Summary Report Diamond Drill Program Mattabi Area Property Northwestern Ontario

Prepared for: Ministry of Northern Development and Mines

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Submitted by: 1522923 Ontario Inc.

May 2007



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1.0 Introduction

A diamond drill program was undertaken on the Mattabi area joint venture property of 1522923 Ontario Inc. in the Sturgeon Lake greenstone belt during the period of April 5 to April 19, 2007, consisting of three diamond drill holes. The property is located south of Sturgeon Lake near the past-producing mines of the area (Sturgeon Lake, Lyon Lake, Mattabi), approximately 70 km north of Ignace, Ontario (refer to Figure 1). Immediate access to the property is achieved through the Mattabi mine road off of Highway 599 at Silver Dollar, and subsequent secondary and logging roads. Overall, access to the property is excellent. Refer to Figure 2 for the location of the claims relative to topographic features, as well as access to the claims.

Addresses of the holders of claims making up the joint venture property are provided below:

1522923 Ontario Inc. Suite 1100 – 111 Richmond Street West Toronto, ON M5H 2G4

Xstrata - Falconbridge Limited 207 Queen's Quay West, Suite 800 Toronto, ON, Canada M5J 1A7

Inmet Mining Corp 330 Bay Street Suite 1000 Toronto, Ontario M5H 2S8

This report has been prepared under the direction and supervision of Mr. Dale Hendrick, P.Eng. who is also the report's author.



Figure 1 Property Location



Figure 2 Mattabi Area Property Location (May 9, 2007)

Local topography is typical of the Canadian Shield, where the shape of lakes is often controlled by the properties of the bedrock, local structural zones, contacts, joint structures, folds and foliation. Shoreline exposure in the region is excellent, with exposed outcrop present throughout. Away from the shores, the area is covered by thin glacial drift, and is largely well forested, with the few swamps contained within well-defined topographic lows.

Regional Geology

The Sturgeon Lake greenstone belt consists of a thick west-northwest facing, north dipping $(70-75^{\circ})$ sequence of mixed tholeiitic/calc-alkalic volcanics forming the southern limb of a syncline. The volcanic pile rests on Archean gneissic basement, and is intruded by syn-to post-volcanic plutons, sills and dykes. The north facing, steeply dipping nature of the south Sturgeon Lake assemblage has resulted from folding about an east-west axis with the fold axis situated in the south part of Sturgeon Lake. A weaker deformation about a north-south axis produced a gradual concave arching to the east, with a change from east – west (90°) strikes in the Mattabi Mine area to southeast (120°) strikes in the Lyon Lake area.

Laterally extensive mappable units have been grouped into a number of volcanic cycles by the GSC and others, with each cycle beginning with mafic to intermediate volcanic flows and terminating with felsic pyroclastic events. A thin sedimentary layer caps each cycle. Subsequent mapping by Trowell (Ontario Geological Survey) confirmed the cyclical nature of the volcanism. Mapping by Morton and co-workers (University of Minnesota in 1990) suggested that the observed thickness of pyroclastics were probably due to thrust repetition of the stratigraphy. Morton et al's detailed volcanological / stratigraphic studies over the last decade resulted in the interpretation of the South Sturgeon Lake assemblage as a large submarine caldera complex approximately 30 km in strike length and containing up to 4500m of caldera-fill material. Five major ash-flow tuff units (traced for kilometers across the camp) have been interpreted to mark 5 separate caldera-collapse events. The distribution of the ash tuff and associated debris flow deposits indicates that the Sturgeon Lake caldera is composed of smaller nested or overlapping calderas. Based on detailed core logging and stratigraphic mapping, Morton et al have defined a number of synvolcanic faults oriented approximately normal to the stratigraphy. Some of these faults have displacements of greater than 150m, which they believe to mark individual caldera boundaries. Additional faulting, in the form of north-south trending dip-slip faults has further broken the complex into a number of blocks.

Pre-caldera lithologies comprise basalt lava flows with minor scoria cone deposits, tuff cone deposits, and bedded epiclastic rocks. The scoria and tuff cone deposits are interpreted to represent shallow subaqueous deposits resulting from magmatic and phreato-magmatic eruptions. The caldera-fill sequence contains up to 4500m of pyroclastic units, with individual horizon thicknesses ranging between 100 to more than 1200m. The units have been subdivided into a total of eight volcanic successions by Morton.

