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PRELIMINARY EVALUATION OF THE ECONOMIC POTENTIAL ON THE OSWAY PROPERTY ESTHER AND OSWAY TOWNSHIPS

Porcupine Mining Division Sudbury District, Ontario N.T.S.:41-0-9

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April 1988

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#### 1.1 INTRODUCTION

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The Osway Property consists of two separate claim groups located in northwest Osway Township and northeast Esther Township, in the southern part of the Swayze greenstone belt, approximately 115 kilometers southeast of Timmins, Ontario (Figure 1). The area has a long history of exploration for base metals and gold, and numerous occurrences of both are documented. Recent exploration, which began in earnest in 1980, is focused towards gold as the Jerome Mine, the largest past producer of gold in the Swayze area, is situated only 5.5 kilometers east along trend from the Osway Property. Ongoing re-evaluation of the Jerome Mine has created widespread renewed interest in the area, for both its gold and polymetallic massive sulphide potential. Encouraging preliminary results have been reported from several active properties located in the vicinity of the Osway Property. Access to the property is excellent as a major logging road cuts through the center of the main claim group. Companies currently active in the Osway Township area include Jerome Gold Mines Corp., Muscocho Exploration Ltd., McNellen Resources Ltd., Hargor Resources Ltd., Grandad Resources Inc., Tonopah Resources plus several more.

The writer was asked to compile and evaluate existing data for the area and to assess the potential of the Osway Property for gold mineralization. The following report describes the property, summarizes the results of past and current exploration activities on and adjacent to the property, outlines the features of economic interest and presents an exploration strategy designed to effectively evaluate the economic potential of the claim group.

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# 1.2 SUMMARY AND RECOMMENDATIONS

The Osway Property consists of two separate claim groups comprising 59 unpatented claims plus an additional 5 "Filed Only" claims for a total of 64 claims located in northwest Osway Township and northeast Esther Township. The Osway group consists of 49 unpatented claims plus the 5 "Filed Only" claims and is located in northwest Osway Township. The Esther group consists of 10 unpatented claims straddling the Esther-Osway Townships boundary, 400 meters north of the Osway group (Figure 2). The 5 "Filed Only" claims represent fractions discovered on the east boundary of the Osway group while staking. Their status will remain in question until a claims inspection can be carried out.

The property is situated on the southeast arm of the Swayze greenstone belt in Northeastern Ontario. The area was prospected initially for iron in the early 1900's and for gold initially between 1928 and 1933. At that time, several discoveries were made in Esther, Mallard and Huffman Townships. Gold was discovered on Jerome Point in 1938 and considerable prospecting continued until 1943. With the exception of the Jerome property, gold exploration in the area was virtually idle until 1980. Since 1980, exploration activities in the area have gradually increased. Recent work by Jerome Gold Mines Corp., Muscocho Exploration Ltd., and McNellen Resources Inc. on the Jerome Mine property has resulted in renewed interest and activity which is just now being recognized.

The Osway Property is underlain by the same stratigraphy that hosts the Jerome deposits, an isoclinally folded, steeply dipping sequence of metavolcanics and metasediments believed to represent a major northwest

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## 1.2 SUMMARY AND RECOMMENDATIONS (cont.)

trending synclinorium. The synclinal axis, which passes through the north half of the Osway Property is represented by a thick sequence of polymictic conglomerate, conglomeritic arenite and greywacke with lesser laminated mudstone, ironstone and chert units. Alternating sequences of felsic to intermediate tuff, agglomerate, pyroclastic fragmental units and interbedded chert-magnetite-sulphide-graphite horizons underly the clastic sedimentary sequence. These rocks are in turn underlain by mafic flows and fragmentals. Feldspar porphyry and quartz-feldspar prophyry dikes, sills and stocks intrude all stratigraphic sequences. These in turn are cut by northwest-trending diabase dikes and random lamprophyre dikes. Regional scale northwest trending shear zones characterized by chlorite-carbonatepyrite and sericite-pyrite alteration are common. Locally within the shears, intense porphyritization, carbonatization and silicification has taken place. Where hematization and sulphidization is present in the intensely altered shears, significant gold concentrations also occur. Extensive northwest and northeast trending cross-faulting has disrupted stratigraphic continuity.

Westward, the clastic sedimentary sequence narrows considerably, and in the vicinity of the Osway Property a major lithofacies transition between distal basin sediments and proximal volcaniclastic rocks is indicated. The potential for a geological and structural environment similar to that hosting the Hemlo deposit exists. Base metal concentrations have been reported from diamond drilling on the iron formations of the lower volcanic sequence, near the contact with the basement granites. These sulphidebearing formations have a regional magnetic and electromagnetic response yet very few have been tested by diamond drilling. Those anomalies occurring

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## 1.2 SUMMARY AND RECOMMENDATIONS (cont.)

on the Osway Property may represent viable secondary drill targets.

The Osway Property is strategically situated between a past producing gold mine and a promising small but high-grade gold deposit. Both of the adjoining properties are currently under evaluation. There is no record of significant detailed evaluation of the Osway Property for gold in the past and this is due largely to the extensive overburden cover. Recent airborne geophysical surveys indicate the area responds well to the new geophysical methods. As such, the property has excellent potential as a gold exploration target.

An initial exploration program involving detailed ground geophysical surveys, geological mapping, stripping and assaying is recommended. Selective soil geochemistry studies may prove a useful exploration tool. The presence of arsenopyrite with gold in occurrences near the contact between sediments and volcanics, and the ubiquitous occurrences of molybdenum with gold at the Jerome Mine provides two excellent tracer minerals for the evaluation of basal tills.

A total expenditure of \$76,375. is recommended for Phase I exploration of the property. This figure represents estimated expenditures for work on both claim groups including the 5 "Filed Only" claims, totalling 64 claims.

Respectfully Submitted,

James C. Ireland Geologist. April 25, 1988 -4-

## 2.0 PROPERTY

# 2.1 Claim Groups

The Osway Property consists of two separate claim groups totalling 59 unpatented mining claims plus 5 "Filed Only" unpatented mining claims, located in northwest Osway Township and northeast Esther Township (Figure 2). The 5 "Filed Only" claims represent fractions discovered on the east boundary of the Osway Township group during initial staking. The status of these claims is in question pending a claims inspection.

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The Osway property was initially staked as a single, contiguous group, but during staking, several claims initially indicated as cancelled were re-instated under extension, effectively cutting the property into two groups. The Osway group consists of 49 claims plus the 5 "Filed Only" claims for a total of 54 claims. The Esther group consists of 10 claims straddling the Osway-Esther Townships boundary. The claim numbers and recording dates are listed below.

# 2.2 Claim Numbers

Osway Group	Recording Date	Claims
P. 1034802 - 803	April 11,1988	2
P. 1045892 - P. 1045910 incl.	April 27,1988	19
P. 1045922 - P. 1045935 incl.	April 27,1988	14
P. 1045936 - P. 1045940 incl.	Filed Only	5
P. 1045998 - P. 1046000 incl.	April 27,1988	3
P. 1046002 - P. 1046005 incl.	April 27,1988	4
P. 1046006 - P. 1046009 incl.	May 19,1988	4
P. 1046014 - P. 1046016 incl.	April 27,1988	3
Total 54 Claims		
Esther Group	Recording Date	Claims
P. 1046018 - P. 1046019	May 19,1988	2
P. 1046020 - P. 1046027	May 17,1988	8
Total 10 Claims		

ADDENDUM: One Additional Claim

No. P.1037200, Esther Twp, To The Esther Group.



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Esther and Osway Townships

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## 2.3 Location and Access

The Osway Property is located in Osway and Esther Townships, District of Sudbury, Porcupine Mining Division, Ontario; Latitude  $47^0$ 39.00'Longitude  $82^0$ 21.00', approximately 100 air kilometers southwest of Timmins (Figure 1). The property is accessed by good gravel roads via the Sultan-Ramsey-Shiningtree corridor road joining highways 129S, south of Chapleau, Ontario and 144S, south of Gogama, Ontario. A major forest access road north of the Sultan-Ramsey road cuts through the Osway Property.

## 2.4 Topography, Vegetation and Climate

The Osway Property has maximum relief of less than 150 feet above Opeepeesway Lake. Higher ground is dominated by a dissected esker, which passes through the center of the property. Small kettles and isolated swamps occupy the areas of low relief. Minor streams draining eastward into Opeepeesway Lake and northward into the Woman River, dissect the esker. Bedrock exposures are restricted to the northwest and southeast parts of the property, where overburden is thin but areally extensive. The area was burned over in 1957 and is now forested with secondary growth jackpine, birch, poplar, alder and cedar. Balsam kill is extensive due to budworm infestation. Cold winters and cool wet summers typify the climate.

## 2.5 Services

The area is approximately equidistant between Sultan, on the C.P.R. transcontinental line and Gogama, on the C.N.R. transcontinental line. Both villages provide limited services. Men, equipment and services could be obtained in Timmins, 100 air kilometers to the northeast or Sudbury, 140 air kilometers to the south. Electrical power is not currently available in the area.

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#### 3.0 PREVIOUS EXPLORATION ACTIVITIES

3.1 Regional

The Swayze area has been prospected periodically since the early 1900's. Several iron formations were investigated initially, and by 1906, the base-metal potential was under evaluation in the southwest and southeast. Exploration for gold dates back to 1909, when initial discoveries were made in Chester Township in the southeast end of the Swayze belt and in Horwood Township, located in the north-central part of the Swayze belt.

The first major thrust in gold exploration and development occurred during the period 1929 to 1939, when many of the known gold occurrences were documented. A minor gold rush occurred during the period 1948 to 1949, during which several additional gold occurrences were discovered.

Some of the more important gold occurrences discovered during the period 1929 to 1949 are listed below.

Discovery Date	Occurrence Name	Township	Current * Status
1921	Young-Shannon Gold Mine (past producer)	Chester	under evaluation
1931	Kenty Mine	Swayze	<b>60</b> ·
1932	Halcrow-Swayze Mine	Halcrow	19
1933	Tionaga (Smith-Thorne) Mine	Horwood	inactive
1933	Swayze (Orofino) Mine	Silk/Horwood	development
1933	Kingbridge-Gomak Mine (past producer)	Chester	under evaluation
1936	Strathmore Mine	Chester	development
1938 (?)	Rundle No. 1 (South) Mine	Newton	development
1938	Jerome Mine (past producer)	Osway	development
1946	Joburke Mine (past producer)	Keith	inactive
* "under evalu "development	uation" refers to surface explorat refers to surface and unde	ion incl. diamon rground activitie	d drilling es

"inactive" refers to no work on patented claims in 1987

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## 3.1 Regional (cont.)

Only sporadic exploration was carried out in the Swayze area during the period 1950 to 1970. During that period the Reeves Asbestos Mine in Reeves Township was discovered and put into production by Johns-Manville Company. The mine produced periodically between 1968 and 1975

The discovery of a "porphyry copper" occurrence in the Rush Lake area in 1970 led to extensive b ase metal exploration which continued until 1981. The most significant results were reported by M.W. Resources Ltd., who reported reserves of 2.4 million tons grading 2.7% zinc, and 0.39% copper on their Cunningham Township Property.

The discovery of Hemlo in 1981 resulted in widespread speculative staking in the Swayze area. Many of the documented gold occurrences were staked at that time and are still held. Between 1983 and 1988, several new gold occurrences were discovered. Currently, most of the known and new gold occurrences are being subjected to preliminary evaluation.

The Opeepeesway Lake area was mapped in 1935 by H.C. Laird for the Ontario Department of Mines. Detailed mapping of Osway Township was carried out in 1949 by W.W. Moorhouse for the Ontario Department of Mines. In 1979, the area was re-mapped in detail by G.M. Siragusa for the Ontario Geological Survey.

In 1982, the Ontario Geological Survey released the results of an airborne magnetometer and INPUT electromagnetic survey, flown by Questor Surveys Limited in 1980 and 1981. The survey covers all or part of 42 townships in the south half of the Swayze area, including the Osway Property area.

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#### 3.2 Local

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3.2.1 Osway-Huffman Townships Area

Property No. 1 - Jerome Gold Mine - Osway Township (1938-88)

a) Sylvanite Gold Mines Limited (1938)

Following the discovery of gold mineralization on Opeepeesway Lake, Osway Township, by Bert Jerome in 1938, Sylvanite Gold Mines Limited evaluated two occurrences that same year.

- i) Mining Corp Property Jerome Point, Osway Township -two trenches 200 feet apart, exposed sections of the Main or North Vein.
  - -Channel sampling returned 0.52 oz/ton gold across 6.0 feet; 0.122 oz/ton gold across 17.1 feet; and 0.17 oz/ton gold across 9.6 feet
  - -Showing was described as silicified arkose or greywacke with quartz streaks in thick-bedded arkose, greywacke and possible conglomerate bands.
- ii) Shannon Property at 2 mile Post of Osway-Huffman Township boundary
  - -A series of small trenches located in the southwest corner of patented claim S.31759, approximately 175 feet southeast of the 2 mile post on the Osway-Huffman Townships boundary, in Huffman Township. (at the narrows of the East Arm, Opeepeesway Lake)
  - -In one trench, a series of three parallel veins were exposed across 12.5 feet. A channel assay of 0.386 oz/ton gold across 3.6 feet was obtained and the showing was diamond drilled with a single hole. No gold values were reported from drilling, although a 30 foot wide "mineralized section" was reported. The hole was drilled due south at -45 for a total length of 178 feet. It may well have been drilled down dip, as current diamond drilling on the Jerome property's South Vein zone indicates south-dipping mineralized structures. (Ref: File T-2136, Res. Geol. Files, Timmins)
- b) Mining Corporation of Canada Limited/Hollinger Consolidated Gold Mines Limited (1938-1957)

Jerome Gold Mines Limited, a subsidiary of Mining Corp of Canada Ltd., initiated an exploration and development program on the

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Jerome Point showing in 1939 that continued until 1945, when all operations ceased. Between 1941 and 1943, the mine produced 56,878 ounces of gold and 15,105 ounces of silver from 335,000 tons of ore for a recovered grade of 0.174 oz/ton gold. Average daily mill throughput was 459 tons per day. In 1943, the mill was shut down due to manpower shortages caused by the war. The remaining workforce concentrated on mine development, which continued through 1945, and consisted of:

-3 compartment vertical shaft to 1138 feet -6 levels at 200, 350, 500, 650, 800 and 1100 feet -21,100 feet of drifting on 6 levels -3,155 feet of cross-cutting on 6 levels -3,402 feet of raising on 5 levels -38,149 feet of surface diamond drilling -47,293 feet of underground diamond drilling

When the mine closed in 1945, reserves developed to the 800 foot level (which was only partially evaluated) were 344,000 tons at a grade of 0.19 oz/ton gold. The property was kept on care and maintenance until, in 1957, fire destroyed the surface buildings. The mill was cleaned and sold and the property went idle. (Ref: Ontario Geological Survey Mineral Deposits Circular 18, Gold Deposits of Ontario, Part 2 (1979); Annual Report for 1987, Jerome Gold Mines Corporation).

c) E.B. Eddy Forest Products Limited (1968-1974)

The Jerome Property was sold in 1968 to Brown Forest Products Limited for use as a lumber camp. In 1973, E.B. Eddy Forest Products Limited, a subsidiary of the Weston Group of companies, acquired the property. In 1974, Eddy drilled 8,417 feet in 21 holes from surface.

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# d) Bridgeview Resources Inc. (1979-1981)

In 1979, the Jerome property was optioned to G.F. Ross, director of Bridgeview Resources, (incorporated in 1980). Bridgeview constructed a headframe, dewatered the shaft to the 200 foot level and sampled the old workings. Detailed ground magnetometer, V.L.F.-E.M. and Induced Polarization surveys were completed and 2,710 feet of diamond drilling in 9 holes were drilled from surface. Three holes were drilled to test I.P. anomalies and 6 holes were drilled to test magnetic low anomalies. Results of the drilling is summarized below:

Hole No.	Azimuth	Dip	Length (ft.)	Remarks
J-80-1		90 <sup>0</sup>	247	-collared to test I.P. anomaly near east end of North Vein extension. No significant mineralization.
J-80-2	035 <sup>0</sup>	45 <sup>0</sup>	348	-collared to test I.P. anomaly at south contact of west part of South Vein. Best assays 0.12/18.5 ft., and 0.42/3.0 ft.
J-80-3	215 <sup>0</sup>	45 <sup>0</sup>	354	-collared north of North Vein to test I.P. anomaly. No samples taken (drilled down section )
<b>J-80-4</b>	035 <sup>0</sup>	45 <sup>0</sup>	196	-collared to test North Vein in center of ore zone. Best assays 0.16/25 ft. (incl. 0.2/10 ft.); 0.11/20.5 ft. (incl. 0.28/5.5 ft.)
J-80~5	035 <sup>0</sup>	70 <sup>0</sup>	307	-same collar site as J-80-4. Best assays 0.12/4.3 ft.; 0.10/6.2 ft.; 0.12/22.5 ft.
J-80-6	035 <sup>0</sup>	45 <sup>0</sup>	247	-collared 300 ft. southeast of J-80-4 to test some section of North Vein. Best assays, 0.23/

3.0 ft.; 0.09/9.0 ft.

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Hole No.	Azimuth	Dip	Length(ft.)	Remarks
J-80-7	035 <sup>0</sup>	70 <sup>0</sup>	317	-same collar as J-80-6. Best assays 0.115/6.5 ft.; 0.09/8.0 ft.
J-80-8	013 <sup>0</sup>	45 <sup>0</sup>	437	-collared to test North Vein Zone at an oblique angle in central part of ore body. Assay widths not true widths. Best assays 0.22/62.0 ft.; including 4.41/1.0 ft. and 0.565/2.5 ft.; 0.65/1.0 ft.
J-80-9	035 <sup>0</sup>	45 <sup>0</sup>	257	-collared at east end of North Vein. No significant values reported.

Results of the underground sampling program, although preliminary in nature, also confirmed the ore potential of the upper levels of the mine. The examination showed that sulphide content of the gold ore is less than one percent, and that gold values are intimately associated with dark grey quartz veins, lenses and irregular masses within a carbonate-rich host rock. Consultants for Bridgeview Resources recommended additional diamond drilling of 25 holes totalling 6050 feet, and continued de-watering to assess the lower levels, but no further work was done. Bridgeview Resources dropped the option in 1982 (Ref: Res. Geol. Files, Timmins T-2624; Annual Report of Jerome Gold Mines Corp., 1987).

e) Jerome Gold Mines Corp./Muscocho Explorations Ltd. (1983-)

- 1983 -Jerome property optioned to Osway Exploration Ltd.
- 1984 -Osway Explorations changed name to Jerome Gold Mines Corp. and entered into a joint venture agreement with Muscocho Explorations Limited.

-11,131 feet of diamond drilling in 24 holes completed from surface to test the North and South Zones.

- 1985 -Recalculation of ore reserves in the developed portion of the mine to the 650 foot level established at 311,000 tons at an average grade of 0.201 oz/ton gold.
- 1987 -Muscocho Explorations made an agreement with McNellen Resources Inc., to allow McNellen to earn an interest in Muscocho's interest. Jerome Gold Mines Corp. and Muscocho Explorations Ltd. ammend the original 1983 option agreement with E.B. Eddy Forest Products Ltd. whereby the optioners may purchase all of Eddy's interest in the property.

-Late in 1987, an \$8 million dollar program was begun on the Jerome property. The exploration program was designed to expand existing reserves sufficiently to support a 400 T.P.D. mining operation.

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1988 -As of April 1988, shaft de-watering had progressed to the 375 foot level, with eventual total dewatering to the 6th level at 1100 feet planned. The underground exploration program calls for detailed sampling of each level, test-holing and underground diamond drilling from the existing workings. The 3rd level at 500 feet will be driven further east to permit deep drilling of the South Zone. A 400 foot cross-cut will be driven from the east extension of the North Zone to permit drifting on the South Zone and deep drilling on the North Zone. A surface diamond drill program began on the South Zone late in 1987 and is continuing, with promising results.

(Ref: Res. Geol. Files, Timmins, T 2694; Northern Miner Press, Feb.22, 1988; Jerome Gold Mines Corp. Annual Report for 1987;)

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Property No. 2 - M. Burton Property (1964-1968)

- 1964, six diamond drill holes totalling 1,946 feet were drilled on a small island on Opeepeesway Lake, approximately 4200 feet northeast of the Jerome Mine shaft. Three holes were drilled west and one hole each was drilled to the east, south and southwest.
- 1966, two holes drilled north from same island as the 1964 drilling.
- 1968, one hole drilled west from east shore of Opeepeesway Lake, 800 feet east of island site of earlier drilling.

The results of the drilling program indicated the island was a hematized, red porphyritic rock variably mineralized with pyrite and minor chalcopyrite. Local heavy marcasite was also noted in the porphyry. Arkosic sediments exibiting scattered mineralization bounds the porphyry to the north, west, southwest and south. Heavily sheared and faulted, porphyry is indicated east of the island as far as the east shore of Opeepeesway Lake. No assays of economic significance was reported. (Ref: Res. Geol. Files, Timmins, T-2177).

Property No. 3 - Falconbridge Nickel Mines Ltd. (1971-1973)

The four westernmost claims situated in Osway Township were part of a much larger 55 claim block tied onto the Jerome patents' north boundary in Huffman Township. In 1971, ground geophysics were carried out with the objective of outlining the underlying geology and particularly to attempt to outline intrusives thought to be in the area. Conductive material associated with the intrusives was the ultimate target of the exploration program.

## Property No. 3 (cont.)

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Two diamond drill holes totalling 973 feet were completed in 1973 near the Osway-Huffman Townships boundary, on the east shore of Opeepeesway Lake. Hole H-1-73 was drilled at an azimuth of  $193^{\circ}$  and at a  $45^{\circ}$  dip. Grey to pink feldspathic sediments exibiting localized porphyritic textures and containing finely disseminated pyrite throughout and thick conglomeritic units were encountered. Some highly silicified and carbonated sections were reported associated with moderate to strong foliation, sericitization and chloritization.

Hole H-2-73 encountered similar rock-types to the first hole, but alteration consisting of hematization, sericitization, carbonatization, feldspathization (porphyritized sediments) and silicification was more prevalent. Foliation was well developed and chloritic shears were reported. No assay results were reported. (Ref: Res. Geol Files, Timmins, T-2133).

#### Property No. 4 - Kerr Addison Mines Ltd. (1979-1981)

Detailed ground geophysical surveys outlined four targets to be diamond drill tested. Four drill holes were completed on the property, but locations and results of drilling were not available (Ref: Res. Geol. Files, Timmins, T-2354.)

# Property No. 5 - Maverick Mountain Resources (1982) Granges Exploration A.B. Option

Granges Exploration carried out ground magnetometer and electromagnetic surveys over a large, weak A.E.M. anomaly exibiting a magnetic

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## Property No. 5 (cont.)

signature. A single diamond drill hole (D.D.H. G.O.G.-1) was drilled to test the anomaly. The hole intersected rhyolite and quartz-chlorite schist with graphitic horizons containing minor pyrite, chalcopyrite, sphalerite, arsenopyrite and galena. Best assay was 0.64% zinc over 4.7 feet. (Ref: Res. Geol. Files, Timmins T-2524; T-2661; T-2821).

#### Property No. 7a - Noranda Exploration Company Ltd. (1976-1977)

-Noranda carried out ground geophysical surveys over a 4 claim block straddling the Osway-Mallard Townships boundary. One 397 foot diamond drill hole was completed to test an E.M. anomaly, which was due to conductive graphite at the contact between andesitic tuff and sericite schist. No significant assay results were obtained. (Ref: Res. Geol. Files, Timmins T-1786.)

