GEOLOGY AND PROSPECTING RESULTS FOR THE EAGLE LAKE PROPERTY. DRYDEN AREA, NORTHWESTERN ONTARIO

010 C

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## 1. INTRODUCTION

1.1 The Eagle Lake Property is located in northwestern Ontario, approximately 40 kilometers west of the town of Dryden and 2 kilometers south of the village of Eagle River. The claims as of April 1988 (Table 1 and Figure 1), lie within the latlitudes: $40^{\circ} 45^{\prime} 00^{\prime \prime}$ and $49^{\circ} 41^{\prime} 00^{\prime \prime}$ and longitudes: $93^{\circ}$ 05' $07{ }^{\prime \prime}$ and $93^{\circ} 14^{\prime \prime} 42^{\prime \prime}$.

Access to the property can be made via the Trans Canada Highway 17 and Highway 594 from Dryden to Eagle River. Boat access is necessary to many of the claims.

The property is relatively flat with the highest point of land reaching only 38 meters above the water level of Eagle Lake.

Vegetation is predominantly birch, poplar, balsam and spruce. Cedar stands are generally restricted to the central swampy areas of Farabout Peninsula. The distribution of tree types is displayed on Map No. 3 and 4 (back pocket).

### 1.2 REGIONAL GEOLOGY

The Eagle Lake Property lies within the Wabigoon Subprovince, a granite-greenstone belt separated from the English River metasedimentary rocks in the north by the Wabigoon Fault; and the metasedimentary rocks of the Quetico Subprovince, and by the Atikwa Batholith to the south. (Figure $2)$.

The Wabigoon Subprovince in the Eagle Lake area consists of four major geological units:

1. the Upper Wabigoon Volcanic Package - a predominantly pillowed mafic flow sequence showing a tholeiitic chemistry (Trowell, et al. 1980):
2. the Lower Wabigoon Volcanic Package - a mixed sequence of mafic and felsic flows and pyroclastics, with a mixed tholeiitic and calc-alkaline chemistry (Trowell, et al. 1980):
3. the Eagle Lake Volcanic Package - a tholeiitic. (Trowell, et al. 1980), massive to pillowed mafic volcanic flow sequence; and
4. the Atikwa Batholith - a pink to white biotite hornblende granite, syenite, granodiorite and diorite complex (Moorhouse, 1941).


Table 1. Ciaims That Make Uo The Eagie Lake Property As Of Aprii 1988, (Leonard 1988).

Claim $\quad$ Recorded $\quad$ Expires $\quad$| Assessment |
| :---: |
| Credits |

| 1003549 |  | 87/06/04 |
| :---: | :---: | :---: |
| 1003550 | 1 | 87/06/04 |
| 1003551 | 1 | 87/06/04 |
| 1003552 |  | 87/06/04 |
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| 1003555 |  | 87/06/04 |
| 1003556 |  | 87/06/04 |
| 1003557 |  | 87/06/04 |
| 1003558 |  | 87/06/04 |
| 1003569 |  | 87/06/04 |
| 1003570 |  | 87/06/04 |
| 1003571 |  | 87/06/04 |
| 1003572 |  | 87/06/04 |
| 1003573 |  | 87/06/04 |
| 1003574 |  | 87/06/04 |
| 1003575 |  | 98/06/04 |
| 1003576 |  | 87/06/04 |
| 1003577 |  | 87/06/04 |
| 1003578 |  | 87/06/04 |
| 1003691 |  | 87/06/10 |
| 1003692 |  | 87/06/10 |
| 1003693 |  | 87/06/10 |
| 1003694 |  | 87/06/10 |
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| 1003696 |  | 87/06/10 |
| 1003697 |  | 87/06/10 |
| 1003698 |  | 87/06/10 |
| 1003699 |  | 87/06/10 |
| 1003700 |  | 87/06/10 |
| 1007322 |  | 87/11/24 |
| 1007323 |  | 87/i1/24 |
| 1007324 |  | 87/11/24 |
| 1007325 |  | 87/11/24 |
| 1007326 |  | 87/11/24 |
| 1007327 |  | 87/11/24 |
| 1007328 |  | 87/11/24 |
| 1007329 |  | 87/11/24 |
| 1007330 |  | 87/11/24 |
| 1007331 |  | 87/11/24 |
| 1007337 |  | 87/12/09 |
| 1007338 |  | 87/12/09 |
| 851351 |  | 85/10/16 |
| 851352 |  | 85/10/16 |
| 851353 |  | 85/10/16 |
| 851354 |  | 85/10/16 |
| 882561 |  | 86/08/28 |


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| 88/11/24 | 0.00 |
| 88/12/09 | 0.00 |
| 88/12/09 | 0.00 |
| 91/10/16 | 200.00 |
| 90/10/16 | 170.00 |
| 90/10/16 | 170.00 |
| 91/10/16 | 200.00 |
| 92/08/28 | 230.00 |



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| $88 / 12 / 02$ | 20.00 |
| $88 / 12 / 02$ | 20.00 |
| $88 / 12 / 02$ | 20.00 |
| $89 / 01 / 06$ | 20.00 |
| $89 / 01 / 06$ | 20.00 |
| $89 / 01 / 06$ | 20.00 |
| $89 / 01 / 06$ | 20.00 |
| $89 / 01 / 06$ | 20.00 |
| $89 / 01 / 06$ | 20.00 |
| $89 / 01 / 06$ | 20.00 |
| $89 / 01 / 06$ |  |
| $89 / 01 / 06$ |  |

The Lower Wabigoon Package which underlies the Upper Wabigoon Package has been dated at 2734.8 Ma ; (a U-Pb zircon age determination - Davis et al. 1982). This Package overlies the Eagle Lake Volcanics, which have been dated at 2742.8 Ma . It has been intruded by the Atikwa Batholith dated, by a U-Pb determination on zircon, (Davis et al. 1982), at 2732 Ma .

The Eagle Lake Property is underlain by both the Upper and Lowter Wabigoon Volcanics.

## 1.3

REGIONAL MINERALIZATION
Most of the 41 gold properties in the Eagle Lake Wabigoon Lake area are found within the Lower Wabigoon Volcanic Package. Gold occurrences are however also found within the other rock packages of the area. Parker and Blackburn, 1986 have documented both structurally and stratigraphically controlled gold occurrences in the area. The structurally controlled occurrences fall into two categories: 1) shear zone hosted and 2) tension fracture hosted. The stratigraphically controlled gold occurrences are found in sulfide-rich, intermediate to mafic flows and associated pyritic interflow tuff and chert layers along the contact between Eagle Lake mafic flows to the south and Lower Wabigoon felsic flows and pyroclastics to the north, (Parker and Blackburn, 1986). The mineralization occurs with disseminated pyrrhotite and chalcopyrite within the mafic flows and with fine-grained pyrite disseminated throughout the chert. Microscopic sphalerite was identified within the pyritized mafic flows by Leaming (1948).

Shear zone hosted gold occurrences are characterized by narrow (<1 m) quartz veins containing disseminated pyrite, chlorite, iron carbonate, calcite, black tourmaline, specular hematite and accessory chalcopyrite and galena; occurring in all rock types and usually at all lithological contacts, (Parker and Blackburn, 1986). The gold is generally restricted to the quartz veins. In the Eagle Lake area shears generally strike between 040 and $060^{\circ}$.

