



Haddington Resources Ltd.

**Geological Mapping
and Prospecting**

Lavigne Patented Claims
34452 & 34453
N.E. Timmins Township

Porcupine Mining Division, Ontario

2

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A.W. Beecham
Sept. 1997

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Introduction

Geological mapping and prospecting was carried out in September 1997 in conjunction with the extension of induced polarization and magnetic surveys on these patents and the adjacent Kaltwasser-Demarchi option. A soil geochemical survey was completed at the same time, but analyses are not yet available and this work will be reported later. The purpose of the work is to build up more geological information prior to a diamond drilling program planned later this fall. The work is being funded jointly by Haddington Resources Ltd. and Silverstone Resources Ltd.

The main target of the exploration is the 120° trending 'package' of deformed interbedded felsic and mafic volcanics which passes through the southwest part of the Kaltwasser-Demarchi option and the Lavigne patents in the area of the old shaft. Significant gold values occur at the shaft with quartz veins cutting pyritic felsic volcanics and feldspar porphyry dykes. The sulphide mineralization has been traced by IP surveys in areas of overburden cover. Golden Knight and Cross Lake Minerals have recently reported significant concentrations of zinc, copper and gold a few kilometres northwest of this area. Even though the strikes in the two areas are at right angles and there is no apparent correlation of the geology, the gold in both the Golden Knight area and on the Lavigne Patents is associated with sulphide concentrations in felsic volcanics. This has offered some encouragement to pursue exploration on the Lavigne Patents and adjacent holdings.

A grid of 100m spaced picket lines was cut over the 2 claims in the summer of 1996. This was an extension of the grid that covers the other, surrounding Haddington holdings. The lines are laid out from a base line oriented at an azimuth of approximately 115°.

The September 1997 geological mapping is shown on a sheet including the surrounding Kaltwasser-Demarchi and Timmins Group holdings. Even though the mapping on these surrounding properties was done in the 1995 field season, the expenses claimed for assessment credits include only the work done in 1997 and the 1996 line-cutting. Likewise, for the sake of completeness, some of the 1995 data are shown in the list of bedrock samples, Table 1.

Location and Access

The Lavigne Patents are located in the NE corner of Timmins Township bounded on the north by the Sheraton-Timmins Township line. (and the Timiskaming-Cochrane boundary). Sheraton and Egan lie in Cochrane District and Timmins Township lies in Timiskaming District. The claims lie 50 km ESE of Timmins and 25 km SW of Matheson.

Access is via the all weather, Gibson Lake road which starts at a point on Highway 101, some 3 km. east of its intersection with Highway 67. At approximately 28 km. south of Highway 101 a branch leads off to the east to Camp Katapao on Lipsett Lake some 3.5 km from the turn off on the Gibson Lake road. This branch continues beyond Camp Katapao to the east and north. This north trending road passes 300m west of the claims and access is by foot along the Timmins-Sheraton Township line. The Gibson Lake road is not normally snow ploughed during the winter.

