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Albany Graphite Project
2019 Bulk Sample Drill Program
Assessment Report

Porcupine Mining District, Ontario
Pitopiko River and Feagan Lake Areas
NTS: 42K/01,02, 42F/15,16

Graphene Solutions

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1.0 Summary

ZEN Graphene Solutions Ltd.'s ("ZEN" and previously known as Zenyatta Ventures Limited) Albany Graphite deposit is a unique igneous-hosted, fluid-related graphite deposit situated within two near surface breccia pipes intruding host syenitic country rock. The deposit is within ZEN's Albany Graphite Project claim block, located in the James Bay Lowlands region of northeastern Ontario, Canada (Figures 1 and 2*)*. This claim block is the only remaining portion of ZEN's original Albany claim blocks (Figure 2) and is located within the Porcupine Mining District and presently held 100% by ZEN.

In 2013, ZEN completed a Phase III exploration program on the Albany graphite deposit and drilling outlined two graphite mineralized breccia pipes with three-dimensional continuity, and size and grades that can potentially be economically extracted (RPA, 2014). The resource drilling tested the extent of the graphitic breccia mineralization to establish the geometry of the breccia bodies based on the shape of their geophysical signatures. (RPA, 2014).

RPA reported that ZEN's protocols for drilling, sampling, analysis, security, and database management meet industry accepted practices. The drill hole database was also verified to be suitable for Mineral Resource estimation work. In the positive 2015 PEA study, RPA estimated Mineral Resources for the Albany graphite deposit using diamond drill hole data available as of November 15, 2013 and it was based on a potential combined open pit and underground mining scenario. Indicated Mineral Resources were estimated to total 24.3 Mt at an average grade of 3.98% Cg, containing 968,000 tonnes of Cg. Inferred Mineral Resources are estimated to total 16.9 Mt at an average grade of 2.64% Cg, containing 445,000 tonnes of Cg.

The 2019 bulk sample drill program has provided additional information that supports the grade and continuity of the East Pipe that was determined from the 2013 resource drill program and subsequent resource estimate. Also, the program provided a 111 tonne bulk sample from two percussive RCD holes in the East Pipe with the potential to contain 6.94 tonnes of graphitic carbon. Unfortunately, the program was only partially successful due to the influx of ground water into the holes that made drilling a challenge and reduced productivity. Consequently, only 111 tonnes of the proposed 990 tonnes were recovered.

2.0 Introduction

In 2019, ZEN Graphene Solutions Ltd. (ZEN, previously known as Zenyatta Ventures Limited) performed a bulk sample drill program to collect additional graphite-mineralized material for metallurgical and product development testwork. The program was designed to collect up to 990 tonnes of graphite-mineralized material from the East (5 holes) and West (1 hole) pipes. ZEN contracted the drill program to Les Forages LBM Inc. and elected to use a 24-inch percussive reverse circulation drill (RCD) to recover the material. This assessment report summarizes the field activities and results from the bulk sample program. A significant portion of the background information in this report was extracted from assessment and technical reports by by Carey (2015a) and RPA Inc. (2015).

3.0 Property Description, Location and Agreements

ZEN initially held a group of claim blocks (the Albany Project) located in a large area covering twenty townships to the north of Lake Superior and west of James Bay, Canada, within the Porcupine Mining District of northern Ontario, Canada (Figure 1). The Albany Graphite Project (previously known as Block 4F, the "Project") is now the only remaining claim block that made up the Albany Project and includes a total of 521 claim units (Figure 2). The claim blocks were originally staked under an agreement between Cliffs Natural Resources Exploration Canada Inc. (CNRECI), an affiliate of Cliffs Natural Resources Inc. (Cliffs), and Eveleigh Geological Consulting Inc. (EGC) to explore for Cu-Ni-PGM mineralization. The Project is located west of the communities of Constance Lake First Nation and Hearst, Ontario, within 30 km of the Trans-Canada Highway (Highway 11).

At the time of ZEN's Initial Public Offering in December 2010, the Albany claims were 25% owned by ZEN and 75% owned by CNRECI, as defined by the 2010 Amended Albany Option and Joint Venture Agreement. The majority of the claims were staked during the summer and fall of 2009, followed by additional staking in the winter and spring of 2010. This report covers the Albany Graphite Project, which contains the Albany Graphite Deposit and is 100% owned by ZEN.

ZEN's Albany Graphite Project claims were staked during the months of March, May, and June of 2010. Presently, the claim block is comprised of a total of 521 claim units ((Figure 3, Table 2). The property is not subject to any known environmental issues, and no abandoned mine workings or tailings are present on the property. Table 2 below lists the Albany Graphite Project claims, expiry dates, and reserves. Currently, all claims are in good standing until 2024, with the earliest due date occurring on February 28, 2024, and a combined total of over $5.6 million in reserve on key claims in the vicinity of the deposit.

In November 2012, ZEN reached an agreement with CNRECI and acquired 100% ownership of the Albany Graphite Project claim block. Before this date and according to the agreement, ZEN had already exercised its right to acquire an 80% interest in the property by spending a total of $10 million on exploration on the larger group of Albany Project claims. After acquiring Cliffs' remaining 20% interest in the Project, ZEN then held a 100% interest. According to the terms of the transaction, ZEN and Cliffs agreed to the following concerning the Albany Graphite Project claims:

a. ZEN agreed to issue Cliffs (or its designated affiliate) a total of 1,250,000 ZEN shares as follows: (i) 500,000 shares upon signing the agreement (completed); (ii) 250,000 shares issued upon completion of a pre-feasibility study; and (iii) 500,000 shares issued upon completion of a feasibility study; and

b. ZEN also granted Cliffs a 0.75 % NSR royalty on the Project, of which 0.5 % could be purchased at any time for C$ 500,000.

There is an additional underlying 2 % NSR royalty on the Albany Graphite Project granted to EGC, of which 1.0 % could be purchased at any time for C$ 1,000,000. This royalty was part of the original 2009 Project Agreement between CNRECI and EGC, which subsequently became a part of the 2010 Amended Albany Option and Joint Venture Agreement between ZEN, Cliffs, CNRECI, and EGC.

The Albany Graphite Project (Figure 6) is located in Constance Lake First Nation's (CLFN) Traditional Territory. On July 18, 2012, ZEN and CLFN signed an Exploration Agreement for a mutually beneficial and co-operative relationship regarding the exploration and pre-feasibility activities on the Project.

Subsequently, in September 2018, ZEN and CLFN signed a Memorandum of Understanding (MOU) to create a project partnership structure supporting the development of the Albany Graphite Project. The MOU reflects the transition of the Project from the exploration to the development stage. The original 2011 Exploration Agreement has continued to be in effect until a formal agreement on a new project partnership structure is in place. The new agreement provides for more flexibility to accommodate alternative business models for the Project as it progresses toward becoming a graphene nanomaterial technology business built on the unique properties of Albany Graphite. Under this agreement, both parties committed to creating a project partnership that will provide for:

- Shared governance, decision-making, and support for community engagement for the Project;
- Shared objectives and expectations for the Project; and
- Shared economic expectations and benefits for the Project.

ZEN and CLFN are currently working towards completing a formal agreement defining the future partnership structure and accelerating the project development.

Figure 1: Albany Graphite Project Location Map

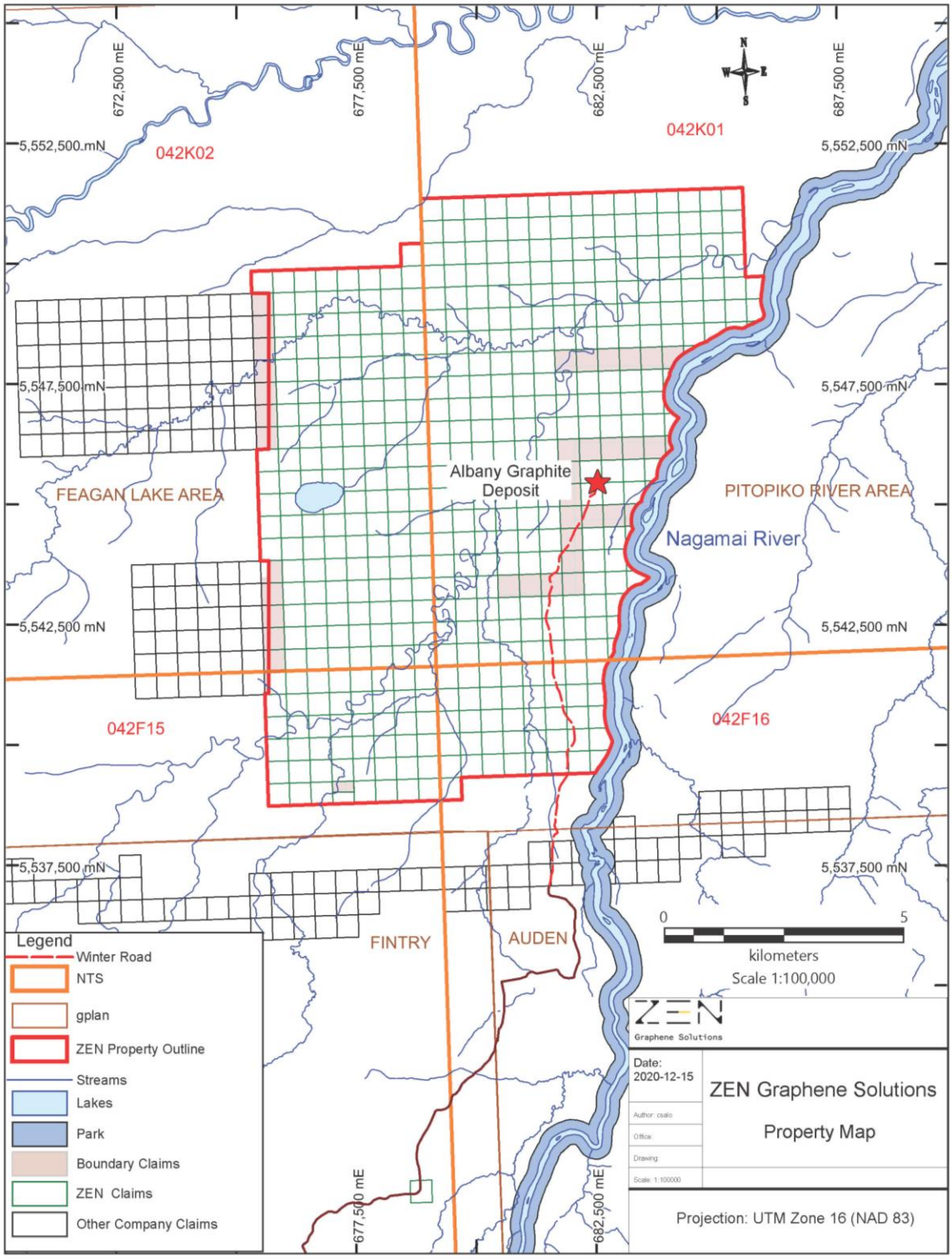


Figure 2: Albany Graphite Project Property Area Map

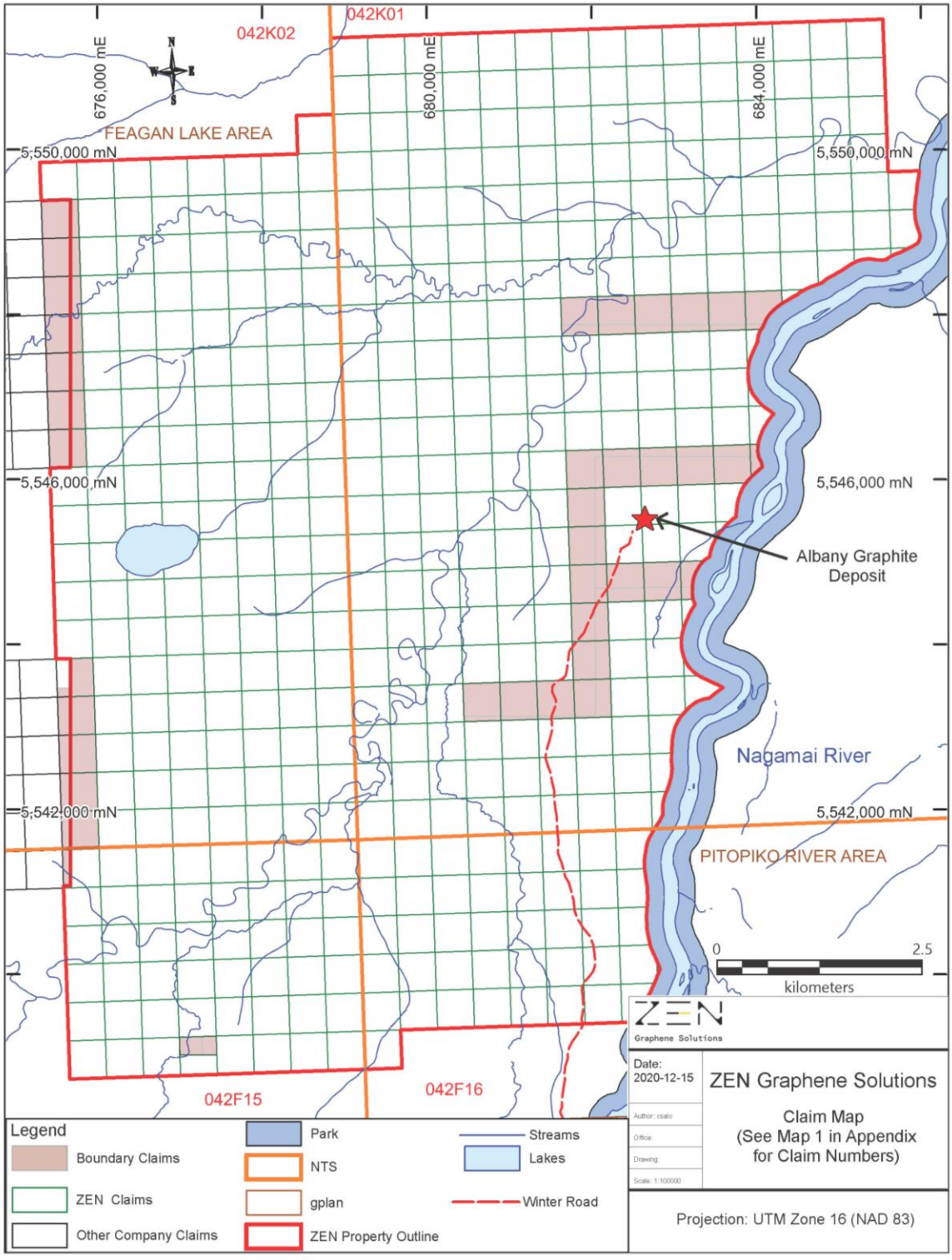


Figure 3: Albany Graphite Project Claims

Table 1: Albany Graphite Project Claim Status

Claim ID	Mining Claim Type	Issue Date	Anniversary Date	Reserves	Holder
102303	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
103472	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
103563	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
103564	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
103565	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
104157	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
104158	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
104159	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
104160	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
104161	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
104742	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
105055	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
105056	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
105812	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
106112	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
106169	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
106223	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
106790	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
107152	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
108700	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
108845	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
110195	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
110196	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
110347	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
111356	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
111367	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
112818	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
113467	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
117604	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
118832	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
118833	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
119106	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
119975	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
119985	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
120173	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
121309	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
121438	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
122203	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
122204	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
122205	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
122574	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
122586	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
122680	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 508	ZEN Graphene Solutions Ltd.
122778	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
122779	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
122925	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
122954	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 271,600	ZEN Graphene Solutions Ltd.
122955	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 270,000	ZEN Graphene Solutions Ltd.
122956	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 274,600	ZEN Graphene Solutions Ltd.
123556	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
123557	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
123938	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
124238	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
124239	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
124324	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.

Claim ID	Mining Claim Type	Issue Date	Anniversary Date	Reserves	Holder
125878	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
126166	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
126167	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
127240	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
127241	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
127835	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
127871	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
127872	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
127876	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
130190	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
130530	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
131000	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
131441	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
131442	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
131451	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
133702	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 274,600	ZEN Graphene Solutions Ltd.
133703	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 280,400	ZEN Graphene Solutions Ltd.
133717	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
134162	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
134181	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
134220	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
134221	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
134298	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
134799	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
134995	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
137349	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
137802	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
138171	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
138172	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
138173	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
138174	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
138699	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
139339	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
139691	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
139692	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
140891	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
141721	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
141722	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
141723	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
141724	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
141725	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
141726	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
143264	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
143897	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
144164	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
147679	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
148213	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
149413	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
149448	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
149449	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
149841	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
150127	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
150189	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
150334	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
150371	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 281,200	ZEN Graphene Solutions Ltd.

Claim ID	Mining Claim Type	Issue Date	Anniversary Date	Reserves	Holder
150384	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
150554	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
150555	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
150924	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
150925	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
150968	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
150969	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
150970	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
150971	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
153765	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
154042	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
154086	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
155267	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
155268	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
155269	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
155881	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
156278	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
156279	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
158418	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
158419	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
158436	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
159776	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
159777	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
160288	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
160564	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
161073	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
161074	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
161081	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
161209	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
162363	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
163872	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
163873	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
165046	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
165047	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
165048	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
165175	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
166507	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
166654	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
167975	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
169229	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
169879	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
171863	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
171864	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
171991	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
172750	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
174023	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
174242	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
175214	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
176787	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
176822	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
176823	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
178725	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
178726	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
178868	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
178916	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 236,880	ZEN Graphene Solutions Ltd.

Claim ID	Mining Claim Type	Issue Date	Anniversary Date	Reserves	Holder
178917	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 269,400	ZEN Graphene Solutions Ltd.
179402	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
179454	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
179466	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
179499	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
179797	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
179798	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
179799	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
180009	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
180533	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
180544	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
182623	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
183456	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
183637	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
183638	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
183687	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
185319	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
185320	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
185321	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
186165	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
186177	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
186302	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
186303	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
186599	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
186600	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
186601	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
186734	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
186784	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
186785	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
186786	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
187083	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
187949	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
188348	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
188349	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
189376	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
189377	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
190171	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
190726	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
190727	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
192179	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
193439	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
195244	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
195245	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
195782	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
195783	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
196324	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
196325	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
198459	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
198512	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 266,600	ZEN Graphene Solutions Ltd.
198513	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 297,800	ZEN Graphene Solutions Ltd.
198865	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
198866	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
198988	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
199032	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
199064	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.

Claim ID	Mining Claim Type	Issue Date	Anniversary Date	Reserves	Holder
199237	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
200454	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
200455	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
200456	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
202595	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
204276	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
204496	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
204497	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
205796	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
205797	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
205833	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 267,800	ZEN Graphene Solutions Ltd.
205834	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 235,480	ZEN Graphene Solutions Ltd.
206437	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
207136	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
207237	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
207778	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
207779	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
210922	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
210939	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
211780	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
213002	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
213003	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
213049	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
215382	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
215383	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
215396	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
215873	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
215884	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
215885	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
218065	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
218066	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
220520	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
221137	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
223282	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
223283	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
223818	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
223819	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
225159	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
225160	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
225252	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
225941	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
225942	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
226859	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
227989	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
230662	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
230663	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
231295	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
231296	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
231314	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
231751	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
231787	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
233144	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
233263	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
233264	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
233265	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.

Claim ID	Mining Claim Type	Issue Date	Anniversary Date	Reserves	Holder
233295	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
233970	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
234000	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
234431	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
234432	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
236919	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
236969	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
236970	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
237002	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
237003	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
237339	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
238815	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
239797	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
240637	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
240755	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
240834	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
241274	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
241534	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
243440	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
245327	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
245558	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
245559	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
245599	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 309,200	ZEN Graphene Solutions Ltd.
246188	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
246189	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
246588	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
246689	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
248612	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
249822	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
250146	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
250454	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
250766	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
250767	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
250782	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
250904	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
250953	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
251960	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
251961	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
252746	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
252750	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
253482	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
253581	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
253630	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
253668	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 317,600	ZEN Graphene Solutions Ltd.
253760	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
253915	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
254091	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
254092	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
254093	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
255653	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
256026	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
257254	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
262445	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
262446	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
262992	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.

Claim ID	Mining Claim Type	Issue Date	Anniversary Date	Reserves	Holder
265162	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 318,800	ZEN Graphene Solutions Ltd.
265163	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 318,000	ZEN Graphene Solutions Ltd.
265209	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
265685	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
265936	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
267101	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
268010	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
269202	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
271800	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
273227	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
273728	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
273763	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
273764	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
275963	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
275964	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
278677	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
279311	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
279474	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
279803	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
281115	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
281986	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
282041	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
282396	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
282403	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
282798	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
282846	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 310,800	ZEN Graphene Solutions Ltd.
282857	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
282890	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
283235	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
285988	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
286549	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
286550	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
286551	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
287169	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
287170	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
287180	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
288392	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
290037	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
290038	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
290072	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
290073	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
290136	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
290171	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 287,200	ZEN Graphene Solutions Ltd.
290172	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 294,600	ZEN Graphene Solutions Ltd.
290475	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
290940	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
292553	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
292554	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
293480	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
293481	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
294014	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
294015	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
294016	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
294655	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
294656	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.

Claim ID	Mining Claim Type	Issue Date	Anniversary Date	Reserves	Holder
295300	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
295301	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
295302	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
295472	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
295482	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
295706	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
297997	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
297998	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
297999	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
298062	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
298421	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
298422	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
298444	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
298445	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
301507	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
301508	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
301509	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
302199	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
302210	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
302219	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
302307	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
302308	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
302309	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
302733	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
303007	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
303638	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
303639	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
303720	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
304334	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
305409	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
306151	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
306182	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
307266	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
307267	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
307412	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
309071	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
309727	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
310349	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
312913	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
312914	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
312915	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
312916	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
312917	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
313197	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
314481	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
314483	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
314892	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
315770	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
316440	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
316689	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
318707	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
319383	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
319384	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
319389	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
319413	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.

Claim ID	Mining Claim Type	Issue Date	Anniversary Date	Reserves	Holder
319605	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
319606	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
319653	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ 312,385	ZEN Graphene Solutions Ltd.
319671	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
319672	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
319698	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
319699	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
319700	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
320242	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
320243	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
320244	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
320395	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
320434	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
324451	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
324571	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
324917	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
325073	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
325931	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
325932	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
325933	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
328380	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
328381	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
329674	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
329685	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
329686	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
333447	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
333668	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
335538	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
335539	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
335757	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
335894	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
336481	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
337608	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
338352	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
338395	Boundary Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
338396	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
339440	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
340286	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
340921	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
340922	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
340945	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
340990	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
341040	Single Cell Mining Claim	10-Apr-2018	21-Mar-2024	$ -	ZEN Graphene Solutions Ltd.
341103	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
341543	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
341797	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
342432	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
342514	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
342868	Single Cell Mining Claim	10-Apr-2018	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541602	Single Cell Mining Claim	9-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541603	Single Cell Mining Claim	9-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541604	Single Cell Mining Claim	9-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541605	Single Cell Mining Claim	9-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541719	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541720	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.