Tension fracture hosted gold occurrences are concentrated in the Flambeau Lake area, 15 kilometers east of Eagle Lake. The mineralization is found in white northwest-trending quartz veins containing pyrite, iron carbonate and accessory chalcopyrite, sphalerite and galena; as well as in pyritic wallrock. Shallowly dipping tourmaline-bearing quartz veins striking $110-140^{\circ}$ also contain some gold (Parker and Blackburn, 1980).

Parker and Blackburn have suggested that both the tension-fracture and shear zone related occurrences are related to dextral movement along the Wabigoon Fault.

## 1.4

## PREVIOUS WORK

Work on the Eagle Lake Property began in 1900 and has been sporadic up to the present. The following work history is taken directly from Leonard 1988, and Smith 1981.

## HISTORY OF EXPLORATION

1
I. Swanson or Morning Star Occurrence

This material has been taken directly from a report by Smith (1987).

1900 A 57 foot deep shaft was sunk on the northern most exposed quartz vein (vein No. 1 in Smith's report). The ODM report (Vol. $x$, pg. 95, 1901) refers to "a highly schistose zone in green trap rock containing a few scattered quartz stringers of about a quarter of an inch in width". The shaft was sunk by George Swanson and partners.

1924 The Swanson claims were purchased by H.P. Prather and Associates. The shaft was cleaned out and retimbered in 1925.

1947 The property was examined by $R$. Thomson, resident O.D.M. geologist in Kenora. He collected samples from both the No. 1 and 2 veins and all yielded visible gold upon panning. Thomson reported that "the Vein was trenched from the shaft east to the lake, and near the lake it divides into two veinlets, each a few inches wide, and the intervening material is carbonatized".

1947

1947

1982

1985

Mr. Hawes drilled four diamond drill holes in the area of the shaft and intersected a five foot quartz vein 200 feet west and 150 feet south of the shaft.
F. Joubin of Pioneer Gold Mines drilled two DDH's parallel to previous drilling, intersecting a three foot quartz vein and a sulphide zone. Assay returns were reported to be negligible.

The Swanson gold occurrence was staked by Bruce Perry and optioned to Atikwa Resources Inc. A magnetic and VLF survey done in April 1983 defined the pyritic zone under the lake. A drill program was recommended but the claims were allowed to lapse.

Claims were staked by Alex Glatz of Dryden.


#### Abstract

Property optioned by International Platinum Corporation. An additional sixty three claims were staked by IPCO. A geophysical grid (68.5 miles) was established over the eastern claim group. Eleven drill holes totalling 5644 feet were drilled in the vicinity of the old shaft and grid west for a distance of 800 feet.

Total field magnetic and VLF-EM surveys were done on the eastern claim group. International Platinum Corporation drilled a further six holes on the Swanson prospect for a total of 2978 feet. A further thirty claims were staked to cover geophysical anomalies near Poplar Island, eleven km to the southwest. II. Poplar Island - North Twin Island - Farabout Peninsula Areas


## PREVIOUS WORK

1936 Erie Canadian Mines Ltd. performed geological mapping in the Fornieri Bay-Hardrock Bay area.

1939

1947-51

1947

1955 Steeprock Iron Ore Mines Ltd. performed a ground magnetic survey and a 2,460 foot diamond drill program in four holes on the north shore of North Twin Island. Commodity sought was iron (magnetite iron formation). No assay data is available. (GDIF 359. Buchan Bay Area).

Questor Surveys Ltd. flew an airborne EM (input) and total field magnetic survey for Freeport Canadian Exploration Co. in the area to the north of North Twin Island.

1973-75
Kamlo Gold Mines Ltd. carried out geological mapping ground total field magnetic, EM, IP and resistivity surveys int he Fornieri Bay-Poplar Island area. In 1975, the ground surveys were followed up by 910 feet of drilling in seven holes. Only two of the seven holes were analysed for gold, silver and copper.-

Selco Mining Corp. Ltd. carried out a small ground total field magnetic survey over the point of land just west of Fornieri Bay.

Gulf Minerals Canada Ltd. drilled four holes totalling 1,435 feet on Eagle Lake around the Farabout Peninsula (one of which is located on the present claim group). Drilling encountered pyrrhotite, pyrite, chalcopyrite and sphalerite in every hole. No assay data is available (GDIF 359 Buchan Bay Area).

Raleigh Minerals Ltd. were active in the Fornieri Bay-Hardrock Bay areas. They performed a selfpotential survey in 1981; diamond drilling in 1982/83; a second self-potential survey in 1983 and more drilling in 1985. A total of 2,614 feet was drilled in 12 holes in the two year period. Samples were analysed for gold and silver in all holes. (GDIF 359 Buchan Bay Area).

Geoterrex Ltd. , on behalf of the Ontario Geological Survey, flew an airborne EM (Geotem) and total field magnetic survey over the Dryden area as part of a regional program. Results were released in May of 1987.

In early 1987, a group of 29 claims was optioned from Mr. Alex Glatz of Dryden, and a group of 39 claims was optioned from Mr. Alex Kozowy, also of Dryden, Ontario.

### 1.5 CURRENT PROGRAM

Under the current program the Eagle Lake Property was mapped in detail and prospected for $\mathrm{Au}, \mathrm{Zn}, \mathrm{Pb}, \mathrm{Cu}$ and Ag during a two month period. Mapping was carried out on a 100 metre grid lines cut across the Farabout Peninsula, and along the shoreline.

During the mapping, the grid lines were surveyed into their correct locations with the use of 1982 , $1: 15,840$ scale air photographs. Outcrop location was determined by
rechaining the grid across Partridge Point and by pacing along the grid lines across the Farabout Peninsula using the remaining legible pickets and topographic features as aids. Claim or witness posts observed during the mapping were surveyed into their correct locations, (Map No. 3 and 4, Table 2).

1
Lithological identification was determined by conventional methods: (mineralogy, texture, volcanic features). The classification of fine grained volcanics, (free of carbonate), into mafic or intermediate categories were determined by conventional methods, in addition to their density. With the use of the heavy liquid sodium polytungstate, sample densities were checked with two standard density solutions (densities at 2.7 and 2.8). Under typical greenschist metamorphism, those samples that sink in both solutions were classified as mafic; those samples that sink in the 2.7 but floated in the 2.8 density liquid were classified into the intermediate category, (Carter, pers. comm.). The author feels that this method is more reliable than classifying the fine grained samples by color in an area which was undergone metamorphism and hydrothermal activity. This method was also found to be useful in distinguishing the fine grained flinty chilled gabbro borders from the flinty massive black chert and black massive rhyolite.

Geological data connected in the field was transferred onto a 1:5,000 scale map (Map No. 1 and 2, in back pocket). Samples were collected from quartz veins rusty shear zones, chert horizons and rhyolitic units across the property for assay. Samples of the other lithologies shoving disseminated sulfides were also collected for assay. Sample location is shown on Maps 3 and 4 (back pocket). A representative sample of all specimens assayed has been retained and is stored in the Toronto warehouse. A suite of representative lithologies has also been retained.