## Property No. 7b - Noranda Exploration Company Ltd. (1985)

-Noranda carried out magnetometer and V.L.F.-E.M. surveys over a 9 claim group located in northwest Osway Township. No further work was done and the claims subsequently lapsed. (Ref: Res. Geol. Files, Timmins, T-2995)

Property No. 7c - Noranda Exploration Company Ltd. (1975-1978)

-Ground magnetometer and electromagnetic surveys were carried out over a 6 claim block located in west central Osway Township. A coincident Mag-E.M. anomaly was outlined and diamond drilled. Conductivity was due to multiple graphite-magnetite-chert interflow bands in massive phyolite flows. Best assay was 2.9% zinc and 0.65% lead over 2.0 feet. No further work was done on the claims. (Ref: Res. Geol. Files, Timmins, T-2303.) 3.2.1 Osway-Huffman Townships Area (cont.) Property No. 8 - Hargor Resources Inc. (1982-1986)

Between 1982 and 1987, Hargor held a large block of claims in south and west-central Osway Township. In 1982 and 1983, eight diamond drill holes totalling 2400 feet were completed on the south part of the claim block, (D.D.H. H-1, 3,4,5,7,8,9,10). In 1986, two additional holes, (D.D.H. H-86-1, 2) totalling 766 feet were drilled in the same south part. No work was reported done on the west-central portion of the claim block.

Diamond drilling was concentrated on three zones. The East Zone was tested by five holes (H-1,7,8,9,10), which encountered a northward fining sequence of mafic pyroclastic fragmentals, intermediate lapilli tuffs, fine felsic ash tuffs and interbedded argillaceous sediments. The lower sequence was cut by narrow quartz diorite porphyry dikes mineralized with pyrite. No assay results were given.

The Central Zone is located approximately 5000 feet west of the East Zone and was tested with two drill holes (H-86-1 and H-86-2). Felsic flows and lapilli tuffs with minor disseminated pyrite, pyrrhotite and chalcopyrite were encountered. No assays were reported.

The Northwest Zone was drilled to test a series of northwest trending airborne conductors located 6600 feet west of the southwest corner of Opeepeesway Lake. Three drill holes (H-3,4,5) from two setups tested the conductors. Holes H-3 and H-4 intersected a banded chert-quartz sulphide unit in intermediate to mafic tuffs and pyroclastics. H-3 cut 11.6 feet averaging 25% pyrite, pyrrhotite, chalcopyrite with minor pentlandite, sphalerite and arsenopyrite. In addition, 12 feet of footwall mafic tuff-breccia averaged between 5-10% sulphides. No assay results were reported. Hole H-4 was drilled beneath H-3 and cut 14 feet of banded

## Property No. 8 (cont.)

chert-quartz-sulphide with up to 40% sulphide over 5.0 feet and averaging 25% over 14 feet. The footwall pyroclastics averaged 2 to 5% sulphides. No assay results were reported.

Hole H-5 was drilled approximately 1200 feet north-west of H-3 and H-4, to test the same conductor. A 16 foot wide brecciated, banded chert-quartz-sulphide unit averaging 40-45% pyrite-pyrrhotitechalcopyrite mineralization with minor pentlandite, sphalerite and arsenopyrite was intersected within intermediate tuffs. Twenty feet further down hole a second, 11 foot wide chert-quartz-sulphide unit was cut. This lower zone averaged 15-25% sulphides. No assay results were reported. (Ref: Res. Geol. Files, Timmins, T-2517.)

#### Property No. 9 - Blue Falcon Mines (1983) Benton Resources Inc. (1983-1984)

Ground geophysical surveys were carried out over 4 claims of a much larger block of claims tied onto the west boundary of the Jerome Patents. Two holes were drilled to test a V.L.F.-E.M. anomaly (BR-84-1, 2). The first hole missed the conductor and intersected intermediate flow breccia, felsic pyroclastics and bottomed in quartz diorite. The second hole was collared 300 feet southwest of the first hole and grilled underneath the first hole. This hole cut intermediate to felsic tuffs exibiting varying degrees of carbonate and silica flooding. A siliceous graphitic horizon with up to 10% pyrite explained the conductor. No assays were reported. (Ref: Res. Geol. Files, Timmins, T-2781; T-2752.)

#### Property No. 10 - Blue Falcon Mines Ltd. (1983-1985) Kidd Resources Ltd. (1986)

Blue Falcon Mines completed magnetometer and V.L.F.-E.M. surveys over the claim group in 1983 and 1984. Kidd Resources carried out extensive stripping and trenching in 1986. No results were reported (Ref: Res. Geol. Files, Timmins, T-2752; T-3094.)

Note: Property No.'s 3, 9, and 10, all have Airborne Geophysical surveys filed for assessment purposes. (Ref; Res. Geol. Files, Timmins, T-3020; T-2357.)

Property No. 11 - Osway Explorations Limited (1981-1988)

In 1981, Osway Explorations held 65 claims, largely in Huffman Township, tied onto the north boundary of the Jerome Patents and extending east to the east end of Opeepeesway Lake. Between 1981 and 1983, Osway Explorations carried out lineautting, prospecting, geophysical and geochemical surveys, trenching and 39 diamond drill holes totalling 10,926 feet. Most of the recorded work was carried out in Huffman Township, north of the East Arm of Opeepeesway Lake. Stripping and drilling concentrated on the contact zone between porphyry (to the south) and sediments which trends easterly to southeasterly through Huffman Township.

The exploration program revealed the presence of several mineralized quartz vein and carbonate shear structures located at or near the porphyrysediment contact in Huffman Township.

The discoveries are summarized below and the showing locations are indicated on the Geological Compilation Map (back pocket).

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# Property No. 11 (cont.)

#### Showing No. H-1

Stripping across a linear magnetic low exposed a rich but small gold-silver-zinc showing in an east trending, steeply north dipping, intensely sheared and carbonated rock, assumed to be altered porphyry. Best grab sample assays returned 0.07 oz/ton gold, 5.04 oz/ton silver, 11.5% lead and 6.5% zinc. Sulphide mineralization was described as lensy and discontinuous on surface. The showing was subsequently drill tested with 11 holes (D.D.H. OS-82-8,9,10,11, 14,15,16,18,37,38,39) which traced the porphyry-hosted carbonate shear zone for 850 feet along trend. Drill intercepted mineralization assayed much lower than surface samples and widths appeared to narrow at depth. Drilling defined an east trending carbonate shear zone up to 50 feet wide within altered porphyry. Discontinuous lenses of massive pyrite up to 2 feet wide and disseminated pyrite zones up to 15 feet wide carrying galena, sphalerite and chalcopyrite occur within the carbonate shear. No further work was recommended on this zone.

#### Showing No H-2

A well developed blue quartz vein was exposed intermittantly over a 3800 foot strike length by trenching. The vein occurs within an east trending shear zone in conglomerate and varys in width up to 4 feet where exposed on surface. The vein material and several feet of wallrock is well mineralized with up to 25% sulphides, which include pyrite, molybdenite (especially at its' west end), galena, tetrahedrite and chalcopyrite. Plugger chip and dust from the east end of the vein exposure assayed up to 0.69 oz/ton gold and 9.13 oz/ton silver. Grab samples from the same location assayed 0.05 oz/ton and 0.03 oz/ton gold. Grab samples 100 feet to the west assayed 0.30 oz/ton gold and 2.3 oz/ton silver. Three hundred feet further west, grab samples assayed 0.30 oz/ton gold and 2.52 oz/ton silver; 0.04 oz/ton gold and 0.28 oz/ton silver; 0.06 oz/ton gold and 0.47 oz/ton silver from the same vein.

The vein was drill tested with two holes (OS-82-17,19) 500 feet to 700 feet east of the west end of the vein exposure, and with 6 holes at the east end of the exposure, (D.D.H. OS-82-13,22,23,24,32,33). At the west end, drill intersections varied from 1.0 feet to 10.5 feet, and best assays ranged from 0.045 oz/ton gold over 4.0 feet to 0.14 oz/ton gold over 1.0 feet. The vein was drill tested along a 400 foot strike length at the east end.

#### Property No. 11 (cont.)

Two drill holes, 300 feet apart, at the west end of the vein exposure encountered multiple blue quartz stringer zones mineralized with pyrite and locally abundant molybdenite. Best assay from the westernmost hole (OS-82-19) was 0.18 oz/ton gold over 3.0 feet in a molybdenite rich section of carbonated and haematized highly sheared and folded conglomerate. Additional work was recommended on this vein zone.

#### Showing No. H-3

Trenching at this site revealed a narrow quartz vein in pink, haematized porphyry mineralized with chalcopyrite, tetrahedride, anhydrite, and hematite.

Grab samples from surface returned up to 1.74 oz/ton gold and 2.94 oz/ton silver, but best assays from two drill holes (OS-83-31,36) returned only 0.022 oz/ton gold over 10.0feet. This zone is believed to be part of the Gaffney showings, located approximately 1000 feet east of the drill collar sites. The Gaffney showings were originally discovered in 1949 and were drilled extensively between 1949 and 1959.

In 1985, Muscocho Explorations Ltd. completed a 5 hole, 2000 foot diamond drill program on the claims as part of a companion option agreement with Jerome Gold Mines Corp. (formerly Osway Explorations Ltd., 1983) on the Jerome Property patents. Drilling was concentrated on the former Jess-Mac property, located approximately one mile southeast of the Gaffney Showing. No intersections of significance were reported. No further work was reported on the property, which is in good standing at the present time. (Ref: Res. Geol. Files, Timmins T-2452; O.G.S. Misc. Paper 128, Report of Activities 1985, Regional and Resident Geologists, p.176.)

# 3.2.2 Esther Township Area

Property No. 6 - Grandad Resources Ltd.-Burton Option (1987-present)

The original gold showing was discovered circa 1928 by  $\Lambda$ . Burton Sr. In 1928, Northern Aerial Minerals Exploration Ltd. trenched and pitted the showing. A 33ft. shaft was sunk to intersect the downdip extension of a west dipping north-south striking, quartz vein. Numerous trenches followed the mineralized zone east from the shaft for approximately 2500ft.

Hollinger Consolidated optioned the property and completed approximately 32 boreholes during the late 1930's and early 1940's. In 1945, ten additional drill holes were completed by Burscott Gold Mines. The drilling outlined a zone roughly 250ft. long, apparently plunging west, with values up to 0.444 oz/ton gold over 2.65ft. A zone consisting of a possible 38,000 tons grading 0.345 oz/ton gold down to the 300ft. level was outlined.

In 1983, the Canadian Nickel Company Ltd. optioned the original 6 patented claims and 20 unpatented claims from the Burton brothers. They added an additional 21 claims at that time, bringing the property to 47 claims totalling approximately 1900 acres. At that time Canico entered into a joint venture agreement with Golden Hope Resources Inc. on the property. A summary of work carried out by Canico in 1983,-84 and -85 is given below.

-1983 - grid cut, detailed geological mapping and prospecting, ground magnetometer survey, ground V.L.F.-E.M. survey over entire property

- -in the vicinity of the showings; humus and soil sampling, detailed Induced Polarization Surveys.
- -limited stripping, 9 diamond drill holes totalling 4,830ft. were drilled, but no significant mineralization was encountered.
- -1984 additional humus sampling along strike from the Shaft zone. extensive stripping on the Shaft zone and the East zone, plus other zones where magnetic data suggested complex drag folding may have occurred.
- -an additional 17 diamond drill holes were completed on the Shaft and East zones. A total of 1,536ft. was drilled.

The proposed follow-up diamond drill program was never initiated, and, in 1985, Canico and Golden Hope dropped the option on the Burton property.



3.2.2 'Esther Township Area (cont.)

The results of the 1984 program are summarized in:

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 "Annual Report of Activities, Canico-Colden Nope Agreement, Jurton Property, Eather and Benton Townships, Porcupine Mining Division, NTS 41-0-9" (Timmins Resident Geologist Office, File T-2595)

Exerpts of which are included below:

#### 4.3 Summary of 1983 Exploration

In 1983 5.02 km of baseline and 90.4 km of grid lines were established on the property by a contract line cutter. Crosslines were established at 100 metre spacing and pickets marked at 25 metre stations along the lines.

Detailed geological mapping, prospecting, and sampling was carried out over the entire property. A humus and soil orientation sampling program was carried out. In the shaft area 4 lines 50 metres apart were sampled 200 metres north and south of the baseline at 10 metre intervals. An additional 5 lines were sampled at 20 metre intervals.

An IP survey was carried out over a total of 11.3 line km, in the area of known showings. The entire grid was covered with both magnetometer and VIP surveys.

An attempt to use a backhoe to strip the overburden down to bedrock in areas of interest falled due to wet ground conditions and inadequate equipment.

Nine boreholes totalling 1472.3 metres were drilled using a Canico owned and operated Longyear 24 diamond drill.

#### 5.0 REGIDIAL GEOLOGY

The claims are underlain by rocks of the southeast arm of the Swayze Archean greenstone belt. The belt is approximately 12 km wide in the area of the claims and narrows to the southeast. The rocks consist predominantly of mafic to intermediate volcanics and metasediments. The regional foliation is 100° to 120° with a very steep to vertical dip.

The mafic volcanics are predominantly fine-grained pillow basalts. Thicker, medium to coarse-grained, gabbroic flows and subvolcanic sills are also fairly common. Several major bands of metasediments varying from coarse conglomerates to shales and siltstones outcrop on the property and continue for great distances along strike [10's of kilometres] in either direction.

The rocks within the claim area occur as a south-facing homoclinal sequence, dipping vertically  $\pm 10^{\circ}$ .

5.0 1984 EXPLORATION PROGRAM

In Hay 1904 additional humus sampling was carried out along strike from the shaft area. During August and September the Shaft Zone and the East Zone mineralized areas were stripped and channel sampled. Overburden trenching was also carried out on several lines to the east of the East Zone where complex magnetic data suggested that drag folding.might occur in the volcanics. During October a seventeen (17) hole diamond drill program was completed.

#### 6.1 Humus Sampling

In Hay 1984, the humus survey was extended and samples were collected at 25 m intervals on all lines from 10,500E to 11,800E between 9700H and 10,300H; and from 8000E to 10,300E between 9700H and 10,400H. All samples were assayed for gold (ppb) and for arsenic (ppm).

No significantly high anomalous gold assays were recorded but a number of low values were found; most of these are single point anomalies as indicated below: 25 ppb @ 10,900E/9850N; 16 ppb @ 11,000E/10,125N; 18 ppb @ 8100E/ 10,200N; 16 ppb @ 8500E/9975N; 14 ppb @ 9200E/10,250N. Three assays of 10, 10 and 12 ppb Au were located at three adjacent points on lines 9100E and 9200E between 9975N and 9900N.

A few single point arsenic anomalies were also located: 110 ppm at 9100E/ 9875N and at 10,500E/9900N values of 280 and 240 were recorded where 300 ppm had been obtained during the 1983 survey. However, an 18,000 ppm As anomaly which had been obtained from 9700E/10,160N in 1983 did not repeat during the 1984 survey and a value of only 11 ppm As was recorded.

With the exception of line 10,500E, none of the gold and arsenic anomalies were found to be coincident. The anomalies did not outline any additional high priority target areas for further exploration.

#### 6.2 Overburden Stripping

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In August 1984, a D7 Caterpillar tractor and a tracked backhoe with a 1.25 cubic yard bucket were used to strip two areas on the property. The first area (East Zone) is located between 104+00E and 106+50E and averages from about 30 m to 50 m wide. The second area (Shaft Zone) is located between 99+30E and about 101+00E. The stripped area is about 40 m wide at the shaft, narrowing to about 10 m towards line 101+00E. As the stripping proceeded both areas were cleaned off using high pressure water supplied by a Wajax fire pump.

In late September and early October, 1984, the backhoe was again used to excavate a number of trenches in overburden on lines 108+50E; 109+00E, 109+50E, 110+00E, 110+50E, 101+50E and 101+75E.

#### 6.2.1 East Zone

On the East Zone excavation began by following the line of old [c. 19347] trenches; this allowed the mineralized zone to be traced almost completely across the stripped area. The country rocks consist of medium-grained basalts [gabbro7] which are interpreted to consist either of thick flow units or subvolcanic sills. Pillowing can be observed in adjacent rocks to the north and south of this zone but no pillows were noted in the footwall or hangingwall units. At several locations the mineralized area occupies shallow, rubbly depressions and could not be examined; elsewhere the mineralization can be observed striking consistently E-W [grid] completely across the stripped area. The zone varies in width from about 0.5 m to 4.0 m and is variably mineralized throughout. The narrower zones, as at line 105+SOE, are commonly very weakly mineralized, pyrite + pyrnotite, with scattered erratic and narrow quartz veins. The zone also commonly shows a stronger follation than the adjacent country rocks and a very sharp contact with the country rocks. Within the wider mineralized sections, quartz bands, veins and lenses are commonly much thicker and more persistent. Disseminated pyrite and arsenopyrite tend to be associated with the quartz rich sections; pyrrhotite is ubiquitous. Mineralization is not consistent across the zone but the less well mineralized portions still show heavy silicification and iron carbonate alteration. This appears to be more concentrated on the hangingwall (south) side.

A diamond saw was used to cut channels (fig. 5) every few metres across the mineralized zone. Assay values from the channel samples collected are indicated on the plans (fig. 5). The best result was obtained from channel B23 which yielded 4.5 ppm Au over 2.5 metres. This includes 0.4 m section which assayed 12.11 ppm gold.

The mineralized zone displays very few small scale "z" fold structures similar to that cut by channel "B7" (about 105+70E section). Between 104+5DE and 105+0DE some possible indications of folding can be observed but these are not definite. The mineralization may be concentrated along quite narrow, tight, drag folds. A plunge measurement of 40 W was obtained from the folded sediments in the southwest corner of the stripped area. This confirms measurements taken in the Shaft Zone area.

#### 6.2.2 Shaft Zone

At the Shaft Zone an area was power stripped and cleared from the vicinity of the shaft eastwards towards the camp. After the area had been washed down it was possible, for the first time, to observe that a fold structure controlled the mineralization. It could also be noted that the northern limb of this drag fold is marked only by a very narrow mineralized zone.

The area underlain by the fold, apart from the margins, is almost completely rusted out. The gossan area is commonly a deep purplish-brown colour; it is soft and friable in texture with only local competent patches where quartz veining exists. At the northern edge of the fold the wineralization consists of heavily disseminated arsenopyrite and pyrite in silicified basait (gabbro?). A channel sample from the central portion of the fold yielded 14.00 ppm gold over D.7 metres and a sample from the northern edge gave 18.65 ppm gold over D.55 metres. All channel sample assays are indicated on figure 6.

Three plunge measurements from this area indicated that the fold had a plunge of  $30^{\circ}$  to  $40^{\circ}$  west. These observations and the recognition of the fold structure enabled a drill program to be laid out which could predict, with reasonable accuracy, where the mineralization would be intersected.

Alteration appears to be restricted to the immediate vicinity of the fold, particularly on the hangingwall side. On the narrow northern limb, unaltered basalt is in contact with the mineralized zone.

#### 6.3 Overburden Trenching

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In late September and early October several overburden trenches, each about 100 m to 125 m long, were dug between lines 108450E and 110450E (figure 7). Two shorter trenches were also dug on lines 101450E and 101475E (figure 8). The longer trenches were intended to test an area of complex magnetics where a fold structure was suspected to exist. If this were the case then mineralization similar in nature to that found at the Shaft Zone might exist.

The mineralized zone was observed extending over widths of 5 m and 8 m on lines 108+50E and 109+00 respectively. It consists of strongly carbonatized and silicified basalt with patchy quartz, quartz veins and very minor pyrite. On lines 109+50E and 110+00E a very narrow zone about 10 cm wide was noted; this widens to about 3.5 m on line 110+50E. It is unlikely that it is part of the main mineralized zone since it is offset from the zone and appears to cut across strike in this area. In all of the trenches the foliation measurements in the basalts indicate a consistent east-west trend, however, when the actual units (basalts and sediments) are mapped these indicate a strike of about 300° to 310°. The strike of the mineralized zone parallels that of the country rocks.

It is considered that the apparently complex magnetic picture (figure'9, sheets 1,2) in this area is at least partly due to the change in strike of the country rocks which was not recognized when the mag data was contoured.

Two short trenches were excavated on lines 101+50E and 101+75E, immediately east of the Canico camp. No mineralization was noted in the latter trench, however, in 101+50E a 0.4 m section of strongly foliated, silicified and quartz veined basalt assayed 2.25 ppm gold. This mineralization strikes toward the Shaft Zone and probably extends into the southern limb of the Shaft Zone drag fold.

#### 7.0 DIAMOND DRILLING

Seventeen (17) diamond drill holes (lable 1) were completed on the Burton property during October. The total length drilled amounted to 468.17 metres (1536 feet). Eleven (11) holes were drilled on the Shaft Zone and six (6) on the East Zone. Drill logs and sections are located in Appendix I.

7.1 Shaft Zone

Drilling at the Shaft Zone commenced on line 100+00E and continued westwards to line 99+40E with sections spaced every 20 metres (figure 6). As noted above, the recognition of a westerly plunging fold structure in this area enabled the holes to be spotted so that they would intersect the structure. Mineralized intersections with assay values greater than 1 ppm Au are shown on Table 2. The best section to date is 99+60E where borehole 72513 intersected 9.34 ppm Au over 7.75 m and borehole 72515 intersected 8.91 ppm Au over 8.00 metres. The deepest intersection in the current drill program is from borehole 72520 (section 99+40E) where 12.47 ppm Au was obtained over 3.13 m at a vertical depth of 38.15 m to 41.28 m. The only holes which did not intersect any significant mineralization were 72516 and 72517 which were drilled on the southern edge of the structure and missed the mineralized zone. 3.2.2 Esther Township Area (cont.)

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Property No. 6 - Grandad Resources Ltd. - Burton Option (1987-present)

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In 1987, the property was optioned to Grandad Resources Ltd., who completed a 14 hole surface diamond drilling program totalling 3,117 feet that same year. In August, 1987, Grandad Resources announced the results of one diamond drill hole which cut 28.4 feet of mineralization grading 0.23 oz/ton gold. (Northern Miner Press, 1987;pp.9). An additional 5 drill holes, drilled to test the southeast extension of the mineralized zone, have been filed for assessment on the unpatented portion of the claim group. Hole 87-2, drilled approximately 2000 feet east of the Shaft zone, cut 0.7 feet averaging 0.133 oz/ton gold in sheared chloritic meta-gabbro. The other 4 holes returned only anomalous values up to 0.02 oz/ton gold. Late in 1987, Grandad began a second diamond drill program. No information is available on the results of this program. (Ref: Timmins Resident Geologist Assessment File, T-1920, Northern Miner Press, August 17, 1987, pp.9).

BH	From -	10	Length	Grade/ppm Au
72508	5.61 -	6.32	0.71 m	9.98
72509	7.69 -	9.95	2.26 m	8.13
72510	9.14 -	11.41	2.26 m	17.07
72511	15.54 -	15.96	0.42 m	1.02
72512	9.74 -	10.36	0.62 m	14.45
72513	4.20 -	4.88	0.68 m	7.52
	11.65 -	13.45	1.80 m	1.05
	13.45 -	14.50	1.05 m	7.80
	19.05 -	26.80	7.75 m	9.34
72514	3.66 -	6.14	2.48 m	15.12
	6.14 -	7.42	1.28 m	1.75
	8.82 -	10.00	1.19 m	1.39
	10.00 -	11.77	1.77 m	10.45
	11.77 -	12.35	0.58 m	1.44
	13.40 -	15.55	2.15 m	1.08
	17.43 -	19.65	2.22 m	1.37
	19.88 -	21.35	1.47 m	3.83
72515	21.74 -	22.90	· 1.15 m	2.23
	23.61 -	31.61	8.00 m	B.91
72518	9.56 -	11.35	1.79 m	4.40
	13.93 -	14.65	0.72 m	6.45
72519	16.17 -	16.41	0.24 m	2.54
	16.41 -	16.90	0.49 m	16.18
	16.90 -	17.83	0.93 m	2.26
	19.34 -	20.57	1.23 m	1.28
	21.39 -	22.50	1.11 m	10.42
	22.50 -	22.76	0.26 m	2.26
72520	26.45 -	27.13	0.68 m	7.89
	38.15 -	41.28	3.13 m	12.47
72521	11.85 -	12.15	0.30 m	2.81
	13.51 -	13.88	0.37 m	16.01
72522	20.22 -	21.02	0.80 m	1.54
	21.55 -	21.90	0.35 m	2.40
	21.90 -	22.62	0.72 m	7.03
	25.68 -	26.56	0.88 m	3.74
	27.43 -	27.96	0.53 m	5.04
72523	7.20 -	8.65	1.45 m	9.53
	8.65 -	9.54	0.89 m	1.37
	10.80 -	12.18	1.38 m	6.30
72524	13.69 -	13.91	0.22 m	2.95
	17.27 -	18.54	1.27 m	1.45
	18.54 -	20.31	1.77 m	9.39
	23.32 -	23.92	0.60 m	1.20

TABLE 2

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## 4.0 GEOLOGY

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# 4.1 Regional Geology

The Osway Township property is situated in a northwest trending belt of Archean metavolcanics and metasediments which comprise the southeast portion of the Swayze Greenstone Belt (Figure 1). The volcanosedimentary sequence has been traced for over 100 kilometers from Chester Township in the east to Halcrow Township in the west, where it abutts the Ivanhoe Front of the Kapuskasing Structural Zone.