Claim ID	Mining Claim Type	Issue Date	Anniversary Date	Reserves	Holder
541721	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541722	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541723	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541724	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541725	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541726	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541727	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541728	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541729	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541730	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541731	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541732	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541733	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541734	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541735	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541736	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541737	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541738	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541739	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541740	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541741	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541742	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541743	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541744	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541745	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
541747	Single Cell Mining Claim	11-Feb-2019	28-Feb-2024	$ -	ZEN Graphene Solutions Ltd.
Totals		**521**		**$ 5,695,453**	

4.0 Accessibility, Climate, Physiography, Local Resources, and Infrastructure

4.1 Accessibility

A helicopter is required to access most of the Project area; however, a boat or canoe can be used to gain access along the Nagagami River in the eastern portion of the claim block. Old forestry logging roads reach the southeast boundary of the claim block leading to several old quad trails through previously harvested forests just east of the Nagagami River (see Figures 2 and 3). A winter access trail joins the end of the all-weather forestry road to the deposit area and can be reached by travelling northwards up the Pitopiko Road from the Trans-Canada Highway. The winter road was initially added as a safety route to be used in an emergency, but it is now used as the main winter access route.

4.2 Climate

The Albany claims are situated in northern Ontario where there are various climates and weather extremes. Most of the region has a continental climate with warm to hot summers (June, July, and August) with 25 to 35°C, and cold winters (December to March) with temperatures ranging from -10 to -35°C with lows down to -45°C. Generally, precipitation ranges from 600 mm to around 900 mm.

Lakes and swamps are typically frozen and suitable for diamond drilling from December to April. Exploration can take place year-round with minor breaks during the spring thaw and winter freeze-up. Mining operations can take place all year round.

4.4 Physiography

The claims are situated within the Hudson Bay-James Bay Lowlands area where the topography is essentially flat, low-lying, and swampy. Overburden averages 45 m in the Project area with little or no outcrop exposure; Paleozoic limestone cover rocks are exposed in the bottom and along the banks of the Nagagami River. Many creeks flow between peat bogs throughout the area. The Nagagami River forms the eastern property boundary with several meandering tributaries flowing in from the east and west. The Pitopiko River flows into the west side of the Nagagami. Local vegetation is dominated by wetlands with some areas of spruce and alder trees and cedar swamps. Spruce and alder trees are also abundant along the banks of the Nagagami River and other smaller rivers (Figures 4 and 5).

Figure 4: Oblique View of Topography in the Deposit Area - Looking West

Figure 5: Vertical View of Drill Pads in the Deposit Area with the Nagagami River on the Right and the Pitopiko River on the Upper Left (North is up)

4.3 Local Resources and Infrastructure

The claims are located approximately 50 km north of Highway 11 and the Canadian National Railway. The town of Hearst, with a population of around 5000 (see Figure 6), is located approximately 50 km southeast of the property and has many facilities to keep an exploration camp well supplied. These include hotels, restaurants, a hospital, hardware stores, gas stations, a mining supply store, and an airport. Float plane and helicopter services are also available in Hearst. Mining personnel, equipment, and supplies are also available in Timmins, a large mining and exploration centre.

There is currently no permanent infrastructure on the Property. An all-weather logging road runs within approximately nine kilometres of the graphite deposit – access from that point is via a winter trail. The Project is near the communities of Constance Lake First Nation and Hearst. The nearest airport is in Hearst, approximately one hour by car. The Timmins airport with scheduled flights is about four hours away by road. A power transmission line and a natural gas pipeline run along the Trans-Canada Highway, 30 km south of the Project. A rail line is located 70 km away near Constance Lake, but the abandoned railway line still exists to the south of the property (Figure 6).

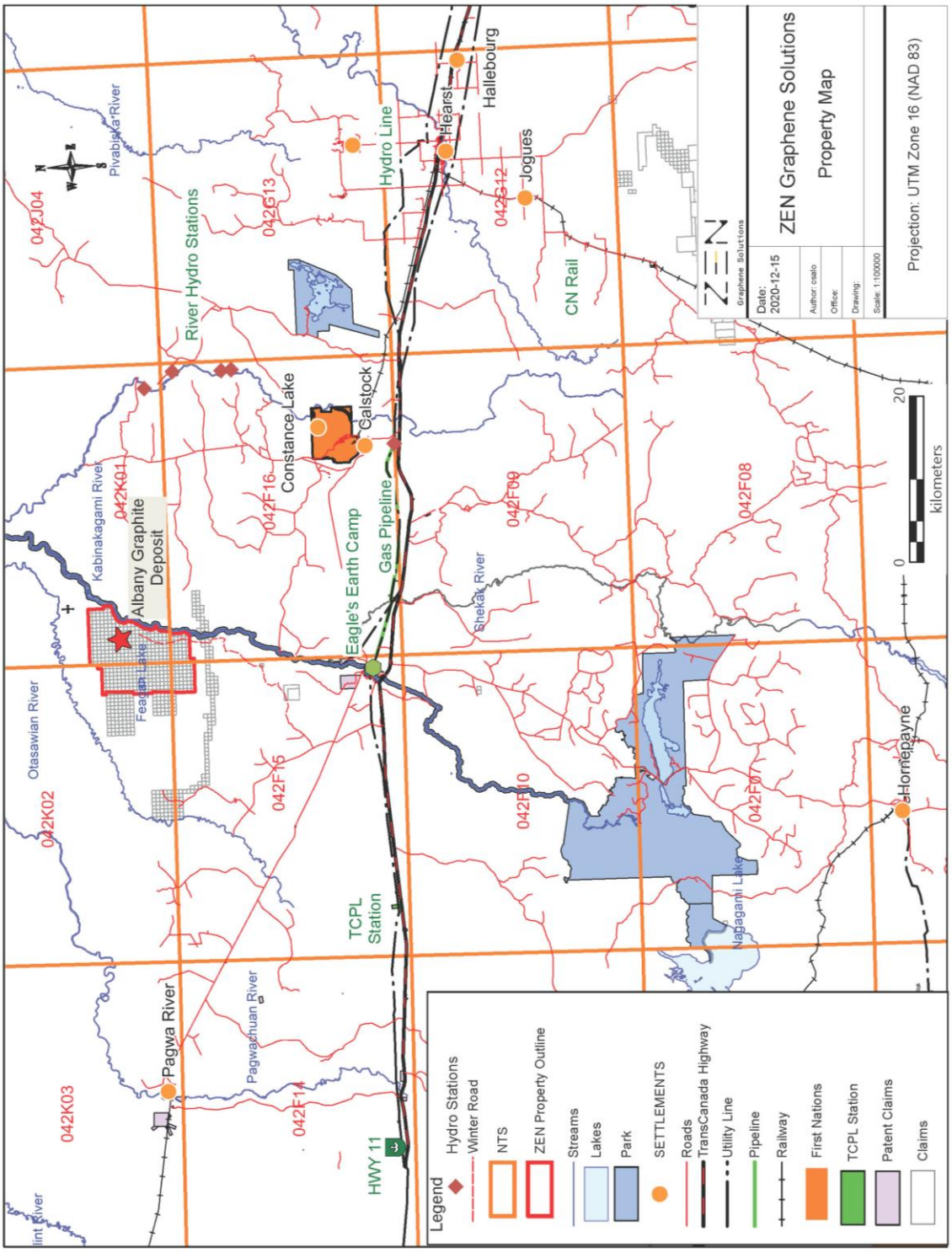


Figure 6: Albany Graphite Project Infrastructure Map

5.0 Previous Work

ZEN's Albany Graphite Project covers ground selected based on geophysical information from OGS airborne magnetic maps, the geological interpretation (Stott, 2008) of these data, and additional geological and geophysical data from historical exploration reports provided by MEMDM. Past exploration work has been limited in this area of the James Bay Lowlands and mostly consisted of a small number of geophysical surveys and diamond drill projects. The following is a summary of the historical exploration work carried out in the project area:

1959: A ground magnetic and electromagnetic survey was performed on claims held by ***Nagagami River Prospecting Syndicate*** in the Feagan Lake/Pitopiko River townships area. The geophysical survey was carried out by Koulomzine and Brossard Limited but was not fully completed because of an early spring breakup. The survey revealed three magnetic anomalies defining basement geology contacts and several vertical-loop electromagnetic conductors. The report stated that "*the general lenticular nature of the conductors and their occurrence in the vicinity of a diabase dyke may suggest the presence of sulphide lenses that could contain base metals; one anomaly (magnetic & EM) could be due to some disseminated mineralization*" (Koulomzine, 1959). Four drill holes were proposed to investigate the EM anomalies, but there is no record that they were ever drilled.

1961: ***Algoma Ore Properties Limited*** flew an aeromagnetic survey in the Nagagami River and Pitopiko Townships area. The survey outlined a horseshoe-shaped anomaly which was confirmed on the ground in the same year. This led to further exploration in 1963.

1963: ***Algoma Ore Properties Limited*** flew an airborne magnetometer survey in the Nagagami River area, located forty miles northwest of Hearst, Ontario. The survey was flown by Hunting Survey Corporation. The survey results indicated two large low-intensity circular shaped anomalies (Anomalies #1 and #2) underlying the Paleozoic limestones. Interpretation of the anomalies inferred that they were caused by a complex syenitic to gabbroic intrusion. It was reported that Anomaly #1 could be associated with a basic intrusive, hosting magnetite, and thought to be mildly interesting for iron ore, niobium, and sulphides. Anomaly #2 was interpreted to be associated with an alkaline and carbonatite complex and could contain columbium and other rare earth elements (REEs). Algoma recommended follow-up work to include a ground magnetometer survey over the anomalies and a diamond drill program (Venn, V.R., 1964).

1964 - 1967: ***Algoma Ore Properties Limited*** continued exploration in the Nagagami River area. Ground work involved grid cutting followed by a ground magnetometer survey and claim staking. Algoma drilled nine holes (located in the Albany blocks ***4E and 4F***) for a total of 4,868 feet. Holes 1-64 to 7-64 were drilled in Block 4E. Two holes were drilled in Anomaly #2 (drill holes 8-64 and 9-64) and reported to be located near the northern boundary of ***Block 4F***. Erratic sampling was done on the core, along with petrographic studies. The core was tested with scintillometer and samples were taken where radioactive responses occurred; assay results indicated columbium (Cb_2O_5) content to be 0.02% to 0.04%. Drilling on Anomaly #2 intersected coarse syenite rock

with 3-5% magnetite. It was concluded that the ground magnetometer survey and the diamond drilling verified the airborne survey fairly well, and although drilling did not intersect any ore minerals, the structure was still geologically interesting. Algoma reported that minerals of economic potential could possibly be associated with other parts of the structure and they recommended that the property be referred to other companies interested in intrusive structures (Venn, V.R., 1964).

1978: ***Shell Canada Explorations Limited*** initiated a diamond drill program in the area based on results of an airborne geophysical survey. Drill logs were available from MNDM, but no report was submitted with the logs. One hole, drill hole 7609-78-1, was drilled within Bock 4F in the Pitopiko River Area and it was reported to have Intersected "graphitic syenite breccia". Unfortunately, it was not possible to locate the historic drill site but it appears to have likely been drilled on the East Pipe.

1999: The ***Ontario Geological*** Survey (OGS) released aeromagnetic geophysical maps for the Hudson Bay and James Bay Lowlands areas, *Geophysical Data Set 1036* (*see Figure 7 for Block 4F area*).

2008: The ***Ontario Geological Survey*** (OGS) Precambrian Geology Map P.3599 was published: *Hudson Bay and James Bay Lowlands Region Interpreted from Aeromagnetic Data* (Stott, 2008; *see Figure 5 for Block 4F area*).

2010 to 2012: Exploration work conducted by ***ZEN*** includes the initial 2010 helicopter-borne geophysical survey (VTEM Max and magnetometer) which identified airborne EM and magnetic anomalies (Geotech, 2010a; Geotech, 2010b). Follow-up drilling in Block 4F during the fall of 2011 included one drill hole (Z11-4F1) which intersected several mineralized zones of graphitic breccia (Carey and Dalby, 2012). In 2012, ZEN continued with a Phase II diamond drill program and drilled eight more holes (Z12-4F2 to Z12-4F9) on the graphite deposit (Carey, 2012). Results were very encouraging and several additional graphite mineralized zones were intersected; however, ZEN was unsure of the size, geometry and attitude of the zones.

2013: Exploration work in Block 4F conducted by ***ZEN*** included a large loop surface DPEM survey by Crone Geophysics and Exploration Ltd. The survey confirmed two discrete breccia pipes and was used to plan the resource drill program (Crone, 2013a; Crone, 2013b; Legault et al. 2015). Between March and November 2013, ZEN drilled 54 holes totalling 22,463 m (Z13-4F10 to Z13-4F57 and Z13-4FM01 to Z13-4FM06) in the graphite deposit area. Geotech also performed a higher powered VTEM max survey over the 4F Extension claims to the north of 4F, including the Block 4E claims (Geotech, 2013). Additionally, ZEN also drilled two reconnaissance drill holes on Block 4F to test two weaker conductive zones defined by the 2010 VTEM survey. The EM conductors were most likely explained by zones of disseminated pyrrhotite or zones of massive pyrrhotite mineralization (Carey, 2014a). In late 2013, ZEN contracted DGI Geoscience Inc. (DGI) to survey seven boreholes (Z13-4F14, -4F16, -4F17, -4F18, -4F26, -4F27, and -4F34) with three probes: an Acoustic Televiewer (ATV), a Focused Density probe, and a Full Waveform Sonic probe.

6.0 Geological Setting

6.1 Regional Geology

The Albany claims were staked based on geological information acquired from OGS Map P3599, Precambrian Geology of the Hudson Bay and James Bay Lowlands Region. Stott et al. (2007) interpreted the regional tectonic subdivisions and mapped the Albany claim blocks as part of the English River Basins, the Marmion Terrane, and the Quetico Basins of the Superior Province of the Canadian Shield (Figure 7). Based on the interpretation of Sage (1988), it appears that the Nagagami Alkalic Rock Complex underlies most of the Property.

The following is a summary of the major rock units that occur in the area, as cited in Geotech (2010b): The relatively flat-lying Hudson Bay and James Bay Lowlands consist mostly of carbonate rocks of Paleozoic to Mesozoic age. These sedimentary rocks cover a significant portion of the Precambrian rocks of Northern Ontario and, therefore, have impeded the understanding of the Precambrian geology and the tectonic framework across this region of Ontario. Consequently, the geology is based mainly on available reprocessed aeromagnetic data and limited drill hole information. The results provide a general framework of interpreted supracrustal belts, plutonic subdivisions, major faults, and Proterozoic mafic dykes (Figure 7).

Quetico Subprovince

Located in the west-central portion of the Superior Province, the Quetico Subprovince is an east-northeast trending, 10 km to 100 km wide by 1,200 km long belt of variably metamorphosed and deformed clastic metasedimentary and granitoid rocks. The metamorphic grade varies from greenschist to amphibolite to local granulite facies. The metasedimentary rocks were deposited before 2696 Ma. The Quetico intrusions near Atikokan are typically small (<1 km^2) and form sills, plugs, and small stocks composed of various lithologies, including wehrlites, clinopyroxenites, hornblendites, monzodiorites, syenites, foidites, and silicocarbonatites. These rocks are locally enriched in Ni-Cu and PGEs (Vaillancourt et al., 2003).

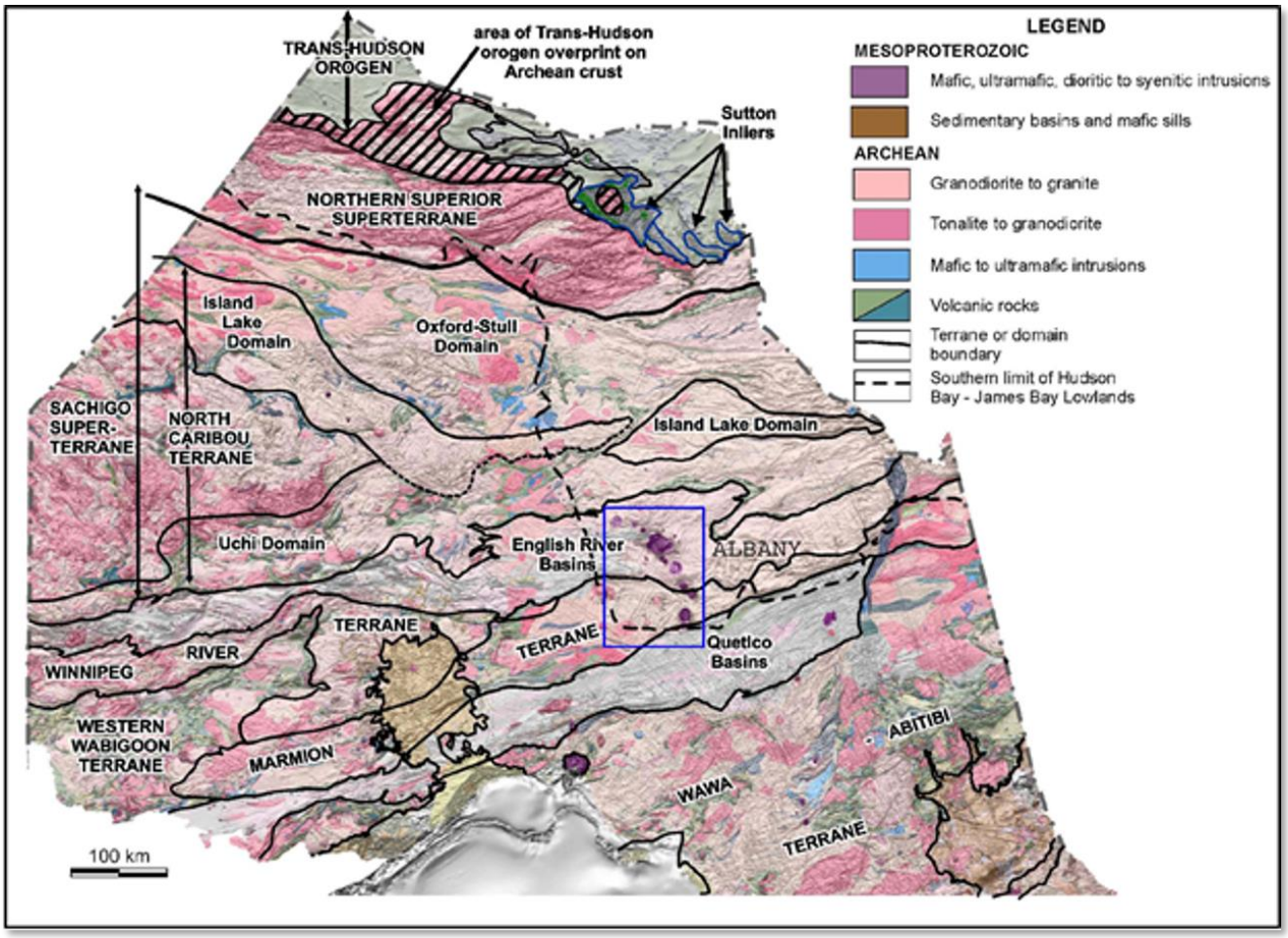


Figure 7: Regional Tectonic Subdivisions Map of Northern Ontario (Stott et. al., 2008)

Marmion Terrane / Subprovince

The Marmion Terrane consists predominately of metamorphosed felsic intrusive rocks. The 3.0 to 2.7 billion year old rocks are interpreted as an assemblage of continental fragments. These rocks have been interpreted as a part of the Western Wabigoon and Winnipeg River terranes (MENDM, Government of Ontario).

English River Subprovince

The English River Subprovince is an east-trending 30 km to 100 km wide by 650 km long belt of metasedimentary and granitoid rocks located in the west-central Superior Province. The metasedimentary rocks contain detrital zircons as young as 2698 Ma, and the granitoid rocks range between 2.65 and 2.70 Ga (Vaillancourt et al., 2003).

Nagagami Alkalic Rock Complex

Limited data and observations obtained from drill logs and drill core, together with aeromagnetic data, suggest that the Nagagami River Alkalic Rock Complex (NRARC) comprises two ring-shaped subcomplexes with more mafic rims and more leucocratic cores. Aeromagnetic data interpretation suggestes that the northern subcomplex is cut by the southern subcomplex, indicating the southern subcomplex is younger. The middle-to-late Precambrian diabase dykes, characterized by linear northwest-trending aeromagnetic patterns, do not crosscut the aeromagnetic signature of the NRARC, indicating that the complex is younger than the regional diabase dyke swarm. Sage (1988) concluded that this observation, together with the fresh and unmetamorphosed nature of the rock point to a Late Precambrian age, is equivalent to the dominant period of alkali magmatism in Ontario. Regional structural controls on the emplacement of the subcomplexes have not been unambiguously identified, but the NRARC lies on trend with the extension of the northeast-striking Gravel River Fault.

The dominant rock type is a fine- to coarse-grained amphibole-pyroxene syenite, which locally displays a trachytoidal texture. A coarse-grained nepheline-bearing phase appears restricted to the southern subcomplex. A very coarse-grained pegmatitic phase and a minor granite phase have also been identified. Petrographic analysis indicates that the NRARC has strong similarities to the pyroxene- bearing syenites of the Port Coldwell Alkalic Rock Complex.

Based on the unsuccessful testing of the intrusion for iron and niobium in 1964 by the Algoma Ore Properties Division of Algoma Steel Corporation, Sage (1988) recommended that future exploration of the complex should be directed towards the type of mineralization found in equivalent syenitic rocks of the Port Coldwell Alkalic Rock Complex.

Albany Alkalic Complex

The Albany Alkalic Complex (AAC) (Conly, 2014), which hosts the graphitic breccia pipes, occurs to the south of the two Nagagami Alkalic subcomplexes. This intrusion appears to be crosscut by the northwest-trending middle to late Precambrian diabase dykes suggesting that it predates the dyke swarm. Initial work by Dr. Conly indicates that the AAC “syenite” corresponds to a range of quartz-poor to moderate quartz-bearing felsic rocks that are albite dominant. Compositionally, the rocks of the AAC range from quartz syenite to diorite with quartz monzonite being the most common composition (Conly and Moore, 2015). All drilling by ZEN has focused on the immediate area which hosts the graphite deposit and the limits of the intrusion are based

on geophysical interpretation. Also, Conly et al. (2016) have reinterpreted the magnetic data and suggest that the AAC could be significantly smaller than originally interpreted by Stott (2008).

6.2 Property Geology and Graphite Mineralization

The bedrock in the Block 4F region of the James Bay Lowlands area is covered by a layer of overburden and flat-lying, Paleozoic sedimentary cover rocks. Consequently, no historic surface geological mapping projects have been carried out in the area and most of the geology has been geophysically inferred (Figure 8). The average overburden thickness (determined from holes Z13-4F10 to 4F48; Z13-4FM01 to 4FM06) is approximately 45 m and ranges from 28 m to 55 m. According to Stott (2008) (see Figure 9), the geology in the southern section of the claim block consists of mostly paragneiss and migmatite metasedimentary rocks and mafic rocks with related intrusive rocks of the Quetico Subprovince. The northern section of the claim block is underlain by metamorphosed (foliated to gneissic) tonalite to granodiorite with minor supracrustal inclusions of the Marmion Terrane/Subprovince. Both subprovinces have been intruded with a younger alkalic intrusive suite made up of alkalic syenite, ijolite, associated mafic and ultramafic rocks and carbonatite (Stott, 2008). The two graphitic breccia pipes are hosted within predominantly monzonitic intrusive rocks (Figure 9).

The 2013 drilling intersected flat-lying Paleozoic sediments above the Precambrian rocks and thicknesses ranged from 0 m to 16 m. The erosional unconformity is located on the southern portion of the property and trends approximately east-west (Figure 9). The most abundant Precambrian rock types intersected during the ZEN drill programs include graphitic brecciated syenitic gneiss, graphitic brecciated syenite, graphitic overprint syenitic gneiss, graphitic brecciated granite, graphitic brecciated granitic gneiss, and graphitic overprint granitic gneiss. Unmineralized rock types included: syenitic gneiss, syenite, granitic gneiss, granite, diorite, schist, monzonite, and mafic to intermediate dykes.