Tabie 2. List $0 f$ Ciaim or Witness Posts Observed In The Field Area.

| Map location number of post | Single post numbers | more than one post present | name on post |
| :---: | :---: | :---: | :---: |
| 1 |  |  |  |
|  |  |  |  |
| 1 | ${ }^{3} 959874$ |  | A. Kozowy |
| 2 | 3959767 |  | A. Glatz |
|  | 4959858 |  |  |
|  | 2959766 |  |  |
|  | 3959770 |  | A. Glatz |
| 3 | 2959755 |  |  |
| 4 | 7959774 |  | A. Glatz |
| 5 | ${ }^{3} 959769$ |  |  |
|  | 1959767 |  |  |
|  | 4959768 |  |  |
|  | 2959757 |  |  |
| 6 | $1959752$ |  | A. Glatz |
|  | 4959773 |  |  |
|  |  | $\begin{aligned} & 1959749 \\ & 4959750 \end{aligned}$ | A. Glatz |
| 7 | $1^{9} 59865$ |  | A. Kozowy |
| 8 | 1959765 |  | A. Glatz |
|  | 3959758 2959759 |  |  |
|  | 2959759 4959766 |  |  |
|  | 3959766 |  | A. Glatz |
| 9 | 4959749 |  |  |
| 10 | 2959750 |  | A. Glatz |
| 11 | 1959762 |  | A. Glatz |
|  | 2959761 |  |  |
|  | 4959762 |  |  |
| 12 | 3959761 |  | A. Glatz |
|  | 2959763 |  | A. Glatz |
| 13 | 4459524 |  |  |
|  | ${ }_{1}{ }_{4} 59525$ |  |  |
| 14 | 2959868 |  | A. Kozowy |
| 15 | 1497362 |  | A. Knapp |
|  | 4497359 |  |  |
| 16 | 4959880 | $3^{3} 998811$ |  |
|  |  |  | A. Kozowy |
| 17 | ${ }^{3} 959864$ |  | A. Kozowy |
| 18 | 2959864 |  | A. Kozowy |
| 19 | 3272318 |  |  |
| 20 | 2972322 |  |  |
|  | 1972322 |  |  |
|  | ${ }^{3} 972319$ |  |  |
|  |  | 2972320 |  |


| Map location numider of post | Single post numbers | more than one post present | name on post |
| :---: | :---: | :---: | :---: |
| 21 | ${ }^{3} 474864$ |  |  |
|  | ${ }^{1} 474868$ |  |  |
|  | 4474865 |  |  |
| 22 | 3959842 |  | E. Burden |
|  | 1959851 |  |  |
|  | 4959843 |  |  |
|  | 2959850 |  |  |
| 23 | ${ }_{2} 1050336$ |  |  |
|  | ${ }_{1} 1050337$ |  |  |
|  | ${ }^{1} 1050337$ |  |  |
|  | ${ }^{3} 1050335$ |  |  |
| 24 | 21050336 |  | D. MacEachern |
|  | 21050339 |  |  |
| 25 | 11050336 |  | D. MacEachernR. Kozowy |
| 26 |  | pile of posts: |  |
| 27 | $\begin{aligned} & \mathbf{3} 959861 \\ & \mathbf{2 9 5 9 8 6 0} \end{aligned}$ |  | A. Kozowy |
| 28 |  | $\begin{aligned} & \text { pile of posts: } \\ & 4959814 \\ & 3_{9} 959813 \\ & \text { i999821 } \\ & 29599822 \end{aligned}$ |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| 2930 | ${ }^{1} 959838$ |  | L. Burden |
|  |  | pile of posts: |  |
| 31 |  |  |  |
| 32 | ${ }_{1} 1050335$ |  | D. MacEachern |
| 33 | $4500188$ |  |  |
|  | $\mathbf{3}_{500175}$ |  |  |
| 34 | ${ }^{4} 959775$ |  | A. Glatz |
| 35 |  |  | A. Kozowy |
| 36 | $\begin{aligned} & 21007336 \\ & 3_{1} 1007338 \end{aligned}$ |  |  |
| 37 |  | pile of 10 posts | B. Leonard |
|  |  | $3_{1004402}$ |  |
|  |  | 21004402 |  |
|  |  | ${ }^{1} 1004402$ |  |
|  |  | ${ }^{4} 1004401$ |  |
| 38 |  | pile of posts: | A. Kozowy |
|  |  | ${ }_{1} 1007324$ |  |
|  |  | ${ }^{4} 1007328$ |  |
|  |  | 11007323 |  |
|  |  | ${ }^{1} 1007324$ |  |
|  |  | ${ }^{2} 1007322$ |  |
|  |  | ${ }^{1} 1007323$ |  |


| Map location number of post | Singie post numbers | more than one post present | name on post |
| :---: | :---: | :---: | :---: |
| 39 | $3_{1007328}$ |  | A. Kozowy |
| $40 \quad 1$ |  | pile of posts: $1_{972319}$ | A. Kozowy |
|  |  | 3959379 |  |
|  |  | 4972318 3959880 |  |
| 41 | $\begin{aligned} & 3_{840583} \\ & 1841901 \end{aligned}$ | pile of posts: 3841896 | Dowhaluk |
|  |  | ${ }^{4} 841901$ |  |
|  |  | 1841900 2841895 |  |
|  |  | ${ }_{4} 841897$ |  |
|  |  | 3841892 |  |
|  |  | ${ }^{3} 841893$ |  |
|  |  | ${ }^{4} 841898$ |  |
|  |  | 1841897 |  |
|  |  | 2841892 |  |

2. LITEOLOGIES AND FIELD RELATIONS

### 2.1 Property Stratigraphy

The current mapping program has indicated that the Eagle Lake Property is underlain by a series of mafic to intermediate and felsic volcanic packages, which are categorized by Parker and Blackburn 1987 into the Upper and Lower Wabigoon Volcanic Units (Figure 2).

Three intermediate to felsic volcanic packages separated by three mafic volcanic packages can be traced across the property (Map 1). The mafic units consist predominantly of massive to highly amygdaloidal and foliated flows, often pillowed and sometimes variolitic. The intermediate to felsic units consist of fine grained to medium grained, pillowed, amygdaloidal, fairly massive dacitic flows, dacitic quartz eye crystal tuff, quartz and plagioclase crystal to fragmental tuffs, lapilli tuff and agglomerate, massive dark grey to black rhyolite, quartz-eye rhyolite and rhyodacite.

Both the mafic and intermediate to felsic packages are penetrated by later generally unfoliated massive gabbroic sills.

A cross section (Figure 3) taken across the property from location (A) to (B) to (C) on Map 1 shows that much of the volcanic package forms a homoclinal sequence dipping and facing steeply to the north. Only toward the northern extent of the property are the rocks folded into two fairly tight isoclinal folds.

Late relatively thin mafic dykes trending northwest and dipping steeply north cut the intermediate to felsic volcanic rocks of Poplar Island.

Most of the rock on the Farabout Peninsula strike approximately $068^{\circ}$, however, near the western extent of the property the strike swings around to approximately 090, and in the eastern end of the property the foliation strikes $078^{\circ}$. The foliation and lithogoies strike $095^{\circ}$ on Poplar Island.

Contacts between lithological units are usually fairly sharp and are parallel to the general foliation. Contacts between the mafic and intermediate volcanics generally occur as rusty fissile shear zones, however, a layered type of contact characterized by layers of dacitic tuffaceous material approximately 8 cm thick, separated by mafic flow material of approximately the same thickness, was observed in two places. Direct contact relations between the gabbro and the volcanics were not well exposed. It is believed that they are, for the


most part, conformable with the surrounding volcanics since the surfact outcrop trends parallel to the local foliation.

Both the intermediate and mafic volcanic packages contain relatively narrow mafic and felsic to intermediate horizons which strike parallel to the local foliation. Felsic dykes with a variable trend cut the quartz-eye crystal tuffs on Farabout Peninsula.

