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TECHNICAL REPORT

NI 43-101 TECHNICAL REPORT AND AUGUST 2013 MINERAL RESOURCE ESTIMATE

Kearney Graphite Property Ontario, Canada

Submitted to:

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Golder Associates

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1.0 SUMMARY

1.1 Scope of Work

Golder was commissioned by Ontario Graphite to provide an independent mineral resource estimate an NI 43-101 technical report, for filing with the Ontario Security Commission (OSC), for the Kearney property located in the Township of Kearney, Ontario, Canada. The Kearney property consists of the McGuire and Sheehan graphite deposits.

Greg Greenough, P. Geo of Golder is the Qualified Person (QP) responsible for the preparation of this technical report. A site visit was conducted by Greg Greenough on February 7, 2013, and again April 4, 2013. The purpose of the visits was to fulfill the site visit requirements specified under NI 43-101 and to familiarize Golder personnel with the property.

1.2 Location and Ownership

The Kearney property is located approximately 26 km north-east of the town of Kearney, Ontario, Canada and is about 140 km South of North Bay and 280 km north of Toronto, Ontario, Canada. The latitude and longitude co-ordinates of the site are 45° 43′ north and 79° 05′ west at an elevation of 485 m.

1.3 Geology and Mineralization

The Kearney Graphite Property lies within the Grenville Province of the Canadian Shield as shown on Figure 4.1. The Grenville Province is subdivided into two lithological belts and two structural zones. These are the Central Gneiss Belt (CGB), the Central Metasedimentary Belt (CMB), the Grenville Front Tectonic Zone (GFTZ), and the Central Metasedimentary Belt Tectonic Zone (CMBTZ). The Grenville Province is the youngest structural province within the Precambrian Shield and extends from Lake Huron through to Labrador, and south into New York State. The Grenville Orogeny, dated at 1.07 Ga (billion years ago), was a major compressional event resulting from the collision between the Precambrian Shield and a continent to the southeast (Moore et al, 1986). It is characterized by stacks of northwest directed thrust faults sheets formed during the crustal shortening due to the continental collision.

The Kearney Graphite Property occurs within the Kiosk Domain of the CGB. The Kiosk Domain is at the same structural level as the Britt and Rosseau Domain, all of which comprise the lower thrust sheet within the CGB. Structural trends in the Kiosk Domain are orientated east-northeast to southwest, conforming to the southern termination of the Powassan Batholith (Lumbers, 1975). Smaller ortho-gneiss bodies extend to the south and east into Butt Township. These plutonic bodies consist of meta-diorite, garnet-hornblende meta-monzonite, and meta-quartz-monzonite, and occur within a series of mafic quartzo-feldspathic, semi-pelitic, and pelitic gneisses which contain the graphitic horizons. Regional Geology is shown in Figure 7-1. No township level bedrock mapping has been carried out in Butt Township.

During the Grenville Orogeny, the rocks in the region were subjected to intense deformation of extreme heat and pressure which converted fine grained amorphous graphite into coarse grained flake graphite.

1.4 Exploration Programs

Ontario Graphite has completed two phases of exploration during 2013; a geophysical survey and a diamond drill program based on the survey's indication.

In the first quarter of 2013 Ontario Graphite contracted JVX to conduct a Spectral IP/Resistivity survey on the Kearney property, specifically in the area of the McGuire deposit. The main intent of the survey was to assist in targeting for the planned 2013 exploration diamond drill campaign.

Major Drilling was contracted by Ontario Graphite to complete 12 diamond drill holes on the McGuire zone to both in-fill existing resource areas of sparser data density and extend resources indicated by geophysical testing. Four of the holes (OG_01, 06, 07, and 08) covered areas which resulted in additional resources, four holes (OG-02, 03, 04, and 05) resulted in a combination of confirmation in-fill drilling and additional resources, and four holes (OG-09, 10, 11, and 12) increased confidence in the resource through in-fill drilling.

1.5 Sample Preparation, QA/QC and Security

Significant previous exploration campaigns on the property have been completed by several companies. The authors of this report believe that the sampling method and approach employed during these exploration programs would have been consistent with industry practices at the respective times. The issuer has not completed any sampling on the property except as documented in this report.

Past drilling on the property was largely BQ sized with a core size of 3.64 cm. (1.432 inches). Core was split with samples being a maximum 3.048 m (10 feet) in length. Sampling did not cross geological boundaries which resulted is some samples being a minimum of 0.3 m (1 foot) in length. Core was split using a table mounted hydraulic splitter. Samples were bagged and sent to an outside laboratory. Standard industry practices appear to have been followed.

During the 2013 core logging by Golder, specific sampling guidelines were outlined and followed by the loggers. Samples were taken from intervals during and between any areas containing graphite. To ensure that the laboratory was maintaining proper testing procedures blanks, duplicates, and coarse reject duplicates were used. Security was maintained during the cutting, packaging, and transportation of the samples to the assayers.

1.6 Data Validation

Golder compared graphitic carbon assays from the supplied drillhole database to all assay values from the certificates supplied by Ontario Graphite for the McGuire and Sheehan properties. Certificates were not available for many of the historical samples from the McGuire property but they were available for all of the 2013 samples as well as all of the samples from the Sheehan property. Specific gravity measurements were also validated for all of the available 2013 McGuire samples.

The validated samples make up approximately 26.5% of the sample data for McGuire property and 100% for Sheehan. Validation checks could not be completed on the remainder of the McGuire historical assay data as the original assay certificates were not available. A total of 8 errors were identified in the McGuire and Sheehan databases. These errors were not corrected prior to estimation but they are not expected to have a material impact on the resource estimate. All errors are recommended to be fixed prior to the next iteration of the resource model.

1.7 Mineral Process and Metallurgical Testing

Mineral processing and metallurgical testing was previously summarized by Hawkins in 2010 as part of their preliminary assessment report, portions of which are included in Section 13 of this report.

New testing data (RDI – Resource Development Inc. – October 5, 2011) regarding improvements in the rougher flotation, as well as other additional design changes and efficiency improvement are discussed in detail in Section 13 of this report.

Based on test work, the issuer plans to produce a range of products including mesh sizes of +50, +80, +100, and -100. Testing in July 2013 also supports plans to micronize some (or all) of the -100 mesh material to a very fine size (5 microns), and the purchase and installation of the equipment to achieve this is underway.

1.8 Mineral Resources

The mineral resource estimate the Ontario Graphite Kearney project consists of two zones, McGuire and Sheehan, and was completed in conformance with the CIM Mineral Resource and Mineral Reserve definitions referred to in NI 43-101 Standards of Disclosure for Mineral Projects. This resource estimate precludes previous resource estimates, including those stated in the PAH Preliminary Assessment, dated January 29, 2010.

Graphitic Carbon estimates were interpolated using Ordinary Kriging and validated based on global grade comparisons with the declustered composite grades, along with visual comparison of block and composite grades, along with a series of swath plots. All modeling and geostatistics were completed using Datamine Studio 3 software.

The McGuire resource estimate is based on 3,363 Graphitic Carbon (Cg) assays in 133 drill holes, and the Sheehan resource estimate is based on 1,392 Cg assays from 99 drill holes.

Very little is known of the sampling and Quality Assurance (QA)/Quality Controls (QC) protocols that were used in the Sheehan deposit drilling, hence, in spite of the drill data density being quite good for a significant portion of the resource volume, the entire Sheehan zone has been classified as an Inferred Resource.

Table 1–1: Kearney Resources

		Tonnes	Cg%
Indicated Resources	**McGuire**	**51,505,894**	**2.14**
Inferred Resources	**McGuire**	28,393,361	2.00
	Sheehan	18,427,547	2.00
	Kearney Total Inferred	**46,820,908**	**2.00**

1.9 Conclusions

Work by Golder Associates, using information from Ontario Graphite and others' exploration programs at the Kearney project, has delineated a NI 43-101 compliant Mineral Resource. A pit optimization exercise (Whittle) with reasonable assumptions of metal pricing and production costs was used to delineate the Mineral Resource limits. Results of the Mineral Resource estimate are presented in Table 1-1.

1.10 Recommendations

In Golder's opinion, future work on the Kearney property should include the following items, in the order of importance indicated here:

- Initiate work to provide appropriate permitting that will ensure the inclusion of Mineral Resources under McGuire Lake in the mine plan;
- Provide additional diamond drilling in the south-west and north-east areas of the McGuire deposit to increase confidence in the Mineral Resources in those areas;
- Initiate a Pre-Feasibility Study;
- Carry out geophysical surveys to the south-west of the McGuire deposit, and to the northeast between the McGuire and Sheehan deposits;
- Diamond drill any targets indicated by the geophysical surveys;
- Carry out a diamond drill hole-twinning program in the Sheehan deposit, covering at least 5% of the existing drill holes.

2.0 INTRODUCTION

Golder was commissioned by Ontario Graphite to provide an independent mineral resource estimate and NI43-101 technical report, for filing with the Ontario Security Commission (OSC), for the Kearney property located in northern Ontario, Canada. The Kearney property consists of the McGuire and Sheehan graphite deposits. The mineral resource estimates were completed in conformance with the CIM Mineral Resource and Mineral Reserve definitions referred to in NI 43-101, Standards of Disclosure for Mineral Projects. The previous mineral resource estimate was completed by Tetratech August 6th, 2008.

The mineral resource estimates were completed by Greg Greenough, P.Geo. and reviewed by Mr. Brian Thomas, P.Geo. of Golder.

This report was prepared as an NI 43-101 Technical Report for Ontario Graphite. The quality of information, conclusions and estimates contained herein is consistent with the level of effort involved in Golder's services, based upon:

- information available at the time of preparation;
- data supplied by outside sources, and;
- assumptions, conditions, and qualifications set forth in this report.

This report is intended to be used by Ontario Graphite, subject to the terms and conditions of its contract with Golder. That contract permits Golder to file this report as a Technical Report with Canadian Securities Regulatory Authorities pursuant to provincial securities legislation. Except for the purposes legislated under provincial securities laws, any other use of this report by any third party are at that party's sole risk.

Mr. Greenough completed site visits to the Kearney Property on February 7th and April 4th, 2013. During the site visits, Mr. Greenough reviewed the site conditions, reviewed logging procedures and confirmed graphite mineralization through the inspection of core and mineralized exposures in the existing open pit.

The second site visit (April 4th, 2013) included the additional tasks of reviewing drill locations, as well as inspecting core logging and sampling facilities and procedures for the 2013 drill program.

2.1 Source of Information

The sources of information that were provided in the preparation of the mineral resource estimate and technical report were provided by Ontario Graphite under the direction of Mr. Jerry Janik, and from previous reports, outlined as follows:

- Preliminary Assessment Kearney Graphite Mine, Ontario Graphite Ltd., Butt Township, Nipissing District, Kearney, Ontario (Hawkins, Kleinboeck, 2010);
- Kearney Graphite Project, Ontario Province, Canada, Grade Modelling and Mine Planning Study (Tschabrun, Mohr 2008);
- A site visit by Mr. Greg Greenough, (QP), of Golder;
- Kearney database of surface drill holes that included:

  - Cg, Lithology sample data;
  - Sample bulk density; and
  - Drillhole collar survey data and down-hole survey data.
- Assay certificates from various analytical laboratories including historical data and 2013 drilling data; and
- Metal Pricing was supplied by Ontario Graphite, and is based on ‘blended’ pricing for various product sizes though direct confidential negotiations with customers (see Section 14.8).

All units of measure (Figure 2-1) used in this report are in the metric system, unless stated otherwise. Currencies outlined in the report are in Canadian dollars unless otherwise stated.

Capital expenditure	CAPEX
Centimetre	cm
Copper	Cu
Cubic centimetre	cm^3
Cubic metre	m^3
Degree	°
Degrees Celsius	°C
Gram	g
Grams per tonne	g/t
Graphitic Carbon (%)	Cg
Greater than	>
Hectare (10,000 m^2)	ha
Internal rate of return	IRR
Kilogram	kg
Kilograms per cubic metre	kg/m^3
Kilograms per square metre	kg/m^2
Kilometre	km
Less than	<
Metre	m
Metres above sea level	masl
Millimetre	mm
Million	M
Million tonnes	Mt
Million tonnes per annum	Mtpa
Operating expense	OPEX
Percent	%
Pound(s)	lb
Parts per million	ppm
Parts per billion	ppb
Relative Percentage Difference	RPD
Square km	km^2
Square metre	m^2
Short Tons (907 kgs)	tons
Tonnes (1000 kgs)	t
Tonnes per day	t/d
United States Dollars	US$

Figure 2-1: Units of Measure and Abbreviations

3.0 RELIANCE ON OTHER EXPERTS

Golder has relied upon data and documentation supplied by Ontario Graphite, including permitting, and those resulting from mineral processing and metallurgical testing. Some information was also provided by Mr. Rick Keevil, who has been involved in the geology of the area for a number of years, and has a thorough knowledge of the geology of the property.

Golder has relied upon data supplied by Ontario Graphite with regard to concession tenure and believes that it is in accordance with relevant regulations.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Property Area and Location

The Kearney property is located approximately 26 km north-east of the town of Kearney, Ontario, Canada and is about 140 km South of North Bay and 280 km north of Toronto, Ontario, Canada as shown in Figure 4-1. The property is in Butt Township, District of Nipissing, and lies within the town limits of Kearney. It is adjacent to west side of Algonquin Provincial Park which is located approximately 5 km to the east. The latitude and longitude co-ordinates of the site are 45° 43′ north and 79° 05′ west at an elevation of 485 m.

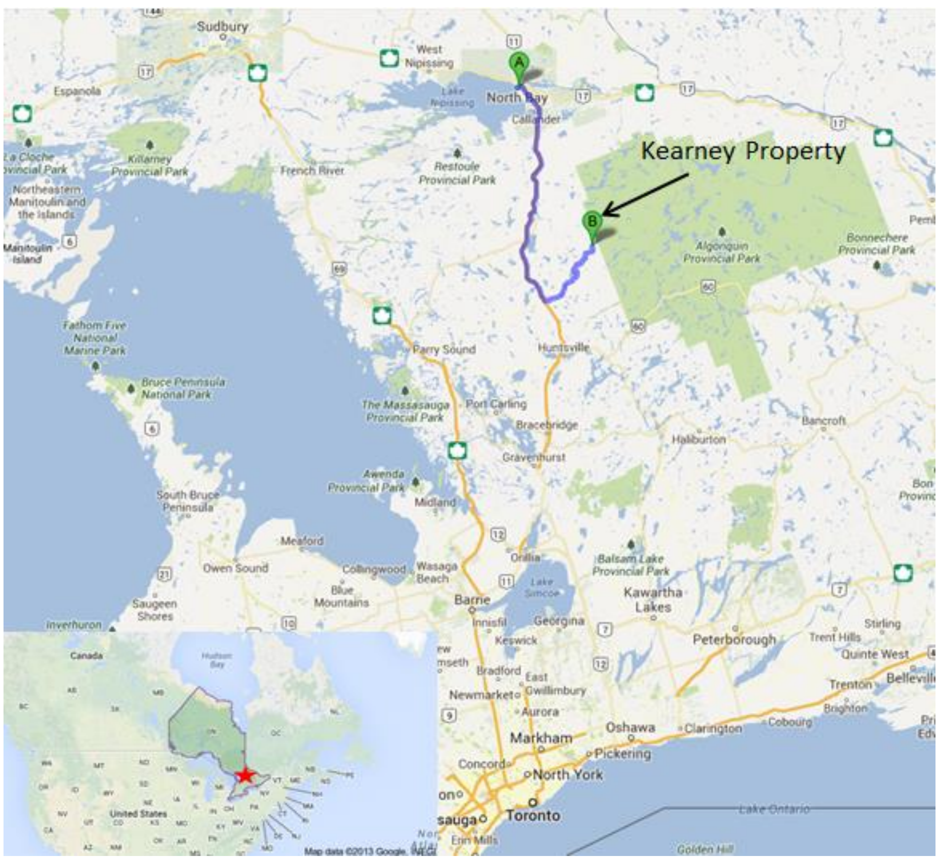


Figure 4-1: Kearney Property Location, Ontario, Canada

Figure 4-2 provides details of the area around the McGuire deposit, including the existing McGuire open pit, waste rock pile, mill infrastructure, tailings and polishing ponds, and access roads.

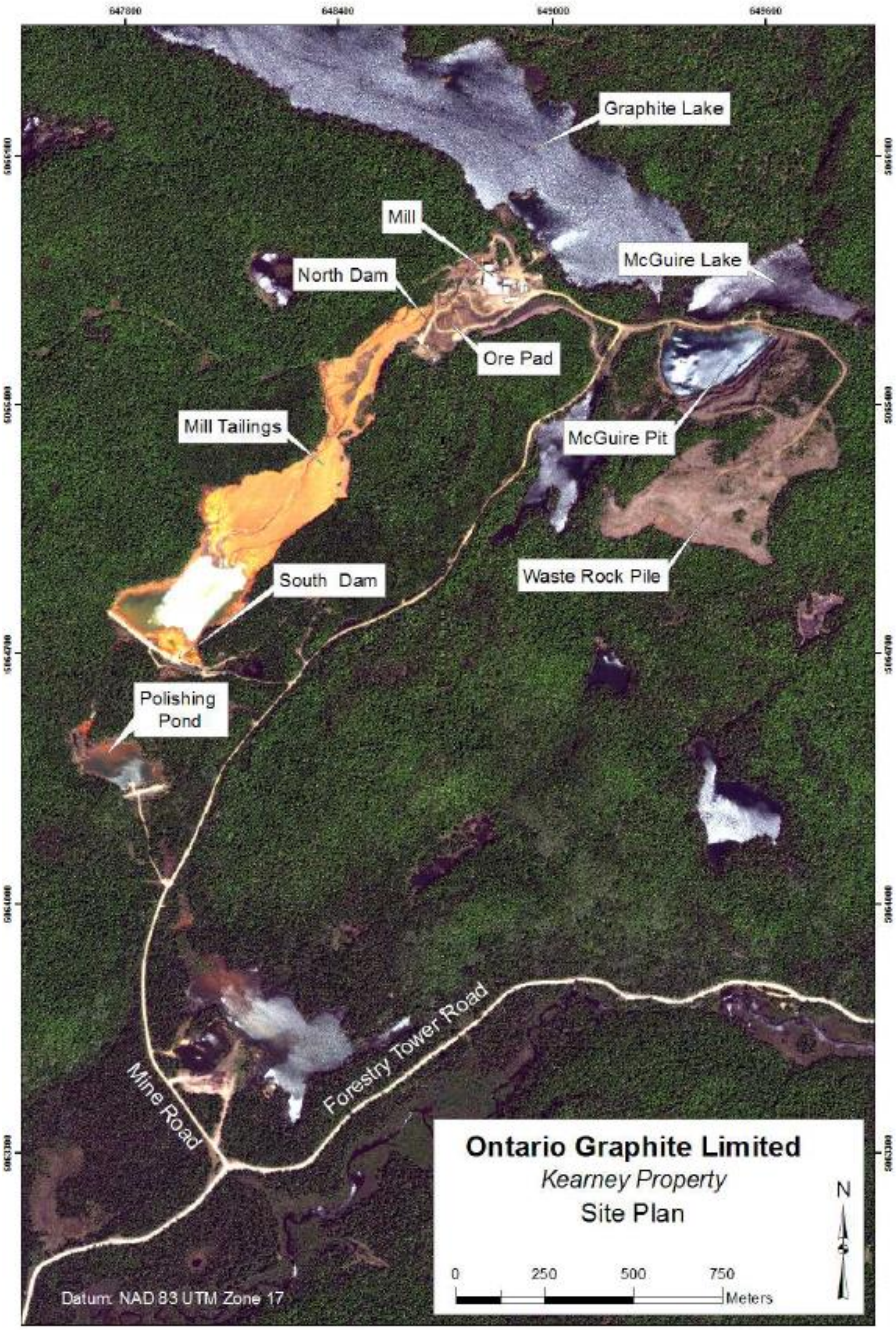


Figure 4-2: Kearney Property Site Plan - McGuire

4.2 Mineral Tenure

The Kearney property consists of 7 mining leases covering an area of 435.014 hectares and 12 claims (not surveyed) for a total of 26 claims as outlined in Figure 4-2. All claims and mining leases remain in good standing as listed in Tables 4-1 and 4-2, however 15 claims are due to expire before the end of 2013. The Basserman claims will require $400 of assessment work in order to be renewed. Golder does not believe there will be any issue with renewing these claims. The mineral leases cover both surface rights and sub-surface rights and have a 21 year term. Claim information was verified online using software provided on the MNDM website, but an official title search was not performed. The leases cover all mineralization and surface infrastructure on the site as shown in Figure 4-2.

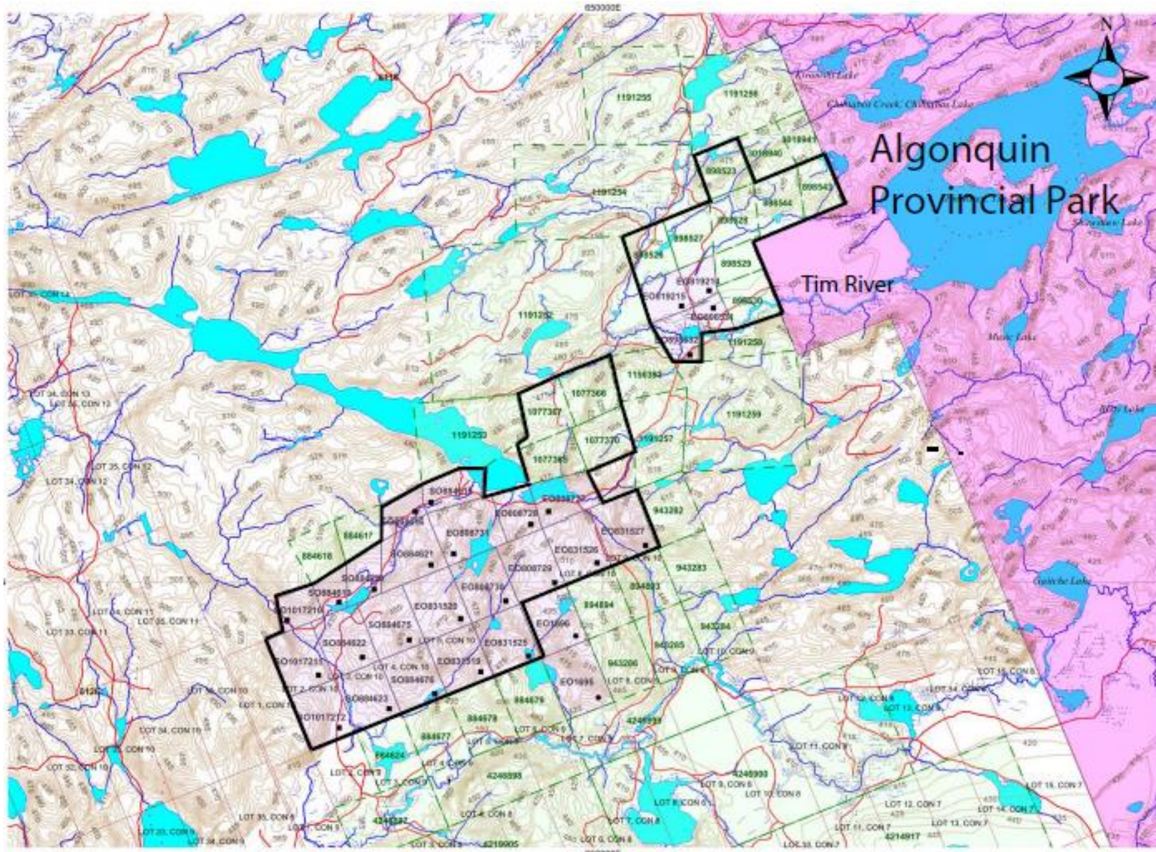


Figure 4-3: Kearney Mineral Claim and Lease Locations

Table 4–1: Kearney Mineral Claims

Name	Township/ Area	Claim Number	Recording Date	Claim Due Date	Status	Percent Option	Work Required	Total Applied	Total Reserve	Claim Bank
SHEEHAN, VINCENT ERIC (100.00 %)	BUTT	3018940	2003-Nov-13	2013-Nov-13	A	1	400	3200	0	0
SHEEHAN, VINCENT ERIC (100.00 %)	BUTT	3018941	2003-Nov-13	2013-Nov-13	A	1	400	3200	0	0
DAN PATRIE EXPLORATION LTD. (100.00 %)	BUTT	4219905	2007-Apr-13	2014-Apr-13	A	1	4800	24000	0	0
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	4258349	2010-Dec-09	2014-Dec-09	A	1	3600	7200	0	0
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	4258350	2010-Dec-09	2014-Dec-09	A	1	800	1600	0	0
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	4259851	2010-Dec-09	2014-Dec-09	A	1	1600	3200	0	0
DAN PATRIE EXPLORATION LTD. (100.00 %)	BUTT	4214914	2007-Jan-25	2014-Jan-25	A	1	4800	24000	0	0
DAN PATRIE EXPLORATION LTD. (100.00 %)	BUTT	4214915	2007-Jan-25	2014-Jan-25	A	1	4800	24000	0	0
DAN PATRIE EXPLORATION LTD. (100.00 %)	BUTT	4214916	2007-Jan-25	2014-Jan-25	A	1	3200	16000	850	0
DAN PATRIE EXPLORATION LTD. (100.00 %)	BUTT	4214917	2007-Jan-25	2014-Jan-25	A	1	4800	24000	7439	0
DAN PATRIE EXPLORATION LTD. (100.00 %)	BUTT	4214918	2007-Jan-25	2014-Jan-25	A	1	4800	24000	715	0
DAN PATRIE EXPLORATION LTD. (100.00 %)	BUTT	4246897	2009-May-12	2014-May-12	A	1	800	2400	0	0
DAN PATRIE EXPLORATION LTD. (100.00 %)	BUTT	4246898	2009-May-12	2014-May-12	A	1	1200	3600	0	0
DAN PATRIE EXPLORATION LTD. (100.00 %)	BUTT	4246899	2009-May-12	2014-May-12	A	1	1200	3600	4707	0
DAN PATRIE EXPLORATION LTD. (100.00 %)	BUTT	4246900	2009-May-12	2014-May-12	A	1	3200	16000	24283	0
BASSERMANN, ROBERT JAMES (100.00 %)	BUTT	1077366	1997-Sep-02	2014-Sep-02	A	1	400	6000	0	0
BASSERMANN, ROBERT JAMES (100.00 %)	BUTT	1077367	1997-Sep-02	2014-Sep-02	A	1	400	6000	0	0
BASSERMANN, ROBERT JAMES (100.00 %)	BUTT	1077370	1997-Sep-02	2014-Sep-02	A	1	400	6000	0	0
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	4255163	2010-Sep-16	2014-Sep-16	A	1	400	800	0	0
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	4248233	2010-Sep-21	2014-Sep-21	A	1	1600	3200	0	0
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	4248234	2010-Sep-21	2014-Sep-21	A	1	2000	4000	0	0
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	4248235	2010-Sep-21	2014-Sep-21	A	1	3200	6400	0	0
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	4248236	2010-Sep-21	2014-Sep-21	A	1	4800	9600	0	0
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	4248237	2010-Sep-21	2014-Sep-21	A	1	1600	3200	0	0

Name	Township/ Area	Claim Number	Recording Date	Claim Due Date	Status	Percent Option	Work Required	Total Applied	Total Reserve	Claim Bank
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	4251800	2010-Sep-22	2014-Sep-22	A	1	2000	4000	0	0
BASSERMANN, ROBERT JAMES (100.00 %)	BUTT	1077365	1997-Aug-25	2014-Aug-25	A	1	400	6000	193	0
BASSERMANN, ROBERT JAMES (100.00 %)	BUTT	898526	1986-Sep-04	2014-Sep-04	A	1	400	10800	0	400
BASSERMANN, ROBERT JAMES (100.00 %)	BUTT	898527	1986-Sep-04	2014-Sep-04	A	1	400	10800	0	400
BASSERMANN, ROBERT JAMES (100.00 %)	BUTT	898528	1986-Sep-04	2014-Sep-04	A	1	400	10800	191890	400
BASSERMANN, ROBERT JAMES (100.00 %)	BUTT	898529	1986-Sep-04	2014-Sep-04	A	1	400	10800	66610	400
BASSERMANN, ROBERT JAMES (100.00 %)	BUTT	898530	1986-Sep-04	2014-Sep-04	A	1	400	10800	4827	400
BASSERMANN, ROBERT JAMES (100.00 %)	BUTT	898523	1986-Sep-09	2014-Sep-09	A	1	400	10800	0	400
BASSERMANN, ROBERT JAMES (100.00 %)	BUTT	898543	1986-Sep-09	2014-Sep-09	A	1	400	10800	0	400
BASSERMANN, ROBERT JAMES (100.00 %)	BUTT	898544	1986-Sep-09	2014-Sep-09	A	1	400	10800	5988	400
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	1500476	2012-Sep-20	2014-Sep-20	A	1	400	0	0	0
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	1500477	2012-Sep-20	2014-Sep-20	A	1	800	0	0	0
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	4269444	2012-Sep-20	2014-Sep-20	A	1	3600	0	0	0
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	4269445	2012-Sep-20	2014-Sep-20	A	1	400	0	0	$
ONTARIO GRAPHITE LTD. (100.00 %)	BUTT	4267364	2011-Sep-23	2014-Sep-23	A	1	2800	2800	0	0

Table 4–2: Kearney Mining Lease Details

Lease #	Claim #	Start Date	Good To Date	Area (Hectares)	Ownership
108513	EO808727 EO808728 EO808729 EO808730 EO808731 EO831526 EO831527	01-Apr-2009	31-Mar-2030	133.316	OGL
106812	EO819214	01-Jun-1994	31-May-2015	9.526	OGL
106813	EO819215	01-Jun-1994	31-May-2015	12.97	OGL
106814	EO898531	01-Jun-1994	31-May-2015	7.252	OGL
106815	EO898532	01-Jun-1994	31-May-2015	11.295	OGL
106691	SO1017211 SO1017212 SO884622 SO884623 SO884675 SO884676 EO831519 EO831520 EO831525	01-Sep-1993	31-Aug-2014	178.180	OGL
106692	SO1017210 SO884615 SO884616 SO884619 SO884620 SO884621	01-Sep-1993	31-Aug-2014	82.475	OGL

For terms of reference, the McGuire and Sheehan deposits, existing tailings and mill locations are noted on the claim boundaries in Figure 4-4.