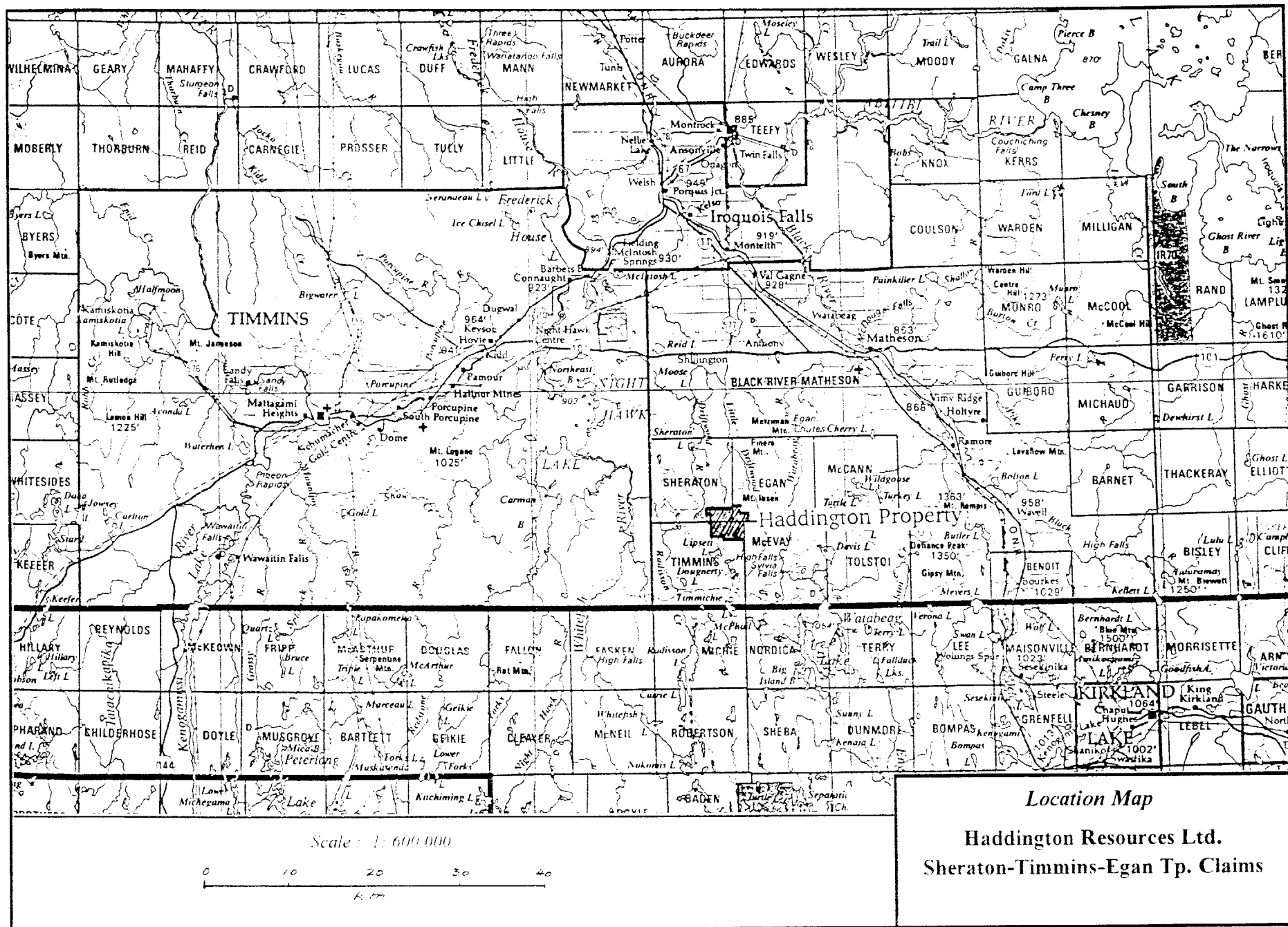
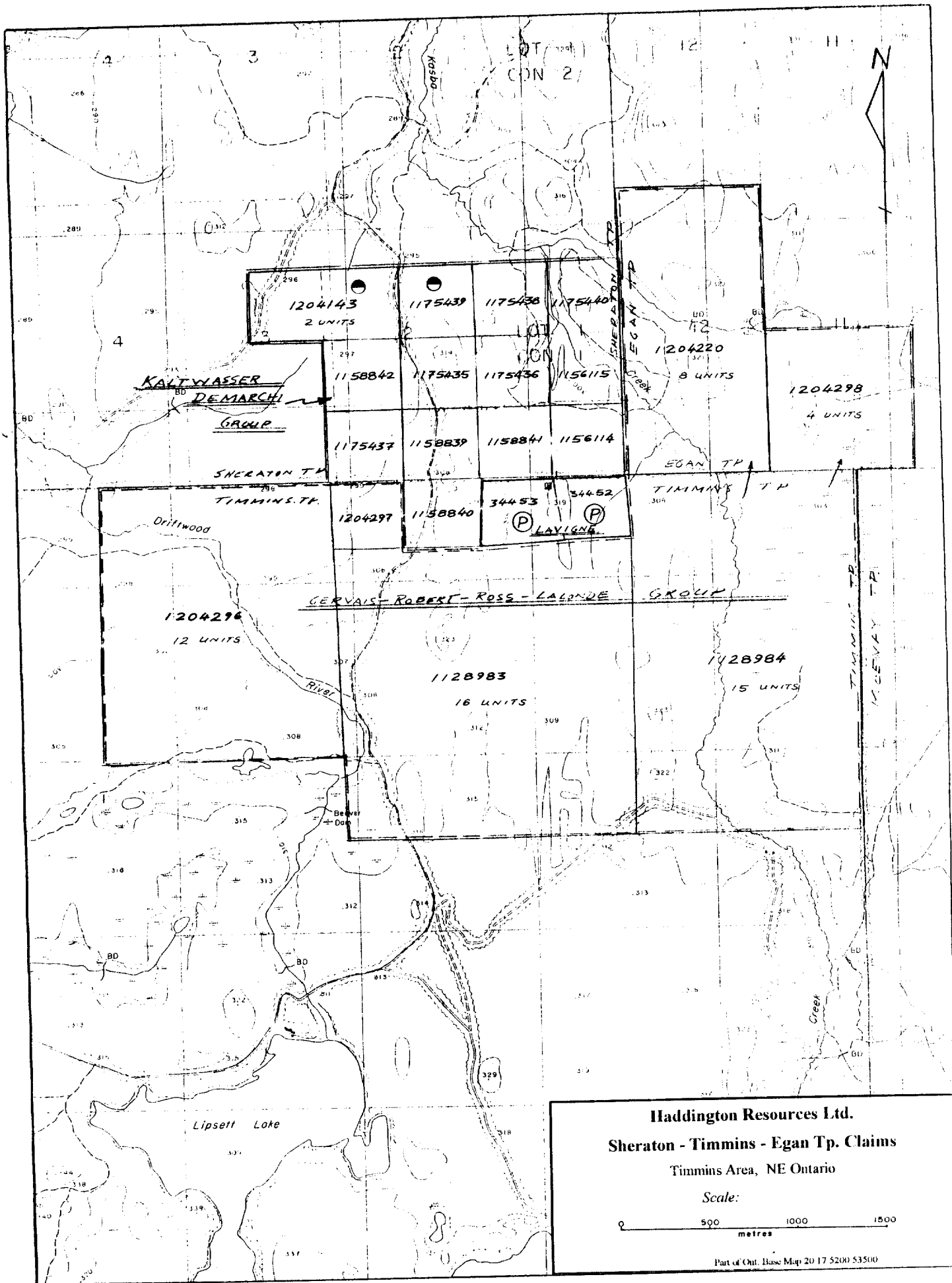


Fig. 1



Description of Claims

The Lavigne Patents, claims 34452 and 34453, form part of a contiguous group of 70 units in SE Sheraton, NE Timmins and SW Egan Townships as shown in Fig. 2. They are held by Haddington under three separate option agreements. The Lavigne Patents are held under option from JCL Corporation of Timmins.