### 2.2 LITHOLOGIES

2.2 (a) Mafic Volcanics

The mafic volcanic flows on the property range from being fine grained to medium grained, and very massive, showing little to no foliation; to very amygdaloidal and highly foliated. On average flows are approximately 6 m thick and characterized by a massive featureless base to a central fairly massive pillowed central section, to a highly foliated, amygdaloidal top; which may be pillowed and contain breccia. It appears that the vesicular flow tops were not as competent to the regional deformation event as the more massive and pillowed portions of the flows.

Vesicles within the mafic flows are almost always filled with Ca-carbonate and range in size from 1 mm to 4 mm .

Facing directions for the mafic flows were determined from well developed pillows. The pillows range from being relatively undeformed and roundish (Photo 1) to very slightly flattened (Photo 2 and 3) to very stretch (Photo 4), and brecciated (Photo 5).

The massive nature of the thicker flows which are fine to medium grained are in some cases especially near outlet Bay difficult to distinguish from the fine to medium grained gabbroic sills that penetrated them.

Variolitic pillowed mafic flows are fairly common across the property. The varioles are generally between 3 mm and 1 cm in size and may be deformed or stretched parallel to the foliation (Photo 6 and 7). In some cases these varioles are concentrated in the centers of the pillows. (Photo 8)


PHOTO 1: Round unstrained variolitic pillows within the mafic flows, located on an island near West Long Island


PHOTO 2:
Massive, slightly flattened mafic flows, near the northern massive sulfide showing, top toward the south.

PHOTO 3: Amygdaloidal, slightly flattened pillowed mafic flows strike $076^{\circ}$, dip 81 N . and top toward the north.


PHOTO 4: Stretched variolitic pillows within the mafic flows.


PHOTO 5: Altered pillows breccia penetrated by quartz and carbonate veinlets.


PHOTO 6:
Massive variolitic pillows within the mafic flows


PHOTO 7:
Large varioles (light grey in centre of photo) in the massive pillowed mafic flows which are elongate parallel to the general foliation.


PHOTO 8:
Variolitic pillowed mafic flows topping toward the south, near the northern massive sulfide horizon. Variables are concentrated toward the centre of the pillow.

Two variolitic marker horizons $0_{m}$ to 4 m thick can be traced across the Farabout Peninsula within the central intermediate volcanic package, (Map 1). The horizons are characterized by white to grey rhyolitic varioles 1 mm to 1 cm in size, wrapped around by a chlorite schist. The strain on the variols indicates that this rock unit has undergone both a compression and shearing type of deformation (Photos 9, 10, 11. 12 ). In some cases the varioles are so large and abundant that they have coalesced to form a massive rhyolite, (Photo 13), dark grey to black in colour.

Across the northwestern part of the Farabout Peninsula, the mafic volcanics are amphibolatized to the point of being a very hard amphibole-rich black rock.

Occasionally small outcrops of fine grained flinty mafic rock were encountered in the central to northern portion of the Farabout Peninsula. These are believed to be the chilled portions of the gabbroic sills, however, a baked mafic volcanic could also be represented by this lithology.

Thin fine grained dark green foliated mafic flows or dykes penetrate the central intermediate volcanic package. These are generally $1-2 \mathrm{~m}$ in width and are in sharp contact with the intermediate rocks.

A thin cherty breccia horizon 1 cm to $0_{\mathrm{m}}$ in width is a third marker horizon that can be traced from Swanson Island to Partridge Point and Line 42 on Farabout Peninsula. This thin horizon consists of a matrix of black chert containing angular white to pale mauve cherty shards, 2 mm to 6 mm in size, (Photo 14).

## 2.2 (b) Intermediate Volcanics

The intermediate volcanic rocks across the Farabout Peninsula consist predominantly of fairly massive quartz eye dacitic tuff. (Photo 15), interlayered with plagioclase and quartz crystal to fragmental tuff, (Photo 16). In outcrop the quartz-eye dacitic tuff looks very massive and breaks into large irregular pieces, (Photo 17 and 18), however a distinct foliation penetrates the rock and can be recognized when breaking the rock with the hammer. Locally this dacitic tuff is isoclinally folded - a feature the author has interpreted to be the result of soft sediment deformation, (Photo 19). Locally stretched mafic fragments or discontinuous sheared mafic flows or dykes occur, (Photo 20, 21), within the tuff unit.

Less common in the Farabout Peninsula but predominant in the Poplar Island Unit, are intermediate lapilli tuffs to agglomerates (22, 23, 24a, 24b).


PHOTO 9：
Variolitic marker horizon within the intermediate unit； characterized by cream coloured cherty to rhyolitic blebs wrapped by a chlorite matrix．Varioles are elongate parallel to the foliation．


PHOTO 10：Tiny but very numerous varioles within the chlorite schist of the variolitic marker horizons．

PHOTO 11：A less sheared and chloritized example of the variolitic marker horizon．


PHOTO 12 ：Vertical lineation to the rhyolitic varioles within the variolitic marker horizons．


PHOTO 13: Large grey rhylotic varioles which coalesced to form massive grey rhyolite associated with the variolitic marker horizon.


PHOTO 14: Chert breccia marker horizon on the Partridge Point of Farabout Peninsula.

## PHOTO 15：Blue quartz－eye crystal tuff



PHOTO 16：Quartz－Plagioclase Crystal－Fragmental Tuff

PHOTO 19 ：Soft－sediment deformational folding with the quartz－ eye crystal tuff


PHOTO 20 Mafic fragment within the quartz－eye crystal tuff．


PHOTO 22: Lapilli tuff to agglomerate unit within the intermediate horizon.

PHOTO 23：Lapilli tuff to agglomerate within the intermediate horizon．


PHOTO 24a：Large fragments within the agglomerate on Poplar Island


PHOTO 24b：Large zoned fragment within the agglomerate on Poplar Island．

The fragments that occur within this tuff are white, generally $1-10 \mathrm{~cm}$ in size, often pumaceous, rounded, and elongate parallel to the foliation (Photo 25). The fragments are all generally of the same lithology in the central intermediate unit while the lapilli tuff and agglomerates of the Poplar Island intermediate unit are composed of a number of lithologies and are much larger in size. Some of the larger fragments, reaching $80 \mathrm{~cm} \times 20 \mathrm{~cm}$ in size, are zoned around their edges (Photos 24a and 24b). The fragments again have a preferred orientation elongate parallel to the local foliation. The fragmental lapilli tuffs and agglomerates are coarser grained and more abundant toward the south.

The pillowed intermediate dacitic flows are not very extensive across the property. These horizons were observed in both of the intermediate units across the Farabout Peninsula. In both horizons the pillows were very amygdaloidal and had thin salvages (Photo 26 and 27). In some cases a well developed pillow breccia was observed at the top of the flows, (Photo 28).

Thin fine grained 0 to 1 metre wide intermediate dykes or thin flows are found within both the mafic and intermediate flows, trending parallel to the general foliation, (Photo 29). No chill zones were observed in these units.

Rhyodacitic horizons were observed in both the central intermediate horizon on Farabout Peninsula and on Poplar Island. These rocks are generally very massive contain less quartz eyes than the dacitic tuff but are more siliceous. These are not siliceous enough to be classified into the rhyolite category.

## 2.2 (c) Felsic Volcanics

The felsic volcanic rocks are found in the dacitic crystal tuffs and lapilli tuff of the intermediate units on both the Farabout Peninsula and Poplar Islands. These rocks are usually massive and often contain blue quartz-eye crystals, 1-2 mm in size.

Rhyolite can also occur as a light grey to black massive rock in close spatial association to the variolitic marker horizons found on Farabout Peninsula. This rhyolite is believed to be the result of the coalescence of the rhyolitic varioles into a massive rhyolitic horizon.

