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Claim L4217525, 26, 27

Eby & OttoTownships NTS - 42 A/1 80°08'57''W 48°05'46''N

> July 12, 2017 E Marion

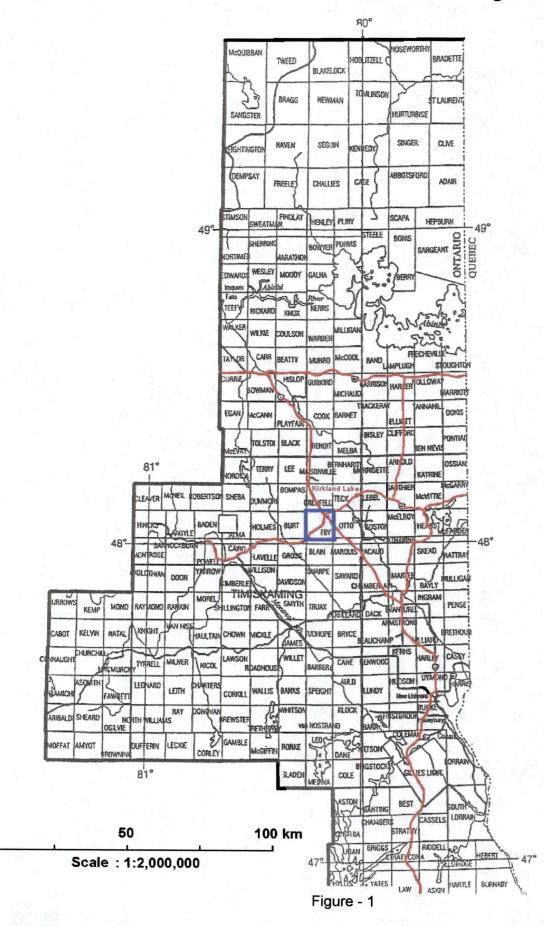
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Kirkland Lake Resident Geologists District



1

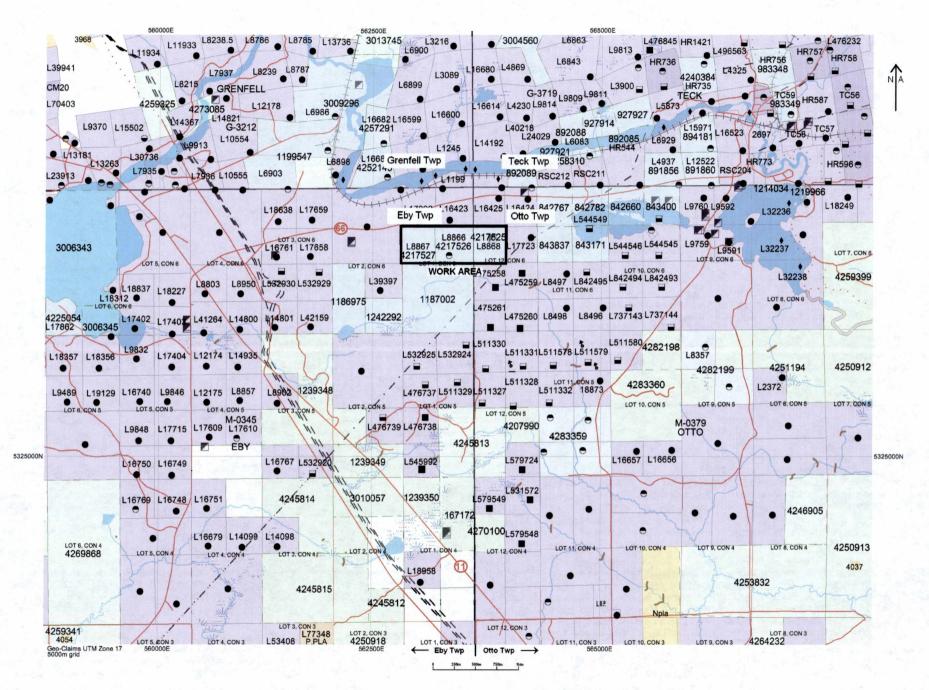


Figure - 2

PROPERTY LOCATION

The claim is located in the Larder Lake mining division approximately 9 kilometers south-west of the town of Kirkland Lake. The group sits straddling the north-south common Eby Twp-Otto Twp boundary, 400 meters south of the common corner of Grenfell, Teck, Eby and Otto townships. Highway 66 passes across the north west corner of the group.claims. This is in the Kirkland Lake Resident Geologists District and can be found on NTS-42 A/1 with the geographic center being at approximately °08'57"W and 48°05'46"N.

ACCESS

Heading west south west on Hwy.#66 from the railway underpass in Swastika for 4.4 kilometers will bring you to the area where Hwy 66 goes across the north west corner of L4217527. The Eby-Otto Twp line is cut out and povides walking access to the claims at that area. The newly cut grid gives good walking access to all areas of the two eastern claims.

<u>CLAIMS</u>

This project consists of 3 staked mining claim units in Temiskaming District, in the subdivided Townships of Eby and Otto, recorded on Plan M-0345 of Eby Township And Plan M-379 of Otto Township .The claims and descriptions are as follows:

CL#4217525Lot 12, Con.6 SW¼ of N½	Otto Twp
CL#4217526Lot 1 Con.6 SE1/4 of N1/2	Eby Twp
CL#4217527Lot 1 Con.6 SW¼ of N½	Eby Twp