The central section of the belt is isoclinally folded and is believed to represent a major synclinorium, the axis of which is represented by a band of matamorphased polymictic conglomerate and conglomeritic arenite, with subordinate arenite and wacke, and lesser laminated mudstone, ironstone and chert. The sediments are underlain by intermediate to felsic tuff, agglomerate and pyroclastic fragmental units with interbedded chert-magnetite and chert-pyrite-graphite-argillite units. The volcaniclastic sequences are in turn underlain by mafic to intermediate tholeiitic flows and pyroclastic breccias and minor interflow argillite-graphite units, felsic ash-tuffs and banded iron formation. The lower tholeiites are in unconformable contact with the migmatite-granite terrane surrounding the greenstone belt. Intrusive felsic porphyritic dikes, sills and stocks have intruded the supracrustal rocks, and late diabase dikes and lamprophyric dikes intrude all rock types in the area.

Metamorphic grade is variable between middle greenschist and upper amphibolite facies, with higher metamorphic grades prevalent along the edge of the greenstone belt. Extensive metasomatism associated with the emplacement of the felsic porphyritic intrusions tends to mask the extent of metamorphism in the central volcano-sedimentary rocks.

Regional foliation trends northwest to west with vertical to steep north and south dips. Several ages and directions of faulting have been observed.

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4.1 Regional Geology (cont.)

The major sedimentary-volcanic contacts are faulted parallel to stratigraphy. Felsic porphyry contacts tend to parallel or subparallel stratigraphy, and the contacts are variably sheared with the most intensive deformation developed in the sediments, where the largest porphyry bodies are concentrated. Splay faults and subsidiary, parallel faults are common in the vicinity of the sheared porphyry contacts. Moderately east-dipping, north-northwest trending thrust faults exibit a predominant vertical movement and a dextral horizontal displacement of from 1 to 50 feet at the Jerome Mine. Geophysical evidence suggests this cross-faulting is not a local phenomenon. Late northeast trending and northwest trending transcurrent faults are the most obvious structural features in the area. The extent of vertical displacement on these regional faults is not known and lateral displacement varies from a few feet to over a mile. Northeast trending faults exhibit a sinistral sense of movement while the northwest trending faults show a dextral sense of displacement.

# 4.2 Property Geology

The Osway Township property is underlain by a northwest trending, vertical to steeply north or south dipping sequence of conglomerate and conglomeritic arenite, massive to pillowed basaltic flows, thick felsic pyroclastic units and iron formation. Outcrop exposure is limited to the northwest and southeast portions of the property. Iron formation is not exposed at surface, but is interpreted from geophysics and limited drilling. A major northwest-trending transcurrent fault is geophysically interpreted cutting along the common boundary between Grandad Resources Ltd.'s Burton Property and the Osway Township property.

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# 4.2 Property Geology (cont.)

Available information suggests the geology underlying the Osway Township property represents a transition zone between proximal volcanic rocks and more distal, basin sediments. Limited quartz-feldspar porphyry dike exposures have been documented in areas with outcrop exposure.

# 5.0 ECONOMIC POTENTIAL

The Osway Township property is stratigically located on a strong, northwest trending, regional shear structure, bracketed to the west by a promising gold occurrence held by Grandad Resources Limited, and to the east by the Jerome Gold Mine Property, held by joint venture partners Jerome Gold Mines Corp., Muscocho Explorations Ltd., and McNellen Resources Geology and geophysics suggest the property is underlain by a Inc. transitional sequence of volcanics, pyroclastics, tuffs and sediments . representative of a regional lateral facies change. The potential for the development of a restricted basin environment, similar to the geological environment hosting the Hemlo orebody, is greatest in such transition zones. Airborne geophysical surveys carried out by industry and the provincial government show a cluster of moderate to strong INPUT anomalies flanking the nose of a strong, linear, northwest trending, magnetic anomaly which terminates in the center of the claim group. Research indicates the anomalies have never been defined or drill tested.

Exploration to date in the Canadian Shield has shown that gold can occur in a wide variety of geological environments. The study of many deposits and occurrences of gold over time has established a rather broad set of criteria that are useful in defining exploration target areas for gold. These criteria were summarized by A.C. Colvine of the Ontario Geological Survey (1983). They include:

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# 5.0 ECONOMIC POTENTIAL (cont.)

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- 1. common occurrence of quartz-carbonate (ankerite) vein systems and an almost ubiquitous association with pyrite;
- 2. Occurrence with mafic volcanic rocks, usually of greenschist or lower amphibolite grade;
- 3. common spatial association with -alteration zones (predominately carbonatization and silicification) -chemical sedimentary rocks -felsic intrusions -regional transitions between volcanic and clastic sedimentary sequences (Major lithoficies changes) -komatiltes
- 4. common association with tellurides, arsenopyrite, tourmaline, scheelite and molybdenite;
- 5. local structural control on the final siting of gold concentrations and apparent concentration of deposits along major deformation zones.

Colvine stressed the necessity of systematically defining the role and relative importance of each criterion in the gold forming environment.

The Osway Township property appears to fit many of the criteria as summarized by Colvine. It is unusual to find ground between two known significant gold occurrences that has not been evaluated on the ground. The fact that outcrop exposure is minimal is not significant as identifiable airborne geophysical targets exist on the property. As such, the property has excellent potential as a gold exploration target.

# 6.0 PROPOSED EXPLORATION PROGRAM

Outcrop exposure is indicated on the northwest and southeast parts of the property, but the central portion is dominated by a prominent esker and outcrop exposure will be difficult to find.

Airborne geophysical anomalies are located in the west part of the property, and overburden is not expected to be a major problem in their evaluation. Good road access makes the property amenable to detailed ground evaluation, including geological mapping and prospecting, geophysical surveys and selected rock and soil geochemical surveys. The possibility exists for trenching and stripping to be carried out on the west half of the property.

The initial phase of the proposed exploration program is as follows (N.B. Numerical and dollar figures are based on the 59 existing recorded mining claims plus the 5 "Filed Only" claims - total 64):

-33-

# OSWAY PROPERTY

# PHASE 1 - PRELIMINARY EVALUATION

1.	Linecutting, including baseline and all cross lines at 400 foot spacing 70 line miles @ \$275. per mile	\$ 19,250.00
2.	Ground Proton Magnetometer survey 70 line miles @ \$150. per mile	10,500.00
3.	Ground V.L.F E.M. survey 64 line miles @ \$150. per mile	9,600.00
4.	Geological Mapping, Prospecting, Soil Sampling 30 days @ \$400. per day	12,000.00
5.	Trenching, Basal Till Sampling (Backhoe)	4,000.00
	5 days @ \$800. per day Mob and Demob (Backhoe)	500.00
6.	Assay and Geochemical Analyses 100 samples @ \$35, per sample (Au,As,Mo)	3,500.00
7.	Camp Costs, Vehicle, Misc. 35 days @ \$50. per day	1,750.00
	Sub Total	\$ 61,100.00
	Contingencies at 10%	6,110.00
	Administration at 15%	9,165.00
	Total Expenditure	76,375.00

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#### Certificate of Qualifications

- I, James Carson Ireland do hereby certify;
  - 1. That I am a Geologist and reside at 466 Center Street, Timmins, Ontario. P4N 7V5
  - 2. That I graduated from Laurentian University in Sudbury, Ontario, with a four year B.Sc. in Geology in 1981.
  - 3. That I have practiced my profession since 1981 and have been involved with geology since 1978.
  - 4. That the report on the Osway Property is based upon my knowledge of the area and on a review of published information and accessible data on file with the Ministry of Northern Development and Mines, Timmins.
  - 5. That I have no personal, direct or indirect interest in the Osway Property, Osway and Esther Townships, District of Sudbury, Ontario, or any adjacent properties, nor do I intend to in the future.
  - 6. That, during the period March 25, 1988 to April 25, 1988, I have written this report as an independent Geologist.

Dated in Timmins, Ontario, this 30th day of April, 1988

James C. Ireland, B.Sc. Geologist.



#### SELECTED REFERENCES:

Boyle, R.W. (1979) -The geochemistry of Gold and its Deposits Geol. Surv. Can. Bulletin 280. 584p. Meen, V.B. (1944) -Geology of the Cunningham-Garnet Area, Sudbury District, Ontario, Ontario Department of Mines, Ann. Report, Vol.51 Pt.7 Durocher, M.E. (1983) -The Nature of Hydrothermal Alteration Associated with the Madsen and Starret-Olsen Gold Deposits, Red Lake Area, in The Geology of Gold In Ontario, Ont. Geol. Survey Misc. Paper 110, edited by A.C. Colvine. 278p. Pirie, J. (1981) -Regional Geological Setting of Gold Deposits in the Red Lake Area, Northwestern Ontario, in Genesis of Archean Volcanic Hosted Gold Deposits, Symposium held at the University of Waterloo, March 7, 1980, Ontario-Geological Survey, Misc. Paper 97, 175p. -Geology of the Garnet Lake Area, District Siragusa, G.M. (1987) of Sudbury, Ontario Geological Survey Report, 248, 81p. Accompanied by Maps 2503 and 2504, Scale 1:31,680. -Geology of Osway Township, Ontario Department Moorhouse, W.W. (1951) of Mines, Volume 58, Part 5, 1949. -Jerome Area (West and East) Siragusa, G.M. (1980) District of Sudbury, Ontario. Geological Survey Preliminary Maps, P.2369 and P.2370, Geological Series, Scale 1:15,840 or 1 inch to 1 mile. Geology 1989. -Geology of the Opeepeesway Lake Area, Ontario Laird, H.C. (1936) Department of Mines, Volume 44, Part 7, 1935.

Assessment Files, Resident Geologist Office, Timmins, Ontario.



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GEOCHEMICAL SURVEY ANALYSIS

OSWAY TOWNSHIP PROPERTY Timmins Area, Ontario

NTS 41 O/NE

for

CENTRAL CRUDE LIMITED

Toronto, Ontario

Dominion Explorers Inc. 916 - 111 Richmond Street West, Toronto, Ontario M5H 2G4

Mary K. Kearney 77 Balliol St., Toronto, Ontario M4S 1C2

(416) 364-3182

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### GEOCHEMICAL SURVEY ASSESSMENT ANALYSIS

Property: Osway Township Property Swayze-Timmins Area, Northern Ontario

Division: Porcupine Mining Division District of Sudbury

Property Holder: Central Crude Limited/ Noront Resources Ltd. 55 Yonge Street, 111 Richmond St. W., Toronto, Ontario Toronto, Ontario M5E 1J4 M5H 2G4

Assessment Submission by: Dominion Explorers Inc., Management Company, on behalf of Central Crude Limited

License Number: T1361

Claim Numbers:

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P 1034802 1034803 1045922 - 1045935 incl. 1045892 - 1045910 incl. 1045998 - 1046000 incl. 1046002 - 1046005 incl. 1046014 - 1046016 incl. 1046006 - 1046009 incl.

Survey Date: November 11 - 22, 1988

Cut Line Km.(): 84.67 km.



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References				

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1	Location Map	1a
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3	Soil Geochemistry	map pocket



#### GEOCHEMICAL SURVEY ANALYSIS

#### LOCATION:

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The Osway Township property is located in the extreme western portion of Osway Township within the southern portion of the Swayze greenstone belt approximately 69 miles southwest of Timmins, Ontario, figure 1. The property lies within the District of Sudbury in the Porcupine Mining Division, latitude 47 degrees, 38 minutes north and longitude 82 degrees, 20 minutes.

ACCESS, Topography and Vegetation:

Property access is easily attainable via several gravel roads serviced by the Sutan-Ramsey-Shingtree corridor road. Although there are numerous rivers, ponds and lakes existing within the claim group, these are not navigable.

Relief is very low with a mean elevation of 427 meters (1,400ft.).

In the northeast portion maximum of the property relief is 150 feet or less. Higher positive relief is characterized by an esker which dissects the center of the property, lower relief by swamp and kettles. Bedrock exposures are restricted to the southeast and northwest portions of the property.

Vegetation consists of birch, poplar, jackpine, alder and cedar.



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LUCATION MAP SWAYZE PROPERTIES



page 2/ Osway Township Property

REGIONAL DESCRIPTION

The Osway Township property is underlain by largely Archean metasedimentary rocks metavolcanic and of greenschist metamorphic grade within the Swayze belt which have been deformed by an east-southeast trending synclinorium. This synclinorium tholeiitic metavolcanics in the outer consists of: limbs and calc - alkaline metavolcanics younger and polymictic metaconglomerate comprising the core.

The geology and ore environment in the Kirkland Lake and Timmins region appears to be comparable. Within the Timmins area, most gold ore occurs in quartz veins in metavolcanic flows and tuffs, carbonate rocks and nearby quartz-feldspar porphyry stocks. Gold-bearing units consist of two components: 1) a carbonate-rich unit which may be a sedimentary rock or altererd volcanic rock and 2) a quartz vein system which has a direct spatial association with the carbonate-rich unit. Quartz veins postdate the emplacement of the carbonate-rich units.

Timmins porphyries are defined as albite-rich whereas the Kirkland Lake porphyries exhibit large percentages of potash felspar.

As well, auriferous metasediments are abundant in the Timmins area and are predominantly physically associated with pyroclastics.

Notably, the Jerome Mine is approximately 4 miles southeast and on-strike of the Osway Township property. From 1941 to 1943 the Jerome Mine produced 56,878 ounces of gold and 15,104 ounces When operations ceased in 1945, the ore reserve was of silver. 344,000 tons averaging 0.19 oz/ton Au after dilution. Work completed by Muscocho Explorations Limited increased reserves to tons of 0.193 oz/ton Au in 1988. 437.320 This mine is unusual of auriferous blue quartz which results in the best ore because located in two zones, 1) the North or Main Zone and 2) the South Zone. This blue quartz occurs at the contact of the Jerome Porphyry with the metasediments.

The other pertinent gold occurrence in the immediate area of the claim group occurs in Esther Township approximately 2/3 mile northwest and on-strike and is referred to as the Gran Dad Discovery. Since 1928, this has been investigated with little excitement. page 3/ Osway Township Property

**PROPERTY DESCRIPTION:** 

The claim group, as previously noted, lies between the Jerome Mine owned by Muscocho Explorations Limited/McNellan Resources Ltd. and the Grandad Showing. The property is located within a northwest trending regional shear possessing several south southwest trending eskers. Outcrop is not plentiful.

The northern third of the property is underlain by Timiskaming metasediments and iron formation. Chloritic green to carbonatized polymictic conglomerate, arkose and wackes fabricate the clastic metasediments. The remainder of the property is underlain by mafic metavolcanics consisting predominantly of massive to pillowed basaltic flows and iron formation. Thick felsic pyroclastic units occur throughout.

The immmediate area east of the property is underlain by sedimentary rocks of Timiskaming (Rideout Series) and to the west and south by volcanic rocks to include andesites and basalts of the Keewatin. The remainder of rock types consist of porphyritic dikes and or sills of the Algoman and later diabase dikes of the Matachewan or Keewanawan.

Within the property, porphyry sills and dykes are presumed to occur although only a single feldspar porphyry outcrop exists on the property and this lies in contact with a highly sheared chloritic conglomerate in the northern portion of the claim group.

At least two sets of diabase dykes cut all units; two additional sets are geophysically inferred. Of these, the most prominent set trends in a northeasterly direction.

An extensive regional granitic intrusion lies along the southern claim boundary extrapolating laterally.

#### EXPLORATION SUMMARY

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The Swayze belt has experienced activity since the early 1900's and is well documented.

Briefly, the iron formations were investigated firstly, followed by base-metal and gold exploration. A minor gold rush occurred during 1929 to 1939 with only sporadic work done from 1950 to 1970. This was followed by a porphyry copper discovery which resulted in renewed base metal exploration until 1981. Since then, the general region has experienced extensive exploration for gold, the result of the Hemlo boom.

# page 4/ Osway Township Property

#### Exploration Summary Cont'd.

The Osway Township property has undergone the following preliminary work:

- 1. Preliminary evaluation-geological analysis report.
- 2. Airborne magnetic, electromagnetic survy.
- 3. Linecutting. Cut line over the entire property at 100m intervals , base line and two tie lines totalling 84.67km.
- 4. Ground geophysical surveys, magnetic and VLF-EM 16.
- 5. Soil geochemical survey.
- 6. Mechanical stripping.
- 7. Lithogeochemical sampling.

#### SOIL GEOCHEMICAL SURVEY

#### INTRODUCTION

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A soil geochemical survey was completed in the fall of 1988 by Tarnex Geoservices Ltd. of British Columbia to cover the claim group, figure 2. A total of 2,000 samples were collected predominantly from the 'B' horizon with 1,380 analyzed for Au and As.

It was felt that the survey was not, overall, effective as an exploration tool. Many criteria such as the extensive and thick overburden, and glacial remobilization potentiate this problem.

## METHOD

To analyze and evaluate the geochemical survey, the following threshold values were used: 1) primary anomalous area, 35+ Au ppb 2) secondary anomalous areas, 30 - 35 ppb Au. This is notably higher than normally employed in the area.

#### INTERPRETATION

To properly evaluate this property, additional sampling is required to ascertain the validity and nature of the suggested anomalous trends. Remarks will be focussed on the data and its' extrapolation.

Three separate primary east-west trending anomalous zones consisting of predominantly point source tenors or relatively short duration anomalous areas occur in the north, central and southern portions of the property.

The central zone anomalies are thought to be associated with iron formation.

page 5/ Osway Township Property

#### Interpretation Cont'd.

Within the most southern zone, the longest primary anomalous length is 200 meters. All remaining primary anomalous areas are in fact point source occurrences probably related to hydraulic fracturing within short duration shears or faults. Associated arsenic values are generally only very slightly elevated from background. Overall, the arsenic values are not an indicator.

An interesting anomalous area occurs between L10E and L12E within claim P 1045905. On L10E, the primary anomalous area width is approximately 60 meters and on L12E it is a point source tenor. Between these lines a strong secondary anomalous area envelopes both primary areas trending as well in a southwesterly direction. This area should be further investigated to gain insight into the mode of mineralization in relationship to the nose of syncline in this southeastern portion of the property.

The highest arsenic values, 20 and 11 ppm As respectively, are located in the extreme northwestern portion of the property within claim P1046016. These are single point source occurrences not correlateable with gold values of the same soil sample which is predominantly the norm for the entire property. Generally, the arsenic values are extremely low with only 30 samples or 4.6% of the population returning 2 ppm As or greater and only 2 samples, 11 ppm As and 20 ppm As, exceeding 9 ppm As. Consequently, as previously stated, arsenic is not considered a viable pathfinder element.

The highest returned soil gold value is 81 ppb Au and is located within claim P1045909 in the southwestern portion of the property.

#### DISCUSSION

Structure, namely shearing and faulting, is complex and complicated in this localized portion of the Swayze belt. Offset displacement is often indicated by either north-south or northeast trending shears. This structure acts as channelways for possible mineralizing fluids and is therefore of utmost importance. All anomalous areas should be analyzed in relation to this once a geological survey is completed on this property.

It is documented that mafic flows are associated with ankerite units which are strongly carbonatized as in the Dome Mine region and are associated with tuff and hyaloclastite beds at flow contacts. Such carbonatized areas may be suggested by elevated geochemical values.



#### CONCLUSION

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Given that one of the essential problems in gold-exploration geology is discriminating between a local, restricted anomaly and a potential large producer, it is obvious from this data that a better understanding is necessary to evaluate local gold tenor and define the optimum environment for gold deposition.

Geochemical screens, particularly Au & As, have been useful in the Timmins area. However, this geochemical survey using this screen has been ineffective. It would be advantageous to acquire regional government geochemical surveys completed in this area; additional chemical elements would benefit the overall analysis.

Prime target areas are considered to be carbonate-rich units which may be a sedimentary rock or an altered volcanic rock. These areas may be host to quartz vein systems spatially associated with such units. Several anomalous areas require follow-up to discern their causation. page 7/

#### CERTIFICATE OF QUALIFICATIONS

This is to certify that I, Mary K. Kearney have been a resident of Toronto, in the Province of Ontario, since 1973.

I have been engaged in mining exploration since 1967 and as a Consulting Geologist since 1979.

I am a graduate of Western University and the University of Waterloo (B.S., B.Sc.) in Geology.

registered Professional Geologist and а Regional T am Representative of the Association of Professional Geologists and Geophysicists of Quebec; and also a member of the Quebec Prospectors Association, of the Prospectors and Developers American Association of Association of Canada; Petroleum the Cordilleran Geologists; of Section of the Geological Association of Canada ; of the Canadian Institute of Mining and Yukon Chamber of Mines and an Associate of Gibbs Metallurgy; Associates Energy and Minerals Information Specialists of Boulder, Colorado, U.S.A.

This report is based upon examination of the data provided by Central Crude Limited.

I have no direct or indirect interest in this property.



Dated: October, 1989



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# REFERENCES

1972 XXIV International Geological Congress Pye, E., Lovell, H., Bright, E., Petruk, W., et al Precambrian Geology and Mineral Deposits of the Timagami, Cobalt, Kirkland Lake and Timmins Region, Ontario

- 1980 O.G.S. Summary of Research 1979 - 1980
- 1988 O.G.S. Summary of Field Work & Other Activities Miscellaneous Paper 141

Information supplied by Central Crude Limited



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# PETROGRAPHIC DESCRIPTIONS

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Submitted by: Geoplastech, Inc. Petrography by: Barbara Murck

> Client: Stephen Masson Noront Resources

> > Locality: Project:

Date Completed: Jan. 12, 1989



# PETROGRAPHIC DESCRIPTION

# SAMPLE No. T1-1030-46' (polished thin section)

#### SUMMARY & TEXTURAL DESCRIPTION

This is a heavily serpentinized intrusive ultramafic rock. specifically a peridotite (or lherzolite). It consists of abundant (dominant) cumulate-textured olivine, now thoroughly serpentinized, with intercumulus pyroxene, probably mainly clinopyroxene. The pyroxene is also altered (metamorphosed under hydrous conditions, to be more accurate), although less heavily The material altering the pyroxene is a than the olivine. fibrous mixture, probably consisting of talc ± serpentine ± brucite. Mixed in with the serpentine in the intergrain areas is a green, platy to flaky mineral which is probably chlorite, although the birefringence is a little high, and the green to brown pleochroism unusual for chlorite; alternatively it could be anthophyllite. There is a lot of opaque material in the sample  $(\approx 20\%)$ , of which only a small amount is reflectant. The reflectant material is dominated by oxides (magnetite + chromite), with only very minor pyrite + pyrrhotite.

## MINERALOGY

- ≈50% Serpentine: colourless, fibrous material, closely pseudomorphous after euhedral to embayed, cumulatetextured olivine, of which none remains (original grain size of the olivine ≈0.4-1.0 mm); network and mesh textures are common; the serpentine is closely intergrown with chlorite (? see below) in the intergrain areas, and also occurs in veinlets with magnetite.
- ≈20% Opaques (although only about 7% of the total rock is actually reflectant), consisting of:

≈60% Magnetite: very common as irregular fringes surrounding chromite, and also replacing chromite along cracks and fractures; magnetite also occurs in irregular gashes and discontinuous remobilized veinlets, and as relatively coarse (up to 0.4 mm), irregular masses; much of the magnetite occurs as inclusions in totally serpentinized olivine grains (from which the magnetite has exsolved?).