History & Previous Work, Lavigne Patents and Surrounding Area

The area has been mapped by government agencies only on reconnaissance scale. It lies near the east edge of O.D.M. Map 49h (at 1 mile to the inch) and it is briefly described in Annual Report XLIX Pt. IV 1940 by L.G. Berry.

A thorough review of previous work and data available on the property was done by Beesley and described in his report of April 1995. The following section draws from Beesley's report and assessment work up to 1988 is taken, with minor alterations, from his report.

Two claims were staked by L.A. Blanchette and Napoleon Seguin in the northeastern corner of Timmins Township in 1910 and 1911. These, now patented claims 34452 and 34453 are surrounded by the Kaltwasser-Demarchi and Timmins Group. An exploration shaft was sunk to 40 FT on the western claim in 1910 to test the narrow quartz veins at the contact of feldspar porphyry dykes and chlorite schists. The quartz veins with abundant pyrite locally yielded high gold values in grab samples. In 1937, Blanchette-Porcupine Mines put down a number of short diamond drill holes in the area of the shaft.

In 1947, five holes drilled at right angles to the ENE-striking porphyry dykes, in the eastern claim of what was at that time referred to as the Butler Claims. Narrow quartz stringers with pyrite were noted, but no gold values were reported. A total of 19 short holes are shown in assessment files, most of which are near the shaft. Logs are, however, only available for 3 of these holes.

In 1974, stripping and trenching were reported from the 'Lloyd Dolan' claims, including the southern part of the present Kaltwasser-Demarchi and some of the Timmins group claims. Gold values were reported from the current Kaltwasser-Demarchi claim 1158840 (the one claim in the group from Timmins Tp.) and from further to the south and east.

Johns-Manville Canada Inc. held claims over much of the current holdings and carried out geological and geophysical surveys, stripping and trenching between 1981 and 1984. Gold values are reported from samples of quartz veins in feldspar porphyry dykes. According to Kaltwasser some of the Johns-Manville work consisted of exploration of the gabbro in current claim 1158840 for platinum. No platinum was found.

In 1987, Placer-Dome Inc. held 15 units in the SE part of Sheraton Township, including the northern most tier of the Kaltwasser-Demarchi claims. They carried out magnetometer and VLF-EM surveys. In 1988, T. McAllister held the southeastern part of the current Kaltwasser-Demarchi claims and conducted magnetometer and VLF-EM surveys. In 1988, Kimex Inc. did magnetic and VLF-EM surveys over the western part of the Kaltwasser-Demarchi group, as well

as to the west and northwest of the group, and over the Timmins Group. A strong SE - trending VLF - EM anomaly indicates a structure starting in the area south of the main Kaltwasser-Demarchi showing in SE Sheraton Township and extending across the Timmins Group to the large batholithic plutons to the east.

In the fall of 1990, Richard Kaltwasser and David Demarchi re-discovered significant gold values in an old rock trench in the southeast corner of Sheraton Township. This area is referred to as the 'Main Showing'. They explored the area with geophysics, soil geochemistry, mapping and power stripping. Sampling of these showings by Haddington in 1995 returned values up to 13.17 g/t Au over 0.61m.

In the summer of 1995, Haddington cut a large grid (approximately 100 km.) over the holdings surrounding the Lavigne Patents. The work included magnetic surveys of the whole grid, with smaller areas covered by IP, geological and geochemical surveys. Detailed sampling was also done on the Kaltwasser-Demarchi showings. In the process of mapping and prospecting some outcrops adjacent to the Kaltwasser-Demarchi claims were examined and some good gold values were returned from samples taken around the old shaft on the Lavigne patents and the potentially favourable horizon through the shaft area was recognized. In the summer of 1996 an option was negotiated on the Lavigne patents and the picket line grid extended over the 2 claims.

Regional Geology and Mineral Deposits

The claims are about 45 km. ESE of the Timmins 'Complex' and 20 km. south of the Destor-Porcupine deformation zone. Published maps show a relatively simple geology with mafic volcanics intruded by large trondhjemite batholiths protruding into the area from the south, east and northeast. However, both the adjacent areas, to the west, the Shaw Dome (Shaw, Eldorado, Langmuir, and Carman Township) and to the east, (Black, Benoit Township.) show fairly complex, well differentiated volcanic suites. It seems likely that the apparent simplicity in the Sheraton area is due to the poor exposure and lack of detailed mapping. In this regard, recent work has recognized significant amounts of intermediate to felsic volcanics.

Stratigraphically the Sheraton volcanics appear to fit into Pyke's tholeiitic, Upper Supergroup. Formational trends are generally ESE and dips are mostly steep. Trondhjemitic batholiths intrude the volcanics in NW McEvay, NE Timmins and in central and west Egan Tp. Parts of these plutons are thought to lie to the NE, SE and south parts of the claim group. Within the claims, where examined by the author, some re-crystallization is apparent, presumably from the contact effects of these plutons. The mafic volcanics, particularly the variolitic types (presumably Fe-tholeiites) are commonly magnetic, possibly as a result of hornfelsing related to the surrounding batholiths.

Many dykes, of a set of NNW trending, generally feldspar porphyritic diabase to gabbros, are present in the region as mapped by Berry. These are thought to be part of the late Archean, Matachewan swarm.

Although fairly strong deformation of the variolitic basalts and intermediate to felsic volcanics, is apparent in the map area, no major deformation zones have been previously documented in the area.

The assumed position of the main branch of the Cross Lake Fault, a fault the Lake Temiskaming Rift set, is interpreted to pass a short distance west of the 2 patents. Although this has been suggested as a possible site for gold mineralization, these faults are relatively late, (some are still active) and no known gold mineralization is elsewhere associated with them. It is thought unlikely that they are significant as a locus of gold mineralization.

