# REPORT ON PROSPECTING ON THE LITTLE-BRYAN AND BLACK DONALD GRAPHITE PROPERTIES, ONTARIO, CANADA

FOR

STANDARD GRAPHITE CORP.

Toronto, Ontario, Canada May, 2012.

MPH Consulting Limited

MPH Consulting Limited

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### 1.0 SUMMARY

On April 17<sup>th</sup>, 2012 two teams of two prospectors began an 8 day program designed to follow-up the recent airborne electromagnetic surveying on the properties, and to determine and gain familiarity with access. The program was supervised by senior MPH geologists. The goal of the program was to determine the cause of the major electromagnetic conductors on the property. All conductors found to be caused by graphitic rocks were sampled.

No outcrop was located at Beidelman-Lyall, therefore the property is not discussed in this summary report.

Sedimentary rocks of the Flinton Group (Grenville Supergroup) dominate the bedrock in the vicinity of the EM conductors on both properties. All of these rocks are now felsic to mafic gneisses and schists having undergone amphibolite grade metamorphism. The folded sequence comprises calcitic marbles ('marble'), amphibole-rich metasedimentary rocks ('amphibolites') and rusty–weathering, graphitic, pyrite and pyrrhotite bearing schists ('rusty graphitic schist'), which are cut by late pegmatites. Dips in general on Little-Bryan are moderately steep (50-60 degrees to the south), and shallow (10 to 20 degrees to the south) on Black Donald.

On Little-Bryan both broad conductive trends appear prospective, and especially the southern conductor which includes the known showing where historical trench values to 4.93% Cg ("graphitic carbon")/10m are documented. MPH results here ranged to 4.82% Cg, and in a new discovery some 2km along the conductor to the west, to 9.81% Cg. Follow-up grids over both these areas, as well as one area of exposure and ~2% graphite mineralization on the northern conductor, are recommended.

On Black-Donald two grids are recommended over western areas of the northern conductor, which is believed to correlate with the known Coronation Showing in the extreme northeast of the property. Prospecting results in the areas recommended for immediate follow-up range to 4.46% Cg. The area further east, which includes the Coronation Showing (values in drill core to 3.96% Cg over 21' and 4.67% Cg over 12' in the same hole), needs to be re-flown at a more appropriate azimuth to better map stratigraphy before concise follow-up can be planned.

The results of the prospecting sampling campaign are deemed quite successful for both properties. Results are presented on compiled geology and EM profile plan maps which serve to put the present state-of-knowledge into context. In general it is believed that the strongest EM conductive response is correlating with a rusty schist that is part of the overall meta-sedimentary package, which is high in pyrrhotite content, but variable in graphite content that is dominantly disseminated (i.e. chargeable, but not conductive). Graphite is also present in other rocks within the sequence, again as disseminations.

For these reasons, MPH is advocating limited follow-up programs in areas of known mineralization with line-cutting, comprehensive EM and IP surveying, stripping, mapping and sampling such that an accurate assessment of the thickness and grade tenor of the units of interest within the sedimentary package can be documented. These results will put the larger airborne EM responses on the property into better deposit size and type context.

At this point, both properties appear extremely promising for Bissett Creek style graphite deposits, i.e. large, low-grade and stratiform. Further, and likely more detailed work, will be needed to assess their potential for smaller, high-grade deposits such as the historic Black Donald Mine.

### 2.0 INTRODUCTION

At the request of Mr. Christopher Bogart of Standard Graphite Corp., MPH Consulting Limited ("MPH") undertook a short prospecting program on the Little-Bryan and Black Donald graphite properties in Southern Ontario, during late April 2012. Together the two properties along with the Beidelman-Lyall property comprise the Southern Ontario Graphite Properties (SOGP) of Standard Graphite Corp.

On April 17<sup>th</sup>, 2012 two teams of two prospectors began an 8 day program designed to follow-up the recent airborne electromagnetic surveying on the properties, and to determine and gain familiarity with access. The program was supervised by senior MPH geologists. The goal of the program was to determine the cause of the major electromagnetic conductors on the property. All conductors found to be caused by graphitic rocks were sampled.

No outcrop was located at Beidelman-Lyall; therefore the property is not discussed in this summary report.