Rhyolite was also observed as relatively thin dykes or schlieren, - 1m in width, in close spatial association to intermediate dykes or horizons within the intermediate units.

[^0]The felsic agglomerates are found in, and as part of, the intermediate agglomeratic units, being somewhat more siliceous in nature relative to the intermediate unit. The fragments are white and generally pumaceous.

Gabbroic Intrusions
1
The gabbroic intrusions that cut both the intermediate and mafic metavolcanic rocks on the Farabout Peninsula are very massive to very weakly foliated, (Photo 30): range from being fine to coarse grained (Photo 31), and often contain medium to coarse grained leucogabbroic pods, o metre to several metres in size, within a darker gabbroic matrix. Some of the leucogabbro pods contain the blue quartz crystals.

## 2.2 (e) <br> Northwest Trending Mafic Dykes

A number of northwest trending mafic dykes, 0 to 4 metres in width, cut the intermediate to felsic rocks on Poplar Island. These dykes are generally massive, fine grained and lack a chill zone.

STRUCTURE
The cross-section (Figure 3) across the Property indicates that most of the volcanic package forms a homoclinal sequencing facing and dipping steeply to the north.

All rocks on the property except for the massive rhyolite on the Peninsula, the gabbroic sills and dykes, and to some degree the dacitic quartz crystal tuffs are strongly foliated. It appears that the amygdaloid mafic flow tops are generally the most strongly deformed. Most of the mafic and intermediate volcanics are in fact slately to schistose, in particular those on the Partridge Point, Poplar Island, and the north shore of Eagle Lake along the Farabout Peninsula. Those rocks displaying an excessive slately to schistose nature have been identified on Map 1 by the presence of an (s) after the lithologic abbreviation.

The foliation across the Farabout Peninsula strikes generally $068^{\circ}$ but swings around to 090 in the western and southwestern extent of the property; and swings around to $075^{\circ}$ in the eastern extent of the property around the Swanson Occurrence.


PHOTO 31: Coarse grained amphibole and plagioclase within the gabbro.

PHOTO 32：Small scale＂s＂within the mafic flows on Partridge Point．

Although a number of relatively small scale kink folds were observed throughout the area, (Photo 32), the lithologic units were traceable across the property, indicating that these folds have not affected the original stratigraphic sequence.

Only two fairly tight isoclinal folds were recognized in the Littleneck Bay - Outlet Bay area to the north of the property. These folds with horizontal to subhorizontal fold axes were delineated by facing directions on pillowed mafic flows. Although some foliations in the intermediate and mafic volcanics within the central portion of the Farabout Peninsula dip to the south; no facing directions were determined. Theses steeply southerly dipping rocks may represent light folding across the central part of the Farabout Peninsula or they could be the result of local adjustments to the emplacement of the gabboric sills.

Although most rocks in the area are highly foliated, regions of intense fissility include Partridge Point, Swanson Island, the south shoreline of Farabout Peninsula, and Poplar Island.

## 2.4 <br> ALTERHATIOX

All rocks in the area have been metamorphosed to at least the greenschist metamorphic grade; with local areas (around Littleneck Bay) reaching the amphibolite facies.

Along with the regional metamorphism, many of the rocks are also carbonatized with Ca-carbonate. Rocks showing excessive amounts of carbonatization are represented by a (k) symbol on Map 1.

A number of iron-carbonate shear zones ranging in width from o to 3 metres occur along the Farabout Peninsula south shoreline, and on Swanson Island and Poplar Island. These zones are easily recognized by their gossan type of appearance which is most likely a combination of both the iron-carbonate and increased pyrite content.

The primary or secondary nature of these zones is uncertain.

Mineralized shear zones are often characterized by a yellow colouration believe to be the alteration of pyrite.

## 2.5 <br> MINERAKIZATIOX

Under the current program the area was prospected for $A u, \mathrm{Zn}, \mathrm{Ag}, \mathrm{Pb}$ and Cu . Any rusty shear zones delineated by an (r) on Map 1, quartz veins, rhyolitic horizons or contact zones were sampled and assayed for the above elements.

Appendix 1 lists the assayed samples, the observed mineralization, a description of the each sample and the assayed values. All sample locations are displayed on Maps 3 and 4.

Two massive sulphide horizons were observed on the property, both occurring at contacts between the intermediate to felsic horizons and the mafic horizons. These sulphides consist of a fairly loosely consolidated pyrite, ranging from 5 cm to metre in thickness. These sulphide horizons are located: 1) on a small island in Littleneck Bay - (Maps 1 and 2), and 2) at the Swanson Occurrence at the eastern edge of the Property. (Photos 33 and 34)

At both sulphide showings the rock is sheared and displays a yellow powdery alteration product, (Photo 35). Pyritized pillow salvages are present at the Littleneck Bay Occurrence, (Photos 36 and 37).

Assay values of the northern massive sulphide is slightly enriched in $\mathrm{Cu}(30 \mathrm{ppm})$. $\mathrm{Pb}(65 \mathrm{ppm})$ and Zn ( 8 ppm ), over the local country rocks. The dark grey rhyolite or chert, spatially associated with this sulphide zone; that contains semi-massive pyrite; is more enriched in Au (30 ppb). Zn (260 ppm) and $C u$ (190) over the country rock.

Assay valves of massive sulphides from the Swanson Occurrence ranged in Au from (65, 70, 90 to 150 ppb ): Ag from (0.8 to 1.0 ppm ). Cu from (120, 140. 170 to 200 ppm ) and Zn from (29, 44. 80 to 230 ppm). The local altered shear zone is also enriched over the typical rocks of the area.

The highest Au valves obtained in this study were obtained from: 1) a sugary quartz vein on the Swanson Occurrence, (sample EL-88-442 at $0.29-0.33 \mathrm{oz} . /$ ton.) : 2) a rusty mafic flow (sample EL-88-380 at 380 ppb ) and 3) a massive grey intermediate sample EL-88-21 at 290 ppb. Rhyodocitic schist samples EL-88-608, 629 were also enriched at 120 and 170 ppb . The quartz vein on Poplar Island EL-88385 is also enriched in Au at 140 and 190 ppb. Sample EL-88466, an Fe-carbonate and rhyolite or chert horizon, is enriched in Au at 170 ppb as well as Ag at 3.0 ppm. The Poplar Island quartz vein sample EL-88-385 contains the highest Ag value obtained in this study at 5.8 ppm.


PHOTO 33: The northern massive sulfide showing located between black rhyolite to dacite and mafic pillowed flows in the Littleneck Bay area


PHOTO 34
Massive sulphide horizon located between the mafic flows above and the dacitic tuff below at the Swanson Occurrence.

PHOTO 35: Yellow alternation and extensive shearing accompanies the massive sulphide horizon on in the Morning Star area.


PHOTO 36: Altered pillows with pyritized salvages and yellow staining in the Littleneck Bay massive sulphide showing.


PHOTO 37:
Yellow staining and pyritized pillow salvages (a tip of hammer head) at the Littleneck Bay massive sulphide showing.

The highest $C u$ assays in this study were obtained from a quartz vein on the Islands west of the Swanson Occurrence and in rusty shears in the mafic flows: (samples EL-88-611, 134 and 234 assaying at 3800,1400 and 2000 ppm respectively). A rusty quartz vein, located on an island west of the Kozowy option (sample EL-88-413), assayed at 1900 ppm Cu.