GENERAL GEOLOGY

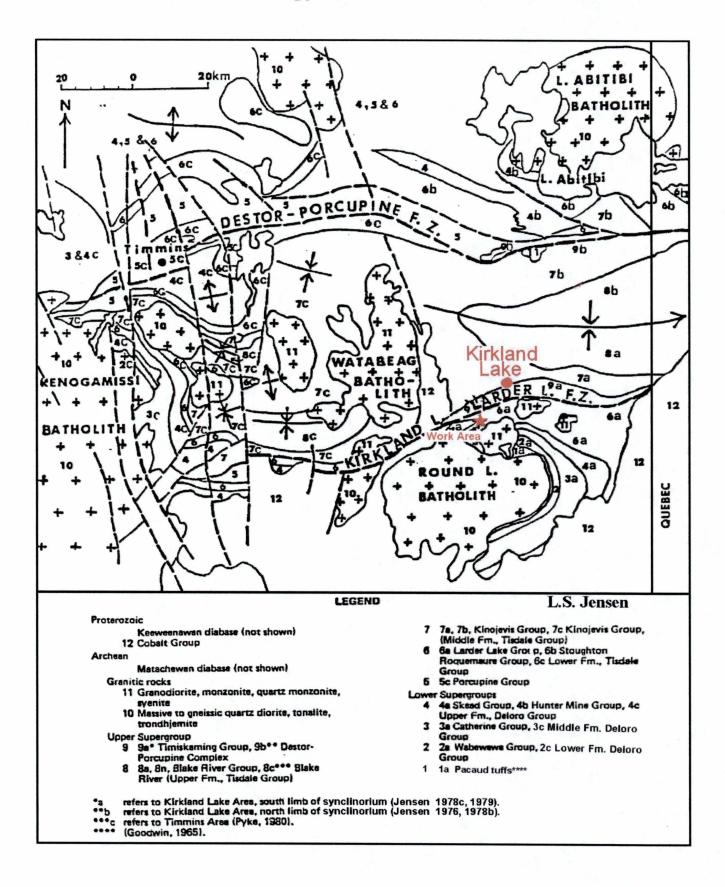
This claim lays within the Abitibi Greenstone Belt, a region of predominantly volcanic rocks and related interflow sediments at the south central region of the Superior Province. Several eras of intrusion and deformation have affected most of the lithologies present. The Abitibi Belt is host to many large gold and base metal deposits on both sides of the Ontario-Quebec border along these structural trends and has an exploration history going back well into the 1800's. A band of altered mainly fluvial sediments of Temiskaming age, folded and upturned to a near vertical position, coincide with the main structural trend of the LCDZ less than 400 meters to the north of the claim group. The round Lake batholith, a large Archaen aged granitic intrusive occurs about 6 kilometers to the south-west. The south east of the claim group is the "Otto Stock", an almost circular, somewhat zoned mafic(sanukitoid?) intrusive of some 10 kilometer diameter. Thin bands of clastic sediments and iron formation belonging to the older Skead group trend east-west through the map area and wrap around the Otto Stock. To the south-west of the claim group, a roughly 10 kilometer wide north-south finger of Huronian aged sediments filling a paleo depression of probable structural origin overlie the volcanics. Field work by the OGS has shown LCDZ strain and faulting affecting these much younger overlying sediments.

Major structural deformation zones, (locally the Larder-Cadillac Deformation Zone or LCDZ), parallel each other west to east across the belt and have acted as a control on gold deposition. In the Larder Lake sector, gold mineralization is associated with carbonatized ultramafic rocks along the LCDZ, whereas around Kirkland Lake gold mineralization occurs in sheared syenitic intrusions, trachytic flows and sedimentary rocks along the Kirkland Lake Fault. The LCDZ can be traced across the camp where it generally marks the boundary between the Temiskaming sediments and Larder Lake Group. This same structure continues below the cover of Cobalt Group sedimentary rocks along the Kirkland Lake Fault. Carbonatized komatiitic ultramafic and mafic levels would be expected along this whole area immediately south of the Larder Lake Fault. Also, there are gold enriched subsidiary faults that parallel the major structures. These claims have a completely unexplored, previously defined carbonatized splay of the LCDZ passing across its entire east to west length.

The Temiskaming Rift is a regional graben feature strinking at about 330° across this part of Ontario. This young rift system has a definite control association with diamond bearing intrusives

3

General Geology of the Kirkland Lake Area



such as kimberlites. Several NNW-SSE trending fault features passing through the area have been identified as probable Temiskaming Rift associated features.

The Kirkland Lake Break is located about 1500 meters north of this claim., laying on the east side of the Amikougami Fault, a late off-setting cross fault. The Macassa Mine is the last operating producer of the historic Kirkland Lake camp which has produced in excess of 28 million ounces of gold, has its #3 shaft at this area. Although there have been several postulated correlations of the economic faults to fault or vein features to the west of this north south fault, no economically encouraging "ore blocks" have been defined to the west of the Amikougami Fault. Available geologic reports and publications appear to have differing information and estimation of the amout of and direction of off-set by the Amikougami Fault. The east-north east trending Kirkland Lake Break is mapped as merging with the Larder Cadillac break about 1400 meters directly north of L1239348.

CLAIM/LOCAL GEOLOGY

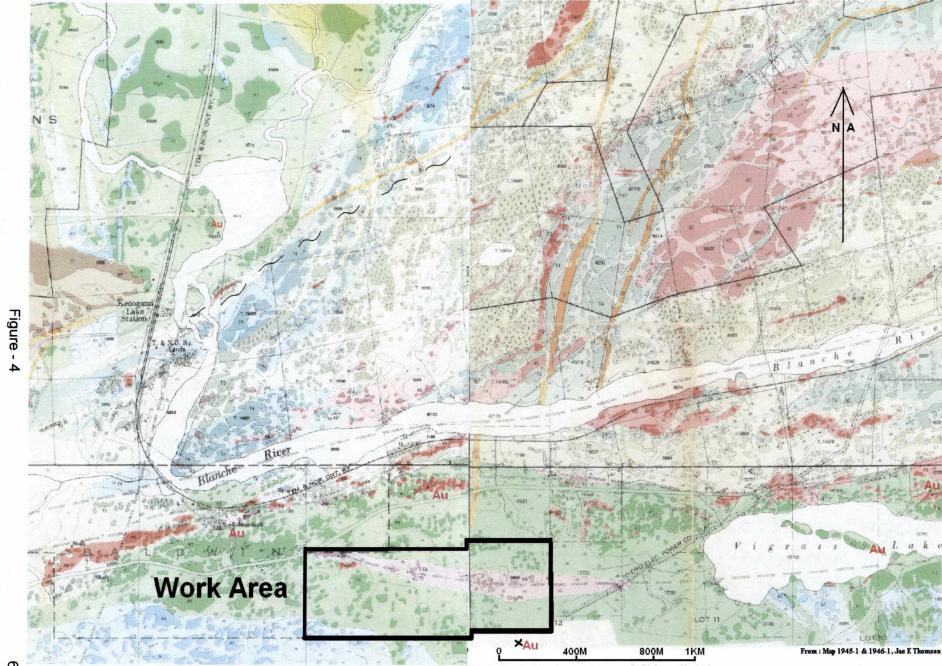
O.D.M. Map M-2239 of Eby Twp. shows the three claim units to be underlain by volcanic rocks of basalt composition. And east-west zone of heavy carbonate alteration following sheared volcanics if mapped across the length of the claims and lines up with a similar fault described in the report on the "Baldwin" property. The following report of the Baldwin Mine which is contiguous directly to the west of my claims, is reproduced from the report of GL Holbroke in 1946 and gives a good summation of the local geology and style of mineralization likely to be found.