### **3.0 PROPERTY ACCESS**

Both the Little-Bryan and Black Donald properties can be accessed by paved roads from the major centre of Bancroft to the west where the MPH crew stayed, or Renfrew to the northeast. Going forward it will be more time and cost efficient to establish an operating base in or around the central hamlet of Griffith which provides all manner of basic supplies.

# **3.1.** Little-Bryan Property (Map 1)

The Little-Bryan Property can be easily accessed by driving south on Addington Road from the town of Quadeville on County Road 515. Addington Road turns into Hyland Creek road, a dirt road easily passable with a 4-wheel drive vehicle that continues on to Griffith and therefore is the main thoroughfare between the properties. Rock Lake Road, off of Hyland Creek Road, parallels the Northern Conductor on the property and also continues to the east, providing access to the attenuated conductive areas in the eastern part of the property. The Southern Conductor is accessed via Graham Lake road, a spur off of Hyland Creek Road. The Graham Lake Road turns into an ATV trail which can be followed to the east providing access to the historical Little Bryan Prospect and trenches.

# **3.2.** Black Donald Property (Map 2)

The Black Donald property consists of two parts, a North and South Block separated by northeast trending Black Donald Lake, a reservoir on the Madawaska River created by the Mountain Chute Dam in the south.

The North Block can be accessed by driving south on the paved Dorley Creek Road/Morrow Lake Road which is off of Hwy 41, immediately west of the bridge in Griffith. Morrow Lake Road ends at Centennial Lake Road, which runs along the southern boundary of the North Block. A few dirt roads extend north of Centennial Lake Road and allow for access to the Northern Conductor, some of which are accessible eg. Tipperary Camp Road while others are gated private roads. The access to the Coronation Graphite zone on the northern tip of the property was thought to be accessible via Kennelly Mountain Road to Maloney Mountain Road. However, approximately 6km in along Maloney Mountain road, the road is gated and a sign indicates private property belonging to David Smith of Braeside, Ontario.

The Coronation Graphite zone is approximately 5 km north of the Centennial Lake Road and might be accessible by foot if it is possible to cross two east-west running creeks between Green Lake and Mason Lake.

The Southern Block is accessed by several major paved roads off the end of Centennial Lake Road including Black Donald Road which leads to Calabogie Road (Highway 508), Graphite Bay Road which leads to the old Black Donald mine site (now all cottages), and Mountain Chute Road which accesses the southwestern portion of the South Block.

## 4.0 GEOLOGY AND MINERALIZATION

Sedimentary rocks of the Flinton Group (Grenville Supergroup) dominate the bedrock in the vicinity of the EM conductors on both properties. All of these rocks are now felsic to mafic gneisses and schists having undergone amphibolite grade metamorphism. The folded sequence comprises calcitic marbles ('marble'), amphibole-rich metasedimentary rocks ('amphibolites') and rusty–weathering, graphitic, pyrite and pyrrhotite bearing schists ('rusty graphitic schist'), which are cut by late pegmatites.

### <u>Marble</u>

The marble unit is distinctively white in color, coarse grained and locally contains up to 5% disseminated graphite as mm-scale flakes. Calcite crystals vary from white to grey in color and phlogopite or another like colored mica is typically present. The graphite bearing marble is typically found adjacent to rusty graphitic schist units although not enough mapping has been carried out to confirm this association. Occasionally the marble is seen to be light green, such as west of Tipperary Road on the Black Donald property. This green color is likely due to the presence of epidote and diopside and may indicate a skarn.

# Amphibolite

The amphibolite unit has a characteristic 'salt and pepper' texture and represents a metamorphosed calcareous mudstone or sandstone. Amphibole has in part retrograded to biotite, and this unit can locally be more siliceous than calcareous. Graphite is not associated with this lithology.

# Rusty Graphitic Schist

The rusty graphitic schist unit has a distinctive weathered surface which locally can be described as gossanous. Graphite comprises 10-20% of the rock at some locales, defining thin, mm-scale foliation planes. Locally the schist can be very crumbly and unconsolidated due to weathering. In these extreme cases the rock is reduced compositionally to quartz and graphite. Where the schist is extremely gossanous, the protolith is unrecognizable.