A dominant rock type that was intersected in many drill holes is a late, massive, cross-cutting, barren sill which, based on petrography, has been classified as an olivine-aegirine alkali syenite (James, 2013) (Figures 25 and 26). Based on current drill information, the sill dips shallowly to the southeast at 10° to 15° and likely emanates from a northwest-trending dyke that is located on the southwest side of the West Pipe and was intersected at the top of hole Z12-4F02. The sill ranges in thickness from approximately 55 m in the vicinity of the West Pipe and then

appears to narrow and bifurcate towards the East Pipe with thicknesses of 12 m and 28 m (Figures 25 and 26). James (2013) suggests that the peralkaline nature of the samples is consistent with the apparent rift-type magmatic environment from which they originated. An association with silica undersaturated silicate rocks such as nepheline syenites and carbonatites is to be expected as these types of associations are recognized in a continental rift setting. Interestingly, Conly and Moore (2015) have identified an unmineralized porphyritic, hypabyssal subvolcanic monzodiorite/foid (nepheline) monzodiorite, which appears to have intruded along the margins of the West Pipe and postulate that it may have played a critical role in the formation of the graphite deposit. This unit was logged as a porphyritic intermediate dyke.

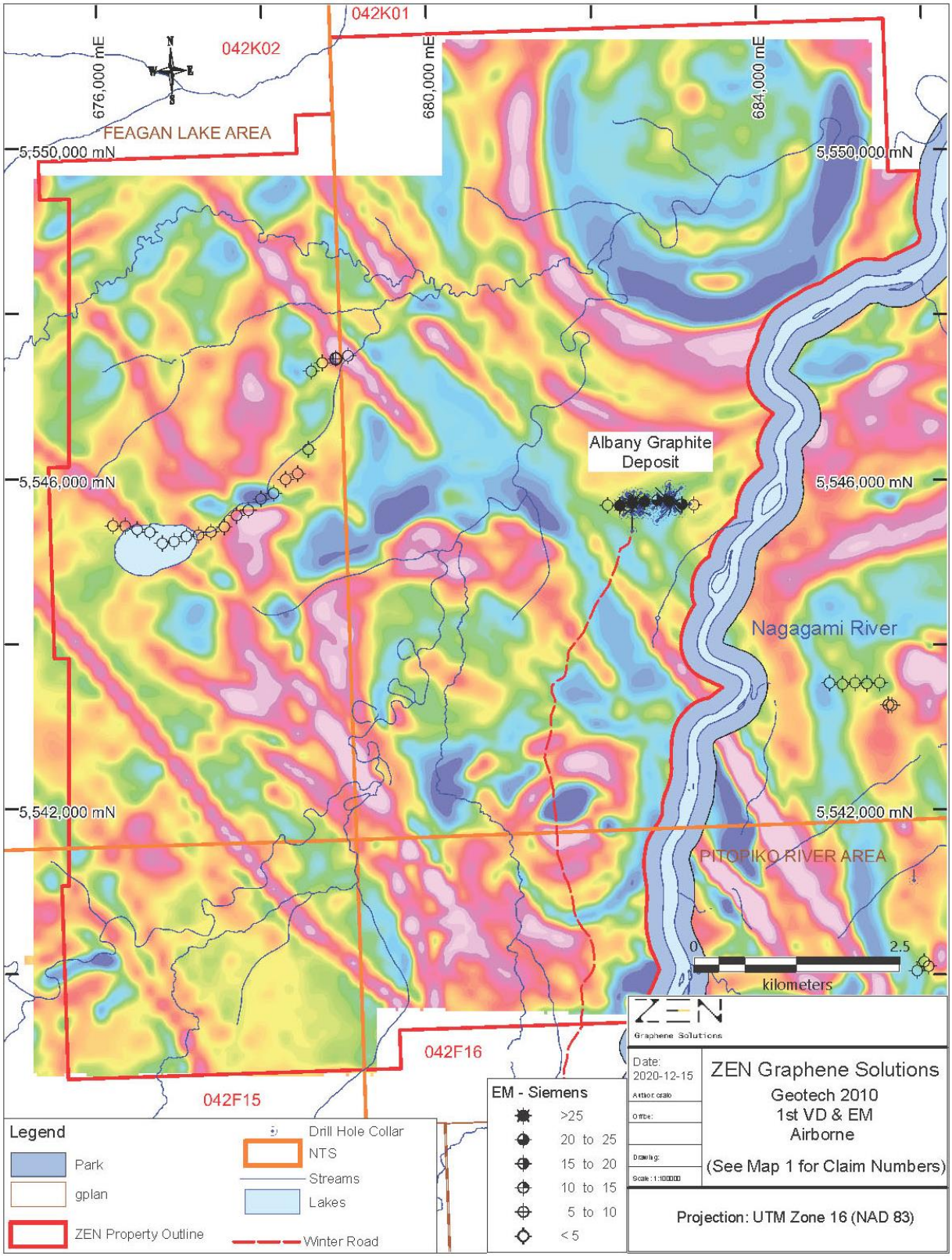


Figure 8: Albany Project First Vertical Derivative Airborne Magnetics (OGS, 1999; Geotech, 2010)

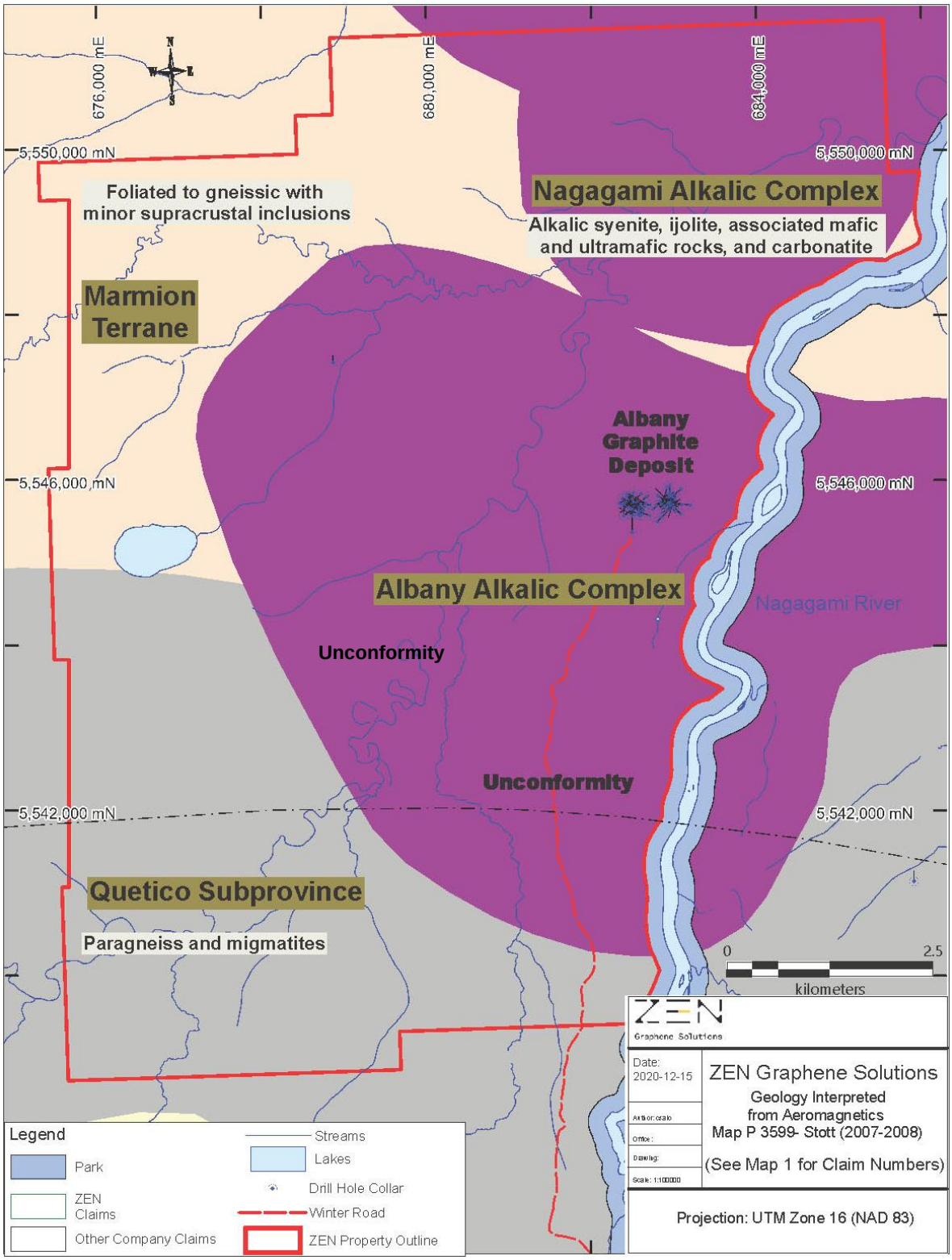


Figure 9: Albany Project Interpreted Geology (after Stott, 2008)

7.0 Deposit Type

The “Arc of Fire” consists of several large multi-phased mafic-ultramafic-alkalic complexes forming an arc line approximately 150 km long. One of these complexes, called the Nagagami River Alkaline Ring Complex, shows similarities to the Mid-Continent Rift related Coldwell Complex on the north shore of Lake Superior. The “Arc of Fire” is believed to also represent a deep-seated Proterozoic structure that may be related to the 1.1 billion year old Mid-Continent Rifting. The Mid-Continent Rift is a known deep seated structural environment that hosts a number of significant mineral deposits around Lake Superior, including Rio Tinto’s Eagle and Tamarack Cu-Ni deposits and Magma Metal’s (now Panoramic Resources) Thunder Bay North (TBN) PGM deposit. Rifting environments around the world are host to many large mineral deposits due to a tapping of the copper-nickel rich mantle by way of the structural conduits and traps for metal transport and deposit. Interestingly, ZEN was exploring for Cu-Ni-PGM mineralization and accidentally discovered a large graphite deposit when it tested a very large conductive body on one of its claim blocks.

Most economic geologists and geophysicists are familiar with graphite as a nuisance in geophysical exploration due to its excellent electrical conductivity that produces an identical geophysical response to that of massive sulphide mineralization. Graphite commonly occurs in metasedimentary rocks as a result of the conversion of organic matter through regional or contact metamorphism. Graphitization of organic carbonaceous matter is well understood; however, the insitu heating and compression of organic matter is only one of the ways in which graphite is formed in nature. Another is via the precipitation of solid carbon (i.e., graphite) from natural carbon-fluids such as those containing CO_2, CO, and/or CH_4.

Somewhat simplified, there are three different processes leading to the formation of economic graphite deposits (Harben and Kuzvart, 1996):

1. Contact metamorphism of coal deposits - Graphite formed under these conditions is characterized by incomplete structural ordering and crystallization, resulting in low value “amorphous” graphite with its main market in foundry applications.
2. Syngenetic flake graphite deposits - The formation of these deposits involves the alteration of carbonaceous organic matter to graphite during regional metamorphism.
3. Epigenetic graphite deposits - The formation of these deposits is associated with migrating supercritical carbon-bearing (C-O-H) fluids or fluid-rich magmas. The formation

of the carbon-bearing fluids is most often a consequence of high temperature (granulite facies) metamorphism, but magmatic degassing can also produce graphite. Fluid precipitated graphite is well-ordered and can be a source of highly valued crystalline lump or vein-type graphite.

The Albany deposit is a unique example of an epigenetic graphite deposit in which a large volume of highly crystalline, fluid-deposited graphite occurs within an igneous host. The deposit is interpreted as a vent pipe breccia that formed from CO_2-rich fluids that evolved due to pressure-related degassing of an ascending magma related to the intrusion of the Albany Alkalic Complex (Figure 10) and is described below (Conly, 2014a; Conly, 2014b; Conly and Moore, 2015).

STAGE 1 – Emplacement of Host Syenites Forming the Albany Alkalic Complex:

Emplacement of the Albany breccia pipes is estimated to be Mesoproterozoic to Neoproterozoic based on cross-cutting relationship with the Paleoproterozoic Matachewan and Hearst quartz diabase dyke swarms and Mesoproterozoic Sudbury olivine tholeiite dyke swarm. Magma emplacement may also be structurally controlled by the Gravel River Fault which, in part, defines the southern margin Albany Alkalic Complex and separates the Marmion Terrane (to the north) and the Quetico Subprovince (to the south).

STAGE 2 – Fluid Generation and Breccia Pipe Development:

The two breccia pipes formed as a result of a degassing magma, resulting in segregation of a CO_2-bearing fluid, which occurred in response to depressurization of the magma at mid to shallow crustal levels, and accumulation of CO_2 at the top of the ascending dyke. Possible sources for the carbon include i) generation of primary CO_2-rich syenite; and ii) assimilation of carbonaceous Quetico metasedimentary rock by syenitic magmas. The co-existence of angular to rounded breccia fragments is evidence of the mixing of juvenile fragments with earlier entrained material which has been subject to a greater extent of mechanical erosion due to rapid and turbulent upflow of the CO_2-fluid.

STAGE 3 – Graphite Deposition:

Graphite deposition likely occurred rapidly due to the sudden depressurization and quenching (from supercritical fluid to gas) of the CO_2-fluid which, in turn, is due to the dyke head breaking the surface and venting CO_2 gas (Figure 10). Surface venting is evidenced from the extent of the graphite breccias to the unconformity with the overlying Paleozoic rock. Such rapid depressurization would have also imploded the walls of the vent complex; it is consistent with the higher proportion of angular syenite fragments relative to rounded syenite fragments and fragments of Archean country rock, and with localized production of xenoliths with minimal transport. Rapid deposition of graphite inferred from its fine crystal size (laths typically 100 µm to 300 µm long) and high abundances of discrete crystals and fine crystal aggregates. Coinciding with the changes in pressure, a rapid decrease in temperature would have inhibited the growth of coarser crystalline graphite and led to the crystallizing of the degassing syenite magma at depth.

STAGE 4 –Post Mineralization Magmatic and Erosional Events:

Post-mineralization events include the following (listed in temporal succession):

- Emplacement of late-stage barren olivine-aegirine syenite sills
- Intrusion of aplite and other felsic dykes
- Erosion of upper levels of the Albany Alkalic Complex and supergene alteration
- Deposition of Paleozoic carbonate rocks and Quaternary glacial sediments

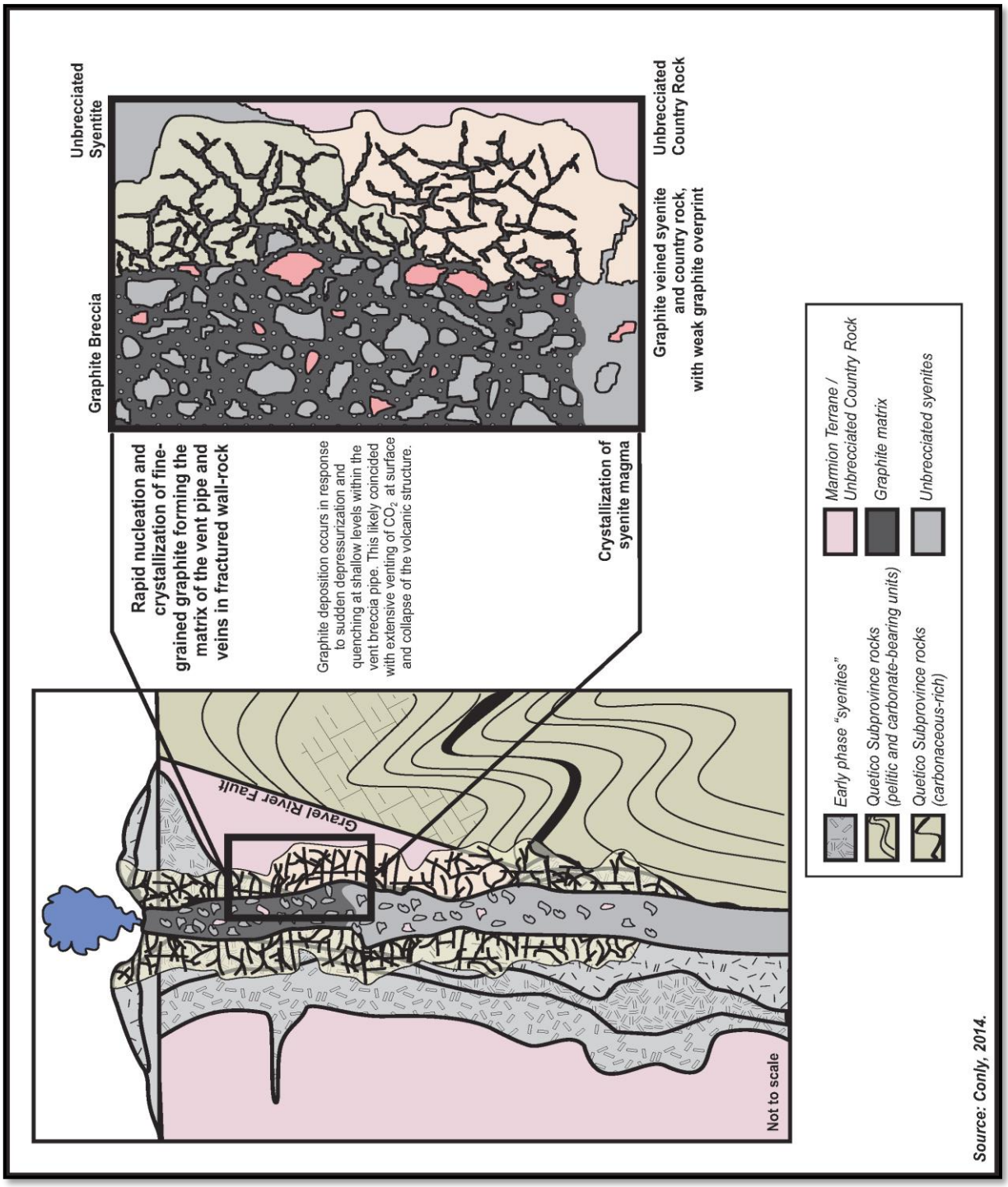


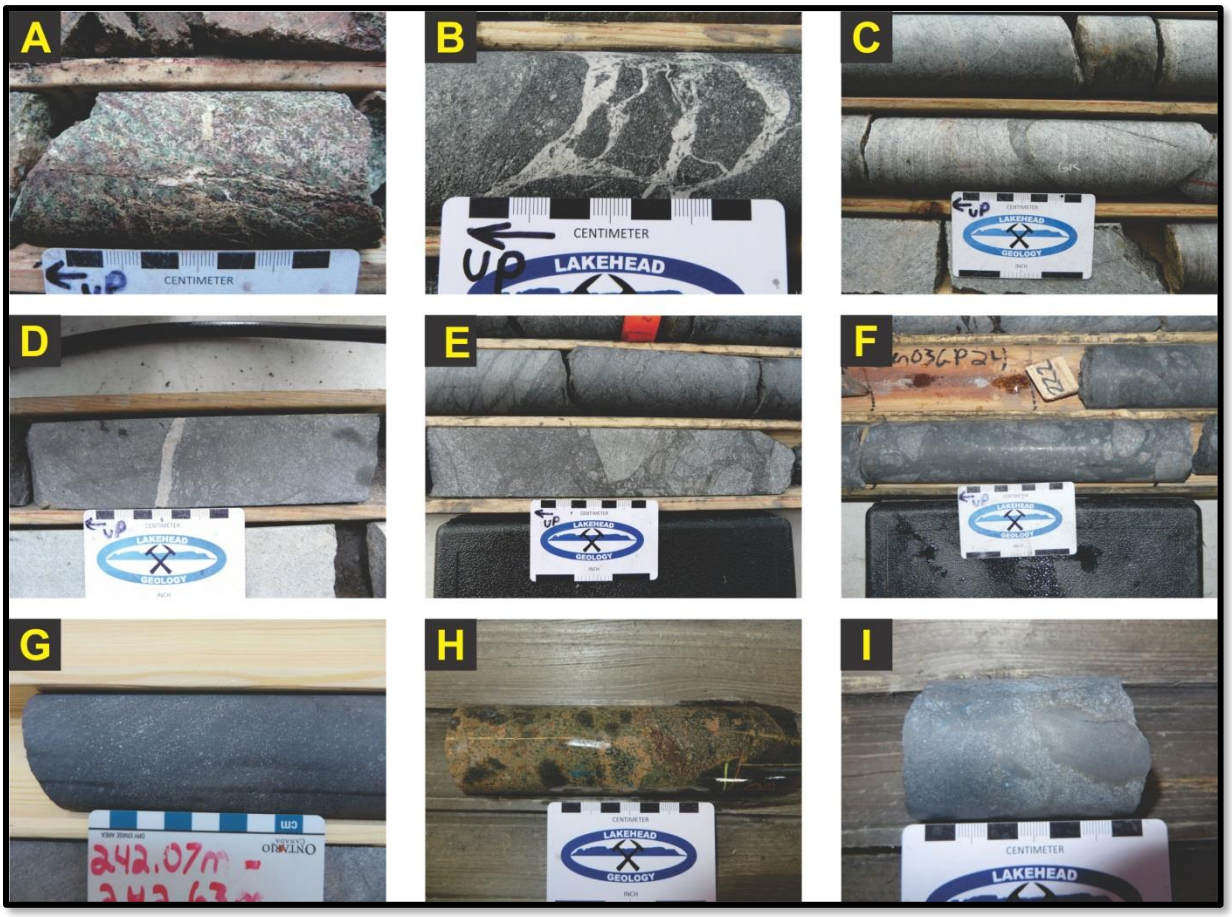
Figure 10: Albany Graphite Deposit Model (from Conly, 2014a)

8.0 Mineralization

The following description of the graphite mineralization is based on RPA (2014):

Preliminary petrography indicates that the graphite hosting breccias range in composition from diorite to granite and are generally described as “syenite”. Graphite occurs both in the matrix, as disseminated crystals, clotted to radiating crystal aggregates, veins and along crystal boundaries, and as small veins within the breccia fragments. In addition to graphite, the matrix consists primarily of quartz, alkali feldspar and plagioclase feldspar with minor phlogopite and amphibole and trace amounts of pyrite-pyrrhotite and magnetite. Alteration is minor, and is most pronounced as a paleo-weathering profile in the upper 20 m of the breccia pipes where bleaching and late, carbonate-filled fractures are common. The stockwork graphitic veins can be several centimetres wide while the veinlets and hairline fractures are millimetre and submillimetre scale. Breccia fragments are dominantly massive to weakly foliated syenite (>95%) with minor to trace chlorite-biotite-rich schist fragments and mafic to intermediate dyke fragments. Occasional solid graphite fragments and rare altered fragments of unknown origin were also observed. Breccia fragments are angular to subangular to subrounded and range in size from subcentimetre to approximately 1 m, most being between 3 cm and 30 cm. Dyke and graphite fragments range from 1 cm to 5 cm (Figure 11). Rapid crystallization of graphite is inferred from its fine crystallites (laths typically 100 µm to 300 µm long) and high abundances of discrete crystals and fine crystal aggregates.