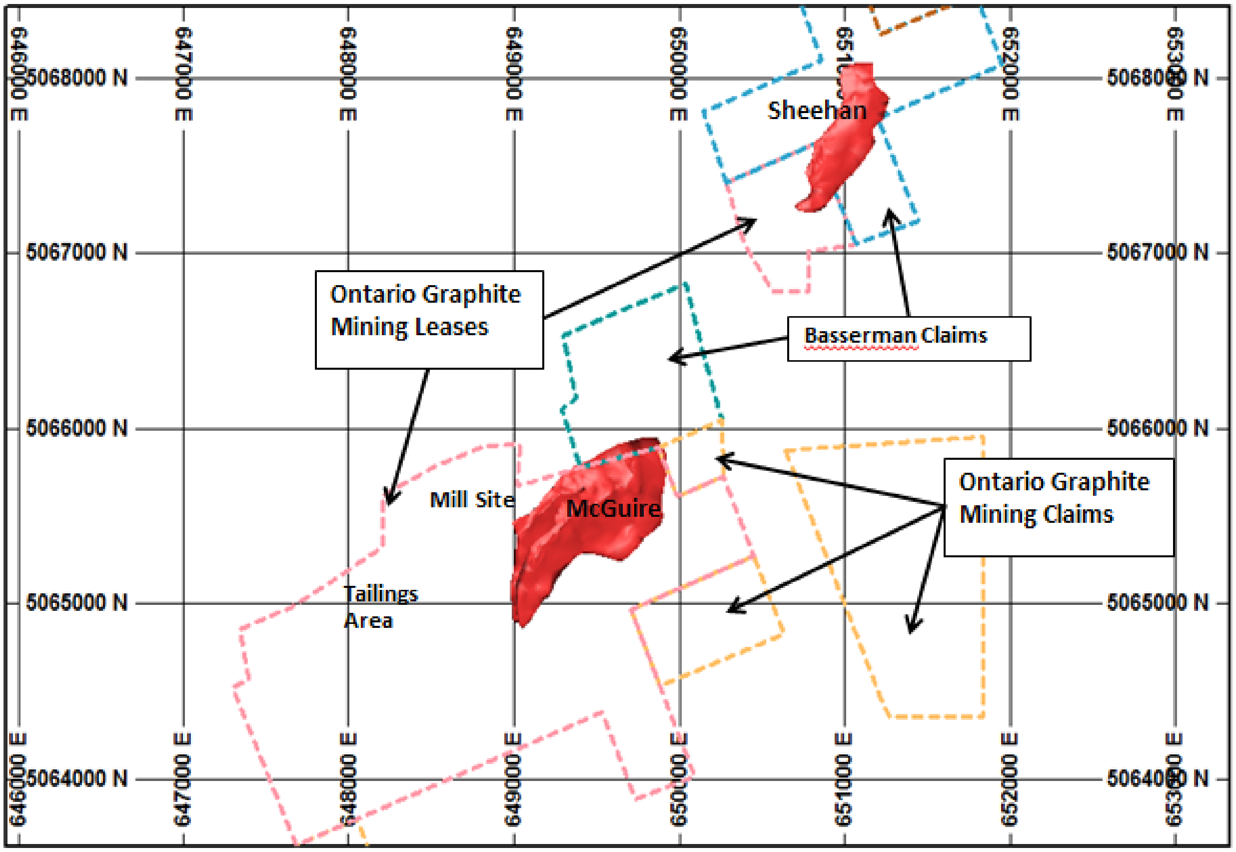


Figure 4-4: Kearney Mineral Claim and Lease Locations; NAD83 (Zone 17) coordinates

4.3 Nature and Extent of the Issuer's Title

An annual work requirement of $400 is needed to maintain each mineral claim in good standing. Mining leases require an annual payment to the province of C$1,500. Annual local property taxes of C$11,181.14 are also payable to the Ontario Ministry of Municipal Affairs and Housing on the leases and buildings.

A February 2011, title opinion prepared by the law firm Heenan Blaikie, indicates that Ontario Graphite has good and marketable title to the leasehold interests which include surface rights and mining claims located within its claim area.

Twelve mineral claims listed in Table 4-1 are held by Robert James Bassermann as trustee, with Ontario Graphite Limited as the 100% beneficial owner. An additional 10 claims are owned by Dan Patrie Exploration Inc. and two are owned by Eric Vincent Sheehan. These claims are subject to certain royalty agreements between Ontario Graphite and the respective parties as outlined below.

Mining leases 108513, 106691 and 106692 are registered to Ontario Graphite Ltd. Location of Mineralized Zones

4.3.1 McGuire

The McGuire deposit is located on mining lease 108513 which is adjacent to McGuire Lake as shown in Figures 4-3 and 4-4.

4.3.2 Sheehan

The Sheehan deposit is located on mining leases 106812, 106813, 106811, and 106815 which are located to the north-east of the McGuire deposit as shown in Figures 4-3 and 4-4.

4.4 Royalties and Other Agreements

As per the title opinion from Heenan Blaikie, dated February 9, 2011 (provided to Golder by Ontario Graphite), twelve claims in the Sheehan zone and adjacent to the McGuire deposit are subject to separate royalty agreements. These agreements call for a minimum annual royalty, subject to cost-of-living adjustments, until such time as when Ontario Graphite commences commercial production from the subject claims. According to Ontario Graphite, payments in 2013 were C$24,890 for Sheehan and C$22,627 for McGuire. Subsequent to the commencement of commercial production the royalty agreement requires payment of a 2.5% royalty on gross sales of graphite produced from material mined in the subject claims.

Twelve claims are held by Robert James Bassermann and are subject to an option/purchase agreement, and included in the Heenan Blaikie title opinion.

4.5 Environmental Liabilities

The Kearney property was a past producing mine consisting of a mill, open pit, waste rock dump and a tailings facility as identified in Figure 4-2. The waste rock dump reportedly does not produce acid water and has been successfully re-vegetated since 1994. Oxidation of the old tailings causes minor generation of acid which is simply treated with lime and is reported under control. The metal content is within limits set for the property, and effluent is safely discharged into a wetland, and finally into the South Branch of the Magnetawan River (Hawkins, 2010).

4.6 Permits and Future Work

Ontario Graphite has publicly reported that they have received all of the required permits and approvals to re-commission the Kearney Mine from the Ontario Government (May 13, 2013). Ontario Graphite has also announced that the Ministry of Northern Development and Mines has approved the mine closure plan (March 5, 2012). The following permitting has also been obtained by Ontario Graphite:

Permit To Take Water (1213-933SR9)	Ontario Ministry of the Environment	May 1, 2013
Environmental Compliance Approval (4313-8XCQE4)	Ontario Ministry of the Environment	May 2, 2013
Amended Environmental Compliance Approval (4523-8ZLH6M)	Ontario Ministry of the Environment	May 2, 2013

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

The Kearney property is accessible by public Highways 11 and 518 to the town of Kearney, ON and then Forestry Tower Road (municipal) and a short section of private road is used to access the mine site. Logging roads provide access to the south end of the Sheehan Zone. The private road into the mine site is maintained by Ontario Graphite using its own equipment. Forestry Tower Road is a gravel road that may be subjected to seasonal load restrictions. Forestry Tower Road also services Algonquin Provincial Park.

5.2 Climate

The Kearney property is located in the Algonquin Highlands which is characterized as having a continental climate with warm, humid summers; cool and wet fall/springs; and cold snowy winters. Average daily temperatures for nearby Huntsville range from -10.2^{o} C to 19.4^{o} C with daily minimum and maximum temperatures ranging from -15.6 ^{o} to 25.0^{o} C. Extreme minimum and maximum temperatures range from -39.5 to 35.0^{o} C. Average precipitation ranges from 63.2 mm to 102.1mm and consists of a combination of rain and snow. Table 5-1 summarizes temperature and precipitation data for Huntsville, Ontario from 1971 to 2000. Huntsville is located approximately 55 km south of Kearney. The local climate conditions at Kearney are favourable for year round mine production.

Table 5–1: Daily Average Temperature and Precipitation Data for Hunstville, Ontario (1971 to 2000)

Temperature:	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Daily Average (°C)	-10.2	-8.6	-3.2	4.6	11.9	17	19.4	18.5	13.8	7.6	0.9	-6
Standard Deviation	3.3	2.8	2.4	2	2.1	1.3	1.1	1.3	1.1	1.8	1.6	3.1
Daily Maximum (°C)	-4.8	-2.7	2.6	10.3	18	22.7	25	23.7	18.7	12	4.4	-1.9
Daily Minimum (°C)	-15.6	-14.4	-8.9	-1.1	5.7	11.1	13.8	13.2	8.8	3.1	-2.7	-10.2
Extreme Maximum (°C)	12.5	13	21.7	30	31.1	34	34.5	34	35	26.7	22.8	17
Date (yyyy/dd)	1995/ 14	1984/ 23	1977/ 30	1990/ 28	1962/ 17	1994/ 17	1988/ 06	1988/ 03	1999/ 04	1971/ 02	1961/ 03	1982/ 03
Extreme Minimum (°C)	-39.5	-38.3	-32.8	-18.3	-7.8	-1	4.4	-10	-4	-8.9	-22	-36.5
Date (yyyy/dd)	1981/ 03	1971/ 01	1962/ 02	1964/ 01	1966/ 07	1980/ 09	1965/ 06	1984/ 31	2000/ 28	1966/ 30	2000/ 23	1989/ 27
Precipitation:												
Rainfall (mm)	18.8	12.4	35	54.7	79.3	82.1	84.2	89	105.1	94.7	69.8	21.2
Snowfall (cm)	83.3	54.5	34.4	8.5	0.6	0	0	0	0	3.1	29.4	71.9
Precipitation (mm)	102.1	66.9	69.5	63.2	79.9	82.1	84.2	89	105.1	97.8	99.1	93.1
Extreme Daily Rainfall (mm)	26	46.7	37.8	35.4	41.8	56.8	65.2	53.4	110	49	55.2	34.5
Date (yyyy/dd)	1993/ 04	1968/ 01	1976/ 04	1995/ 21	1984/ 22	1980/ 19	2000/ 31	1984/ 14	1992/ 21	1991/ 26	1992/ 12	1968/ 12
Extreme Daily Snowfall (cm)	37	32	54	20.3	11.4	0	0	0	0	20	36.1	49.5

Date (yyyy/dd)	1979/ 14	1986/ 01	1985/ 04	1970/ 02	1963/ 10	1961/ 01	1961/ 01	1961/ 01	1961/ 01	1997/ 26	1976/ 30	1998/ 23
Extreme Daily Precipitation (mm)	37	46.7	54	35.4	41.8	56.8	65.2	53.4	110	49	56.2	49.5
Date (yyyy/dd)	1979/ 14	1968/ 01	1985/ 04	1995/ 21	1984/ 22	1980/ 19	2000/ 31	1984/ 14	1992/ 21	1991/ 26	1992/ 12	1998/ 23
Extreme Snow Depth (cm)	86	94	91	58	10	0	0	0	0	13	36	66
Date (yyyy/dd)	1977/ 31	1971/ 23	1971/ 01	1971/ 01	1963/ 11	1961/ 01	1961/ 01	1961/ 01	1961/ 01	1974/ 02	1966/ 05	1985/ 29

5.3 Physiography

The topography of the Kearney project area consists of rolling hills with steep cliffs and valleys, as well as a number of streams, lakes and bogs. Overburden ranges from a few centimeters on the hillsides to several meters in the marsh areas. Vegetation consists of equal amounts of deciduous and conifer trees with sparse to moderate under bush. Drainage on the property is into the Magnetawan River and into the Tim River system.

5.4 Infrastructure and Local Resources

Ontario Graphite has sufficient surface and mineral rights for mining operations as well as enough space for tailings, waste disposal and processing.

The mine is approximately 20 km away from the provincial power grid but it is not currently connected. Power for the property will be supplied by diesel generator that is currently on order.

There are abundant water resources on the property to handle all processing requirements of the mine.

There is no shortage of skilled labour, mining equipment / supplies or fuel in the area and the mine site is well serviced by roads and local rail ways. There is currently no accommodation on site but the town of Kearney, as well as many other towns, are well within driving distance.

6.0 HISTORY

6.1 Ownership and Exploration History

Graphite was first recognized on the Kearney property in 1879 by J.J. McKenna (OLS) while surveying the southern half of Butt Township. Numerous individuals and companies sampled and prospected the area, leading up to CAL Graphite Corporation obtaining 100% ownership of property covering known graphite showings in 1985.

Several changes in ownership of the Kearney Mine property and corporate name have occurred over the years, and are summarized in Table 6-1.

For a more detailed account of the history, the reader is referred to the Preliminary Assessment of the Kearney Graphite Mine completed by Paul A. Hawkins & Associates Ltd., 2010. Since 2010, Ontario Graphite has completed all the necessary mine permitting required to re-commission the mine and has completed additional infill diamond drilling in order to update the resource model and increase geological confidence in the resource.

Table 6–1: Kearney Ownership History

Year	Owner	Work Completed	Notes
1917	Prospector	Staking.	Originally staked.
1940	Noranda	Staking.	
1973	Noranda	Geological mapping and Geophysics (Induced polarization).	
1976	Prospector	Staking.	
1980	Dravo Corporation	Geological mapping.	
1981	Vesuvius Crucible Ltd.	Geological mapping and diamond drilling.	JV with Dravo Corp.
1985	Cal Graphite	Diamond drilling.	McGuire West claims.
1988	Cal Graphite	Diamond drilling.	Acquired the Sheehan property.
1991	Cal Graphite	Staking and diamond drilling.	Staked intervening claims east of McGuire Lake.
1991	Cal Graphite	Open pit mining.	Mined through to May 1994.
1994	Applied Carbon Technology Inc.	NA.	
1999	International Graphite Ltd.	NA	Purchased from Applied Carbon.
2005	iCarbon Canada Ltd.	NA	Purchased from International Graphite Ltd.
2008	Ontario Graphite Ltd.	Mineral resource update (2008), PEA (2010), mine permitting, diamond drilling and resource update (2013).	Name change from iCarbon Canada Ltd

6.2 Historical Resource Estimates

Paul A. Hawkins and Associates updated the mineral resource estimate in 2010 as part of their Preliminary Assessment entitled “Preliminary Assessment, Kearney Graphite Mine, Ontario Graphite Ltd, Butt Township, Nipissing District, Kearney, Ontario, 2010”. Their mineral resource estimates are presented in Table 6-2 and are nearly identical to estimates completed by Tetra Tech in 2008. The estimates are based on an Inverse Distance Squared interpolation of the Kearney diamond drill hole assay data and are 43-101 compliant. The resource estimates are 43-101 compliant and are reported on an in-situ / un-diluted basis.

Table 6–2: Kearney 2010 Resource Estimates (Hawkins)

Mineral Zone	(tons)	(tonnes)	Carbon (%)
McGuire Zone			
Measured Resources	11,200,000	10,613,339	2.50
Indicated Resources	17,700,000	16,061,706	2.46
Total Measured & Indicated Resources	28,900,000	26,225,045	2.48
Sheehan Zone	`		
Measured Resources	8,400,000	7,662,505	2.14
Indicated Resources	10,600,000	9,618,875	2.11
Total Measured & Indicated Resources	19,000,000	17,241,379	2.12
Total Property Measured & Indicated Resources	47,900,000	43,466,425	2.34
McGuire Zone			
Inferred Resources	10,000,000	9,740,410	2.52
Sheehan Zone			
Inferred Resources	3,500,000	3,176,044	2.14
Total Property Inferred Resources	13,500,000	12,250,454	2.42

Tetra Tech completed a mineral resource estimate and mine planning study for the McGuire and Sheehan properties in 2008. Estimation of % graphite was completed using the Inverse Distance Squared interpolation method. Measured and indicated resources are listed in Table 6-3 and inferred resources are listed in Table 6-4. The resource estimates are 43-101 compliant and are reported on an in-situ / un-diluted basis.

Table 6–3: Kearney 2008 Resource Estimates (Tetra Tech)

Table 1-1
Ontario Graphite, Ltd. – Kearney Project Mineral Resource Summary – Measured and Indicated
(Graphite cutoff grade: 1.5 % Cg)

Mineral Zone	**Measured**		**Indicated**		**Measured and Indicated**	
	Ktons	Cg Grade (%)	Ktons	Cg Grade (%)	Ktons	Cg Grade (%)
McGuire West and McGuire Lake						
	11,229	2.50	17,730	2.46	**28,959**	**2.48**
Sheehan						
	8,416	2.14	10,613	2.11	**19,029**	**2.12**
Combined Total – McGuire and Sheehan						
Total	**19,645**	**2.35**	**28,343**	**2.33**	**47,988**	**2.34**

Table 6–4: Kearney 2008 Inferred Resources

Table 1-2 Ontario Graphite, Ltd. – Kearney Project Mineral Resource Summary – Inferred (Graphite cutoff grade: 1.5 % Cg)		
Mineral Zone	Inferred	
	Ktons	Cg Grade (%)
McGuire West and McGuire Lake		
	10,028	2.52
Sheehan		
	3,509	2.14
Combined Total – McGuire and Sheehan		
	13,537	2.42

Previous historical (non 43-101 compliant) resource estimates were calculated by Pincock, Allen and Holt (PAH) in 1991 and 1994. PAH calculated an Inverse Distance Squared ore reserve estimate for the McGuire and Sheehan deposits. The McGuire deposit, excluding mineralization under McGuire Lake, was estimated at 29.7 million proven and probable tons grading 2.44% graphitic carbon, reported above a 1.5% cut-off grade. The Sheehan deposit was estimated using the same parameters as McGuire and was reported at 4.55 million tonnes at an average grade of 2.46 percent Cg. PAH's estimate is historic and not considered NI 43-101 compliant. No dilution was applied to the PAH estimates.

6.3 Previous Production

The Kearney Mine consisted of an open pit and a flotation mill that operated from 1990 to June 1994 for an estimated total production of 1,001,113 tonnes. The mine closed after the main generator failed and the owners elected to not replace it. A summary of the 1994 production is listed in Table 6-5.

Table 6–5: 1994 Kearney Mine Production Results

Month	Milled (tonnes)	Concentrate (tonnes)	Metallurgical Recovery (%)
January	35,453.5	599.1	70.8
February	42,188.2	596.7	65.2
March	43,290.3	786.6	77.7
April	40,432.3	750.8	79.9
May	53,102.7	1,076.3	87.2

6.4 Preliminary Economic Assessment

A Preliminary Economic Assessment (PEA) was completed in 2010 by Paul A. Hawkins and Associates. The study provided a mineral resource update and outlined a preliminary economic assessment of a 3000 tonne per day mine with nominal milling rates of 83,000 tonnes per month. A Discounted Cash Flow (DCF) – Net Present Value (NPV) analysis was carried out on an after-tax basis, resulting in a $112 million NPV using a 10% discount rate. Base case assumptions, used for this study, are provided in Table 6-6 and appear to be reasonable for current market conditions, but Golder recommends that they be reviewed in more detail to confirm their accuracy. For more details on the Hawkins PEA, the reader is referred to the original paper entitled “Preliminary Assessment, Kearney Graphite Mine, Ontario Graphite Ltd, Butt Township, Nipissing District, Kearney, Ontario, 2010”.

Table 6–6: Base Case Assumptions (Hawkins, 2010)

Exchange Rate (C$/US$)	0.94
Operating Cost ($ per tonne)	C$13.27
Graphite Price +50 mesh / tonne	US$1,550
Graphite Price +80 mesh / tonne	US$1,350
Graphite Price -100 mesh / tonne	US$1,000
Graphite Price Micronized / tonne	US$3,500

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Regional Geology section was previously summarized by Hawkins in 2010 as part of their preliminary assessment report. Golder reviewed this section and has reproduced it here in its entirety.

The Kearney Graphite Property lies within the Grenville Province of the Canadian Shield as shown on Drawing A10-234-01. The Grenville Province is subdivided into two lithological belts and two structural zones. These are the Central Gneiss Belt (CGB), the Central Metasedimentary Belt (CMB), the Grenville Front Tectonic Zone (GFTZ), and the Central Metasedimentary Belt Tectonic Zone (CMBTZ). The Grenville Province is the youngest structural province within the Precambrian Shield and extends from Lake Huron through to Labrador, and south into New York State. The Grenville Orogeny, dated at 1.07 Ga (billion years ago), was a major compressional event resulting from the collision between the Precambrian Shield and a continent to the southeast (Moore et al, 1986). It is characterized by stacks of northwest directed thrust faults sheets formed during the crustal shortening due to the continental collision.

The Kearney Graphite Property occurs within the Kiosk Domain of the CGB. The Kiosk Domain is at the same structural level as the Britt and Rosseau Domain, all of which comprise the lower thrust sheet within the CGB. Structural trends in the Kiosk Domain are orientated east-northeast to southwest, conforming to the southern termination of the Powassan Batholith (Lumbers, 1975). Smaller ortho-gneiss bodies extend to the south and east into Butt Township. These plutonic bodies consist of meta-diorite, garnet-hornblende meta-monzonite, and meta-quartz-monzonite, and occur within a series of mafic quartzo-feldspathic, semi-pelitic, and pelitic gneisses which contain the graphitic horizons. Regional Geology is shown in Figure 7-1. No township level bedrock mapping has been carried out in Butt Township.

During the Grenville Orogeny, the rocks in the region were subjected to intense deformation of extreme heat and pressure which converted fine grained amorphous graphite into coarse grained flake graphite.

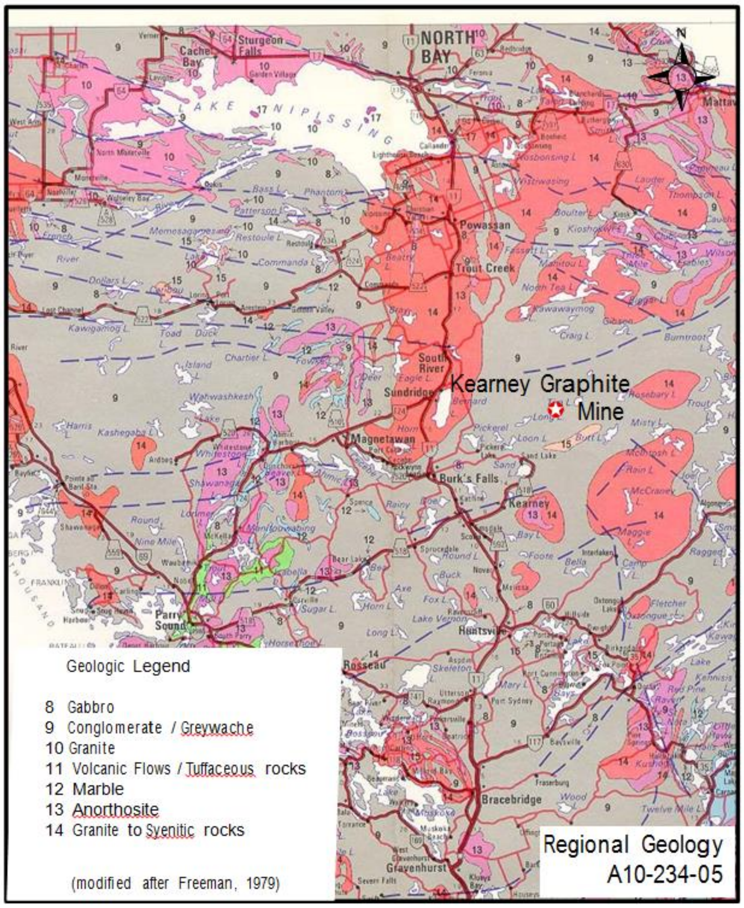


Figure 7-1: Kearney Regional Geology (Hawkins 2010)

7.2 Property Geology

The McGuire Zone (as modelled) is up to 300 m wide (150 true thickness) and extends for approximately 1300 m in strike length. The overall trends of the deposits are N40^{0}E for McGuire and N30^{0}E for Sheehan. Both zones dip approximately 25^0 to the Southeast.

Mineralization within the Sheehan zone is fairly consistent, while the southwest half of the McGuire zone appears to be split into two upper and lower limbs, separated by a 50m thick zone of weakly mineralized and barren material. A portion of the McGuire deposit to the Northeast comes to surface under McGuire Lake.

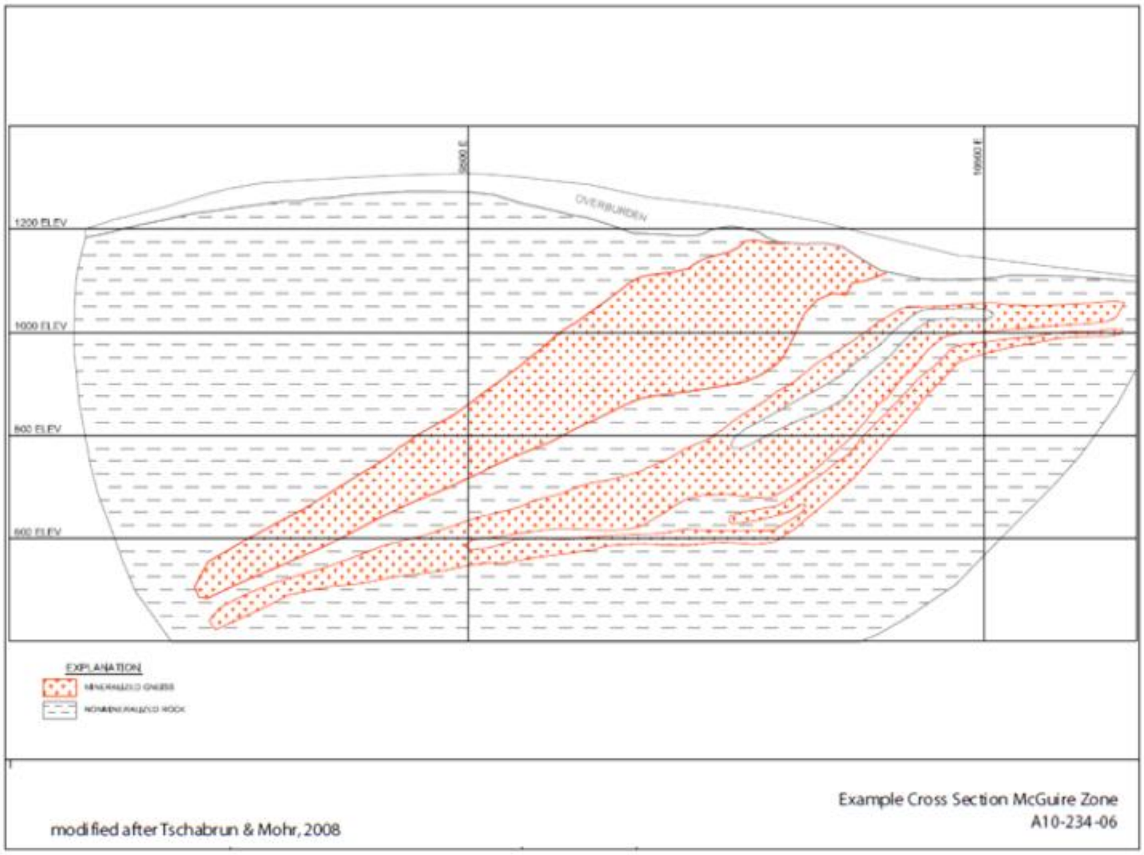


Figure 7-2: Kearney Property Geology (Hawkins 2010)

The mineralogy of the graphitic unit is comprised of up to 15% graphite, 50 to 80% quartz, up to10% biotite, and varying amounts of feldspars. Garnet may be present, but is usually associated within units deficient in graphite. Sulfides, minor amounts of pyrite and pyrrhotite, are commonly associated with graphite mineralization and tend to be oxidized. Graphitic zones tend to be attenuated due to deformation, making them long relative to their average widths. Folding is also evident on a macroscopic to megascopic scale, and foliation is defined by the alignment of graphite and biotite flakes, and lineation is defined by quartz rods and feldspathic ribbons (Garland, 1991). Both brittle and ductile deformation is evident throughout the deposits. The deposits have been subjected to several deformation events resulting in the local thickening of the graphitic unit due to folding.

The main lithological units of the McGuire and Sheehan Zones are described as graphite-quartz schist (Garland, 1991) and subordinate feldspar-graphite-quartz schist, garnet-horneblende-quartzo-feldspathic gneiss, local blocks of non-textured mafic rock, and minor occurrences of pegmatite. Graphite content is usually 1 to 2 %, disseminated in nature, and is hosted in the graphite-quartz-feldspar schist containing 5 to 7 % biotite and phlogopite. Approximately 90 % of the graphite grains are in contact or inter-grown with the mica. The remaining 10 % of the graphite is associated with pyrite and pyrrhotite, with minor amounts occurring as inclusions in quartz, feldspar, and pyroxene. The average flake diameter is 0.5 to 0.7 mm (25 to 35 mesh) with a few crystals exceeding 1 mm and rare crystals exceeding 2 mm.

In 1991, thirteen samples were submitted by the previous owner of the property at that time (Cal Graphite) for mineralogical examination (Petruk et al, 1992), where they were scanned using an electron microprobe. The graphite was reported as 70% +48 mesh (0.35 mm). The graphite was considered very pure with 86.8% of the flakes free of impurities, 12.1% containing less than 10% impurities, and 1.1% containing more than 10% impurities.

