

2014 ASSESMENT REPORT - FIELD WORK -Ruza Levack Property

Levack Township and Area Ontario, Canada

November 2014

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1 Introduction

The 2014 field mapping was conducted on claims 3009424 and 3009423 of the Wallbridge's Ruza Property (**Error! Reference source not found.**). They are centered at approximately 466620E/5166260N (UTM-NAD27 Zone 17) and lay within Levack Township of the Sudbury Mining District in North-central Ontario.

The work was performed in order to better understand the geology claims 3009424 and 3009432 (Fifure 2). Recent logging in the area resulted in many new roads being built allowing vehicular access to these claims.

2 Accessibility

The Ruza Levack Property is accessed by traveling 14 kilometres northwest of Dowling, Ontario on Provincial Highway 144. The property is accessed by turning Northeast off Highway 144 onto an unnamed logging road controlled by the logging company. There is an unlocked gate that must be opened in order to enter the logging road. There is approximately 2 Km of road that runs through the center of claims 3009424 and 3009423.



Figure 1: Ruza Levack location relative to the Sudbury Basin.



Figure 2: Location of Claims



Claim number	township	area (ha)	holder	recorded date	work due	(\$) work required	(\$) work
			-	<i>a</i>	date	-	reserve
3009421	Levack	160	WMCL	03-May-	03-	4,000	0
				2004	May-		
					2015		
3009422	Levack	224	WMCL	03-May-	03-	5,600	0
				2004	May-		
					2015		
3009424	Levack	176	WMCL	03-May-	03-	4,400	0
				2004	May-		
					2015		

Table 1: Ruza Levack Claim Status as of November 24, 2014

3 Work History

1954, 55 - Inco Limited drilled a series of diamond drill holes, 17 in total, west of the Onaping River and immediately east of the eastern claim boundary of the property. Narrow intercepts of Sudbury breccia are reported in several holes although no significant mineralization is noted. Two holes drilled east of the northeast corner of the property intersected over 70 feet (21 metres) of diorite/diabase and minor pyroxenite at depths between 180 and 525 feet (55 and 160 metres) below surface. These intercepts may represent a NNW-trending dyke.

1987 - Falconbridge Limited conducted a regional soil-sampling program. Soil samples were collected at irregular intervals over the northern two-thirds of the current property. Nickel values in soils ranged between 5 and 45 ppm, copper between 1 and 50 ppm and gold between values below detection and 35 ppb. All platinum and palladium values were below the detection limits of 15 and 2 ppb respectively. The soil values indicate an area of weakly anomalous nickel and copper values in the northeast corner of the current property. A brief visit identified several cm to 1.5 metre wide Sudbury breccia occurrences in this portion of the property.



2002 - A prospector collected a sample from a sulphide-mineralized Sudbury breccia occurrence reported to be in the northeast corner of the current property. Analysis of the sample returned 1.91% nickel, 0.36% copper, 210 ppb platinum and 210 ppb palladium. The location of the mineralized sample was not well recorded and a brief attempt to relocate the sample site failed. However the anomalous soil sample results over this portion of the property lend some support to the presence of Ni-Cu mineralization in this area.

2002- Platinum Group Metals conducted a magnetic survey of the central and southern portion of the Levack Property. This survey indicated the presence of two northwest-trending magnetic highs.

2003- An AeroTEM survey was flown over the claims. The survey delineated a number of weak conductors.

2008- Wallbridge Mining Geologist, Kay Hoffman and junior Geologist Kathryn Eagles and assistants Martin Clark and Ellen Phillips spent 16 days mapping and investigating a magnetic low on claims 3009421 and 3009422 and airborne EM anomalies on claims 3009423 and 3017412. The mapping was completed at 1:2000 scale, using satellite imagery as a base map and GPS-receivers (UTM Zone 17N, NAD 27). Generally, northsouth traverses were executed but this would vary depending on topographic features. Structural data was collected using a Silva Compass with inclinometer. A total of 88 samples were collected on the claims; 76 of which were grab samples collected from outcrop and 12 were float samples. All samples were also analyzed for 47 base metals and trace elements using a four acid (HNO3-HCIO4-HF and HCI) near total digestion and a combination of ICP-MS and ICP-AES. Mapping and investigating nine air borne EM anomalies on claims 3009423 and 3017412 did not locate the source any of the conductive responses. However two conductive responses are coincident with a shear zone found on the southern portion of claim 3017412. The apparent offset of the roughly 100m wide shear zone is dextral and rotates gneissosity up to 20 degree.