The only gold occurrences in the general area are those within the Haddington holdings. On the patented claims, gold occurs in quartz-pyrite +/-molybdenite veins in the shaft area. Elsewhere on Haddington's holdings, gold occurs in minor quartz veins with pyritic selvages as at the Main Showing and at Trench #8. A short distance to the north of the property, in Lots 2 and 3, Con. II and III of Sheraton Township, drilling by Kamscofia intersected concentration of pyrite - pyrrhotite and chalcopyrite mineralization.

Description of Work - Geological Mapping

The Lavigne Patents were mapped by A.W. Beecham of Haileybury, Ontario, and Neil MacIsaac of Schumacher, Ontario between 8th Sept. 1997 and 15th Sept. 1997. Because of the brevity of the program, no camp was established and the crew commuted from Timmins and South Porcupine each day.

Details of work on the claims are tabulated below:

A.W. Beecham

<u>Dates</u>	<u>Description of Work</u>	<u>Days Performed</u>
3 Sept. 1997	traveling, scouting roads	
	prospecting IP anomalies	1.0
8 Sept. 1997	planning expediting	0.5
9 Sept. 1997	mapping, prospecting in shaft area	1.0
10 Sept. 1997	mapping, prospecting in shaft area	1.0
11 Sept. 1997	supervision, planning, expediting	0.5
12 Sept. 1997	report writing	0.5
15 Sept. 1997	report writing, plotting	0.5
16 Sept. 1997	report, cartography, map	1.0
17 Sept. 1997	map preparation	0.5
	Total	6.5

Neil MacIsaac

<u>Dates</u>	<u>Description of Work</u>	<u>Days Performed</u>
10 Sept 1997	mapping, prospecting	1.0
11 Sept 1997	prep. maps, review IP. expediting;	0.5
12 Sept 1997	mapping, prospecting	1.1
15 Sept 1997	mapping, prospecting	1.0
16 Sept 1997	plotting, cartography	1.0
	Total	4.5

Geology

Outcrop in the general area is sparse. However, two areas of 'high ground' on the Lavigne Patents have fairly abundant exposures. The first of these is a low, north-south ridge through the Shaft Area. This seems to be 'held up' by a resistant axis of diabase. A similar low ridge of outcrop passes through the SW part of the western claim. Overburden is sandy to loamy till, clay and some sand cover in the western part. Although overburden depths are not known, it is suspected that they are relatively deep, e.g. the Kasba Creek about 0.7 km. to the north cuts through an estimated 15 to 20 m of overburden.

The mappable units on the Lavigne Patents, from north to south consist of the following:

Shaft Area

- | | | |
|-----|-------------------|--|
| (1) | = or >50m | massive to streaky banded (variolitic) mafic flows |
| (2) | 220m | 'Intercalated Unit': massive medium to fine grained, mafic flows with about 25% pyritic, felsic tuff-sediments, chlorite-sericite schist including pyrite layers up to 1m. |
| (3) | 70m | no exposure |
| (4) | unknown thickness | pyroxenite |
| (5) | unknown thickness | mafic flows / gabbro |

Claim 1158840

- | | | |
|---|-----------|---|
| A | 110m | intermediate-mafic flows with minor felsic (spherulitic) volcanics; |
| B | 25m | Dacitic pyroclastics (SiO ₂ , 61.5%); |
| C | 50 - 175m | leucodiorite-gabbro; |
| D | >200m | fine grained, pillowed - massive mafic flows; |

The upper part of the intercalated unit appears to be exposed at the shaft, while the lower part is exposed on the Claim 1158840 at the west boundary of the patents. i.e. A and B on Claim 115880 seem to correlate with the southern part of (2) and (3) at the shaft. As noted below this is probably complicated by a NNW fault between the two outcrop areas.

Both eastern and western exposures are cut by large, north-south diabase dykes.

There is an isolated pyroxenite outcrop at 21+60E/5+65S. This with the adjacent, gabbroic rocks may be part of one intrusive complex.

At the shaft exposure, the intercalated mafic-felsic unit is interpreted to consist of mafic flows with 5 to 15 m thick inter-flow beds of fine felsic tuff. However, the rocks are strongly

deformed and , no good diagnostic, primary structures were recognized. Hence the nature of the original rock is speculative and the felsic layers could mark zones of alteration. As well some of the sheared mafics may be derived from mudstones rather than mafic volcanics. In the western area, primary structures and textures are better preserved, where the lower part of the 'Intercalated Unit' is made up of dark grey, vitreous, locally spherulitic types and coarse tuff breccias. A whole rock analyses of the tuff breccias gave a silica content of 61.5 % indicating they are intermediate rocks and separate from the predominantly basaltic volcanics of the area.

Feldspar porphyry dykes up to few metres thick are common, particularly in the shaft area where some of them host auriferous quartz-pyrite veinlets. Minor quartz-feldspar porphyries occur south of the shaft. There are isolated dykes of quartz-feldspar porphyry, near the shaft and near the west boundary of the patents.

Coarse north-south diabase dykes cut the volcanics. Most exposed diabbases is strongly magnetic. Some are uniform textured and others are feldspar phytic.

Structural Geology: As noted above general trends of volcanics are 110 to 120°. Dips are steeply north. Isolated pillows on the Kaltwasser claims to the NW appear to face south suggesting the sequence is slightly overturned.

Variolitic mafic volcanics north of the Lavigne Patents are, for the most part, strongly deformed and are typically streaky banded.