Lumbers and Vertolli (2001) describe the rusty schist as probably due to hydrothermal replacement deposits in shear zones although some may represent turbiditic ironsulphide-bearing sediments or black shales. On the Black Donald property, sequences of graphitic schist interlayered with metamorphosed pyritic+ pyrrhotitic+ chalopyritic black shale in at least two areas, would seem to support the lean IF association. These rocks are magnetic due to the presence of pyrrhotite on both properties, the schistosity strikes northeasterly and dips southeasterly and is deformed into upright, plunging, recumbent folds.

### 5.0 PROSPECTING PROGRAM

Of the total eight field days, 3 were spent on the Little Bryan Property and 4 1/2 days were spent on the Black Donald property, with the Biedelman-Lyall Property receiving half a day of negative prospecting in that no outcrop was found at any of the EM conductor locations.

# 5.1. Little-Bryan Property

Thirty-three samples were collected on the Little Bryan property. Rock exposures coinciding with the interpreted location of the Northern and Southern EM conductors were examined.

### Northern Conductor

Outcrops coinciding with the west, central and east portions of the Northern Conductor on the property were examined. At the eastern end and central portion, rusty graphitic schist is exposed and confirms that the conductor is in part due to the presence of graphite (Samples 328126-30). Graphite content ranges from 2-5% as fine grained to medium grained flakes (1-5mm). The schist consist of quartz, biotite, graphite plus up to 3% sulphides locally (py, po). At the western end, white marble with minor fine-grained graphite is exposed (# 542652) suggesting this sample does not represent the conductor, which may not be exposed in this area.

A discontinuous conductive horizon is interpreted approximately 800m north of the western end of the North Conductor. Samples taken just south of this targeted conductor are marble or calcareous sandstone with minor fine grained graphite and light mica (Samples 542653-656).

### South Conductor

The South Conductor includes the historical Little-Bryan Showing at its eastern end (on the property). Here, grab samples from the trenches are rusty graphitic schist with fine to medium grained graphite, typically 2-4% but locally up to 5-10% (Samples 328002-011). The seven trenches for the most part need to be mucked out to get a better handle on the stratigraphy, but would appear to be well positioned perpendicular to strike, and spaced over several hundred metres of strike extent.

In the central portion of the South Conductor, rusty graphitic schist is exposed and sampled with samples 328013 and 542672-75. Locally the rock is more gneissic and has pyrite, pyrrhotite, trace chalcopyrite as well as graphite. However, more commonly the schist is very crumbly and locally unconsolidated with medium grained (1-5mm) graphite flakes up to 15%. At the west end of the South Conductor, outcrops of very rusty, gossanous graphitic schist was observed in several locations and sampled with Nos. 542676-78. This rock is hydrothermally altered and has coarse grained calcite and graphite.

## 5.2. Black Donald Property

On the North Block, the EM conductors trend northeasterly parallel to the shore of Black Donald Lake, in a loose swath of 2 conductor axes (North and South) that range from the lake shore to approximately 1.2 km north of the road. In the eastern part of the North Block, the conductive trends become attenuated due to regional folding and the interrelationship of various short conductor axes is not so readily correlated.

The South Conductor in all locations is compromised by roads, cottages etc. and should be eliminated as an exploration target. Samples 328131-136 are from the known Highway Prospect along this conductor. The short creek which drains Carter Lake into Black Donald Lake exposes a sequence of graphitic schist interlayered with metamorphosed pyritic+ pyrrhotitic+ chalopyritic black shales. Also exposed along the shore of Black Donald lake at this location is a silicified, sulphide bearing horizon. Samples 328137-142 are from this locale.

All observed outcrops along the overall conductor trends expose rusty graphitic schist, generally with shallow dips, and therefore these may represent duplicated stratigraphy. The schists consist of quartz, biotite, graphite and sulphides. Locally the schist is very gossanous and hydrothermally altered with coarse grained (>5mm) calcite and graphite. Typically, graphite is medium to coarse grained and ranges up to 5%. Samples 328016-25 and 542704-711 are from the western end of the trend, an area that is relatively more attractive for exploration given less infrastructure. Similarly Samples 542657-60 and 542679-81 are from the central to eastern portion of the trend, away from infrastructure.