 $\approx$ 40% Chromite: medium-fine (0.2 mm and less), equant grains, generally subhedral, occasionally euhedral, but rounded where rimmed by magnetite (which is very common); magnetite (lighter colour and slightly higher reflectivity) also replaces chromite along fractures and cracks; no internal reflections were observed in the chromite, suggesting an Ferich composition rather than an Al-rich or Mg-rich composition; chormites appear homogeneous and unzoned.

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Acc. Pyrite: mostly extremely fine grains ( $<5 \mu$ ) as inclusions in silicates, occasionally as inclusions in magnetite; also occurs with magnetite, filling cracks around grain boundaries between cumulus olivine grains.

Tr.-Acc. Pyrrhotite: only a few very fine occurrences were observed, always rimming and replacing fine grains of pyrite.

Tr. Chalcopyrite: extremely fine grains, as inclusions in magnetite.

- ~15% Pyroxene: originally more abundant, prior to alteration (metamorphism); due to the degree of alteration of the pyroxenes (which, however, are less strongly altered than the olivine), and also due to the slight extra thickness of polished sections, it is difficult to judge the relative proportions of clinopyroxene to orthopyroxene; I would guess that both are (were) present, with clinopyroxene more abundant, making the protolith a "wehrlite" (ol + cpx) or a "lherzolite" (ol + cpx + opx), both of which are included in the more general term "peridotite".
- ~10% Chlorite (or possibly Anthophyllite): this mineral resembles chlorite, although there are a few features that are unusual; it is platy to flaky, almost fibrous in some cases, occurring in intergrain areas (i.e. between the olivine grains), closely intergrown with serpentine; it is moderately pleochroic, from light green to brown (chlorite is usually only weakly pleochroic, from colourless to light green); the interference colours vary, from low anomalous purple to blue colours (typical of chlorite) to rather high colours (not typical of chlorite); alternatively, it could be anthophyllite, which is commonly found in metamorphosed ultramafics.
- ~5% Talc(?): extremely fine-grained, colourless, fibrous, relatively high birefringence material altering pyroxenes; it is probably mainly talc, possibly mixed with some serpentine and/or brucite.

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# PETROGRAPHIC DESCRIPTION

#### SAMPLE No. T1-1030-225' (polished thin section)

## SUMMARY & TEXTURAL DESCRIPTION

This is a feldspar- and quartz-phyric igneous rock, possibly extrusive (i.e. a tuff), but more likely hypabyssal. It consists of feldspar and (less abundant) quartz phenocrysts in a finegrained, granular-textured quartzofeldspathic groundmass. Judging by the phenocryst assemblage and the composition of the plagioclase, the bulk composition of the rock is probably in the general range of a dacite. The alteration is light, and consists mainly of minor, lightly disseminated carbonate, and stringers of chlorite. There are also some stringers of a darker green mineral which could be chlorite, but is more likely a green biotite (e.g. annite). The sample is criss-crossed by very fine, anastomosing cracks and stringers, containing opaque but nonreflectant material (probably cryptocrystalline). In many areas it is clear that material has been removed along these cracks, strongly suggesting pressure solution remobilization. Minor guartz and minor albite are also remobilized into veinlets. There is some evidence of minor deformation, particularly in bent and broken plagioclase twin lamellae. There is virtually no reflectant material in this thin section, except for a small amount of what would normally be referred to as "leucoxene".

## MINERALOGY

- ≈85% Quartz & Quartzofeldspathic Material: the groundmass of the sample consists of fine-grained, granular-textured feldspar (mainly or exclusively plagioclase) and quartz (0.2 mm and less), and abundant, very fine-grained quartz-feldspar intergrowths; feldspar seems to be considerably more abundant than quartz in the groundmass, but it is difficult to distinguish the two, in order to judge the relative proportions; quartz also occurs as phenocrysts, although not as commonly as feldspar; the quartz phenocrysts are typically rounded, often embayed, ave. 0.5-1.0 mm; remobilized quartz also occurs in veinlets.
- \*10% Feldspar: in addition to forming a large part (probably the major part) of the fine-grained quartzofeldspathic groundmass, feldspar also occurs as phenocrysts (total feldspar in the rock is probably >60%); the phenocrysts are generally subhedral, tabular, ave. 1-1.5 mm; mainly or exclusively plagioclase, very lightly altered to essentially fresh; optical determination of plagioclase composition is unreliable because most of the grains are fractured and kinked, but it seems to be at least

as calcic as An22 (oligoclase); feldspar also occurs as remobilized albite in veinlets; this tends to be finegrained (0.2 mm), with a dusting of reddish-brown material, probably extremely fine iron oxide. 4

- 2-3% Chlorite (and/or possibly Annite): while some chlorite is present, for the most part the birefringence of this mineral is rather high, and the colour a bit too dark for chlorite; I do believe that it is micaceous, because of its elongated platy habit, perfect cleavage, and bird's eye extinction; I therefore suggest that this might actually be a green biotite (e.g. annite, an Fe<sup>3+</sup> biotite); moderate pleochroism, dark green to greenish-yellow; occurs in fine, contorted veinlets, and occasionally in small, radiating clusters of needle-like grains associated with carbonate, in quartz veinlets; the chlorite itself in this sample has weak pleochroism, colourless to light green, with low anomalous greyish-green interference colours (more typical of chlorite).
- 2-3% Opaques: extremely fine, irregular stringers, probably related to pressure solution; mostly non-reflectant, except for some small masses of "leucoxene".
- Acc. Carbonate: fine-grained, irregular, grainy masses, often with a slight brownish to greyish tint (possibly an Fe-carbonate); lightly disseminated.

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## PETROGRAPHIC DESCRIPTION

## SAMPLE No. T1-1031-216' (polished thin section)

## SUMMARY & TEXTURAL DESCRIPTION

This sample is very similar to sample T1-1030-225', i.e. a feldspar- and quartz-phyric hypabyssal rock, probably approximately dacite in bulk composition. The texture and mineralogy are very similar to that of T1-1030-225', although the groundmass is slightly coarser-grained, probably ruling out the possibility that this sample could have been extrusive. From the field relations as I understand them, it is entirely probable that this is a felsic porphyry dyke cutting the serpentinized ultramafics. As in T1-1030-225', the alteration consists mainly of anastomosing stringers of opaques material which are, however, much more abundant in this sample. Also common in this sample are small, radiating clusters of a pale greenish- to buffcoloured muscovite, which may be a Cr muscovite. It is possible that the Cr could have been derived from nearby chromite-bearing ultramafics, although chromite is notoriously non-mobile. There is only a trace amount of reflectant material present, all iron oxide (mainly magnetite), although it is too fine-grained to be certain.

#### MINERALOGY

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- \*75% Quartz & Quartzofeldspathic Material: main occurrence of quartz is in the granular-textured groundmass, which is a complex intermixture of quartz + feldspar, possibly dominated by feldspar; ave. grain size in the groundmass is \*0.1-0.2 mm, which probably indicates a hypabyssal, rather than extrusive, rock; quartz also occurs as phenocrysts, but much less commonly than feldspar; generally rounded to subhedral, up to 2 mm; no quartz veins were observed in this thin section.
- ~10% Opaques: only trace reflectant material is present, as discussed above; all iron oxide, probably mainly magnetite, although it is so fine-grained that it is difficult to identify with certainty; the rest of the opaque material occurs in anastomosing stringers and masses of cryptocrystalline material, almost certainly associated with pressure solution remobilization and removal of material; the largest stringers of opaque material are easily seen by holding the thin section up to the light.
- % Muscovite (+ Chlorite + Annite?): in addition to extremely fine, needle-like sericite altering feldspar phenocrysts, a variety of "white" mica occurrences are



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common in this sample; main occurrence is in small, radiating clusters of elongated, flaky grains (ave. grain size 0.2 mm in length); the muscovite ranges from essentially colourless, to weakly pleochroic in light green and buff; this is probably either a Cr-bearing or a ferric iron-bearing muscovite; the muscovite is darker green where it is closely associated with the opaque material described above; it is sometimes associated with a light green, platy mineral with low, anomalous greyish-green interference colours, probably chlorite (accessory amounts only), and even less frequently with a darker green mineral, possibly an annite (as described in sample **T1-1030-225'**).

\*5% Feldspar: as in T1-1030-225', feldspar probably makes up the main portion of the granular-textured groundmass material, but also occurs as phenocrysts; total feldspar probably 50% or more; mainly or exclusively plagioclase, composition not optically determinable; lightly to moderately altered (sericitized); phenocrysts are generally subhedral, ave. 1-1.5 mm in length; no albite veinlets were observed in this sample.

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## PETROGRAPHIC DESCRIPTION

#### SAMPLE No. T1-1031-341' (polished thin section)

#### SUMMARY & TEXTURAL DESCRIPTION

This sample is very similar to sample T1-1030-46', i.e. a heavily serpentinized peridotite (or lherzolite), consisting of cumulate-textured olivine, now totally pseudomorphed by serpentine, with intercumulus pyroxene. The pyroxene tends to be more heavily altered than in sample T1-1030-46', probably mainly to talc. As in T1-1030-46', the reflectant minerals are dominated by magnetite + chromite.

#### MINERALOGY

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- ≈50% Serpentine: colourless, fibrous, closely pseudomorphous after euhedral to embayed, cumulate-textured olivine, of which none remains (original grain size of the olivine ≈0.4-1.0 mm); network and mesh textures are common; the serpentine is closely intergrown with chlorite (?) in the intergrain areas, and also occurs in veinlets with magnetite.
- ≈20% Opaques (although only about 10% of the total rock is actually reflectant), consisting of:

≈70% Magnetite: in fine cracks through silicates and chromite; in gashes, veinlets, and irregular masses; often associated with serpentine in veinlets; also occurs rimming chromite, and occasionally associated with (replacing) pyrite.

 $\approx$ 30% Chromite: equant, subhedral to euhedral grains, often rimmed by magnetite, and replaced by magnetite along cracks.

Tr. Pyrite: extremely fine grains; in at least one case, pyrite seems to have been replaced by magnetite.

~10% Pyroxene: more abundant (at least 25-30%) prior to alteration (metamorphism); much of the intercumulus pyroxene has been pseudomorphously replaced by a colourless, fibrous mixture, probably mainly talc; there is also a brown pyroxene (actually a reddish- or orange-brown), with exactly the same intercumulus habit as the rest of the pyroxene (the brown pyroxene constitutes ~5% of the whole rock); I am note sure which pyroxene this is (or if it could possibly be another mineral pseudomorphing the pyroxene?); titanaugite is brown, but it is normally a violetbrown; pigeonite is also brown, but pigeonite never



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occurs in intrusive rocks (because it is unstable and inverts to a lower temperature form on cooling, except in the most rapidly cooled volcanic rocks); I would still guess that it is probably a titaniferous clinopyroxene.

- ≈15% Talc: extremely fine-grained, colourless, fibrous, relatively high birefringence material altering pyroxenes; probably mainly talc, possibly mixed with some serpentine and/or brucite.
- ~5% Chlorite (or possibly Anthophyllite): platy to flaky, almost fibrous in some cases, occurring in intergrain areas (i.e. between the olivine grains), very closely intergrown with serpentine; moderately pleochroic, from light green to brown; variable interference colours, from low anomalous purple to blue colours to rather high colours; alternatively, it could be anthophyllite, as discussed in sample T1-1030-46'.

# PHOTOMICROGRAPHS

(Photomicrographs taken in transmitted light unless reflected light is indicated.)

1. Sample T1-1030-46': totally serpentinized, cumulate-textured olivines (white) with exsolved(?) magnetite (opaque black) in fine cracks; the cumulus olivine grains are rounded due to resorption by intercumulus clinopyroxene (appears brownish); the pyroxene in this particular field of view is relatively unaltered; dimensions ~2.35 x 1.61 mm; plane polarized light.

2. Sample T1-1030-46': same as 1, with crossed polarizers; serpentine pseudomorphing olivine appears whitish- to bluishgrey, extremely fine-grained, fibrous; pyroxene shows moderately high birefringence (strong interference colours).

3. Sample T1-1030-46': totally serpentinized cumulus olivines (white) with exsolved iron oxide material, in a very altered, poikilitic intercumulus pyroxene (dark brown; dimensions ≈2.35 x 1.61 mm; plane polarized light.

4. Sample T1-1030-46': same as 3, with crossed polarizers; the material altering the pyroxene is extremely fine-grained, fibrous, probably mainly talc.

5. Sample T1-1030-46': similar to 1, different field of view, showing cumulate texture of serpentinized olivines enclosed in poikilitic intercumulus clinopyroxene; dimensions  $\approx 2.35 \times 1.61$  mm; plane polarized light.

6. Sample T1-1030-46': same as 5, with crossed polarizers.

7. Sample T1-1030-46': close-up of altered pyroxene (cf. Photos 3 & 4); relict pyroxene at the core of the grain (brownish colour) surrounded by fibrous, white material probably mainly talc or a mixture of talc and serpentine; dimensions  $\approx 1.0 \times 0.7$  mm; plane polarized light.

8. Sample T1-1030-46': same as 7, with crossed polarizers.

9. Sample T1-1030-46': close-up of three equant, subhedral chromite grains (brown) rimmed by magnetite (lighter brownishgrey), in gangue (darkest grey); in addition to replacing the chromite, magnetite is also remobilized in fine cracks; dimensions  $\approx 0.25 \times 0.17$  mm; reflected light.

10. Sample T1-1030-225': close-up of a deformed plagioclase phenocryst; twin lamellae are kinked and the grain is fractured; note anhedral, interlocking texture of the granular quartzofeldspathic groundmass; dimensions  $\approx 1.0 \times 0.7$  mm; crossed polarizers.

11. Sample T1-1030-225': plagioclase feldspar phenocryst (left center, easier to see with crossed polarizers), cut by a fine

crack, clearly related to pressure solution removal of material; the fine, contorted veinlet at the bottom of the photo is open (white), and contains a dark green mineral, probably annite; dimensions  $\approx 2.35 \times 1.61 \text{ mm}$ ; plane polarized light.

12. Sample T1-1030-225': same as 11, with crossed polarizers; granular, interlocking quartzofeldspathic groundmass is clearly seen; note also the high birefringence (high interference colours) of the 'annite', too high for chlorite.

13. Sample T1-1030-225': a fine, contorted veinlet containing the same dark green mineral shown in Photos 11 & 12; also shown is a veinlet containing remobilized, recrystallized albite; dimensions  $\approx 2.35 \times 1.61 \text{ mm}$ ; plane polarized light.

14. Sample T1-1030-225': same as 13, with crossed polarizers.

15. Sample T1-1031-216': close-up of a radiating cluster of pale green- to buff-coloured sericite, probably a Cr- or Fe<sup>3+</sup>-bearing muscovite (flaky grains at center of photo); note the abundance of dark, cryptocrystalline material; dimensions  $\approx 1.0 \times 0.7$  mm; plane polarized light.

16. Sample T1-1031-216': same as 15, with crossed polarizers; the groundmass in this sample is probably too coarse-grained for it to have been extrusive.

17. Sample T1-1031-341': reddish- or orange-brown pyroxene(?), probably a titanaugite (see discussion in text); note the intercumulus habit, identical to the other pyroxenes in these samples; the rounded, white grains are serpentinized cumulate olivines, with exsolved magnetite; dimensions  $\approx 2.35 \times 1.61$  mm; plane polarized light.

18. Sample T1-1031-341': same as 17, with crossed polarizers.
















TO:MINING



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TO: MINING LANDS SECTION

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Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines Mining Lands Section 880 Bay Street, 3rd Floor Toronto, Ontario M5S 1Z8

Telephone: (416) 965-4888

Your File: W9006-088 Our File: 2.13060

April 23, 1990

Mining Recorder Ministry of Northern Development and Mines 60 Wilson Avenue Timmins, Ontario P4N 2S7

Dear Sir:

Re: Notice of Intent dated March 9, 1990 for Geological and Geochemical Survey submitted on Mining Claims: P 1034802 et al in Osway and Esther Townships.

The assessment work credits, as listed with the above-mentioned Notice 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,

Willow

W.R. Cowan Provincial Manager, Mining Lands Mines & Minerals Division

US:pt Bnclosure

cc: Mr. G.H. Ferguson Mining and Lands Commissioner Toronto, Ontario

> Central Crude Limited Toronto, Ontario

Mary K. Kearney Toronto, Ontario Resident Geologist Timmins, Ontario Ministry of Northern Development and Mines

Technical Assessment Work Credits

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The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does me exceed the maximum allowed as follows: Geophysical +80; Geologocal +40; Geochemical +40; Section 77(19) +60,

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Ministry of Northern Development and Mines

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FROM: M.R. PORCUPINE MIN. DIV. TO: MINING LANDS SECTION

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SUITE 916 111 RICHMOND STREET WEST TORONTO, ONTARIO M5H 2G4 TELEPHONE (416) 364-3182 TELECOPIER (416) 364-5265

FE BROLEMINS LORERS INC.

MINING LANDS SECTION

January 29, 1990

Mr. Larry Stoliker Assessment Office 3rd Floor 880 Bay Street Toronto, Ontario M5S 128

## 2.13060

Dear Larry

RE: OSWAY TOWNSHIP PROPERTY 49 CLAIMS, TIMMINS AREA, ONTARIO NTS 41 0/NE

Unfortunately, hospitalization has delayed my attending to the filing of assessment work.

Thank you for your assistance and Blairs'. It is appreciated.

The following is submitted for assessment credit:

1.	Geochemical	-	40 days/claim
2.	Geological	-	20 days/claim
3.	Expenditures	-	28.4 days/claim

Should there be any problems or questions with the aforementioned submission, please call at your convenience.

Again, thanks for your assistance.

Yours very truly

DOMINION EXPLORERS INC.

Mary K. Kearney

cc: Mr. G. White, Mining Recorder Porcupine Mining Division



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## Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers 212 BROOKSBANK AVE., NORTH VANCOUVER, BRITISH COLUMBIA, CANADA V7J-2C1 PHONE (604) 984-0221 To: DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON M5H 2G4

\* INVOICE NUMBER 18910669 \*

BILLING INFORMATION	CHEMEX CODE	ANALYSIS DESCRIPTION	SAMPLES ANALYZED	UNIT PRICE	AMOUNT
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Terms : Net payment in 30 Days l.5% per month (18%6 per annum) charged on overdue accounts.					
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We are pleased to announce that CHEMEX now accepts payment by ++ VISA ++					
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## Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers 450 MATHESON BLVD., E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA L4Z-1R5

PHONE (416) 890-0310

To : DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON M5H 2G4 Project : Comments: ATT'N: S.MASSON \*\*Page No. : 1 Tot. Pages 1 Date : 1-FEB-89 Invoice # : I-8910669 P.O. # :

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## Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

450 MATHESON BLVD.,E., UNIT 54, MI88188AUGA, ONTARIO, CANADA L4Z-1R5 PHONE (416) \$90-0310 To : DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON MSH 2G4 Project : Comments: ATT'N: S.MASSON \*\*Page No. : 1 Tol. Pages: 1 Date : 1-FEB-89 Invoice # : I-8910669 P.O. # :

SAMPLE DESCRIPTION	P C	REP	SiO2 %	AI 203 %	Fe2O3 %	<b>MgO</b> %	<b>CaO</b> %	Na 20 95	K2O %	TiO2 %	P2O5 %	MinO %	BaO 95	101 %	TOTAL %	
T1-1030-216 T1-1030-341	299 299	232 232	73.11 38.92	14.14 4.64	1.67 13.07	0.52 28.68	1.11 3.56	5.89 0.27	2.76 1.52	0.06 0.20	< 0.12	0.03 0.18	< 0.04 < 0.01	1.18 8.91	100.65 99.97	
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											CERTIFI	CATION :	β.	ag	<u>.</u>	<del></del>

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## Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers 212 BROOKSBANK AVE., NORTH VANCOUVER, BRITISH COLUMBIA, CANADA V7J-2CI

PHONE (604) 984-0221

To: DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON M5H 2G4

### \* INVOICE NUMBER 18910611 \*

BILLING INFORMATION	CHEMEX CODE	ANALYSIS DESCRIPTION	SAMPLES ANALYZED	UNIT PRICE	AMOUNT
Date : 30-JAN-89 Project : Po #	368 - G12 -	CO2 % inorg A-12 W.R.A. ICP	1	27.00	27.00
Account : BHN Comments:	Sample p 299 - 232 -	pulp Total ICP digestion	s : 1 1	0.00 0.00	0.00 0.00
Billing : For analysis performed on Certificate A8910611			To Total	tal Cost \$ PAYABLE \$	27.00
Terms : Net payment in 30 Days 1.5% per month (18% per annum) charged on overdue accounts.					
Please remit payments to:					
CHEMEX LABS LTD. 212 Brooksbank Ave., North Vancouver, B.C. Canada V7J-2C1					
We are pleased to announce that CHEMEX now accepts payment by ++ VISA ++					

![](_page_88_Picture_0.jpeg)

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# Chemex Labs Ltd.

450 MATHESON BLVD., E., UNIT \$4, MISSISSAUGA, ONTARIO, CANADA L4Z-IR5

PHONE (416) \$90-0310

To: DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON M5H 2G4

A8910611

Comments: ATT'N: S.MASSON; CC: U.ABOLINS

### CERTIFICATE A8910611

DOMINION	EXPLORERS	INC.		
PROJECT	:	-		
P.O.#	:			
Samples	ubmitted ·	to our lab	in Misaiss	auga, ON.
This rep	ort was pr	inted on	1-FEB-89.	-

	SAMP	LE PREPARATION
CHBMEX CODE	NUMBER Samples	DESCRIPTION
299 232	B E	Sample split from other certif Total ICP digestion

#### • NOTE 1:

Code 1000 is used for repeat gold amalyses It shows typical sample variability due to coarse gold effects. Each value is correct for its particular subsample.

CHEMEX	MIMBER			DETECTION	· PPER
CODE	SAMPLES	DESCRIPTION	METHOD	LIMIT	NdT
592	1	SiO2 %: Whole rock	ICP-ABS	0.01	99.00
594	1	Al2O3 %: Whole rock	ICP-ABS	0.01	64 OO
586	1	Fe2O3(total) %: Whole rock	ICP-ABS	0.01	00
593	1	MgO %: Whole rock	ICP-ABS	0.01	00
5 8 8	1	CaO %: Whole rock	ICP-AES	0.01	00
599	1	Na2O %: Whole rock	ICP-AES	0.01	00
821	L	K2O %: Whole rock	ICP-ABS	0.01	99.0
595	L	TiO2 %: Whole rock	ICP-ABS	0.01	99.00
597	L	P2O5 %: Whole rock	ICP-ABS	0.01	99.00
596	1	MnO %: Whole rock	ICP-ABS	0.01	99.00
542	L	BaO %: Whole rock	ICP-ABS	0.01	99.00
475	1	L.O.I. %: Loss on ignition	FURNACE	0.01	99.00
540	1	Total %	CALCULATION	0.01	N/A
368	1	CO2 %: Inorganic	LECO-GASOMETRIC	0.20	100.0

ANALYTICAL PROCEDURES

![](_page_89_Picture_0.jpeg)

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### Chemex Labs Ltd.

Analytical Chemiats \* Geochemiata \* Registered Assayers

450 MATHESON BLVD., E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA 142-185 PHONE (416) 890-0310

To : DOMINION EXPLORERS INC.

916 - III RICHMOND ST. W TORONTO. ON M5H 2G4

A8910611

Comments: ATT'N: S.MASSON; CC: U.ABOLINS

#### CERTIFICATE A8910611

DOMINION EXPLORERS INC. PROJECT : P.O.# :

Samples submitted to our lab in Mississauga, ON. This report was printed on 1-FEB-89.

\$	SAMP	LE PREPARATION						
CHEMEX CODE	NUMBER Samples	DESCRIPTION						
299	1	Sample split from other certif						
232	1	Total ICP digestion						

#### • NOTE 1:

Code 1000 is used for repeat gold analyses It shows typical sample variability due to effects. Bach value is coarse gold correct for its particular subsample.

### ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER Samples	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
					<u> </u>
592	1	SiO2 %: Whole rock	ICP-AES	0.01	99.00
594	1	A12O3 %: Whole rock	ICP-AES	0.01	99.00
586	1	Fe2O3(total) %: Whole rock	ICP-AES	0.01	99.00
593	1	MgO %: Whole rock	ICP-ABS	0.01	99.00
588	1	CaO %: Whole rock	ICP-AES	0.01	99.00
599	1	Na2O %: Whole rock	ICP-AES	0.01	99.00
821	1	K2O %: Whole rock	ICP-AES	0.01	99.0
595	1	TiO2 %: Whole rock	ICP-AES	0.01	99.00
597	1	P2O5 %: Whole rock	ICP-AES	0.01	99.00
596	1	MnO %: Whole rock	ICP-AES	0.01	99.00
542	1	BaO %: Whole rock	ICP-AES	0.01	99.00
475	1	L.O.I. %: Loss on ignition	FURNACE	0.01	99.00
540	1	Total %	CALCULATION	0.01	N/A
368	1	CO2 %: Inorganic	LECO-GASOMETRIC	0.20	100.0

![](_page_90_Picture_0.jpeg)

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#### Chemex Labs Ltd Ltd.

450 MATHESON BLVD., E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA L4Z-IRS PHONE (416) 890-0310

To : DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON MSH 2G4 Project :

\*\*Page No. :1 Tot. Pages:1 Date : 30-JAN-89 Invoice #: I-8910611 P.O. # :

Comments: ATT'N: S.MASSON; CC: U.ABOLINS

SAMPLE DESCRIPTION	P C	REP	SiO2 %	A1 2O3 %	Fe 2O3 %	<b>MgO</b> %	CaO %	Na 20 %	K2O %	TiO2 %	P2O5 %	MhO %	BaO %	LOI %	TOTAL %	CO2 % inorg
M-D-M-01	299	232	52.26	12.02	8.36	2.58	5.60	6.76	1.42	0.96	0.08	0.14	< 0.01	8.91	99.10	7.38
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ALL ASSAY DETERMIN	ATIONS	ARE	PERFORM	ED OR S	UPERVISED	BY B.C.	CERTIFIE	D <b>ASSAYE</b>	RS		CERTIFI	CATION :	<u>B.</u>	Cary	d.	

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# Chemex Labs Ltd.

450 MATHESON BLVD , E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA L4Z-IR5

PHONE (416) \$90-0310

916 - 111 RICHMOND ST. W TORONTO, ON MSH 204 Project :

Comments: ATT'N: S.MASSON; CC: U.ABOLINS

\*\*Page No. :1 Tot. Pages:1 Date :30-JAN-89 Invoice #:1-8910611 P.O. # :

SAMPLE DESCRIPTION	P C	REP	SiO2 %	A1 203 %	Fe 2O3 %	<b>MgO</b> %	CaO %	Na 20 %	K2O %	TiO2 %	P2O5 %	MnO %	BaO %	101 %	TOTAL %	CO2 % inorg
MD-M-01	299	232	52.26	12.02	8.36	2.58	5.60	6.76	1.42	0.96	0.08	0.14	< 0.01	8.91	99.10	7.38
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ALL ASSAY DETERMIN	ATIONS	ARE	PERFORM	ED OR S	U <b>pervise</b> d	BY B.C.	CERTIFIE	D <b>ASSAYS</b>	IR S		CERTIFI	CATION :	P. (	and	<u>Ki</u>	<b>-</b>

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# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers 212 BROOKSBANK AVE., NORTH VANCOUVER, BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To: DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON M5H 2G4

### \* INVOICE NUMBER 18910667 \*

BILLING INFORMATION	CHEMEX CODE	ANALYSIS DESCRIPTION	SAMPLES ANALYZED	UNIT PRICE	AMOUNT
Date : 31-JAN-89	G12 -	A-12 W.R.A. ICP	1	20.00	20.00
P.O. # :	Sample p	reparation and other charges	:		
Comments ·	299 - 232 -	pulp Total ICP digestion	1	0.00 0.00	0.00 0.00
			То	tal Cost S	20.00
Billing : For analysis performed on Certificate A8910667			TOTAL	PAYABLE \$	20.00
Terms : Net payment in 30 Days 1.5% per month (18% per annum) charged on overdue accounts.					
Please remit payments to:					
CHEMEX LABS LTD. 212 Brooksbank Ave., North Vancouver, B.C. Canada V7J-2C1					
We are pleased to announce that CHEMEX now accepts payment by					
++ VISA ++					

\*\*

![](_page_93_Picture_0.jpeg)

#### hemex Labs Ltd. Analytical Chemists \* Geochemists \* Redatered Assayers

450 MATHESON BLVD., E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA 142-185

PHONE (416) \$90-0310

#### **To: DOMINION EXPLORERS INC.**

916 - 111 RICHMOND ST. W TORONTO, ON M5H 2G4

A8910667

Comments: ATT'N: S.MASSON

#### CERTIFICATE A8910667

DOMINION	EXPLORERS	INC.	
PROJECT	:		
P.O.#	:		

Samples submitted to our lab in Mississauga, ON. This report was printed on 31-JAN-89.

CHEMEXNUMBERCODESAMPLES29912321Total ICP digestion	SAMP	LE PREPARATION
2991Sample split from other certif2321Total ICP digestion	NUMBER Samples	DESCRIPTION
2 3 2 1 Total ICP digestion	1	Sample split from other certif
	1	Total ICP digestion
		SAMP NUMBER SAMPLES

#### • NOTE 1:

Code 1000 is used for repeat gold analyses It shows typical sample variability due to coarse gold effects. Each value is correct for its particular subsample.

### ANALYTICAL PROCEDURES

CHEMEX	NUMBER			DETECTION	UPPER
CODE	SAMPLES	DESCRIPTION	METHOD	LIMIT	LIMIT
592	1	SiO2 %: Whole rock	ICP-AES	0.01	99.00
594	1	Al2O3 %: Whole rock	ICP-AES	0.01	99.00
586	1	Fe2O3(total) %: Whole rock	ICP-AES	0.01	99.00
593	1	MgO %: Whole rock	ICP-AES	0.01	99.00
588	1	CaO %: Whole rock	ICP-AES	0.01	99.00
599	1	Na2O %: Whole rock	ICP-AES	0.01	99.00
821	1	K2O %: Whole rock	ICP-AES	0.01	99.0
595	1	TiO2 %: Whole rock	ICP-AES	0.01	99.00
597	1	P2O5 %: Whole rock	ICP-AES	0.01	99.00
596	1	MnO %: Whole rock	ICP-AES	0.01	99.00
542	1	BaO %: Whole rock	ICP-AES	0.01	99.00
475	1	L.O.I. %: Loss on ignition	FURNACE	0.01	99.00
540	1	Total %	CALCULATION	0.01	N/A

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## Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers 450 MATHESON BLVD., E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA L4Z-1R5 PHONE (416) \$90-0310 To : DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON MSH 2G4 \*\*Page No. : i Tot. Pages: i Date : 31-JAN-89 Invoice # : I-8910667 P.O. # :

Project : Comments: ATT'N: S.MASSON

SAMPLE DESCRIPTION	P	REP	SiO2 %	A1 2O3 %	Fe 2O3 %	<b>МеО</b> %	<b>CaO</b> %	Na 20 %	K2O %	TiO2 %	P2O5 %	<b>MhO</b> %	BaO %	LOI %	TOTAL %	
T1-1030-46	299	232	38.71	4.62	11.58	27.88	4.08	0.22	1.27	0.21	< 0.01	0.17	< 0.01	9.12	97.88	
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# Chemex Labs Ltd.

PHONE (416) \$90-0310

450 MATHESON BLVD., E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA LAZ-IRS

TORONTO, ON MSH 2G4 ISSAUGA, Project :

Comments: ATT'N: S.MASSON

To : DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W

\*\*Page No. :1 Tot. Page:1 Date :31-JAN-89 Invoice #:1-8910667 P.O. # :

SAMPLE DESCRIPTION	P	REP	SiO2 %	A12O3 %	Fe2O3 %	MgO %	CaO %	Na 20 %	K2O %	TiO2 %	P2O5 %	MaO %	BaO %	101 %	TOTAL %	
T1-1030-46	299	232	38.71	4.62	11.58	27.88	4.08	0.22	1.27	0.21	< 0.01	0.17	< 0.01	9.12	97.88	
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## Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers 212 BROOKSBANK AVE., NORTH VANCOUVER, BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To: DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON M5H 2G4

\* INVOICE NUMBER 18910613 \*

\*\*

BILLING INFORMATION	CHEMEX ANALYSIS CODE DESCRIPTION	SAMPLES ANALYZED	UNIT PRICE	AMOUNT
Date : 26-JAN-89 Project : P.O. # :	368 - CO2 % inorg G12 - A-12 W.R.A. ICP Sample preparation and other charg	5	27.00	135.00
Account : BHN Comments:	299 - pulp 232 - Total ICP digestion	5 5	0.00 0.00	0.00 0.00
Billing : For analysis performed on Certificate A8910613		To Total	tal Cost \$ PAYABLE \$	135.00
Terms : Net payment in 30 Days i.5% per month (18% per annum) charged on overdue accounts.				
Please remit payments to: CHEMEX LABS LTD. 212 Brooksbank Ave., North Vancouver, B.C. Canada V7J-2C1	\$301.50 Remets in duplicate 3			
We are pleased to announce that CHEMEX now accepts payment by ++ VISA ++	Osway Turp.			

![](_page_97_Picture_0.jpeg)

**\***\*

## Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers 450 MATHESON BLVID., E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA L4Z-1R5 PHONE (416) 890-0310 To: DOMINION EXPLORERS INC.

916 – 111 RICHMOND ST. W TORONTO, ON M5H 2G4

A8910613

Comments: ATT'N: S.MASSON; CC: U.ABOLINS

#### CERTIFICATE A8910613

DOMINION EXPLORERS INC. PROJECT : P.O.# :

Samples submitted to our lab in Mississauga, ON. This report was printed on 26-JAN-89.

:	SAMP	PLE PREPARATION
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
299	5	Sample split from other certif
232	5	Total ICP digestion

#### • NOTE 1:

Code 1000 is used for repeat gold analyses It shows typical sample variability due to coarse gold effects. Each value is correct for its particular subsample.

CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER Limit
592	5	SiO2 %: Whole rock	ICP-AES	0.01	99.00
594	5	Al2O3 %: Whole rock	ICP-AES	0.01	99.00
586	5	Fe2O3(total) %: Whole rock	ICP-AES	0.01	99.00
593	5	MgO %: Whole rock	ICP-AES	0.01	99.00
588	5	CaO %: Whole rock	ICP-AES	0.01	99.00
599	5	Na2O %: Whole rock	ICP-AES	0.01	99.00
821	5	K2O %: Whole rock	ICP-AES	0.01	99.0
595	5	TiO2 %: Whole rock	ICP-AES	0.01	99.00
597	5	P2O5 %: Whole rock	ICP-AES	0.01	99.00
596	5	MnO %: Whole rock	ICP-AES	0.01	99.00
542	5	BaO %: Whole rock	ICP-AES	0.01	99.00
475	5	L.O.I. %: Loss on ignition	FURNACE	0.01	99.00
540	5	Total %	CALCULATION	0.01	N/A
368	5	CO2 %: Inorganic	LECO-GASOMETRIC	0.20	100.0

ANALYTICAL PROCEDURES

![](_page_98_Picture_1.jpeg)

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# Chemex Labs Ltd.

450 MATHESON BLVD., E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA L4Z-IRS PHONE (416) 890-0310 916 - 111 RICHMOND ST. W TORONTO, ON M5H 2G4 \*\*Page No. :1 Tot. Pages 1 Date :26-JAN-89 Invoice #:I-8910613 P.O. # :

A, Project :

Comments: ATT'N: S.MASSON; CC: U.ABOLINS

SAMPLE DESCRIPTION	P C	REP ODE	S iO2 %	A1 2O3 %	Fe 2O3 %	<b>Ме</b> О %	CaO %	Na 20 %	K2O %	TiO2 %	P2O5 %	MhO %	BaO %	101 %	TOTAL %	CO2 % inorg
S-O-01 S-O-02 S-O-03 S-O-04 S-O-05	299 299 299 299 299 299	232 232 232 232 232 232	66.18 66.21 61.45 74.10 41.52	14.93 15.11 6.07 2.67 18.05	2.90 2.46 16.63 13.16 9.35	0.63 0.79 1.95 1.03 1.96	3.30 3.06 4.22 3.24 8.43	5.72 5.82 0.14 0.07 3.14	2.05 2.43 0.51 0.30 4.23	0.34 0.32 0.44 0.19 0.68	0.21 0.18 0.10 0.09 0.16	0.04 0.04 0.40 0.29 0.56	0.09 0.10 < 0.01 < 0.01 0.04	3.89 3.33 7.12 5.12 10.79	100.30 99.85 99.04 100.25 98.91	2.35 2.01 4.67 2.92 7.76
ALL ASSAY DETERMIN	ATIONS	ARE	PERFORM	ED OR SI	UPERVISED	BY B.C.	CERTIFIEI	D ASSAYE	R S	<u>i</u>	CERTIFI	CATION :	<u>ــــــ</u>	B. (	ag	l.

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# Chemex Labs Ltd.

450 MATHESON BLVD., E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA L4Z-IRS

PHONE (416) 890-0310

916 - 111 RICHMOND ST. W TORONTO, ON M5H 2G4 Project : Comments: ATT'N: S.MASSON; CC: U.ABOLINS \*\*Page No. :1 Tot. Pages:1 Date :26-JAN-89 Invoice #:1-8910613 P.O. # :

SAMPLE DESCRIPTION	P C	REP	SiO2 %	A1 2O3 %	Fe 2O3 %	MgO %	CaO %	Na 20 %	K2O %	TiO2 %	P2O5 %	MhO %	BaO %	LOI %	TOTAL %	CO2 % inorg
S-O-01 S-O-02 S-O-03 S-O-04 S-O-05	299 299 299 299 299 299	232 232 232 232 232 232 232	66.18 66.21 61.45 74.10 41.52	14.93 15.11 6.07 2.67 18.05	2.90 2.46 16.63 13.16 9.35	0.63 0.79 1.95 1.03 1.96	3.30 3.06 4.22 3.24 8.43	5.72 5.82 0.14 0.07 3.14	2.05 2.43 0.51 0.30 4.23	0.34 0.32 0.44 0.19 0.68	0.21 0.18 0.10 0.09 0.16	0.04 0.04 0.40 0.29 0.56	0.09 0.10 < 0.01 < 0.01 0.04	3.89 3.33 7.12 5.12 10.79	100.30 99.85 99.04 100.25 98.91	2.35 2.01 4.67 2.92 7.76
							· .									
ALL ASSAY DETERMIN	ATIONS	ARE	PERFORM	ed or su	PERVISED	BY B.C.	CERTIFIEI	D ASSAYE	RS		CERTIFI	CATION :		<i>B.</i> (	ag	ļ.

![](_page_100_Picture_1.jpeg)

# Chemex Labs Ltd.

450 MATHESON BLVD., E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA L4Z-IRS PHONE (416) \$90-0310 916 - 111 RICHMOND ST. W TORONTO, ON MSH 2G4 Project : Comments: ATT'N: S.MASSON; SE: U.ABOLINS \*\*Page No. :1 Tot. Pages:1 Date :26-JAN-89 Invoice #:1-8910613 P.O. # :

SAMPLE DESCRIPTION	P C	REP	SiO2 %	A1 2O3 %	Fe2O3 %	MgO %	CaO %	Na 20 %	K 20 %	ТіО2 %	P2O5 %	<b>MhO</b> %	BaO %	101 %	TOTAL %	CO2 % inorg
S-O-01 S-O-02 S-O-03 S-O-04 S-O-05	299 299 299 299 299 299	232 232 232 232 232 232	66.18 66.21 61.45 74.10 41.52	14.93 15.11 6.07 2.67 18.05	2.90 2.46 16.63 13.16 9.35	0.63 0.79 1.95 1.03 1.96	3.30 3.06 4.22 3.24 8.43	5.72 5.82 0.14 0.07 3.14	2.05 2.43 0.51 0.30 4.23	0.34 0.32 0.44 0.19 0.68	0.21 0.18 0.10 0.09 0.16	0.04 0.04 0.40 0.29 0.56	0.09 0.10 < 0.01 < 0.01 0.04	3.89 3.33 7.12 5.12 10.79	100.30 99.85 99.04 100.25 98.91	2.35 2.01 4.67 2.92 7.76
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ALL ASSAY DETERMIN	ATIONS	ARE	PERFORME	d or su	PERVISED	BY B.C.	CERTIFIEI	ASSAYE	 R	[	CERTIFIC	CATION :	/	B. (	ag	e.`

DOMINION EXPLORERS INC. 918 - 111 RICHMOND STREET WEST, TORONTO, ONTARIO M5H 204

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THE BANK OF NOVA SCOTIA 44 KING ST. WEST TORONTO, ONTARIO

M58 1H8

Nº 0794

DATE January 23, 1989

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Geoplastech Inc. Lower Level - 65 Granby Street Toronto, Ontario

DOMINION EXPLOREBS INC.

"000 ? 94 " I: 8000 2 00 21: 056 53 H 18"

Expenditures :

PETROGRAPHIC ANALYSIS

\$ 446.50

100000446501

JAYOR

69 CN:84195 TRN1936 DATE 182 (03/8 FB 89 03

TORONTO, ONTARIO

Separate ContentINVOICELower Level - 65 Granby StreetNO. 1909Toronto, OntarioN5B 1H8416 - 596 - 0381											
SERVIC	CES RENDERED TO : Noront Re 916-111 R Toronto, 0 M5H 264	sources Lt ichmond S ntario	d. treet West	1							
Date:	/17/89 Shipped Via: Messengers	(	Order No. §	S.L. Masson							
Quantity	Description	Shipped	\$/Unit	Amount							
	Polished Thin Sections	4	\$23.50	\$94.00							
4											
4	Polished Thin Descriptions	4	\$60.00	\$240.00							
4 4 18	Polished Thin Descriptions         Photomicrographs	4	\$60.00 \$3.50	\$240.00 \$63.00							
4 4 18 36	Polished Thin DescriptionsPhotomicrographsPhotomicrographs (2 Sets)	4   4   18   36	\$60.00 \$3.50 \$1.25	\$240.00 \$63.00 \$45.00							
4 4 18 36	Polished Thin Descriptions         Photomicrographs         Photomicrographs (2 Sets)	4   4   18   36	\$60.00 \$3.50 \$1.25	\$240.00 \$63.00 \$45.00							
4 4 18 36	Polished Thin Descriptions         Photomicrographs         Photomicrographs (2 Sets)	4   18   36 	\$60.00 \$3.50 \$1.25	\$240.00 \$63.00 \$45.00							
4 4 18 36	Polished Thin Descriptions   Photomicrographs   Photomicrographs (2 Sets)	4   18   36   	\$60.00 \$3.50 \$1.25	\$240.00 \$63.00 \$45.00							
4 4 18 36	Polished Thin Descriptions   Photomicrographs   Photomicrographs (2 Sets)	4         18         36	\$60.00 \$3.50 \$1.25	\$240.00 \$63.00 \$45.00							
4 4 18 36	Polished Thin Descriptions   Photomicrographs   Photomicrographs (2 Sets)     Shipping:	4         18         36	\$60.00 \$3.50 \$1.25	\$240.00 \$63.00 \$45.00 							
4 4 18 36	Polished Thin Descriptions   Photomicrographs   Photomicrographs (2 Sets)     Image: Imag	4         18         36         36	\$60.00 \$3.50 \$1.25	\$240.00 \$63.00 \$45.00 							

![](_page_103_Picture_0.jpeg)

# Chemex Labs Ltd.

212 BROOKSBANK AVF ... NORTH VANCOUVER. BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To: DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON M5H 2G4

### \* INVOICE NUMBER 18910670 \*

BILLING	INFORMATION	CHEMEX CODE	ANALYSIS DESCRIPTION		SAMPLES ANALYZED	UNIT PRICE	AMOUNT
Date : Project : P.O. # :	26-JAN-89	100 - 2 - 4 - 4	Au ppb Cu Pb Za	FA+AA ppm ppm			
Account :	EHN	G4 -	TR-4 AU RELA	ppm TBD	2	21.25	42.50
Comments:		Sample p	reparation ar	d other charge	s :		
		217 -	Geochem - RI	NG ONLY	2	3.00	6.00
Billing :	For analysis performed on Certificate A8910670			·	То	tal Cost \$	48.50
					TOTAL	PAYABLE \$	48.50
Terms :	Net payment in 30 Days 1.5% per month (18% per annum) charged on overdue accounts.						
Please rem	nit navments to:						
	CHEMEX LABS LTD. 212 Brooksbank Ave., North Vancouver, B.C. Canada V7J-2C1						
		-					
			1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	and a second			
				А.			
We are CHEME	e pleased to announce that K now accepts payment by						
	** VISA **	Os	war)				
			drill sludge.				
L		L	×				

![](_page_104_Picture_0.jpeg)

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## Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers 450 MATHESON BLVD, E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA L4Z-IR5 PHONE (416) 890-0310

To: DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON M5H 2G4

A8910670

Comments: ATT'N: S.MASSON

CERTIFICATE A8910670

DOMINION EXPLORERS INC. PROJECT : P.O.# :

Samples submitted to our lab in Mississauga, ON. This report was printed on 26-JAN-89.

### SAMPLE PREPARATION CHEMEX NUMBER CODE SAMPLES DESCRIPTION 217 2 Geochem:Ring only,no crush/split

### ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCR   PT   ON	METHOD	DETECTION LIMIT	UPPER LIMIT
100	2	Au ppb: Fuse 10 g sample F	A-AAS	5	10000
2	2	Cu ppm: HNO3-aqua regia digest A	AS	1	10000
4	2	Pb ppm: HNO3-aqua regia digest A	AS-BKGD CORR	1	10000
5	2	Zn ppm: HNO3-aqua regia digest A	AS	5	10000
6	2	Ag ppm: HNO3-aqua regia digest A	AS-BKGD CORR	0.2	200
13	2	As ppm: HNO3-aqua regia digest A	AS-HYDRIDE/EDL	1	10000
20	2	Hg ppb: HNO3-HCl digestion A	AS-PLAMELESS	10	100000
22	2	Sb ppm: HCl-KClO3 digest, extrac A	AS-BKGD CORR	0.2	1000

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# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers 450 MATHESON BLVID., E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA L4Z-1R5 PHONE :416) 890-0310

To : DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON M5H 2G4 Project :

Comments: ATT'N: S.MASSON

\*\*Page No. :1 Tot. Pages:1 Date :26-JAN-89 Invoice #:1-8910670 P.O. # :

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA <del>1</del> AA	Cu ppm	РЬ ppm	Zn ppm	Ag ppm Aqua R	As ppm	Hg ppb	Sb ppm		
L16E 17+85N L16E 17+90N	217	< 5	90 128	1 3	141 265	0.1 0.1	1 2 1 5	50 70	0.2 0.1		
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![](_page_106_Picture_1.jpeg)

Analytical Chemists \* Geochemists \* Registered Assayers 450 MATHESON BLVT>.E. UNIT 54, MISSISSAUXIA, ONTARIO CANADA L4Z-1R5

PHONE 4161 890-0310

916 - 111 RICHMOND ST. W TORONTO, ON MSH 2G4 Project : Comments: ATT N: S MASSON

\*\*Page No. :1 To1. Pages:1 Date :26-JAN-89 Invoice # : I-8910670 P.O. # :

SAMPLE PREP DESCRIPTION CODE		Ли ррь Гл <del>1</del> лл	Cu ppm	Рь ppm	Zn ppm	Ag ppm Aqua R	As ppm	Hg ppb	Sb ppm		
LI6E 17+85N LI6E 17+90N	217 217		< 5 5	90 128	3	141 265	0 . 1 0 . 1	12	50 70	0.2 0.1	
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					3						
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											-

![](_page_107_Picture_0.jpeg)

# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers 212 BROOKSBANK AVE., NORTH VANCOUVER, BRITISH COLUMBIA, CANADA V7J-2C1 PHONE (604) 984-0221

#### To: DOMINION EXPLORERS INC.

916 - III RICHMOND ST. W TORONTO, ON M5H 2G4

7

\* INVOICE NUMBER I8910612 \*

\*\*

BILLING INFORMATION	CHEMEX CODE	ANALYSIS DBSCRIPTI	ON		SAMPLES ANALYZED	UNIT PRICE	AMOUNT
Date : 24-JAN-89 Project :	$   \begin{array}{ccc}     100 & - \\     13 & -   \end{array} $	Au ppb As	FA+AA ppm		8	11.25	90.00
Account : EHN	Sample p	preparation	and other	charges	:		
Comments:	205 -	Rock Geoch	em - RING	. * . *	8	3.50	28.00
		<u></u>			To	tal Cost \$	118.00
Billing : For analysis performed on Certificate A8910612					TOTAL	PAYABLE \$	118.00
Terms : Net payment in 30 Days 1.5% per month (18%) per annum) charged on overdue accounts.							
Please remit payments to:							
CHEMEX LABS LTD. 212 Brooksbank Ave., North Vancouver, B.C. Canada V7J-2C1							
We are pleased to announce that CHEMEX now accepts payment by ++ VISA ++							
		Обшау Тир.				·····	

Inench Area.