The intercalated mafic-felsic unit through the shaft is strongly deformed and schist beds are contorted. Schistosity follows the general formational trend. Just west of the patents, on claim 1148840, the leucodiorite intrusive appears to intrude a strongly sheared and crumpled zone. The chloritic schists of the crumpled zone form north plunging chevron folds.

A structure along the 0+00 BL, a short distance north of the patents is indicated by VLF EM conductors, resistivity lows and a broad magnetic low. It is believed to be marked by a deep overburden trough. These features suggest an extensive zone of strong deformation, possibly including late faults. This may be of region extent.

A NNW striking fault is interpreted between the shaft area outcrop and the western outcrop area. This based on, (1) an apparent dextral offset of a variolitic to non variolitic contact some 700m to the north, (2) a similar offset of IP chargeability anomalies along the Sheraton-Timmins Township boundary and (3) disruption of the magnetic pattern in the same area. This structure would presumably be a fault of the same set as the regional Cross Lake Fault which passes west of the property. The Cross Lake Fault is part of the late Lake Temiskaming rift system.

Alteration: The felsic layers in the shaft area are generally hard and appear silicified. These felsic rocks, particularly where pyrite is abundant contain considerable white mica (or sericite). Most of mineralized felsic rocks in the shaft area have rusty weathering rinds believed to indicate Fe-dolomite alteration.

Prospecting

Prospecting was undertaken with geological mapping. Considerable moss stripping was done and rough chip samples taken of veins and sulphide concentrations. Results of this sampling are shown in Table I and sample points are shown on Fig. 3

Showings and Mineral Occurrences

Part of the intercalated felsic and mafic volcanic unit exposed in the shaft area and farther to the west in the NE corner of claim 1158840, carries appreciable concentrations of pyrite. This is as pyritic quartz veins, pyritic sericite-chlorite schists, scattered streaks and blebs and as heavy (up to 1m massive pyrite) exhalative pyrite. Most gold values seen to date occur in narrow quartz-pyrite (+/-) molybdenite veins where they cut sulphide-rich felsics and feldspar porphyry intrusives and there are only isolated geochemically anomalous gold levels in the sulphides-rich rocks themselves. Results of sampling veins and pyrite showings are shown in Table I. An assay of 52 g/t Au was returned from a quartz pyrite vein and 21 g/t Au from a quartz-pyrite-molybdenite vein at the shaft. The highest value from a 'heavy pyrite' without quartz veins was 200 ppb Au. Whether there are significant gold values over appreciable widths or with sulphide-rich horizons has not yet been established.

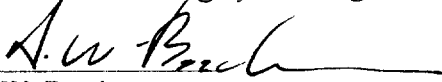
During the 1995 work, a low gold value (1056 ppb) was returned from a location on the west boundary of the Lavigne patents. This is from a quartz vein within deformed, crumpled mafic volcanics near the south contact of the leucodiorite intrusive (at picket line coordinates 16+70E/5+15S). This is south of and may mark a zone distinct from the values in the felsics rocks to the north.

Discussion and Recommendations

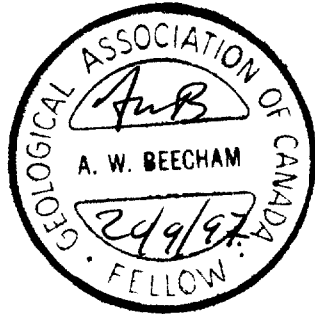
The pyritic felsic volcanics and sericite-chlorite schists exposed in the shaft area, seem to mark a geological environment similar to some large tonnage gold deposits. (e.g. the Hemlo camp and the north Cadillac camp in NW Quebec). The environment may also be similar to that in which Golden Knight is finding significant gold and basemetals some 8 km. to the northwest. Even though, the gold values found to date are in narrow quartz veinlets and the geological environment suggests the potential for major gold concentrations.

The intercalated sulphide bearing unit which hosts most of the gold showings on the patents, based on magnetics and the IP survey, extends for hundreds of metres to the WNW through the Kaltwasser- Demarchi option. To the ESE, although IP coverages extends only about 200m ESE of the shaft area outcrop, the magnetics suggest the horizon extends across the east patent onto the Timmins group. Because of the potential in this horizon for major gold deposits, it is strongly recommended that exploration be continued. Results have not yet been received from the soil geochemical survey was completed at the same time as the mapping, but it is hoped that this will indicate more specific diamond drilling targets along the extensive sulphide bearing unit. Depending upon the overburden depth these targets should either be tested by trenching or diamond drilling. Even if no specific targets are indicated by the soil geochemistry, some systematic drilling of the horizon at about 300m spaced lines should be done.

As noted above, an anomalous gold value at picket line coordinate 16+70E/5+15S may indicate a second mineralized structure. A '2-line' chargeability anomaly occurs some 75m to the east and may reflect sulphide concentrations associated within the same general structure. This also warrants testing by trenching or diamond drilling.