Around the northern end of Green Lake, in the NE part of the North Block, the conductor is interpreted to define a fold in the stratigraphic package around a granite intrusive to the NW. The stratigraphy folds from a northeast strike to north, parallel to the trend of the Coronation Prospect (which wasn't accessible during this program due to gated private roads) at the extreme north end of the property. Where observed, outcrops coinciding with the Green Lake conductor expose very rusty and gossanous graphitic schist. Some samples have a marble protolith with coarse grained graphite up to 5%. Others consist of only weathered gossan with up to 10% graphite as medium grained (1-5mm) flakes aligned parallel to the schistosity. Samples 542661-669 are from this Green Lake area. There are cottages on the south end of the lake, whereas the northern end which was prospected, is less undeveloped. Samples 328144-46 are from the Little Black Donald Creek area, where the conductive trend is quite broken up.

On the South Block, southeast of the Black Donald Mine, outcrops exposing rocks associated with the one strong east-northeast trending conductor, where found to consist of rusty, sulphide bearing, graphitic gneiss (Samples 328147-150). These rocks are magnetic and have more sulphides (py, po + cpy) similar to the sulphide horizon between Carter Lake and Black Donald Lake. Locally the rocks are pegmatitic with coarse grained feldspars and massive sulphides.

### 6.0 RESULTS AND CONCLUSIONS

The results of the prospecting sampling program are tabulated in the following table, and are deemed quite successful for both properties. Prospecting results are presented on compiled geology and EM profile plan maps which serve to put the present state-of-knowledge into context. In general it is believed that the strongest EM conductive response is correlating with a rusty schist that is part of the overall meta-sedimentary package, and which is high in pyrrhotite content, but variable in graphite content that is dominantly disseminated (i.e. chargeable, but not conductive). Graphite is also present in other rocks within the sequence, again as disseminations.

For these reasons, MPH is advocating limited follow-up programs in areas of known mineralization with line-cutting, comprehensive EM and IP surveying, stripping, mapping and sampling such that an accurate assessment of the thickness and grade tenor of the units of interest within the sedimentary package can be documented. These results will put the larger airborne EM responses on the property into better deposit size and type context. At this point, both properties appear extremely promising for Bissett Creek style graphite deposits, i.e. large, low-grade and stratiform.

Further and more detailed work may well isolate areas of structural complexity with potential for smaller, high grade deposits akin to the historical Black Donald Mine.

# 6.1. Little-Bryan Property (Map 1)

The Little-Bryan Property provides very good access due to ATV trails, which allowed for good traversing to the priority conductors. The Northern Conductor stretches ~6km across most of the property. Very little exposure of the actual conductive package of rocks was located, however some attractive rusty graphitic schist outcrops assaying up to 2.16% Cg were located in the central-east portion, with this area recommended for follow-up work with Grid LB2.

The Southern Conductor which includes the known Little-Bryan Showing, is also a long feature, stretching semi-continuously over at least 4km across the central and eastern parts of the property. The central/west portion of the conductor yielded the best results, with grab samples of 9.81% Cg and 4.9% Cg at a new discovery which is recommended to be followed-up with Grid LB1. Further east, in the known showing area results from the five trenches located and sampled reached a high of 4.92% Cg. A larger grid is recommended here (Grid LB3 on Map 1) to extend the known mineralization and as well comprehensively understand the relationship between conductors and mineralization, as the old work has extremely compelling mineralization (i.e. 3.79% Cg over 11m) in Trench 1 which lies well outside the main conductive trend.

# 6.2. Black Donald Property (Map 2)

The Black Donald prospecting campaign served to prioritize only the northern conductive trend on the north block of the property, as the south block was found to be essentially unmineralized, and the southern conductor on the north block compromised by dwellings and infrastructure.

As well, the compilation map vividly shows that stratigraphy has warped around a granitic intrusive in the NE part of the property, meaning that the airborne survey was flown parallel to strike and therefore explains the lack of geophysical expression for the known high-interest Coronation Showing. Past work here which included HLEM surveying was oriented east-west, and MPH would recommend re-flying the NE portion of the northern block in this orientation before planning follow-up work.