8.0 DEPOSIT TYPES

Graphite deposits of potentially economic interest in Canada dominantly occur within the Grenville Province. Mineralization occurs as disseminated crystalline flake and in veins. Most deposits of flake graphite are associated with graphitic gneiss or crystalline limestone that has been subjected to severe metamorphism associated with tectonic events (Dumont, 1996).

The main lithology hosting the graphite mineralization on the Kearney Graphite Property is a graphite-quartz-feldspar schist which hosts the McGuire and Sheehan disseminated crystalline flake graphite deposits. The deposits are hosted within the Kiosk Domain of the lowermost thrust sheet of the CGB.

9.0 EXPLORATION

9.1 Historical Surveys and Investigations

The site has undergone exploration at various times since 1879. For more information refer to Section 6.1 or the Preliminary Assessment of the Kearney Graphite Mine completed by Paul A. Hawkins & Associates Ltd. in 2010.

9.2 2013 Geophysical Program

In the first quarter of 2013 Ontario Graphite contracted JVX to conduct a Spectral IP/Resistivity survey on the Kearney property, specifically in the area of the McGuire deposit. The main intent of the survey was to assist in targeting for the planned 2013 exploration diamond drill campaign.

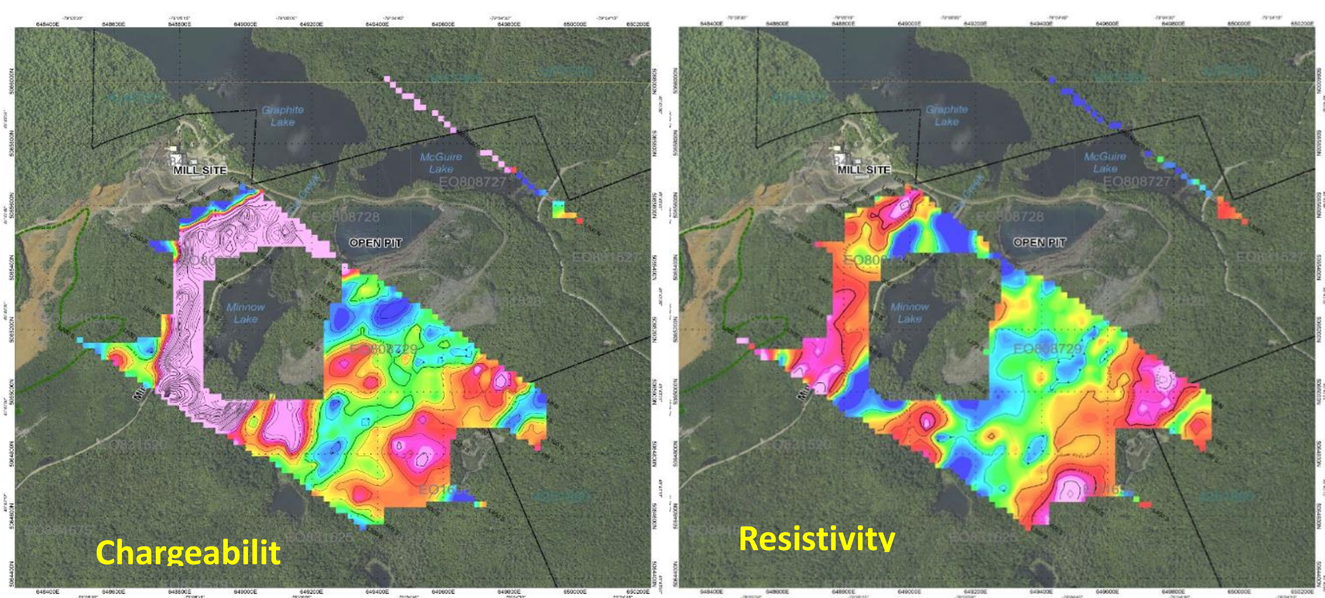


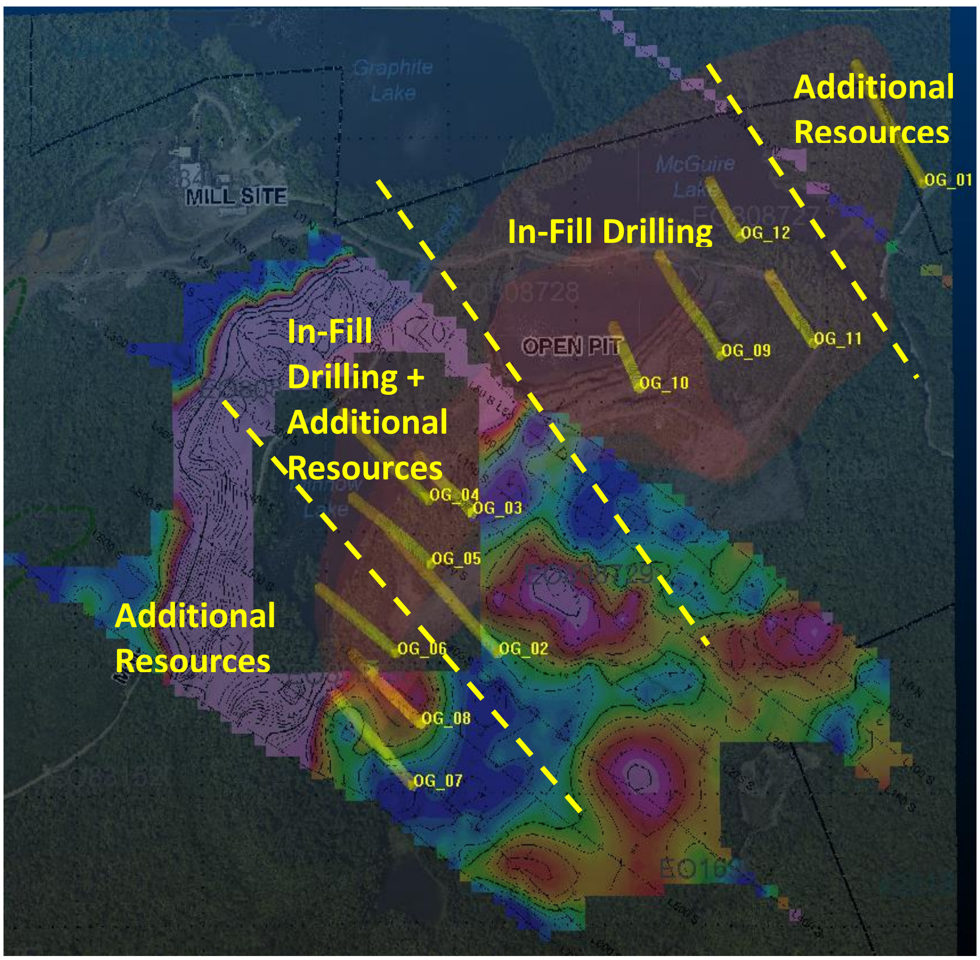
Figure 9-1: Kearney JVX Geophysical Survey

Figure 9-1 illustrates the interpreted Chargeability and Resistivity results of the survey, and shows the open-ended nature of both ends (northeast and southwest) of the known McGuire deposit.

9.3 2013 Diamond Drill Program

Major Drilling was contracted by Ontario Graphite to complete 12 diamond drill holes on the McGuire zone to both in-fill existing resource areas of sparser data density and extend resources indicated by geophysical testing.

Figure 9-2 illustrates the location of the twelve holes drilled in 2013, relative to the geophysical survey results, as well as the existing open pit. Four of the holes (OG_01, 06, 07, and 08) covered areas which resulted in additional resources, four holes (OG-02, 03, 04, and 05) resulted in a combination of confirmation in-fill drilling and additional resources, and four holes (OG-09, 10, 11, and 12) increased confidence in the resource through in-fill drilling.



. Figure 9-2: McGuire Zone 2013 Diamond Drill Program

Previous drilling in many cases did not extend deep enough into the footwall, so planning of the 2013 drilling ensured penetration into the lowest mineralization indicated by previous work.

Golder qualified geological carried out all core logging and sampling for the 2013 drill program, and supervised the core splitting.

9.4 Interpretation of Exploration Information

The 2013 drill program was successful in meeting its objectives of both filling adding confidence data to some widely spaced areas around the existing drilling and defining additional resources in the north-east and south-west extents of the McGuire deposit. The McGuire zone remains open both along strike and at depth. Exploration in both directions along strike to potentially expand open pit resources is suggested, as well as additional in-fill drilling to further improve classification of current resources. Since potential underground mining will be well into the future of the project, deeper drilling in the McGuire zone to potentially expand resources down-dip would not be prudent at this time, in Golder's opinion.

Additional geophysical work in the northeast and southwest directions prior to drilling in the McGuire zone should be considered.

10.0 DRILLING

10.1 Type and Extent

A summary of the drill holes covering the McGuire and Sheehan deposits is presented in Table 10-1. Not all of the 270 holes noted here included geological and assay information, and therefore not all were included in the 240 holes used in the Mineral Resource estimate.

Table 10–1: Summary of Historical Drilling

Date	Company	No. Of Holes	Total Length (m)	Size
1979-1981	Dravo Corporation/Vesuvius Crucible	20	1,161	?
1985	Cal Graphite	22	1,666	?
1986	Cal Graphite	34	4,799	?
1988	Cal Graphite	53	8,784	BQ
1992	Cal Graphite	8	974	BQ
1993	Applied Carbon	121	14,549	BQ
2013	Ontario Graphite	12	3,234	NQ

Drill hole collar locations for the McGuire and Sheehan zones, superimposed on the modelled mineralized envelopes are shown in Figures 10-1 and 10-2 respectively. The blue collars in Figure 10-1 indicate the holes drilled in 2013 by Ontario Graphite.

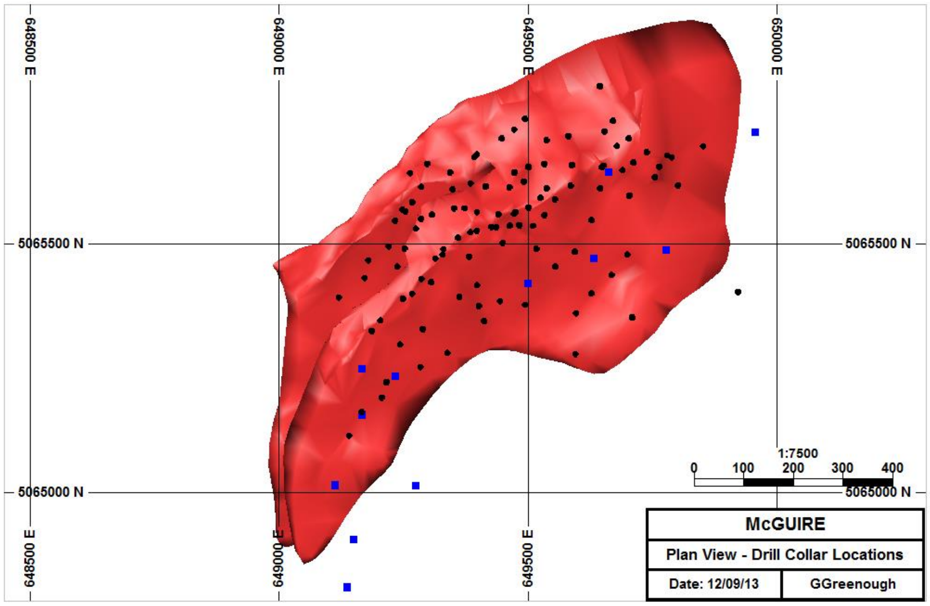


Figure 10-1: McGuire Drill Collar Locations

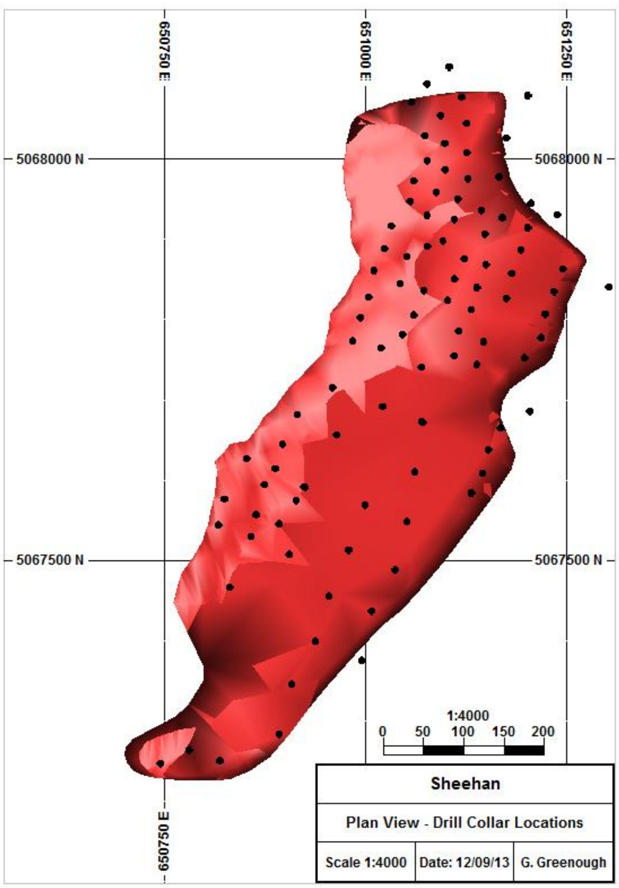


Figure 10-2: Sheehan Drill Collar Locations

10.2 Procedures

Drilling was carried out by Major Drilling limited on a 24 hour basis. Core was emptied from the core barrel directly into the core box. Wooden depth markers were placed at the end of each run. When a core box was full it was securely taped shut with the hole number, box number and depths (from & to) marked on the outside of the box. Core was transported from the drill site to the core logging building at the end of each shift via an all-terrain vehicle (ATV) and half ton truck.

10.2.1 Borehole Nomenclature

Each hole was assigned a unique identifier. Drillhole names were 4 characters long: the first two characters were the project identifier (in this case it represented the company Ontario Graphite) and the last two numbers corresponded to the drillhole number. The drillhole number was sequential for the entire project, and the sequence did not vary, even when switching between prospects (i.e. OG-01 to OG-12).

10.2.2 Drill Hole Set-up and Operation

All planned drill hole locations were field located via a hand held Gps (global positioning satellite) unit by a Ontario Graphite contract geologist and clearly marked with the drillhole identifier. The drillers reviewed the site prior to setting up to determine suitability. If the hole location was deemed unsuitable to safe operation the contract geologist and driller moved the location within a 50 m radius. This new location was field measured with a hand held Gps unit and recorded. At each drill hole location the contract geologist would supervise the proper alignment of the drill in accordance to the planned layout. During the coring of each hole a downhole survey measurement was taken via a Reflex EZ-Shot initially between the 10-20 m interval and thereupon 100m intervals afterwards. Upon completion of all the drilling, Tulloch engineering was contracted to survey the collar location as well as the collar azimuth and dip. The latter was achieved via the placement of a reference pipe into the drill hole. The overall length of the reference pipe was approximately three meters and had an outer diameter of 2-3/4". A reference mark had been placed approximately 1.8 m from the top end of pipe to serve as a stop point for insertion into collar, the actual distance between measured points on the pipe was generally 1.55m. Doing this allowed for at least 1.2m of pipe to be inserted into the collar to ensure a reasonable fitting of the pipe to match orientation of the collar, and allow sufficient length outside the collar to allow reasonable measurement of the azimuth and dip of the reference pipe.

10.2.3 Core Handling and Logging

Core boxes were marked as per standard instructions to include the following information: drillhole identifier, initial and final depth and core box number. At the drill rig, a field technician fitted the entire core and clearly marked a centreline and fractures related to core handling by the drill crew. All logging (geotechnical and geological) personnel utilized a site-specific hierarchical coding system designed to ensure continuity of the logging parameters for the duration of the exploration programs, helping to maintain order, quality and completeness of data collection. Prior to logging, the geologist marked all geotechnical structures using colours and letters to clearly identify different features.

All core was logged and photographed, and bulk density was measured prior to cutting and sampling. The site geologist was required to:

- complete the collar data sheet with final collar location, elevation and orientation;

- complete both standard (entire hole) and detailed (20 metres above the mineralized zone and 30 metres below) geotechnical logging of hole;
- and to complete the geological logging of the hole in addition to capturing the geological features that crosscut the major rock type boundaries, for example, weathering, zones of alteration, mineralization and structural features. The “From” and “To“ depths were recorded for each of these items on separate columns in the log sheets.

10.2.4 Core Photographing

Following logging and prior to sampling, digital photographs were taken of each core box in consecutive order. Care was taken to ensure that geological/geotechnical features (Rock Quality Data (RQD), Total Core Recovery (TCR), Joints and Fractures) were adequately captured.

10.3 Summary and Interpretation of Results

The Ontario Graphite 2013 diamond drill program has in Golder’s opinion achieved the desired results of confirming the existing graphite mineralization and expanding mineralization, as indicated by the geophysical work described in Section 9 of this report.

Drill hole layouts, logging and sampling were supervised by Golder senior personnel and followed industry best practice procedures.

Appendix B contains the list of drill holes used in the resource estimate for both McGuire and Sheehan zones. The list contains drill hole collar locations, and the resource model intervals with average Cg%.

11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

11.1 Field Sample Preparation

11.1.1 Methodology

Significant previous exploration campaigns on the property have been completed by several companies. The authors of this report believe that the sampling method and approach employed during these exploration programs would have been consistent with industry practices at the respective times. The issuer has not completed any sampling on the property except as documented in this report.

Past drilling on the property was largely BQ sized with a core size of 3.64 cm. (1.432 inches). Core was split with samples being a maximum 3.048 m (10 feet) in length. Sampling did not cross geological boundaries which resulted is some samples being a minimum of 0.3 m (1 foot) in length. Core was split using a table mounted hydraulic splitter. Samples were bagged and sent to an outside laboratory. Standard industry practices appear to have been followed.

11.1.2 Quality Analysis and Quality Control (QA/QC)

During the 2013 drill program, the geological loggers were required to follow a set of QA/QC guidelines during the core sampling. This included taking coarse reject duplicate, blank, and duplicate samples. These tests are to ensure the validity of the lab results. They are designed to ensure that the lab equipment has been properly cleaned and maintained between sample analyses.

Coarse reject duplicates were identified once out of every five samples, resulting in approximately 20% of the total samples taken. A coarse reject duplicate is shipped as a regular core sample; however, any remaining aggregate from the initial sampling procedure is saved and then sent to a second laboratory for an additional assessment. The two assays will be compared.

Blank samples were inserted once every 20 samples resulting in approximately 5% of all samples taken. A blank sample was not obtained from the core being analyzed, but instead from a sample of silica sand, known to contain no graphitic carbon. When the lab returns the sample assays, this known value was compared to the lab results.

Duplicate samples were designated once out of every 25 samples, or approximately 4% of all samples. A duplicate is a sample that has been cut twice so that two equal samples of the same core can be tested. The duplicates should yield very similar compositions and were compared once the lab results returned.

11.2 Laboratory Preparation Procedures and Analysis

11.2.1 Historical Assays

The issuer suspects that some of the early assays prior to 1992 of graphite were higher than actual values, perhaps because of inadequate drying of the samples during sample preparation. A more reliable standardized method of sample preparation was adopted in 1993. At that time there was no routine usage of known standards, blanks or duplicates as now mandated by NI43-101. There was no special security in the procedure. The evenly disseminated mineralization appears to produce consistent assays in successive samples which tend to be their own reliability checks. The low-value industrial mineral did not require further checking at the time, and security was not considered by the previous owners to be necessary. Since 1993, assaying for past owners of the property was completed at Chauncey Assay Laboratories Ltd. in Toronto, which is no longer in business. The methods did meet industry standards of the day for both quality control and security from tampering by any employee, officer, director or associate of the company.

The standardized analytical procedure developed in 1993 was as follows:

1. Samples are crushed and riffled to produce a representative split.
2. This is pulverized to minus 200 mesh.
3. From this subsample, a 2.0 g split is weighed, boiled with 30 ml of concentrated nitric acid for one hour.
4. It is then cooled, washed and filtered through a prepared Gooch crucible, dried at 375° for one hour, cooled in a desiccator, and weighed.
5. The crucible is then heated in a furnace at 1,000°C for two hours to burn off the carbon.
6. The difference in weight is the reported carbon assay.

This procedure likely addressed the issue of moisture and the presence of sulfides. The use of only 1000˚C may have minimized the loss of other volatiles. This procedure was likely within industry standards of the day. The procedure, given current technology and lack of routine usage of known standards, blanks or duplicates, required verification for both the pre-1992 and post-1992 data bases.

11.2.2 2013 Ontario Graphite Assays (AGAT Labs)

A total of 745 samples (including blanks) of the 2013 Ontario Graphite drill program were submitted to AGAT Labs for Graphitic Carbon assay. The procedure described by AGAT Labs as 'Double Loss of Ignition in High Carbon Samples' is outlined as follows:

- Prepared samples are pre-weighed and placed in a ceramic crucible is digested in HCl (to remove carbonates), 'ashed' at 450°C to remove organic carbon;
- Sample is then weighed;
- This partly roasted sample is then heated in a muffle furnace (900°C) for one hour. Samples are then weighed again;
- Blanks, sample replicates, duplicates, and internal reference materials (geochemical standards) are routinely used as part of AGAT Laboratories' Quality Assurance Program;
- Four place analytical balances are used in the analysis.

11.2.3 Bulk Density Determination

A total of 350 samples of the 2013 Ontario Graphite drill program were submitted to AGAT Labs for Specific Gravity (SG) determination. The procedure outlined by AGAT Labs is as follows:

- Based on ASTM D5550-06, prepared samples are placed into a sample holder cup where UHP He is used as a displacing fluid;
- Density is determined using Boyle's Law from the displacement of He from each sample;
- Quantachrome Pentapyc 5200e instruments are used in the analysis;
- Sample replicates, duplicates, blanks (determined from an empty sample holder cup) and reference materials (an object with a known volume) are routinely used as part of AGAT Laboratories Quality Assurance Program.

11.3 Quality Control Measures and Check Assays

11.3.1 AGAT Labs

Analysis results of the '1 in 20' blanks and '1 in 25' duplicates submitted to AGAT Labs are shown in Figures 11-1 and 11-2 below. Correlation of the duplicates (Figure 11-2) is very good, and only one of the blanks was significantly outside one standard deviation (Figure 11-1).

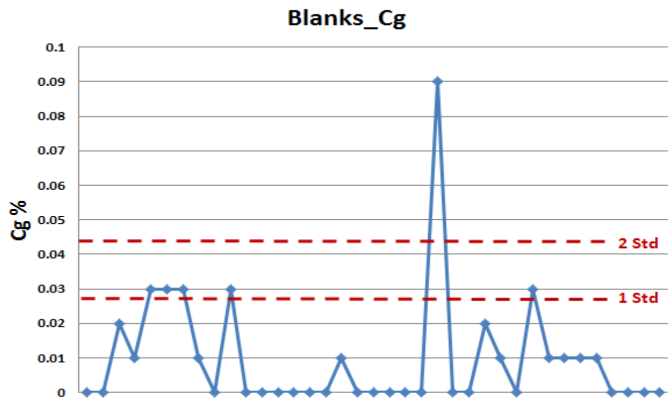


Figure 11-1: Blank Assays

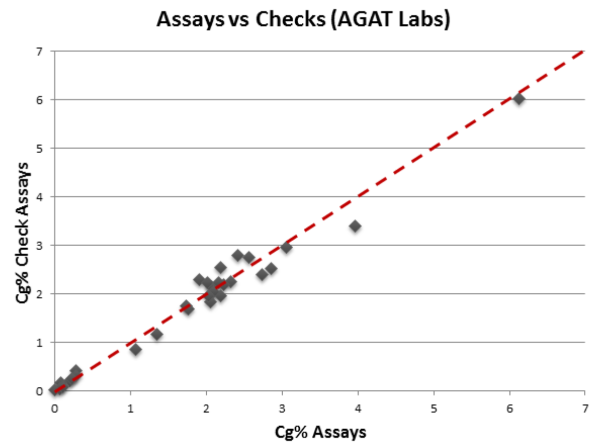


Figure 11-2: Check Assays (Duplicates)

11.3.2 2013 Ontario Graphite Check Assays (SGS Lakefield)

Part of the QA/QC procedures on the 2013 drill campaign included 148 coarse reject check assays by SGS Lakefield laboratory. The procedure described by SGS as 'Combustion-Infrared Detection' is outlined as follows:

- Samples are crushed and pulverized according to default preparation procedures;
- A weighed sample is roasted in an oven at 550^0 C for 1 hour;
- The sample is then mixed with nitric acid and de-ionized water, digested and filtered;
- The filtered residue is mixed with metal accelerators and placed in the LECO IR combustion system;
- The residue carbon is taken as graphitic carbon (high grade carbon samples are wetted with methanol prior to adding acid).

Analysis of the results and the QQ plot in Figure 12-2 indicate very good correlation, with only one anomalous result. A standard deviation plot of the AGAT assays vs. the SGS check assays, also in Figure 12-2, shows only a small percentage outside one standard deviation, and only two outside two standard deviations.

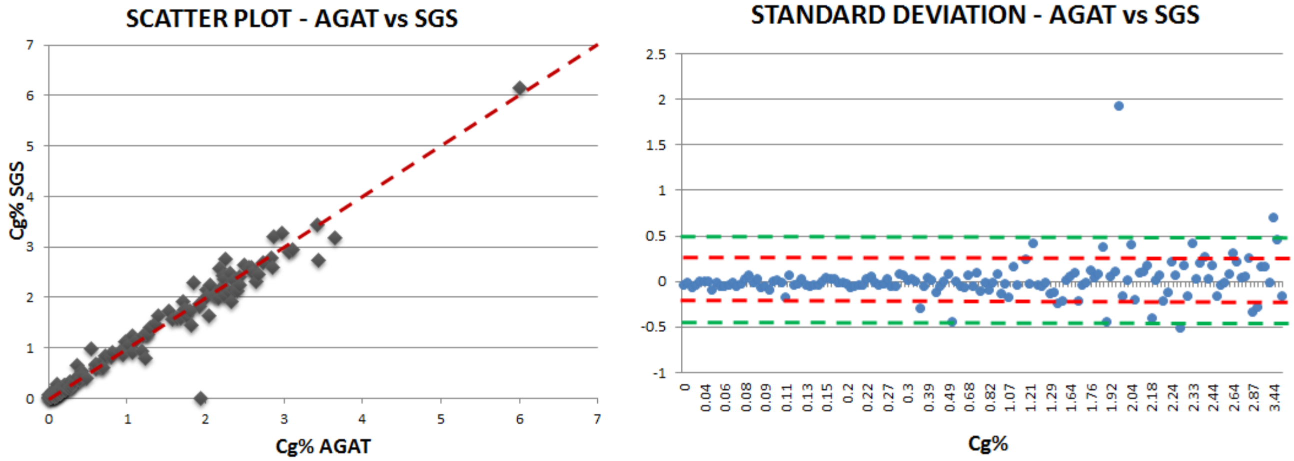


Figure 11-3: QQ and Standard Deviation Plots of Independent Check Assays

11.4 Summary of Results

All sample preparation, analytical procedures and security measures taken by Ontario Graphite for the 2013 drill program were up to industry best practice standards. The QA/QC procedures used by Ontario Graphite were sufficient to prevent the entry of large errors into the assay database and to demonstrate that the sampling and analytical errors are small with respect to the geological variance.

It is Golder's opinion that the assay database is of suitable quality to support an indicated or inferred resource, but there is insufficient documentation of Quality Assurance and Quality Control for the historical data to support a measured resource.

12.0 DATA VERIFICATION

12.1 Hawkins 2010

Hawkins describes the data verification completed by Joerg Kleinboeck in November and December of 2009, in the paper titled Preliminary Assessment Kearney Graphite Mine, Ontario Graphite Ltd., Butt Township, Nipissing District, Kearney, Ontario (Hawkins, Kleinboeck, 2010). Kleinboeck submitted quarter core samples from holes 88-52 (McGuire) and VS-93-25 (Sheehan) for re-assay as a validation check of the historical assays. A previously un-sampled hole from the Sheehan property (VS-93-106) was split and also submitted for assay as a check of historical assays of adjacent holes. A hydraulic core splitter was used to split the core samples and was cleaned after each interval.

A total of 53 samples were submitted for carbon analysis. Thirty-four samples were re-sampled from holes 88-52 and VS-93-25 and 19 new samples were taken from hole VS-93-106. All samples were submitted to the ALS Chemex Laboratories processing facility in Sudbury, ON where they were prepared for analysis and the sent to their main laboratory in Vancouver, B.C. for analysis. The samples were analyzed using the Leco procedure which is described in detail in the Hawkins 2010 report.

Re-assays from hole 88-52 (McGuire) were found to be all within ±20% of the original values, whereas there was a lot more variability in hole VS-93-25 (Sheehan) where assays varied ±50% from the original values. Kleinboeck cites the poor condition of the remaining core as a possible cause for the high variability of the re-assay results in hole VS-93-25 and noted that the core was heavily oxidized in some intervals. Re-assay values, on average, trended 17% lower than the original values which Kleinboeck believed could be a minor bias caused by the presence of volatiles such as moisture, sulphides and carbonate.

Assay results from hole VS-93-106 were compared to adjacent holes VS-93-97 and VS-93-98 and were found to be reasonably consistent.

For more details of the data verification completed in 2009, the reader is referred to the Preliminary Assessment Kearney Graphite Mine, Ontario Graphite Ltd., Butt Township, Nipissing District, Kearney, Ontario (Hawkins, Kleinboeck, 2010).

12.2 Golder 2013

12.2.1 Database Verification

12.2.1.1 Assays

Golder compared graphitic carbon assays from the supplied drill hole database to all assay values from the certificates supplied by Ontario Graphite for the McGuire and Sheehan properties. Certificates were not available for many of the historical samples from the McGuire property but they were available for all of the 2013 samples as well as all of the samples from the Sheehan property. Specific gravity measurements were also validated for all of the available 2013 McGuire samples. A summary of the data validation completed is listed in Table 12-1.