The highest $\mathbf{P b}$ assays observed in this study were obtained from the northern massive sulphide: (sample EL-88115a, assaying 65 ppm Pb). Sample EL-88-90a - a semi-massive sulphide from the Kozowy Option, assayed at 32 ppm Pb .

The highest Zn values came from the quartz vein on Poplar Island represented by samples EL-88-466 and EL-818385, assaying at 2.1 and $1.1 \% \mathrm{Zn}$ respectively. Increased Zn values were observed on the Kozowy Option in both the rhyolite, rhyodacite, and quartz veining and semi massive sulphide. The massive sulphides and rhyolites and rhyodacite are enriched over the mafic flows.

A number of tourmaline bearing quartz veins (Photo 38) were assayed also but the results were not encouraging, (sample EL-88-56).

The Fe-carbonate with rhyolite or chert (Photos 39 and 40), show slightly increased assay values in Zn , (example same EL-88-470 and 480) on the Partridge Point.

Some of the quartz veins within the thick central intermediate horizon on the Farabout Peninsula contain a plately submetallic, hard, mineral believed to be wolframite. The identification of this material, best exposed in a pit on Line 31, 50 meters south of the tieline $16+00$; has yet to be confirmed.

The pyrrhotite - bearing amphibolite shows only a slight enrichment in Cu and Zn , with the highest values reaching 180 ppm Cu and 62 ppm Zn , (samples EL-88-116 and -99 respectively.


PHOTO 38:
Tourmaline (grey area to the left of hammer) in quartz vein on the south shore of Farabout Peninsula.

PHOTO 39: Fe-carbonate gossan on West Long Island.


PHOTO 40: Fe-carbonate gossan shear zone on Partridge Point.

## 3. CONCLUSIONS AND RECOMMENDATIONS

The Eagle Lake Property is underlain by mafic and intermediate to felsic flows and volcanoclastic tuffs, penetrated by felsic, intermediate and mafic dykes and gabbroic sills. Most of the volcanics are highly foliated an in somef cases sheared. Generally the volcanic rocks form a homoclinal sequence steeply dipping and facing toward the north. The only significant folding occurs as two fairly tight isoclinal folds with horizontal to subhorizontal fold axes in the Littleneck-Outlet Bay area; leaving the lithologic units traceable in an east-west direction over the entire property. Several marker horizons indicate that the stratigraphy has not been adjusted by the deformational events.

The mafic - intermediate volcanic contract found at the Swanson Occurrence can be traced across the Farabout Peninsula to the Kozowy Option on the western side of the Peninsula. The massive sulphide horizon found at the Swanson Occurrence most likely extends across to the Farabout Peninsula, as massive sulphide boulders were found on the south shore of Partridge Point. Although the same sheared contact with the Yellow alteration was observed on the Kozowy Option, (Photo 41), as was found at the Swanson Occurrence: the massive sulphide was not observed. Perhaps the sulphide zone may pinch and swell as do the quartz veins that are also found in the area. The chert that is spatially associated with the sulphide horizon at the Swanson Occurrence was observed on Swanson Island, at Partridge Point, and at Line 42 on the Peninsula. Tracing the lateral extent of this horizon is of interest, not only for the sulphide, but also for the goldbearing quartz veins which appear to parallel the contact. It is therefore recommended that stripping be carried out across this zone of interest at two locations on the Farabout Peninsula: 1) along line 58 and 2) between line 25 and 26 along the shore. Both sulphide-rich rocks and all quartz veins, (especially the veins with the sugary texture), should be assayed for $\mathrm{Pb}, \mathrm{Zn}, \mathrm{Cu}, \mathrm{Ag}$ and Au .

[^1]It is also recommended that stripping be done on the northern massive sulphide horizon in the Littleneck Bay area, to trace its lateral extent, to the east onto the neck portion of the Peninsula. Pyritic chert or rhyolite was observed on the wegtern side of the island on which the showing occurs.
,
The third area of interest is the quartz vein on the eastern side of the northwestern tip of Poplar Island. This vein is relatively rich in $\mathrm{Au}, \mathrm{Ag}, \mathrm{Cu}, \mathrm{Pb}$ and Zn . This vein was traced onto the mainland portion of the Island in this study. The lateral extent of this vein should also be check by stripping.

The Fe-carbonate shear zones that occur along the south shore of the Peninsula, in the Swanson Island area and at the Swanson Occurrence, tend to be slightly enriched in Zn and Cu.

Sample EL-88-27, -21, -22 and the boulders -456 determines a zone on the south shore of Partridge Point enriched in Au. The lateral extent of this zone to the west should be explored.

Lastly the quartz veins containing the hard, submetallic, mineral found in the intermediate - mafic contact area should be assayed for tungsten, and its identification as wolframite should be confirmed, (ie sample EL-88-271 a,b,c.

## CERTIFICATE

The following report and accompanying map was written and prepared by D.M. Conrod, a contract geologist employed by International Platinum Corporation for a four-month duration to conduct a study of the Eagle Lake Property from June to October 1988.

The author is currently a practising geologist, holds a B. Sc. degree from Dalhousie University, Nova Scotia, and a M.Sc. degree from the University of Toronto, Ontario.

All field mapping and sample collection for this study was carried out by the author.

Debian M. Corrode
Deb M. Conrad
Geologist
Toronto, June 5, 1989


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## APPENDIX 1:

Summary of Grab Samples


$\begin{array}{ll}- & - \\ - & \\ - & \\ - & \end{array}$




戸




| -421 | rusty | rhyolitle achist | 5 | $<0.2$ | 19 | <2 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -420 | py along follation planes $1 \times 1 \mathrm{~mm}$ | nrhyodacitic schist | 20 | 0.4 | 21 | 30 | 14 |  |
| -417 | rusty | rhyodacitic schist | 8 | $<0.2$ | 98 | $<2$ |  |  |
| -416 | dice py | quartz eye rhyodacite | <8 | $<0.2$ | 12 | <2 |  |  |
| -415 | dias py $1 / 2 \mathrm{~mm}$ | massive rhyodacite | < | 0.2 | 17 | <2 |  |  |
| -414 | py ( $1 / 2 \mathrm{~mm}$ ) <br> and magnetite | yellow altered rhyodacitio echist | < 6 | $<0.2$ | 8 | <2 |  |  |
| -413 | $1 / 2 \mathrm{~cm}$ blebs of | rusty quartz voin | 68 | 0.2 | 1800 | $<2$ |  |  |
| -412 | cpy, po, py dise py. po along foliation planes | quartz vein with cone wall rook | 8 | <0.2 | 78 | <2 | 14 |  |
| -411 | 1/2 cm blebs of py and po ahd along fracturas | carb vein in dacitic achist | 5 | $<0.2$ | 45 | <2 | 13 |  |
| -410 | - | felsio olast in the agelomerate (oa fllled amygdules) | <6 | $<0.2$ | 87 | <2 |  |  |
| -409 | ruaty | quarte vein with tourmaline and flakey chlorite | 45 | - | - | - | - |  |
| -408 | rusty | quartz vein with tourmaline and chlorite | 8 | - | - | - | - |  |
| -486a | py | masaive aulfide bolder | 45 | 0.4 | 18 | <2 |  |  |
| -486b | py | masaive sulfide bolder | 170 | 0.6 | 18 | <2 |  |  |
| -406 | rusty | rusty sugary quartz veln |  |  |  |  |  |  |
| -405 | rusty | rusty sugary quartz vein | <8 | - | - | - | - |  |
| -404b | rusty | rusty augary quartz veln | <8 | 0.4 | 3 | <2 | 2 |  |
| -404a | - | quastz ey chlorite echist | < 8 | 0.6 | 130 | <2 | 10 |  |
| -480 | - | quartz eye rhyodacite | - | - | - | - | - |  |
| -461 | - | quartz eye rhyodocite | - | - | $\overline{-}$ | 5 |  |  |
| -462 | py + cpy in fractures and blebe | altered quartz - eye rhyodeoltic schist | 40 | 1.2 | 22 | 50 | 76 |  |
| -463 | - | chert horizon | <8 | 0.2 | 82 | $<2$ | 2 |  |
| -484 | - | cherty brecela | 5 | 0.2 | 79 | $<2$ | 7 |  |
| -483 | - | altered mafic dyke | < 8 | 0.2 | 36 | $<2$ | 18 |  |
| -488 | ga, cpy, py | fe-carb and quartz voin | 170 | 3.0 | 210 | 150 | >8000 | 2.1* |
| -487 | minor rusting | sugary quartz vein | 10 | <0.2 | 11 | <2 | 3 |  |
| -408 | - | sugary quartz vein with minor rusty upots | <5 | <0.2 | 4 | $<2$ |  |  |
| -469 | py and po in $1 / 4 \mathrm{~cm}$ blebs and dina throughout | quart\% eyo rhyolite | < 5 | 0.2 | 8 | 230 | 3 |  |
| -470 | rusty | yuarte vain and | < 8 | <0. 2 | 23 | $<2$ | 11 |  |