Figure 11: Core Photographs of Albany Graphite Mineralization



Description of the photographs (provided by Dr. Conly; RPA, 2014):

A) Weathering-related alteration of brecciated and carbonate-veined syenite just below the unconformity with the overlying Paleozoic carbonate rocks (Z12-4F2, West Pipe).
B) Carbonate veining in weakly to moderately brecciated syenite with weak graphite overprint (Z13-4F10, East Pipe). Sample is taken just below the highly weathered zone.
C) Graphite veining in barren syenite (Z12-4F6, West Pipe).
D) Aplite dyke crosscutting moderately brecciated syenite with weak to moderate graphite overprint of syenite fragments (Z12-4F9, East Pipe).
E) Typical angular breccia texture of graphite mineralization (Z12-4F10, East Pipe).
F) Rounded syenite breccia fragments indicating more extensive mechanic erosion due to turbulent flow within the vent complex (Z12-4F3, West Pipe).
G) Laminated graphite intercalated with finely milled fragments (Z13-4F51, West Pipe). The laminated texture is interpreted to be the result of flow banding.
H) Highly altered syenite breccia with weak to no graphite mineralization (Z13-4F26, West Pipe). This style of alteration occurs at depth and is not associated with weathering-related alteration observed at the top of the breccia pipes.
I) Graphite mineralized breccia fragment partially rimmed by pyrite-pyrrhotite in a graphite and milled silicate matrix (Z13-4F26, West Pipe).

9.0 Bulk Sample Drilling Results

The Exploration Permit for the drill program (PR-18-00023) and Permission to Test Mineral Content were issued on January 19, 2019.

Access to the property was provided by winter road which was prepared and kept clear of snow by Amik Nuna Forestry Services Joint Venture (Constance Lake) and Villeneuve Construction Co. Ltd. (Hearst). Road preparation commenced on January 19, 2019 and the drill site was reached on February 11, 2019. From February 24 to March 16, 2019, ZEN completed 2 holes for a total of 292.1 m (Table 1, Figure 15). Drilling was contracted to Les Forages LBM Inc. (LBM) of Victoriaville, Quebec. LBM utilized a Foremost DR-24HD truck mounted hydraulic rig (Figure 12) and provided all the necessary support equipment (Figure 13) and drillers. Fuel for the drill and equipment was provided by Pepco Corp. of Hearst, Ontario and billed directly to ZEN. Expedition Camp Service and Logistics Inc. of Cochrane, Ontario was contracted to provide full camp services (food and accommodations) for the duration of the drill program and the camp was set up on claim 540586. A well to supply water for the camp was drilled by Northland Well Drilling of Kapuskasing, Ontario. The drill program was designed and supervised by Peter Wood, P.Geo. (ZEN Graphene Solutions Inc., President and Chief Geologist) and this also included all field logistics and sampling.

Table 2: Albany Graphite Deposit 2019 Bulk Sample Drill Holes

Drill Hole ID	***Date***	***Target Description***
Z19-4FM07	*February 24 – March 6, 2019*	The purpose of this drill hole was to obtain graphite mineralized material from the higher grade East Pipe to be tested for metallurgical and product development purposes and also provide more infill data.
Z19-4FM08	*March 7 – 16, 2019*	The purpose of drill hole Z19-4FM08 was to obtain additional graphite mineralized material adjacent to 2013 bulk sample diamond drill holes for metallurgical and product development purposes.

A total of six 300m bulk sample holes were planned for the 2019 program with five on the East Pipe and one on the West Pipe; however, the drill encountered a water-filled fracture system which drastically slowed the progress of the drill and only two holes were partially completed (Z19-4FM07 and Z19-4FM08). A total of 123 were submitted for assay (graphitic carbon, % Cg) of which 6 were field duplicate samples, 8 were blanks and 13 were ZEN's Certified Reference Material (standards).

9.1 Field Procedures

Holes were spotted using a handheld GPS. Wooden pickets were used to mark the location of each new drill hole. All the collar locations were initially surveyed with a Garmin hand-held GPS to determine the collar coordinates (UTM E, UTM N, and elevation).

After the bulk sample drill hole had been completed and the drill rig had moved off the hole the drill site was inspected, and all garbage was collected and removed from the site. Casings were capped with a welded plate and each drill hole was assigned an official well number (Figure 14).

Figure 12: LBM drill set up on hole Z19-4FM07

Figure 13: Percussive drill bit

Figure 14: Clean drill site with capped casing and well tag (Z19-4FM08)

A drill hole location map is presented below in Figure 15, the drill hole information is summarized in Table 3, and a summary of assay results along with estimates of grade and tonnage are presented in Table 4. Additionally, well and sampling logs are in Appendix 1 and certified assay certificates from ALS Minerals can be found in Appendix 2. A 1:1,500 scale drill hole plan map and 1:1,000 scale vertical cross sections with the individual bulk sample interval assay grades (% Cg) and weights in kilograms are also provided in Appendix 3.

Table 3: 2019 Bulk Sample Drill Hole Location Data & Samples

Hole ID	***Pipe***	***Start Date***	***End Date***	***UTM East (NAD 83, Zone 16)***	***UTM North (NAD 83, Zone 16)***	***Dip (°)***	***Azimuth (°)***	***Length (metres)***	***Sample Assays***
Z19-4FM07	East	24/02/2019	06/03/2019	683005	5545668	-90	0	157.9	59
Z19-4FM08	East	30/10/2013	06/11/2013	682950	5545730	-90	0	134.2	37
								292.1	***96***

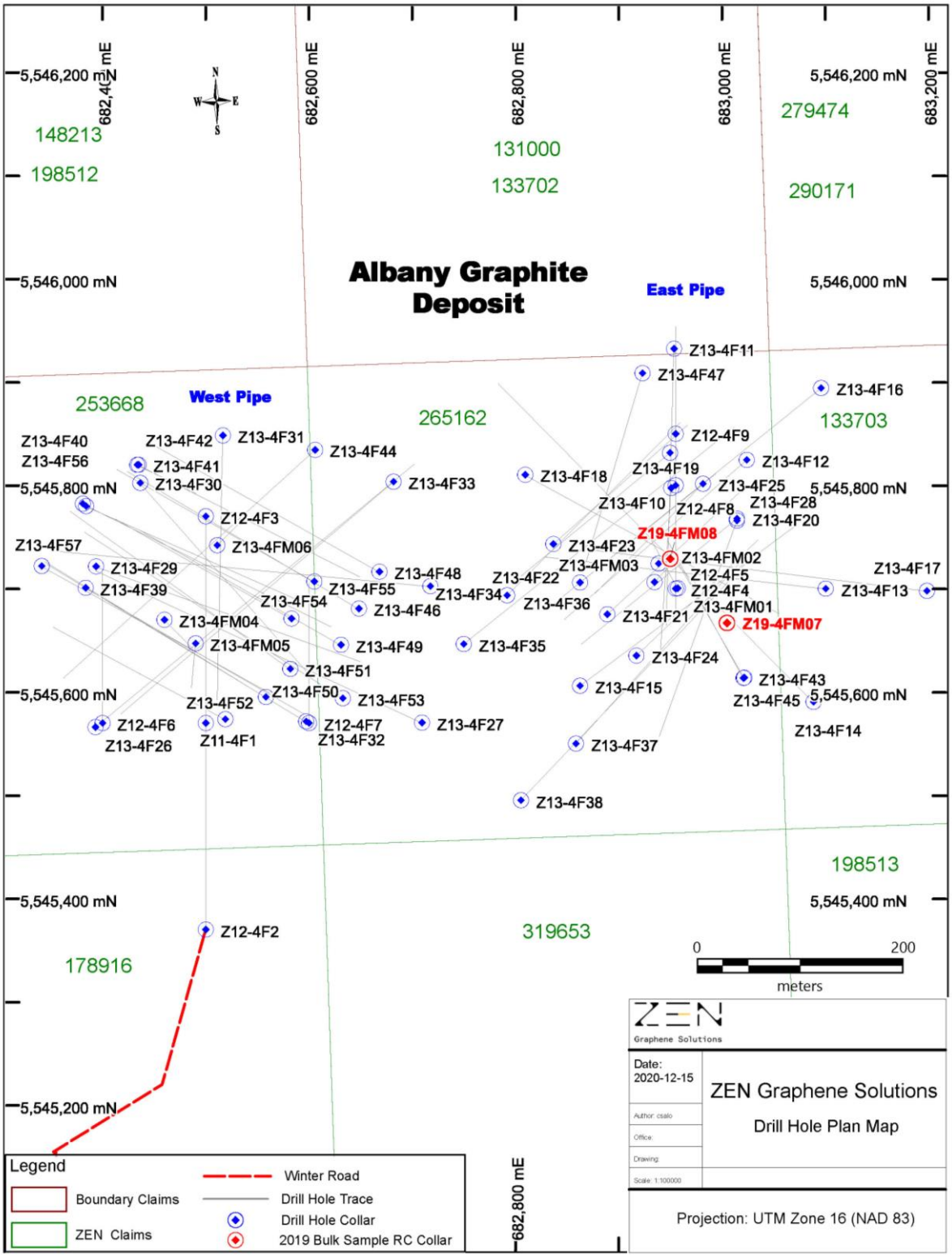


Figure 15: Albany Graphite Deposit 2019 Bulk Sample Drill Hole Location Map

Table 4: 2019 Bulk Sample Assay Data, Estimated Grade and Tonnage

SAMPLE DESCRIPTION	C-IR18 C Graphitic %		Bulk Sampl Size kg	Sample x Grade kg	Grade %	Comments
A45451	0.95	ZEN-1				CRM
A45482	3.15	ZEN-2				CRM
A45483	4.74	07-01	1175	55.7	4.74	
A45484	5.69	07-02	784	44.6	5.69	
W065702	5.78	07-02A			5.78	FIELD DUP
A45485	4.89	07-03	346	16.9	4.89	
A45452	4.73	07-04	1150	54.4	4.73	
A45486	6.46	07-05	1335	86.2	6.46	
A45487	7.1	07-06	1206	85.6	7.10	
A45453	6.74	07-07	1276	86.0	6.74	
A45454	7.40	07-08	1096	81.1	7.40	
A45488	6.45	07-09	1160	74.8	6.45	
A45455	4.57	07-10	1218	55.7	4.57	
A45489	3.58	07-11	982	35.2	3.58	
A45456	6.42	07-12	1172	75.2	6.42	
A45457	8.06	07-13	1180	95.1	8.06	
A45490	0.02	CDN-BL-10				BLANK
A45491	0.9	ZEN-1				CRM
A45458	0.07	CDN-BL-10				BLANK
A45459	4.14	07-14	1160	48.0	4.14	
A45460	7.01	07-15	1180	82.7	7.01	
A45461	5.41	07-16	1240	67.1	5.41	
A45462	6.80	07-17	1366	92.9	6.80	
A45463	7.87	07-18	1140	89.7	7.87	
A45464	6.09	07-19	1030	62.7	6.09	
A45465	7.60	ZEN-3				CRM
A45466	5.93	07-20	927	55.0	5.93	
A45467	7.34	07-21	1096	80.4	7.34	
A45468	7.05	07-22	1238	87.3	7.05	
A45469	6.25	07-23	1238	77.4	6.25	
A45470	7.04	07-24	1248	87.9	7.04	
A45471	5.03	07-25	1273	64.0	5.03	
A45472	0.05	CDN-BL-10				BLANK
A45473	5.41	07-26	1270	68.7	5.41	
A45474	6.30	07-27	1275	80.3	6.30	
A45475	6.41	07-28	1278	81.9	6.41	
A45476	6.13	07-29	1162	71.2	6.13	
A45477	6.02	07-30	1140	68.6	6.02	
A45478	6.03	07-31	794	47.9	6.03	
A45479	4.38	07-32	1056	46.3	4.38	
A45480	5.19	07-33	990	51.4	5.19	
A45481	2.91	ZEN-2				CRM
W065701	3.12	ZEN-2				CRM
W065703	7.65	07-34	958	73.3	7.65	
W065704	7.91	07-35	1096	86.7	7.91	
W065705	6.03	07-36	1246	75.1	6.03	
W065706	6.45	07-37	850	54.8	6.45	
W065707	3.59	07-38	984	35.3	3.59	

SAMPLE DESCRIPTION	C-IR18 C Graphitic %		Bulk Sampl Size kg	Sample x Grade kg	Grade %	Comments
W065708	8.61	07-38A			8.61	FIELD DUP
W065709	7.73	ZEN-3				CRM
W065710	5.58	07-39	1006	56.1	5.58	
W065711	6.71	07-40	982	65.9	6.71	
W065712	5.86	07-41	1226	71.8	5.86	
W065713	5.97	07-42	1162	69.4	5.97	
W065714	5.39	07-43	1306	70.4	5.39	
W065715	0.08	BL				BLANK
W065716	7.62	07-44	1198	91.3	7.62	
W065717	8.13	07-45	1164	94.6	8.13	
W065718	7.99	07-46	1134	90.6	7.99	
W065719	1.12	07-47	1174	13.1	1.12	Unmineralized Dike?
W065720	9.17	07-48	1220	111.9	9.17	
W065721	8.38	07-49	1200	100.6	8.38	
W065722	7.71	ZEN-3				CRM
W065723	4.08	07-50	1244	50.8	4.08	
W065724	8.2	07-51	1322	108.4	8.20	
W065725	10.7	07-52	1290	138.0	10.7	
W065726	5.65	07-53	1204	68.0	5.65	
W065727	9.16	07-54	1260	115.4	9.16	
W065728	8.9	07-55	1256	111.8	8.90	
W065729	0.07	BL				BLANK
W065730	0.28	07-56	1244	3.5	0.28	Unmineralized Dike?
W065731	12.85	07-57	1156	148.5	12.85	
W065732	8.96	07-58	1150	103.0	8.96	
W065733	5.94	07-59	646	38.4	5.94	
W065734	8.66	07-59A			8.66	FIELD DUP
W065735	3.62	08-01	1164	42.1	3.62	
W065736	15.2	ZEN-4				
W065737	3.46	08-02	1282	44.4	3.46	
W065738	5.00	08-03	1268	63.4	5.00	
W065739	3.36	08-04	1200	40.3	3.36	
W065740	5.15	08-05	1178	60.7	5.15	
W065741	6.12	08-06	1256	76.9	6.12	
W065742	4.64	08-07	1166	54.1	4.64	
W065743	<0.02	BL				BLANK
W065744	5.7	08-08	1176	67.0	5.7	
W065745	7.73	08-09	1336	103.3	7.73	
W065746	6.43	08-10	1322	85.0	6.43	
W065747	6.71	08-11	1208	81.1	6.71	
W065748	5.64	08-12	1252	70.6	5.64	
W065749	5.02	08-13	1290	64.8	5.02	
W065750	7.52	ZEN-3				CRM
W065751	6.80	08-14	1566	106.5	6.80	
W065752	7.37	08-15	1486	109.5	7.37	
W065753	6.60	08-16	1414	93.3	6.60	
W065754	5.67	08-17	1376	78.0	5.67	

SAMPLE DESCRIPTION	C-IR18 C Graphitic %		Bulk Sample Size kg	Sample x Grade kg	Grade %	Comments
W065755	1.27	08-18	1296	16.5	1.27	Unmineralized Dike?
W065756	6.77	08-19	1290	87.3	6.77	
W065757	<0.02	BL				BLANK
W065758	7.43	08-20	1204	89.5	7.43	
W065759	6.36	08-21	1222	77.7	6.36	
W065760	8.17	08-22	1340	109.5	8.17	
W065761	7.36	08-23	1230	90.5	7.36	
W065762	6.29	08-24	1072	67.4	6.29	
W065763	6.55	08-25	1192	78.1	6.55	
W065764	7.69	ZEN-3			7.69	CRM
W065765	5.83	08-25A			5.83	FIELD DUP
W065766	6.09	08-26	1156	70.4	6.09	
W065767	5.99	08-26A			5.99	FIELD DUP
W065768	5.58	08-27	900	50.2	5.58	
W065769	7.63	08-27A			7.63	FIELD DUP
W065770	3.99	08-28	1048	41.8	3.99	
W065771	<0.02	BL				BLANK
W065772	6.78	08-29	964	65.4	6.78	
W065773	0.37	08-30	1138	4.2	0.37	Unmineralized Dike?
W065774	7.83	08-31	1138	89.1	7.83	
W065775	9.73	08-32	1134	110.3	9.73	
W065776	9.35	08-33	1150	107.5	9.35	
W065777	8.16	08-34	1080	88.1	8.16	
W065778	3.27	ZEN-2				CRM
W065779	8.14	08-35	1024	83.4	8.14	
W065780	1.69	08-36	1014	17.1	1.69	Unmineralized Dike?
W065781	7.47	08-37	634	47.4	7.47	
W065782	0.86	ZEN-1				CRM

Sample Duplicates (6)

All Samples Included

	kg sample	kg Cg	% Cg (avg)
Z19-4FM07	66859	4305	6.4

	kg sample	kg Cg	% Cg (avg)
Z19-4FM08	44166	2632	6.0

	kg sample	kg Cg	% Cg (avg)
Total	111025	6937	6.2

Tonnes	111.0	6.94
	Bulk Sample	Graphite

Excluding Unmineralized Dikes

	kg sample	kg Cg	% Cg (avg)
Z19-4FM07	64441	4288	6.7

	kg sample	kg Cg	% Cg (avg)
Z19-4FM08	40718	2595	6.4

	kg sample	kg Cg	% Cg (avg)
Total	105159	6883	6.5

Tonnes	105.2	6.88
	Bulk Sample	Graphite

10.0 Sampling Method and Approach

Bulk samples were collected in large sample totes and sampled for assay (Figure 16) at the drill and then transported to ZEN's secure core shack located in Hearst. All sample bags contain individual sample tickets, and the sample number scribed on the outside of the sample bag in black marker; each sample bag was then stapled closed. All sample tickets were taken to a secure location and all sample data were then transferred to a password protected computer at base camp. The rice bags were also sealed by ZEN personnel before being transported to ALS Minerals Prep Laboratory in Sudbury and Thunder Bay where all samples were opened, crushed and split into sub-samples and pulverized prior to being sent for analyses in Vancouver, Canada. See Appendix 2, at back of this report for all assay results (Certificates of Assay) for the 2019 bulk sample program.

Figure 16: Bulk sample collection in large sample tote from the shaker table

11.0 Sample Security, Preparation, Analysis, Quality Assurance and Quality Control

As part of ZEN's bulk sample drill program, the sample chain of custody was maintained from the sample collection point until delivery to a representative from the analytical laboratory. Following sample collection, samples were packed into large rice sacks and tightly sealed using nylon tie wraps. The sacks were stored at ZEN's Hearst core shack until they were transported directly to the sample preparation laboratory.

All samples were submitted to ALS Minerals' sample preparation facilities in Sudbury and Thunder Bay, Ontario, for sample preparation. After ALS received the samples, they were verified against the shipping documents and entered into their tracing system. Sample preparation was conducted using ALS code PREP-31B. Each sample was dried, crushed, and pulverized (1000 g to 85%) passing 75 µm for assaying. To avoid contamination, ALS cleaned the crushers and pulverizers with barren material after each sample. The pulps were then shipped to ALS Minerals analytical laboratories in Vancouver, British Columbia for graphitic carbon (Cg) assays by LECO (C-IR18) (range: 0.02%-100%). ALS is Certified to ISO 9001:2015 for survey and inspection activity, and ISO 17025:2005 UKAS ref 4028 Accredited for laboratory analysis as per the Standards Council of Canada at all its global laboratories.

A total of 123 samples (including QC samples) were submitted to ALS Minerals on March 22, April 4, and May 7, 2019. ZEN routinely inserted standards and control samples into the sample stream to test the analytical quality control. QA/QC was also monitored by Naaznin Pastakia and is described in detail in Pastakia (2019).

The following section is based on an internal report by Pastakia (2019).

Quality Assurance and Quality Control

Quality assurance (QA) consists of evidence to demonstrate that the assay data has precision and accuracy within generally accepted limits for the sampling and analytical method(s) used in order to have confidence in future resource estimations. Quality control (QC) consists of procedures used to ensure that an adequate level of quality is maintained in the process of sampling, preparing, and assaying the exploration drilling samples. In general, QA/QC programs are designed to prevent or detect contamination and allow assaying (analytical) precision (repeatability) and accuracy to be quantified. In addition, a QA/QC program can disclose the overall sampling – assaying variability of the sampling method itself.

Certified Reference Material

Results of the regular submission of Certified Reference Materials (CRMs) are used to identify problems with specific sample batches and long-term biases associated with the regular assay laboratory. ZEN prepared custom in-house standards. Four different CRMs were prepared by CDN Resource Laboratories Ltd. in Langley, British Columbia and certified for both graphitic carbon (Cg) and sulphur: ZEN-1, ZEN-2, ZEN-3, and ZEN-4. Table 5 lists the mean and standard deviation for each CRM. A total of 13 CRMs were inserted with the 123 bulk sample chips submitted by ZEN to ALS, for a rate of approximately 1 in 9 samples.

Table 5: Expected Values for Custom CRMS

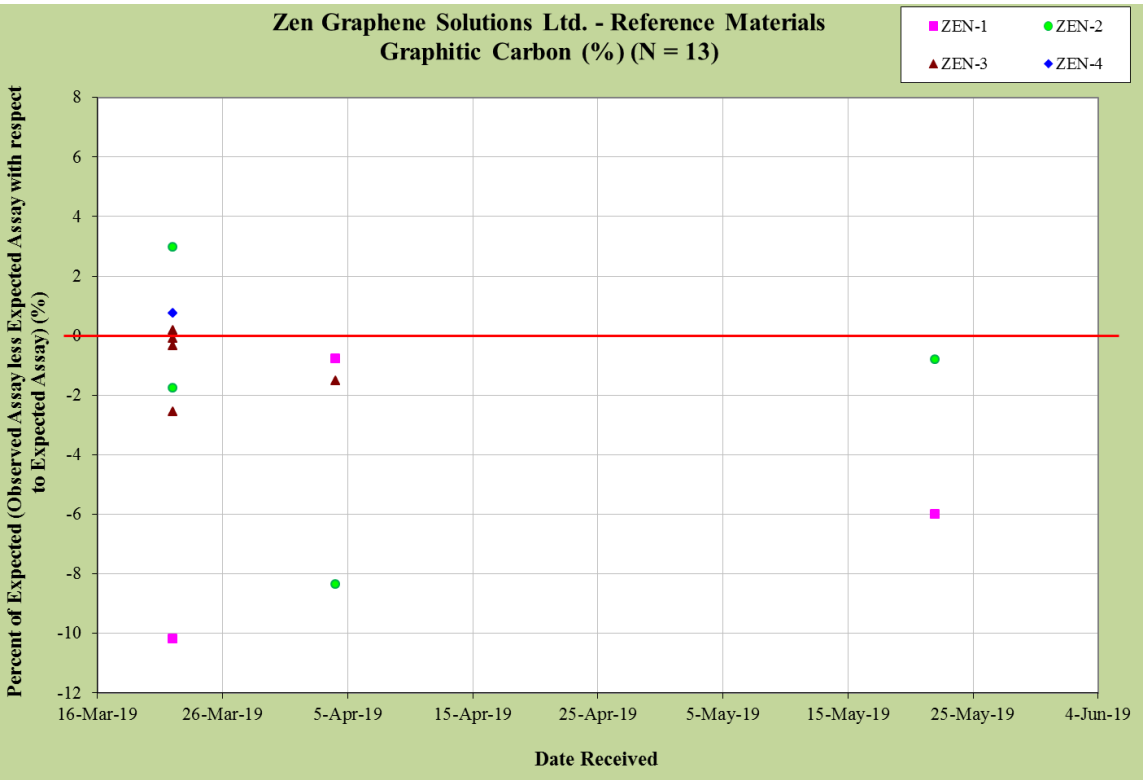
CRM ID	Cg (%)	
	Mean	Std. Dev.
ZEN-1	0.91	0.045
ZEN-2	3.13	0.125
ZEN-3	7.42	0.415
ZEN-4	14.12	0.99

A QC failure for a CRM was defined as an assay that fell outside either three standard deviations (±3SD) or ±10% of the expected value. The results were plotted and are shown in Figure 17 and the data are summarized in Table 6.