That being said, the prospecting campaign has very successfully sampled the Coronation/northern conductive trend further to the west, with values to 4.46% Cg in the west (Grid BD-1) and in the 2-3% Cg range in the central region (Grid BD-2).

Respectfully submitted,

Paul Sobie, P.Geo. MPH Consulting Limited

	-		-	-				
SampNo	Easting	Northing	Description	Property	Location	SampType	~Gf Flake Sz.	C-graph%
542652	313925		Marble with Mica +/- Graphite		N. Conductor, West End	Outcrop	+48 mesh	0.77
542653	313662		Marble with Mica +/- Graphite		N. Conductor, West End	Outcrop		0.38
542654 542655	313666 313688	5014631	Marble with Mica +/- Graphite Rusty calcareous sandstone with 1% fgr Gp		N. Conductor, West End N. Conductor, West End	Outcrop Outcrop		0.12
542656	313000	5014661			N. Conductor, West End	Outcrop		0.48
542030	315106		Rusty sheared schist, 5 - 10% graphite		N. Conductor, West End	Outcrop	+60-24 mesh	0.48
542702	315106		Rusty sheared schist, 5 - 10% graphite		N. Conductor, West End	Outcrop	+60-24 mesh	1.14
542703	315106		Rusty sheared schist, 5 - 10% graphite		N. Conductor, West End	Outcrop		0.91
328126	317135		rusty graphitic schist, pyrr and graphite		N. Conductor, East end	Outcrop		< 0.05
328127	317133	5015878	rusty graphitic schist pyrr and graphite	Little B	N. Conductor, East end	Outcrop		0.54
328128	317121		rusty graphitic schist graphite		N. Conductor, East end	Outcrop		1.19
328129	317122		rusty graphitic schist with graphite rusty graphitic schist with graphite		N. Conductor, East end	Outcrop	+100-60 mesh	2.16
328130	316781	5015834	rusty graphitic schist with graphite	Little B	N. Conductor, East end	Outcrop		< 0.05
542676	315424	5012275	gossan with graphite	Little B	S. Conductor, West end	Subcrop		0.51
542677	315425	5013373		Little B	S. Conductor, West end	Subcrop		0.31
542678	315048	5013987			S. Conductor, West end	Float		0.76
542672	316933	5014432	rusty calcareous amph w/ pyrr and trace cpy	Little B	S. Conductor, Central	Outcrop		0.43
542673	316660		rusty schist with graphite	Little B	S. Conductor, Central	Outcrop		1.38
542674	316671		rusty schist with graphite	Little B	S. Conductor, Central	Outcrop	+48 mesh	4.9
542675	316682		Sandy marble schist		S. Conductor, Central	Outcrop		9.81
328012	318312		rusty graphitic schist, pyrr and graphite		S. Conductor, Central	Outcrop		1.11
328013 328002	317484 318791		ang FL f, rusty graphitic schist composite grab, Trench 6, 20%pyrr, 5% G	Little B Little B	S. Conductor, Central S. Conductor, East end	Subcrop Outcrop		< 0.05
328002	318787		comp grab, rusty sheared schist, 5% Gp, Trench 6	Little B	S. Conductor, East end	Outcrop		3.02
328004	318787		comp grab 50% graphite and dissem pyrr, trench 6	Little B	S. Conductor, East end	Outcrop	+80-48 mesh	4.82
328005	318790	5015073	comp grab, 5% graphite and dissem pyrr, trench 6	Little B	S. Conductor, East end	Outcrop		0.79
328006	318781	5015068	ang FL from trench, 50% graphite & pyrr, trench 6	Little B	S. Conductor, East end	Subcrop		3.02
328007	318726		rusty graphitic schist, pyrr and graphite, trench 5	Little B	S. Conductor, East end	Outcrop		1.54
328008	318726	5015053	rusty graphitic schist, pyrr and graphite, trench 5	Little B	S. Conductor, East end	Outcrop	+60-48 mesh	3.55
328009 328010	318647 318647		rusty graphitic schist, pyrr and graphite, trench 4 rusty graphitic schist, pyrr and graphite, trench 4	Little B Little B	S. Conductor, East end S. Conductor, East end	Outcrop Outcrop		< 0.05