REGIONAL GEOLOGY

Starting many miles east of the interprovincial boundary, in Quebec. a belt of TemiskamIng age sedimentary rocks with interbedded lavas, from one to four miles wide, extends at least 60 miles westward into Ontario, where it passes through the Larder Lake, Kirkland Lake, Swastika, Matachewan and Midlothian areas. This bclt probably represents one limb of a major geosyncline enfolded with the unconformably underlying complex of older Keewatin basic lavas and intrusives. It is intruded in many places throughout it's length by numerous dykes and irregular masses of medium to acid rocks of Algoman age and is occasionally blanketed by younger, flat lying, Cobalt age sediments.

The economic signiligance of this geologic feature is easily appreciated when it is realized that a large percentage of the gold production of Canada comes from structures in, or very near, this belt of Temiskaming rocks.

In recent years, detailed geologic mapping of parts of this Important area has indicated what is probably the main structural control of gold deposition. It has been shown that a major fault and shear zone closely follows the south contact of the Timiskaming rocks for over forty miles from the Matachewan area to the Quebec boundary, and the same zone has been traced for a further distance eastward of over 100 miles throughout the Cadillac, Malartic and Bourlamague aeas of Quebee. In Ontario this zone is known as the "Larder Lake Break" and is thought to be the main structural control of gold deposition throughout the area. It consists of a wide zone of shearing and alteration that follows a sinuous course across the country with a general East-West trend and steep dips. For much of its length it is marked by a wide zone of carbonate alteration accompanied by silicification and sulphide mineralization. At certain places, where local conditions are favourable, important gold deposits, such as those of the Kerr Addison Mine, have bee formed. Numerous shear and fault zones are found throughout the length of the Temiskaming belt and it is thought many of these are subsidiary structures developed from stresses set up by movement along the Larder Lake Break. Where these secondary breaks encounter sufficiently favourable conditions, gold deposits have been formed, such as the "main break" at Kirkland Lake, the Upper Canada veins, etc. There are thus two main types of ore occurrence throughout the area, one occuring in the Larder Lake Break itself, and the othe in subsidiary structures or "breaks". Those in the



K1 Basalt A1 Gabbro/Diorite T2 Conglomerate T4 Tuff A5 Augite Syenite A9 Porphyritic Syenite C1 Huronian Conglomerate D Diabase Cb Carbonate

σ

Larder Lak Break are usually large but relatively low grade and are very sparingly distributed along the zone. Favourable conditions seem to be caused by local flexures in the shear zone and by drag folded areas in the nearby sediments or greenstones. Those in the subsidiary breaks are usually narrow but high grade and are frequenty found where the breaks cross relatively brittle rocks such as syenite or porphyry. Orebodies of both types are frequently displaced by later strike and cross faults.

LOCAL GEOLOGY

(A) Rocks

The Baldwin property is located astride the south Temiskaming contact. To the south of the contact the rocks consist predominantly of intermediate to basic pillowed Keewatin lava flows with occasional narrow tuffaceous horizons along flow contacts. To the north of the contact they consist of Temiskaming conglomerates, grey wackes and tuffaceous rocks. Both series of rocks have been Intruded by lenticular bodies of syenite and syenite porphyry that are localized in and near the main contact area.

(B) Structure

The detailed geologic structure underlying the property has not as yet been worked out. The lavas to the south exhibit definite evidence of broad folding and some faulting. The sediments to the north show close drag folding, roughly parallel to the contact, plus minor cross faulting.

The main contact itself trends east-west across the NI/2 of Lot 2 Con. VI and NW¼ of Lot I, Con. VI, a distance of 4,000' and on the latter location shows a broad flexure or warping. In this area the main contact is strongly sheared and altered over widths of from 30' to 200' and almost certainly marks the position of the important Larder Lake Break. As elsewhere along its length it is probable that here too the Larder Lake Break represents a fault zone of major displacement. The Blanche River flows west-east across the length of the property parallel to, and about 800' north of, the main contact. The rocks on both sides of the river are Timiskaming sediments but while those to the south strike east-west, those to the north strike north-east. This disconformity must mark a fault of major displacement and, underlying the river bed, a supposition that is substantiated by the 2000' right displacement of two north-south trending diabase dykes as they cross the river near the east property boundary.

(C) Alteration, etc.

The zone of strong alteration that marks the Larder Lake Break follows the sediment greenstone contact. In the mine area it lus been developed for an approximate length of 500' on one or other of three levels underground. Here it has an average width of about 50' and consists of an intense carbonization plus a moderate silicification and pyrite mineralization. The silicilication is best developed in and near syenite and porphyry bodies lying in the zone. Following the alteration the zone was fractured and the fractures filled by quartz veinlets and stringers running in all directions. This introduction of secondary guartz is frequently accompanied by coarse visible gold and apparently determines the location and shape of the orebodies. Approximately 1200' South of the Larder Lake Break a parallel zone of shearing and strong carbonate alteration cuts the greenstones across the south part of the property. Some secondary quartz is visible in this zone but no attempt has been made to investigate it and nothing is known concerning the possibilities. The fault zone underlying the Blanche River has been investigated by one short diamond drill hole put in for assessment purposes. It shows a strong zone of shearing, carbonization. silicification and mineralization. Some secondary quartz veinlets were noted and several low gold values were obtained.