In the fall of 2008 Dave Smith and Warren Roque over saw trenching over a moderate airborne anomaly delineated by the 2003 AeroTEM survey. A 15m by 15m trench was



excavated. No samples were collected from the trench because only felsic gneiss was exposed.

4 Regional Geology

The property lies within the Superior Province and is underlain by the Levack Gneiss Complex (Card et al., 1984), which straddles the western side of the Sudbury Intrusive Complex (SIC -see below). The Levack Gneiss Complex may represent a domal uplift, similar to the Kapuskasking Zone to the west, of deeper-seated Middle Archean volcanic and plutonic lithologies which have been overprinted by the SIC. The rocks of the Levack Gneiss Complex are cut by dykes and Sudbury Breccia, Algoman granite (2680 Ma), Matachewan diabase (2630 Ma), and later dyke suites and by the SIC and related offset dykes.

The Sudbury Igneous Complex (SIC) is located 2.2 kilometers to the Southeast of the claims. The SIC is a 70 x 30 km northeast-elongated mafic intrusive complex dated at about 1850 Ma (Card et al., 1984). The SIC has a base of norite and grades up-section through gabbroic lithologies to a granophyre at it's top. The SIC is believed to be at least 2000 meters thick and formed as a result of a meteoric impact in the Sudbury area (Dietz, 1964) or cryptoexplosive magmatic activity of undetermined origin (Muir, 1984).

Numerous Cu-Ni-PGE deposits are associated with the footwall rocks of the SIC, with so-called "offset" dykes which radiate out from the SIC and with breccia zones located along the basal contact and within the footwall rocks below the SIC. Along the North Range of the SIC, in the Project area, the base of the SIC is hosted in a southeast-dipping mafic norite. Sixteen active and past producing mines are located within and in breccia zones immediately below the base of the SIC, within what is referred to as the North Range Embayment (Coates and Snajdr, 1984).



The North Range Embayment stretches for roughly 12 km along the northwestern margin of the SIC from the town of Onaping to the northeast. Semi-massive to massive sulphide Ni-Cu-PGE ore bodies can occur up to several hundred meters below the base of the SIC - for instance the Deep Copper Zone at Strathcona occurs some 600 meters into the footwall. These deep zones take the form of fracture-fillings and massive sulphide veins and are typically rich in Cu and PGE's and relatively depleted in nickel.

Ni-Cu-PGE mineralization in the Sudbury area is hosted in a number of offset dykes that radiate out from the SIC for many kilometer's. These dykes are typically narrow (<300 meters wide) and quartz diorite is the dominant lithology. The Offset dykes appear to have developed along deep-seated fracture sets related to the formation of the SIC. Ni-Cu-PGE mineralized zones within the offset dykes typically occur as pods and lenses of disseminated to semi-massive sulphide. The Western Sudbury Basin Properties are bracketed by the Trill and Ministic Offsets to the south, the Hess Offset to the northwest and the Pele and Foy Offsets to the north.

5 **Property Geology**

Dressler (1981) mapped Levack Township at a scale of 1:15,840. Dressler's map shows the majority of the Ruza Levack Property to be underlain by migmatitic felsic intrusive lithologies, which may or may not form part of the Levack Gneiss Complex. Dressler's mapping shows the Levack Gneiss Complex cutting NE across the Levack Property with younger granitic rocks in the NW and SE portions of the property. In the field, there appears to be little difference in the two lithologies. All rocks on the property are gneissic except for the later dykes and breccia occurrences discussed below.

Dressler's mapping also indicates the presence of three WNW-trending diabase dykes cutting the south and central portion of the property. He has mapped these dykes as being of Early Precambrian age (pre-SIC formation). The mapped location and trend of these dykes corresponds well with the two linear magnetic anomalies identified by geophysical survey completed by PTM in early 2002. Dressier also maps narrow dykes of similar age



near the southern contact of the claim group and immediately east of the property in the vicinity of the Onaping River.

The Pike Lake Trough occurs to the east of the property and is part of the Pumphouse Creek Deformation Zone (PCDZ) which transects the property. The Pumphouse Creek deformation zones have been described as being similar to the South Range deformation zone (Card, 1994), possibly implying a genetic association Card (2005) suggested "the PCDZ probably belongs to a system of thrust faults that resulted in northward-directed regional tectonic transport and NW-SE shortening of the Sudbury Structure."