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MART OF LEASE

# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers 450 MATHESON BLVD.,E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA L4Z-1R5 PHONE (416) 890-0310 To: DOMINION EXPLORERS INC.

916 – 111 RICHMOND ST. W TORONTO, ON M5H 2G4

A8910612

Comments: ATT'N: S.MASSON; CC: U.ABOLINS

### CERTIFICATE A8910612

DOMINION EXPLORERS INC. PROJECT : P.O.# :

Samples submitted to our lab in Mississauga, ON. This report was printed on 24-JAN-89.

1	SAMP	IPLE PREPARATION							
CHEMEX CODE	NUMBER Samples			DESCRIPTION					
205	8	Rock	Geochem:	Crush,split,ring					

#### \* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, T1, W.

CHEMEX CODE	NUMBER Samples				Descr	(IPTIO)	N	METHOD	DETECTION LIMIT	UPPER Limit
100	8	Au As	ppb: ppm:	Fuse HNO:	lO s D-aqua	sample regia	digest	FA-AAS AAS-HYDRIDE/ED	5 L 1	10000



# Chemex Labs Ltd.

450 MATHESON BLVD., E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA L4Z-IRS PHONE (416) 890-0310 To : DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON M5H 2G4 Project : Comments: ATT'N: S.MASSON; CC: U.ABOLINS \*\*Page No. :1 Tot. Pages:1 Date :24-JAN-89 Invoice #:1-8910612 P.O. # :

### CERTIFICATE OF ANALYSIS A8910612

SAMPLE DESCRIPTION	PRE COD	P DE	Ац ррь F <del>A+</del> AA	As ppm			т.				
S-0-01 S-0-02 S-0-03 S-0-04 S-0-05	205 205 205 205 205 205		<pre>&lt; 5 &lt; 5 40 30 25</pre>	4 4 70 70 10							
S-0-06 S-0-07 S-0-08	205 205 205		60 35 5	36 32 4							
										•	
L	<b></b>			1	L	<u></u>	CRR	TIPICATION :	Jant	Sichle	<u>م</u>



# Chemex Labs Ltd.

450 MATHESON BLVD., E., UNIT \$4, MISSISSAUGA, ONTARIO, CANADA L4Z-IRS

PHONE (416) \$90-0310

To : DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON MSH 2G4 Project :

Comments: ATT'N: S.MASSON; CC: U.ABOLINS

### CERTIFICATE OF ANALYSIS A8910612

SAMPLE DESCRIPTION	PRE COD	P E	ли рръ F <del>л+л</del> л	As ppm							
S-0-01 S-0-02 S-0-03 S-0-04 S-0-05	205 205 205 205 205		<pre> &lt; 5 &lt; 5 &lt; 40 30 25 </pre>	7 7 1	4 4 0 0 0						
S-0-06 S-0-07 S-0-08	205 205 205		60 35 5	3 3	6 2 4						
	Ľ	<u> </u>		<u> </u>			CBR	TIFICATION :	tart	Sichle	L

\*\*Page No. : 1 Tot. Pages: 1 Date : 24-JAN-89 Invoice #: I-8910612 P.O. # : C

# Chemex Labs Ltd.

450 MATHESON BLVD.,E., UNIT 54, MISSISSAUGA, ONTARIO, CANADA L4Z-1RS PHONE (416) \$90-0310 To : DOMINION EXPLORERS INC.

916 - 111 RICHMOND ST. W TORONTO, ON MSH 264 Project :

Comments: ATT'N: S.MASSON; QC: U.ABOLINS

\*\*Page No. :1 Tot. Pages:1 Date :24-JAN-89 Invoice #: I-8910612 P.O. # :

### CERTIFICATE OF ANALYSIS A8910612

SAMPLE DESCRIPTION	PRE COD	P E	Ац ррь Глна	As ppm								
S-0-01 S-0-02 S-0-03 S-0-04 S-0-05	205 205 205 205 205 205		< 5 < 5 40 30 25		4 70 70 10							
S-0-06 S-0-07 S-0-08	205 205 205		60 35 5		36 32 4			n site si≢ van same se				
						-						
	l	[					 		TIRICATION	tart	Sichle	ـــــــــــــــــــــــــــــــــــــ

NION EXPLORERS IN 916 - 111 RICHMOND STREET WEST, TORONTO, ONTARIO M6H 2G4 THE BANK OF NOVA SCOTIA 44 KING ST. WEST TORONTO, ONTARIO April 4, 1989 DATE PAY 20010 AND GOCTS 20.010.00 Assayers Limited -33 Chauncey Avenue Toronto, Ontario MB2-222-::...Ē.: ÷..... #000884# 1\$80002#0071: 056 000 500 7000 % Expenditures gerchemical assaying 1,380 samples 1/ 20,010.00 100 28211 6861 F-17 DCRIMITOH CN:01858 TRN1728 DAT HOHOL SICE 三出新祝三 MY 89 04 Toronts, Onterle 0267-127 TORONTO DOMINION BANK TORONTO DATA CENTRE ę 素医现白症症 医白白

Contract Re	ANALYTICAL CHEMISTS - ASSAYERS - SPECTROSCOPISTS - REPRESENTATIVES		8750
	ASSAYERS (ONTARIO) LIMITED		0100
9	33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527		
•			
	Dominion Explorers Inc.,1.5% LATEAtt'n: Mr. U. Abolins,1.5% LATE916-111 Richmond Street W,DAYS (ANNTORONTO, OntarioM5H 2G4	CHARGE OV IUAL RATE 1	/ER 30 8%)
and a start of the second s		والمراجع والمراجع	
OUANTIT	DESCRIPTION	UNIT PRICE	AMOUNT
751	Assays Au, As & Sample Prep	\$ 14.50	\$10,889,50
	Cert. No. Do-27		
629	Assays Au,As & Sample Prep	14.50	9,120.50
	Cert. No. DO-28		
	TOTAL		\$20,010.00

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INVOICE

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OK al. a. 24/37-54 clc/Noront Swayze.

PRITENTED 1078, 1080, 1081

MOORE CLEAN PR

PATENTED 1883.

976 C

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 $\mathbf{S}^{*}$ 

# **ASSAYERS ONTARIO LABORATORIES**

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 2 FAX (416) 2

1380 Sa

# **Certificate of Analysis**

Certificate No.	DO-28/01/ 8574	Date January 24, 1989	-
Received	629	Samples of Soils	-
Submitted by	Dominion Explorers Inc.	Att'n: Mr. U. Abolins	
		c.c. Mr. S. Masson	-

Sample #	Au ppb	As ppm	Sample #	Au ppb	As ppm
√L9+00E (B) 0+00N	19	.3	L9+00E (B) 5+50N	13	.2
0+50N	25	.2	L9E (B) 8+25N	16	.1
0+75N	30	.1	8+50N	12	.1
1+00N	21	.1	8+75N	10	.4
1+25N	27	<.1	9 N	19	.3
1+50N	32	.1	9+25N	29	.5
1+75N	15	.2	9+50N	19	.6
2+00N	19	.3	10+25N	22	.4
2+25N	11	.2	10+50N	18	.6
2+50N	27	.3	10+75N	33	.6
2+75N	14	. 4	1 <b>1 N</b>	13	.7
3+00N	24	- 4	11+25N	10	.6
3+25N	16	.2	11+50N	14	.5
3+50N	14	.2	11+75N	16	.4
3+75N	38	.4	12+25N	19	1.1
4+00N	12	.3	12+50N	11	• 5
4+25N	26	.6	12+75N	26	.3
4+50N	20	1.1	13+25N	15	.6
4+75N	14	.5	13+50N	19	.5
5+00N	16	.2	L9E (B) 14N	22	.7
L9+00E (B) 5+25N	11	.4			

#### **ASSAYERS ONTARIO LABORATORIES**

.....

Per

J. van Engelen Mgr.

- - -

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

### **Certificate of Analysis**

Certificate N	D0-28/0	2/ 8574		Date January 24, 1989	
Received			629	Samples of Soils	
Cubmitted by	, Dominion	Explorer	s Inc.	Att'n: Mr. U. Abolins	
Submitted by				c.c. Mr. S. Masson	
	Sample #	Au ppb	As ppm	Sample # Au ppb As ppm	
L9E	(B) 14+25N	20	.2	L9E (B) 19+50N 26 .5	
	14+50N	18	.2	19+75N 15 .4	
	14+75N	11	.5	20+00N 10 .3	
	15N	15	.6	20+25N 12 .4	
	15+25N	10	.3	20+50N 19 .4	
	15+50N	17	.8	20+75N 10 .3	
	15+75N	15	.6	21N 9 .3	
	16+25N	11	.3	21+25N 18 .4	
	16+50N	27	.7	21+50N 11 .5	
	16+75N	19	.5	21+75N 19 .4	
	17N	10	.4	22N 18 .6	
	17+25N	20	.6	22+25N 17 .3	
	17+50N	25	.3	22+50N 28 .2	•
	17+75N	14	.4	22+75N 30 .1	
	18N	18	.2	23+00N 24 .2	
	18+25N	21	.2	23+20N 19 .1	
	18+50N	25	.3	23+50N 15 .1	
	18+75N	27	.5	23+75N 23 .2	
	19N	31	.2	24+00N 10 .2	
L9E	(B) 19+25N	34	9.0	L9E (8) 24+25N 16 .3	

#### ASSAYERS ONTARIO LABORATORIES

Per \_\_\_\_\_

#### J. van Engelen Mgr.

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M82 222 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# Certificate of Analysis

Certificate No	D0-28/0	03/ 8574		•.		Date: .	January	24, 1989	
Received			629	Samples	of	Soils			
Submitted by	Dominion	Explor	ers Inc.		<u>A</u>	tt'n: I	4r. U. A	bolins	
			-			<u>c.c. M</u>	r. S. Ma	sson	
	Sample #	Au ppb	As ppm		Sam	ple #	Au ppb	As ppm	
L9E	(B) 24+50N	19	.2	L9E	(B)	29+50N	17	<b>.1</b>	
	24+75N	28	.2			29+75N	23	.5	
	25+00N	26	.2			29+91N	32	.5	
	25+25N	11	.4			30+25N	11	•2	
	25+50N	15	.5			30+50N	19	.4	
	25+75N	22	.1			30+75N	35	.3	
	26+00N	17	.1			31+00N	20	.4	
	26+25N	23	<.1			31+25N	13	.2	
	26+50N	25	.1			31+50N	29	.2	
	26+75N	13	.1			31+75N	18	.3	
	27+00N	30	.1	L9E	(B)	32+00N	15	.4	
·	27+25N	10	.2	L9+00E	(B)	0+25\$	20	.2	
	27+50N	25	.1			0+50\$	23	.3	
	27+75N	16	.1			0+755	19	• 4	
	28+00N	18	.2			1+00s	20	• 4	
	28+25N	21	.4			1+255	14	.2	
	28+50N	13	1.2			1+50\$	17	.2	
	28+75N	10	.5			1+755	12	• 2	
	29+00N	18	.9			2+00S	11	.5	
L9E	(B) 29+25N	12	.9	L9+00E	(B)	2+255	16	.2	

ASSAYERS ONTARIO LABORATORIES

ar s 1

J. van Engelen Mgr.

ANALYTICAL CHEMISTS . ASSAVING . ICP MULTI-ELEMENT ANALYSIS . REPRESENTATION

Per ..

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE. TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

### **Certificate of Analysis**

Certificate No.	D0-2	8/04/ 8	574		Date	ary 24,	1989		
Received	-		629	Samp	esor Soils			·····	
Submitted by0	mini	on Explo	orers Inc.		Att'n: c.c.	Mr. U. Abolins Mr. S. Masson			
S	ampl	e #	Au ppb	As ppm	Sampi	le#	Au ppb	As ppm	
L9+00E	(B)	2+50\$	35	.2	L10+00E(B)	3+50N	22	.2	
		3+00\$	38	.2		3+75N	14	.1	
		3+255	26	.2		4+00N	30	.7	
		3+50S	32	.1		4+25N	25	.5	
		3+75\$	19	.2		4+50N	18	1.4	
		4+00\$	24	.8		4+75N	30	.4	
L9+00E	(B)	4+115	29	.6		5+00N	23	.7	
L10+00E	(8)	0+25N	27	.2		5+25N	19	.7	
		0+50N	17	.2		5+50N	21	.6	
		0+75N	14	.1		5+75N	24	1.1	
		1+00N	21	.2		6+00N	17	1.0	
		1+25N	13	.3		6+50N	26	.6	
		1+50N	29	.4		6+75N	14	.2	
		1+75N	33	.4		7+00N	31	.1	
		2+00N	31	.2		7+25N	22	.1	
		2+25N	26	.3		7+50N	29	.2	
		2+50N	32	.2		7+75N	36	.1	
		2+75N	18	.1		8+00N	20	.2	
		3+00N	27	•4		8+25N	16	.1	
L10+00E	(B)	3+25N	- 33	.3	L10+00E (B)	8+50N	14	.4	

#### **ASSAYERS ONTARIO LABORATORIES**

Per \_

J. van Engelen Mgr.

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# **Certificate of Analysis**

Certificate No.	DO-28/05	/ 8574		Date: January 24, 1989
Received			629	Samples of Soils
Submitted by _	Dominion	Explorer	s Inc.	Att'n: Mr. U. Abolins c.c. Mr. S. Masson
	Sample #	Au ppb	As ppm	Sample # Au ppb As ppm
L10+00E	(B) 8+75N	13	<.1	L10+00E (B) 14+75N 17 1.1
	9+00N	43	,3	L10+00E (B) 15+00N 25 .2
	9+25N	24	<.1	L10E (B) 15+25N 10 .4
	10+50N	16	<.1	15+50N 19 .1
	10+75N	15	.2	15+75N 28 .3
	11+00N	10	<.1	16+00N 22 .3
	11+25N	17	.1	16+25N 11 .1
	11+50N	29	.1	16+5DN 18 .1
	11+75N	30	.2	16+75N 15 .1
	12+00N	14	.3	17+00N 30 .3
	12+25N	16	.4	17+25N 22 .3
	12+50N	20	.7	17+50N 25 .2
	12+75N	26	.6	17+75N 12 .1
	13+00N	15	.5	18+00N 26 .4
	13+25N	18	.6	18+25N 21 .3
	13+50N	27	1.0	18+50N 13 .5
	13+75N	16	.2	18+75N 11 .5
	14+00N	39	.2	19+00N 19 .4
	14+25N	35	.2	19+25N 23 .2
L10+00E	(B) 14+50N	23	<b>.1</b>	L10E (B) 19+50N 14 .2

#### ASSAYERS ONTARIO LABORATORIES

Per .....

J. van Engelen Mgr.

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

### **Certificate of Analysis**

Certificate No	D0-28/0	06/ 8574	<u>.</u>			Date:	anuary	24, 1989
			629		So	ils		
Received			-			······································		
Submitted by	Dominion	Explorer	s Inc.	•	Att C.	<u>'n: Mr.</u> c. Mr.	<u>. U. Abc</u> S. Mas	son
				<del>الور می الار بر المراجع ا</del>				
	Sample #	Au ppb	As ppm		Sa	mple #	Au ppb	As ppm
L10E	(B) 19+75N	28	.1	L10E	(B)	25+00N	26	.2
	20+00N	26	.1			25+25N	30	.3
	20+25N	15	.4			25+50N	17	.6
	20+50N	18	.4			25+75N	18	.7
	20+75N	36	.1			26+00N	13	.6
	21+00N	20	.1			26+25N	15	.8
	21+25N	23	.2			26+50N	29	.9
	21+50N	27	.2			26+75N	19	1.2
	21+75N	33	.3			27+00N	18	.3
	22+00N	25	.3			27+25N	16	.5
	22+25N	16	.4			27+50N	26	.7
	22+50N	29	.1			27+75N	17	.7
	22+75N	31	.2			28+00N	12	.5
	23+00N	40	.2			28+25N	30	•6
	23+25N	34	.2			28+50N	20	.9
	23+75N	28	.2			28+75N	10	.7
	24+00N	15	.5	•		29+00N	23	.8
	24+25N	17	.2			29+25N	12	.3
	24+50N	32	.2			29+50N	22	.4
L10E	(B) 24+75N	19	.3	L10E	(8)	29+75N	19	.7

#### ASSAYERS ONTARIO LABORATORIES

Per ......

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# **Certificate of Analysis**

Centificate No	DO-28/0	7/ 8574		Date January 24, 1989						
Received			629	Samples of Soils						
Submitted by	Dominion	Explorers Inc.		Att'n: Mr. U. Ab c.c. Mr. S. Mas	olins Ison					
	Sample #	Au ppb	As ppm	Sample # Au	ppb As ppm					
L10E (	(B) 30+00N	11	.4	L10+00E (B) 2+005 1	6.4					
	30+25N	13	.3	2+258 1	0.4					
	30+50N	14	.4	2+508 1	3.4					
	30+75N	18	.5	2+758 24	6.9					
	31+00N	12	.4	3+008 10	6.4					
	31+25N	15	•4	3+258 2	2.7					
	31+50N	11	.3	3+508 1	1.6					
	31+75N	16	.4	3+758 1	7.5					
	32+00N	10	.3	L10+00E (B) 4+00S 1	9.9					
	32+25N	14	.6	/ L11E (B) BL 0+00 14	4 1.0					
	32+50N	9	.7	0+25N 1:	3 1.1					
	32+75N	20	.6	0+50N 2	<b>.</b> .6					
L10E (	(B) 33+00N	13	.1	0+75N 29	9 .3					
L10+00E	(B) 0+25S	15	.5	1N 1	2 .5					
	0+50\$	20	.8	1+25N 11	B.3					
	0+758	19	1.3	1+50N 1	5 .6					
	1+00\$	17	.4	1+75N 1	5 .5					
	1+258	13	.8	2N 1'	.5					
	1+50\$	14	.4	2+25N 1	5.4					
L10+00E	(B) 1+75s	30	. 4	111F (B) 2+50N 10						

#### ASSAYERS ONTARIO LABORATORIES

Per .\_ . . . .

J. van Engelen Mgr.

A DIVISION OF ASSAYERS CORPORATION LTD.

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### **Certificate of Analysis**

Certificate No	D0-28	/08/ 857	4		Date: .	January	24, 1989	<b></b> .
Received			629	Samples of	Soils			
Submitted by	Domini	on Explo	erers Inc.		Att'n:   c.c.	Mr. U. A Ar. S. M	bolins asson	
	Sample #	Au ppb	As ppm	Si	ample #	Au ppb	As ppm	
L11E	(B) 4+25N	19	.4	L11E (	B) 11N	14	.9	
	4+50N	16	.5		11+25N	20	1.2	
	4+75N	27	.3		11+50N	26	1.5	
	5 N	33	.6		12+25N	17	1.2	
	5+25N	32	.5		12+50N	13	.5	
	5+50N	17	.6		12+75N	24	.5	
	5+75N	11	.7		13N	18	.6	
	6 N	30	.5		13+25N	12	.6	
	6+25N	21	- 4		13+50N	34	.5	
,	6+50N	27	.7		13+75N	27	.7	
	6+75N	23	1.0		14N	26	.8	
	7 N	32	.5		14+25N	33	.7	
	7+25N	18	.6		14+50N	11	.5	
	7+50N	35	.9		14+75N	20	.5	
	7+75N	24	.7		15N	36	.5	
· •	8 N	12	.6		15+25N	25	.6	
	8+25N	14	.6		15+50N	15	.5	
	8+50N	20	.6		15+75N	21	.7	
	8+75N	29	.6	,	16N	27	.9	
L11E	(B) 10+75N	19	.1	L11E (B)	) 16+25N	16	.5	

#### **ASSAYERS ONTARIO LABORATORIES**

Per .

J. van Engelen Mgr.

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## **ASSAYERS ONTARIO LABORATORIES**

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M82 222 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# Certificate of Analysis

Certificate N	o	/09/ 85	74	Date: January 24, 1989
Received			629	Samples of Soils
Submitted by	yDominio	n Explor	ers Inc.	Att'n: Mr. U. Abolins c.c. Mr. S. Masson
	Sample #	Au ppb	As ppm	Sample # Au ppb As ppm
L11E	(B) 16+50N	23	.5	L11E (B) 21+50N 21 1.3
	16+75N	19	.7	21+75N 22 1.2
	17N	15	.6	22N 15 1.2
	17+25N	31	.7	22+25N 20 .7
	17+50N	18	.8	22+50N 31 1.2
	17+75N	17	.7	22+75N 11 1.4
	18N	26	.8	23N 33 .3
	18+25N	11	.8	23+25N 19 .4
	18+50N	29	1.0	23+50N 20 .5
	18+75N	26	.5	23+75N 28 .4
	19N	18	.8	24+00N 31 .2
	19+25N	20	.5	24+25N 27 .4
	19+50N	32	1.1	24+50N 17 .3
	19+75N	19	.8	24+75N 23 .7
	20N	20	.6	25+00N 25 .5
	20+25N	10	.7	25+25N 18 .5
	20+50N	15	.5	25+50N 20 .3
	20+75N	31	1.3	25+75N 21 .2
	21 N	19	.4	26+00N 30 .2
L11E	(B) 21+25N	13	.6	L11E (B) 26+25N 12 .3

#### **ASSAYERS ONTARIO LABORATORIES**

Per \_

J. van Engelen Mgr.

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# **Certificate of Analysis**

Certificate No.	DO-28/10	/ 8574		Date January 24, 1989					
Received			629	Semples ofSO 1 Ls					
Submitted by	Dominion	Explorer	s Inc.	Att'n: Mr. U. Abolins c.c. Mr. S. Masson					
	Sample #	Au ppb	As ppm	Sample # Au ppb As ppm					
L11E	(B) 26+50N	22	1.2	L11E (B) 31+50N 18 1.4					
	26+75N	15	.7	31+75N 30 1.3					
	27+00N	19	.5	32+00N 15 .6					
	27+25N	14	.7	32+25N 11 1.1					
	27+50N	29	.6	32+50N 26 .8					
	27+75N	16	.5	32+75N 19 .4					
	28+00N	22	.3	L11E (B) 33+00N 12 .4					
	28+25N	18	.5	L11E (B) 0+258 24 .7					
	28+50N	20	.5	0+505 17 .4					
	28+75N	31	.3	0+755 19 .4					
	29+00N	23	.4	15 13 .2					
	29+25N	25	.6	1+755 10 .3					
	29+50N	27	.5	25 28 .7					
	29+75N	18	.8	2+258 21 .9					
	30+00N	31	.7	2+505 19 .5					
	30+25N	19	.6	2+75\$ 30 .6					
	30+50N	24	.6	3\$ 11 .8					
	30+75N	23	.4	3+258 22 .7					
	31+00N	26	.3	3+508 10 .6					
L11E	(B) 31+25N	12	.2	L11E (B) 3+758 11 1.2					
				111F (B) 33+25N 14 0					

#### **ASSAYERS ONTARIO LABORATORIES**

Per \_\_\_\_\_

J. van Engelen Mgr.

A DIVISION OF ASSAYERS CORPORATION LTD.