ECONOMIC GEOLOGY

The main feature of possible economic importance on the property is the Larder

Lake Break described above. As cited, the break crosses the property for 4,000' with an east-west strike and a steep south dip. It marks the location of a major zone of crustal weakness along which a series of fault movements has taken place over a long period of geologic time. Being a zone of weakness it has formed a locus of acid igneous intrusions and of alteration and mineralization. Where developed on the property it shows as a 50' wide zone of intense carbonization and silicification cut by later quartz filled fractures. Several relatively small syenite and porphyry masses and dykes are found throughout the zone and these show a rake of about 45° to the east down the plane of the zone. As described below, a limited amount of diamond drilling and underground development has outlined several small but rich gold ore-bodies lying in the zone and apparently associated with the more easily fractured svenite rocks. As with the intrusive bodies these ore shoots show a 45° east rake and it is probable that both are following some folded structure in the zone. There is a distinct flexure in the zone about 1,000' east of the shaft and it is likely that this has controlled the fracturing which allowed the introduction of secondary quartz and accompanying gold values. The underground work has also indicated the presence of a strike fault with a steep north dip cutting the zone a short distance above the 400' level. The displacement on this fault is such as to cause a fault gap of some 300' from above the 400' horizon to the 600' horizon. There is thus on this property a set of conditions that has resulted in the formation of important ore-bodies elsewhere in the Larder Lake Break, namely a flexure in the break and the intrusion into it of masses of acid igneous rock. Coupled with this the presence of rich, though small, oreshoots makes the exploration of this area of the break highly desirable and justifies extensive diamond drilling and underground development. In addition to the Larder Lake Break this zone of shearing and alteration under the Blanche River has shown low gold values and should be further investigated by diamond drilling both from surface and underground. The carbonate zone to the south in the greenstone should also be investigated. August 19, 1946. G. L. HOLBROOKE, M.E.

PREVIOUS WORK

Undoubtably the claim area was looked at by many prospectors in the early part of the 1900's as the Swastika Camp and then the Kirkland Lake Camp were being opened up and gold discoveries were drawing many to the area. No submitted assessment work on file for the three claims area exists. As a matter of fact, I could find no mention of these three claims at all.

Several occurances of gold are located in the immediate area around the claim. Most notably of the gold occurances in the area is the workings of the Gateford Mine about 5 kilometers east north east of this claim, on the west shore of Otto Lake. These holdings include the workings of the Swastika Mine which is the site of the first discovery west of Larder Lake in 1906, three years before the major discoveries 4½ north east in what was to become the historic Kirkland Lake gold camp. The property is underlain by volcanic rock cut by syenite dikes. Gold occurs in very rich thin flat laying quartz veins associated with galena and molybedenite. Initial production at the Swastika Mine began in 1911 and was sporadic unill about 1950. About 1 million dollars of gold from about 100,000 tons of ore were produced from the combined Gateford operations.

In 1911 gold was discovered on the "Baldwin" property which is contiguous on the west side of L4217527. (see section above on Claim Geology) The property was developed with a shaft to 400 feet, 920 feet of crosscutting, and 1120 feet of drifting. Fine grained native gold associated with molybedenite and chalcopyrite occurs in several east-west oriented quartz stringers within a carbonate schist. Shoots also occur in red syenite porphyry dykes and light pink fine grain syenite. The shaft and workings are in the Temiskaming aged sediments *DEVELOPMENT*

The property has been developed by a few surface trenches across the main contact zone, by some 12,000' of surface and underground diamond drilling, and by shaft sinking and lateral work. Most of this work is located on the NI/2 of Lot 2, Con.VI Eby

Twp and is practically confined to the Larder Lake Break. The shaft is located about the centre of the lot and is of two compartments and reaches a depth of 420'. Four levels have been established at 100' intervals and some 1,000' of drifting and cross-cutting has been done mostly on the 200' and 300' levels. On both of these levels crosscuts have been driven 350' north and 300' south of the shaft to give a 650' wide cross section of the area. The composite lateral work in all levels covers approximately 500' of the zone with the upper levels extended to the west and the lower to the east. Because of the east rake of the ore shoots the actual development of favourable ore structures only covers about a 300' length. Of the 12,000' of diamond drilling reported, over 7,000' is in 5 holes put down to investigate the contact zone at the 850' horizon, well below the fault gap mentioned above. The balance is in holes drilled from surface and underground to trace the extension of the 300' level ore shoots.

ORE SHOOTS

No assay plans or underground maps are available and the following information has been supplied by the former mine manager. Mr. S. L. Macdonald. both verbally and in a report of January 9, 1939. The statements made in Mr. Macdonald's report have been checked and supplemented by Mr. E. K. Fockler, consultin~ engineer, in a report of February 25, 1939. Mr. Fockler agreed with Mr. Macdonald's statements. It is on the 300' level that definite are lenses are established and it is here that most of the effective development has been carried out. Two are shoots have been outlined:

i) <u>311 Ore Shoot</u>

This ore body lies in highly altered and fractured tuffs near the south side of the contact zone. In this are shoot the distribution of values is very erratic with much visible gold in evidence. For a length of 65' drift assays show values of from \$0.70 to \$1,000.00 over widths of from 2' to 14'. A representative bulk sample of II tons of drift muck sent to the Temiskaming Testing Laboratories returned \$62.70. Three holes drilled from surface to investigate this erratic occurrence. some 40' above the level. returned respectively, \$199.00 across 9.5', low values across 13', and low values across 6' true widths. One hole drilled up from the 300' level returned two intersections, \$43.05 across 20 inches and \$15.05 across 24 inches. A raise was put up on this ore shoot for 45' where it was turned to connect with a heading on the 200' level. On completion of the raise the shoot was stoped, by shrinkage methods, for a height of 45'. The broken ore is still in the stope. Because of the erratic distribution of values, and the abundant presence of visible gold. bulk sampling was used in addition to 20 lb. channel samples in the stope. Following is a list of the results otained from the bulk samples:

70 Lb. representative overall					\$ 62.00
80	"	stope	sectio	ns-average	\$119.00
80	H	"			\$105.00
80	"	"	"	"	\$ 3.15
500 " composite					\$ 26.25
72 tons to Noranda Mines					\$ 11.90
Overall average					\$ 53.35

(all @ \$34.71/oz)

i)310 OreShoot

This ore body lies about 25' north and consists of a silicious replacement in fractured syenite. From channel sampling during drifting it shows an average of \$24.50 across 3.5' for a length of 35'. A branch vein has been traced a short distance northward and shows much visible gold and gives an average of \$22.00 across 1.0'. Additional drifting for 50' to the east showed no definite ore, although some visible gold was found and the present face is very strongly silicified and mineralized. On the 200' level two small shoots are indicated

ii) 210 Ore Shoot

This ore shoot is only cut in the crosscut and has not been developed. Sampling here shows \$51.00 across 18" of quartz replacement in porphyry. It is probably that this is the upward extension of the 310 orebody.