Table 6: Summary of Carbon Assays for Reference Materials

Element (units)	N	Expected C (%)		Observed C (%)		% of Expected
		Average	Std. Dev.	Average	Std. Dev.	
ZEN-1	3	0.91	0.045	0.90	0.05	99.3
ZEN-2	4	3.13	0.125	3.11	0.15	99.4
ZEN-3	5	7.42	0.415	7.65	0.09	103.1
ZEN-4	1	14.12	0.99	15.20	n.a.	107.6
Total	**13**				*-Weighted Average	**101.7***

Figure 17: Graphitic Carbon Assays for Reference Materials



The average results for carbon are consistently biased slightly high for the two higher grade RMs (between 3% to 7%). These are similar to the results observed at the end of drilling season in November 2013. The average results are generally within ±10% and the performance is considered acceptable.

Blanks

Contamination and sample numbering errors are assessed through blank samples, on which the presence of the elements undergoing analysis has been confirmed to be below the

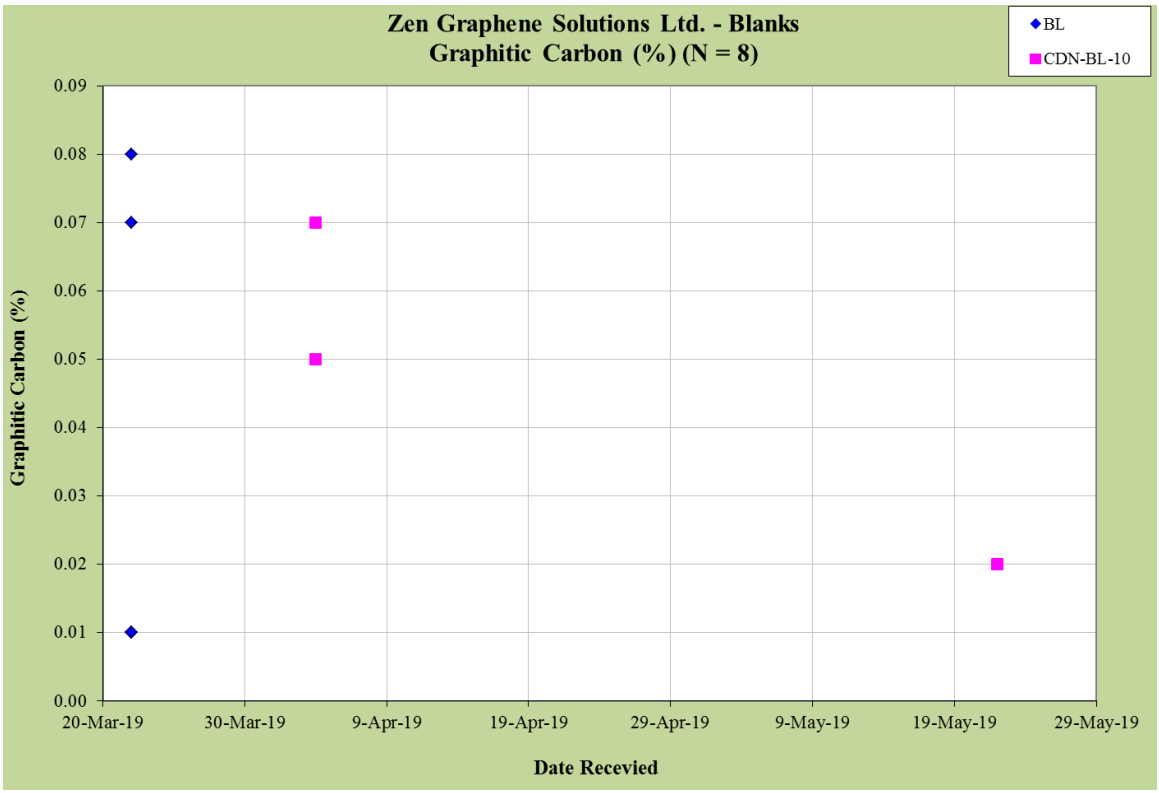
corresponding detection limit. A significant level of contamination is identified when the blank sample yields values exceeding 0.2% Cg, which is ten times the detection limit of 0.02% Cg. Additionally, the matrix of the blank sample should be similar to that of the material being routinely analyzed.

A blank (BL) consisting of coarse-grained granite was purchased from Analytical Solutions Ltd., Toronto, and a second blank (CDN-BL-10) was sourced from CDN Laboratories in Langley, British Columbia. A total of 8 blanks were submitted with the 123 field and QC samples for an insertion rate of about 7%, or approximately 1 in 15 samples. Blank assay results were plotted in Figure 18, and statistics are listed in Table 7. Based on these results, there was no evidence of systematic sample contamination.

Table 7: Summary of Blanks

Criteria	BL	CDN-BL-10
count	5	3
min	0.01	0.05
max	0.08	0.07
average	0.036	0.047
stdev	0.036	0.025

Figure 18: C-IR18-% Assays for Blanks



Duplicates

Field duplicates assess the variability introduced by sampling the same sample interval. The duplicate splits are bagged separately with separate sample numbers to be blind to the sample preparation laboratory. The duplicates contain all levels of sampling and analytical error and are used to calculate field, sample preparation, and analytical precision.

Pulp duplicates consist of second splits of final prepared pulverized samples, analyzed by the same laboratory as the original samples under different sample numbers. The pulp duplicates are indicators of the analytical precision, which may also be affected by the quality of pulverization and homogenization. To ensure repeatability conditions, both the original and the pulp duplicate samples should be submitted to the primary laboratory, in the same sample batch, and under a different sample number, so that assaying follows a similar procedure.

ZEN incorporated field duplicates into the sample stream and the results are summarized below.

Field Duplicates

Samples were taken from the large sample totes that the samples were collected in. The material is mainly composed of rock chips and fine powdered rock that was recovered from a 24" percussive drill. Each sample tote holds between 1 to 1.5 tonnes of material. The sample is also dewatered using a shaker table which splits the material into two sample streams which are coarse and fine fractions. The two size fractions are not remixed in the sample tote and this could introduce variability in the graphite concentrations depending upon where the sample was collected from.

A total of six field duplicate assays reported and the original and duplicate assays are plotted in Figures 19 and 20. The reproducibility of these assays is scattered and does not reproduce well. This is likely due to the sample size and collection method which may have introduced significant variance.

Figure 19: Field Duplicates for Carbon

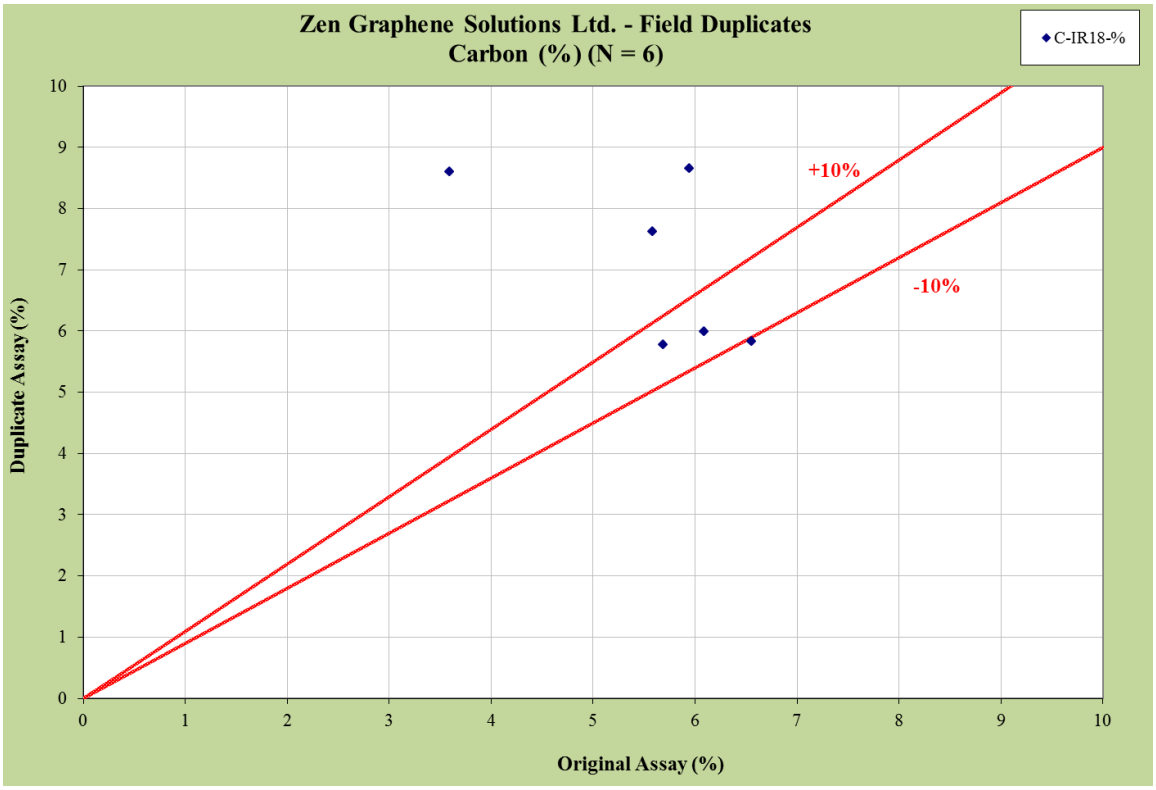
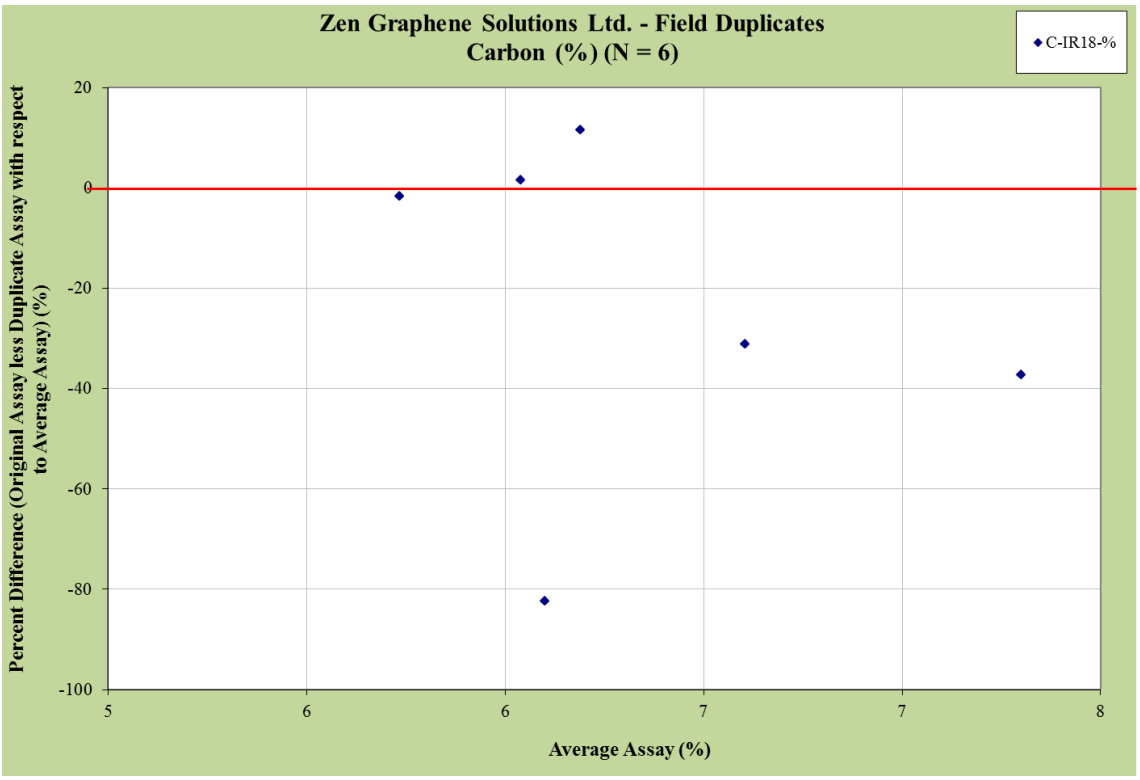


Figure 20: Relative Percent Difference for Field Duplicates for Carbon



Laboratory Pulp Duplicates

Commercial laboratories routinely assay a second aliquot of the sample pulp usually for one in ten samples. The data are used by the laboratory for their internal quality control monitoring. The data are either automatically reported to clients or can be requested.

A total of five laboratory duplicate assays reported and the original and duplicate assays are plotted in Figures 21 and 22. The reproducibility of these assays was within ±10%. Reproducibility of assays on the same pulp and at the same laboratory fall within the expected ranges.

Figure 21: Laboratory Pulp Duplicates for Carbon

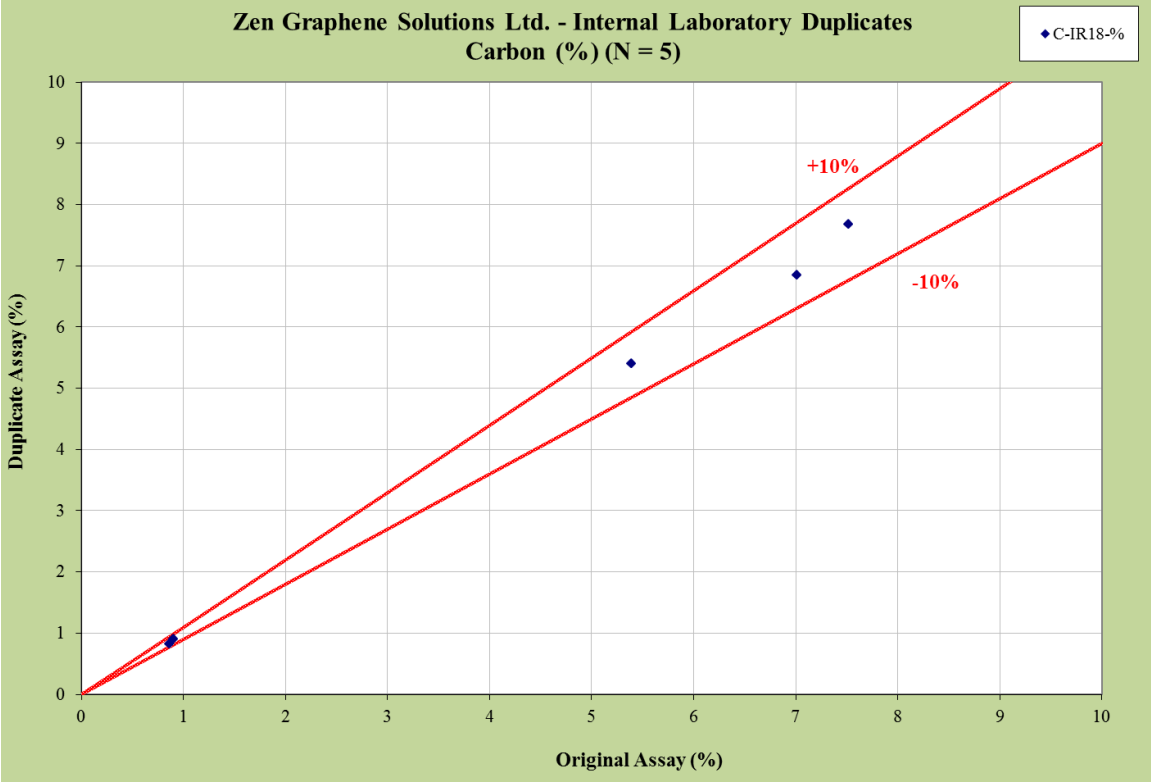
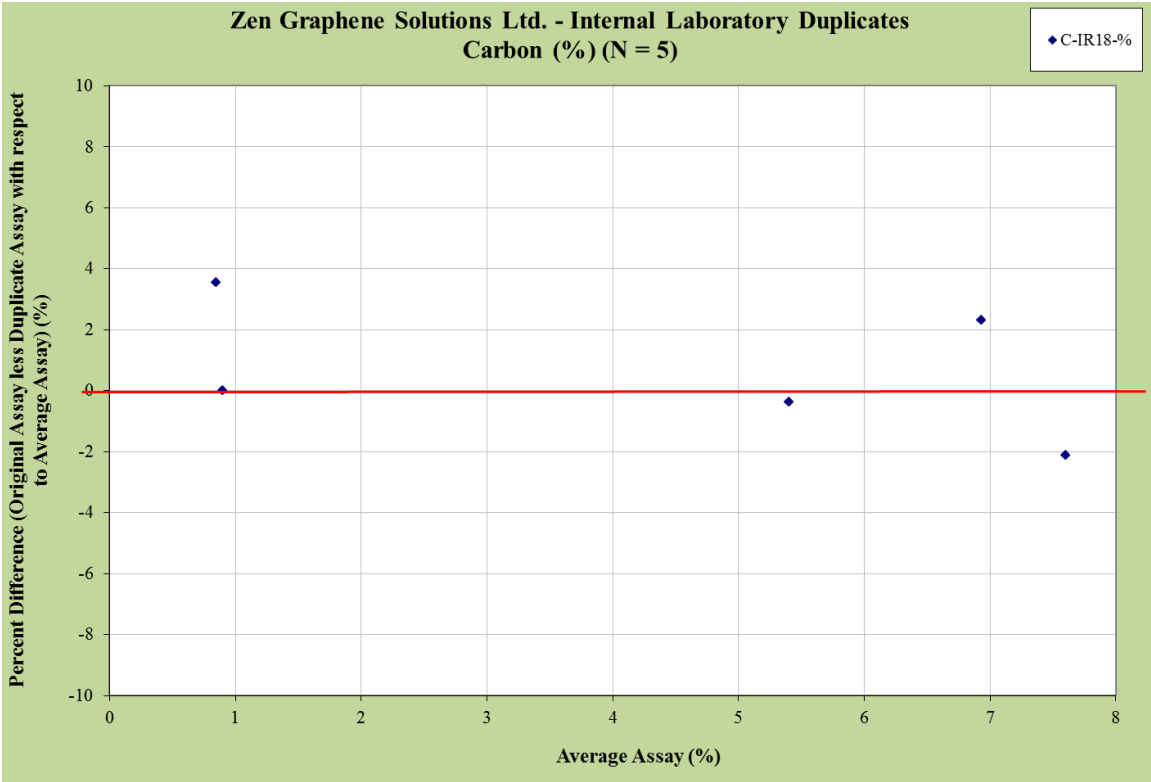


Figure 22: Relative Percent Difference for Laboratory Pulp Duplicates for Carbon



12.0 Resource Estimate

The following section is based on RPA (2014 & 2015).

In December 2013, ZEN announced its maiden resource estimate for the Albany Graphite Deposit. RPA estimated Mineral Resources for the Albany graphite deposit using diamond drill hole data available as of November 15, 2013, which included drill holes Z11-4F1, Z12-4F2 to Z12-4F9, Z13-4F10 to Z13-4F57, and Z13-4FM01 to Z13-4FM03 (RPA, 2014). The Mineral Resource estimate was based on a potential open pit mining scenario. RPA estimated Indicated Mineral Resources to total 25.1 Mt at an average grade of 3.89% Cg, containing 977,000 tonnes of Cg. In addition, Inferred Mineral Resources are estimated to total 20.1 Mt at an average grade of 2.20% Cg, containing 441,000 tonnes of Cg. Mineral Resources were constrained within a preliminary optimized pit shell in Whittle software. RPA also reported that the Mineral Resource estimate is insensitive to cut-off grade up to at least 2% Cg.

Subsequently, in 2015, RPA recalculated Mineral Resources for the Albany Graphite Deposit using drill hole data available as of November 15, 2013 and economic assumptions current to June 1, 2015 (RPA, 2015). The Mineral Resource estimate was based on a potential combined open pit and underground mining scenario. Indicated Mineral Resources were estimated to total 24.3 Mt at an average grade of 3.98% Cg, containing 968,000 tonnes of Cg. Inferred Mineral Resources are estimated to total 16.9 Mt at an average grade of 2.64% Cg, containing 445,000 tonnes of Cg (Table 8 and Figure 23).

Table 8: RPA Mineral Resource Estimate - JUNE 1, 2015

	Cut-off Grade (% Cg)	Tonnage (Mt)	Grade (% Cg)	Contained Graphitic Carbon (t Cg)
OP				
Indicated	0.9	24.3	3.98	968,000
Inferred	0.9	5.4	2.58	138,000
UG				
Indicated	-	-	-	-
Inferred	1.5	11.5	2.67	307,000
Total Indicated	**Variable**	**24.3**	**3.98**	**968,000**
Total Inferred	**Variable**	**16.9**	**2.64**	**445,000**

Notes:
1. CIM definitions were followed for Mineral Resources.
2. Cg – graphitic carbon.
3. Mineral Resources are estimated using a long-term price of US$7,500 per tonne Cg, and an exchange rate of US$0.82 = C$1.00.
4. Bulk density is 2.6 t/m^3 in the pipes and 2.65 t/m^3 in the halo of the East Pipe.
5. OP Mineral Resources are constrained by a pit-shell generated in Whittle software.
6. UG Mineral Resources are constrained by a nominal 1.5% Cg wireframe, which includes some material below cut-off to preserve continuity.
7. Numbers may not add due to rounding.

Mineral Reserves have not yet been estimated for the Albany graphite deposit.

Figure 23 below shows the classified blocks for the Albany graphite deposit, Figure 24 shows the block model grades while Figures 25 and 26 show the Cg grades for the West and East pipes in long section.