Occurrence Geology and History

A summary of the local geology and exploration history is provided below.

History

- 1993 exploration by hole 91-51-30 intersected massive to stringer sulphides (py, po) from 2886 to 2921 feet near the top of a pyroclastic sequence
- Group 23 exploration yielded 2.9% Zn over 15 feet within the NBU rhyolite (hole SL-23-86-310)
- adjacent holes intersected thickening horizon of pyritiferous graphitic argillite, indicating a potentially deepening basin to the east
- SL-23-86-324 yielded 2.84% Zn and 1.10 opt Au over 10 feet Severin, 1981
- Sturgeon Lake deposit occurs at the top of a quartz porphyry rhyolite that does not correlate with the rock unit underlying the Lyon Lake and Creek deposits
- no graphitic sediments occur within the rhyolites south of the Sturgeon Lake deposit

Geology

- Sturgeon Lake area massive sulphide deposits occur within or at the top of felsic volcanoclastics thought to mark the termination of a major volcanic cycle
- the NBU-Lyon Lake contact traced across the Santa Maria and Norex East Sturgeon Lake properties, and yielded up to 0.64%Zn, 2.62% Cu, 0.71% Ag, and 0.06 opt Au over 14 feet (LLM-20) (Smith, 1993)
- past programs indicated the presence of felsic units within the volcanic stratigraphy of the Inmet Option area
- compilations and reconnaissance mapping by Noranda staff in the area west of Claw Lake indicated felsic units; Falconbridge studies also report that many outcrops extending east from the productive horizons originally mapped as andesite and actually rhyolite
- potential for the extension of mine stratigraphy to the southeast, with either stacked or offset targets appears high
- Lyon Lake orebodies located near the top of the volcanic cycle
- BIF located about 30 m below the ore, with pyroclastic rhyolite between the BIF and the ore (immediate footwall of the orebodies)
- BIF would provide a geophysical target for continuation of the mineralized horizon Sturgeon Lake deposit (Severin, 1981)
- Area underlain by basalts and felsic volcanics, a quartz porphyritic rhyolite at the top of the felsic volcanics and is capped by the massive sulphide deposit
- hydrothermal alteration of the underlying rhyolites have resulted in a depletion of Na, Ca, and Fe and an in crease in Mg, K and Zn
- also exhibit silicification and sericitization, and are locally strongly chloritic

Geophysics

- Mattabi deposit discovered by Input; Sturgeon Lake, Lyon Lake and Creek Zone had poor geophysical expressions and were discovered by determining stratigraphic controls (OGS Report 221)
- the upper formation of the Lyon Lake cycle consists of clastic metasediments, including carbonaceous sulphidic mudstone within a shale host (OGS Report 221, pg 43)
- contains pyrite and pyrrhotite, with minor arsenopyrite, chalcopyrite, sphalerite and magnetite; a potential marker horizon

Claim Summary

A summary of claim information and work undertaken on the claims, as presented in this report, is tabulated below:

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| Claim Numbers | Claim Holder | No. of Units | Work Conducted | No. of Holes |
|------------------|-------------------------|-----------------|---------------------|-----------------|
| 1195743 | Xstrata | 4 | | 0 |
| 1195744 | Xstrata | 16 | | 0 |
| 1195858 | Xstrata | 1 | | 0 |
| 3001029 | 1522923 Ontario Inc. | 12 | | 0 |
| 3001620 | 1522923 Ontario Inc. | 3 | | 0 |
| 3001621 | 1522923 Ontario Inc. | 16 | | 0 |
| 3001622 | 1522923 Ontario Inc. | 16 | | 0 |
| 3001623 | 1522923 Ontario Inc. | 16 | | 0 |
| 3001624 | 1522923 Ontario Inc. | 16 | | 0 |
| CLM 248 | Inmet | Patented | | 0 |
| CLM 249 | Inmet | Patented | | 0 |
| CLM 250 | Inmet | Patented | Diamond Drilling | 3 |
| 107141 | Inmet | Lease | , C | 0 |
| 106627 | Inmet | Lease | | 0 |