328010	318515		rusty graphitic schist, pyrr and graphite, trench 4 rusty graphitic schist, pyrr and graphite, trench 3		S. Conductor, East end	Outcrop		0.08
	210010		g spine conce, pyri and graphico, dollori o			p		0.00
542704	343658	5006993		Black D	Northl Conductor, West End	Outcrop		< 0.05
542705	343658	5006993	Rusty sheared schist, 5 - 10% graphite	Black D	North Conductor, West End	Outcrop		1.28
542706	343668		Rusty sheared schist, 5 - 10% graphite		North Conductor, West End	Outcrop		1.06
542707	343709		Rusty sheared schist, 5 - 10% graphite	Black D	North Conductor, West End	Outcrop		2.85
542708	343709		Rusty sheared schist, 5 - 10% graphite	Black D	North Conductor, West End	Outcrop		2.71 2.73
542709 542710	343709 343709		Rusty sheared schist, 5 - 10% graphite Rusty sheared schist, 5 - 10% graphite	Black D Black D	North Conductor, West End North Conductor, West End	Outcrop Outcrop		4.46
542711	343797		Rusty sheared schist, 5 - 10% graphite	Black D	North Conductor, West End	Outcrop		2.2
328015	339195		Marble with 1-2% Graphite	Black D	North Conductor, West End	Outcrop		1.63
328016	342923		Rusty Schist with 5%Graphite	Black D	North Conductor, West End	Outcrop		1.6
328017	342945	5006252		Black D	North Conductor, West End	Outcrop		1.89
328018	342945	5006252			North Conductor, West End	Outcrop		2.46
328019	342945		Rusty Schist with 5%Graphite		North Conductor, West End	Outcrop		2.07
328020 328021	342945 342945		Rusty Schist with 5%Graphite Rusty Schist with 5%Graphite	Black D Black D	North Conductor, West End North Conductor, West End	Outcrop Outcrop	+60-24 mesh	2.12
328022	324968		Rusty Schist with 5 -10 Graphite	Black D	North Conductor, West End	Outcrop	+00-24 mesn	1.06
328023	342997	5006311		Black D	North Conductor, West End	Outcrop		1.38
328024	343526	5006917		Black D	North Conductor, West End	Outcrop		2.5
328025	343526		Siliceous Graphitic Schist, Rusty, 5-10% Graphite	Black D	North Conductor, West End	Outcrop		2.77
542679	345305		rusty graphite schist with py and graphite		North & Central Conductors, Central	Outcrop		0.28
542680	345251	5009572			North & Central Conductors, Central	Outcrop	+48 mesh	1.86
542681 542682	344875 343858		rusty graphite schist with py and graphite Rusty amphibolite schist with graphite	Black D Black D	North & Central Conductors, Central North & Central Conductors, Central	Outcrop Outcrop		0.85
328143	346072		rusty graphitic schist, pyrr and graphite		North & Central Conductors, Central	Outcrop		0.74
542657	345527		Marble with Mica and Graphite	Black D	North & Central Conductors, Central	Sub O/C		0.88
542658	345527	5009494		Black D	North & Central Conductors, Central	Angular Float		0.09
542659	345505		Marble with Mica and Graphite	Black D	North & Central Conductors, Central	Outcrop		0.75
542660	345506	5009481		Black D	North & Central Conductors, Central	Outcrop	+48 mesh	0.29
328144	347292		rusty graphitic schist, pyrr and graphite	Black D	Little Black Donald Creek Area	Outcrop		0.97
328145 328146	347297 347244		rusty graphitic schist, pyrr and graphite	Black D Black D	Little Black Donald Creek Area	Outcrop		1.07
328146 542661	347244 348834	5012894	rusty graphitic schist with graphite Pegmatite with graphite	Black D Black D	Green Lake Area Conductor	Outcrop	+24 mesh	< 0.05
542662	348834 348799	5014515	Marble with Mica +/- Graphite	Black D Black D	Green Lake Area Conductor Green Lake Area Conductor	Outcrop Outcrop	+24 mesti	0.43
542663	348792	5014567		Black D	Green Lake Area Conductor	Outcrop		0.3