iii) 209 Ore Shoot

This lies about 30' south of 210 and is possibly the upward extension of the 311 occurrence. Channel sampling shows an are shoot 15' long, 4' wide averaging \$21.25. A 5 ton bulk sample of this material returned \$21.05. On the 100' level the faulting, that starts to show on the 200' level, has become so intense that no definite ore shoots can be outlined although several individual high assays have been returned. As noted above, the 400' level lies in a fault gap that extends from below the 300' level to about the 600' horizon. No values were obtained on this level. In order to investigate the zone below the fault gap the five deep drill holes mentioned above were drilled on 260' centres to a vertical depth of from 725' to 925'. These holes showed this zone at these horizons and indicated its presence here for over 1,000' of length. No values were obtained but this is not surprising when the erratic nature of the ore, and the east rake of the shoots is considered. Following is an estimate of indicated and broken ore now all the properly. In arriving at this estimate, Mr. Macdonald has cut all high assays, and, where possible, has relied on bulk samples. He has, moreover, cut his final grade figures 40% and also his tonnage figures 40% to allow for sorting. This, I believe, is too drastic and his tonnage figure is too low and probably his grade figure as well. In the tonnage figures he has assumed the extension of ore shoots 50' above and below levels.

Surface dump	600 to	ons	at	\$11.20	
311 stope-broken	720			\$27.00	
-indicated	2700	"	"	\$27.00	(all @ \$34.71/oz
)					
310 lense -indicated	720	"	,	' \$13.20	
209 lense-indicated	240	"		\$13.20	
This gives 5,040 tons with	a gross va	alue	e o	f \$112,404.00	or an average value of \$22.30
per ton.					-

August 19, 1946.

G. L. HOLBROOKE. M.E. (ref KL179)

In 1919 Eby Township was included in mapping by H. C. Cooke of the Geological Survey of Canada while mapping the Kenogami, Round, and Larder Lakes areas.

In 1935, W. S. Dyer of the Ontario Department of Mines mapped Eby Township as part of the Geology and ore deposits of the Matachewan-Kenogami area.

In 1967 Eby Township was mapped by H. L. Lovell of the Ontario Department of Mines. The report and colored geology map was released in 1972 as Geological Report 99.

In 2001, B. R. Berger, Geologist in the Precambrian Geological Section O.G.S., D. Guindon, District Geologist Kirkland Lake Region O. G. S. and G. Grabowski, District Geologis tKirkland Lake Region O. G. S. reported in Ontario Geoligical Survey Open File Report 6070 (Summary of Field Work and Other Activities 2001, Project Unit 10), that a Geological Reconnaissance along Highway 66, from Matachewan to Swastika had begun. The purpose of this multi-year project is to re-map andimprove the geological database.

In 1939 gold was discovered 2400 west south west of this claim group on the Rogick-Elliott-Clark claims located in the NW1/4 of the south 1/2 Lot 5 Con 6 and NE 1/4 of the south 1/2 Lot 5 Con 6 and NW 1/4 of the south 1/2 Lot 4 Con 6. D.K.Burke representing Sylvanite Gold Mines Limited reported extensive trenching showed gold values up to about ½ ounce per ton in gold bearing zones up to 20 feet wide, associated with sheared contacts of red syenitic dykes and carbonate rock. Several drill holes were put down on the zone and showed several economic intersections. In the late 60's early 70's much of the surface exposures have been removed by open cutting. (ref : KL 2409a, KL2605, KL1759)

In 1945 - G. L. Holbrooke for Sylvanite Gold Mines, Limited reported on the Rosa Brown Claim # L17990 located in the NW 1\4 of N 1/2 of Lot 1 Con 6 in Eby Township, which is contiguous directly north of L4217527. Interest in the claim was due to the adjacent west property,

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the Baldwin. The Baldwin is one of the few spots where definite gold values had been obtained from the Larder Lake break / zone. He reported that the greenstone contact of the area crosses the northern part of this claim. Several pyritic quartz veins and numerous pyritic quartz stringer zones were also found in the carbonate areas. The geology of the claim was mapped and a series of 8 shallow drill holes were put down for a total of 1897 feet. Sampling showed "Negligible gold values"? The main sediment-greenstone contact occurs on the north part of the claim crossing at slightly north of east with a steep south dip. The carbonatized greenstones on the south are intruded by syenite porphyry and mafic syenite. Frequently the carb areas are cut by quartz stockworks with variable amounts of pyrite, pyrrhotite and occasional galena. This claim now forms part of the "Baldwin" claimgroup (ref KL 2608)

In 1944, the "Lumsden" shaft was sunk about 2650 meters west south west of L4217527,on a red porophyry dike. A pinkish quartz vein at the botton of the shaft assayed about .17 ounces per to across five feet. No reported follow up drilling or work. This lines up well on strike as the west continuation of the Todora geology described previously. This would indicate a possible 3.6 kilometers strike length of this zone.

In around 1948, drilling about 1000 meters south of these claim, on the "Todora" claims encountered molybedenite and chalcopyrite with gold in quartz stringers and quartz porphyry in sheared volcanic rocks and iron formation. About 800 meters farther east of this, the 112 foot "Cheltonia" shaft was sunk south of the zone but crosscutting did not go far enough to encounter the shearing. Grab samples from pits in the shaft area reported up to 13% copper.