Table 1: Summary of Claims and Work Performed

3.0 Work Program

Three holes were drilled on the property during the period April 5 to April 19, 2007 with a total of 900 m (2952 ft) of core recovered. The holes were drilled using standard wireline techniques, with all holes drilled at an angle of -60° to the horizontal. The core is NQ diameter, and is stored near the property at an existing Inmet core storage area. The core logging, drill supervision and sampling programs were undertaken by the personnel itemized in the following table:

| Personnel | Prospecting Licence Number | Field Dates |
|---|-------------------------------|--------------------|
| Drill Supervision: Sherridon Johnson | 1000862 | Apr 5 to 19, 2007 |
| Field Supervision: Gary Williams | 1002232 | Apr 11 to 13, 2007 |
| Core Splitting: Ryan Jones | 1002557 | Apr 5to 19, 2007 |
| | | |

Table 2Summary of Field Personnel

Diamond drilling was conducted by Heath & Sherwood Drilling of Kirkland Lake, Ontario. The program consisted of three holes. Drill hole information is summarized in Table 3, with geological logs of the holes provided in Appendix C. A plan of the drill hole locations, and individual cross sections of the drill holes are provided in Appendix D. No significant sulphides were intersected in the drilling, so no samples were collected for geochemical analysis.

Daily drill supervision was provided by Sherridon Johnson and Ryan Jones during the period April 5 to 19, 2007. Property visits were undertaken from April 11 to 13 and May 14 to 18, 2007 by Mr. Gary Williams P.Geo., in order to oversee progress and evaluate the results of the drilling program.

| Table 3: | : Drill | Hole | Summary |
|----------|---------|------|---------|
|----------|---------|------|---------|

| Hole No. | Grid Location | Depth (m) | Angle & Azimuth | Drilling Dates | Claim No. |
|---------------|--------------------|--------------|------------------------|---------------------------|-----------------------|
| Mattabi 07-01 | 654000E / 5524275N | 300 | -60 @ 180 ⁰ | Apr 5 – Apr 10, 2007 | CLM 250 (Inmet lease) |
| Mattabi 07-02 | 654000E / 5524025N | 300 | -60 @ 360 ⁰ | Apr 10 – Apr 14, 2007 | CLM 250 (Inmet lease) |
| Mattabi 07-03 | 654375E / 5524100N | 300 | -60 @ 315 ⁰ | Apr 15 to Apr 19, 2007 | CLM 250 (Inmet lease) |

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4.0 Results

A total of three diamond drill holes were drilled on the property. The drill core was logged in detail, but the lack of sulphide mineralization resulted in no samples being collected for chemical analysis. Overall, the drill holes intersected a suite of mafic to intermediate to felsic tuffaceous volcanics. These units are interbedded throughout the length of the holes. Trace to 2% pyrite was noted throughout most of the core, with the felsic units often being mildly magnetic. Foliations ranged largely from 45° to 90° to the drill core, indicating near vertical dipping units were intersected.

5.0 Conclusions and Recommendations

A diamond drilling program was undertaken by Heath and Sherwood Drilling of Kirkland Lake, Ontario for 1522923 Ontario Inc. during the period April 5 to 19, 2007. The data collected from that work is summarized in this report. The next phase of work is proposed to consist of re-evaluation of existing drill hole, geological and geophysical data for the area, to better outline areas for additional ground work.

This report was compiled under the supervision of Dale M. Hendrick, P.Eng. who oversaw and directed the drilling program undertaken. Mr. Hendrick has been involved in mineral exploration for the past 40 years, overseeing exploration programs throughout North America and around the world. This report was completed and submitted to the Ministry of Northern Development and Mines in May 2007.

Respectfully submitted, **1522923 Ontario Inc.**

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Dale M. Hendrick, P. Eng.

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APPENDIX A Proof of Beneficial Interest .

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APPENDIX C Diamond Drill Logs

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HOLE NO: Mattabi 07-01 PROJECT: Mattabi Sturgeon Lake COMPANY: 1522923 Ontario Inc.