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| :--- | :--- |
| - |  |
| - |  |
| - |  |
| - | $\quad 1$ |





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## APPENDIX II

## Assay Certificates



2-302-48th STREET, EAST SASKATOON, SASKATCHEWAN S7K 6 A4 (O) (306) 931-1033 FAX (306) 242-4717

## CERTIFICATE OF ANALYSIS

International Platinum Corporation Suite 2304 - 150 King street West Toronto, Ontario M5H 1J9


SAMPLE(S) FROM

REPORT No. S5415

INVOICE \#: 9982
P.O.:
D. Conrod

Project Eagle Lake


oN. BUAGENER TECHNCML ENTERPRISES LINTED
2-302-48th STREET, EAST

## CERTIFICATE OF ANALYSIS

SAMPLES) FROM
International Platinum Corporation Suite 2304 - 150 King Street West Toronto, Ontario M5H 1J9

SAMPLES) OF ROCK
INVOICE \#: 9982
POO.:

## D. Conrod

Project Eagle Lake

## Au <br> pp

- EL-88-376
$<5$
EL-88-139 <5
EL-88-225 <5
EL-88-181
$<5$
EL -88-222B
<5
EL-88-68
<5
EL -88-221 <5
EL-88-160
<5
EL-88-6 20
- 

COPIES TO: J. Truster, L. Burden INVOICE TO: Int. Platinum, Toronto

- For enquiries on this report, please contact Customer Service Department.

Samples, Pulps and Rejects discarded two months from the date of this report.

TSL LABORATORIES
OV. GURGENER TECGMCAL ENTERFPASES LMMTED
2-302-48th STREET, EAST SASKATOON, SASKATCHEWAN STK 6A4 (O) (306) 931-1033 FAX: (306) 242-4717

## CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM
International Platinum Corporation Suste 2304 - 150 King Street West Torionto, Ontario M5H 1J9


REPORT No. S5414

INVOICE \#: 9981
SAMPLE(S) OF ROCk
P.O.:
D. Conrod

Project Eagle Lake

EL-88-100
EL-88-395
EL-88-394
EL-88-396
EL-88-480
EL-88-479
EL-88-478
EL-88-476
EL-88-477
EL-88-475
Au
ppb
$<5$

| $<5$ | -0. |
| ---: | ---: |
| $<5$ | 0.5 |
| $<5$ | 0.2 |
| $<5$ | 0.2 |
| 5 | 0.4 |

65
19
22
3


| $<5$ | $<.2$ | 6 |
| ---: | ---: | ---: |
| $<5$ | $<.2$ | 54 |
| $<5$ | $<.2$ | 5 |
| 10 | $<.2$ | 170 |
| 5 | $<.2$ | 250 |



EL-88-474
EL-88-473
EL-88-472
EL-88-471
EL-88-470
EL-88-469
EL-88-468
EL-88-466
EL-88-467
EL-88-465
$<5$
$<5$
$-<-$
$<5$
$<5$
$<5$
$<5$
170
10
$<5$
$<.2$
$<.2$
.--
0.2
$<.2$
0.2
$<.2$
3.0
$<.2$
0.2

| 7 | $<2$ | 69 |
| ---: | ---: | ---: |
| 5 | $<2$ | 54 |
| --2 | $<2$ | --2 |
| 140 | $<2$ | 110 |
| 23 |  |  |
|  | 230 | 38 |
| 8 | $<2$ | 7 |
| 4 | 150 | $>5000$ |
| 210 | $<2$ | 38 |
| 11 | $<2$ | 150 |

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Aug 31/88

2-302-48th STREET, EAST SASKATOON. SASKATCHEWAN

S7K GAM
(3) (306) 931-1033 FAX: (306) 242-4717

## CERTIFICATE OF ANALYSIS

SAMPLES) FROM
International Platinum Corporation Suite 2304 - 150 King Street West Toronto, Ontario M5H 1J9

SAMPLE(S) OF ROCk

REPORT No. S5414

INVOICE \#: 9981
PrO.:
D. Conrad

Project Eagle Lake

- EL-88-464

EL -88-462
EL-88-460
EL-88-461
EL-88-463
EL-88-404A

| Au |  |  |  |  |
| ---: | :--- | ---: | ---: | ---: |
| pp | Ag | ppm | Cu <br> ppm | Pb <br> ppm |
| 5 | 0.2 | 79 | Zn |  |
| ppm |  |  |  |  |

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SIGNED


- For enquiries on this report, please contact Customer Service Department.

Samples, Pulps and Rejects discarded two months from the date of this report.

TSL LABORATORIES
diN. bufgener technical enterprises lated
2-302-48th STREET. EAST SASKATOON, SASKATCHEWAN S7K GAM (3) (306) 931-1093 FAX: (306) 242-4717

| SAMPLE(S) from | International Platinum Corporation <br> Suite 2304-150 King Street West <br> Toronto, Ontario <br> M5H 1J9 |
| :--- | :--- |

REPORT No. S5416

INVOICE \#: 9975
PrO.:
D. Conrad

Project Eagle Lake


COPIES TO: J. Trusler, L. Burden INVOICE TO: Int. Platinum, Toronto

Aug 31/88
SIGNED



2-302-48th STREET, EAST SASKATOON. SASKATCHEWAN

CERTIFICATE OF ANALYSIS

| $-\quad$ SAMPLE(S) FROM | International Platinum Corporation <br> Suite 2304 - 150 King Street West <br> Torfonto, Ontario <br> M5H 1J9 |
| :--- | :--- |

SAMPLE(S) OF ROCK
INVOICE \#: 9975 P.O.:
D. Conrod

Project Eagle Lake

- EL-88-455

EL-88-454
EL-88-437

- EL-88-405

EL-88-434
EL-88-428
EL-88-432
EL-88-435
EL-88-404B

Au
$\mathrm{Au} \quad \mathrm{Ag}$
ppm

| $<5$ | $<.2$ |
| :--- | :--- |
| $<5$ | 0.4 |
| $<5$ | 0.2 |
| $<5$ | .-- |
| $<5$ | 0.2 |

0.2
0.4
0.4
0.4

Cu
ppm


REPORT No. S5416

TSL LABORATORIES
div. buagentr technical enterprises limited

## CERTIFICATE OF ANALYSIS

SAMPLES) FROM
International Platinum Corporation Suite 2304 - 150 King Street West Toronto, Ontario M5H 1J9


> REPORT No. S5417

INVOICE \#: 9974
PoO.:
D. Conrad

Project Eagle Lake


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CTR


2-302-48th STREET. EAST SASKATOON, SASKATCHEWAN

CERTIFICATE OF ANALYSIS


SAMPLE(S) OF Rock
INVOICE \#: P.O.:
D. Conrod

Project Eagle Lake
-


- EL-88-440

EL-88-442
EL-88-441

- EL-88-401

EL-88-443

- EL-88-438

EL-88-400

Ag
ppm
0.2
0.4
<. 2
<. 2
<. 2
$<.2$
$<.2$

Cu
ppm
38
4

20
6
22
2
94
3

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- For enquiries on this report, please contact Customer Service Department.