Table 12–1: Summary of Kearney Assay Data Validation

Property	# of Holes	# of Samples	# of Errors	% of Errors
McGuire (Historical)	18	394	7	1.80%
McGuire (2013)	12	677	0	0.00%
Sheehan	101	1671	1	0.06%
Totals	**131**	**2742**	**8**	**0.29%**

The validated samples make up approximately 26.5% of the sample data for McGuire property and 100% for Sheehan. Validation checks could not be completed on the remainder of the McGuire historical assay data as the original assay certificates were not available. A total of 8 errors were identified in the McGuire and Sheehan databases as summarized in Table 12-2. These errors were not corrected prior to estimation but they are not expected to have a material impact on the resource estimate. All errors are recommended to be fixed prior to the next iteration of the resource model.

Table 12–2: Summary of Data Validation Errors

Property	Drillhole	Sample Number	Depth to	Depth From	Assay from Table	Assay From Certificate
McGuire	8831	12298	221	225	3.522	3.822
McGuire	8845	11893-11904	445	555	0.000	Assays exist for 8 subintervals throughout
McGuire	8846	12003	531.8	540.6	3.329	0.206
McGuire	8848	12066	423.7	425.5	2.399	2.397
McGuire	8849	12202	370.3	375.4	4.853	4.833
McGuire	8850	12240	79.9	87.6	3.600	3.593
McGuire	8851	12280	357	361.4	0.261	0.260
Sheehan	S-93-10	n/a	124.968	128.016	2.14	2.05

12.2.1.2 Collars

The drill hole collar locations and orientations for the 12 McGuire holes drilled in 2013 were surveyed by Tulloch Engineering of Huntsville Ontario. Accurate collar coordinates were located with high resolutions GPS and hole collar orientations were determined surveying reference rods inserted into the hole collars with a Total Station survey instrument.

The collar orientation results were compared to the down-hole surveys for the 2013 drilling. In all but 2 of the holes agreement was close, and in the 2 holes where the first down-hole survey readings were questionable they were replaced with the Tulloch survey results.

12.2.1.3 Down Hole Surveys

Down-hole surveys for the 2013 McGuire drill holes were compared to the database values and no errors were found. Down-hole survey data was not available for validation of the historical McGuire and Sheehan drilling.

12.2.2 Hole Comparisons

Golder completed a comparison of graphitic carbon assays between the new 2013 holes (12 new holes) and the closest historical drill holes from previous drilling campaigns, in order to determine if there was any potential bias present in the data. All of the new holes are located on the McGuire property. None of the new holes were close enough to historical holes to be considered “twin holes”, therefore, up to three of the closest historical holes were compared to each of the new holes in areas where both sets of holes exist. A Total of 6 new holes were chosen for comparison to historical data and the remaining holes were not close enough to existing holes to be used. Where multiple holes were selected, the grades were weight averaged by length for the entire length of mineralization. The assay comparisons were all within ±13% to the closest historical holes (see Table 12-3).

Table 12–3: Hole Comparisons

2013 Hole	Length	Avg CG Grade	Closest Historical Holes	Avg Mineralized Length	Avg %CG Grade	% Variance
OG_03 (Top)	60.0	1.52	8615C	57.8	1.37	11%
OG_03 (Bottom)	40.2	2.19	883	50.6	2.05	7%
OG_05	63.4	1.46	8617C	65.4	1.35	8%
OG_09	120.0	2.16	8818, 8856, 8853	84.9	2.29	-6%
OG_10	80.3	2.14	8856, 8846, 8852	85.4	2.33	-8%
OG_11	114.0	1.82	8854	104.5	2.10	-13%
OG_12	84.0	1.62	8620L, 8621L, 8830	82.8	1.56	4%

Variability appears to be higher in holes OG_03, 04, 05, & 11 which, is likely due to the fact that they are exploration holes and there is only one historical hole available for comparison for each of these new holes. Holes OG_09, 10 & 12 have lower variances as assays from three neighbouring holes were available for each hole comparison. Differences in the orientation of the new holes compared to the historical holes could have an effect on the comparison results. The new holes are all oriented with azimuths ranging from between 285° to 325° with dips ranging from -46° to -76°, whereas all of the historical drilling is vertical. The comparisons between 2013 holes and historical drilling are close enough to be considered reasonable for resources classified as indicated or lower.

12.2.3 QQ Plots

A QQ plot was generated to compare the graphitic carbon assay populations between the new 2013 drill holes and the historical drill hole data, in order to determine the presence of a bias in either of the sample populations. The same set of holes selected for the hole comparisons were used to generate the QQ plots. The QQ plot indicates that the historical drill data may be biased a little high with respect to the 2013 data as shown in Figure 12-1.

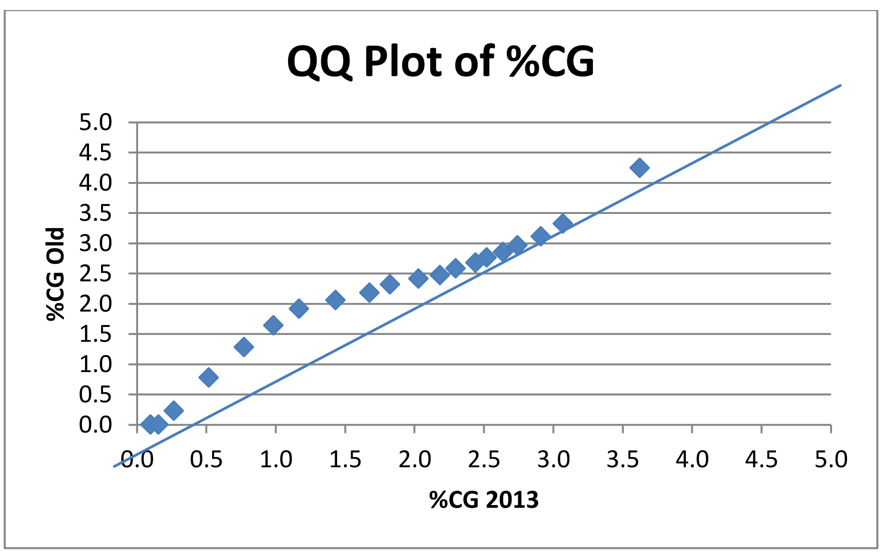


Figure 12-1: QQ Plot Comparing 2013 and Historical Drill Hole Populations

On average, the historical assay values are approximately 15% higher than the 2013 assays, with the biggest differences occurring between the 0.5% and 2.0% grade range. The differences between the two populations may be partially attributed the different orientation of the new holes, as discussed previously, as well as the fact that none of the new holes are close enough to existing holes to be considered twin holes. Holes chosen for comparison are, on average, approximately 40m away from the new holes, with some being up to 60m away. In some cases the new drilling is deeper than the neighbouring holes making direct comparisons difficult. Golder has concluded that the differences noted between the 2013 and historical data are unlikely to have a material impact on the resource estimate and that the risk is acceptable given the indicated and inferred resource classifications.

12.2.4 Site Visit

Site visits to the Kearney project site were carried out by G. Greenough, qualified person for this Mineral Resource estimate and Technical Report, on February 7, 2013, and again April 4, 2013. The visits to the Kearney property included:

- an inspection of the McGuire zone mine property, including exposed mineralized faces of the historically mined open pit;
- inspection of planned and actual 2013 drill collar locations, including handheld Gps location check of the collar coordinates for completed holes;
- observation of logging, sampling and QA/QC procedures for diamond drill holes from the 2013 drill program;
- review of the Kearney property geological and mineralization characteristics with geological staff (contracted by Ontario Graphite) with previous experience on the property, and;
- collection and review of all available data required for the Mineral Resource estimate.

Due to access difficulties and weather conditions at the time of the site visits, the Sheehan zone was not visited.

Drilling Methods

Details of the drilling procedures for the Ontario Graphite 2013 NQ drill program are provided in Section 10.2. One of the two contract drill rigs (Major Drilling) was visited, and found to be operating safely and efficiently. Core recovery was good, as was the drill crew's boxing and tagging of the core.

Security of the drill core was very good, as it was picked up on a frequent basis (at once least daily) under the supervision of Golder on-site staff and transported by truck to the lockable on-site core logging facility.

Drill Hole Collars

Actual collar locations for OG-02 and OG-08 were checked by handheld GPS and found to be as noted in the drill reports, and close to the planned layout coordinates. Drill pad locations for the next couple of planned holes were also checked and found to be close to layout.

Final hole locations and orientations were accurately surveyed by Tulloch Engineering and used in the final Mineral Resource estimate for McGuire.

Geological Logging and Sampling

Observation of the geological logging and sampling procedures revealed no significant issues. Identification of the disseminated graphite in core where biotite is abundant was sometimes difficult. Therefore the procedure to sample all material between known barren hanging wall and footwall rocks was warranted.

All geological and geotechnical logging was carried out by Golder geologists, and were observed to be following the procedures defined by Golder Senior Mineral Resource and Geotechnical staff.

All sampled intersections were split with a diamond saw, and with the core being very competent for the most part, no sample bias as a result of the splitting is expected.

12.2.5 Golder Opinion

After completing the data validation, hole comparisons, QQ plot analysis, and observations during the site visit, as well as reviewing the data verification completed by Kleinboeck in 2009, Golder is of the opinion that the underlying data is of sufficient quality to accurately support this resource estimate.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The Mineral Processing and Metallurgical testing section was previously summarized by Hawkins in 2010 as part of their preliminary assessment report titled Preliminary Assessment Kearney Graphite Mine, Ontario Graphite Ltd., Butt Township, Nipissing District, Kearney, Ontario (Hawkins, Kleinboeck, 2010). Golder reviewed this section and elected to include portions of it here, along with updated discussion on more recent work.

As the result of test work conducted (Petruk et al, 1992 & Lakefield, 1993), suggested changes to existing circuit were only partially modified in 1993 but failed to bring the operation fully up to 3,000 tpd. The further recommendations had the objective of maximizing the amount of +50 mesh product with a carbon content of 95% because of the high market price for that product at that time.

A report (Lakefield, 1993) detailed the results of test work on 76 tonnes of mined graphite sample from the McGuire Zone. This testing demonstrated the amenability of the ore to semi-autogenous grinding. A SAG mill was installed in December 1993. As previously illustrated in Table 6, there was a dramatic improvement in recovery in May 1994 (to 87%), the last full month recorded, compared to recovery of 80% or less in previous months. However, throughput was still well below design capacity of 80,000 tonnes per month, caused largely by a bottleneck in the drying section. This is an area targeted for improvement in this report.

New testing data (RDI – Resource Development Inc. – October 5, 2011) regarding improvements in the rougher flotation, as well as other additional design changes and efficiency improvement are discussed in detail below.

While it is still desirable to produce a +50 mesh product, the market for +80 mesh is such that optimization to produce +80 mesh graphite is considered as desirable as maximizing the +50 mesh product. It is therefore appropriate to consider other modifications in the treatment plant to overcome deficiencies identified during former operations, and to optimize the circuit for current market conditions. Micronizing some of the -100 mesh product is highly recommended.

13.1 Crushing and Grinding

Mineralogical and liberation studies (Petruk et al, 1992) indicated an optimum crush size of approximately 90% -16 mesh to maximize the percentage of fully liberated +50 mesh graphite. It was found that ball milling -2" feed resulted in somewhat higher liberation of coarse material than milling -6" feed. Crushing and grinding to approximately 90% - 50 mesh or 90% -100 mesh resulted in a significant increase in production of finer sizes, but greatly increased losses of graphite to tailings.

Semi-autogenous grinding test work (Lakefield, 1993) utilized feed material containing approximately 10% -14 mesh without any processing. Optimum crushing was determined to be minus 6 inches because plus 6 inch material was difficult to break in the mill. It was determined that the work load to crush or mill to a smaller size of say 2 inches would be about the same. However it was not determined if significant -14 mesh material is produced by crushing in any size range, and if so, whether this material could be added to the 10% already present, and whether the total -14 mesh fraction could then be circuited through a unit cell, for example, by-passing attrition in the grinding mill.

The results of the Canmet and Lakefield work indicate that an optimum initial crush size in the - 6" to +2" size range as feed for the SAG mill may be most suitable. Further investigation is warranted to determine the optimum size and the potential to increase amounts and grade of the highest value products by introducing a unit cell. Additional work on optimization of the ball mill circuit appears warranted.

The proposed circuit includes the existing 48 x 60 inch jaw-crusher but will dispense with secondary crushing. A rock-breaker will be added to reduce boulders in the feed hopper to a size that can be conveyed to the crusher. A hydraulic toggle will be fitted to the crusher so that a size of less than 6 inches for feed to the SAG mill may be achieved and optimization considered. The removal of a conveyor belt from the dump hopper to the jaw, and the installation of a 200 tonne storage bin with gravity/vibratory feed system to a grizzly screen are being incorporated to the design change. This change will represent the elimination of a material handling issue of belt conveyance of run of mine shot rock directly to the jaw crusher, a process efficiency improvement with only the grizzly over size rock reporting to the jaw resulting, and grizzly undersize reporting to the SAG mill feed stock pile. This will have a significant reduction in jaw crusher wear and a large increase in primary crushing throughput reducing operating hours and resulting in a process cost savings.

The new plant lay out as shown on Figure 13-1 uses existing conveyor belts from the jaw-crusher to a new crushed ore pile. Below the ore pile, a feed tunnel supplies a new apron feeder (which replaces an old syntron feeder) from where the ore goes by conveyors to the SAG mill. The new plant lay out eliminates the need for an additional front end loader.

A new 18 x 9 foot SAG mill is required to replace the former mill. The new mill was constructed and engineered to tight specifications in order to fit the existing foundations. The mill will have 2 new motors of 800 each. The plan is to add water to achieve 70 to 80% solids, with 7-10 ball charging to maximize grinding.

It is planned to separate outflow from the SAG mill at 14 to 16 mesh, via a wet screen to recirculating the oversize back into the SAG mill as contemplated in the Lakefield report. To better achieve this, it is planned to replace the existing screen with a more efficient and multiple wet screens with water spray to enhance separation and to increase the water content for flotation. The wet screening will have excess screening capacity to increase plant availability during screen changes and repairs. The addition of a conventional rougher cell, belt filter, and high efficiency drying system are also depicted in the drawing below and discussed in further detail in subsequent portions of this section.

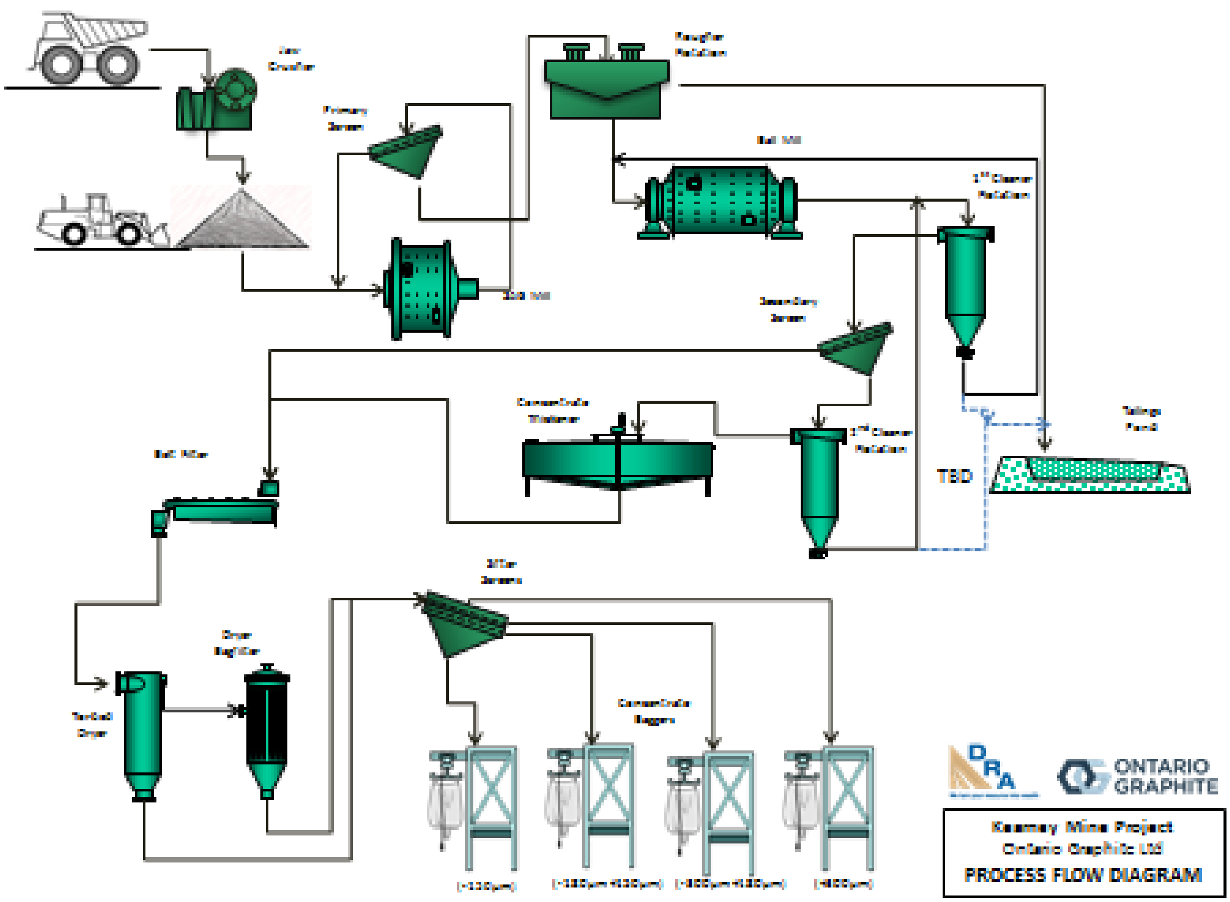


Figure 13-1: Kearney Mill Flow Sheet (Hawkins, 2010)

13.2 Flotation Test

The existing column flotation has proved itself for cleaning stages and the columns will be retained with minor modifications of adding more efficient air/water bubble generation as opposed to the rubber designed spargers previously used. Flotation is performed at pulp densities of approximately 30-50% solids. Rougher flotation of the minus 16 mesh material is expected to recover 90% of concentrate grading approximately 25% carbon, with the addition of a bank of conventional cells. Recent testing with RDI (Deepak Malhotra, Resource Development Inc – October 5, 2011) has verified that approximately 90% of the graphite will float in a flash flotation environment will a 3 minute retention time, with feed size over 66% coarser than 50 mesh. The testing confirms that finer grinding is not required to achieve liberation and coarse graphite recovery at this step.

The existing flotation circuit consists of two rougher columns and two cleaner columns. The two rougher columns will be replaced with the conventional bank of flotation cells with over flow reporting into an 8'x 12' ball mill that is charged with ceramic slugs. This will clean or "polish" the rougher concentrate. A high percentage of flakes are liberated at this stage, however some flakes retain some quartz and need to be cleaned using the ceramics. The ball mill discharge is pumped to the first cleaner column. The overflow from the first cleaner goes to a 60 mesh wet screen, where capacity of wet screening will be increased by 50% with the installation of addition wet screening. The 50 mesh concentrate is pumped to the thickener tank, while the underflow goes through the second cleaner column. During operations it was recognized that a further polish of the -100 mesh flake was necessary to maintain high carbon levels. Therefore the existing circuit will be analyzed and modified with the addition of a second polish (re-grind) mill or attrition scrubbing if necessary. The – 50 mesh from the existing wet screen will be diverted to the new mill and then to the second cleaner. Actual full scale testing of this process change took place just prior to the mill shut down. Carbon levels of – 100 mesh flake were upgraded from 90% carbon to 97% carbon. It is anticipated that the second mill will be an 8'x 14', or 9'x 14' as a longer mill will increase retention time. Traditional methods to calculate the size of a mill do not apply in this application as the goal is liberation without necessarily reducing particle size. The redundant column rougher cells may be utilized as additional cleaning steps and/or as scavenger for rougher tails, once operation and testing indicates the best use of this additional flotation capacity.

Further metallurgical evaluations will be conducted when the entire circuit is operational. The evaluation will determine mineral liberation at all steps, opportunities to improve recovery, opportunities to improve grades, and any other bottlenecks or processing steps that would benefit the operation. A base line qualitative evaluation method using scanning electron microscope of previous products and tailings has been completed and will be used to continuously improve the current mill design.

13.3 Dewatering

In the present plan, the cleaner concentrates will be combined with the existing thickener where reagent residues are removed and the concentrate is recovered at approximately 30% moisture. Lab testing has been conducted with BASF and a coagulant/flocculent chemical target has been established to enhance thickener performance. Trial tests will be conducted once the circuit is re-activated.

13.4 Drying

In the previous process operation, filtering and drying was a costly bottleneck. The tray drier will be replaced with a cyclonic air dryer utilizing waste heat from the diesel burning electrical generators. Bulk pilot testing (Torftech, December 14, 2011) of the drying system has determined that a graphite cake containing 20% moisture was dried to below 0.11% moisture (1% or less is required by customers). The feed rate was simulated at 5 tonnes per hour, from actual graphite concentrate reconstituted with 20% moisture using a cement mixing apparatus. Even though test results are very favourable, an external burner with a fuel source will be designed for installation into the circuit as a contingency for any drying issues, and for extra drying capacity for future expansion.

13.5 Micronizing

Micronized Graphite has numerous applications, including lubricant formulations, additives to structural materials and metallic alloys, batteries, rubber, plastics and composite materials.

The issuer proposes to add a new product to its range of products. Some (or all) of the minus 100 mesh material would be further processed to micronize this to a very fine size (perhaps 5 microns). Testing of this approach was carried out successfully in July 2013, resulting in several micronized grades for the various markets. A detailed internal marketing study and review has been carried out and the grades required, volume, and price have been incorporated into the business model and has increased the company's profitability. The purchase and installation of tolling equipment to achieve the micronization objectives is currently underway.

13.6 Product Sizing and Packaging

The issuer plans to replace the existing screening system for dried graphite with horizontal screens producing four products to meet market specifications. Test work has been successful completed on new product screens, and previous production has proven this technology and screen method to be efficient. Different multiple product sizing can be produced by simple changes in the screen mesh sizes. These products will be bagged in 1 tonne bags, and/or 50 lb. and 25kg paper bags, either on site or at the nearby storage location.

13.7 Power Generation

A major concern to the previous operation of the McGuire pit was unreliable electrical power generation. Used generators are being replaced with new units, installed with a N+1 capacity philosophy. There will always be 1 generating unit as a backup to the other 3 required for high power draw start-up, and maintaining enough energy to run the plant. This will maximize efficiency of grade and recovery, minimize unscheduled downtime, and produce a processing environment of consistency and stable operations, key proponents of a concentrating mill.

14.0 MINERAL RESOURCE ESTIMATE

14.1 Introduction

The August 2013 Ontario Graphite Kearney Mineral Resource Estimate was completed by Greg Greenough, P.Geo. and reviewed by B. Thomas, P.Geo. (both of Golder Associates). The estimate incorporated data analysis, 3-dimensional solids modelling, and a block model utilizing Datamine Studio v3 (Datamine) in extended (double) precision.

The Kearney resource modelling consists of two mineralized zones, McGuire and Sheehan, constructed by Golder, based on drillhole geology and Graphitic Carbon (Cg) grade data. Golder used a Lidar topographic survey provided by Ontario Graphite to develop a topography model. Drillhole collar elevations were checked visually against the Lidar topographic survey and found to be of sufficient accuracy to not warrant adjustment.

Both the McGuire and Sheehan deposits trend generally northeast-southwest, and consist of shallow dipping (approximately 30 degrees south-east) Graphitic Carbon lenses within overall mineralization packages ranging in true thickness from 50m to 150m.

Drill spacing ranges from 40m to 100m in the McGuire zone, and 20-25m for the majority of the Sheehan zone, both on-section and between sections.

The resource for McGuire includes 12 new diamond drill holes from a program in 2013 to confirm previous drilling and expand resources. The Sheehan zone resource estimate is based solely on historic drilling.

14.2 Coordinate Conversion

All historic drillhole data provided by Ontario Graphite was in Imperial units and in a local grid coordinate system, while newer data (Lidar topographic survey, geophysical interpretations, and 2013 drill program) was in the UTM (NAD 83, Zone 17) coordinate system. Conversion from the historic local coordinates to UTM was required, but previous documentation on the project only stated the angle of rotation between the UTM and Local grids (45.181938 degrees).

In order to define a point for the conversion process, Golder used the topographic data (provided in both grids) and a geo-referenced ortho-photo image. The conversion point is shown in Figures 14-1 and 14-2.

Figure 14-1: Plan view of common coordinate point (red dot)

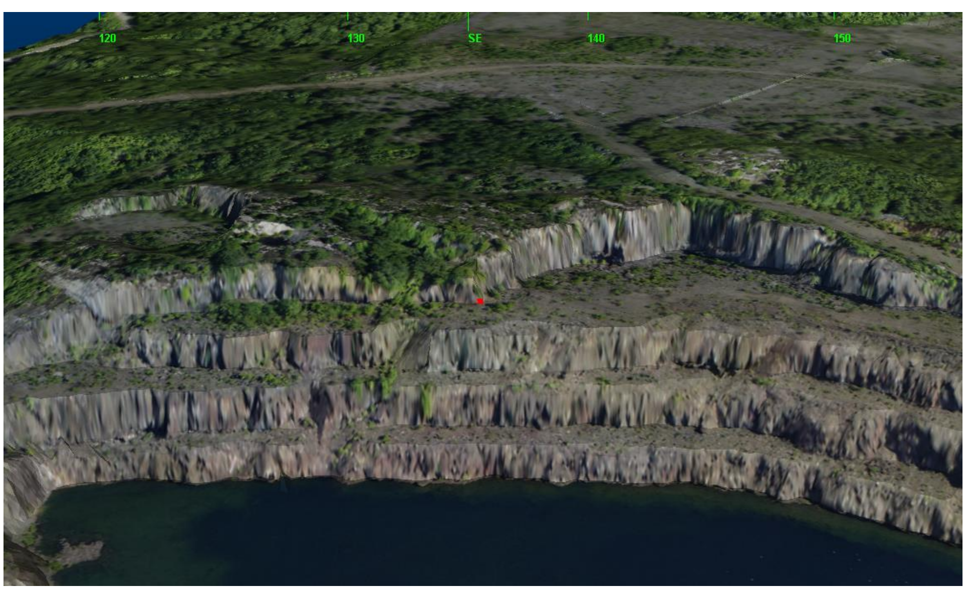


Figure 14-2: Isometric view looking downward and southeast of common coordinate point (red dot)

Conversion between UTM and Local coordinates was based on the following parameters.

Coordinate System	Easting	Northing	Elevation
Local	2,983.0410	2,912.1994	373.38
UTM (NAD 83)	649,545.5399	5,065,480.0159	494
	Azimuth rotation = 45.181938		

Verification of the conversion was done by translating the original Local grid topography into UTM coordinates and comparing it against the original UTM grid topography. Also the drillhole data was converted into UTM coordinates and compared against the original UTM grid topography (see Figure 14-3). Taking into account the relative dates of the Local grid topography and UTM grid topography and the earth movements that had taken place between these dates the comparisons are considered to be good to within 1m.

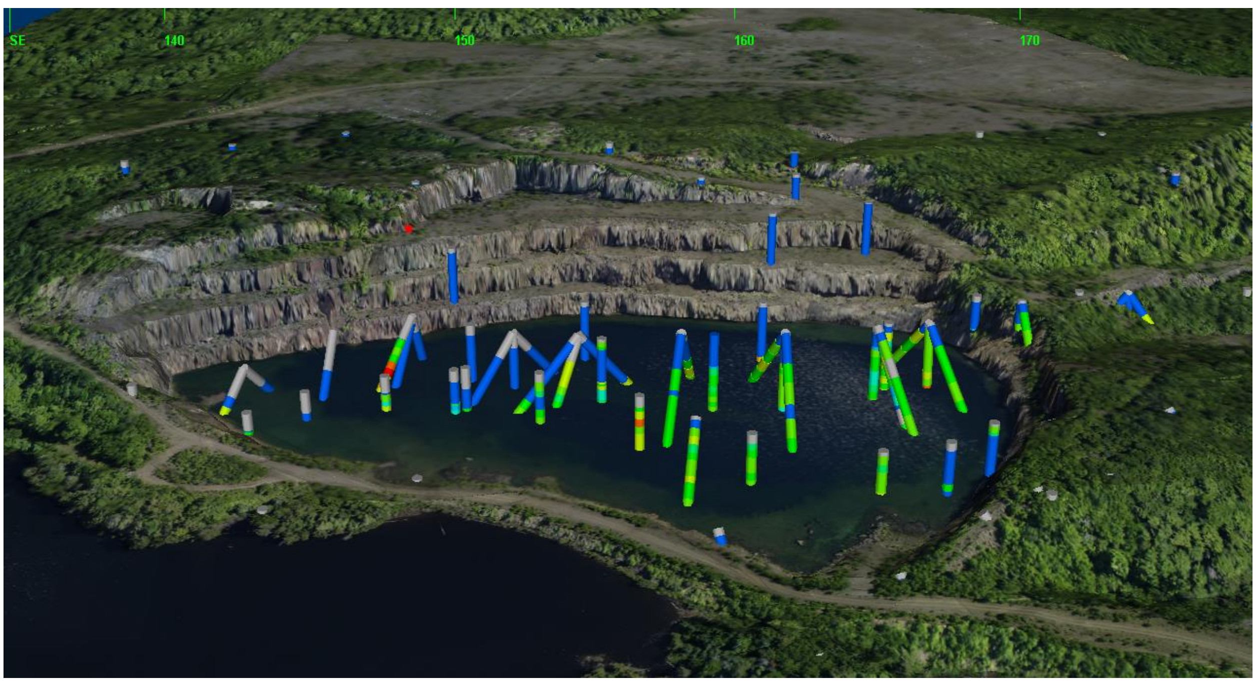


Figure 14-3: Isometric view looking downward and southeast of common coordinate point (red dot) and converted drill holes

14.3 Drill Hole Data

The Kearney property drill hole database information was supplied to Golder by Ontario Graphite, and included a total of 184 surface drill holes. The final collar, survey, assay and lithological data were supplied in csv format with the last modified dates shown in Table 14-1.