5.1 Rock Descriptions

The mafic and intermediate gneisses are spatially associated and there is a compositional gradation between the two end members. Hence, the rocks are thought to represent compositional variations in a single rock unit. Partial melting is low in comparison to the other gneisses, with minor volumes of plagioclase-augite-quartz leucosome. The leucosome may occur as thin parallel bands that define gneissic layering, but also occurs as irregular, unaligned, elongate patches. Both leucosome and melanosome are equigranular and mineral alignment is very weak or absent.

Tonalite Gneiss occurs in the western North Range. The rock is strongly magnetitic. The biotite and quartz content of the gneiss might indicate higher K_2O and SiO_2 content. The leucosome consists of medium- to coarse-grained, round to chamfered plagioclase set in amorphous quartz with minor biotite. Biotite in the melanosome wraps around other mineral grains but defines a moderate foliation, which is locally discordant with the gneissic layering. Coarse orthopyroxene occurs preferentially in the leucosome, commonly intergrown with scattered 0.5 mm grains of pyrite. Garnet is rare.

The Felsic gneiss has minor biotite and is dominantly composed of quartz and feldspar. The outcrops of the rock have a distinctive white, almost unweathered surface. Patches of a green mineral resembling diopside or perhaps an actinolitic amphibole occur in some outcrops. The rocks may represent metamorphosed equivalents of quartz-rich Huronian Group sediments.

Outcrops of the Proterozoic Granite are smooth and the rock varies from white to pink. The K-feldspar and plagioclase contents appear to be roughly equal. The quartz content varies but is approximately 25%, and biotite and hornblende are minor or absent.

The low mafic mineral content of the rock prevents development of a measurable foliation, but the rock may display a weak, gneiss-like layering.

Sudbury Breccia consists of rounded and milled, millimeter to tens of meters sized fragments of country rock hosted within a fine-grained, variably recrystallized matrix. Small veinlets of Sudbury Breccia occur throughout nearly every earlier lithology in the footwall environment. Generally, it is only distinguished as a distinct, lithological unit when the Sudbury Breccia matrix accounts for greater than 15 volume percent of the host rock. Concentrations of Sudbury Breccia often occur along pre-existing structures and weaknesses in the Archean and Paleoproterozoic footwall rocks, such as along the contact between rock types of contrasting competencies. It is commonly found along the margins of diabase dykes. Trace pyrite is common within the Sudbury Breccia matrix, particularly when it occurs in the surrounding rocks and dominant fragment types. Background precious metal concentrations in Sudbury Breccia are typically below the limits of detection for standard assay or ICP analyses (i.e. <5 ppb).

5.2 Structure

Gneissosity is the most common structural observation. It is consistent within the property and averages around 231/65 (excluding 5 values dipping towards E) with a STDEV=020/16 and n=28 measurements.

6 Exploration Program

From July 22/2014 - August 11/2014, seven days of field mapping was conducted on claims 3009424 and 3009423 of the Ruza Property. These claims previously had very



little work completed on them because there was limited access prior to the logging roads being created. Bedrock mapping was completed to gain a better understanding of the geology of the property. The mapping was completed at 1:2000 scale, using satellite imagery as a base map and Garmin etrex GPS units (UTM Zone 17T, NAD 27). Generally, north-south traverses were executed but this would vary depending on topographic features. Structural data was collected using a Suunto Compass. A total of 4 samples were collected on the claims. Only one sample (P446463) was analyzed for 48 element ICP-MS and precious metals.

Table 2: Sample descriptions (NW: Nicholas Wray, PYXT: Pyroxenite)

Sample ID	E_NAD27	N_NAD27	Sample Type	Geologist	Date Sampled	Rock Type	Field Description
P446463	465995.34	5166130.27	grab	NW	6/8/2014	PYXT	Coarse pyroxenite with no visible mineralization

6.1 Results

The crew mapped and prospected the southern third of the Ruza property. The area was dominated by granite, Levack gneiss and various generations of the diabase. Minor glassy Sudbury breccia was encountered.

7 Recommendations

The results indicate the area mapped does not warrant further exploration.



8 Qualifications

I, Nicholas Wray, do hereby certify that:

- 1. I reside at 859 Adelaide st, Sudbury, Ontario, Canada, P3E 4B7.
- 2. I am a graduate from Laurentian University in 2014 with my Bachelor of Science (Hons.) in Geology and have been practicing my profession ever since.
- 3. I am a Geologist in Training with Wallbridge Mining Limited.
- 4. I have personally performed the work carried out in 2014.
- 5. As an employee, and an insider, of Wallbridge Mining Company, I do not qualify as an independent Qualified Person.

Nich Wang

Nicholas Wray. Wallbridge Mining Company Ltd. 129 Fielding Rd. Lively, Ont. P3Y 1L7



9 References

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