A.W. Beecham
Haileybury, Ontario,
20th Sept. 1997



References

- Beecham A.W., Daigle R.J., Meikle R.J.
(May 1996) Report of 1995 Exploration, Magnetics, Induced Polarization, Geological Mapping, Soil Geochemistry and Bedrock Sampling, Sheraton, Timmins and Egan Tp Claims, Haddington Resources Ltd.- Assessment report MNDM;
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(1940) 1 mi =1 inch; ODM. Ann. Rep. ,XLIX Pt. IV 1940
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(April, 1995) Timmins and Egan Townships, Dist. of Cochrane and Timiskaming, Ontario, Haddington Resources Ltd. internal report;
- Kaltwasser, Richard F.
(Jul. 1992) Summary Report of the Power Stripping\Washing\Mapping\Assaying and Prospecting, Demarchi East Group and Demarchi West Group, Sheraton, Egan and Timmins Tp., Porcupine & Larder Lake Mining Div. Assess. Rep.
- Summary Report of the Magnetometer Survey, Mapping and Prospecting,
(Jun 1994) Sheraton Tp., parts of Lots 1,2 & 3, Con. 1, Porcupine Mining Division. Assessment report;
- Addendum to Summary Report on the Magnetometer Survey, Mapping and
(Oct. 1994) Prospecting, Sheraton Tp. Parts of Lots 1,2 and 3, Con. 1, Porcupine Mining Div.
- Report of the Geochemical Soil Survey, Magnetometer Survey\Assaying and
(Nov 1996) Prospecting, Mechanical Stripping, Demarchi-Kaltwasser Group, Sheraton and Egan Township, Porcupine and Larder Lake Mining Divisions; Assessment report;
- Middleton R.S. Gravity Surveys and Geological Structures in Timmins and Matheson Area
(1976) Dist. of Cochrane, Timiskaming and Sudbury;
- Pyke D.R. et al
(1973) Timmins-Kirkland Lake Area Geological Compilations Series 1"=4 mi.
Map 2205;
- O. D. M. Map 31D, Watabeag Area, ODM.
- Pyke D.R. Geology of the Timmins Area, OGS. Report 219
(1982)

Appendix I

Certificate of Bedrock Assays



Swastika Laboratories

A Division of TSL/Assayers Inc.

Assaying - Consulting - Representation

Established 1928

Geochemical Analysis Certificate

7W-3638-RG1

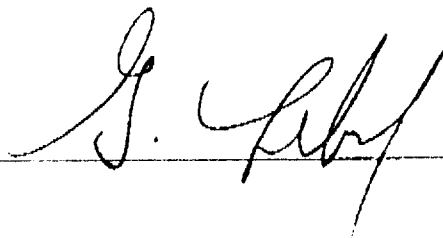
Company: **HADDINGTON RESOURCES LTD**
Project: Sherit-Timm
Attn: P. Tallman / A. Beecham

Date: SEP-16-97

We hereby certify the following Geochemical Analysis of 11 Chip samples submitted SEP-11-97 by .

Sample Number	Au PPB	Au Check PPB	Cu PPM	Zn PPM
14901	38	-	10	12
14902	117	-	20	32
14903	19	-	20	16
14904	5	-	10	22
14905	38	-	10	10
14906	Ni1	Ni1	56	8
14907	12	10	24	30
14908	Ni1	-	6	8
14909	2	-	132	22
14910	Ni1	-	4	6
14911	46	33	88	24

One assay ton portion used.

Certified by 

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705)642-3244 Fax (705)642-3300

Personal information collected under the Access to Information Act, the information is for the use of the Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario N2S 2L6.



of the Mining Act. Under section 8 of the Act, the information provided in this declaration must correspond with the mining land holder's information in the Mining Land Register maintained by the Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario N2S 2L6.

Instructions: - For work performed on or after January 1, 1997, please type or print in ink.

900 form 0240.

1. Recorded holder(s) (Attach a list if necessary)

Form with fields for Name, Address, Client Number, Telephone Number, and Fax Number. Includes handwritten entries for HADDINGTON RESOURCES LTD (OPTIONEE) and JCL CORP.

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

Form with checkboxes for Geotechnical, Physical, and Rehabilitation work types. Includes a table for Office Use with fields for Commodity, Total \$ Value of Work Claimed, NTS Reference, Mining Division, and Resident Geologist District.

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required; - provide proper notice to surface rights holders before starting work; - complete and attach a Statement of Costs, form 0212; - provide a map showing contiguous mining lands that are linked for assigning work; - include two copies of your technical report.

3. Person or companies who prepared the technical report (Attach a list if necessary)

Form with fields for Name, Address, Telephone Number, and Fax Number. Includes a RECEIVED stamp from the GEOSCIENCE ASSESSMENT OFFICE dated SEP 24 1997.

4. Certification by Recorded Holder or Agent

I, NEIL MAC ISAAC, do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Form with fields for Signature of Recorded Holder or Agent, Date, Agent's Address, Telephone Number, and Fax Number. Includes a RECEIVED stamp from the PORCUPINE MINING DIVISION dated SEP 23 1997.

(ORIGINAL COPY)

RECORDED HOLDERS (Supplementary list)

- 1) ICL CORPORATION - CLIENT # (Pending)
BOX 630 303255
1110 LAVIGNE BOULEVARD
TIMMINS ONT.
P4N 7G2 TEL. 705-264-4750

- 2) DAVID E. DEMARCHI - CLIENT # 12515
BOX 36
11 BRUCE ST.
SOUTH PORCUPINE
ONT. TEL. 705-235-3888
PON 1H0

- 3) RICHARD KALTWASSER - CLIENT # 150541
BOX 34
448 - 8th AVE 2-17758
MATHESON ONT.
POK 1N0 - TEL. 705-273-2733

- 4) Jacques Robert - CLIENT # 188148
218 OGDEN AVE
TIMMINS ONT
P4N 1M9 TEL. 705-267-5225