The drillhole data provided to Golder by Ontario Graphite is as follows:

Table 14–1: Kearney (McGuire and Sheehan) Drill Hole Data

Zone	***File name***	**Last Modified Date**	**Comments**
McGuire	*MCGUIREGEMSCOLLAR.CSV* [1]	May 22/2013	126 collars
	MCGUIREGEMSASSAY.CSV	May 23/2013	3356 intervals containing numeric rock codes, Cg and Total Carbon (Chk) assays. Null values represented as -999.99.
	Collars_New.csv	May 24/2013	12 collars of holes drilled in 2013
	Surveys_New.csv	May 22/2013	53 down-hole Reflex EZ-Shot surveys of 12 holes drilled in 2013
	Litho_New.csv	May 24/2013	269 logged lithological intervals from 12 holes drilled in 2013
	Assays_New.csv	May 22/2013	744 logged assay intervals from 12 holes drilled in 2013
	X01_all.csv	June 2/2013	724 whole rock assay results of 52 elements from AGAT Labs, additional to Cg
	X02_all.csv	June 2/2013	744 assay results from AGAT Labs; Total Carbon and Graphitic Carbon
	X03_all.csv	June 2/2013	350 SG results from AGAT Labs
Sheehan	*SHEEHANGEMSCOLLAR.CSV* [1]	Jan 1/2012	102 collars
	SHEEHANGEMSASSAY.CSV	Jan 1/2012	1793 intervals containing numeric rock codes and Cg assays only. Null values represented as -999.99.

- No downhole surveys available for historic drilling; azimuth and dip taken from collars

The data was imported into Datamine and de-surveyed using internal processes. During the import procedure, some modifications were made to the original data:

- Assay data noted as -999.99 in the historic data files was re-coded as <null>;
- New assay results showing values less than detectable limits (eg: <0.05) were set to zero (0.0).

The location of the drill hole collars relative to the topography was checked for elevation issues, and although some of the collars disagreed with the surface by small amounts, they were within the resolution of the topographical survey provided.

A list of drillhole names and collar locations is provided in Appendix B.

14.4 Geological Interpretation

Data terrain model (dtm) surfaces of the topography were generated for the McGuire and Sheehan zones (separately) from LIDAR topographical survey contours supplied by Ontario Graphite. The LIDAR survey was carried out by Group PHB in July 2011. A base-of-overburden/top-of-bedrock surface was generated from the drill hole end of casing intervals in the drill hole logs.

Wire frame domains of the mineralization were constructed using Cg% grade, generally >0.5%, to define the foot wall and hanging wall limits. Points at hanging wall and foot wall contacts for each drill hole were generated, and meshed to the mineral envelope. In the case of the Sheehan zone, to maintain reasonable continuity of shape, minor lower grade material was included, and in a few isolated instances some higher grade material in the foot wall was excluded. Interactive compositing of these intervals was done to check whether they would carry the waste material to the main mineralization. Most would not.

The McGuire mineralization envelope was split in the south-west portion of the deposit in order to separate out a definable continuous zone of waste containing very little or no mineralization.

The outer limits of the mineralization were extended using a distance of approximately 1/3 the drill spacing (to the closest un-mineralized hole or from the last mineralized hole) as a control. Surface meshes (dtms) were made from the digitized points in the general plane of the deposit using control strings for the outer limits. This method is useful for removing irregularities in the outer limits, and also for minimizing interpretational bias that can exist in wire frames generated from section or plan strings/polylines.

To ensure proper sample capture, points defining the mineralized envelope were snapped to the end points of the appropriate drill hole intervals and validated through visual checks. The volumes were verified to ensure that there were no intersections or invalid (open or shared) edges.

Boolean wire frame facilities in Datamine were used to provide correct contacts between the mineralized zones and the bottom of overburden.

Figures 14-1 and 14-2 show the mineralized zones with drilling coverage.

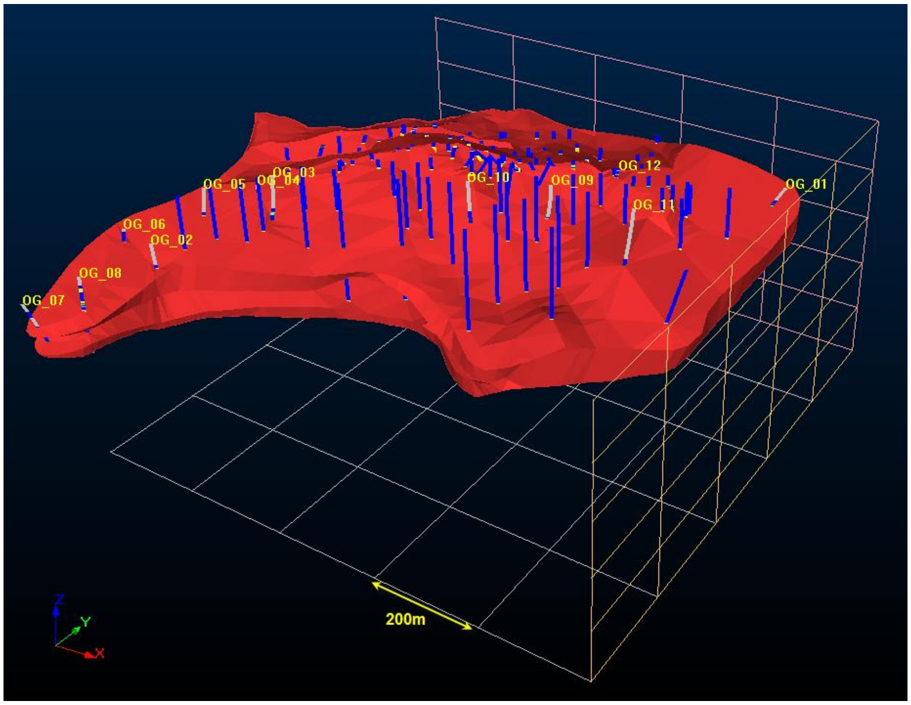


Figure 14-4: Isometric View Looking North-West of McGuire Mineralized Envelope, with Drill Coverage (Hole ID's in yellow indicate 2013 holes).

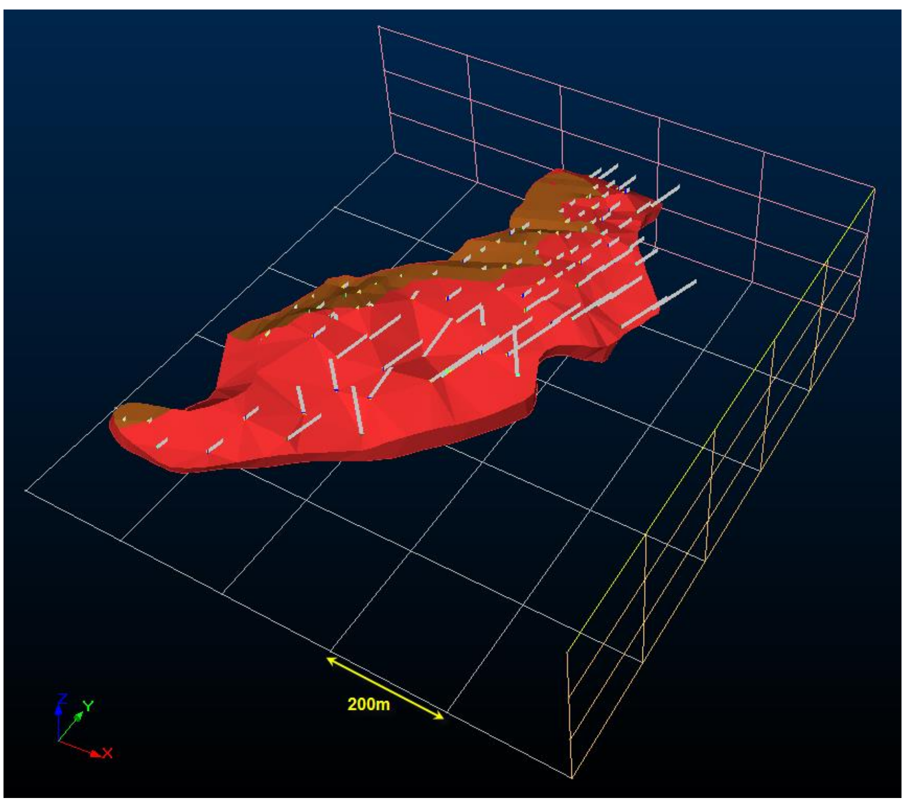


Figure 14-5: Isometric view looking North-West of Sheehan mineralized envelope with drilling coverage

14.5 Exploratory Data Analysis (EDA)

14.5.1 Raw Assay Data

Primary statistics of raw assay data for both entire drillhole databases are summarized in Table 14-2.

Table 14–2: Raw Sample Data Univariate Statistics

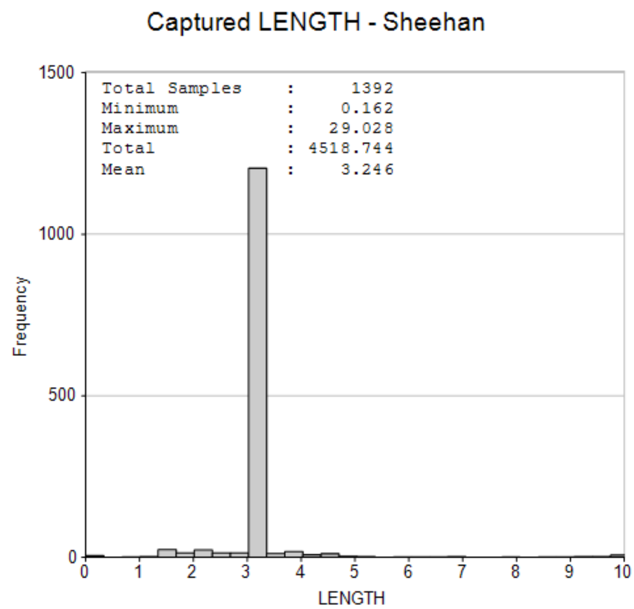
		SAMPLES	MIN.	MAX.	MEAN	VAR.	STANDDEV	STANDERR	SKEWNESS
McGuire	Cg %	4838	0	13.47	1.07	1.85	1.36	0.010	1.17
	C (total) %	800	0	6.14	1.16	1.29	1.13	0.025	0.90
	SG (meas)	408	2.62	3.26	2.91	0.02	0.14	0.004	0.36
	SG (all)	4838	2.62	3.26	2.90	0.01	0.10	0.0007	-0.58
Sheehan	Cg %	1629	0.01	4.15	1.78	0.72	0.85	0.012	-0.26

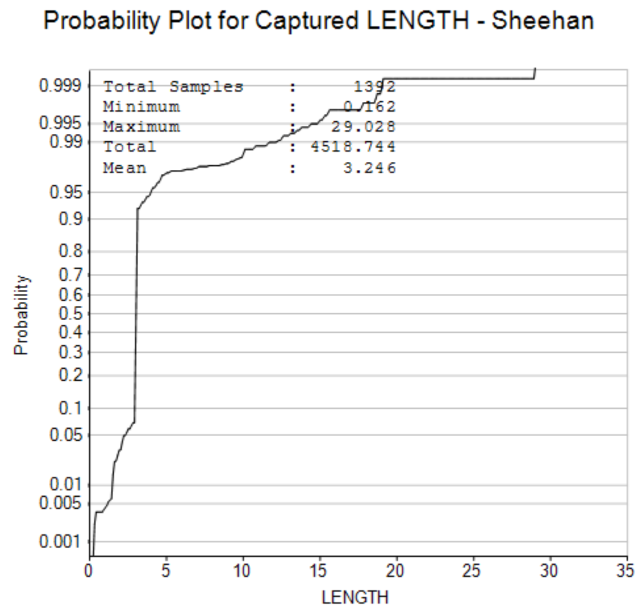
* All statistics weighted by sample length.

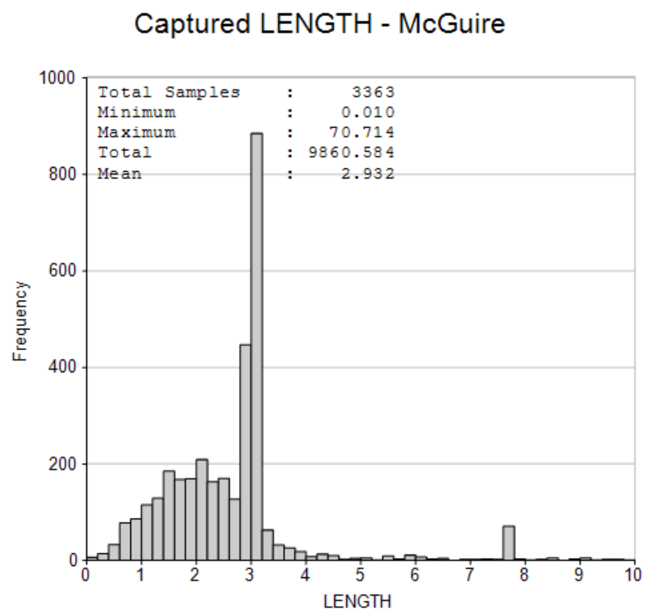
Note that total Carbon assays were available only in the McGuire data, and only with the 2013 drill results.

14.5.2 Data Capture

Drill holes were captured within the entire mineralization envelope for both zones. The histogram of sample LENGTH and probability plots in Figure 14-3 shows that the majority (approx. 90%) of samples selected within the mineralization envelopes are 3m or less. Based on this a composite length of 3m for both zones was chosen for variogram analysis and grade interpolation.







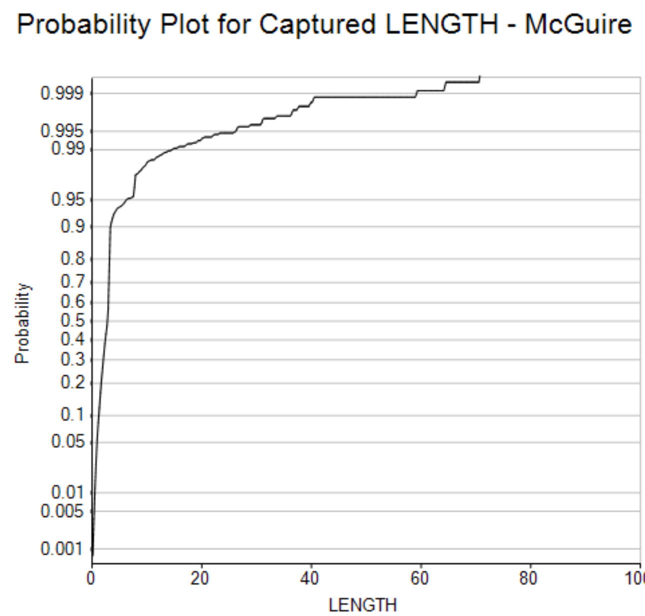


Figure 14-6: Length Distribution of Captured Samples

14.5.3 Correlations

Since Cg is the only element being estimated there is no basis for any multi-element correlative analysis. There was enough SG data in the McGuire zone from the 2013 drill program however to investigate the potential for correlation between SG and Cg. The results are given in Table 14-4 and although a correlation of 63% (negative) is only moderate, it is Golder's opinion that it is more reasonable to apply this correlation to sample intervals without SG assays through the use of polynomial regression than to assign average SG values to the resource estimate.

Table 14–3: McGuire Correlation Analysis

	Samples	Mean	SG Correlation
SG	344	2.89	1
Cg	344	1.17	**-.63**

14.5.4 Bulk Density (SG)

Included in the 2013 drill program was the submission of 350 samples to AGAT Labs for the determination of Specific Gravity by Gas Pycnometer using the following procedure:

- Prepared samples are placed into a sample holder cup, where UHP He is used as a displacing fluid;
- Density is determined using Boyle's Law from the displacement of He from each sample;
- Sample replicates, duplicates, blanks (determined from an empty sample holder cup) and reference materials (an object with a known volume) are routinely used as part of the Quality Assurance Program;
- Quantachrome Pentapyc 5300e instruments are used in the analysis.

Of the SG samples submitted, 344 were captured within the mineralization envelope and used in the analysis below. As Figure 14-4 shows, the SG data is represented by a relatively normal population, with a minimum of 2.62 and maximum of 3.26.

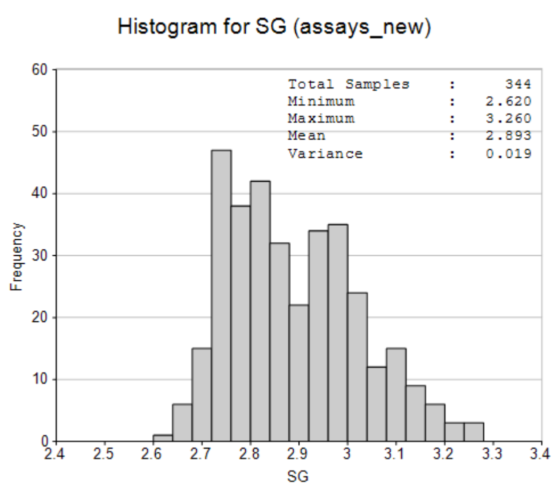


Figure 14-7: SG Distribution – McGuire 2013 Drill Data

Expanding on the 63% negative correlation between SG and CG indicated in 14.4.3 (Correlations), a scatter plot of Cg vs. SG was generated, along with a line representing the polynomial regression (power 1), and is shown in the left side of Figure 14-5.

The polynomial regression is represented by the equation: **SG = 2.98 – (Cg x 0.07566).**

This equation was applied to all samples where SG was absent in the McGuire zone. Upper and lower limits in the calculation were set to the minimum and maximum values returned from the 344 assay results. The right side scatter plot in Figure 14-5 shows the inclusion of the calculated SG values in the McGuire zone.

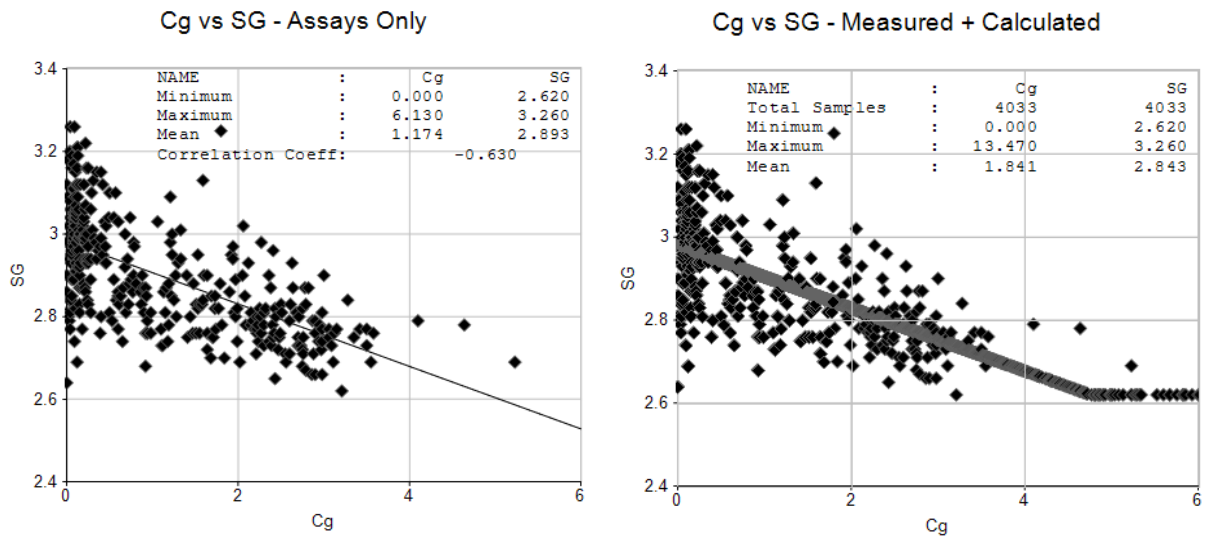


Figure 14-8: SG Correlation with Cg%

Historic estimates in the Sheehan zone used an SG of 2.86 for low grade and waste material and 2.74 for ‘ore’ material. This rational was continued for this Inferred resource estimate, and Cg <1.5% were assigned SG = 2.86, while CG>1.5% were assigned SG = 2.74. Golder recommends future drilling in the Sheehan zone ensures sufficient SG data to allow correlation analysis similar to the McGuire zone.

14.5.5 Composites

Based on the Length analysis of the captured data in 14.4.2 (Data Capture) Golder considers the composite length of 3m to be reasonable considering the bulk mining method expected and resource model block size that will be required. This length should provide an optimal amount of grade smoothing in the compositing process thereby providing a reasonable ‘picture’ of the variability across the deposit.

See Figure 14-5 for histograms of the captured raw data and composites for both McGuire and Sheehan zones.

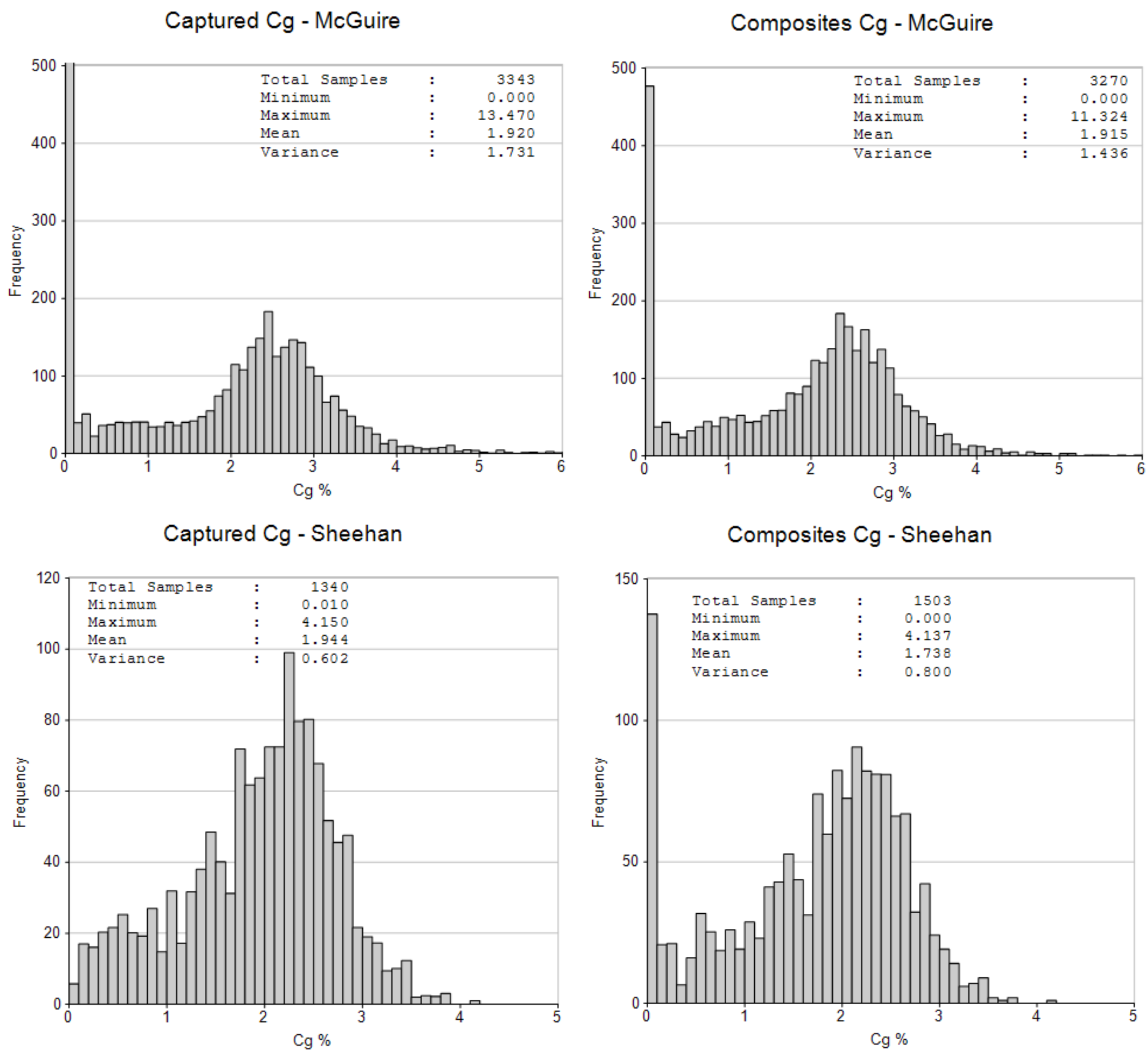


Figure 14-9: Cg% Distribution of Captured Samples and Composites

Before compositing the Sheehan captured data, null values were set to zero (0.0). The McGuire data was treated during the input process, where null (un-sampled) data or values less than detectable limits were assigned 0.0.

To keep the variation in LENGTH of the composite data to a minimum the compositing process eliminated sample lengths <1.5m at the lower boundary of the captured data. In the relatively normal Cg population of both McGuire and Sheehan zones this is not expected to eliminate any detrimental amounts of material from the compositing process, nor have any significant effect on the resource estimate.

14.5.6 Capping Strategy

Investigation of high grade occurrences showed only 10 samples in McGuire above 8% Cg (maximum of 13.47% Cg). In Golder's opinion these few higher grades are well within reasonable Cg concentrations, and considering the robust Kriged estimation method used, no capping was necessary in the McGuire zone.

In the Sheehan zone no samples were greater than 4.15% Cg, so no capping was applied.

14.6 Resource Estimation

14.6.1 Unfolding

A series of unfold strings were generated, based on the mineralization envelope, which were used to transform the composites from Cartesian space to an unfolded coordinate system, thereby eliminating undulations and pinching and swelling in the deposit. This removes the need to alter search orientations, thereby resulting in more robust variogram calculation and grade interpolation.

In Figure 14-8, the composites as well as the unfold strings are displayed in unfolded space. Note that Datamine convention requires the X-axis to be always represent the thickness of the deposit, so as a rule strike and 'across' direction axes are reversed. The Y-axis represents the down-dip direction.

Note that in unfolded space, the composites in the areas of the two separated west end limbs are still obeying their relative positions, leaving a gap where the large waste zone exists.