2-302-48th STREET, EAST

## CERTIFICATE OF ANALYSIS



- SAMPLES) FROM | International Platinum Corporation |
| :--- |
| Suite 2304-150 King Street West |
| Toronto, Ontario |
| MEH 1J9 |

SAMPLEIS) OF Rock

International Platinum Corporation Suite 2304 - 150 King Street West Toronto, Ontario M5H 1J9

REPORT No. S5447

INVOICE \#: 9987
PrO.:
D. Conrad

Project Eagle Lake


COPIES TO: J. Truster, L. Burden INVOICE TO: Int. Platinum Corp., Toronto
$\qquad$

TSL LABORATORIES
ON. QURGENEA TECHNICAL ENTERPRISES L MATED
2-302-48th STREET, EAST SASKATOON, SASKATCHEWAN SK GAM
(3) (306) 931-1033 FAX: (306) 242-4717

## CERTIFICATE OF ANALYSIS

International Platinum Corporation Suite 2304 - 150 King Street West Toronto, Ontario MEH 1J9

SAMPLE(S) OF ROCk

REPORT No. S5447

INVOICE \#: 9987 P.O.:

## D. Conrad <br> Project Eagle Lake

- EL-88-633

EL-88-620
EL-88-628
EL-88-622
EL -88-621
EL-88-605
EL-88-618
EL-88-627
EL-88-626
EL-88-631
EL-88-619

- EL-88-614
<5
<5
<5
$<5$
<5
$<5$
$<5$
<5
<5
<5

Ag
ppm
<. 2
$<5$
Au pp
$<5$
14
200
Cu
ppm

Pb
ppm
$<2$
$<2$82

Zn ppm 82 110
<.2 41
140

34
180
160

5
340
120
<2
130
<2
<2

COPIES TO: J. Truster, L. Burden
INVOICE TO: Int. Platinum Corp., Toronto

Aug 31/88
SIGNED


## $\omega 8901.00150$

Minustry of
Northern Develo: : e. and Mines

## Report of Work

(Geophysica!, Geological. Geochemical and Expenditu

212552



Credits Requested per Each Claim in Columns at right


Expenditutes (excludes power strippingi


## Insiruetions

Tota: Days Ciedits may be apportioned ar the cisim. hotap: 's choice Enter numher ol davs credits pm clamseicter: on colcmoss al rigrt


Mining Claims Traversed (List in numerical sequence)



Certifica: on Veifying Repori of Mork


varme and Posial Aoriress of Person Cerlity.rip
Catherine Beckett, Suite 2304, Sun Life Touver, Box 30.150king it W To.onto, MSH 159
Done $2 / \beta_{1}$ Calk Bectut

|  | CLAIM |
| :--- | :--- |
| PREFIX | NUMBER |

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CLAIM
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| Tocorded holdor | INTERMATIONAL PLATINUM CORPORATION |
| :--- | :--- |
|  | AUBREY AND TEMPLE TOWNSHIPS, AND BUCHAN BAY AREA. |


| Type of survey sod number of Alovespment doys anedis per doim | Mining Cluins Amened |
| :---: | :---: |
| Geophysical |  |
| Electromegnetic __________deys |  |
|  | See attached list of claims. |
| Pediomerric____deys |  |
| Inctuond polerization _______________Celers |  |
| Other___deys |  |
|  |  |
| Geological 12.6 _dern |  |
| Geochemical ________________ders |  |
| tasn cove $\square$ airborme |  |
| Species provision [ $\mathbb{\square}$ |  |
| 18. Credits have been reduced beciuse of periin covergge of elaims. |  |
| Credies mave been redveed beenuse of comections to mork daves and figures ef apolicent. |  |

Special eredits under section 77 (16) for the following mining elaims

## No credits have been allowed for the following mining daims

mot mitheciently conened by the emvery$\square$ inenticion sectmient ctate fired

 Ministry of and Mines

File

# TO DE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT FACTS SHOWN HERE NEED NOT BE REPEATED IN RETORT TECHNICAL REPORT MUST CONRAD INTERPRETATION, CONCLUSIONS ETC. 

Type of Survey(s)_Geological
Township or Area Aubrey Twee, Temple Twp., Buchan Bay Cham Holder(z) International Platinum Corporation

Survey Company lo-house
Author of Report Deborah Craned
Address of Author Suite $230 y, 30 \times 30,150$ King St W, Toronto Covering Dates of Survey June 21,1988 to Oct, 1, 1988
Total Miles of Line Cut


AIRBORNE CREDITS (Special provision credits do not apply to imborme surveys) Magnetometer Electromagnetic Radiometric (ember days per chin) DATE: June 1/85 SIGNATURE:


Previous Surveys


## MiNING CLATAS TRAVERSIBD List numerically

see attached (prefix)
(

EEC. ElY ED
$1691<889$
ML:MIS LARDS SECTION


Mining Lands Section 880 Bay Street, 3rd Floor Toronto, Ontario NES 178

Telephone: (416) 965-4888

September 12, 1989
Your file: M8901-150 Our File: 2.12552

Mining Recorder
Ministry of Morthern Development and Mines 808 Robertson Street
P.O. BOX 5200

Kenora, Ontario
P8N 3X9

Dear Sir:
Re: Notice of Intent dated August 9, 1989 for Geological Survey submitted on Hining Claims K 959749 et al in Aubrey and Temple Townships, and Buchan Bay Area.

The assessment work credits, as listed with the above-mentioned Motice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

## M.R. Comian <br> Provinctal Manager, Mining Lands Mines $\&$ Minerals Division

LS:eb
Enclosure
$\begin{array}{ll}\text { cc: Mr. G.H. Ferguson } & \text { Resident Ceologist } \\ & \text { Mining and Lands Comissioner } \\ \text { Toronto, Ontario } & \end{array}$
Intermational Platinu Corporation
Suite 2304 Sun Life Tower
Box 30, 150 King Street $\boldsymbol{M}$.
Toronto, Ontario
M5H $1 \mathrm{J9}$

ONTANO EEOLOGICAL SUPVEY
ASSESSMENT FILES OFFICE

SEP 131989
RECEIVED
$2.12552$




District of Kenora
KENORA MINING DIVISION
Scale - 40 Chains $=1$ Inch



## EAGLE







EAGLE










[^0]:    PHOTO 29：Intermediate dyke penetrating the mafic flows．

[^1]:    Yellow stained and very sheared contact between mafic flows to the north and dacitic tuffs to the south，on the Kozowy option on the western side of Farabout Peninsula．