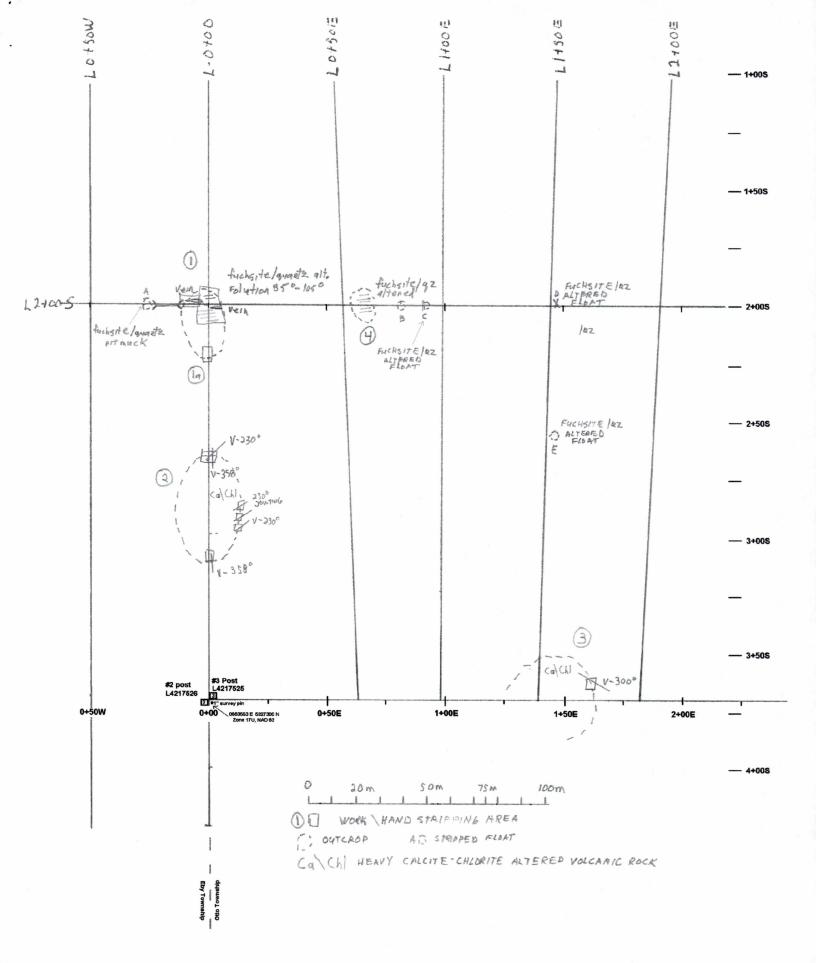
In 1963 W. S. Savage reported re: Kelly Kirkland Mines Limited Property located In Eby Township, concession VI, Lot 1, NE¼, of the N½, (claim L-16423) and Otto Township, concession VI, lot 12, NW¼ and NE¼ of the N½, and , as well as adjacent parts of Grenfell and Teck Townships, work was done in 1929 by Matabanick Kirkland Gold Mines Limited. An eastwest trending ridge of syenite porphyry is located south of the Larder Lake Break. Gold was found on this ridge of syenite porphyry likely where old trenches blasted across the ridge by former owners. The work consisted of 8,000 feet of surface trenching and the sinking of a 50-foot shaft. Matabanick Kirkland Gold Mines Limited was reorganized as Kelly-Kirkland Mines Limited. The former Kelly-Kirkland claims now belong to Diane C. Strome. In 1939, geological and geophysical investigations disclosed a well-mineralized quartz and porphyry vein and three mineralized dikes (The Northern Miner 1939, p.839).

Some shallow holes, followed by deeper holes, were drilled to test the mineralization. At that time, the property was held by Kelly-Kirkland Mines Limited, an amalgamation of Blanche River Kirkland Gold Mines Limited and Matabanick Kirkland Gold Mines Limited. In 1966, a short hole was drilled under Highway 66 by Kerr Addison Mines Limited. This claim is contiguous directly north of L4217526. (ref : KL 1355)

In 1992 W. Benham and K. Barron of Battle Mountain (Canada) Inc. reported re: Vigrass Lake Property located in Teck, Otto, Eby and Grenfell Townships. Geological mapping, stripping, channel sampling and drilling were completed. The property is underlain by Timiskaming Group trachytic volcanics and sediments and Larder Lake Group mafic to ultramafic volcanics with interbedded graphitic sediments. The larder Lake and Blanche River Fault Zones cross the property. Sub-parallel and splay faults, altered pyritic syenites, volcanics and sediments associated with these structures are present on the property. Reported gold values were generally low but several intersections were in the several gram range.

In 1992 - J. Roth of Stratagex Ltd. reported on behalf of Battle Mountain (Canada) Inc. re: magnetic and HLEM Surveys on the Vigrass Lake Property (see above) that the structural regime is dominated by a network of faults and / or shear zones trending east-west to eastnortheast, comparable to those recognized as important in controlling known gold mineralization. These programs were conducted under the joint partnership with Queenston Mining (formerly HSK Minerals) This work was done on the ground contiguous to the east and north of L4217525 (ref : KL 3907, KL 3582, KL1192, KL3130)

In 1996, directly to the south of, and forming the south boundary of the L4217525-27 J. E. Tilsley, Geologist / Engineer completed a Mag /Electromagnetic Survey on eleven claims in Eby Township in Lot 1,2 and 3 South 1/2 Con VI, (the Reed-Robinson Property). This work was sponsored by Nastek Exploration Ltd. Carbonate alteration with disseminated sulphides and



quartz veining were located. Some gold bearing boulders yielded 0.099, 0.495 and 1.337 grams of gold per tonne.

A geotechnical survey with magnetic profiles and magnetic contours, on eleven claims (Lot 1,2 and 3 S 1/2 Con VI) was done again in 1998. Several additional anomalies were detected. Sixteen areas of carbonate alteration, disseminated sulphides, and quartz veining have been defined by stripping, detailed mapping and sampling. Sampling done by Douglas Robinson approximately 75 meters south of L4217525 showed gold values up to 19 grams per ton gold on a 290 to 300 degree trending structure which should trend and continue onto L4217525.

In 2011, about 7 kilometers of grid were cut on the areas of 4217525 and 4217526. A walking magnetometer survey was performed and interpreted by Doug Robinson. Several geologic trends were mapped as crossing the grid area, with the general trend of the magnetics being east - west in orientation.

PRESENT WORK

During the early summer of 2017 much hand stripping and washing of outcrop was done on the claim area. Walking trails were cleaned out and the township line was re-cut to aid access and all the prior grid work in the active was cleaned up and the pickets relocated and erected. Permanent markers with 2" x 2" lumber were established at 50 meter intervals in the active area and along the western and southern claim line of L4217525.