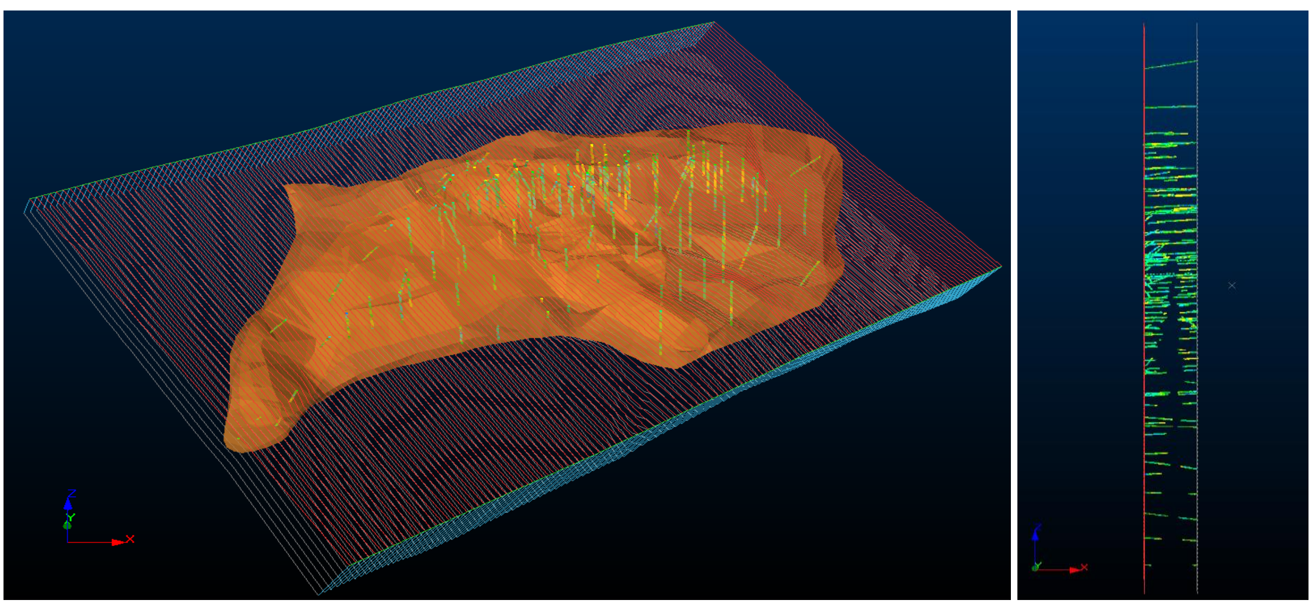
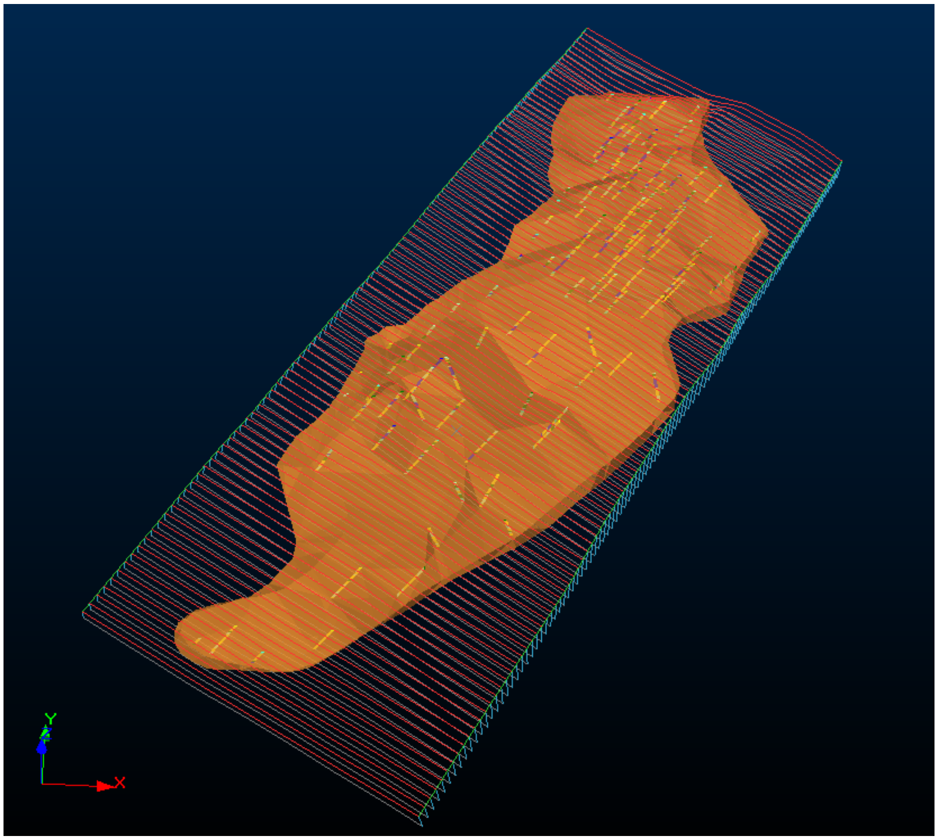


Figure 14-10: Isometric View (North-Downward) of McGuire Mineral Envelope, Captured Samples, and Unfold Strings



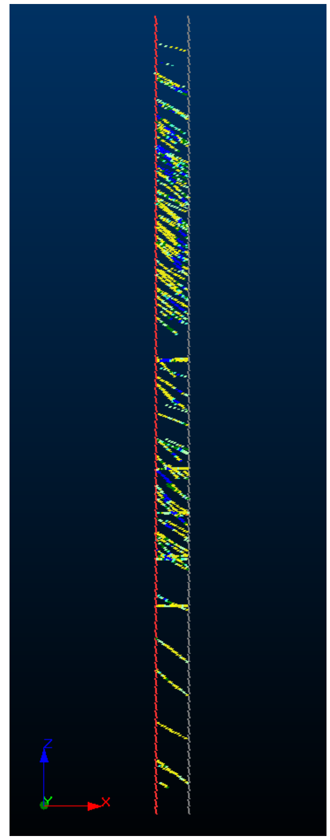


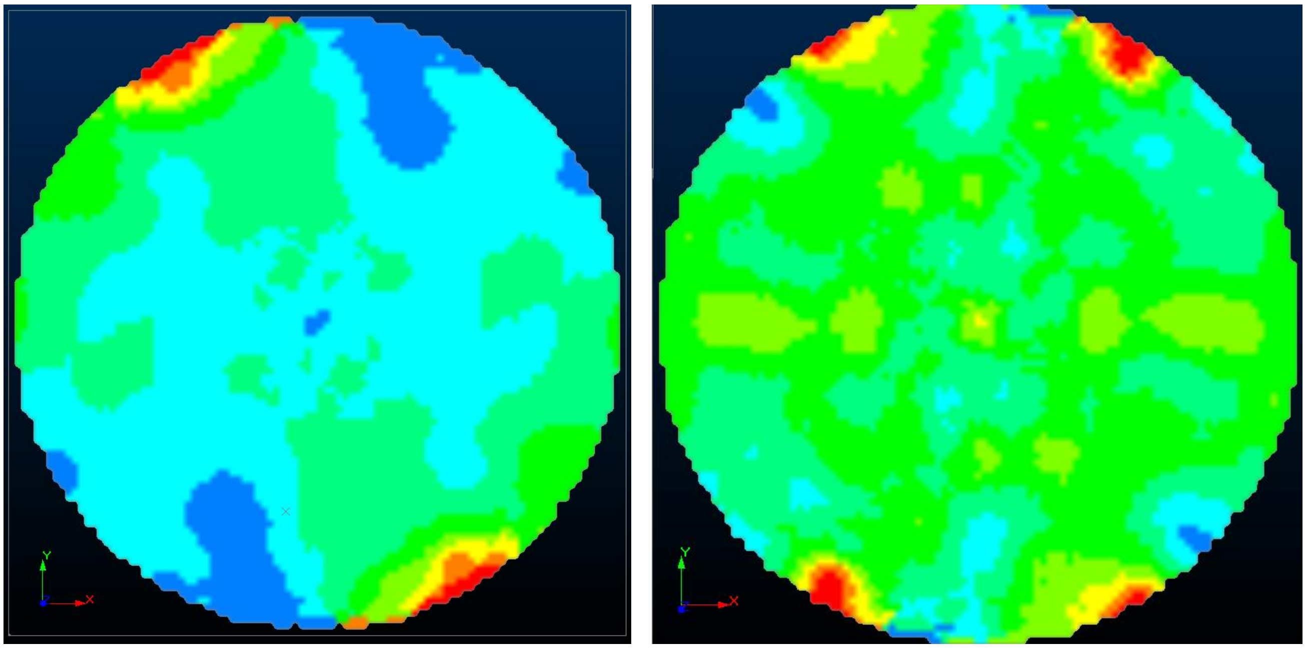
Figure 14-11: Isometric View (North-Downward) of Sheehan Mineral Envelope, Captured Samples, and Unfold Strings

14.6.2 Spatial Analysis (Variography)

Variogram contour maps in the plane of the deposits (in unfolded coordinates) for Cg% were generated to check for possible non-orthogonal continuity. The variogram mappings shown in Figure 14-9 do not show any clear preferred orientation of continuity in the plane of the deposit in unfolded coordinates, therefore no rotation was required for variogram calculations or grade interpolations.

Note that with the use of unfolded composites sub-domains of the deposit to account for changes in orientation and thickness are not required, and any preferred orientation indicated from the variogram mapping in the unfolded plane of the deposit would represent a plunge.

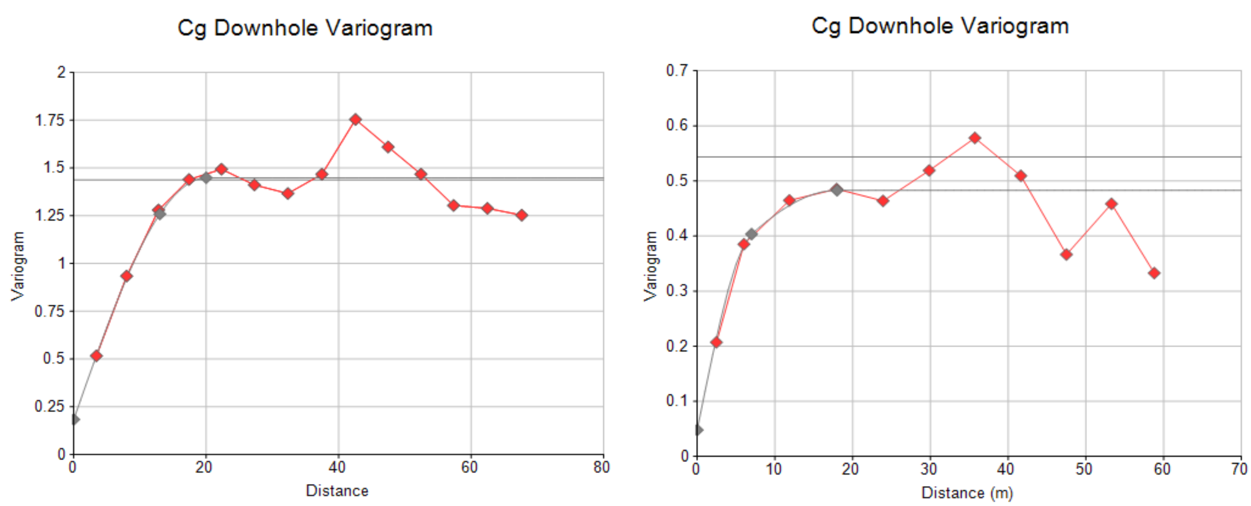
Cg Variogram Contours (Unfolded Coordinates)



McGuire **Sheehan**

Figure 14-12: McGuire and Sheehan Cg% Variogram Contours (Unfolded Space)

Downhole grade variograms were calculated in order to eliminate masking effect in the strike and dip directions when determining variograms in the 'thickness' direction. The variogram model fitting shown in Figure 14-10 indicates a similar range of approximately 20m across the thickness of both the McGuire and Sheehan deposits.



McGuire **Sheehan**

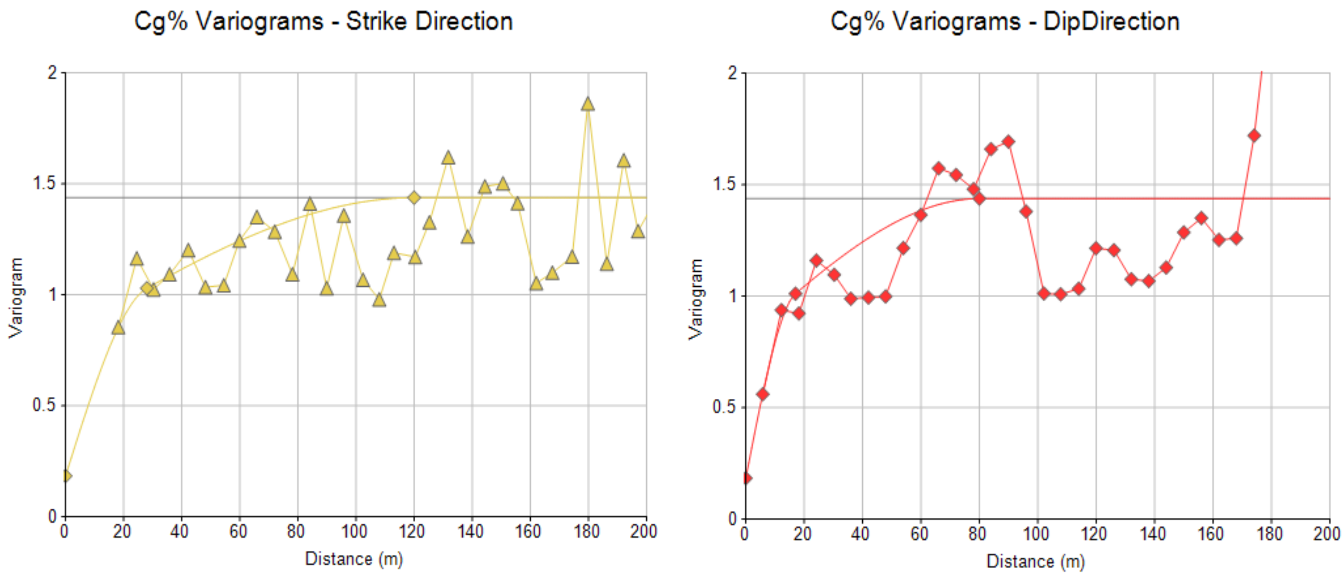
Figure 14-13: Cg% Downhole Grade Variograms (Unfolded)

Experimental grade variograms for Cg% in the unfolded strike and dip directions were also calculated using the parameters shown in Table 14-4, and two structure spherical variogram models fitted using Datamine. The experimental variograms and fitted models in the major (strike) and semi-major (dip) directions are shown in Figure 14-11.

Table 14–4: Experimental Variogram Calculation Parameters

	Lag Distance	# Lags	# Sublags	# Lags to be Sublagged	Regularization Angle	Cylinder Radius
Sheehan	30	10	6	5	30	10
McGuire	30	20	**5**	**10**	**30**	**20**

Note that the variograms are calculated in unfolded space, so that the across direction is represented by the X-axis, the strike direction is represented by the Z-axis, and the down-dip direction is represented by the Y-axis. Since no plunge was observed in the variogram contour mapping above, no axes rotations were required.



McGuire

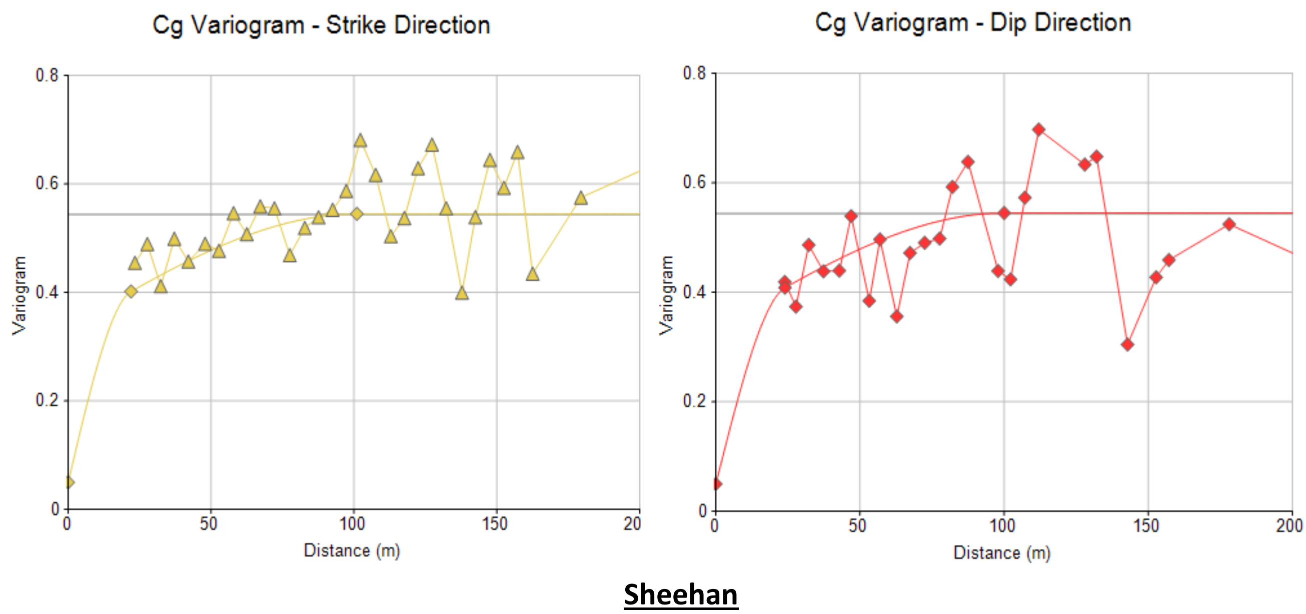


Figure 14-14: Cg% Strike and Dip Direction Grade Variograms (Unfolded)

The variogram model fitting results for both zones are shown in Table 14-5. As noted above, in the unfolded coordinate system the X-axis is the across-direction (thickness), Y-axis is down-dip, and Z-axis is in the strike direction. These variogram model characteristics continue through to the estimation process, with the search ellipses for each zone having the same axes definitions and ranges as those of the 2nd structures.

Table 14–5: Cg Variogram Models

	Nugget	1st Structure				2nd Structure			
		X range	Y range	Z range	Var.	X range	Y range	Z range	Var.
McGuire	0.184	11	17	28	0.632	20	80	120	0.622
Sheehan	0.050	9	25	25	0.284	20	100	100	0.211

14.6.3 Resource Block Model Definition

The McGuire and Sheehan block model definitions, based on the mineralized envelopes, are shown in Table 14-6. Given the current drill spacing and probable mining volumes, the 10m sizes in the McGuire horizontal directions, and 10m x 15m sizes in the Sheehan horizontal directions, will provide a reasonable block support with an appropriate amount of grade smoothing.

For both deposits the mineralized wire frame model, trimmed to the modelled overburden surface, was filled with blocks of the sizes described in Table 14-6. Blocks were split on the edges to give the correct volume representation. From these 'split' block models regularized block models were generated (all blocks 'parent' block size, as defined in Table 14-6) for the final grade interpolation.

A comparison of the block model volumes and wire frame envelope volumes used to create them show excellent agreement, and are also shown in the table below.

Table 14–6: Resource Block Model Definitions

	Model Origin			Block Size (m)			No. of Blocks			Volume Check
	X (E-W)	Y (E-W)	Z (E-W)	X	Y	Z	X	Y	Z	
McGuire	648970	5064850	190	10	10	5	97	111	61	0.006%
Sheehan	650690	5067210	310	10	15	5	59	59	35	<0.04%

14.6.4 Interpolation Plan

As observed in the composites statistical analysis above (14.4.5) the distribution of Cg grade is relatively normal in both deposits, so Ordinary Kriging with robust estimation parameters is considered sufficient in Golder's opinion to provide a reasonable resource estimate with an appropriate amount of smoothing. The search parameters used are based on the variogram analyses described above, and are provided in Table 14-7.

Interpolation of SG was added to the McGuire model estimate using the assayed and calculated SG composite values (as determined by the correlation described in Section 14.4.4) and the Cg variogram parameters.

Nearest Neighbour estimates (declustered data) were included for block model validation and potential use in grade smoothing analysis.

Table 14–7: Estimation Search Parameters

	RANGES [1]			1ST SEARCH		2ND SEARCH			3RD SEARCH			
	X	Y	Z	MIN. NO.	MAX. NO.	SVOLFAC2	MINNUM2	MAXNUM2	SVOLFAC3	MINNUM3	MAXNUM3	MAX KEY [2]
McGuire	20	80	120	18	20	2	18	20	4	12	20	6
Sheehan	18	100	100	12	32	2	12	32	4	8	32	5

1. X-axis = across the deposit; Y-axis = down-dip; Z-axis = strike (unfolded space)
2. Maximum samples per bore hole (BHID)

Other estimation parameters used included:

- Cell discretization of 2x2x1 (cell size grading of 5x5x5) for McGuire
- Cell discretization of 2x2x1 (cell size grading of 3x4x2) for Sheehan

The McGuire Cg and SG grade interpolation for Nearest Neighbour, Ordinary Kriging, and Inverse Distance Squared (for comparative purposes) was carried out on the regularized block model. Table 14-8 shows the proportions of the model graded with each search volume, as defined in Table 14-7.

Table 14–8: McGuire and Sheehan Blocks Estimated by Search Volume

	McGuire Blocks Graded			Sheehan Blocks Graded		
	1st Search	2nd Search	3rd Search	1st Search	2nd Search	3rd Search
Search Volume	20x80x120	40x160x240	80x320x480	18x100x100	36x200x200	72x400x400
Blocks	57,678	39,232	1,924	13,937	691	
Tonnes	74,522,204	45,339,414	1,949,288	23,957,330	789,827	-
Percent (Tonnes)	61.2	37.2	1.6	96.8	3.2	-

14.7 Mineral Resource Classification

Although the data density for the Sheehan zone is quite good, and in Golder's opinion would be capable of providing a robust Indicated Resource for at least a portion of the zone, lack of sufficiently documented QA/QC procedures and data verification keep the Sheehan zone in the Inferred Resource category. Any potential change in classification for Sheehan will require a requisite amount of confirmation diamond drilling.

In a view looking in the plane of the deposit, Figure 14-15 shows the Golder resource estimate mineral envelope and the wire frame volume defining Indicated classification for the McGuire deposit. For this exercise, blocks graded in the first search of the grade interpolation were deemed Indicated and the remainder Inferred.

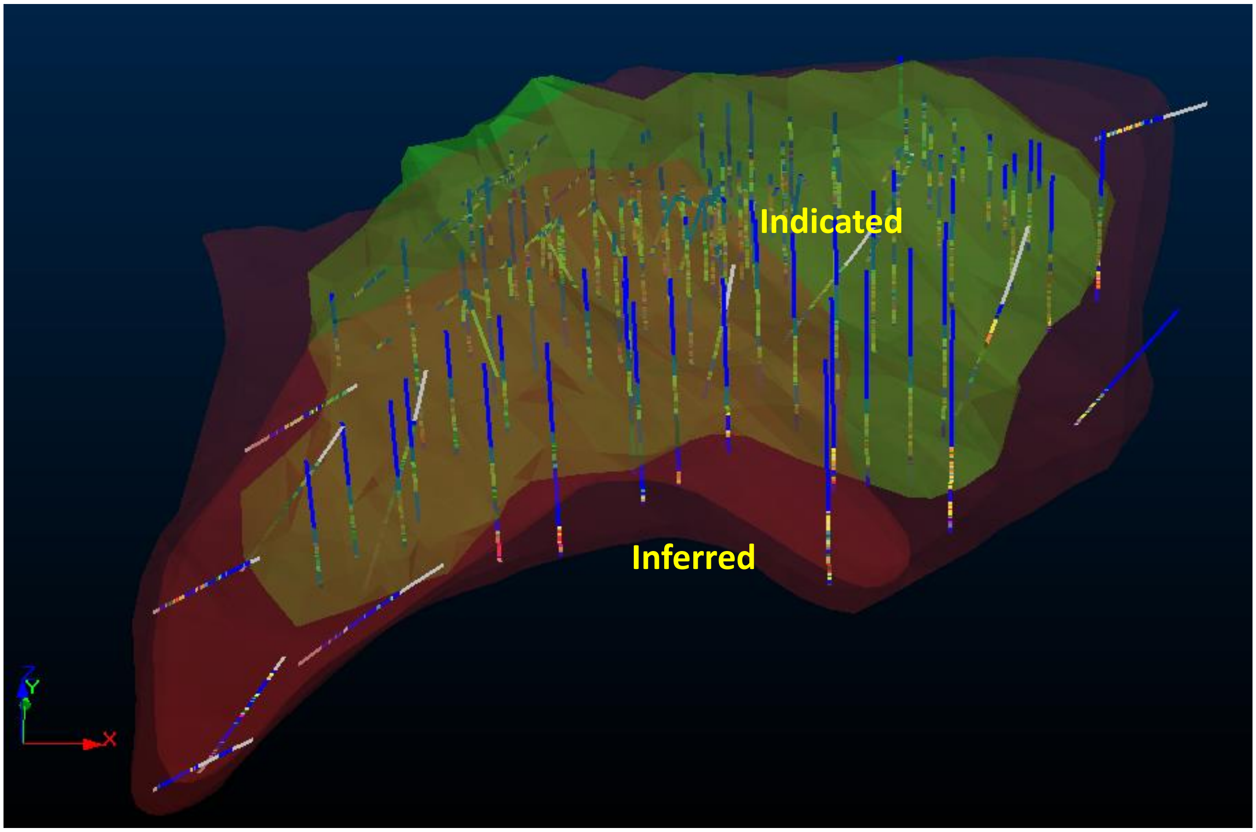


Figure 14-15: McGuire Classification – Isometric View Looking Downward and North

The ‘first search’ (within the variogram sill range) logic for classification is reasonable, but a more robust method would include reconciliation of projected quarterly and annual production rates from estimates of decreasing levels of data density, and should be considered in for future official resource estimates.

14.8 Block Model Validation

14.8.1 Global Comparisons

As can be seen in Table 14-9, global comparison (mean values) of the Kriged, Inverse Power of Distance (squared) and Nearest Neighbour estimates are very good. A one-sample Nearest Neighbour estimate was also done, whereby all composites in each bore hole are given the same average grade across the deposit. This approximates a polygonal estimate, and anomalous mean grades can indicate problems in the estimate due to things such as ‘low-angle’ holes.

Table 14–9: Kearney Block Model Validation Statistics

		METHOD	SAMPLES	MIN	MAX	MEAN	VAR.
McGuire	Cg%	Composites					
		Nearest Neighbour	98,834	0	11.32	1.72	1.434
		1 Sample NN	98,834	0	3.25	1.74	0.404
		Inverse Power Distance (2)	98,834	0	6.56	1.77	0.448
		Ordinary Kriged	98,834	0	8.50	1.75	0.462
	Density	Composites					
		Nearest Neighbour	98,834	2.62	3.16	2.85	0.008
		1 Sample NN	98,834	2.73	2.98	2.85	0.002
		Inverse Power Distance (2)	98,834	2.70	2.99	2.85	0.002
		Ordinary Kriged	98,834	2.64	3.07	2.85	0.003
Sheehan	Cg%	Composites					
		Nearest Neighbour	14,628	0	4.14	1.78	0.779
		1 Sample NN	-	-	-	-	-
		Inverse Power Distance (2)	14,628	0.41	2.77	1.81	0.164
		Ordinary Kriged	14,628	0.09	3.15	1.79	0.209

14.8.2 Visual Inspection

Visual comparisons of the block model Kriged estimate and composite data in plan and section views (Figures 14-13 to 14-16) show close agreement. These figures also show that the unfolding process is performing as expected.