Figure 23: 3D View of Mineral Resource Classification

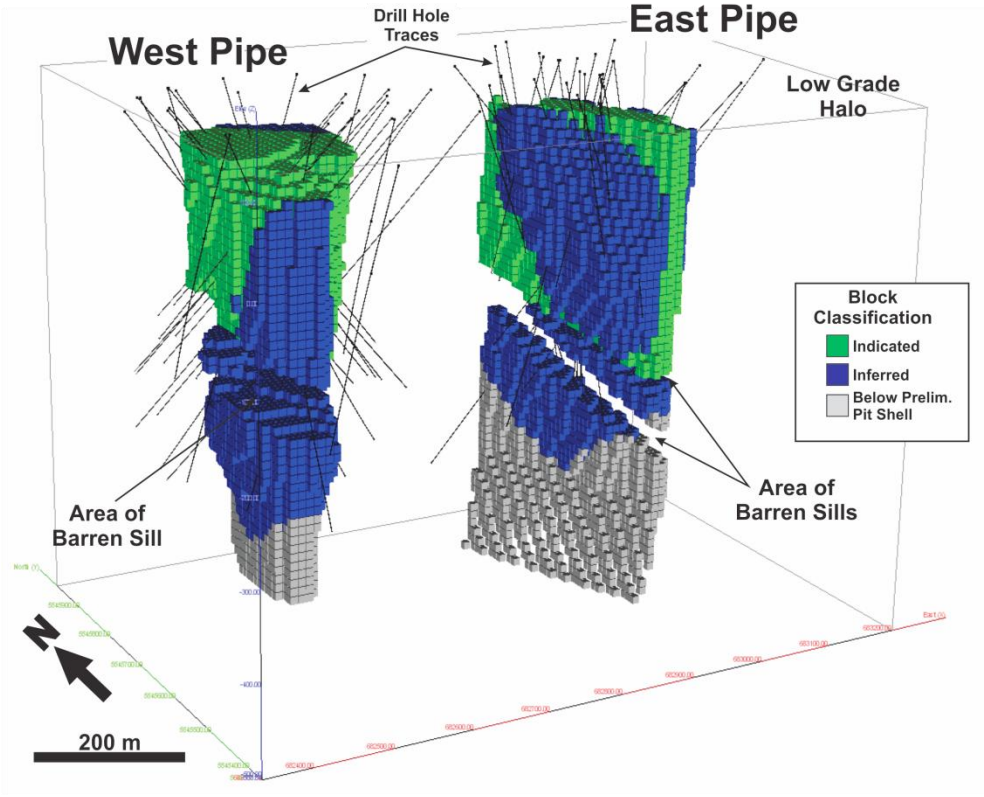


Figure 24: 3D View of Block Model Grades

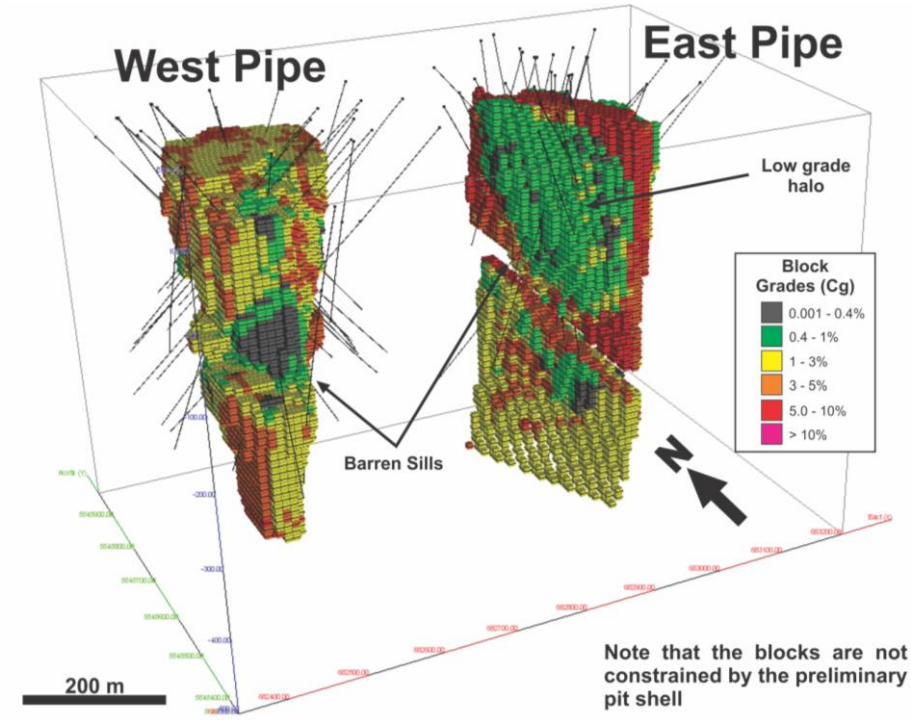


Figure 25: West Pipe Long Section View Looking Northwest

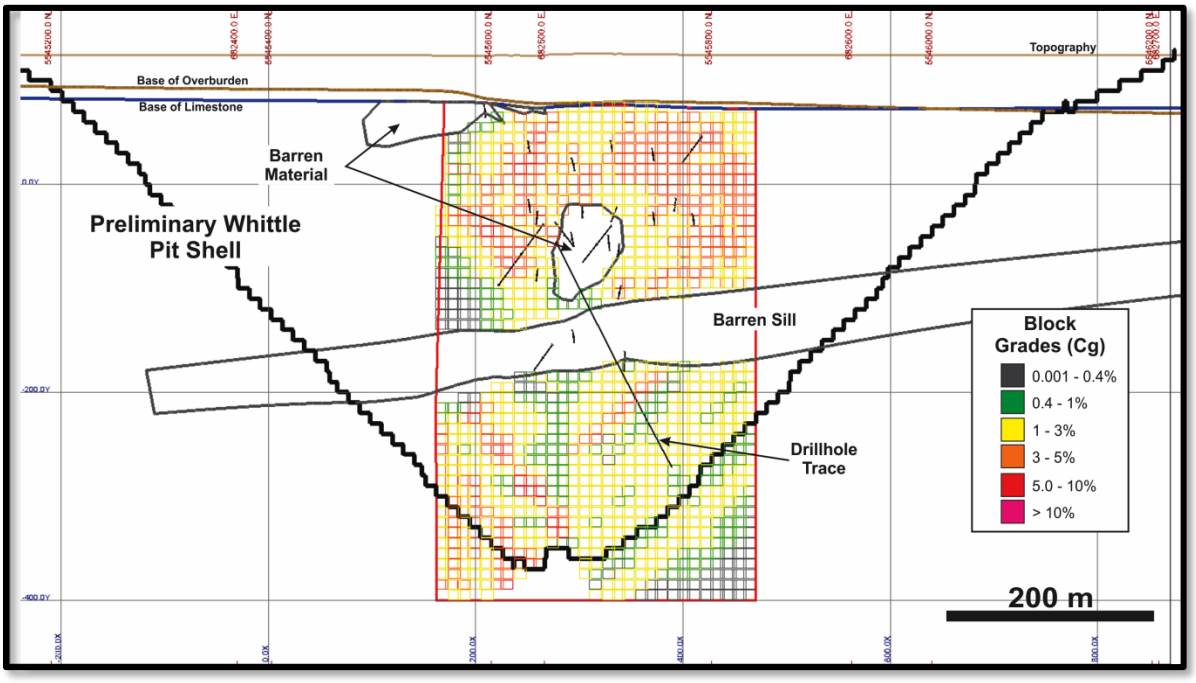
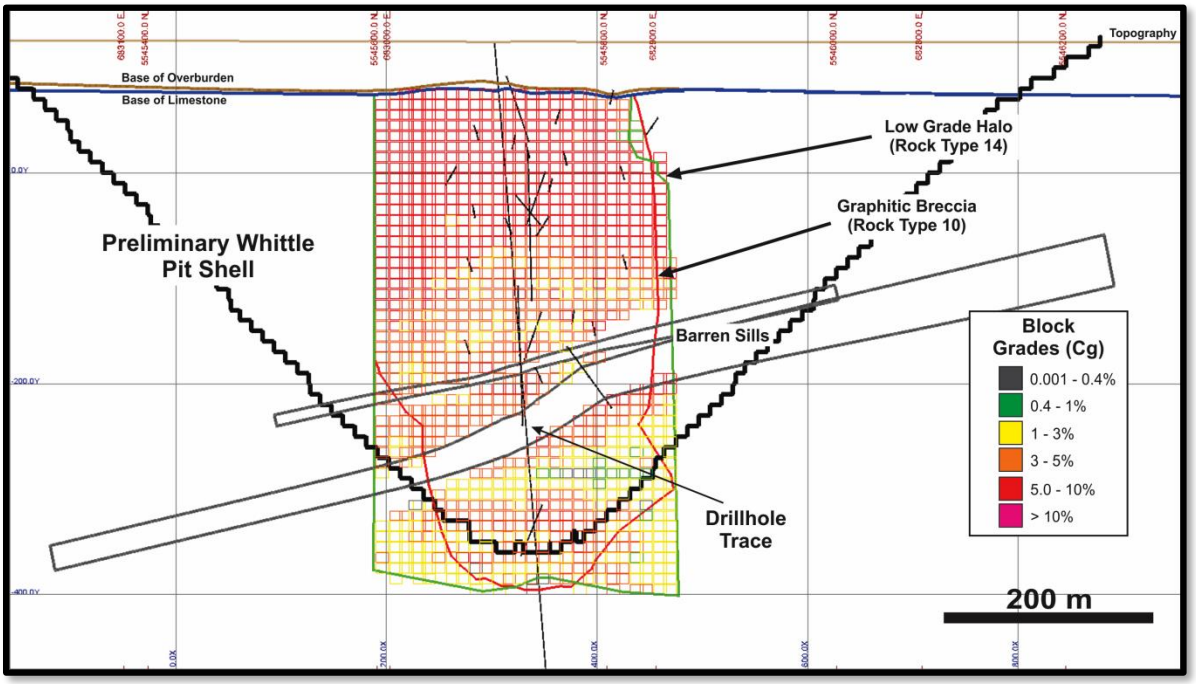


Figure 26: East Pipe Long Section View Looking Southwest



13.0 Interpretation and Conclusions

The Albany deposit is a unique example of an epigenetic graphite deposit in which a large volume of highly crystalline, fluid-deposited graphite occurs within an igneous host. The deposit is interpreted as a vent pipe breccia that formed from CO_2-rich fluids that evolved due to pressure-related degassing of ascending magma related to the intrusion of the Nagagami River Alkalic Complex.

In 2013, ZEN completed a Phase III exploration program on the Albany graphite deposit and drilling outlined two graphite mineralized breccia pipes with three-dimensional continuity, and size and grades that can potentially be economically extracted (RPA, 2014). The resource drilling tested the extent of the graphitic breccia mineralization to establish the geometry of the breccia bodies based on the shape of their geophysical signatures. (RPA, 2014).

RPA reported that ZEN's protocols for drilling, sampling, analysis, security, and database management meet industry accepted practices. The drill hole database was also verified to be suitable for Mineral Resource estimation work. In the positive 2015 PEA study, RPA estimated Mineral Resources for the Albany graphite deposit using diamond drill hole data available as of November 15, 2013 and it was based on a potential combined open pit and underground mining scenario. Indicated Mineral Resources were estimated to total 24.3 Mt at an average grade of 3.98% Cg, containing 968,000 tonnes of Cg. Inferred Mineral Resources are estimated to total 16.9 Mt at an average grade of 2.64% Cg, containing 445,000 tonnes of Cg.

The 2019 bulk sample drill program has provided additional information that supports the grade and continuity of the East Pipe that was determined from the 2013 resource drill program and subsequent resource estimate. Also, the program provided a 111 tonne bulk sample from two percussive RCD holes in the East Pipe with the potential to contain 6.94 tonnes of graphitic carbon. Unfortunately, the program was only partially successful due to the influx of ground water into the holes that made drilling a challenge and reduced productivity. Consequently, only 111 tonnes of the proposed 990 tonnes were recovered.

14.0 Recommendations

Future bulk sample drill programs should recover additional graphite mineralized material as allowed by the current permit (~880 tonnes) to provide feed for a graphene production pilot plant. This material will allow for a beneficiation pilot plant at SGS Canada Inc.'s Lakefield facility that will produce a 86% flotation concentrate which will subsequently be purified to 99.8%. This material can then be used for graphene-based products and application development.

Future programs should involve the use of a high-pressure water pump to deal with the influx of groundwater and provide a continuous drawdown. Shorter length but larger diameter percussive RCD holes (e.g. 48") should also be considered as they will provide more material per vertical foot than a smaller diameter drill hole.

15.0 Statement of Qualification

I, Peter C. Wood, do hereby certify that:

1. I am a practising professional geoscientist with Geodigital Mapping Systems Inc., with an office in Sudbury, Ontario, and a mailing address of Box 40026, Long Lake RPO, 2015 Long Lake Road, Sudbury, Ontario, P3E 0B2.

2. I am a graduate of the University of Toronto, Ontario with an Honours Bachelor of Applied Science Degree (1983) in Geological Engineering and Applied Earth Sciences (Exploration Option), and a Master of Science Degree (1987) in Geology.

3. I am registered as a Professional Geologist in the Province of Ontario (#1068). I have worked as a geologist for a total of 35 years since my graduation in Ontario, Manitoba, Quebec and Nunavut.

Date: December 19, 2020 at Sudbury, Ontario

Peter C. Wood, P.Geo, President and Chief Geologist
ZEN Graphene Solutions Ltd.
210-1205 Amber Drive, Thunder Bay, Ontario, P7B 6M4
Tel**:** 844-730-9822

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APPENDIX 1

2019 BULK SAMPLE PROGRAM
RCD WELL LOGS, SAMPLE REPORTS
& ASSAY SUMMARY
Z19-4FM07 & Z19-4FM08

WELL LOG AND INSTALLATION

LES FORAGES LBM INC.

ZEN Graphene Solutions Ltd.		Well #
DRILL SITE	Albany Project	**Z19 - 4FM07**
CITY	Hearst	**N 50° 02' 06.5"**
PROVINCE:	Ontario	**W 084° 26' 40.0"**

DATE	DEPTH		
20-02-2019 to 06-03-2019	Overburden		m
DRILLERS	Fractured rock		m
J. Beaudet, Y. Proulx, Junior B.	Soft rock		m
DRILL	Final Depth	157,89	m
DR-24HD (F-17)			

MATERIAL USED		
Surface casing no. 1 (24" x 0,500"):	37,19	m.
Casing shoe (24"):	1	un.
Surface casing nb. 2 :		m.
Casing shoe nb. 2 (__"):		un.

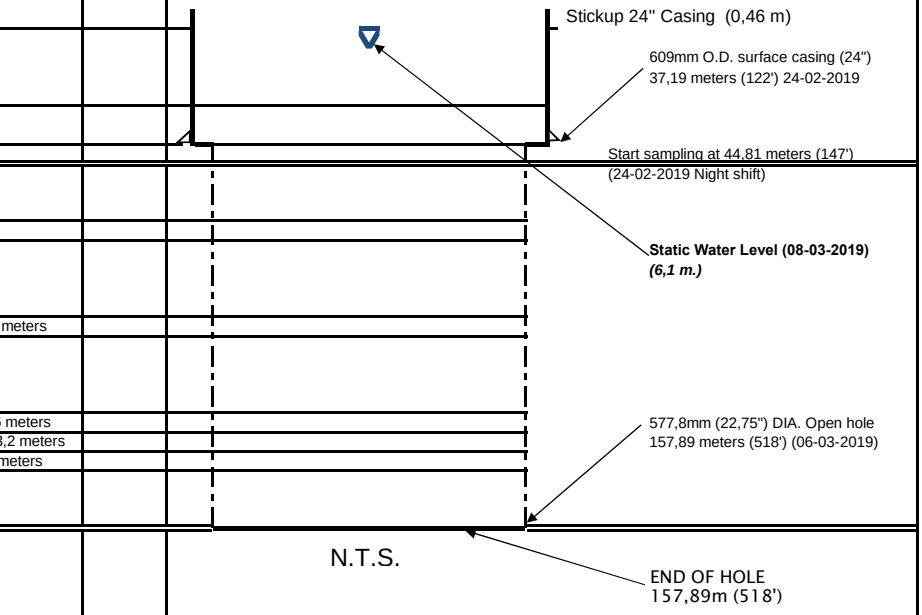
FLOW RATE (Q)		
End of drilling		GPM**
Status		GPM
Static water level	6,10	m

WELLHEAD		
DIAMETER	609,6	mm
STICK-UP	0,46	m

GEOLOGY | WATER | DRILLING DETAILS

Depth (m)	Section	LITHOLOGIES DESCRIPTION	Flow (GPM)
0		Ground Level	
30		Limestone	
60		Fractured rock	
90	59 bags for 66859 kgs (66,859 metric tons)	Very hard between 96,3 and 96,6 meters	
120		Fracture between 124,0 and 124,6 meters Fractured rock between 126,5 to 133,2 meters Very hard between 134 and 135 meters	
150			
180			
210			
240			
270			
300			
330			
360			

PRODUCTION WELL DETAILS | Depth (m) | PENETRATION RATE (FOOT/H) 20 40 60 80




Z19-4FM07

Ontario Well Tag

A201196

Protect Your Well
Regulation 903

SAMPLING Report

ZEN Graphene Solutions Ltd., Bulk Sampling Program
PROJECT # H-011-2019

Hole no. : **Z19-4FM07**
Hole diam. : ***22.75''***

Forage / Hole # - Sac / Bag #	Heure /Hour		Profondeur / Depth in feet		Date	Initials	poids en kilogramme/ weight in kg
	de / From	à / To	de / From	à / To			
Z19-4FM07 - 1	21:15	4:45	147	163.5	24-Feb-19	J.A	1175
Z19-4FM07 - 2	4:45	5:25	163.5	171	24-Feb-19	J.A	784
Z19-4FM07 - 3	5:25	5:45	171	175	24-Feb-19	J.A	346
Z19-4FM07 - 4	11:50	12:25	175	187	25-Feb-19	F.F	1150
Z19-4FM07 - 5	12:25	13:00	187	195	25-Feb-19	F.F	1335
Z19-4FM07 - 6	13:00	18:15	195	202	25-Feb-19	F.F	1206
Z19-4FM07 - 7	18:15	20:40	202	208	25-Feb-19	J.A	1276
Z19-4FM07 - 8	20:40	21:08	208	217	25-Feb-19	J.A	1096
Z19-4FM07 - 9	21:08	0:38	217	222	25-Feb-19	J.A	1160
Z19-4FM07 - 10	0:38	1:17	222	228	26-Feb-19	J.A	1218
Z19-4FM07 - 11	1:17	1:57	228	234	26-Feb-19	J.A	982
Z19-4FM07 - 12	1:57	2:50	234	239	26-Feb-19	J.A	1172
Z19-4FM07 - 13	2:50	3:27	239	246	26-Feb-19	J.A	1180
Z19-4FM07 - 14	3:27	4:00	246	251	26-Feb-19	J.A	1160
Z19-4FM07 - 15	4:00	4:45	251	255	26-Feb-19	J.A	1180
Z19-4FM07 - 16	13:13	14:38	255	261	26-Feb-19	F.F	1240
Z19-4FM07 - 17	14:38	15:38	261	269	26-Feb-19	F.F	1366
Z19-4FM07 - 18	15:38	4:55	269	272	26-Feb-19	J.A	1140
Z19-4FM07 - 19	4:55	5:47	272	281	27-Feb-19	J.A	1030
Z19-4FM07 - 20	5:47	6:15	281	284	27-Feb-19	J.A	927
Z19-4FM07 - 21	8:50	9:23	284	290	27-Feb-19	F.F	1096
Z19-4FM07 - 22	9:23	9:51	290	297	27-Feb-19	F.F	1238
Z19-4FM07 - 23	9:51	10:50	297	303	27-Feb-19	F.F	1238
Z19-4FM07 - 24	10:50	11:20	303	310	27-Feb-19	F.F	1248
Z19-4FM07 - 25	11:20	11:55	310	317	27-Feb-19	F.F	1273
Z19-4FM07 - 26	11:55	14:13	317	322	27-Feb-19	F.F	1270
Z19-4FM07 - 27	14:13	14:53	322	328	27-Feb-19	F.F	1275
Z19-4FM07 - 28	14:53	15:13	328	337	27-Feb-19	F.F	1278
Z19-4FM07 - 29	15:13	20:45	337	340	27-Feb-19	A.L	1162
Z19-4FM07 - 30	20:45	21:15	340	345	27-Feb-19	A.L	1140
Z19-4FM07 - 31	21:15	21:45	345	350	27-Feb-19	S.G	794
Z19-4FM07 - 32	21:45	22:06	350	357	28-Feb-19	S.G	1056
Z19-4FM07 - 33	21:30	21:50	357	360	28-Feb-19	S.G	990
Z19-4FM07 - 34	21:50	22:15	360	365	28-Feb-19	S.G	958
Z19-4FM07 - 35	22:15	22:45	365	370	28-Feb-19	S.G	1096
Z19-4FM07 - 36	22:45	23:25	370	377	28-Feb-19	S.G	1246
Z19-4FM07 - 37	23:25	3:15	377	384	01-Mar-19	S.G	850
Z19-4FM07 - 38	3:15	3:45	384	388	01-Mar-19	S.G	984
Z19-4FM07 - 39	3:45	4:55	388	392	01-Mar-19	S.G	1006
Z19-4FM07 - 40	4:55	5:50	392	396	01-Mar-19	S.G	982

Z19-4FM07 - 41	5:50	10:10	396	403	01-Mar-19	S.G	1226
Z19-4FM07 - 42	10:10	11:20	403	409	01-Mar-19	F.F	1162
Z19-4FM07 - 43	11:20	14:05	409	415	01-Mar-19	F.F	1306
Z19-4FM07 - 44	14:05	N/A	415	421	01-Mar-19	F.F	1198
Z19-4FM07 - 45	16:41	21:35	421	428	01-Mar-19	S.G	1164
Z19-4FM07 - 46	21:35	22:15	428	433	01-Mar-19	S.G	1134
Z19-4FM07 - 47	22:15	9:12	433	438	02-Mar-19	F.F	1174
Z19-4FM07 - 48	9:12	17:15	438	444	02-Mar-19	F.F	1220
Z19-4FM07 - 49	17:15	18:18	444	451	02-Mar-19	F.F	1200
Z19-4FM07 - 50	18:18	11:30	451	457	03-Mar-19	S.G	1244
Z19-4FM07 - 51	11:30	17:30	457	466	03-Mar-19	F.F	1322
Z19-4FM07 - 52	17:30	5:15	466	472	04-Mar-19	S.G	1290
Z19-4FM07 - 53	5:15	9:00	472	479	04-Mar-19	F.F	1204
Z19-4FM07 - 54	9:00	11:55	479	488	04-Mar-19	F.F	1260
Z19-4FM07 - 55	11:55	22:40	488	494	05-Mar-19	S.G	1256
Z19-4FM07 - 56	22:40	0:30	494	500	06-Mar-19	S.G	1244
Z19-4FM07 - 57	0:30	2:15	500	509	06-Mar-19	S.G	1156
Z19-4FM07 - 58	2:15	4:45	509	515	06-Mar-19	S.G	1150
Z19-4FM07 - 59	4:45	6:10	515	518	06-Mar-19	S.G	646

Total: 66,859 kg

WELL LOG AND INSTALLATION

LES FORAGES LBM INC.

ZEN Graphene Solutions Ltd.		Well #
DRILL SITE	Albany Project	**Z19 - 4FM08**
CITY	Hearst	**N 50° 02' 08.6"**
PROVINCE:	Ontario	**W 084° 26' 42.6"**

DATE	DEPTH		
07-03-2019 to 16-03-2019	Overburden		m
DRILLERS	Fractured rock		m
Junior B., Y. Proulx, J.Beaudet	Soft rock		m
DRILL	Final Depth	134,19	m
DR-24HD (F-17)			

MATERIAL USED		
Surface casing no. 1 (24" x 0,500"):	38,48	m.
Casing shoe (24"):	1	un.
Surface casing nb. 2 :		m.
Casing shoe nb. 2 (__"):		un.