542664	348411		mafic dyke? Mica, Graphite, Amphibilite?	Black D	Green Lake Area Conductor	Subcrop		1.5
542665	348448	5014451	mafic dyke? Mica, Graphite, Amphibilite?		Green Lake Area Conductor	Outcrop	+24 mesh	2.58
542666	348384	0011110	Rusty Schist with Graphite	BIGONE	Green Lake Area Conductor	Outcrop		0.66
542667	348370		rusty Schist with Graphite, 20-30%	Black D	Green Lake Area Conductor	Outcrop		2.21
542668 542669	348401 348253		rusty schist with Graphit, 10 - 20% rusty gossan with 10-20% graphite	Black D	Green Lake Area Conductor Green Lake Area Conductor	Outcrop		2.48
542669	348253 355925		Silicified Amph, 5%diss pyrr, graphite tr	Black D Black D	Green Lake Area Conductor Green Lake Area Conductor	Subcrop Outcrop		1.13
328131	347223		rusty graphitic schist with graphite	Black D	S. Conductor, Central, Hwy Showing	Outcrop		1.3
328132	347195	5010957	rusty graphitic schist, pyrr and graphite	Black D	S. Conductor, Central, Hwy Showing	Outcrop		1.61
328133	347194	5010954	rusty graphitic schist, pyrr and graphite	Black D	S. Conductor, Central, Hwy Showing	Outcrop	+24 mesh	1.93
328134	347089	5010843	rusty graphitic schist, pyrr and graphite	Black D	S. Conductor, Central, Hwy Showing	Outcrop		2.42
328135	347044	5010811		Black D	S. Conductor, Central, Hwy Showing	Outcrop		2.91
328136	347029	5010801		Black D	S. Conductor, Central, Hwy Showing	Outcrop		2.81
	349951		rusty graphitic schist, pyrr and graphite	Black D	S. Conductor, East End, Waterfall	Outcrop		0.2
328137			rusty graphitic schist with graphite	Black D	S. Conductor, East End, Waterfall	Outcrop	1100 mesh2	< 0.05
328138	349919		black shale, IF, po + sulphides, magnetic		S. Conductor, East End, Waterfall	Outcrop Outcrop	+100 mesh?	< 0.05
328138 328139	350031		rusty graphitic schist pyrr and graphite					
328138 328139 328140	350031 350020	5012460	rusty graphitic schist, pyrr and graphite silicified schist, Samp taken for Au		S. Conductor, East End, Waterfall S. Conductor, East End, Waterfall			0.41
328138 328139	350031	5012460 5012447	silicified schist. Samp taken for Au	Black D	S. Conductor, East End, Waterfall S. Conductor, East End, Waterfall S. Conductor, East End, Waterfall	Outcrop		0.06
328138 328139 328140 328141	350031 350020 350039	5012460 5012447		Black D	S. Conductor, East End, Waterfall			0.06
328138 328139 328140 328141	350031 350020 350039 350029 352635	5012460 5012447	silicified schist. Samp taken for Au rusty graphitic schist, pyrr and graphite	Black D Black D Black D	S. Conductor, East End, Waterfall	Outcrop		0.06
328138 328139 328140 328141 328142 328142 328147 328148	350031 350020 350039 350029 352635 352635 352880	5012460 5012447 5012447 5009008 5009008 5009158	silicified schist. Samp taken for Au rusty graphitic schist, pyrr and graphite rusty graphitic schist, pyrr and graphite massive pyrr in a graphitic schist	Black D Black D Black D Black D	S. Conductor, East End, Waterfall S. Conductor, East End, Waterfall South Block Conductor South Block Conductor	Outcrop Outcrop Subcrop Outcrop	+100-60 mesh	0.06 2.02 0.21 0.08
328138 328139 328140 328141 328142 328142 328147	350031 350020 350039 350029 352635	5012460 5012447 5012447 5009008 5009158 5009163	silicified schist. Samp taken for Au rusty graphitic schist, pyrr and graphite rusty graphitic schist, pyrr and graphite	Black D Black D Black D	S. Conductor, East End, Waterfall S. Conductor, East End, Waterfall South Block Conductor	Outcrop Outcrop Subcrop	+100-60 mesh +48 mesh	0.06 2.02 0.21