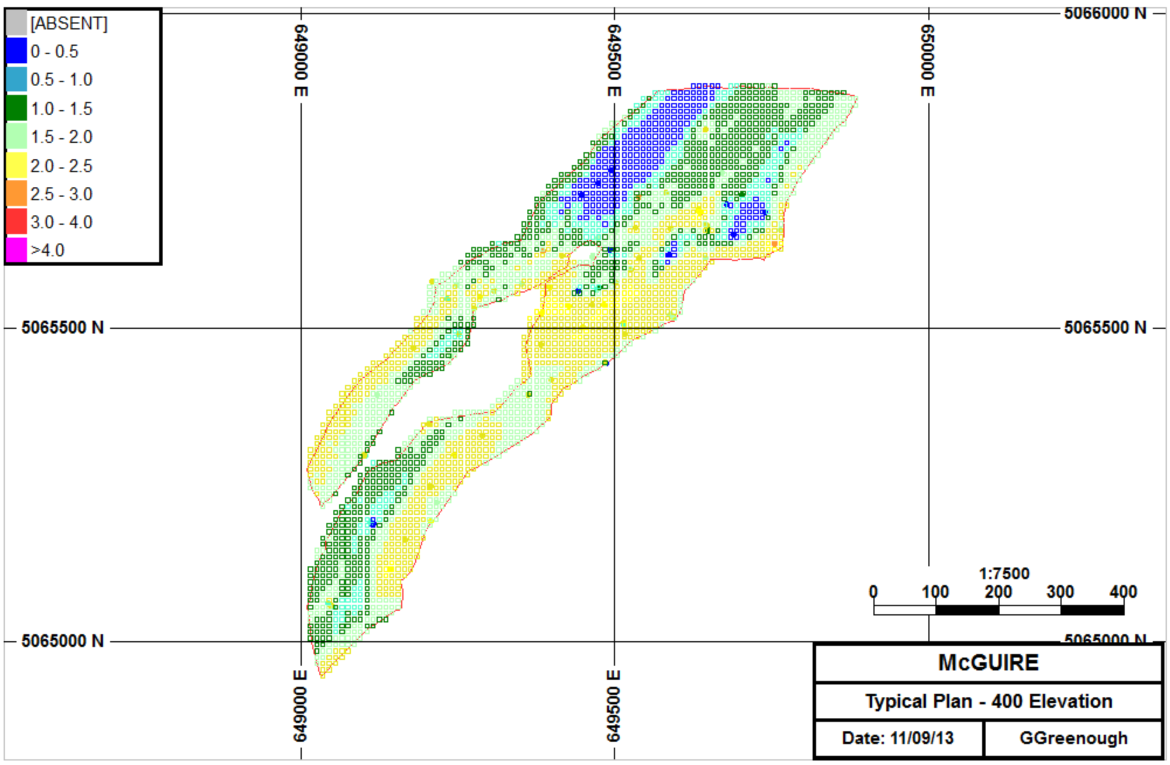


Figure 14-16: McGuire Typical Plan View of Block Model and Composites

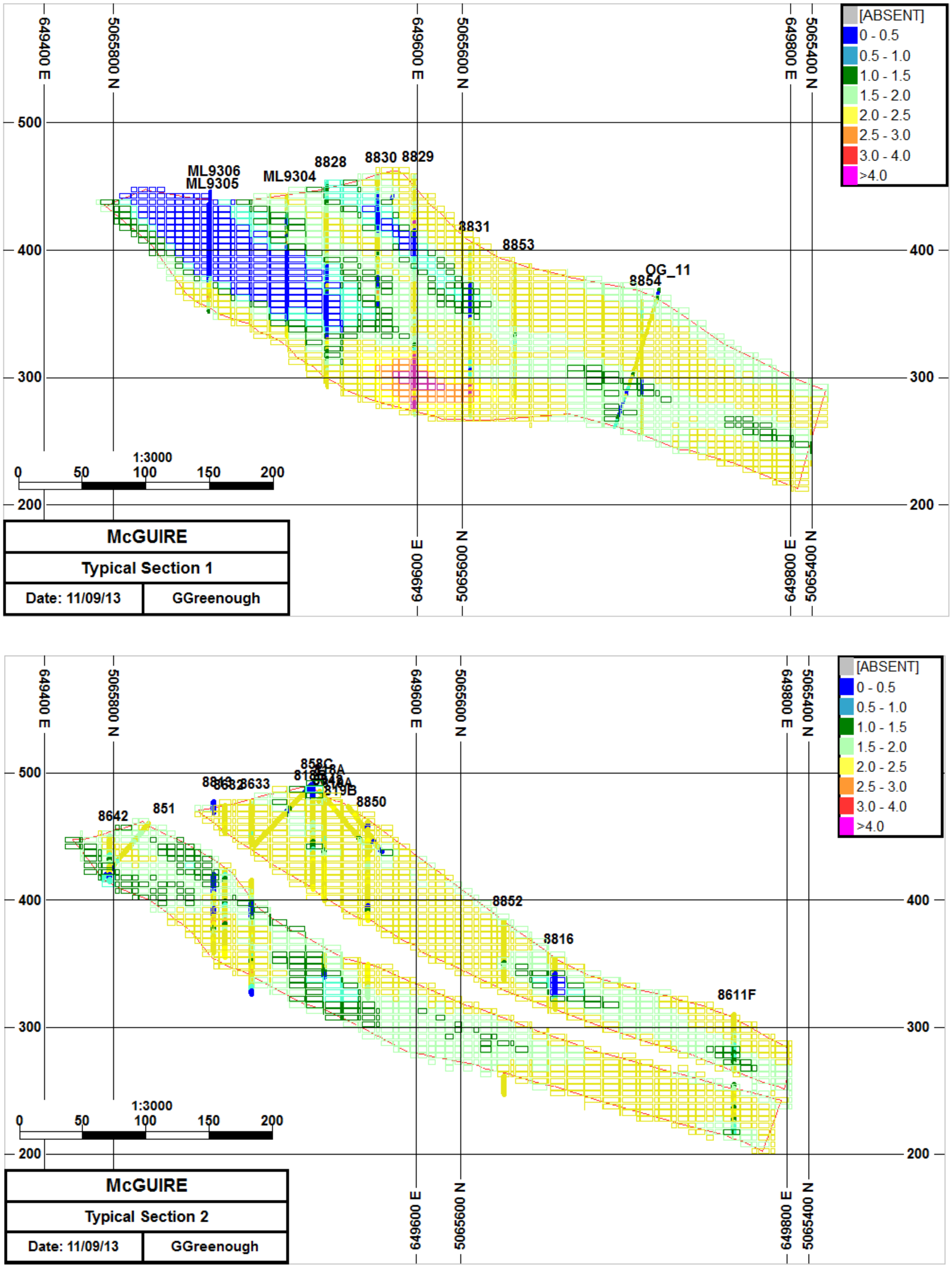


Figure 14-17: McGuire Typical Section Views of Block Model and Composites

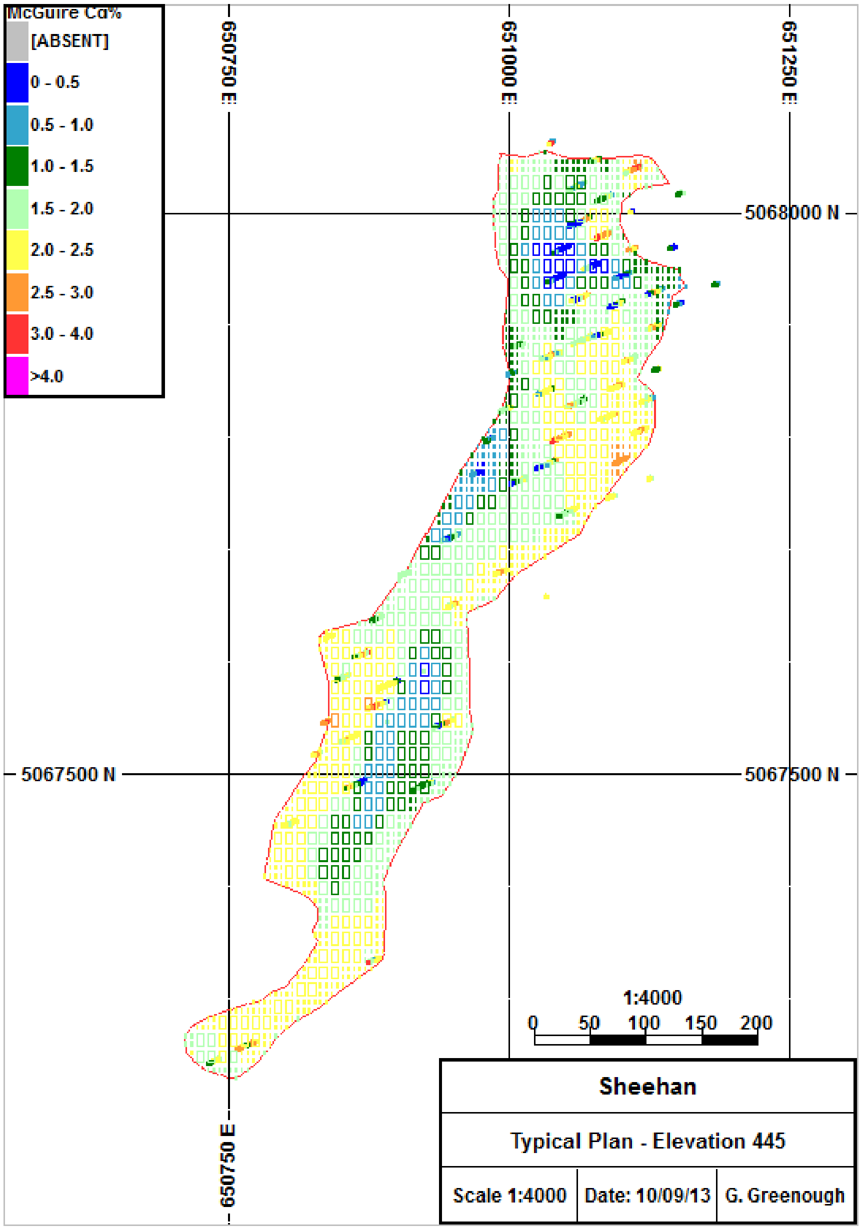
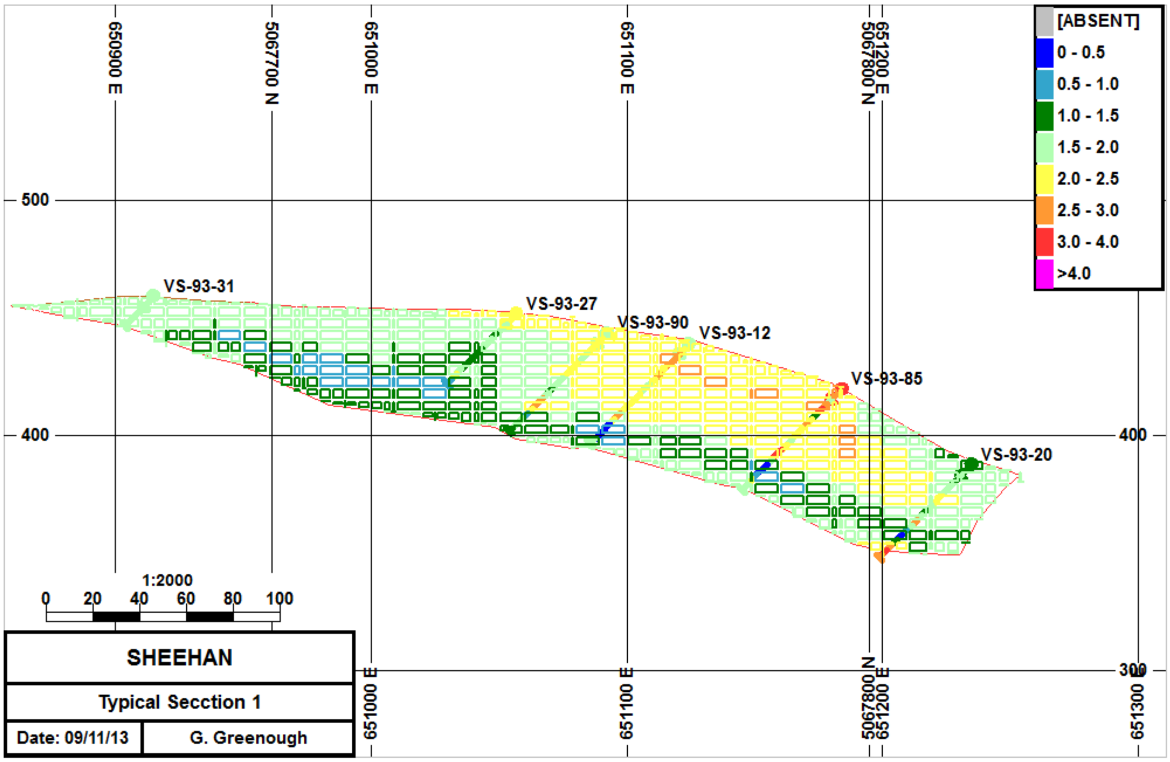


Figure 14-18: Sheehan Typical Plan View of Block Model and Composites



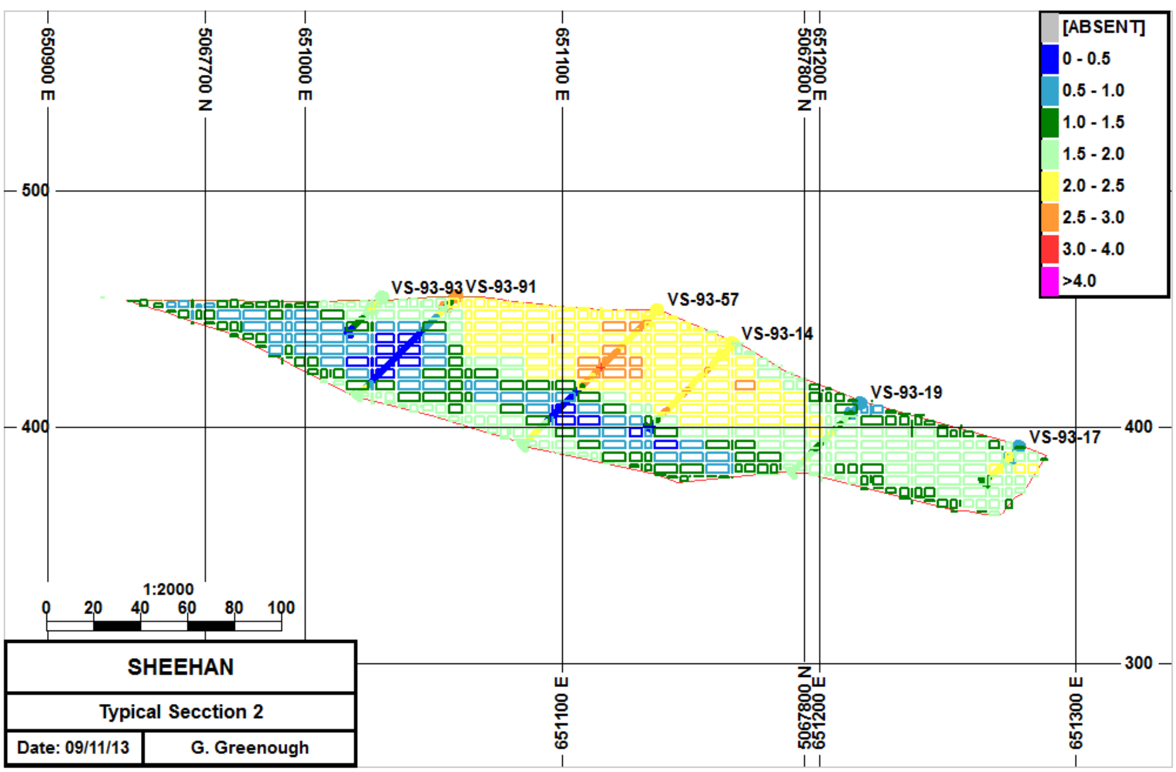


Figure 14-19: Sheehan Typical Section Views of Block Model and Composites

14.8.3 Swath Plots

Swath plots comparing the Cg grade interpolations and the composites were generated to further validate the accuracy of the estimate. Figure 14-13 shows Cg% swath plots in the unfolded strike and dip directions and in plan (elevation) orientation. Since the estimation was done in unfolded space, and the deposits are at a relatively oblique angle to the coordinate system, swath plots in the unfolded coordinates will provide more robust comparisons.

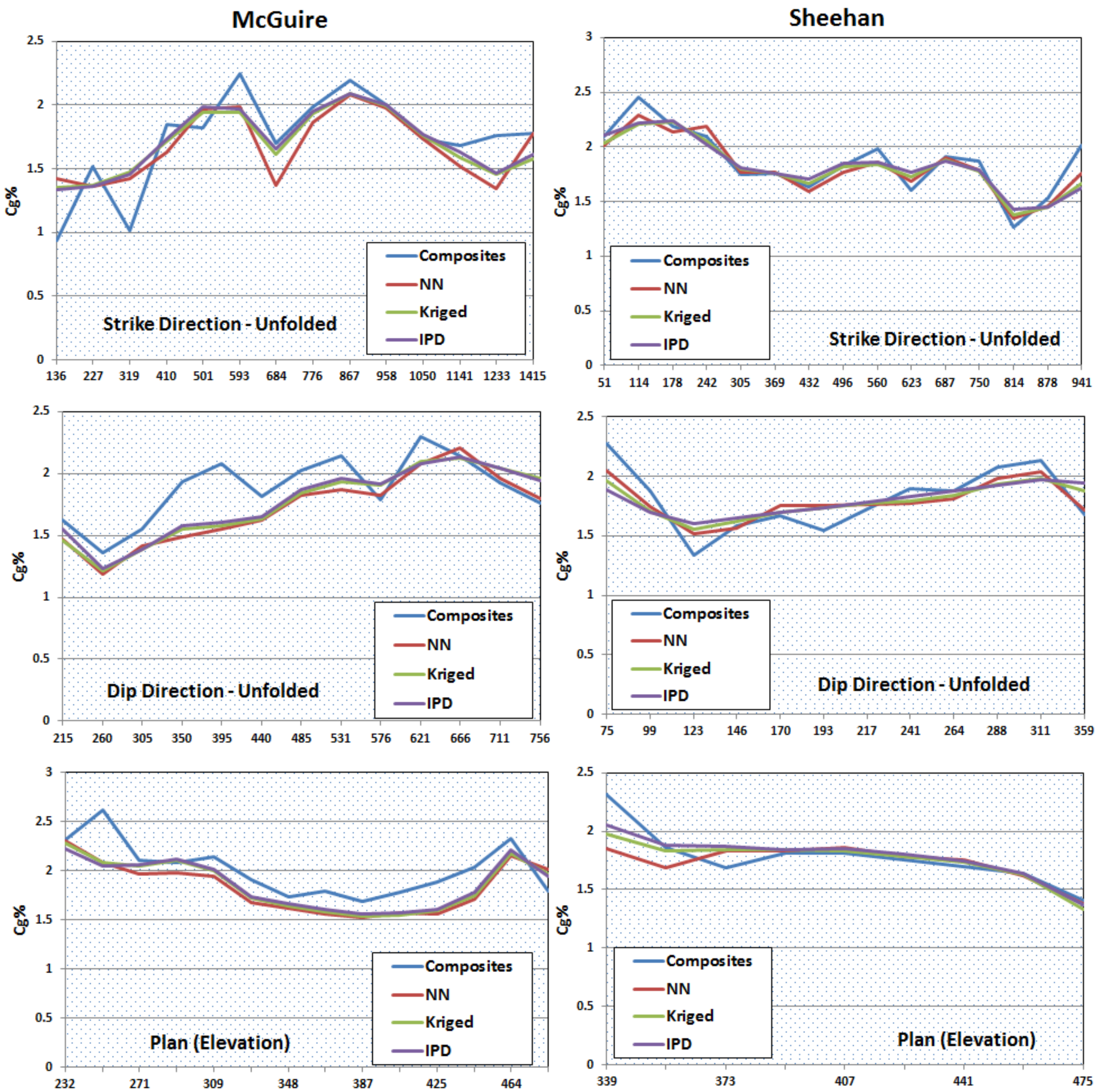


Figure 14-20: McGuire and Sheehan Swath Plots

14.9 Cut-off Grade

To meet the best practice guidelines for resource reporting a Whittle open pit analysis was carried out on the resource block model using current long term Cg pricing assumptions and projected mining, transportation and processing costs, and metal recoveries provided by Ontario Graphite.

The plant is anticipating an 88% overall recovery in the first year of production based on previous production and current projections based on the RDI test work (Section 13.2) with the conventional flotation rougher cell, without any further size reduction to the flotation feed.

The table below, provided by Ontario Graphite, is a breakdown of the products, as a percentage, the plant will produce based on actual production prior to shutdown in June 1994 and anticipated enhancements made to the new circuit:

R.O.M. Production	Percent
+50 mesh (coarse)	34
+80 mesh (med)	21
+100 mesh (med)	15
-100 mesh (fine)	30

The run on mine (ROM) products (above) is expected to sell for an average price of $1800/Tonne. The plan is to micronize a minimum of 25% of the ROM material predominately the -100 mesh and fines. The price for micronized material is expected to range from $2,400-$3200/ton depending on the flake size and purity. This added value to the fines material will bring the total average selling price to $2,200/Tonne.

For Mineral Resource reporting, a cut-off grade of 1.1 Cg% was determined, based on the parameters used in the Whittle pit analysis:

- selling price for Graphite of $2200;
- mining cost of $3.09 per tonne;
- Transportation, G&A, milling and refining costs (processing) of $15.76 per tonne, and;
- processing recoveries of 88%;

where; Cutoff (Cg%) = Mining+Processing Costs / (Processing Recovery x Selling Price) / 100

= (18.85 / (0.88 x 2200)) / 100 = 1.0 % +10% adjustment (contingency allowance) = **1.1%**

Blocks above this cutoff and lying within the Whittle pit shell were tabulated as Mineral Resources according to their classification, and are presented in the Resource Statement section below.

Details of the Whittle pit optimization exercise are provided in Appendix C. Note the sensitivities to metal price (Table 8) and pit slope angle (Table 10) also provided in this appendix.

14.10 Resource Statement

The mineral resources for the Kearney property McGuire and Sheehan deposits are reported in accordance with Canadian Securities Administrators' NI 43-101 and have been estimated in conformity with generally accepted CIM "Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines. Mineral resources are not mineral reserves and do not necessarily demonstrate economic viability. There is no certainty that all or any part of this mineral resource will be converted into mineral reserve. The resource estimate was completed by Greg Greenough, P.Geo. (APGO #0825), an independent qualified person as this term is defined in NI 43-101. The effective date of this resource estimate is August 30, 2013.

Table 14-10 reports the Indicated and Inferred Mineral Resources for the McGuire and Sheehan deposits, effective August 30, 2013 and Table 14-11 is presented to show resource sensitivities to varying cut-offs.

The Whittle pit optimization exercise used to define the McGuire deposit resources is preliminary in nature, and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary Whittle pit defined will be realized.

Table 14–10: Kearney Resource Statement

<table>
<tr><th colspan="3"></th><th>Cutoff (Cg%)</th><th>Tonnes</th><th>Cg%</th></tr>
<tr><td rowspan="3">Indicated</td><td rowspan="3">McGuire</td><td>With McGuire Lake Limit</td><td>1.10</td><td>26,362,847</td><td>2.12</td></tr>
<tr><td>Without McGuire Lake Limit (Additional Resources)</td><td>1.50</td><td>25,143,047</td><td>2.17</td></tr>
<tr><td>Kearney Total Indicated</td><td></td><td>51,505,894</td><td>2.14</td></tr>
<tr><td rowspan="5">Inferred</td><td rowspan="3">McGuire</td><td>With McGuire Lake Limit</td><td>1.10</td><td>12,112,919</td><td>1.97</td></tr>
<tr><td>Without McGuire Lake Limit (Additional Resources)</td><td>1.50</td><td>16,280,442</td><td>2.02</td></tr>
<tr><td>Total McGuire Inferred</td><td></td><td>28,393,361</td><td>2.00</td></tr>
<tr><td colspan="2">Sheehan</td><td>1.50</td><td>18,427,547</td><td>2.00</td></tr>
<tr><td colspan="2">Kearney Total Inferred</td><td></td><td>46,820,908</td><td>2.00</td></tr>
</table>

Table 14–11: Kearney Resource Sensitivities

		CUTOFF (Cg%)	McGUIRE					SHEEHAN	
			TONNES	Cg%		TONNES	Cg%	TONNES	Cg%
INDICATED	With McGuire Lake Limit	0.5	28,254,924	2.03	Additional Resource Without McGuire Lake Limit	37,367,836	1.82		
		0.6	28,158,863	2.04		36,711,018	1.84		
		0.7	28,005,447	2.05		35,948,189	1.87		
		0.8	27,805,910	2.06		35,058,385	1.9		
		0.9	27,462,259	2.07		34,047,959	1.93		
		1	27,026,784	2.09		32,934,558	1.96		
		1.1	**26,362,847**	**2.12**		31,620,606	2		
		1.2	25,609,669	2.14		30,253,822	2.04		
		1.3	24,842,436	2.17		28,570,527	2.08		
		1.4	24,028,901	2.2		26,941,553	2.13		
		1.5	23,201,612	2.23		**25,143,047**	**2.17**		
		1.6	22,174,312	2.26		23,236,465	2.23		
		1.7	21,005,756	2.29		21,339,732	2.28		
		1.8	19,548,499	2.33		19,371,133	2.33		
		1.9	17,966,336	2.37		17,227,708	2.39		
		2	16,285,681	2.42		14,879,150	2.46		
INFERRED	With McGuire Lake Limit	0.5	12,747,992	1.92	Additional Resource Without McGuire Lake Limit	20,987,349	1.84	24,524,319	1.80
		0.6	12,739,477	1.92		20,844,983	1.85	24,391,396	1.81
		0.7	12,700,381	1.92		20,704,484	1.86	24,229,935	1.82
		0.8	12,641,447	1.93		20,548,076	1.86	23,985,213	1.83
		0.9	12,559,963	1.93		20,348,734	1.87	23,672,236	1.84
		1	12,393,837	1.95		20,072,465	1.89	23,231,946	1.86
		1.1	**12,112,919**	**1.97**		19,660,632	1.9	22,743,857	1.87
		1.2	11,724,247	2		19,087,244	1.93	22,058,830	1.90
		1.3	11,259,418	2.03		18,394,245	1.95	20,985,575	1.93
		1.4	10,853,348	2.05		17,381,857	1.99	19,820,185	1.96
		1.5	10,470,351	2.07		**16,280,442**	**2.02**	**18,427,547**	**2.00**
		1.6	10,004,604	2.1		14,911,365	2.07	16,958,157	2.04
		1.7	9,348,137	2.13		13,206,384	2.12	15,363,881	2.08
		1.8	8,478,816	2.17		11,377,260	2.18	13,499,981	2.13
		1.9	7,353,671	2.22		9,528,140	2.24	11,495,161	2.17
		2	6,093,855	2.27		7,783,712	2.31	9,217,206	2.23

Note, that in both the resource statement and sensitivities tables, the McGuire Indicated and Inferred Resources are split into two portions. The first portion represents those resources lying within the Whittle pit optimization shell, generated with a limiting boundary for McGuire Lake. The second portion represents additional resources lying outside the 'limited' pit shell, and within a larger Whittle pit shell, generated without a limiting boundary for McGuire Lake (but with all other parameters remaining the same).

Note also that the Whittle-based cutoff of 1.1% Cg was increased to a more conservative cutoff of 1.5% Cg for resources outside the 'limited' pit and within the unlimited' pit shell. This equates to an approximate net negative fluctuation in costs/pricing, to account for potential changes in commodity pricing well into the future and/or unforeseen costs associated with the inclusion of McGuire Lake.

Since Ontario Graphite has initiated some effort in this regard, and it is reasonable to assume successful permitting to allow the mining of resources under McGuire Lake, these additional resources are included in the resource statement for the Kearney project.

15.0 ADJACENT PROPERTIES

Algonquin Provincial Park is adjacent to the eastern claim boundaries of the Sheehan deposit.

The nearest active graphite property is the Bisset Creek mining lease and surrounding claims which are owned by the Northern Graphite Corporation and are located approximately 100 km northeast of the Kearney mine site, near the town of Mattawa, Ontario. The geology and deposit type are believed to be similar to the Kearney Mine Property.

This information was obtained from the Feasibility Study prepared by G Mining Services Inc. submitted August 23, 2012 and the Preliminary Economic Assessment prepared by SGS Canada Inc. on July 16, 2010. More thorough information regarding this property can be obtained from these reports.

16.0 OTHER RELEVANT DATA AND INFORMATION

Golder is unaware of any other relevant data or information that may exist that would be material to this report.

17.0 INTERPRETATION AND CONCLUSIONS

Work by Golder Associates has concluded that Ontario Graphite and others' exploration programs at the Kearney Mine project has confirmed and delineated a significant Graphitic Carbon (Cg) Mineral Resource. Using:

- a blended selling price for graphite products of $2200, mining and milling costs of $18.85 per tonne, milling recoveries of 88%, and Whittle open pit optimization of the McGuire zone;
- a cut-off grade of 1.1% Cg for material lying within a Whittle open pit limited by the boundary of McGuire Lake, and 1.5% Cg for the additional material lying within a Whittle open pit not limited by McGuire Lake;
- and a cutoff of 1.5% Cg for the Inferred Resources of the Sheehan deposit;

Golder was able to update previous work with an NI 43-101 compliant resource estimate for the Kearney property McGuire and Sheehan deposits.

The results of this current work estimated are:

- Indicated Mineral Resources totalling 51.5 million tonnes with an average grade of 2.14% Cg, and
- Inferred Mineral Resources totalling 46.8 million tonnes with an average grade of 2.00% Cg.

There is good potential for expansion of resources in both the McGuire and Sheehan deposits, although proximity to Algonquin Provincial Park makes exploration northeast of the Sheehan zone unlikely.

Exploration to the southeast of McGuire has potential, but 'zeroing in' with some geophysical work here first is recommended, as the last holes at this extremity of the deposit suggest a possible significant change in strike in this direction.

In Golder's opinion, the most promising exploration target lies between the McGuire and Sheehan deposits. Geological environments and mineralization orientations are essentially the same for both zones, and mineralization is not cut off by existing drilling in either zone, making the approximate 1.5 km area between McGuire and Sheehan an attractive exploration target (see Figure 17-1).

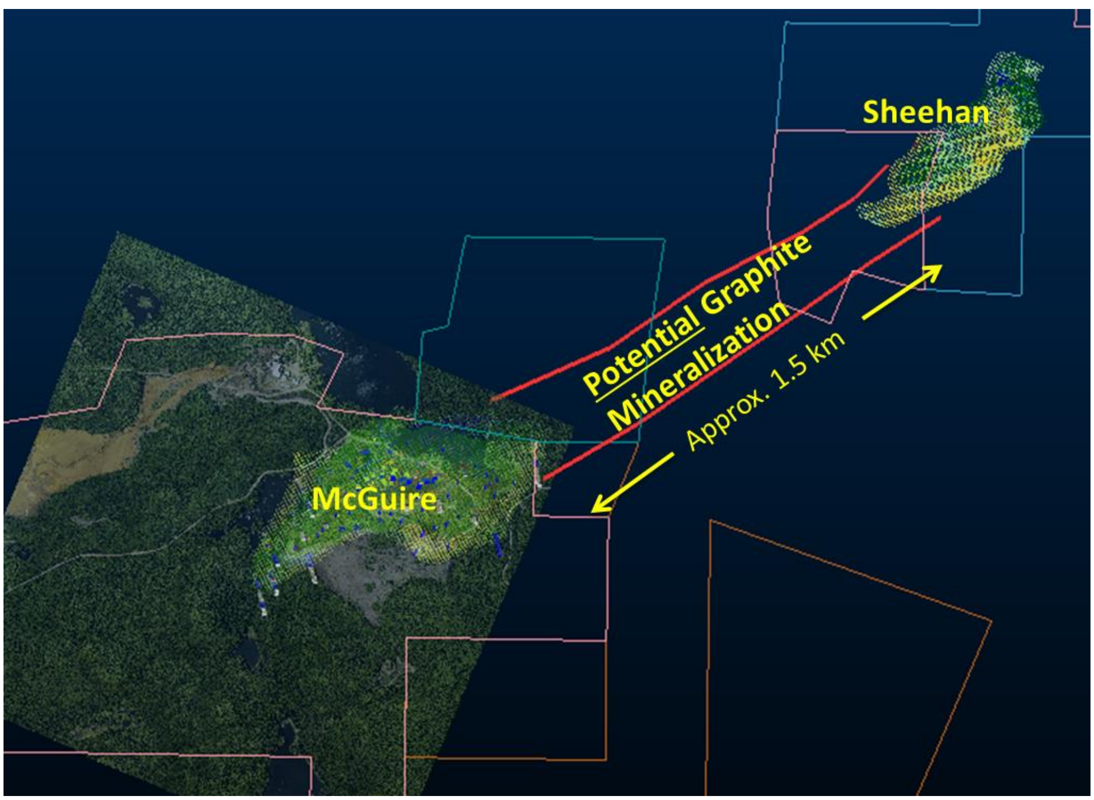


Figure 17-1: Kearney Exploration Potential

The author has visited the site, supervised logging and sampling of the recent exploration, and reviewed the Kearney property data including geological and metallurgical reports, maps, technical papers, and digital data including lab results, sample analyses and other miscellaneous information. The author believes that the data presented are generally an accurate and reasonable representation of the Kearney property mineralisation and concludes that the database for the Kearney property is of sufficient quality to provide the basis for the conclusions and recommendations reached in this Report.

Overall, the author considers the Kearney property to be a property of merit as defined in NI43-101 and has potential for increased resources through additional exploration expenditures.

Other than those stated in this report, the author is not aware of any environmental or social issues that could conceivably affect the Kearney property. Historical mineral resources figures contained in the report, including any underlying assumptions, parameters and classifications, are quoted "as is" from the source. These estimates being historical in nature are not necessarily compliant with National Instrument 43-101 standards and as such, should not be relied upon.

18.0 RECOMMENDATIONS

As indicated in Section 17, both the McGuire and Sheehan zones remain open to the south-west and down-dip, as well as between the two zones. A few of the holes in the Sheehan zone penetrated deep enough into the footwall to indicate additional mineralization. There was not enough information on this mineralization to include it in the Mineral Resource estimate, but the potential for additional resources is indicated.

Areas to the north-east and south-west of the McGuire zone are still classified as Inferred and require additional drill data to increase confidence to the point where they can be included in a Mineral Reserves estimate.