FLOW RATE (Q)		
End of drilling	400	GPM**
Status		GPM
Static water level	4,57	m

WELLHEAD		
DIAMETER	609,6	mm
STICK-UP	1,7	m

Depth (m)	GEOLOGY Section	LITHOLOGIES DESCRIPTION	WATER Flow (GPM)
0		Ground Level	
		Limestone	
		Gravel	
30		Roc	
		Limestone - Fracture at 42,06 m. (138')	
		Graphite	
60	37 bags for 44166 kgs (44,166 metric tons)		
		Fracture at 80,09 m.	
90			
120			
150			
180			
210			
240			
270			
300			
330			
360			

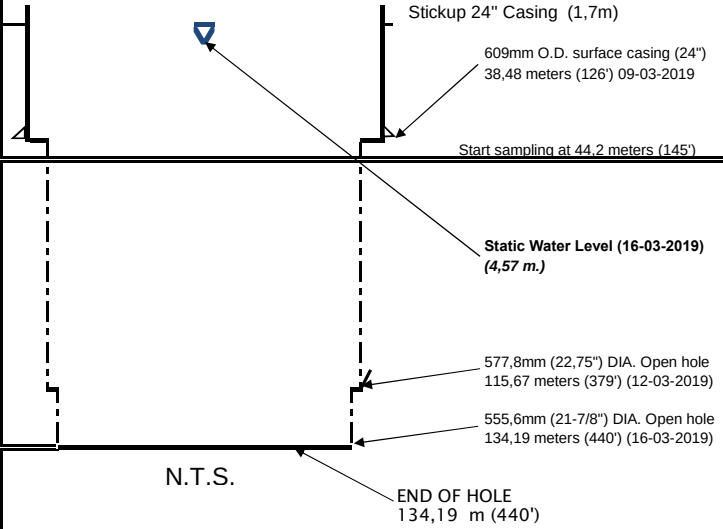
DRILLING DETAILS

PRODUCTION WELL DETAILS

Depth (m)

PENETRATION RATE (FOOT/H)

20 40 60 80




Z19-4FM08
A201197


Ontario Well Tag
A201197
Protect Your Well
Regulation 903

SAMPLING Report

ZEN Graphene Solutions Ltd., Bulk Sampling Program
PROJECT # H-011-2019

Hole no. : **Z19-4FM08**
Hole diam. : ***22.75″***

Forage / Hole # - Sac / Bag #	Heure /Hour		Profondeur / Depth in feets		Date	Initials	poids en kilogramme/ weight in kg
	de / From	à / To	de / From	à / To			
Z19-4FM07 - 1	12:00	06:15	147	163.5	09-mars-19	S.G	1164
Z19-4FM07 - 2	06:15	10:20	163.5	173	10-mars-19	J.A	1282
Z19-4FM07 - 3	10:20	11:15	173	187	10-mars-19	J.A	1268
Z19-4FM07 - 4	11:15	11:35	187	193	10-mars-19	J.A	1200
Z19-4FM07 - 5	11:35	13:40	193	198	10-mars-19	J.A	1178
Z19-4FM07 - 6	13:40	14:18	198	205	10-mars-19	J.A	1256
Z19-4FM07 - 7	14:18	14:55	205	211	10-mars-19	J.A	1166
Z19-4FM07 - 8	14:55	20:00	211	220	10-mars-19	S.G	1176
Z19-4FM07 - 9	20:00	20:20	220	229	10-mars-19	S.G	1336
Z19-4FM07 - 10	20:20	21:18	229	243	10-mars-19	S.G	1322
Z19-4FM07 - 11	21:18	21:48	243	250	10-mars-19	S.G	1208
Z19-4FM07 - 12	21:48	22:00	250	257	10-mars-19	S.G	1252
Z19-4FM07 - 13	22:00	23:15	257	263	10-mars-19	S.G	1290
Z19-4FM07 - 14	23:15	01:50	263	280	10-mars-19	S.G	1566
Z19-4FM07 - 15	01:50	02:25	280	287	10-mars-19	S.G	1486
Z19-4FM07 - 16	02:25	05:10	287	293	10-mars-19	S.G	1414
Z19-4FM07 - 17	05:10	06:45	293	303	10-mars-19	S.G	1376
Z19-4FM07 - 18	06:45	08:01	303	312	11-mars-19	J.A	1296
Z19-4FM07 - 19	08:01	05:58	312	320	11-mars-19	J.A	1290
Z19-4FM07 - 20	05:58	10:31	320	328	11-mars-19	J.A	1204
Z19-4FM07 - 21	10:31	11:08	328	333	11-mars-19	J.A	1222
Z19-4FM07 - 22	11:08	11:58	333	342	11-mars-19	J.A	1340
Z19-4FM07 - 23	11:58	12:37	342	349	11-mars-19	J.A	1230
Z19-4FM07 - 24	12:37	14:04	349	356	11-mars-19	J.A	1072
Z19-4FM07 - 25	14:04	17:04	356	361	11-mars-19	J.A	1192
Z19-4FM07 - 26	17:04	17:55	361	369	11-mars-19	J.A	1156
Z19-4FM07 - 27	17:55	04:10	369	377	11-mars-19	J.A	900
Z19-4FM07 - 28	04:10	05:30	377	381	15-mars-19	F.F	1048
Z19-4FM07 - 29	05:30	17:30	381	392	15-mars-19	J.A	964
Z19-4FM07 - 30	17:30	18:11	392	396	15-mars-19	J.A	1138
Z19-4FM07 - 31	18:11	23:05	396	402	15-mars-19	F.F	1138
Z19-4FM07 - 32	23:05	23:55	402	408	15-mars-19	F.F	1134
Z19-4FM07 - 33	23:55	00:50	408	414	16-mars-19	F.F	1150
Z19-4FM07 - 34	00:50	08:48	414	424	16-mars-19	J.A	1080
Z19-4FM07 - 35	08:48	10:08	424	431	16-mars-19	J.A	1024
Z19-4FM07 - 36	10:08	11:30	431	439	16-mars-19	J.A	1014
Z19-4FM07 - 37	11:30	13:10	439	440	16-mars-19	J.A	634

Total: 44,166 kg

Hole #	Sample #	From (ft)	To (ft)	From (m)	To (m)	Interval (m)	CG (%)	LBM #	Sample (kg)
Z19-4FM07	A45483	147	163.5	44.8	49.8	5.0	4.74	07-01	1175
Z19-4FM07	A45484	163.5	171	49.8	52.1	2.3	5.69	07-02	784
Z19-4FM07	A45485	171	175	52.1	53.3	1.2	4.89	07-03	346
Z19-4FM07	A45452	175	187	53.3	57.0	3.7	4.73	07-04	1150
Z19-4FM07	A45486	187	195	57.0	59.4	2.4	6.46	07-05	1335
Z19-4FM07	A45487	195	202	59.4	61.6	2.1	7.1	07-06	1206
Z19-4FM07	A45453	202	208	61.6	63.4	1.8	6.74	07-07	1276
Z19-4FM07	A45454	208	217	63.4	66.1	2.7	7.40	07-08	1096
Z19-4FM07	A45488	217	222	66.1	67.7	1.5	6.45	07-09	1160
Z19-4FM07	A45455	222	228	67.7	69.5	1.8	4.57	07-10	1218
Z19-4FM07	A45489	228	234	69.5	71.3	1.8	3.58	07-11	982
Z19-4FM07	A45456	234	239	71.3	72.8	1.5	6.42	07-12	1172
Z19-4FM07	A45457	239	246	72.8	75.0	2.1	8.06	07-13	1180
Z19-4FM07	A45459	246	251	75.0	76.5	1.5	4.14	07-14	1160
Z19-4FM07	A45460	251	255	76.5	77.7	1.2	7.01	07-15	1180
Z19-4FM07	A45461	255	261	77.7	79.6	1.8	5.41	07-16	1240
Z19-4FM07	A45462	261	269	79.6	82.0	2.4	6.80	07-17	1366
Z19-4FM07	A45463	269	272	82.0	82.9	0.9	7.87	07-18	1140
Z19-4FM07	A45464	272	281	82.9	85.6	2.7	6.09	07-19	1030
Z19-4FM07	A45466	281	284	85.6	86.6	0.9	5.93	07-20	927
Z19-4FM07	A45467	284	290	86.6	88.4	1.8	7.34	07-21	1096
Z19-4FM07	A45468	290	297	88.4	90.5	2.1	7.05	07-22	1238
Z19-4FM07	A45469	297	303	90.5	92.4	1.8	6.25	07-23	1238
Z19-4FM07	A45470	303	310	92.4	94.5	2.1	7.04	07-24	1248
Z19-4FM07	A45471	310	317	94.5	96.6	2.1	5.03	07-25	1273
Z19-4FM07	A45473	317	322	96.6	98.1	1.5	5.41	07-26	1270
Z19-4FM07	A45474	322	328	98.1	100.0	1.8	6.30	07-27	1275
Z19-4FM07	A45475	328	337	100.0	102.7	2.7	6.41	07-28	1278
Z19-4FM07	A45476	337	340	102.7	103.6	0.9	6.13	07-29	1162
Z19-4FM07	A45477	340	345	103.6	105.2	1.5	6.02	07-30	1140
Z19-4FM07	A45478	345	350	105.2	106.7	1.5	6.03	07-31	794
Z19-4FM07	A45479	350	357	106.7	108.8	2.1	4.38	07-32	1056
Z19-4FM07	A45480	357	360	108.8	109.7	0.9	5.19	07-33	990
Z19-4FM07	W065703	360	365	109.7	111.3	1.5	7.65	07-34	958
Z19-4FM07	W065704	365	370	111.3	112.8	1.5	7.91	07-35	1096
Z19-4FM07	W065705	370	377	112.8	114.9	2.1	6.03	07-36	1246
Z19-4FM07	W065706	377	384	114.9	117.0	2.1	6.45	07-37	850
Z19-4FM07	W065707	384	388	117.0	118.3	1.2	3.59	07-38	984
Z19-4FM07	W065710	388	392	118.3	119.5	1.2	5.58	07-39	1006
Z19-4FM07	W065711	392	396	119.5	120.7	1.2	6.71	07-40	982
Z19-4FM07	W065712	396	403	120.7	122.8	2.1	5.86	07-41	1226
Z19-4FM07	W065713	403	409	122.8	124.7	1.8	5.97	07-42	1162
Z19-4FM07	W065714	409	415	124.7	126.5	1.8	5.39	07-43	1306
Z19-4FM07	W065716	415	421	126.5	128.3	1.8	7.62	07-44	1198
Z19-4FM07	W065717	421	428	128.3	130.5	2.1	8.13	07-45	1164
Z19-4FM07	W065718	428	433	130.5	132.0	1.5	7.99	07-46	1134
Z19-4FM07	W065719	433	438	132.0	133.5	1.5	1.12	07-47	1174
Z19-4FM07	W065720	438	444	133.5	135.3	1.8	9.17	07-48	1220
Z19-4FM07	W065721	444	451	135.3	137.5	2.1	8.38	07-49	1200
Z19-4FM07	W065723	451	457	137.5	139.3	1.8	4.08	07-50	1244

Hole #	Sample #	From (ft)	To (ft)	From (m)	To (m)	Interval (m)	CG (%)	LBM #	Sample (kg)
Z19-4FM07	W065724	457	466	139.3	142.0	2.7	8.2	07-51	1322
Z19-4FM07	W065725	466	472	142.0	143.9	1.8	10.7	07-52	1290
Z19-4FM07	W065726	472	479	143.9	146.0	2.1	5.65	07-53	1204
Z19-4FM07	W065727	479	488	146.0	148.7	2.7	9.16	07-54	1260
Z19-4FM07	W065728	488	494	148.7	150.6	1.8	8.9	07-55	1256
Z19-4FM07	W065730	494	500	150.6	152.4	1.8	0.28	07-56	1244
Z19-4FM07	W065731	500	509	152.4	155.1	2.7	12.85	07-57	1156
Z19-4FM07	W065732	509	515	155.1	157.0	1.8	8.96	07-58	1150
Z19-4FM07	W065733	515	518	157.0	157.9	0.9	5.94	07-59	646
Z19-4FM08	W065735	147	163.5	44.8	49.8	5.0	3.62	08-01	1164
Z19-4FM08	W065737	163.5	173	49.8	52.7	2.9	3.46	08-02	1282
Z19-4FM08	W065738	173	187	52.7	57.0	4.3	5.00	08-03	1268
Z19-4FM08	W065739	187	193	57.0	58.8	1.8	3.36	08-04	1200
Z19-4FM08	W065740	193	198	58.8	60.4	1.5	5.15	08-05	1178
Z19-4FM08	W065741	198	205	60.4	62.5	2.1	6.12	08-06	1256
Z19-4FM08	W065742	205	211	62.5	64.3	1.8	4.64	08-07	1166
Z19-4FM08	W065744	211	220	64.3	67.1	2.7	5.7	08-08	1176
Z19-4FM08	W065745	220	229	67.1	69.8	2.7	7.73	08-09	1336
Z19-4FM08	W065746	229	243	69.8	74.1	4.3	6.43	08-10	1322
Z19-4FM08	W065747	243	250	74.1	76.2	2.1	6.71	08-11	1208
Z19-4FM08	W065748	250	257	76.2	78.3	2.1	5.64	08-12	1252
Z19-4FM08	W065749	257	263	78.3	80.2	1.8	5.02	08-13	1290
Z19-4FM08	W065751	263	280	80.2	85.3	5.2	6.80	08-14	1566
Z19-4FM08	W065752	280	287	85.3	87.5	2.1	7.37	08-15	1486
Z19-4FM08	W065753	287	293	87.5	89.3	1.8	6.60	08-16	1414
Z19-4FM08	W065754	293	303	89.3	92.4	3.0	5.67	08-17	1376
Z19-4FM08	W065755	303	312	92.4	95.1	2.7	1.27	08-18	1296
Z19-4FM08	W065756	312	320	95.1	97.5	2.4	6.77	08-19	1290
Z19-4FM08	W065758	320	328	97.5	100.0	2.4	7.43	08-20	1204
Z19-4FM08	W065759	328	333	100.0	101.5	1.5	6.36	08-21	1222
Z19-4FM08	W065760	333	342	101.5	104.2	2.7	8.17	08-22	1340
Z19-4FM08	W065761	342	349	104.2	106.4	2.1	7.36	08-23	1230
Z19-4FM08	W065762	349	356	106.4	108.5	2.1	6.29	08-24	1072
Z19-4FM08	W065763	356	361	108.5	110.0	1.5	6.55	08-25	1192
Z19-4FM08	W065766	361	369	110.0	112.5	2.4	6.09	08-26	1156
Z19-4FM08	W065768	369	377	112.5	114.9	2.4	5.58	08-27	900
Z19-4FM08	W065770	377	381	114.9	116.1	1.2	3.99	08-28	1048
Z19-4FM08	W065772	381	392	116.1	119.5	3.4	6.78	08-29	964
Z19-4FM08	W065773	392	396	119.5	120.7	1.2	0.37	08-30	1138
Z19-4FM08	W065774	396	402	120.7	122.5	1.8	7.83	08-31	1138
Z19-4FM08	W065775	402	408	122.5	124.4	1.8	9.73	08-32	1134
Z19-4FM08	W065776	408	414	124.4	126.2	1.8	9.35	08-33	1150
Z19-4FM08	W065777	414	424	126.2	129.2	3.0	8.16	08-34	1080
Z19-4FM08	W065779	424	431	129.2	131.4	2.1	8.14	08-35	1024
Z19-4FM08	W065780	431	439	131.4	133.8	2.4	1.69	08-36	1014
Z19-4FM08	W065781	439	440	133.8	134.1	0.3	7.47	08-37	634

APPENDIX 2

2019 BULK SAMPLE PROGRAM
CERTIFICATES OF ANALYSIS

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ZEN GRAPHENE SOLUTIONS LTD.**
210-1205 AMBER DR.
THUNDER BAY ON P7B 6M4

Finalized Date: 21-APR-2019
Account: ZENVEN

CERTIFICATE TB19070268

This report is for 82 Percussion samples submitted to our lab in Thunder Bay, ON, Canada on 22-MAR-2019.

The following have access to data associated with this certificate:

PETER WOOD

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
PUL-QC	Pulverizing QC Test
LOG-21	Sample logging - ClientBarCode
DRY-22	Drying - Maximum Temp 60C
SPL-21	Split sample - riffle splitter
PUL-32	Pulverize 1000g to 85% < 75 um
LOG-23	Pulp Login - Rcvd with Barcode
CRU-31	Fine crushing - 70% <2mm

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
C-IR18	Graphitic carbon by LECO	LECO

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ZEN GRAPHENE SOLUTIONS LTD.**
210-1205 AMBER DR.
THUNDER BAY ON P7B 6M4

Finalized Date: 21-APR-2019
Account: ZENVEN

CERTIFICATE OF ANALYSIS TB19070268

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	C-IR18 C Graphi % 0.02
W065701		0.02	3.12
W065702		1.40	5.78
W065703		6.68	7.65
W065704		6.62	7.91
W065705		6.05	6.03
W065706		6.23	6.45
W065707		4.22	3.59
W065708		6.21	8.61
W065709		0.02	7.73
W065710		5.68	5.58
W065711		5.83	6.71
W065712		5.61	5.86
W065713		6.84	5.97
W065714		7.37	5.39
W065715		1.02	0.08
W065716		6.79	7.62
W065717		6.55	8.13
W065718		7.18	7.99
W065719		6.28	1.12
W065720		7.68	9.17
W065721		7.62	8.38
W065722		0.02	7.71
W065723		5.83	4.08
W065724		7.61	8.20
W065725		7.20	10.70
W065726		7.83	5.65
W065727		10.24	9.16
W065728		9.38	8.90
W065729		1.02	0.07
W065730		6.43	0.28
W065731		6.24	12.85
W065732		6.49	8.96
W065733		7.49	5.94
W065734		8.91	8.66
W065735		9.24	3.62
W065736		0.02	15.20
W065737		8.08	3.46
W065738		8.52	5.00
W065739		8.25	3.36
W065740		9.20	5.15

***** See Appendix Page for comments regarding this certificate *****

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To: **ZEN GRAPHENE SOLUTIONS LTD.**
210-1205 AMBER DR.
THUNDER BAY ON P7B 6M4

Finalized Date: 21-APR-2019
Account: ZENVEN

CERTIFICATE OF ANALYSIS TB19070268

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	C-IR18 C Graphi % 0.02
W065741		8.77	6.12
W065742		10.50	4.64
W065743		1.00	<0.02
W065744		6.76	5.70
W065745		8.43	7.73
W065746		7.69	6.43
W065747		7.35	6.71
W065748		7.41	5.64
W065749		8.04	5.02
W065750		0.02	7.52
W065751		8.29	6.80
W065752		8.02	7.37
W065753		7.84	6.60
W065754		9.02	5.67
W065755		8.60	1.27
W065756		8.54	6.77
W065757		1.02	<0.02
W065758		10.60	7.43
W065759		9.93	6.36
W065760		9.84	8.17
W065761		9.38	7.36
W065762		10.23	6.29
W065763		8.53	6.55
W065764		0.02	7.69
W065765		6.61	5.83
W065766		7.94	6.09
W065767		6.65	5.99
W065768		9.23	5.58
W065769		6.36	7.63
W065770		7.44	3.99
W065771		1.02	<0.02
W065772		7.52	6.78
W065773		6.61	0.37
W065774		7.45	7.83
W065775		6.80	9.73
W065776		6.73	9.35
W065777		5.78	8.16
W065778		0.02	3.27
W065779		7.47	8.14
W065780		7.91	1.69

***** See Appendix Page for comments regarding this certificate *****

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www.alsglobal.com/geochemistry

To: **ZEN GRAPHENE SOLUTIONS LTD.**
210-1205 AMBER DR.
THUNDER BAY ON P7B 6M4

Finalized Date: 21-APR-2019
Account: ZENVEN

CERTIFICATE OF ANALYSIS TB19070268

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	C-IR18 C Graphi % 0.02
W065781		9.07	7.47
W065782		0.02	0.86

***** See Appendix Page for comments regarding this certificate *****

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www.alsglobal.com/geochemistry

To: **ZEN GRAPHENE SOLUTIONS LTD.**
210-1205 AMBER DR.
THUNDER BAY ON P7B 6M4

Finalized Date: 21-APR-2019
Account: ZENVEN

CERTIFICATE OF ANALYSIS TB19070268

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

Applies to Method:				
	CRU-31	DRY-22	LOG-21	LOG-23
	PUL-32	PUL-QC	SPL-21	WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	
	C-IR18

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ZEN GRAPHENE SOLUTIONS LTD.**
210-1205 AMBER DR.
THUNDER BAY ON P7B 6M4

Finalized Date: 21-APR-2019
Account: ZENVEN

CERTIFICATE SD19080406

Project: Albany Graphite

This report is for 31 Percussion samples submitted to our lab in Sudbury, ON, Canada on 4-APR-2019.

The following have access to data associated with this certificate:

PETER WOOD

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-24	Pulp Login - Rcd w/o Barcode
LOG-21	Sample logging - ClientBarCode
DRY-22	Drying - Maximum Temp 60C
SPL-21	Split sample - riffle splitter
PUL-32	Pulverize 1000g to 85% < 75 um
PUL-QC	Pulverizing QC Test

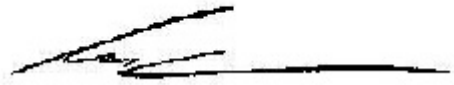
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
C-IR18	Graphitic carbon by LECO	LECO

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:



Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ZEN GRAPHENE SOLUTIONS LTD.**
210-1205 AMBER DR.
THUNDER BAY ON P7B 6M4

Finalized Date: 21-APR-2019
Account: ZENVEN

Project: Albany Graphite

CERTIFICATE OF ANALYSIS SD19080406

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	C-IR18 C Graphi % 0.02	PUL-QC Pass75um % 0.01
A45451		0.02	0.95	
A45452		3.98	4.73	89.8
A45453		2.50	6.74	93.8
A45454		3.67	7.40	
A45455		5.17	4.57	
A45456		4.92	6.42	
A45457		6.01	8.06	
A45458		0.03	0.07	
A45459		5.10	4.14	
A45460		4.81	7.01	
A45461		5.59	5.41	
A45462		8.13	6.80	
A45463		8.82	7.87	
A45464		9.23	6.09	
A45465		0.02	7.60	
A45466		9.16	5.93	
A45467		7.93	7.34	
A45468		8.90	7.05	
A45469		7.57	6.25	
A45470		9.22	7.04	
A45471		10.09	5.03	
A45472		0.02	0.05	
A45473		9.37	5.41	
A45474		9.01	6.30	
A45475		7.33	6.41	
A45476		8.05	6.13	
A45477		10.00	6.02	
A45478		9.43	6.03	
A45479		8.54	4.38	
A45480		10.95	5.19	
A45481		<0.02	2.91	

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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www.alsglobal.com/geochemistry

To: **ZEN GRAPHENE SOLUTIONS LTD.**
210-1205 AMBER DR.
THUNDER BAY ON P7B 6M4

Finalized Date: 21-APR-2019
Account: ZENVEN

Project: Albany Graphite

CERTIFICATE OF ANALYSIS SD19080406

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:				
	DRY-22	LOG-21	LOG-24	PUL-32
	PUL-QC	SPL-21	WEI-21	

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	
	C-IR18

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ZEN GRAPHENE SOLUTIONS LTD.**
210-1205 AMBER DR.
THUNDER BAY ON P7B 6M4

Finalized Date: 22-MAY-2019
Account: ZENVEN

CERTIFICATE SD19110051

Project: Albany Graphite

This report is for 10 Percussion samples submitted to our lab in Sudbury, ON, Canada on 7-MAY-2019.

