni	0.01	50	%
Ag-AA46	Silver	Ag	1.0	1500	ppm
Zn-AA46	Zinc	Zn	0.01	30	%

Geochemical Procedure – ME-AA45

Atomic Absorption Spectroscopy – Aqua Regia Digestion

Sample Decomposition: Nitric Aqua Regia Digestion

Analytical Method: Atomic Absorption Spectroscopy (AAS)

A prepared sample (0.50 grams) is digested with aqua regia for at least one hour in a graphite heating block. After cooling, the resulting solution is diluted to 12.5 ml with demineralized (distilled) water, mixed and analyzed by atomic absorption spectrometry. The elements arsenic, cadmium, cobalt, indium, lead, nickel, and silver are background corrected.

ALS Minerals Method Code	Element	Symbol	Detection Limit	Upper Limit	Units
Ag-AA45	Silver	Ag	0.2	100	ppm
As-AA45	Arsenic	As	1	10,000	ppm
Cd-AA45	Cadmium	Cd	0.1	200	ppm
Co-AA45	Cobalt	Co	1	10,000	ppm
Cu-AA45	Copper	Cu	1	10,000	ppm
Fe-AA45	Iron	Fe	0.01	15	%
Mn-AA45	Manganese	Mn	5	10,000	ppm
Mo-AA45	Molybdenum	Mo	1	10,000	ppm
Ni-AA45	Nickel	Ni	1	10,000	ppm
Pb-AA45	Lead	Pb	1	10,000	ppm
Sb-AA45	Antimony	Sb	5	10,000	ppm
Zn-AA45	Zinc	Zn	1	10,000	ppm