To explore areas of potential resource expansion, and to increase confidence in existing resources, Golder recommends the following efforts:

- Geophysical surveys to the south-west of the McGuire deposit, and between the McGuire and Sheehan deposits (see Figure 17-1);
- diamond drilling to explore best targets identified by geophysical surveys, notably in the area between the McGuire and Sheehan deposits, if confirmed by geophysics;
- additional diamond drilling in the north-east and south-west portions of the McGuire deposit, and;
- twinning of at least 5% of the existing Sheehan drill holes, over a representative area of the entire deposit. These holes should penetrate deep enough into the footwall to confirm the mineralization suggested by a few existing holes;

As noted in Section 14.9 (Resource Statement), a portion of the resources are dependent upon obtaining the appropriate permitting to include the area covered by McGuire Lake in the mine plan. To ensure that these resources remain viable, and that early mine plans are not negatively impacted, Golder recommends that this permitting become a priority as early as possible.

A NI 43-101 compliant Mineral Reserves estimate has yet to be done on the Kearney property. With production planned to resume in the near future Golder recommends that a Pre-Feasibility Study (minimum) be initiated as soon as possible to ensure a robust mine plan and support a statement of Mineral Reserves.

19.0 REFERENCES

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Report Signature Page

The report was prepared and signed by Greg Greenough of Golder. The author is a qualified person as outlined by NI 43-101. The signature and effective date of this technical report is October 25, 2013.

Greg Greenough, P.Geo. of Golder Mississauga is the independent Qualified Person responsible for the Mineral Resource estimate and preparation of the technical report. The Mineral Resource estimate and Technical Report has been reviewed by Brian Thomas P.Geo., of Golder Sudbury.

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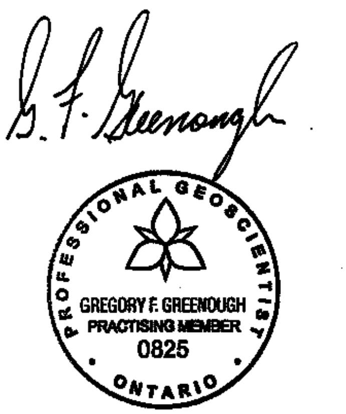

Greg Greenough, P.Geo
Associate/Senior Resource Geologist

GG/BT/co

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APPENDIX A

Certificates of Qualifications

GREG GREENOUGH
CERTIFICATE OF QUALIFICATIONS

I, Gregory F. Greenough, P.Geo. do hereby certify that:

1) I am employed as a Senior Resource Geologist at:
Golder Associates Ltd.
6925 Century Avenue, Suite 100, Mississauga, Ontario, Canada L5N 7K2
Telephone: 905-567-6100; Fax: 905-567-6561
Email: ggreenough@golder.com

2) I graduated from Laurentian University in 1976 with a Hons B.Sc. degree in Geology.

3) I am registered as a Professional Geoscientist in the Province of Ontario (APGO Licence #825).

4) I have worked as a geologist in the mineral resource industry for a total of thirty-six years since my graduation from university. My relevant experience for the purpose of this resource estimate is:

    a) Thirty years of geological experience with INCO Limited in the Sudbury Basin Cu, Ni PGE deposits, including: Senior geologist at various mines responsible for exploration projects and resource/reserve estimation; Nine years as Chief Evaluation and Design Geologist for the Ontario Division, responsible for the resources and reserves, standards, and auditing of the Sudbury Operations deposits.

    b) Consulting resource estimation experience on various projects, including laterite nickel deposits, oxidized Cu-Mo deposits in Sonora Mexico, James Bay district gold deposits, and James Bay Lowlands Ni-Cu-PGE and Chromite deposits.

5) I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.

6) I am responsible for the technical report titled “NI-43-101 Technical Report and August 2013 Mineral Resource Estimate, Kearney Graphite Property, Ontario Canada”, with an effective date of August 30, 2013 (the “Technical Report”). I have visited the property.

7) I have not had prior involvement with the property that is subject to the Technical Report.

8) As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make it not misleading.

9) I am independent of the issuer applying all the tests in section 1.5 of the National Instrument (NI) 43-101.

10) I have read NI 43-101 and Form 43-101F1, and the Summit property resource estimate has been prepared in compliance with that instrument and form.

Dated this 25th Day of October, 2013.

Greg Greenough, H.BSc., P.Geo.

APPENDIX B

Drill Hole Locations and Significant Intersections

	McGuire									
BHID	EASTING	NORTHING	ELEV.	AZ.	DIP	DEPTH	FROM	TO	LENGTH	Cg%
ML9301	649679	5065697	456	0	90	106.7	9.1	106.7	97.5	1.18
ML9302	649671	5065747	456	0	90	90.8	9.1	90.8	81.7	1.24
ML9303	649645	5065816	456	0	90	89.9	15.2	89.9	74.7	1.02
ML9304	649538	5065708	456	0	90	157.0	13.7	124.7	110.9	0.89
ML9305	649495	5065751	456	0	90	117.3	19.1	104.9	85.7	0.65
ML9306	649473	5065730	456	0	90	132.6	9.1	92.7	83.5	0.52
OG_01	649957	5065724	471	324	41	258.0	138.0	255.0	117.0	1.78
OG_02	649274	5065014	475	309	49	356.0	115.0	187.0	72.0	0.52
OG_02	649274	5065014	475	309	49	356.0	226.4	247.9	21.4	1.12
OG_03	649234	5065235	510	299	74	329.0	97.9	158.0	60.1	1.52
OG_03	649234	5065235	510	299	74	329.0	180.8	220.1	39.3	2.23
OG_04	649166	5065249	478	305	45	252.0	36.0	99.0	63.0	1.35
OG_04	649166	5065249	478	305	45	252.0	111.0	153.3	42.3	1.90
OG_05	649168	5065156	507	299	59	280.0	83.8	157.0	73.2	1.31
OG_05	649168	5065156	507	299	59	280.0	175.0	219.5	44.5	2.19
OG_06	649112	5065015	476	304	44	208.7	74.0	123.6	49.6	1.11
OG_06	649112	5065015	476	304	44	208.7	146.4	183.0	36.6	1.95
OG_07	649137	5064810	458	309	47	249.0	137.2	149.3	12.1	1.36
OG_07	649137	5064810	458	309	47	249.0	228.0	236.0	8.0	0.62
OG_08	649150	5064906	463	301	59	257.8	106.9	142.0	35.1	1.90
OG_08	649150	5064906	463	301	59	257.8	184.8	211.0	26.2	0.67
OG_09	649632	5065470	502	316	57	290.0	113.0	197.0	84.0	2.40
OG_09	649632	5065470	502	316	57	290.0	218.0	254.0	36.0	1.62
OG_10	649501	5065420	493	329	74	240.0	95.9	155.2	59.3	2.42
OG_10	649501	5065420	493	329	74	240.0	171.0	190.7	19.7	1.40
OG_11	649779	5065487	495	311	76	313.0	130.0	244.0	114.0	1.82
OG_12	649663	5065644	461	317	69	201.0	21.0	183.0	162.0	1.27
811	649187	5065324	471	353	45	38.4	11.6	38.4	26.8	2.08
8110A	649437	5065533	486	81	45	102.7	32.0	102.7	70.7	2.52
8110B	649437	5065533	486	261	50	63.1	31.7	63.1	31.4	2.65
8111A	649464	5065537	483	71	50	80.5	34.7	80.5	45.7	3.01
8111B	649464	5065537	483	251	50	75.3	40.0	75.3	35.3	1.58
8112	649511	5065536	480	39	50	65.8	31.5	65.8	34.3	3.26
8113	649534	5065557	480	30	50	75.3	31.7	75.3	43.6	2.97
8114A	649555	5065589	474	56	50	44.8	16.5	44.8	28.3	1.95
812	649249	5065389	479	331	45	44.8	11.0	31.4	20.4	2.88

	McGuire									
BHID	EASTING	NORTHING	ELEV.	AZ.	DIP	DEPTH	FROM	TO	LENGTH	Cg%
813	649249	5065389	479	95	45	38.7	9.4	38.7	29.3	2.30
814	649249	5065389	479	193	45	87.2	18.9	87.2	68.3	2.26
815	649287	5065429	485	12	50	42.1	4.9	31.4	26.5	2.32
816A	649314	5065470	487	352	50	44.8	1.2	40.2	39.0	1.77
816B	649314	5065470	487	172	50	63.1	1.2	63.1	61.9	2.15
817	649331	5065489	491	0	45	50.9	3.0	50.9	47.9	1.71
818A	649360	5065512	492	20	45	75.3	0.6	71.0	70.4	1.91
818B	649360	5065512	492	180	50	63.1	7.6	63.1	55.5	2.44
819A	649397	5065526	491	32	45	75.3	14.9	75.3	60.4	2.16
819B	649397	5065526	491	212	50	69.2	21.6	69.2	47.5	2.24
851	649286	5065615	465	0	50	67.3	6.3	63.9	57.6	1.88
8510AB	649437	5065533	485	67	65	44.2	23.5	44.2	20.7	2.45
8511C	649464	5065537	483	0	90	105.8	42.3	103.8	61.5	2.49
8512AA	649511	5065536	482	50	45	50.3	35.7	50.3	14.6	0.00
8512B	649511	5065536	482	218	70	91.4	65.6	91.4	25.8	3.15
852	649254	5065565	478	347	50	63.1	30.5	63.1	32.6	1.48
853	649221	5065495	481	347	50	53.9	35.1	53.9	18.8	0.30
854	649172	5065431	473	347	50	85.3	55.0	83.4	28.4	2.27
854C	649249	5065389	479	0	80	51.8	12.6	43.2	30.6	2.36
855C	649287	5065429	486	0	90	47.9	9.9	45.3	35.4	2.33
856C	649314	5065470	487	278	88	45.7	2.0	43.3	41.3	2.91
857B	649331	5065489	490	0	50	63.1	2.4	63.1	60.7	1.49
857C	649331	5065489	490	0	90	56.4	1.3	41.5	40.2	1.62
857C	649331	5065489	490	0	90	56.4	41.6	56.4	14.8	2.73
858C	649360	5065512	492	0	90	85.3	0.8	83.7	82.8	2.00
859AA	649373	5065571	482	30	45	44.8	1.4	37.9	36.5	2.35
861D	649244	5065298	506	0	90	152.4	80.3	144.6	64.3	2.27
861E	649284	5065252	506	0	90	249.0	121.7	168.2	46.5	1.92
861E	649284	5065252	506	0	90	249.0	206.0	249.0	43.1	2.56
8611F	649596	5065279	498	0	90	282.5	188.1	233.8	45.7	1.74
8611F	649596	5065279	498	0	90	282.5	242.9	282.5	39.6	1.92
8613F	649710	5065352	500	0	90	280.4	169.3	267.3	98.0	1.91
8615C	649216	5065222	511	0	90	175.9	101.5	159.3	57.8	1.37
8616C	649206	5065191	510	0	90	178.9	108.8	171.0	62.2	2.78
8617C	649167	5065162	508	0	90	166.7	98.3	163.7	65.4	1.35
8618C	649141	5065114	503	0	90	154.5	99.7	150.9	51.2	1.68

	McGuire									
BHID	EASTING	NORTHING	ELEV.	AZ.	DIP	DEPTH	FROM	TO	LENGTH	Cg%
862D	649289	5065328	501	0	90	145.4	79.6	132.2	52.6	2.03
862E	649339	5065281	508	0	90	266.7	122.4	154.2	31.9	1.35
862E	649339	5065281	508	0	90	266.7	227.7	258.8	31.1	3.23
8620L	649652	5065657	459	15	60	87.5	16.8	87.5	70.7	2.83
8621L	649649	5065654	459	0	90	90.5	13.3	90.5	77.2	1.87
8622L	649690	5065648	457	0	90	124.1	20.4	124.1	103.6	1.72
8623L	649756	5065633	457	0	90	89.0	44.3	89.0	44.7	2.90
8630	649275	5065531	481	0	90	127.4	1.1	4.8	3.7	2.21
8630	649275	5065531	481	0	90	127.4	81.4	127.4	46.0	2.71
8631	649253	5065490	480	0	90	126.5	1.5	3.9	2.4	1.48
8631	649253	5065490	480	0	90	126.5	67.0	125.0	58.0	1.51
8632	649308	5065559	477	0	90	128.0	1.5	24.5	23.0	2.63
8632	649308	5065559	477	0	90	128.0	53.3	121.8	68.5	2.26
8633	649352	5065571	480	0	90	155.4	3.7	36.6	32.9	2.41
8633	649352	5065571	480	0	90	155.4	64.0	155.4	91.4	2.04
8634	649398	5065563	482	0	90	195.1	4.2	91.9	87.7	3.02
8634	649398	5065563	482	0	90	195.1	93.5	180.1	86.7	1.86
8635	649441	5065559	481	0	90	79.2	3.4	79.2	75.8	2.28
8636	649473	5065560	477	0	90	91.4	17.1	86.9	69.8	2.77
8637	649502	5065572	474	0	90	106.7	7.5	106.7	99.2	2.51
8638	649525	5065592	471	0	90	79.2	8.8	79.2	70.4	2.69
8639	649538	5065611	468	0	90	76.2	7.3	76.2	68.9	2.61
8640	649298	5065660	461	0	50	93.6	1.6	41.9	40.3	1.15
8641	649268	5065583	475	305	50	103.3	34.9	92.6	57.7	1.76
8642	649263	5065642	456	0	90	91.4	4.8	35.7	30.9	2.19
8642	649263	5065642	456	0	90	91.4	35.8	43.0	7.2	0.75
8643	649492	5065625	460	0	90	166.7	6.7	149.4	142.6	1.92
8645	649350	5065609	463	0	50	114.4	18.2	73.8	55.6	1.23
8646	649415	5065615	458	0	90	142.3	5.0	25.0	20.0	0.00
8646	649415	5065615	458	0	90	142.3	53.6	136.7	83.1	1.69
866D	649363	5065393	505	0	90	138.4	64.6	110.3	45.7	1.03
866D	649363	5065393	505	0	90	138.4	110.5	121.0	10.5	2.39
866E	649413	5065345	507	0	90	252.1	125.7	144.0	18.3	1.73
866E	649413	5065345	507	0	90	252.1	233.8	248.6	14.8	1.24
881	649121	5065392	470	0	90	96.6	54.6	94.3	39.7	1.97
8810	649628	5065400	506	0	90	269.7	175.6	245.5	69.9	2.30

	McGuire									
BHID	EASTING	NORTHING	ELEV.	AZ.	DIP	DEPTH	FROM	TO	LENGTH	Cg%
8811	649233	5065547	479	0	90	90.5	41.9	90.5	48.6	2.03
8813	649286	5065550	481	0	90	133.2	3.0	13.0	10.0	0.00
8813	649286	5065550	481	0	90	133.2	60.3	122.0	61.7	1.79
8814	649399	5065417	503	0	90	183.5	90.5	125.1	34.6	2.06
8815	649248	5065568	479	0	90	90.5	33.4	85.3	52.0	1.12
8816	649495	5065377	511	0	90	215.5	156.4	197.2	40.8	1.21
8817	649556	5065454	507	0	90	251.5	127.0	190.5	63.5	2.58
8817	649556	5065454	507	0	90	251.5	214.7	227.0	12.3	2.28
8818	649595	5065484	501	0	90	249.9	125.5	173.2	47.7	2.44
8818	649595	5065484	501	0	90	249.9	193.5	215.5	21.9	1.91
8819	649385	5065621	459	0	90	108.8	30.6	103.8	73.2	2.28
882	649922	5065403	464	0	60	260.6	176.8	259.1	82.2	1.69
8821	649463	5065614	459	0	90	163.1	6.1	54.8	48.7	0.72
8821	649463	5065614	459	0	90	163.1	75.0	147.7	72.7	2.31
8824	649473	5065643	457	0	90	169.2	18.9	148.0	129.1	1.20
8825	649344	5065643	457	0	90	67.7	4.4	50.1	45.7	0.52
8827	649501	5065654	459	0	90	160.0	1.9	158.2	156.3	1.47
8828	649533	5065660	460	0	90	182.6	6.1	169.0	162.9	1.44
8829	649587	5065617	473	0	90	217.9	14.9	202.8	187.9	2.93
883	649204	5065346	473	0	90	182.0	4.5	76.6	72.1	2.18
883	649204	5065346	473	0	90	182.0	97.8	148.4	50.6	2.05
8830	649589	5065658	459	0	90	102.1	1.5	102.1	100.6	1.28
8831	649646	5065612	465	0	90	199.3	62.1	196.6	134.5	2.01
8832	649448	5065712	456	0	90	71.0	13.3	71.0	57.8	0.40
8833A	649780	5065678	456	0	90	141.7	67.6	141.7	74.2	1.92
8834	649704	5065597	468	0	90	230.9	77.7	229.8	152.1	1.99
8835	649582	5065716	456	0	90	71.6	26.7	71.6	44.9	1.37
8836	649739	5065684	456	0	90	120.4	22.0	120.4	98.4	1.18
8837	649713	5065663	456	0	90	44.2	20.2	44.2	24.0	1.89
8838	649654	5065726	456	0	90	61.9	11.0	61.9	50.9	1.32
8839	649764	5065655	456	0	90	175.3	41.1	175.3	134.2	2.17
884	649597	5065360	505	0	90	241.7	187.6	215.1	27.6	2.25
884	649597	5065360	505	0	90	241.7	222.7	232.2	9.5	2.84
8840	649703	5065712	456	0	90	108.2	5.5	108.2	102.7	1.05
8841	649802	5065617	457	0	90	200.3	97.3	195.1	97.8	2.36
8842	649385	5065523	492	0	90	152.4	12.9	92.6	79.7	2.52

	McGuire									
BHID	EASTING	NORTHING	ELEV.	AZ.	DIP	DEPTH	FROM	TO	LENGTH	Cg%
8842	649385	5065523	492	0	90	152.4	135.0	152.4	17.4	1.80
8843	649329	5065478	489	0	90	152.4	4.1	70.7	66.6	2.36
8843	649329	5065478	489	0	90	152.4	112.6	152.4	39.8	0.20
8844	649853	5065696	456	0	90	221.6	98.8	205.5	106.7	2.16
8845	649427	5065534	487	0	90	169.2	18.1	105.5	87.3	2.71
8845	649427	5065534	487	0	90	169.2	125.0	169.2	44.2	0.58
8846	649449	5065502	486	0	90	190.5	28.0	99.3	71.4	2.76
8846	649449	5065502	486	0	90	190.5	143.9	185.0	41.0	1.82
8847	649306	5065423	482	0	90	130.1	16.1	48.9	32.8	2.45
8848	649483	5065537	484	0	90	199.6	34.2	109.8	75.6	2.95
8848	649483	5065537	484	0	90	199.6	129.1	194.2	65.1	2.14
8849	649476	5065564	477	0	90	182.9	14.0	86.8	72.8	2.17
8849	649476	5065564	477	0	90	182.9	112.9	161.8	49.0	2.55
8850	649382	5065474	486	0	90	164.6	24.4	103.7	79.3	2.53
8850	649382	5065474	486	0	90	164.6	136.9	164.6	27.6	2.76
8851	649402	5065375	507	0	90	241.4	110.2	142.3	32.1	2.33
8851	649402	5065375	507	0	90	241.4	223.2	233.2	10.0	0.00
8852	649444	5065385	503	0	90	259.4	119.2	166.8	47.6	2.31
8852	649444	5065385	503	0	90	259.4	241.6	257.7	16.2	2.65
8853	649628	5065547	487	0	90	205.7	98.8	203.7	105.0	2.40
8854	649700	5065478	505	0	90	303.3	144.2	248.6	104.5	2.10
8855	649668	5065437	505	0	90	300.4	172.3	262.9	90.6	2.51
8856	649518	5065490	494	0	90	214.9	86.1	144.8	58.6	2.21
8856	649518	5065490	494	0	90	214.9	158.6	180.6	22.0	1.97
886	649268	5065400	482	0	90	160.6	8.0	43.1	35.1	2.49
886	649268	5065400	482	0	90	160.6	123.1	160.6	37.5	0.00
887	649180	5065467	480	0	90	97.9	50.9	94.9	44.0	2.20
889	649238	5065454	476	0	90	133.2	70.2	126.2	55.9	1.32

Sheehan										
BHID	EASTING	NORTHING	ELEV.	AZ.	DIP	DEPTH	FROM	TO	LENGTH	Cg%
VS-93-01	650831	5067466	482	292	50	87.2	11.0	53.6	42.7	1.57
VS-93-02	650892	5067546	483	292	45	99.1	12.2	64.0	51.8	2.00
VS-93-03	650892	5067546	481	292	90	91.4	11.0	73.2	62.2	1.75
VS-93-04	650923	5067592	479	292	45	91.4	4.5	76.2	71.7	1.65
VS-93-05	650925	5067591	479	0	90	100.6	3.0	73.2	70.1	2.00
VS-93-06	650864	5067557	481	292	45	76.2	15.2	45.7	30.5	2.48
VS-93-07	650888	5067614	470	292	45	64.0	3.0	39.6	36.6	2.22
VS-93-08	650964	5067656	470	292	60	67.1	21.3	61.0	39.6	1.90
VS-93-09	651021	5067691	472	292	45	85.3	33.5	82.3	48.8	2.20
VS-93-10	651070	5067673	476	292	45	128.0	54.9	121.4	66.5	2.33
VS-93-100	650819	5067250	452	292	45	49.4	26.5	49.4	22.9	1.86
VS-93-101	650745	5067247	457	292	45	19.2	3.0	19.2	16.2	1.80
VS-93-102	650781	5067263	460	292	45	68.6	8.2	65.5	57.3	2.23
VS-93-11	651072	5067672	476	0	90	107.6	41.1	103.6	62.5	2.54
VS-93-12	651147	5067772	460	292	45	95.7	30.5	91.4	61.0	2.36
VS-93-13	651116	5067785	459	292	45	97.5	15.2	94.5	79.2	2.20
VS-93-14	651175	5067826	458	292	45	82.9	32.9	82.9	50.0	2.19
VS-93-15	651060	5067806	459	292	45	64.0	10.1	62.2	52.1	2.21
VS-93-16	651004	5067828	459	292	45	17.7	2.4	17.7	15.2	1.97
VS-93-17	651325	5067897	459	292	45	117.0	95.1	117.0	21.9	1.67
VS-93-18	651111	5067851	459	292	45	80.2	14.3	76.8	62.5	2.21
VS-93-19	651246	5067863	459	292	45	110.3	68.6	110.3	41.8	1.56
VS-93-20	651303	5067840	459	292	45	160.0	100.9	156.5	55.6	1.77
VS-93-21	651193	5067886	459	292	45	111.9	41.5	103.0	61.6	1.86
VS-93-22	651149	5067906	461	292	45	90.8	18.9	87.8	68.9	1.71
VS-93-23	651206	5067945	460	292	45	69.5	29.6	69.5	39.9	1.52
VS-93-24	650984	5067774	459	292	45	94.5	16.5	25.6	9.1	0.83
VS-93-25	651239	5067930	461	292	45	88.4	48.5	88.4	39.9	2.10
VS-93-26	651166	5067978	461	292	45	73.2	27.5	73.2	45.7	1.40
VS-93-27	651069	5067740	463	292	45	57.6	15.5	57.6	42.1	1.65
VS-93-28	651202	5067914	460	292	45	94.5	41.8	91.4	49.7	1.15
VS-93-29	650959	5067715	460	292	45	36.6	5.9	30.5	24.5	1.27
VS-93-30	651171	5067926	459	292	45	66.8	24.4	66.8	42.4	1.05
VS-93-31	650915	5067681	460	292	45	51.8	0.9	18.3	17.4	1.82
VS-93-32	651126	5068045	460	292	45	50.3	10.7	50.3	39.6	2.52
VS-93-34	650852	5067627	460	292	45	24.4	12.2	24.4	12.2	2.22
VS-93-35	650824	5067576	462	292	45	11.3	2.1	8.2	6.1	3.76
VS-93-36	651176	5068026	464	292	45	76.2	30.5	73.2	42.7	1.23

Sheehan										
BHID	EASTING	NORTHING	ELEV.	AZ.	DIP	DEPTH	FROM	TO	LENGTH	Cg%
VS-93-37	650817	5067544	463	292	45	50.0	2.7	8.8	6.1	1.86
VS-93-38	650897	5067644	466	292	45	32.0	1.5	29.0	27.4	1.78
VS-93-39	651202	5068079	472	292	45	84.7	64.0	81.7	17.7	2.10
VS-93-40	651120	5068077	462	292	45	48.8	40.2	48.8	8.5	0.91
VS-93-41	650874	5067595	472	292	45	41.5	2.4	41.5	39.0	1.65
VS-93-42	651126	5068008	456	292	45	75.0	23.8	57.9	34.1	1.36
VS-93-43	651099	5068019	459	292	45	78.3	9.8	58.8	49.1	1.65
VS-93-44	650914	5067574	479	292	45	68.6	0.9	65.5	64.6	2.05
VS-93-45	651093	5068054	459	292	45	88.4	18.3	52.5	34.2	1.78
VS-93-46	651099	5067986	459	292	45	104.9	12.2	56.7	44.5	2.33
VS-93-47	650858	5067530	483	292	45	76.5	0.9	50.0	49.1	1.95
VS-93-48	651088	5067958	459	292	45	54.6	10.5	54.6	44.1	1.53
VS-93-49	650905	5067508	492	292	45	107.6	30.5	80.8	50.3	1.84
VS-93-50	651077	5067930	459	292	45	110.3	8.2	47.5	39.3	1.96
VS-93-51	651077	5067891	459	292	45	57.3	1.5	37.5	36.0	2.04
VS-93-52	651043	5067845	459	292	45	69.2	2.4	26.8	24.4	1.73
VS-93-53	650979	5067512	506	292	45	141.4	71.3	141.4	70.1	1.67
VS-93-54	651073	5067836	459	292	45	61.0	5.5	57.9	52.4	1.73
VS-93-55	651011	5067861	459	292	45	48.8	9.8	17.4	7.6	0.86
VS-93-56	651102	5067824	459	292	45	79.2	10.4	77.4	67.1	2.06
VS-93-57	651132	5067812	459	292	45	94.5	13.1	94.5	81.4	2.27
VS-93-58	651139	5067840	459	292	45	100.6	16.8	97.5	80.8	2.23
VS-93-59	650999	5067569	507	292	45	134.1	72.5	134.1	61.6	2.19
VS-93-60	651182	5067857	459	292	45	131.1	37.2	109.4	72.2	2.08
VS-93-61	651150	5067868	459	292	45	101.8	23.5	98.8	75.3	1.97
VS-93-62	651123	5067876	459	292	45	85.6	14.6	78.6	64.0	1.99
VS-93-63	651062	5067610	498	292	60	152.4	101.2	150.3	49.1	1.26
VS-93-64	651055	5067947	459	292	45	102.4	7.0	39.6	32.6	1.23
VS-93-65	651060	5067973	459	292	45	102.4	8.5	50.9	42.4	1.88
VS-93-66	651132	5067584	496	292	45	173.7	117.3	173.7	56.4	2.16
VS-93-67	651077	5067997	460	292	45	107.3	4.9	62.1	57.2	1.85
VS-93-68	651057	5068071	459	292	45	68.9	25.9	42.4	16.5	2.19
VS-93-69	651074	5068029	459	292	45	65.5	7.3	49.7	42.4	1.72
VS-93-70	651146	5067609	500	292	45	186.8	130.8	186.8	56.1	1.92
VS-93-72	651127	5067975	459	292	45	86.6	21.0	67.1	46.0	2.02
VS-93-73	651115	5067950	459	292	45	103.9	8.8	61.9	53.0	1.63
VS-93-74	651168	5067665	501	292	45	168.6	118.0	168.6	50.6	2.10
VS-93-75	651145	5067936	459	292	45	77.4	11.6	73.8	62.2	1.49

Sheehan										
BHID	EASTING	NORTHING	ELEV.	AZ.	DIP	DEPTH	FROM	TO	LENGTH	Cg%
VS-93-76	651111	5067924	459	292	45	57.3	11.9	54.3	42.4	1.48
VS-93-77	651052	5067878	460	292	45	49.4	1.5	38.7	37.2	1.85
VS-93-78	651204	5067685	498	292	45	168.9	119.5	168.9	49.4	2.81
VS-93-80	651153	5067638	500	0	90	178.6	105.5	175.6	70.1	2.24
VS-93-81	651024	5067888	459	292	45	62.5	16.2	27.4	11.3	1.45
VS-93-82	651097	5067897	459	292	45	47.5	9.8	47.5	37.8	2.00
VS-93-83	651051	5067548	498	292	45	163.7	93.3	160.6	67.4	1.76
VS-93-84	651235	5067834	459	292	45	127.4	67.4	123.9	56.5	2.08
VS-93-85	651224	5067806	460	292	45	117.7	57.6	117.7	60.0	2.28
VS-93-86	651218	5067778	466	292	45	109.4	59.7	109.4	49.7	2.43
VS-93-87	651198	5067752	469	292	45	117.0	66.8	114.0	47.2	2.30
VS-93-88	651037	5067488	489	292	60	150.3	79.9	147.2	67.4	2.24
VS-93-89	651139	5067744	464	292	45	90.5	44.8	90.5	45.7	1.83
VS-93-90	651110	5067755	459	292	45	102.1	21.9	80.8	58.8	1.92
VS-93-91	651046	5067781	459	292	45	64.6	5.2	64.6	59.4	1.43
VS-93-92	650993	5067802	459	292	45	21.0	9.1	21.0	11.9	0.66
VS-93-93	651020	5067764	459	295	45	26.5	6.1	26.5	20.4	1.58
VS-93-94	650954	5067456	496	0	90	145.7	68.3	118.0	49.7	1.57
VS-93-95	651007	5067436	485	0	90	147.2	105.2	144.2	39.0	2.20
VS-93-96	650938	5067399	483	0	90	110.3	58.8	107.3	48.5	2.66
VS-93-97	650908	5067346	473	292	45	101.8	35.7	98.8	63.1	2.09
VS-93-98	650893	5067283	457	292	45	83.8	40.2	80.8	40.5	2.51
VS-93-99	650995	5067375	475	292	45	143.3	80.0	139.7	59.7	2.21

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