Black D South Block Eastern Conductor

# Table 1 – Prospecting Sample Results

542671 355232 5011470 Silicified Amph, 5%diss pyrr, graphite tr

Outcrop

+100 mesh?

0.33

APPENDIX 1 ACTIVATION LABORATORIES LTD. CERTIFICATE OF ANALYSIS

**Quality Analysis ...** 



Innovative Technologies

Invoice Date: Invoice No.: Your Reference: Date Submitted: SOGP C-2389 29-May-12 A12-04454 27-Apr-12

133 Richmond St West, Suite 501 Toronto ON M5H 2L3 Canada MPH Consulting

ATTN: President Paul A. Sobie

# CERTIFICATE OF ANALYSIS

90 Rock samples were submitted for analysis

The following analytical package was requested: Code 5D-C-Graphitic Infrared

REPORT A12-04454

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Notes:

CERTIFIED BY :

Emmanuel Eseme, Ph.D.

Quality Control

SCC Accre LAB 26

**ACTIVATION LABORATORIES LTD.** 

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613 E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

		Activation Laborationes Ltd. Report. A12-04434
nalyte Symbol	C-Graph	
Init Symbol	%	
Detection Limit	0.05	
nalysis Method	IR	
28001	0.24	
28002	1.18	
28003	3.02	
8004	4.82	
8005	0.79	
8006	3.02	
8007	1.54	
3008	3.55	
3009	< 0.05	
8010	1.89	
8011	0.08	
8012 8013	1.11 < 0.05	
015	< 0.05	
015	1.60	
017	1.89	
018	2.46	
019	2.07	
020	2.12	
8021	2.63	
022	1.06	
023	1.38	
024	2.50	
025	2.77	
126	< 0.05	
127	0.54	
128	1.19	
129	2.16	
130	< 0.05	
3131	1.30	
3132	1.61	
133	1.93	
134	2.42	
3135 3136	2.91 2.81	
136	0.20	
138	< 0.05	
139	< 0.05	
140	0.41	
3141	0.06	
3142	2.02	
3143	0.74	
144	0.97	
145	1.07	
146	< 0.05	
147	0.21	
3148	0.08	
8150	0.19	
2652	0.77	
2653	0.38	
	0.12	
2654 2655	< 0.05	

nalyte Symbol	C-Graph
nit Symbol	%
Detection Limit	0.05
Analysis Method	IR
542656	0.48
542657	0.88
542658	0.09
542659	0.75
42660	0.29
42661	0.43
42662	0.52
42663	0.30
542664	1.50
542665	2.58
542666	0.66
542667	2.21
542668	2.48
542669	1.13
542670	< 0.05
542671	0.33
542672	0.43
542673	1.38
542674	4.90
542675	9.81
542676	0.51
542677	0.77
542678	0.76
542679	0.28
542680	1.86
542681	0.85
542682	1.61
542701	0.92
542702	1.14
542703	0.91
542704	< 0.05
542705	1.28
542706	1.06
542707	2.85
542708	2.71
542709	2.73
542710	4.46
542711	2.20

### Activation Laboratories Ltd. Report: A12-04454

		Activation Laboratories	Ltd. Report:	A12-04454
Quality Control				
Analyte Symbol	C-Graph			
Unit Symbol	%			
Detection Limit	0.05			
Analysis Method	IR			
Graphite Powder Meas	97.6			
Graphite Powder Cert	99.99			
Graphite Powder Meas	97.9			
Graphite Powder Cert	99.99			
Graphite Powder Meas	98.8			
Graphite Powder Cert	99.99			
328010 Orig	1.90			
328010 Dup	1.88			
328021 Orig	2.62			
328021 Dup	2.64			
328131 Orig	1.30			
328131 Split	1.31			
328141 Orig	0.06			
328141 Dup	0.06			
542653 Orig	0.36			
542653 Dup	0.39			
542663 Orig	0.30			
542663 Dup	0.30			
542673 Orig	1.39			
542673 Dup	1.38			
542701 Orig	0.94			
542701 Dup	0.89			
542711 Orig	2.25			
542711 Dup	2.16			
Method Blank	< 0.05			
Method Blank	< 0.05			