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FAX (416) 239-4012

# **Certificate of Analysis**

Certificate No.	D0-	-28/11	11	8574		-	Date:		anuary	24, 1989	
George					629	Semales of	Soils				
Heceived			~								
Submitted by _	DOMI	norn	EXI		ers inc.		Att'n:	Mr.	S. Mag	SOD	
											· · · · · · · · · · · · · · · · · · ·
	Sampl	.e #	Au	ppb	As ppm		Sample	#	Au ppb	As ppm	
L12E	(B)	0+00		32	.5	L12E	E (B) 6+2	25N	20	1.3	
		0+251	ł	26	.3		6+5	50N	33	.9	
		0+501	ł	21	.5		6+7	75N	22	.6	
		0+75	1	13	.6		7+0	DON	13	.9	
		1+00	ł	22	.6		7+2	25N	32	.5	
		1+251	i	14	.4		7+5	50N	28	.6	
		1+501	1	28	1.0		7+7	75N	23	.7	
		1+75	ł	26	.1		8+0	DON	30	1.1	
		2+001	1	12	.4		8+2	25N	31	.6	
		2+251	ł	18	.8		8+5	50N	20	.4	
		2+501	1	14	1.2		8+7	75N	16	1.3	
		2+75	1	31	.8		9+0	DON	39	.5	
		4+00	1	22	.9		9+2	25N	11	.4	
		4+25	1	12	.9		9+5	SON	17	.6	
		4+501	1	26	1.0		9+7	75N	10	.4	
		4+751	1	23	1.3		10+0	DON	21	.4	
		5+001	1	17	.9		10+2	25 N	14	.7	
		5+501	1	22	.6		10+5	50N	18	.9	
		5+751	1	29	. 8		10+7	75N	17	.7	
L12E	(B)	6+00	1	37	1.1	L12E	(B) 11+0	DON	26	•6	

#### **ASSAYERS ONTARIO LABORATORIES**

Per \_\_\_\_\_

#### J. van Engelen Mgr.

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M82 222 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# **Certificate of Analysis**

Certificate No.	D0-	28/12	/ 857	4	Dat	le:Ja	nuary 2	4, 1989
Deserved				629	Semples of Soils			
	• • • • • • • • •							
Submitted by	Dom	חסנחו	EXPLO	rers inc.	Att'n: C.C.	Mr. S	. Masso	ns n
۵۰۰ ۵۰۰ ۵۰۰ ۵۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰				······································				
	Sample	# A	u ppb	As ppm	Samp	le#	Au ppb	As ppm
L12E	(B) 11	+25N	15	4.0	L12E (B) 1	6+25N	11	.9
	11	+50N	19	1.2	1	6+50N	14	.5
	11	+75N	25	.6	1	6+75N	15	.7
	12	+00N	22	,3	1	7N	10	.5
	12	+25N	18	1.0	1	17+25N	16	.3
	12	+50N	32	.7	1	7+50N	20	.4
	12	+75N	30	.4	1	7+75N	15	.5
	13	+00N	26	.7	1	8 N	30	.5
	13	+25N	18	.4	1	18+25N	32	.6
	13	+50N	11	.5	1	18+50N	15	.5
	13	+75N	32	.3	1	18+75N	18	.5
	14	+00N	29	.3	1	19N	17	.6
	14	+25N	35	.5	1	19+25N	13	.4
	14	+50N	19	.4	1	19+50N	25	.5
	14	+75N	18	.4	1	19+75N	31	.3
	15	N	12	.3	2	20N	13	.4
	15	+25N	26	.9	2	20+25N	18	. 4
	15	+50N	25	.7	2	20+50N	36	.5
	15	+75N	14	.7	ä	20+75N	10	.6
L12E	(B) 16	N	28	.5	L12E (B) 2	21+00N	23	.8

#### ASSAYERS ONTARIO LABORATORIES

Per \_\_\_\_\_

J. van Engelen Mgr.

# ASSAYERS ONTARIO LABORATORIES A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# **Certificate of Analysis**

Certificate No.	DO-28/13	/ 8574		Date: January 24, 1989					
		_	629	a v Soile					
Received				Samples of					
Submitted by	Dominion	Explorer	s Inc.	Att'n: Mr. U. Abolins					
				C.C. Mr. J. Masson					
	Sample #	Au ppb	As ppm	Sample # Au ppb As ppm					
L12E	(B) 21+25N	31	.7	L12E (B) 26+25N 19 .9					
	21+50N	16	.4	26+50N 33 .7					
	21+75N	8	1.3	26+75N 36 .7					
	22+00N	29	1.2	27+00N 10 .4					
	22+25N	35	.9	27+25N 15 .4					
	22+50N	20	.9	27+50N 18 .1					
	22+75N	15	.5	27+75N 16 .1					
	23+00N	17	.4	28+00N 9 -2					
	23+25N	22	.4	28+25N 27 _3					
	23+50N	33	.8	28+50N 13 _2					
	23+75N	21	.5	28+75N 15 .2					
	24N	29	.4	29+00N 23 .2					
	24+25N	18	.8	29+25N 29 .1					
	24+50N	12	.6	29+50N 19 .1					
	24+75N	17	.4	29+75N 11 .2					
	25+00N	26	.4	30+00N 29 .3					
	25+25N	16	.3	30+25N 34 .5					
	25+50N	29	.4	30+50N 24 .4					
	25+75N	23	.4	30+75N 17 .4					
L12E	(B) 26+00N	12	.2	L12E (B) 31+00N 14 .3					

#### ASSAYERS ONTARIO LABORATORIES

Per ...

J. van Engelen Mgr.

A DIVISION OF ASSAYERS CORPORATION LTD.

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# **Certificate of Analysis**

Certificate No.		00-28/1	4/ 8574	و الموسولة برورومانه و و و و و و و و	Date: January 24, 1989					
Personal				629	Semples of So	oils	·	• . •		
								• •		
Submitted by _	Dom	INION E	xplorers	inc.		): <u>Mr</u> ,	. U. ADO S. Mas	Lins son		
			hina Carson ann an San Anna							
	Sar	mple #	Au ppb	As ppm	Samp	ole #	Au ppb	As ppm		
L12E	(B)	31+25N	29	.3	L12E (B)	3+758	30	1.3		
		31+50N	16	.2	/L12E (B)	4+00s	28	1.2		
		31+75N	12	.4	√L13E (B) 1	15+75N	33	1.3		
		32+00N	29	.5	1	16N	26	.3		
		32+25N	19	.4	1	16+25N	15	. 4		
		32+50N	13	.4	1	16+50N	29	.5		
		32+75N	5	.5	1	6+75N	11	.3		
		33+00N	11	.4	1	7+25N	23	.2		
		33+25N	28	.2	1	7+50N	28	.7		
L12E	(B)	33+40N	12	.4	1	7+75N	22	.3		
L126	Е (В)	0+255	17	.7	1	8N .	14	.4		
		0+50\$	21	.6	1	8+25N	13	.4		
		0+755	-31	.7	1	8+50N	20	.3		
		1+00s	29	1.1	1	8+75N	19	.4		
		2+00S	34	.5	1	9+25N	32	.4		
		2+50\$	14	.7	1	9+50N	26	.5		
		2+755	9	.6	1	9+75N	14	.6		
		3+005	27	.5	2	20N	18	.7		
		3+255	16	.6	2	20+25N	29	.7		
L12E	(B)	3+505	33	.4	L13E (B) 2	0+50N	18	.6		

#### **ASSAYERS ONTARIO LABORATORIES**

Per .....

J. van Engelen Mgr.

P.14

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### **Certificate of Analysis**

00-28/15	/ 857	'4	Date: January 24, 1989						
		629	Semales of Soils						
Noninion	Evolo								
	Explu	rers Inc.	<u> </u>						
Sample # A	u ppb	As ppm	Sample # Au ppb As ppm						
(B) 20+75N	13	.4	L13E (B) 27+50N 20 1.7						
21N	11	.7	27+75N 30 1.6						
21+25N	12	.6	28+00N 15 1.5						
21+50N	16	.5	28+25N 18 1.3						
21+75N	10	.6	28+50N 23 .9						
22N	29	. 4	28+75N 11 .5						
22+25N	23	. 4	29+00N 21 .8						
22+50N	19	. 4	29+25N 22 .4						
22+75N	11	.5	29+50N 19 .4						
23N	22	.2	29+75N 14 .5						
23+25N	30	.4	30+00N 18 .4						
23+50N	24	. 4	30+25N 16 .6						
23+75N	14	.4	30+50N 28 .4						
25+25N	23	. 4	30+75N 12 .5						
26+00N	17	.9	31+00N 13 .5						
26+25N	10	.6	31+25N 25 .5						
26+50N	11	.5	31+50N 27 .3						
26+75N	16	.3	31+75N 14 .4						
27+00N	29	.5	32+00N 11 .4						
(B) 27+25N	25	.4	L13E (B) 32+25N 14 .4						
	Do-28/15 Dominion Sample # A (B) 20+75N 21N 21+25N 21+25N 21+50N 21+75N 22+25N 22+25N 22+25N 22+50N 22+75N 23+25N 23+50N 23+75N 23+75N 23+75N 25+25N 26+00N 26+25N 26+75N 27+00N (B) 27+25N	Dominion Explo Dominion Explo Dominion Explo Sample # Au ppb (B) 20+75N 13 21N 11 21+25N 12 21+50N 16 21+75N 10 22N 29 22+25N 23 22+50N 19 22+75N 11 23N 22 23+50N 24 23+50N 24 23+50N 24 23+50N 24 23+50N 24 23+50N 24 23+50N 24 23+50N 24 23+50N 24 23+50N 17 26+25N 10 26+25N 10 26+25N 10 26+75N 16 27+00N 29 (B) 27+25N 25	b0-28/15/       8574         629         Dominion Explorers Inc.         Sample # Au ppb As ppm         (B) 20+75N 13 .4         21N 11 .7         21+25N 12 .6         21+50N 16 .5         21+50N 16 .5         21+75N 10 .6         22N 29 .4         22+25N 23 .4         22+25N 23 .4         23N 22 .2         23N 24 .4         23+25N 30 .4         23+25N 23 .4         26+25N 10 .6         26+25N 10 .6         26+25N 10 .6         26+75N 16 .3         27+00N 29 .5         (B) 27+25N 25 .4						

#### **ASSAYERS ONTARIO LABORATORIES**

Per .....

#### J. van Engelen Mgr.

P.15

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### **ASSAYERS ONTARIO LABORATORIES**

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# **Certificate of Analysis**

Certificate No.	D0-	28/16/	8574			D	ate: Jan	uary 24	. 1989	
Received				629	Samples of	<u>\$0</u>	ils			
Submitted by	Dom	inion E	xplorers	Inc.	At1	<u>t'n:</u> c.c.	<u>Mr. U</u> Mr. S	. Abolin . Massor	1 <u>5</u>	
	Sa	mple #	Au ppb	As ppm		Sai	mple #	Au ppb	As ppm	
L13E	(B)	32+50N	18	.4	L14E	(8)	32+00N	16	7.9	
		32+75N	15	.3			32+25N	18	1.6	
		33+00N	10	.4			32+50N	20	1.3	
		33+25N	20	.3			32+75N	17	1.9	
L13E	(B)	33+50N	19	.4			33+00N	11	.8	
L14E	(B)	28+25N	25	.4			33+25N	13	.4	
		28+50N	13	.6	L14E	(B)	33+50N	25	.8	
		28+75N	11	.7						
		29+00N	15	.6						
		29+25N	17	.8						
		29+50N	21	.7					а	
		29+75N	23	.6						
		30+00N	11	.5						
		30+25N	14	.7						
		30+50N	19	.5						
		30+75N	12	.5						
		31+00N	26	.4						
		31+25N	30	.5						
		31+50N	19	.5						
116F	(8)	31+75N	20	7						

#### **ASSAYERS ONTARIO LABORATORIES**

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Per ......

### J. van Engelen Mgr.

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ASSAYERS ONTARIO LABORATORIES

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# **Certificate of Analysis**

Certificate No.	D0-27/	01/	8565			Date:	January 20, 1989,				
Received				751	Samples of	Soils					
Submitted by	Dominic	on Ex	plorer	s Inc.		Att'n:	Mr. Mr.	U. S.	Abol Mass	ins	
				، ویکی بای بای بایی می بایی می بایی می بایی این بایی این ۲۰ بای ۲۰ بای ۲۰ بایی دارد این این بایی این بایی این بایی این این این این این این این این این						•	
	Sample A	f 1	lu ppb	As ppm	Ľ	Sample	#	Au	ppb	As ppm	
	LIE B C	ON	36	.9		L1E B	7+2	5 N	32	3.8	
	0+2	25N	34	.3			7+5	ON	40	3.0	
	0+5	50N	39	1.0			7+7	5 N	25	.6	
	0+7	75N	28	1.8			8+0	ON	81	.3	
	1+(	NOC	32	.3			8+5	ON	18	.6	
	1+2	25N	21	<.1			8+7	5N	24	.3	
	1+	50N	23	1.0			9+0	ON	17	79	
	1+7	75N	19	.9			9+2	5 N	22	1.2	
	2+0	NOC	24	1.8			9+7	5N	49	1.3	
	2+2	25N	22	1.9			10+0	ÔN	26	1.6	
	2+	50N	18	.5			10+2	5 N	20	.5	
	2+3	75N	29	.3			10+5	ON	18	<.1	
	3+1	DON	30	.2			10+7	5 N	23	<.1	
	3+6	25N	35	.1			11+0	ON	14	.1	
	3+	50N	15	<.1			11+2	5 N	29	.2	
	3+3	75 N	24	1.0			11+5	ON	12	<.1	
	4+(	DON	20	.3			11+7	5 N	17	<.1	
	4+;	25N	28	.2			12+0	ON	30	<.1	
	L1E B	4+50	N 17	.1			12+2	5N	21	<.1	
	L1E B	6+75	N 31	2.5		L1E B	12+5	ÔN	23	<.1	

#### ASSAYERS ONTARIO LABORATORIES

J. van Engelen Mgr.

Per .

THE THE ANALYSIS . REPRESENTATION

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M82 222 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

### **Certificate of Analysis**

Certificate No.	D0-27/	02/ 8565		Date	January	20, 1989
Received			751	Samples of Soils	* 10- 1 - diversity Prilities Anthonese	
Submitted by	Dominion	Explorers	Inc.	Att'n:	Ir. U. Abo	lins
n an ann Annaiche - Mhainmean - Annaiche Annaiche - Annaiche Mhainmealte - Mhainmean - Annaiche Annaiche -					17. <u>3.</u> 181	son
Samp	le No.	Au ppb	As ppm	Sample No.	Au ppb	As ppm
√L1E	B 12+75N	30	.3	L1E B 17+75N	10	7.6
	13+00N	14	.5	18+25N	25	.7
	13+25N	28	.7	LZE B 0+00N	15	.4
	13+50N	19	.2	0+25N	17	1.1
	13+75N	12	.9	0+50N	23	.9
	14+00N	32	1.0	1+50N	15	. 1
	14+25N	29	.5	1+75N	29	.4
	14+50N	13	1.2	5+50N	33	.5
	14+75N	20	.1	5+75N	19	1.5
	15+00N	23	.3	6+0DN	21	1.3
	15+25N	13	.6	6+25N	14	2.2
	15+50N	32	.5	6+50N	16	3.1
	15+75N	15	.4	6+75N	22	3.5
	16+00N	25	.5	7+00N	18	7.6
	16+25N	20	. 4	7+25N	33	2.6
	16+50N	27	.1	7+50N	25	1.4
1	16+75N	24	.8	7+75N	19	6
	17+00N	21	1.3	8+25N	20	.5
	17+25N	15	.5	L2E B .8+05N	21	1.3
L1E	B 17+50N	17	.9	L2E B 11+25N	14	3.0

#### ASSAYERS ONTARIO LABORATORIES

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J. van Engelen Mgr.

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### ASSAYERS ONTARIO LABORATORIES

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE. I UHUNTU, ONTARIO M82 222 • TELEPHONE (416) 230 3627 FAX (416) 239-4012

# **Certificate of Analysis**

Certificate No.	D0-27/03/	8565	· · ·	Date Ja	nuary 20,	, 1989
			751	sing of Soils		
					····	
Submitted by .	Dominion Ex	plorers	Inc.	ATT'N: Mr.	U. ADOLI S. Masso	n <b>s</b>
			-			
Sa	ample No.	Au ppb	As ppm	Sample No.	Au ppb	As ppm
L	2E B 11+50N	23	1.4	L2E B 19+25N	24	.2
L	2+05E 11+75N	17	.7	19+50N	22	.3
Ľ	2E B 12+00N	27	. 1	19+75N	12	.3
	12+25N	16	.9	20+00N	26	1.0
	12+50N	14	1.3	20+25N	30	1.6
	12+75N	18	1.7	20+50N	15	.5 、
	13+00N	26	. 4	20+75N	13	.3
	14+30N	12	.9	21+00N	19	<.1
	14+40N	19	.9	21+25N	26	<.1
	14+75N	31	.9	21+50N	24	<.1
	15+00N	23	. 4	21+75N	23	1.1
i	16+75N	18	2.5	22+25N	17	.1
	17+00N	22	.5	22+50N	19	1.1
	17+25N	16	1.5	22+75N	13	.6
	17+50N	28	2.1	23+00N	27	<.1
	17+75N	23	1.6	23+25N	9	.6
	18+00N	20	.4	23+50N	12	1.6
	18+50N	10	.6	23+75N	16	<.1
	18+75N	26	.5	24+25N	8	1.6
L	2E B 19+00N	22	1.8	L2E B 24+50N	11	.6

#### **ASSAYERS ONTARIO LABORATORIES**

J. van Engelen Mgr.

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33 CHAUNCEY AVENUE. TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# **Certificate of Analysis**

Certificate No D0-27/04/	8565	Date January 20, 1989				
Received	751	Samples of Soils				
Submitted by Dominion Exp	olorers Inc.	Att'n:	Mr. U. Abolins Mr. S. Masson			
Sample No. Au p	opb Asppm	Sample No.	Au ppb	As ppm		
L2E B 24+75N 25	5.4	LO B 20+00N	26	.2		
25+00N 28	3.3	20+25N	19	.3		
L2E B 25+25N 21	1.3	20+75N	18	.2		
LO B 15+75N 29	,3	21+00N	28	.2		
16+00N 33	3.4	21+25N	25	.2		
16+25N 20	5 5.6	21+50N	22	.3		
16+50N 31	1.3	21+75N	15	• .3		
16+75N 20	.5	22+00N	30	.4		
17+00N 17	7.3	22+25N	16	.3		
17+25N 23	3.3	22+50N	29	.2		
17+50N 27	7.3	22+75N	13	<.1		
17+75N 11	7.4	23+00N	24	<.1		
18+00N 25	5.3	23+25N	22	<.1		
18+25N 16	5 .4	23+50N	35	.2		
18+50N 30	.4	23+75N	21	.2		
18+75N 23	3.3	24+00N	16	.2		
19+00N 14	· <.1	24+25N	20	.2		
19+25N 24		24+50N	18	.2		
19+50N 19	.4	24+75N	35	<.1		
LO B 19+75N 29	.3	LO B 25+00N	23	.1		

#### ASSAYERS ONTARIO LABORATORIES

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# **Certificate of Analysis**

Certificate No.	DO-27/05	/ 8565		Date:	January	20, 1989
Reserved			751	Samples of Soils		
Submitted by	Dominion	Explore	rs inc.	C.C. Mr	<u>. U. ADO</u> . S. Mas	son
				ى بېرىمىنىيە بېرىمىيە بىلەرلىكى بېرىمىيە بىلەرلىكى بىلەرلىكى بىلەرلىكى بىلەرلىكى بىلەرلىكى بىلەرلىكى بىلەرلىكى يەربىي بېرىمىيە بىلەرلىكى بىلەرلىكى بىلەرلىكى بىلەرلىكى بىلەرلىكى بىلەرلىكى بىلەرلىكى بىلەرلىكى بىلەرلىكى بىلەر		And the second
Sam	ple No.	Au ppb	As ppm	Sample No.	Au ppb	As ppm
LO	B 25+25N	21	.5	L3E B 4+75N	19	.3
LO	B 27+25N	19	.6	5+00N	11	.4
LJE B	BL 0+00N	17	1.0	5+25N	15	•4
	0+25N	11	.7	5+50N	21	1.0
	0+50N	19	.7	5+75N	23	1.0
	0+75N	26	.7	6+00N	11	.6 ·
	1+00N	31	.4	6+25N	22	.5
	1+25N	16	.8	6+50N	25	1.2
	1+50N	14	.8	6+75N	16	.5
	1+75N	22	1.3	7+00N	20	1.3
	2+25N	13	.9	7+25N	12	.5
	2+50N	11	.4	7+50N	24	.5
	2+75N	23	.6	7+75N	19	.7
	3+00N	12	.9	8+00N	27	1.2
	3+25N	21	.4	8+25N	25	.8
	3+50N	29	.7	8+50N	15	.8
	3+75N	24	.9	L3E B 8+75N	28	.6
	4+00N	27	.6	L3E B 9+00N	30	1.7
	4+25N	17	.4	9+25N	14	1.3
L3E	B 4+50N	23	.4	L3E B 9+50N	23	1.7

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#### ASSAYERS ONTARIO LABORATORIES

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### **Certificate of Analysis**

Certificate No D0-27/06/ 8565	Date	January 20, 1989
751	Samples of Soils	ar
Submitted by Dominion Explorers Inc.	Att'n: 	Mr. U. Abolins Mr. S. Masson

Sample N	o. Aup	pb As pp	m Sample No.	Au ppb	As ppm
L3E B 9+	75N 18	.5	L3E B 16+75N	20	.4
10+	00N 11	. 4	17+00N	30	.8
10+3	25N 9	,5	17+75N	17	.4
10+	50N 19	. 4	18+00N	27	1.0
10+	75N 14	.4	18+25N	17	.6
11+	00N 15	1.6	18+50N	29	.6
11+3	25N 10	1.3	18+75N	21	.4
127	20N 24	•T /	1Y+UUN	11	.0
13+	25N 20	.5	19+25N	18	.7
13+	75N 25	1.3	19+50N	15	<b>.6</b> /
L3E B 14+	00N 17	1.3	19+75N	21	.4
14+	25N 22	.4	20+00N	14	.6
14+1	75N 29	.3	20+25N	13	.4
15+	00N 28	. 4	20+50N	20	.5
15+3	25N 20	.7	20+75N	10	.2
15+	50N 27	.3	L3E B 21+00N	14	.2
15+1	75N 19	. 4	L3E B 0+25S	21	.6
16+	00N 15	.3	1+50\$	23	.4
16+	25N 25	.5	1+758	19	.7
L3E B 16+	50N 14	.7	L3E B 2+005	30	.7

#### **ASSAYERS ONTARIO LABORATORIES**

Per

J. van Engelen Mgr.

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### **ASSAYERS ONTARIO LABORATORIES**

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# **Certificate of Analysis**

Certificate No.	0-27/07/ 8	565	(	Date: Janu	uary 20, 19	89
Becebed		751	Samples of Soil	5		
	nicion Expl	arers Inc	A++ *n	• Mr 11	Aboline	
Submitted by			<u> </u>	. Mr. S.	Masson	
generation of the second s						and a second
Sample No	o. Au ppb	As ppm	Sample No.	Au ppb	As ppm	
L3E B 2+	258 35	- 4	L4E B 5+50N	19	.6	
2+	50S 13	.5	7+00N	28	.2	
3+(	DOS 15	.5	7+25N	21	.5	
L3+50EB 4	+258 17	. 4	7+50N	36	1.1	
L4E B 0+	25N 13	<.1	7+75N	14	.6	
0+	50N 16	.1	8+00N	32	.2	
0+	75N 19	.3	8+25N	22	.5	
1+1	DON 32	<.1	8+50N	12	.6	
1+3	25N 16	.1	8+75N	23	.5	
1+	50N 22	.1	(8+95N	30	.4	
1+	75N 20	.1	£9+00N			
2+	DON 15	1	9+25N	27	.3	
2+	25N 25	<.1	10+00N	24	.5	
3+	75N 29	,2	10+25N	20	.6	
94 <b></b>	00N 22	.3	11+25N	11	.6	
. 4+	25N 27	.2	(11+45N	26	•7	
~ 	50N 15	.5	ETT+SUN AA+3EN	30	,	
4+	75N 36	<b>.</b> 1	11+73N	- 3U	• 4	•
.5+	00N 14	.1	12+UUN	12	•0	
L4E B 5+	25N 24	.1	16+CON	10	T+C E	
			13+CON	20	• 7	
			L4E B 13+3UN	11	. 4	