RECEIVED
DA 9:30
SEP 24 1997
GEOSCIENCE ASSESSMENT
OFFICE

RECEIVED
SEP 23 1997 C
2:30h
PORCUPINE MINING DIVISION

5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date.
eg TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
eg 1234567	12	0	\$24,000	0	0
eg 1234568	2	\$8,892	\$4,000	0	\$4,892
G16000242 34452 Patented	1	\$2695			\$95
G16000243 34453 Patented	1	2695			95
3					
4					
5 1204143	2		\$3200		
6 1158840	1		400		
7 1158839	1		400		
8 1158841	1		800		
9 1175437	1		200		
10 1156114	1		200		
11					
12					
13				\$18750	
14					
15					
Column Totals		\$5390	\$5200		\$190

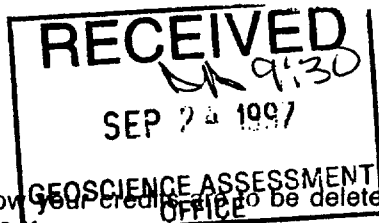
I, NEIL MAC ISAAC (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing: Neil Mac Isaac (Agent) Date: SEPT. 23/97

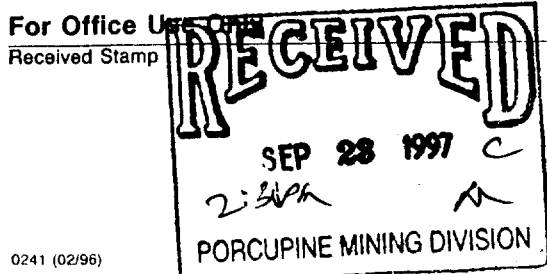
6. Instructions for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- 3. Credits are to be cut back equally over all claims listed in this declaration; or
- 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):



Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.



Deemed Approved Date	Date Notification Sent
Date Approved	Total Value of Credit Approved
Approved for Recording by Mining Recorder (Signature)	

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Work Type	Units of Work <small>Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.</small>	Cost Per Unit of work	Total Cost
LINE CUTTING.	4 km.	\$225	\$900.00
GEOLOGICAL MAPPING. (SALARIES)			3 286.71
ASSAYS.	11 for Au, Cu, Zn		182.45
Associated Costs (e.g. supplies, mobilization and demobilization).			
			2. 17758
Miscellaneous Supplies & Services			27.84
Transportation Costs			\$0.35/km. 752.82
Food and Lodging Costs			239.76
Total Value of Assessment Work			\$5389.58

Calculations of Filing Discounts:

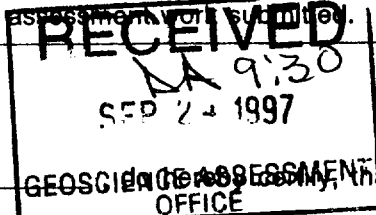
1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK $\times 0.50 =$ Total \$ value of worked claimed.

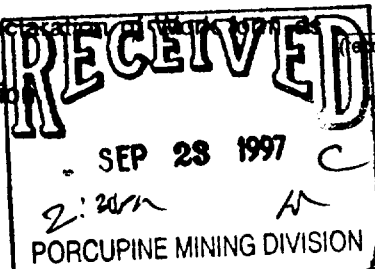
Note:
 - Work older than 5 years is not eligible for credit.
 - A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, A.W. BEECHAM
(please print full name)



that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work 1997. I am authorized to make this certification as AGENT (recorded holder, agent, or state company position with signing authority)



Signature: A.W. Beecham Date: 20/SEP/97

A.W.B

November 18, 1997

HADDINGTON RESOURCES LTD.
BOX 10
11TH FLOOR, 808 W. HASTINGS STREET
VANCOUVER, B.C.
V6C-2X4

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (888) 415-9846
Fax: (705) 670-5863

Dear Sir or Madam:

Submission Number: 2.17758

Status

Subject: Transaction Number(s): W9760.00349 Deemed Approval

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. **WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.**

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice.

Please note any revisions must be submitted in **DUPLICATE** to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Lucille Jerome by e-mail at jerome_l@torv05.ndm.gov.on.ca or by telephone at (705) 670-5858.

Yours sincerely,



ORIGINAL SIGNED BY
Blair Kite
Supervisor, Geoscience Assessment Office
Mining Lands Section

Work Report Assessment Results

Submission Number: 2.17758

Date Correspondence Sent: November 18, 1997

Assessor: Lucille Jerome

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9760.00349	6000242	TIMMINS	Deemed Approval	November 17, 1997

Section:

12 Geological GEOL

In future submissions, please ensure that the sample number is identified on the map.

Correspondence to:

Resident Geologist
South Porcupine, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):

Neil MacIsaac
SCHUMACHER, ONTARIO, CANADA

HADDINGTON RESOURCES LTD.
VANCOUVER, B.C.

DAVID ENIO DEMARCHI
SOUTH PORCUPINE, ON

RICHARD F. KALTWASSER
MATHESON, Ontario

JACQUES ROBERT
Timmins, Ontario

JCL CORPORATION
TIMMINS, ONTARIO

SHERATON TWP. M. 386

2.17758 SAN TWP.
GEOL. M. 346

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

Areas withdrawn from staking under Section 43 of the Mining Act, R.S.O. 1970

Order No.	File	Date	Disposition
1	W 21/77	1978/07/27	S.R.O.
2	W 22/77	1978/10/27	S.R.O.
3	W 23/78	1978/07/25	S.R.O.
4	W 24/78	1978/07/25	S.R.O.

SAND and GRAVEL

Quarry Permits

DATE OF ISSUE

SEP 24 1997

PROVINCIAL RECORDING OFFICE - SUDBURY

THE TWP IS SUBJECT TO FOREST ACTIVITY IN 1997/98. FURTHER INFORMATION IS AVAILABLE ON FILE.