HOLE LOCATION: Northing: 5524275N Easting: 654000E Bearing: 180

HOLE DATA: Dip: -60 Bearing: 180 Elevation: Final Depth: 300m Claim No.: Lease CLM 250

Start Date: April 5, 2007 End Date: April 10, 2007

Core Size; NQ Downhole Surveys: Core Storage: Inmet Mattabi core yard PERSONNEL:

Drill Company: Heath and Sherwood Driller:

Logged by: G Williams Sampled by: no samples taken Date Logged: April 13, 2007

| From | To | Width | Lithological |
|------|------|-------|--|
| (m) | (m) | (m) | Description |
| 0 | 9 | 9 | overburden |
| 9 | 22 | 13 | felsic volcanics; to 1% sulphides; qtz-carb veins at 17 to 22m; interbedded intermediate volcanics at depth |
| 22 | 29 | 7 | intermediate volcanics; well foliated at 30° to core axis (TCA); some greenish mica locally |
| 29 | 53.5 | 14.5 | gabbro; fine grained upper and lower contacts, and coarser in the middle; massive; non-magnetic; |
| | | | minor flecks of chalco at 40 to 42m |
| 53.5 | 67 | 13.5 | intermediate volcanics; 2 to 5cm qtz veins at 64 to 67m; mnor sulphides |
| 67 | 74 | 7 | felsic volcanics; to 1% disseminated py througout; disseminated magnetite crystals throughout also, |
| 1 | | { } | making the unit moderately magnetic; 68 to 70m - to 1% disseminated py; sharp lower contact |
| 74 | 115 | 41 | intermediate volcanics; minor interbedded units of more felsic and mafic material throughout |
| 115 | 129 | 14 | gabbro; coarsely crystalline; 118 to 119m - 1% to 2% py; 120m - 40cm qtz vein; 123 to 127m - fine |
| | | | disseminated py throughout |
| 129 | 132 | 3 | felsic volcanics; weakly magnetic; interbedded with intermediate volcanics at lower contact |
| 132 | 167 | 35 | intermediate volcanics; foliziton at 30° TCA; minor greenish mica |
| 167 | 179 | 12 | felsic volcanics with minor interbedded intermediate volcanics |
| 179 | 300 | 121 | intermediate volcanics; 252 to 256m - euhedral feldspar laths give a porpyritic appearance; 232 to 235m - 1% to |
| | ļ | | 3% disseminated py (cpy); 236 to 238m - 1% to 3% dissemintate py (cpy); 289 to 291m - magnetic felsic volcanics; |
| | | | foliation at 150 TCA at bottom of hole |
| EOH | 300m | | |
| | | | NOTE: no samples collected for analysis |
| | | | |

HOLE NO: Mattabi 07-02 PROJECT: Mattabi Sturgeon Lake COMPANY: 1522923 Ontario Inc.

HOLE LOCATION: Northing: 5524025N Easting: 654000E Bearing: 360

HOLE DATA: Dip: -60 Bearing: 360 Elevation: Final Depth: 300m Claim No.: Lease CLM 250

Start Date: April 10, 2007 End Date: April 14, 2007

Core Size: NQ Downhole Surveys: Core Storage: Inmet Mattabi core yard PERSONNEL:

Drill Company: Heath and Sherwood Driller:

Logged by: G Williams Sampled by: no samples taken Date Logged: April 14, 2007

| From | To | Width | Lithological |
|------|------|-------|--|
| (m) | (m) | (m) | Description |
| 0 | 10 | 10 | overburden |
| 10 | 20 | 10 | mafic volcanics; fine to medium grained; biotite rich; dark grey; foliation at 45° TCA; 10 to 13m - to 0.5% disseminated cpy |
| 20 | 28.5 | 8.5 | felsic volcanics; siliccous; non-magnetic |
| 28.5 | 91 | 62.5 | intermixed intermediate to matic volcanics; disseminated py at 32 to 33m and 34 to 38m; 64m - 30cm qtz vein; |
| | | | becomes coarser grained with depth; 82m felsic lapilli to 5cm long |
| 91 | 104 | 13 | felsic volcanics; fine grained; weakly magnetic |
| 104 | 129 | 25 | intermediate to mafic volcanics; coarse grained |
| 129 | 131 | 2 | felsic volcanics; moderately magnetic |
| 131 | 146 | 15 | intermediate to mafic volcanics |
| 146 | 149 | 3 | felsic volcanics; moderately magnetic |
| 149 | 157 | 8 | intermediate to mafic volcanics |
| 157 | 160 | 3 | felsic volcanics; moderately magnetic; minor qtz eyes visible throughout |
| 160 | 300 | 140 | intermediate to mafic volcanics; foliation at 60° TCA at 175m; variations in grain size with depth but |
| | | | largety consistent throughout |
| EOH | 300m | | NOTE: no samples collected for analysis |

HÖLE NO: Mattabi 07-03 PROJECT: Mattabi Sturgeon Lake COMPANY: 1522923 Ontario Inc.