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### ASSAYERS ONTARIO LABORATORIES

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33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

### **Certificate of Analysis**

Certificate No. D0-27/08	8565		Date: January 20, 1989
Received		751	Samples of Soils
Submitted by	cplorers	Inc.	Att <sup>1</sup> n: Mr. U. Abolins c.c. Mr. S. Masson
Sample No.	Au ppb	As ppm	Sample No. Au ppb As ppm
L4E B 13+75N	26	. 4	L4E B 21+75N 18 .6
14+00N	31	.9	22+00N 21 .6
14+25N	28	.6	22+25N 27 .9
14+50N	25	.6	22+50N 25 .6
14+75N	14	.9	22+75N 17 .7
15+00N	17	1.0	23+00N 18 1.0

ASSAYERS ONTARIO LABORATORIES

23+25N

23+50N

23+75N

28+25N

28+50N

28+75N

29+00N

29+50N

29+75N

30+00N

30+25N

30+50N

30+75N

L4E B 31+00N

16

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1.0

L4E B 21+50N

18+25N

18+50N

18+75N

19+00N

19+25N

19+50N

19+75N

20+00N

20+25N

20+50N

20+75N

21+00N

21+25N

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# **ASSAYERS ONTARIO LABORATORIES**

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# **Certificate of Analysis**

Certificate No. D0-27/09	9/ 8565		Date:Ja	nuary 20	. 1989
		751	South Soils		£
Received		•			
Submitted by Dominion	Explorers	inc.	ATT'N: Mr.	U. ADOLI	ns
				3. 10831	20
Sample No.	Au ppb	As ppm	Sample No.	Au ppb	As ppm
L4E B 31+25N	19	.4	L3E B 28+00N	30	6.2
31+50N	27	.7	28+25N	16	4.1
31+75N	24	1.6	28+50N	12	4.2
L4E 8 32+00N	23	.5	28+75N	·· 14	20
L3E B 21+25N	16	.8	29+00N	18	2.Ò
21+50N	12	1.0	29+25N	17	1.8
21+75N	10	.8	29+50N	13	11
22+00N	14	.5	29+75N	23	.9
22+25N	21	.4	30+00N	19	1.1
22+75N	19	.6	30+25N	30	1.1
23+00N	27	.5	30+50N	25	1.3
23+25N	23	.5	30+75N	32	1.7
23+50N	16	.9	- 31+00N	20	1.8
· 23+75N	15	1.1	31+25N	13	1.9
24+00N	12	.5	31+50N	10	1.4
24+25N	18	1.0	L3E B 31+75N	33	1.0
24+50N	14	1.1	L14EB 15+50N	26	1.2
24+75N	29	1.1	15+75N	14	1.3
25+00N	33	1.2	16N	13	1.0
L3E B 27+50N	28	1.0	16+25N	31	1.4
			L14EB 16+50N	15	1.3

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A DIVISION OF ASSAYERS CORPORATION LTD. 33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# Certificate of Analysis

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Certificate I	NoD	0-27/1	0/ 8565			Date:	Janyar	<u>y 20, 1989</u>	
Received				751	Samples ofS	oils	······	1 	
	Dom	inion	Explorers	Inc.	At	t'n:	Mr. U. /	bolins	
SUDMRIEG	Dy					<u>c.c.</u>	<u>1r. S. M</u>	asson	
	Sample	No.	Au ppb	As ppm	Sample	No,	Au ppb	As ppm	
	L14EB	16+751	19	4.9	L14EB	21+75N	25	1.1	
		17N	23	6.6		22N	14	1.7	
		17+251	I 15	1.7		22+25N	10	.9	
		17+501	20	1.6		22+50N	16	9.4	
		17+751	28	1.2		22+75N	20	.5	
		18N	14	.7		23N	28	.6	
		18+251	22	.6		23+25N	12	. 1.1	
	L.	18+501	12	.8		23+50N	17	.5	
		18+751	1 26	1.4		23+75N	19	.7	
		19N	25	1.1		24N	13	.8	
		19+251	N 17	.6		24+25N	26	1.3	
		19+501	N 26	.5		24+50N	24	.9	
		19+751	N 21	.8		24+75N	18	.4	
		20N	22	9.8		25+00N	11	.8	
		20+251	N 19	.3		25+25N	15	.8	
		20+501	N 13	.4		25+50N	19	1.0	
		20+75	N 18	1.6		25+75N	23	. 4	
		21N	11	.6		26+00N	17	. 8	
		21+25	N 32	1.1		26+25N	12	1.4	
	L14EB	21+50	N 19	.8	L14EB	26+50N	14	.7	

#### **ASSAYERS ONTARIO LABORATORIES**

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ASSAYERS ONTARIO LABORATORIES A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# Certificate of Analysis

Certificate No D0-27/	11/ 8565		Date: January 20, 1989
		751	Samplas of Soils
Submitted by	Explore	rs inc.	c.c. Mr. S. Masson
Sample No.	Au ppb	As ppm	Sample No. Au ppb As ppm
L14EB 26+75N	16	.6	L15EB 19+75N 16 .8
27N	21	• 5	20+00N 20 .6
27+25N	18	.9	20+50N 22 1.6
L14EB 27+50N	12	.4	20+75N 21 1.8
√L15EB 15+00N	16	.8	21+DON 19 1.1
15+25N	11	1.4	21+25N 17 .8
15+50N	18	<b>.</b> 8	21+50N 11 .9
16+50N	32	1.5	21+75N 27 .6
16+75N	12	. 7	22+00N 16 .6
17+00N	27	.6	22+25N 18 1.0
17+25N	20	.4	22+75N 26 .8
17+50N	15	.9	23+00N 22 .6
17+75N	23	1.6	23+25N 21 .5
18+00N	33	.8	23+50N 14 1.2
18+25N	11	.7	23+75N 10 .4
18+50N	21	.6	24N 13 .6
18+75N	24	1.3	24+25N 19 .8
19+00N	16	1.6	24+50N 22 .7
19+25N	26	1.3	24+75N 30 .8
L15EB 19+50N	17	.8	L15EB 25N 14 .7

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#### **ASSAYERS ONTARIO LABORATORIES**

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### **ASSAYERS ONTARIO LABORATORIES**

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# **Certificate of Analysis**

Certificate No D0-27/1	2/ 8565		Date	Jan	11Ary 20, 1989	
Received		751	Samples of Soil	<u>s</u>		
Submitted by Dominion	Explorers	Inc.	Att'n:	Mr. U.	Abolins	
			<u></u>	<u>Mr. S.</u>	Masson	
Sample No.	Au ppb	As ppm	Sample No.	Au ppb	As ppm	
L15EB 25+25N	30	2.8	L15EB 32+50N	24	.5	
25+50N	26	4.8	32+75N	15	.1	
25+75N	46	8.0	33+00N	18	•4	
26+25N	15	1.8	33+25N	11	.4	
28+50N	18	1.7	33+50N	10	.4	
28+75N	23	1.3	L15EB 33+75N	16_	.4	
29+00N	21	1.3	L16EB 17+50N	25	.2	
29+25N	16	.6	17+75N	13	.4	
29+50N	12	.7	18+00N	35	.1	
29+75N	14	1.0	18+25N	17	.4	
30+00N	22	.3	19+00N	14	.5	
30+25N	26	.6	19+25N	12	.5	
30+50N	30	.4	19+50N	19	• 4	
30+75N	24	.8	19+75N	26	• 4	
31+00N	29	.5	20+00N	21	.1	
31+25N	33	.4	20+25N	14	.5	
	12	.4	20+50N	26	.6	
31+75N	14	<b>.</b> 8.	20+75N	22	.7	
32+00N	10	.8	21+00N	18	.5	
L15EB 32+23N	17	8	L16EB 21+25N	20	.6	

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33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# Certificate of Analysis

Certificate No	DO-27/13/ 8565			Date January 20, 1989				
Received		751		Samples of	Soils			
	Dominio		rs Inc.	Attin: Nr. II. Aboline				
				C.C. Mr. S. Masson				
··· •• • • • • • • • • • • • • • • • •	<u></u>			· · · · · · · · · · · · · · · · · · ·				
Sample	No.	Au ppb	As ppm	Sample	e No.	Au ppb	As ppm	
L16EB	21+50N	34	.4	L16EB	31+25N	13	.8	
	21+75N	29	1.3	,	31+50N	24	• 5	
	24N	24	1.3		31+75N	33	.8	
	24+25N	11	1.2		32N	30	1.0	
	24+50N	15	1.4		32+25N	16	1.0	
	24+75N	10	1.0		32+50N	26	1.0	
	25N	16	.6		32+75N	15	1.4	
	25+25N	12	.5		33N	19	1.0	
	25+50N	22	.5		33+25N	20	.9	
	25+75N	15	• 5		33+50N	32	1.0	
•	28+75N	19	.7	L16EB	33+75N	35	.7	
	29+00N	24	.4	L17EB	15+25N	22	.7	
	29+25N	26	.4		15+50N	24	.9	
	29+50N	31	.5		15+75 N	31	.6	
	29+75N	25	.8		16N	21	.5	
· ·	30N	30	.4		16+25 N	22	.6	
•	30+25N	28	.5		16+50N	28	• 5	
	30+50N	32	.8		16+75 N	26	.6	
,	30+75N	23	.3		17N,	17	.4	
L16EB	31N	42	.5	L17EB	17+50N	30	.6	

#### ASSAYERS ONTARIO LABORATORIES

J. van Engelen Mgr.

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# **Certificate of Analysis**

Certificate M	No D0-27/14	4/ 8565			Date:	January	20, 1989
Received			751	Samples of	Soils		
Submitted t	by <u>Deminion</u>	Explorers	Inc.	A	tt'n: c.c.	Mr. U <u>. Abc</u> Mr. S. Mas	son
							-
\$	Sample No.	Au ppb	As ppm	Sample	e No.	Au ppb	As ppm
L	L17EB 17+75N	23	.9	LÍ7EB	27+25N	17	.1
	18N	18	.8		27+50N	24	.5
	18+25N	28	.1		27+75N	I 16	.4
	18+50N	32	1.1		28N	25	.7
	18+75N	22	.6		28+25N	14	.2
	19N	19	.7		28+50N	22	.1
	19+25N	14	.3		28+75N	23	<b>,2</b> .
	19+50N	23	.2		29N	32	.3
	19+75N	30	.2		29+25N	18	.3
	20N	26	.4		29+50N	26	.2
	20+25N	16	.7		29+75N	16	.2
	20+50N	12	.9		30N	25	<.1
	20+75N	15	.5		30+25N	19	.2
	21N	20	.2		30+50N	17	.1
	21+25N	11	.2		30+75N	20	.3
	21+50N	27	.4		31N	23	.3
	21+75N	14	• 4		31+25N	20	.2
	26+50N	23	1.1		31+50N	22	.3
	26+75N	29	.2		31+75N	18	.2
(	L17EB 27N	21	.4	L17EB	32N	30	.2
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# **Certificate of Analysis**

Certificate N	DO-	-27/15/	8565	14 . 14	Date: January 20, 1989			
				751	Samalas al	Soils		
Flecerved							M	
Submitted by	Dom	inion t	xplorers	inc.		6-6-	Mr. U. AD Mr. S. Ma	5500
ана ал са се								
	Sample	e No.	Au ppb	As ppm	Sample	No.	Au ppb	As ppm
	L17EB	32+251	1 32	.2	L18EB	18N	14	.2
		32+501	12	2.2		18+25N	24	.2
		32+75	N 16	.2		18+50N	15	.3
	,	33+001	N 14	.3		18+75N	32	.4
		33+251	N 17	,3		19N	25	.2
		33+501	N 23	.4		19+25N	28	.2
		33+751	20	.3		19+50N	30	.1
	L17EB	34N	18	.4		'19+75N	27.	.1
	L18EB	15 <del>N</del>	11	.3		20N	29	.2
		15+251	N 27	.3		20+25N	33	.3
		15+501	N 16	1.1		20+50N	18	.3
		15+751	N 19	.2		20+75N	20	<b>.</b> 1
		16N	22	.3	L18EB	29+25N	16	.2
		16+25	N 30	.6		29+50N	17	.3
		16'+501	N 23	.5		29+75N	10	.3
		16+75	N 30	.3		30N	30	.2
		17N	26	.3		30+25N	17	.4
· .		17+25	N 13	.2		30+50N	26	.4
		17+50	N 19	.2		30+75N	31	3.4
	L18EB	17+75	N 20	.2	L18EB	31+00N	13	8.7

### ASSAYERS ONTARIO LABORATORIES

Per ...

J. van Engelen Mgr.

ANALYTICAL CHEMISTS . ASSAYING . ICP MULTI-ELEMENT ANALYSIS . REPRESENTATION

**ASSAYERS ONTARIO LABORATORIES** 

A DIVISION OF ASSAYERS CORPORATION LTD.

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## **Certificate of Analysis**

Certificate No.	00-27/10	6/ 8565		Date: January 20, 1989				
Received			751	Semples of	Soils			
Submitted by	Dominion	Explore	rs Inc.	A1	tt'n:	Mr. U.	Abolins	······································
	·				C.C.	<u>Mr. S. I</u>	Masson	
			د				,	
Sa	imple No.	Au ppb	As ppm	Sample	e No.	Au ppb	As ppm	
L1	8EB 31+25N	21	.2	L19EB	18+75N	15	.2	
	31+75N	30	.3		19+00N	12	.1	F
	) 32+00N	16	• 4		19+25N	11	<b>.</b> 1	
, · ·	32+25N	12	.3		19+50N	16	.2	
L1	8EB 32+75N	14	.4		19+75N	, 13	.2	
L1	9EB 14+75N	14	.2		20+00N	33	,<.1	
	15+00N	18	.3		20+25N	16	1	
	15+25N	20	.2		30+50N	× 24	.2	n'
	15+50N	28	.2		30+75N	14	.2	
	15+75N	15	.2		31+00N	20	.1	
	16+00N	26	.2		31+25N	8	.1	
	16+25N	14	.1		31+50N	25	<.1	•
	16+50N	23	.3		31+75N	19	.2	
	16+75N	18	.2	L19EB	32+00N	12	<.1	
	17+00N	30	.2	L20EB	30+00N	30	.2	
	17+25N	22	.1		30+25N	29	.2	
	17+50N	33	.2		30+50N	15	.3	
	17+75N	20	.2		30+75N	19	.1	
	18+25N	25	.2		31+00N	17	.2	
L1	9EB 18+50N	18	.2	L20EB	31+25N	12	.2	

### ASSAYERS ONTARIO LABORATORIES

Per .....

### J. van Engelen Mgr.

ANALYTICAL CHEMISTS . ASSAYING . ICP MULTI-ELEMENT ANALYSIS . REPRESENTATION



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33 CHAUNCEY AVENUE, TORONTO, ONTARIO M82 222 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# Certificate of Analysis

Certificate N	o. <u>D0-27/17</u>	/ 8565			Date	Januar	y 20, 1989	
Received	و المحمد الم		751	Samples of	Soils	, 		
Submitted by	Dominion	Explore	rs Inc.	,	ltt'n:	Mr. U. A	bolins .	
Santara a					C.C.	Mr. S. M	sson	
					:		•	
S	ample No.	Au ppb	As ppm	Sampi	e No.	Au ppb	As ppm	
L	20EB 31+50N	45	.2	L2EA	26+25N	16	.3	
Ļ	20EB 31+75N	40	.1		26+50N	14	<b>.</b> 3	
-1.	12EA 5+00N	22	<.1		26+75N	12	.1	
	10+00N	15	.2		27+00N	22	.2	
	10+25N	27	.2		27+25N	19	.2	
•	10+50N	25	.1		27+50N	13	.2	
	11+00N	14	.2		27+75N	15	.1	
	13+25N	32	1.5	LZEA	30+50N	16	.1	
	15+25N	19	1.3	LJEA	2+00N	23	.2	
	15+50N	18	.2		11+50N	18	.2	
	15+75N	16	<.1		11+75N	10	.2	
	16+00N	23	.2		12+00N	25	<.1	
	16+25N	21	.5		12+50N	26	.1	
	16+50N	34	.2		12+75N	17	<.1	
	18+25N	27	.2		13+00N	21	.1	
	22+00N	20	.2		13+50N	.15	<.1	
	24+00N	36	.7		14+50N	11	.2	
	25+50N	19	<.1		22+50N	10	<.1	
	25+75N	31	.2		25+25N	26	<.1	
	L2EA 26+00N	21	.2	L3EA	25+50N	23	<.1	

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#### ASSAYERS ONTARIO LABORATORIES

J. van Engelen Mgr.

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## ASSAYERS ONTARIO LABORATORIES

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527 FAX (416) 239-4012

# **Certificate of Analysis**

Certificate N	DD	)-27/18	/ 8565		Date: January 20, 1989				
······································			- · ·	751	females of	Soils			
			·····		Samples of				kan an a
Submitted by	<u>Don</u>	ninion	Explorers	Inc.	At1	t'n: M	r. U. Ab r. S. Ma	olins sson	
	Sampl	le No.	Au ppb	As ppm	Sample	No.	Au ppb	As ppm	
,	L3EA	25+75N	24	<.1	L17EA	14+75N	18	.2	•
		26+00N	17	<.1	•	15+00N	11	<.1	
	~	26+25N	26	.1		17+25N	14	.7	•
		26+50N	21	<.1		24N	12	.8	
		26+75N	27	.2	•.	24+25N	10	.5	•
	L3EA	27+75N	23	.2		24+50N	17	.1	
	L4EA	9+50N	17	.1		24+75N	22	.2	
		9+75N	25	.4		25N	19	.4	
		10+50N	13	.1		25+25N	27	• 5 ·	
		10+75N	14	° <b>.</b> 1	· · · · ·	25+50N	21	3	
-		11+00N	17	,3		25+75N	30	.4	
		12+50N	24	.3	L17EA	26N	23	4	•
		12+75N	23	.1	L18EA	21N	16	.2	•
		13100N	12	.2.	, k	21 1 25 N	15	. 2	х. 1
		24+00N	20	6.2		21+50N	25	.3	
,		27+25N	19	.3		21+75N	24	.2	
		27+75N	11	.4		25+84N	16	.1	
		28+00N	18	.2		26+00N	27	.2	
		29+25N	8	.3		26+25N	17	.2	•
	L4EA	32+12N	12	.3	L18EA	26+50N	26	.7	

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#### ASSAYERS ONTARIO LABORATORIES

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# ASSAYERS ONTARIO LABORATORIES

A DIVISION OF ASSAYERS CORPORATION LTD.

33 CHAUNCEY AVENUE, TORONTO. ONTARIO M82 222 • 1 ELEPHUNE (416) 239-3327 FAX (416) 239-4012

# **Certificate of Analysis**

Certificate No.	DO-27/1	9/ 856	5		Date	nte: January 20, 1989			
Received			751	Samples of	Soil	6			
Submitted by	Dominio	n Explor	ers Inc.		Att'n:	Mr. U.	Abolins		
					<u></u>	Mr. S.	Masson		
Samp	ble No.	Au ppb	As ppm	Sample	No.	Au ppb	As ppm		
L188	EA 26+75N	13	.1	L19EA	32+25N	24	<.1		
	27+00N	20	.1		32+50N	22	<.1		
	27+25N	12	• 4		32+75N	12	.7		
	27+50N	18	.2		33+00N	17	.8		
	27+75N	11	.1		33+25N	16	.7		
X.	28+00N	10	.1		33+50N	14	.1		
	28+25N	21	.2	L19EA	33+67N	12	.6		
	28+50N	23	.1	L20EA	29+50N	10	.3		
	28+75N	27	.1		29+75N	19	• 5		
	29+00N	25	.1	L20EA	31+94N	17	.2		
	31+50N	32	.3						
L188	A 32+50N	16	.3						
L198	A 18+00N	29	.2						
	20+50N	25	.1						
	29+00N	28	.3						
	29+25N	14	.2						
	29+50N	10	.1				. <b>.</b> .		
	29+75N	15	.1						
	30+00N	13	.3						
L198	EA 30+25N	27	.3						



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WP, which is a second se	HIGHWAY AND BOUTE Na. OTHER ROADS
	TRADS
4 5	SURVEYED LINES: TOWNSHIPS BASE LINES ETC.
IP I P IP IP P P P B0242 B0244 P	LOTS, MINING CEAIMS, PARCEL
1034284 034244 034244 034244 034244 034247 054247 054247 054247 054247 054247 054247 054247 054247 054247 054247	UNSURVEYED AINLS:
AP IA P IP P P P P BBIZAD BBIZAD P	PARCEL BOUNDARY
q 1034283   1034253   1034252   1034251   1034250   1034240   1034240   1034240   1034250   1034	MINING CEAIMS ETC.
	UTILITY LINES
1034308 (1034254 1034255 1034256 1034267 1034207 1034207 1034207 1034268 1742678 188135 1034267 142668	NON PERENNIAL STREAM
	FLOODING OR FLOODING RIGHTS SUBDIVISION OR COMPOSITE ALM
(1034303 1034265 1034264 1034263 1034262 1034262 1034260 1034260 1034260 1034260 1034260 1034265 10366 1034265	RESERVATIONS
P P P P P P P P P P P P P P P P P P P	OIUGINAL SHORELINE
1034309 1034342 1034343 1034344 1034345 1034345 1034345 1034347 1 1242690 1034343 1034344 142687	MARSH OR MUSKEG MINES
7/8P' 853772 1742600 742600 742600 742600 742600 742670 742670 742670 742670 742670	TRAVERSE MONUMENT
103430 - 14054374 1 6053770 (0543460 1 8063760 1 8053764) 601254 1 4163746 1034267 1034268 05376 - 11034352 1034353 1 1034350 1034349 1034349 1034349 1034349	
1 ANY 26   D ANY 26	DISPOSITION OF CR
1024312 1024322 1024324 1034324 1024324 1024284 1034284 103694 103694 103694 103694 103694 103694 103694	
HUAR 264 POBE 768 ( MIR 2700 P P FRANK STOL R 100 P PO53764 R 01700	TYPE OF DOCUMENT
1034344 1034363 1034362 1034361 1034360 1034358 1034358 1034364 881263 1 881263 1 881263	PATERT, SUIDACE & MINING RIGP
S PARTAL PAULOS P PBBIZGI	", SURFACE RIGHTS ONLY.
00 32261 32262 32209 32266 1034359 418317 98030, 560259 101260 464760	LEASE, SURFACE & MINING RIGHT
$\frac{3}{32267}$ $\frac{3}{32260}$ $\frac{3}{32260}$ $\frac{3}{32260}$ $\frac{3}{32260}$ $\frac{3}{32260}$ $\frac{3}{5}$	", SURFACE RIGHTS ONLY
SEEDS SEEDS SEEDS SEEDS SEEDS SEEDS	
32265 ▼	ORDER-IN-COUNCIL
	RESERVATION
	GANGELLED SAND & GRAVEL
92 32160 P 171 3 5 5 32070 32069 P P	40113 MINING HIGHLS IN PARCELS PA 411 1913, VESTED IN OMIGINAL PA 412 LARDS ACT INS OMIGINAL PA
243 32157 V 32076 032076 Jeroine V 538941 538929-	
030 1074970 1074969 9 32017 PPPP	
B3412 GOUL BUNDY	SCALE: 1 INCH # 40 CHAINS
1074941 1074941 1074961 33640 ¥ (5 32074) 32223 32221	FELT
S 32120 S 32227 32227	
1449 1074945 107494G 107494	METRES
2 P 1037126 P 103/13 5 32366 32365 2395 2395 2	••••••••••••••••••••••••••••••••••••••
	the second s
	1.1011
P P P 657619 652620 64240 Grant Townsites p	
2 1037123 1037124 1037125 1P P 1P 32/330 1682904 682906 1682907	MAN
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