LEGEND

- PATENTED LAND
- PATENTED FOR SURFACE RIGHTS ONLY
- LEASE
- LICENSE OF OCCUPATION
- CROWN LAND SALE
- LOCATED LAND
- CANCELLED
- MINING RIGHTS ONLY
- SURFACE RIGHTS ONLY
- HIGHWAY & ROUTE NO.
- ROADS
- TRAILS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKOG
- MINED

TOWNSHIP OF

TIMMINS

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE 1 INCH = 40 CHAINS (1:2 MILE)

PLAN NO. M.314

MINISTRY OF NATURAL RESOURCES SURVEY AND MAPPING BRANCH

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

BLACKSTOCK TWP. M. 263

MCEVAY TWP. M. 367

MICHIE TWP. M. 301



42A075E0010 2.17758 TIMMINS

M.314

LIMITING TWP

M.314



P1204143

"Trench #8"

P-1175439

P-1175438

P-1175440

NW Stockwork

P-1158842

P-1175435

P-1175436

P-1156115

L-1204220

P-1175437

P-1158839

P-1158841

P-1156114

GEOLOGICAL LEGEND

- | | | | |
|--|---|--|---|
| | 11 Lamprophyre | | (c) Gabbro |
| | 10 Late diabase dykes; p10 porphyritic; (10) interpreted from magnetics | | (l) Leucodiorite, gabbro |
| | 9 Granitoids; (a) granite, (b) syenite, (d) granodiorite, (e) trondjemite | | (s) Serpentine |
| 8 Altered and Metamorphosed Rocks | | | |
| | (l) Chlorite schist | | (b) Greywacke |
| | (s) Sericite schist | | (d) i/b, fine felsic tuff, & chert |
| 5 Mafic and Ultramafic Intrusives | | | |
| | (a) Peridotite | | (f) Magnetite iron formation |
| | (f) Fine, grained, mafic | | (h) Argillite, chert, siltst. graphite |
| | (p) Pyroxenite | | (s) Siltstone +/- argillite |
| 4 Sediments | | | |
| | (a) Argillite | | (j) Dacitic volcanics |
| | (c) Chert | | (k) Fine grained felsic intrusives |
| | (e) Sulphide-rich exhalites | | (l) Fine, bedded tuff, ash |
| | (g) Conglomerate | | (m) Spherulitic, felsic flows |
| | (i) Feldspathic quartzites | | (n) Felsic, hornblende porphyritic dyke |
| 3 Intermediate to Felsic Volcanics and Subvolcanic Intrusives | | | |
| | (a) Rhyolite flows | | (o) Breccia, flow bx |
| | (c) Quartz (+/- feldspar)phyric tuffs | | (p) Pillowed flows |
| | (d) Quartz (+/- feldspar)phyric dykes | | (q) Feldspar phyric (andesite) |
| | (e) Quartz (+/- feldspar)phyric flows | | (r) Streaky banded (sheared 2e) |
| | (f) Fine grained felsic tuff | | (t) Mafic tuff |
| | (g) Dacitic, f.sp. phyric tuff, tuff Bx | | |
| | (h) Dacite porphyry intrusives (F.P. porphyry intrusives) | | |
| 2 Mafic Volcanics | | | |
| | (a) Massive | | (b) Polysuture jointed flow |
| | (c) Coarse grained | | (k) Komatiitic basalt |
| | (e) Variolitic flows | | |
| | (g) Mafic volcanic bx, argillite matrix | | |
| | (i) Diabasic textured flows | | |
| 1 Komatiitic Volcanics | | | |
| | (a) Spinifex textured flow | | |
| | (d) Komatiitic flow breccia | | |

SYMBOLS AND ABBREVIATIONS

- | | | | |
|-----|-------------------------------------|-------|---------------------|
| sss | sericite alteration | alt | altered |
| ### | silicification | Au | gold concentration |
| ... | sulphide concentrations | f.sp. | feldspathized |
| ... | variolites | fg | fine grained |
| ... | bedrock geochem. analyses in ppb Au | cg | coarse grained |
| --- | geological contact | hc | hyaloclastite (ic) |
| --- | shear zone, fault | mg | medium grained |
| --- | schistosity, foliation | pc | pyroclastic |
| --- | bedding | pl | pillowed, pillows |
| --- | breccia | tb | thinly bedded |
| --- | pillows with top direction | qv | quartz vein |
| --- | pillow over turned | chl | chlorite |
| --- | outcrop, area of outcrop | Cp | chalcopyrite |
| --- | vein stockwork | gf | graphite, graphitic |
| --- | pit | Gn | galena |
| --- | shaft | hem | hematite |
| --- | trench in rock | Mo | molybdenite |
| --- | trench in overburden | mt | magnetite |
| --- | diamond drill hole | Po | pyrrhotite |
| --- | open, grassy swamp | Py | pyrite |
| --- | embankment | ser | sericite |
| --- | claim post, approx. loc'n | VG | visible gold |
| --- | claim post tied to grid | | |
| --- | survey iron bar | | |
| --- | all weather road | | |
| --- | track | | |

A.W. Beecham
May, 1996

Note: Geology of patented claims P34452 and P34453 by A.W. Beecham, and N. MacIsaac, Sept. 1997

Drawing Revised: Sept. 1997, by A.W. Beecham



210

2-1776-50
2-1776-50
2-1776-50

Haddington Resources Ltd.
Sheraton-Timmins-Egan Township Claims
Timmins Area, Dist. of Cochrane and Timiskaming, NE Ontario

GEOLOGICAL MAPPING

Geology by: A.W. Beecham
July, 1995
Drawn: May, 1996

Scale: 1:2500

NTS
42-A-7

Fig. 3