HOLE LOCATION: Northing: 5524100N Easting: 654375E Bearing: 315

HOLE DATA: Dip: -80 Bearing: 315 Elevation: Final Depth: 300m Claim No.: Lease CLM 250

Start Date: April 15, 2007 End Date: April 19, 2007

Core Size: NQ Downhole Surveys: Core Storage: Inmet Mattabi core yard PERSONNEL:

Drill Company: Heath and Sherwood Driller:

Logged by: S Johnson Sampled by: no samples taken Date Logged: April 20, 2007

| From | To | Width | Lithological |
|--------------|-------|-------|--|
| (m) | (m) | (m) | Description |
| 0 | 7 | 7 | overburden |
| 7 | 24 | 17 | 7 to 24 - mafic to intermediate volcanics; fine to medium grained; biotite rich (moderately chloritized); dark grey; foliation |
| | | | at 60; interbeds of more mafic volcanics throughout; trace to 1% disseminated pyrite; minor carbonate alteration |
| 24 | 32 | 8 | similar to unit above but with less mafic material; not magnetic; 35 to $38m$ – numerous qtz veins (5 to 10cm wide) at 45^0 TCA no sulphides, minor carbonate alteration; more interbedded mafics at depth |
| 32 | 52.5 | 20.5 | mafic to intermediate volcanics, similar to unit above; qtz veining common from 51m to 54m with minor streaks of cpy locally |
| 52.5 | 67.5 | 15 | felsic volcanics; highly siliceous with minor carbonate alteration; trace pyrite disseminated throughout; foliation at 60° TCA; blue qtz eyes to 2 mm in size throughout unit; 56 to 57 – disseminated cpy and possible py (looks like py but is magnetic); magnetite intermixed with sulphides making interval strongly magnetic; 57 to 64 – intermediate mafic volcanics; fine to mediu grained throughout; 64 to 67 – qtz stringers and qtz flooding; abundant blue and pink qtz eyes; trace sulphides |
| 6 7.5 | 135 | 67.5 | mafic to intermediate volcanics; similar to units above; 113 to 115m - chloritic mafic volcanics; below 115m - intermixed fine grained mafic volcanics and felsic volcanics; 122 to 125.5 - disrupted banding / foliation, carbonate alteration |
| 135 | 155.5 | 20.5 | intermediate to felsic volcanics similar to above units; 141.5m - 5mm bled of cpy in qtz vein; more felsic at depth; 10cm qtz vein at lower contact |
| 155.5 | 189 | 33.5 | matic volcanics; felsic volcanics from 166 to 171m; |
| 189 | 216 | 27 | gabbro; fine to medium grained; typical gabbroic composition and textures; trace pyrite disseminated throughout; weakly magnetic; moderate to strong carbonate alteration |
| 216 | 226 | 10 | felsic volcanics; more strongly magnetic than felsic units above; 219.5 to 220.5 – to 50% qtz veins with 1% to 5% pyrite; minor mafic units interbedded |
| 226 | 238 | 12 | mafic to intermediate volcanics; variable composition throughout; foliation at 60° TCA; minor felsic interbeds |
| 238 | 244 | 6 | felsic volcanics |
| 244 | 273.5 | 29.5 | matic volcanics; variable concentrations of phenocrysts throughout |
| 273.5 | 297 | 23.5 | felsic volcanics; medium carbonate alteration; no qtz eyes |
| 297 | 300 | 3 | mafic volcanics |
| EOH | 300m | | NOTE: no samples collected for analysis |

APPENDIX D Drill Hole Location Plan and Cross Sections

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To Accompany: May 2007Assessment Report

O/B - overburden MV - mafic volcanics IV - intermediate volcanics FV - felsic volcanics G - gabbro

| 1522923 Ontario Inc. | | | |
|----------------------|-------------------------------|--|--|
| Drill Sec Looki | tion MATTOT-cylo2 ng WEST. | | |
| May 2007 | Claim: CLM 250 | | |



To Accompany: May 2007Assessment Report

O/B - overburden MV - mafic volcanics IV - intermediate volcanics FV - felsic volcanics G - gabbro

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1522923 Ontario Inc.

Drill Section パッテア・フーマ3

Looking WEST.

May 2007
Claim: CLM 250
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