<u>RESULTS / WORK LOG</u> Keyed to Work Area Map at page 12

On May 13 and 14, 2017 an old trail was improved with an axe and sandvik for access leading south from highway 66 to the claim area. From there, the north - south claim boundary between 4217525 and 4217526 was recut with axes and a sandvik. A chainsaw was used later on for cutting sections out of blowdowns to remove them. This line section coincides with the township boundary between Eby and Otto townships. This line section is also the north -south baseline 0+ 00 of the claim grid dividing the grid into east and west sections. Permanent markers with 2" x 2" commercial lumber were established at 50 meter intervals along this line with 1" x 2" commercial lumber placed at intervening 25 meter location. From there, the south boundary of 4217525 from the 3 post to the 2 post, which is coterminous with the claim boundary between the #4 post and the #1 post of lease L475258, was recut and permanent markers made of 2" x 2" commercial lumber were established at 50 meter intervals along this line.

Work Area 1, 1a, Location A

On May 27, 28, June 10, 18, 21, 23 and 25 manual hand stripping and outcrop cleaning was performed with sandvik, axe, shovels, swede pick, pry bar, and brushes. The main body of work was done at this site. A water hole was hand dug in the swamp nearby to source water with a pail for cleaning. The thick tree cover was hand cut into managable pieces and piled off the work area out of the way. The work area was then mapped. (ref figure 5 and figure 6) Two areas, the western about 5 meters by 5 meters by about 40 centimeters deep average, and the eastern area about 10 meters by 4 meters by about 20 centimeters deep average were cleaned off. Sheared, foliated carbonate altered rock was exposed showing some patchy pyrite with much fuchsite developed. A crack and seal type quartz vein is exposed for about 4 meters on the east of the workings where it averages about 20 to 25cm and for about 5 meters at the west where it averages up to about 50cm. The vein shows steep dips varying from vertical to slightly north or south. The vein has been shifted in places by a series of N-S shears which have displaced the segments of the vein. Some fine grained and cubic pyrite was noted in the quartz but it appears that the adjacent wallrock is more heavily pyritized in patchy amounts. Preliminary assays showed low values in the quartz but 377ppb was gotten in pyritic wallrock at the east extent of the vein.

At location A (line 2+00S at 0+27w) hand stripping was done in uncovering a 1.5m by 1.5m by .5m quatz veined angular float of fine to medium grained volcanic rock with much fuchsite and

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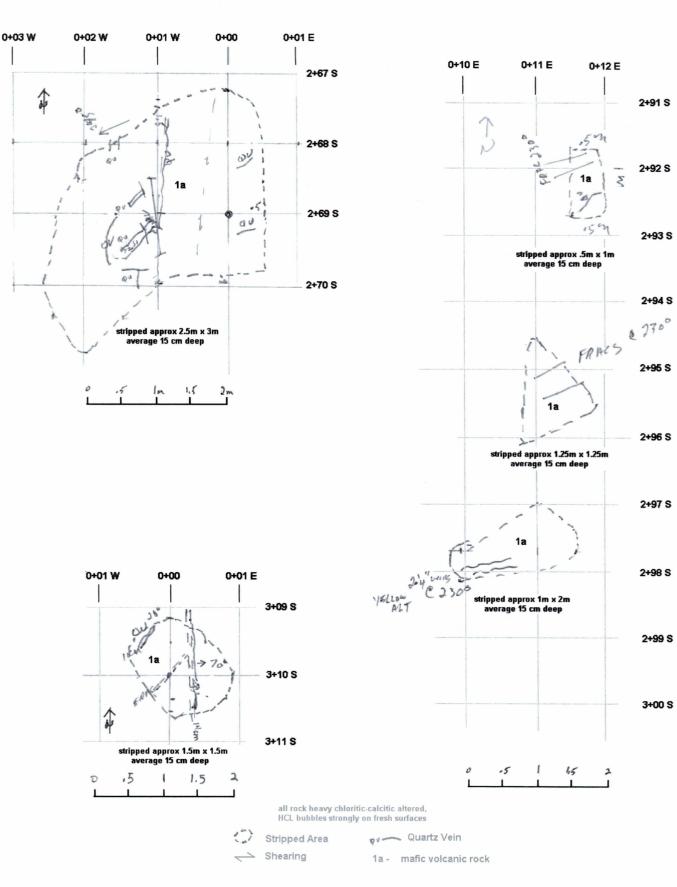
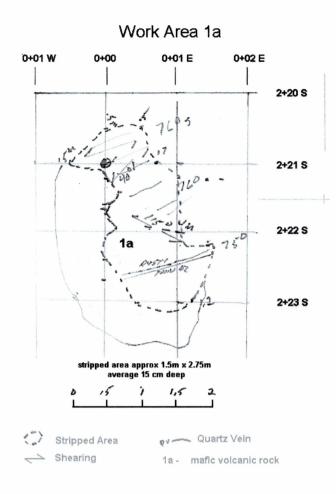
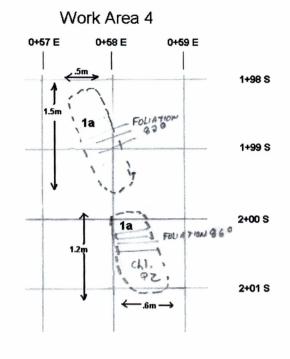


Figure - 7



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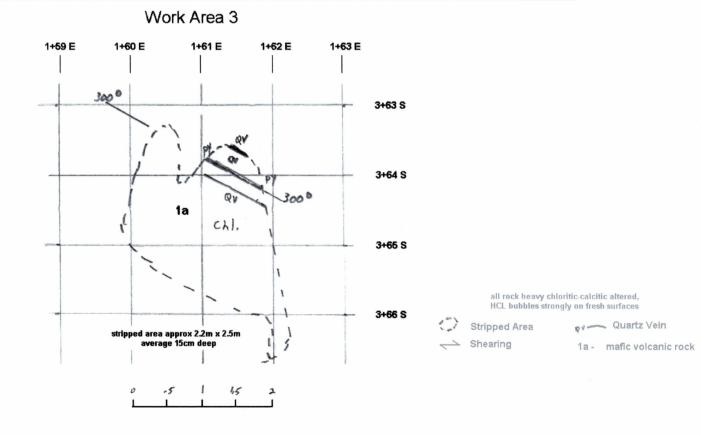


Figure - 8

some fine to coarse pyrite cubes. The surface is rusted a light reddish brown to about 2cm. Foliation is evident. Non magnetic, dilute HCL bubbles on some of the calcite/chlorite streaks. Some pyrite in stringers and fine aggregates to 2mm. On July 7, the author accompanied Douglas Robinson to the site for mapping of the features and work area. After completion, various hand tools and refuse was packed out.

Work Area 2

On June 28 and 29 manual hand stripping and outcrop cleaning was performed with sandvik, axe, shovels, swede pick and brushes in five areas around the outcrop which lays on the Eby-Otto township line. A water hole was hand dug in the swamp nearby to source water with a pail for cleaning. The areas were then mapped. (ref figure 5 and figure 7). All rock was a medium to dark green, chloritic, non magnetic, fine to medium grained mafic volcanic rock. Weak HCL bubbles vigorously on exposed surfaces. Several quartz veins were noted with a general orientation of about 358°ast and another set at about 230 - 240°ast. At the east of the outcrop at location 0+11E at 2+98S, several thin quartz veins cut the vock at 230°ast. The adjacent wallrock is altered a yellow color and shows a finer grain that the unaltered rock. The altered yellow rock does not react to the HCL.

Work Area 3

On June 29 and 30 manual hand stripping and outcrop cleaning was performed with a sandvik, axe, shovels, swede pick and brushes was done at about 1+62E at 3+65S. A water hole was dug by hand in the swamp nearby to source water for cleaning. The workings were then mapped. (ref figure 5 and figure 8). This work exposed several 4cm to 10cm quartz veins. The veins trend at about 300°ast. The host rock is the same medium to dark green, chloritic, non magnetic, fine to medium grained mafic volcanic rock which weak HCL bubbles vigorously on exposed surfaces. The veins show about .5% fine pyrite. The wallrock adjacent to the veins shows a yellowish to buff alteration with up to about 5% pyrite abd pinpoints and fine cubes up to 1.5mm in size. Some of the rock shows light banding or a streakiness of chlorite, quartz and at he yellowish mineral (sericite?) parallel to the strike of the veins.

Work Area 4

On July 2 manual hand stripping and outcrop cleaning was performed with shovels, swede pick and brushes was done at L2+00S, 0+27E which exposed foliated carbonate altered non magnetic volcanic rock. The banding shows layering of chloritie, quartz and less altered volcanic rock. Fuchsite is abundant as in the showing to the west. The color varies from dark green to the emereld green of the fuchsite. Some pyrite was noted. The purpose was to try to expose the strike continuation of the main vein to the west. More work here stripping and cleaning to the north and to the south is required to locate the vein which may have been faulted off.

On July 2 line 2+00S was cleaned up and the pickets stood up from the baseline to 2+50E. Commercial 2 x 2 lumber was put in at 50 meter intervals as permanent markers.

On July 2 line 1+50E was cleaned up and the pickets stood up from 2+00S down to 3+75S to tie in the workings in that area.

Location B

On July 6 manual hand stripping and cleaning was performed with shovels, swede pick and brushes was done at location B on line 2+00S at 0+85E (ref figure 5). Hand stripping a 1m x 1m x .2m area uncovered carbonate altered foliated fine to medium grain rock trending at about 86°ast. A shear crosses the rock at about 40°ast. The shear/foliation directions are close to those measured locally so this may be bedrock. Some fine pyrite noted. The surface is rusted a light reddish brown to about 2cm. Non magnetic, dilute HCL bubbles on some of the calcite/chlorite streaks.



Swastika Laboratories Ltd

Assaying - Consulting - Representation

Page 1 of 1

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Assay Certificate

Certificate Number: 17-1257

Company:	Eric Marion		
Project:	SOUTH BRET	Report Date:	26-Jun-1
Attn:	Eric Marion		

We hereby certify the following Assay of 6 rock/grab samples submitted 20-Jun-17 by Eric Marion

Sample Number	Au FA-MP ppb
20181	4
20182	7
20183	27
20184	377

Certified by Valid Abu Ammar

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

Location C

On July 6 manual hand stripping and cleaning was performed with shovels, swede pick and brushes was done at location C on line 2+00S at 0+94E (ref figure 5). Hand stripping a 1m x 1m x .2m area uncovered carbonate altered foliated fine to medium grained altered volcanic rock. Several 4cm to 6cm quartz veins cross at about 46°ast which direction was not noted in other veining. Odd pyrite noted. The surface is rusted a light reddish brown to about 2cm. Non magnetic. Dilute HCL bubbles on some of the calcite/chlorite streaks.

Location D

On July 6, at location D on line 2+00S at 1+55E (ref figure 5) hand digging a .3m x .3m x .6m deep hole yielded several fuchsite altered angular talus with quartz wisps and odd pyrite. This is the same as the alteration exposed ate 0+00 at 2+00S. One 15cm x 10cm x 8cm clast showed buff colored quartzy? patches with fair fine pyrite. Source location not known.

Location E

On July 6, at location E on line 1+50E at 0+55S (ref figure 5) a large $2.5m \times 2.5m \times 1m$ quatz veined angular float of fine to medium grained volcanic rock with much fuchsite and some fine to coarse pyrite cubes. The surface is rusted a light reddish brown to about 2cm. Foliation is evident. Non magnetic. Dilute HCL bubbles on some of the calcite/chlorite streaks. All around the larger piece are numerous various sized float? up to $1m \times 1m \times .5m$ of the same rock. The source is likely the sheared carbonate zone to the north previously mentioned.

SAMPLES

20181 -	L0+00 at 2+02S	Quartz vein. some fine pinpoint pyrite and cubes to 1mm, flecks of fuchsite, 4ppbAu
20182 -	L0+04 at 2+03S	Quartz vein. some fine pinpoint pyrite and cubes to 1mm, flecks of fuchsite 7ppbAu
20183 -	L0+01 at 2+02S	Altered, foliated, chloritic volcanic rock adjacent to vein. Somewhat speckled appearing. Non magnetic, weak HCL bubbles on chloritic or calcitic areas. Some fine whitish to brassy pyrite 27ppbAu
20184 -	L0+04 at 2+03S	Altered, foliated, fuchsitic volcanic rock adjacent to vein. Waxy texture, 4 to 5% whitish to brassy pyrite as fine grains and cubes up to 2mm. 377ppbAu

CONCLUSION

More field work to further assess the extent and nature of gold potential of the claim area should be undertaken to evaluate the structures found, or to find additional targets.

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