The following have access to data associated with this certificate:

PETER WOOD

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
DRY-22	Drying - Maximum Temp 60C
LOG-21	Sample logging - ClientBarCode
SPL-21	Split sample - riffle splitter
PUL-32	Pulverize 1000g to 85% < 75 um
PUL-QC	Pulverizing QC Test
LOG-24	Pulp Login - Rcd w/o Barcode

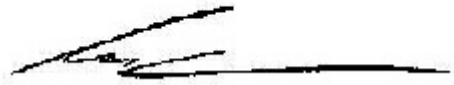
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
C-IR18	Graphitic carbon by LECO	LECO

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:



Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ZEN GRAPHENE SOLUTIONS LTD.**
210-1205 AMBER DR.
THUNDER BAY ON P7B 6M4

Finalized Date: 22-MAY-2019
Account: ZENVEN

Project: Albany Graphite

CERTIFICATE OF ANALYSIS SD19110051

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	PUL-QC Pass75um % 0.01	C-IR18 C Graphi % 0.02
A45482		0.02		3.15
A45483		7.12	85.0	4.74
A45484		8.41	88.2	5.69
A45485		8.82	89.9	4.89
A45486		7.53		6.46
A45487		8.22		7.10
A45488		7.98		6.45
A45489		9.59		3.58
A45490		0.03		0.02
A45491		0.02		0.90

***** See Appendix Page for comments regarding this certificate *****

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To: **ZEN GRAPHENE SOLUTIONS LTD.**
210-1205 AMBER DR.
THUNDER BAY ON P7B 6M4

Finalized Date: 22-MAY-2019
Account: ZENVEN

Project: Albany Graphite

CERTIFICATE OF ANALYSIS SD19110051

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:				
	DRY-22	LOG-21	LOG-24	PUL-32
	PUL-QC	SPL-21	WEI-21	

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	
	C-IR18

ALS Canada Ltd.

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To: **ZEN GRAPHENE SOLUTIONS LTD.**
210-1205 AMBER DR.
THUNDER BAY ON P7B 6M4

Finalized Date: 22-MAY-2019
Account: ZENVEN

QC CERTIFICATE SD19110051

Project: Albany Graphite

This report is for 10 Percussion samples submitted to our lab in Sudbury, ON, Canada on 7-MAY-2019.

The following have access to data associated with this certificate:

PETER WOOD

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
DRY-22	Drying - Maximum Temp 60C
LOG-21	Sample logging - ClientBarCode
SPL-21	Split sample - riffle splitter
PUL-32	Pulverize 1000g to 85% < 75 um
PUL-QC	Pulverizing QC Test
LOG-24	Pulp Login - Rcd w/o Barcode

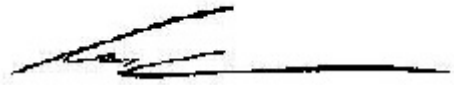
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
C-IR18	Graphitic carbon by LECO	LECO

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:



Colin Ramshaw, Vancouver Laboratory Manager

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To: **ZEN GRAPHENE SOLUTIONS LTD.**
210-1205 AMBER DR.
THUNDER BAY ON P7B 6M4

Finalized Date: 22-MAY-2019
Account: ZENVEN

Project: Albany Graphite

QC CERTIFICATE OF ANALYSIS SD19110051

Sample Description	Method Analyte Units LOD	C-IR18 C Graphi % 0.02
STANDARDS		
GGC-02		27.9
Target Range - Lower Bound		25.1
Upper Bound		29.0
OREAS 724		12.40
Target Range - Lower Bound		11.20
Upper Bound		12.90
BLANKS		
BLANK		0.02
Target Range - Lower Bound		<0.02
Upper Bound		0.04
DUPLICATES		
A45491		0.90
DUP		0.90
Target Range - Lower Bound		0.84
Upper Bound		0.97

***** See Appendix Page for comments regarding this certificate *****

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To: **ZEN GRAPHENE SOLUTIONS LTD.**
210-1205 AMBER DR.
THUNDER BAY ON P7B 6M4

Finalized Date: 22-MAY-2019
Account: ZENVEN

Project: Albany Graphite

QC CERTIFICATE OF ANALYSIS SD19110051

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:				
	DRY-22	LOG-21	LOG-24	PUL-32
	PUL-QC	SPL-21	WEI-21	

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	
	C-IR18

APPENDIX 3

2019 BULK SAMPLE PROGRAM
PLAN AND VERTICAL SECTION MAPS

676,000 mE
680,000 mE
684,000 mE
5,552,000 mN
5,548,000 mN
5,544,000 mN
5,540,000 mN
5,536,000 mN

Legend
Other Company Claims
Boundary Claims
Zen Property Outline
Road
Streams
Park

N
W
E
S

0
1
kilometers
Scale 1:25,000

ZEN Graphene Solutions

	ZEN Graphene Solutions Claim Map Map 1
Date: 10/12/2020	
Author: CSalo	
Office:	
Drawing:	
Scale: Scalebar	Projection: UTM Zone 16 (NAD 83)

N
W E
S

682,400 mE

682,800 mE

148213

131000

WEST PIPE

EAST PIPE

5,545,800 mN

253668

265162

133703

178916

319653

198513

5,545,400 mN

Z13-4F31
Z13-4F44
Z13-4F41
Z13-4F42
Z13-4F30
Z13-4F33
Z13-4F40
Z13-4F56
Z12-4F3
Z13-4FM06
Z13-4F57
Z13-4F29
Z13-4F48
Z13-4F39
Z13-4F55
Z13-4F34
Z13-4F46
Z13-4F54
Z13-4FM04
Z13-4FM05
Z13-4F49
Z13-4F51
Z13-4F50
Z13-4F53
Z12-4F6
Z13-4F26
Z11-4F1
Z13-4F52
Z13-4F32
Z12-4F7
Z13-4F27
Z12-4F2

Z13-4F11
Z13-4F47
Z13-4F16
Z12-4F9
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Z13-4F25
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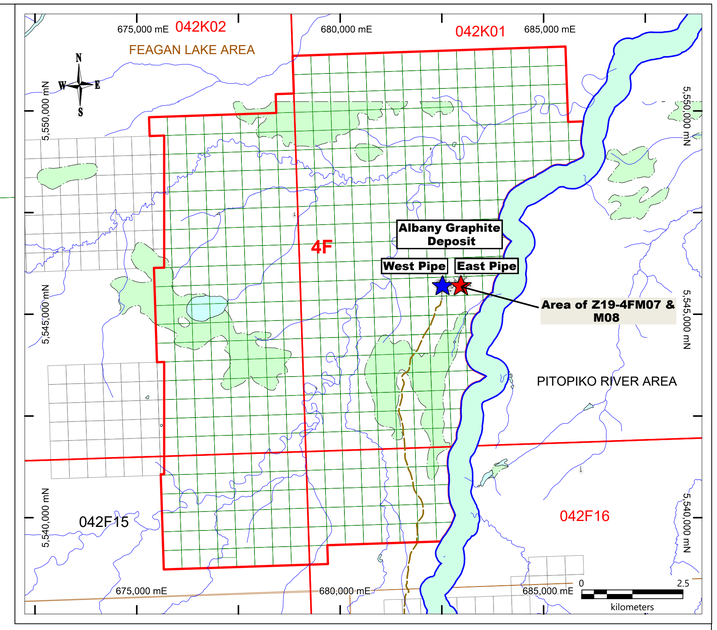
Z13-4FM02
Z12-4F4
Z13-4F22
Z13-4FM03
Z12-4F5
Z13-4FM01
Z13-4F36
Z13-4F13
Z13-4F17
Z13-4F21
Z19-4FM07
Z13-4F35
Z13-4F24
Z13-4F43
Z13-4F45
Z13-4F15
Z13-4F14
Z13-4F37
Z13-4F38



0 100
meters
Scale 1:1,500

Legend
- 2019 Bulk RC Drill Hole Collars
- 2013 Bulk RC Drill Hole Collar
- 2011-2013 Diamond Drill Hole Collars
- PlanD
- Winter Road
- NTS
- gplan
- Constance Lake First Nation
- Zen Graphene Solutions Claims

Legend
- 2019 Bulk Sample Drill Hole Collar
- Previous Bulk Sample Collars
- Previous Drill Hole Collars (NQ)
- Trace
- Property Boundary
- Other Company Claims
- Zen Graphene Solutions Claims
- Lakes
- Marsh

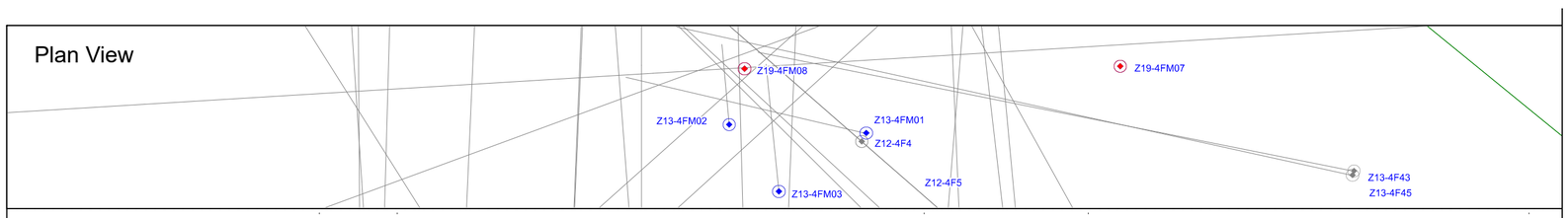
ZEN
Graphene Solutions

Albany Graphite Deposit
Plan Map
Map 1

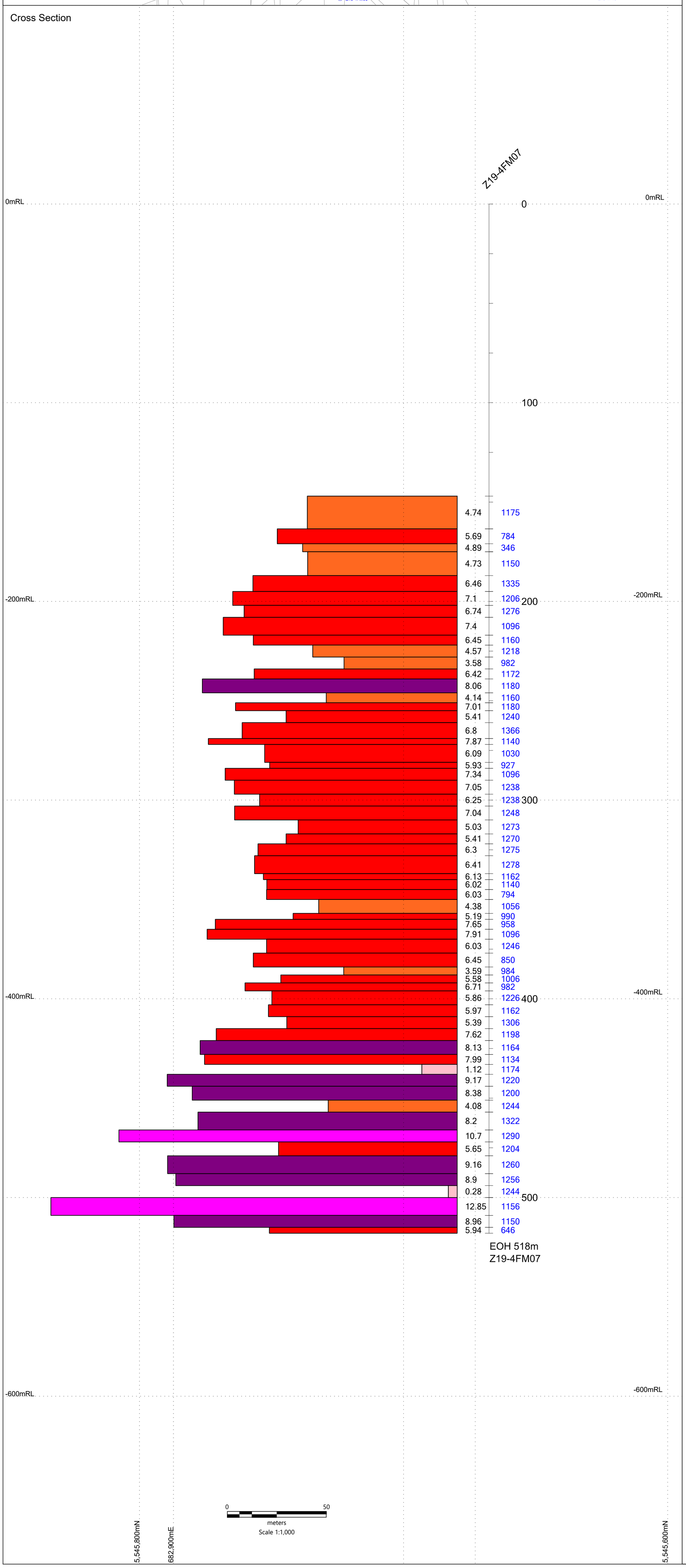
Date: 2020-12-10	
Author: csalo	
Office:	
Drawing:	
Scale: 1:1500	

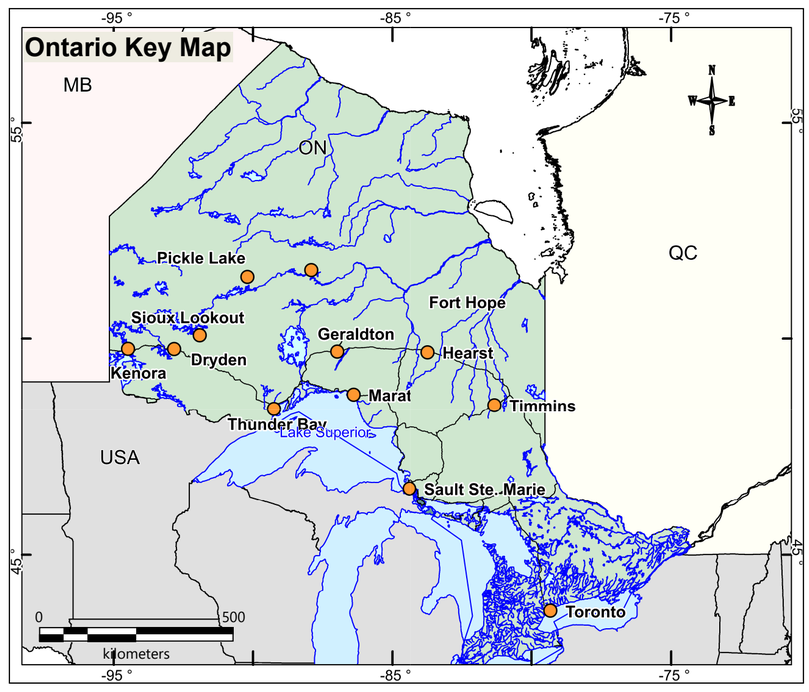
Projection: UTM Zone 16 (NAD 83)

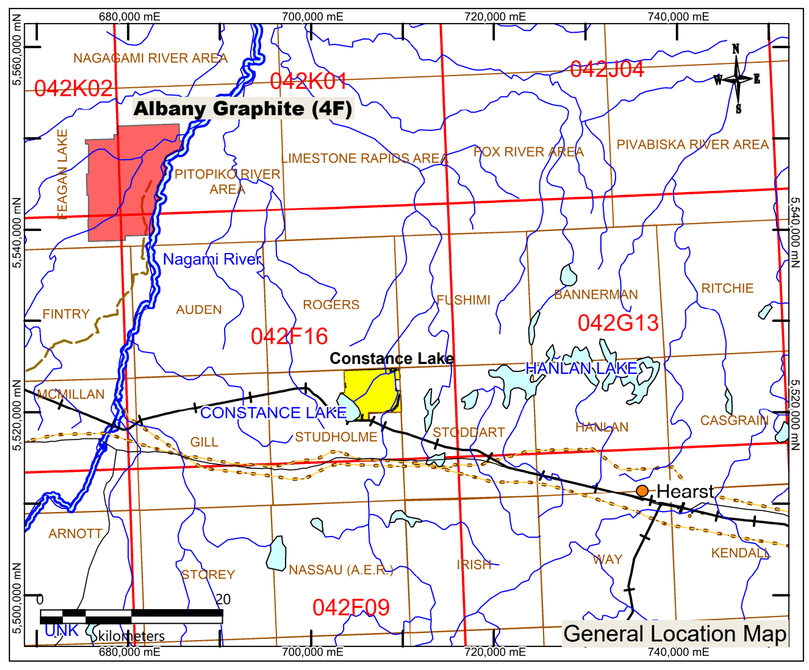
Plan View

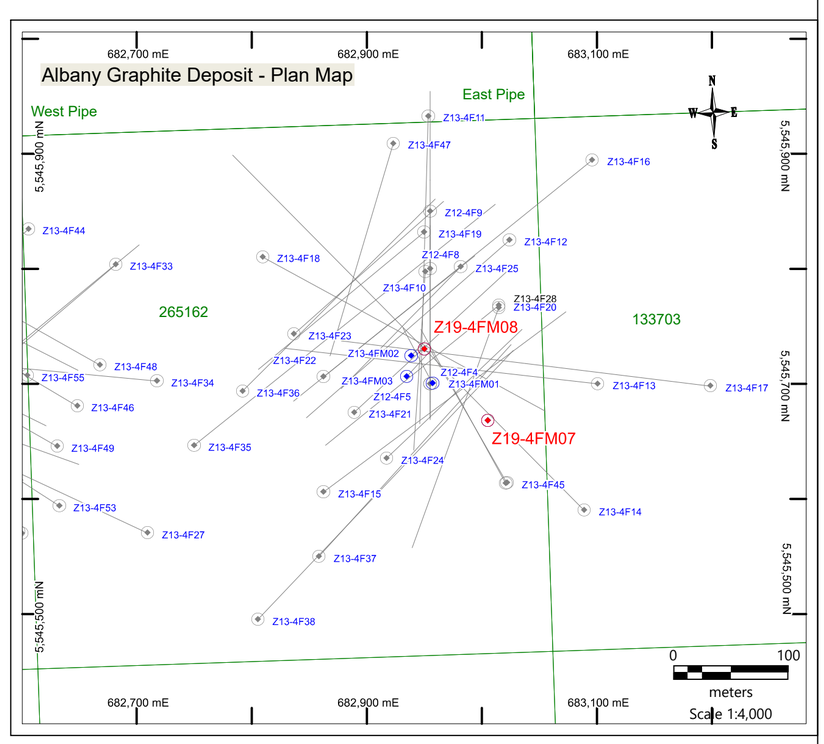


Cross Section









HoleID

Legends
Carbon (%)

- 0-3
- 3 - 5
- 5 - 8
- 8 - 10
- 10 - 13

Carbon Histogram
7.8 mm/unit

Carbon (%)

Sample Weight (kg)

EOH

mm given at scale of 1:2000

Legend

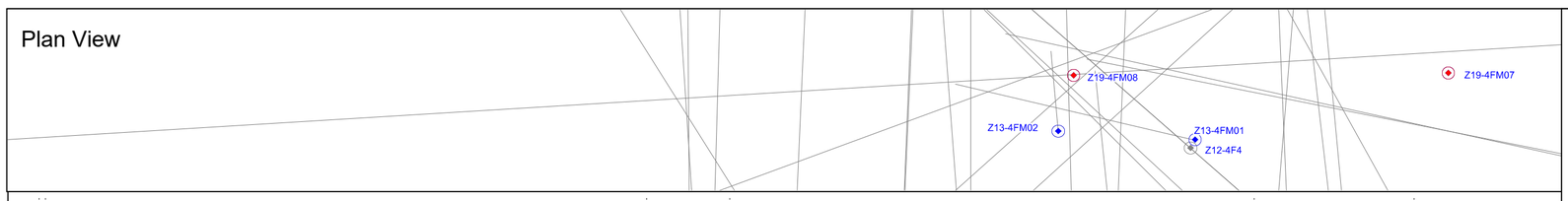
- Place Names
- Streams
- Railway
- topo_al_Utility_Lines
- Winter Road
- Utility Lines
- Roads
- Property Boundary
- NTS
- gplan
- Constance Lake First Nation
- Lakes
- 2019 Bulk Sampling RC Drill Collars
- 2013 Bulk RC Drill Collars
- 2011-2013 Diamond Drill Hole Collars
- Drill Hole Trace

ZEN Graphene Solutions

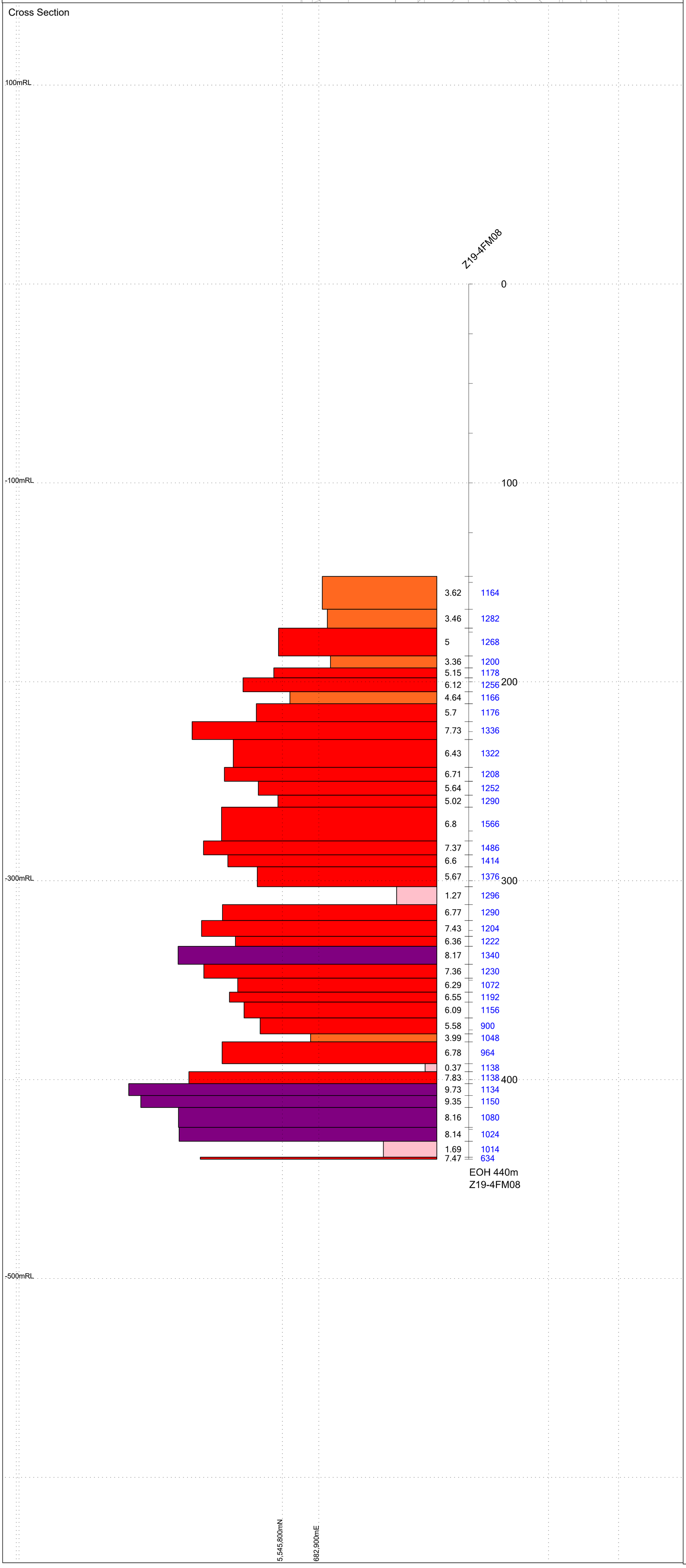
	Albany Graphite Deposit 2019 Bulk Drilling
Date: 2020-12-10	Drill Hole Z19-4F-M08 @ 682,950E, 5,545,730N
Author: csalo	
Office:	Map 3
Drawing:	
Scale: 1:1000	

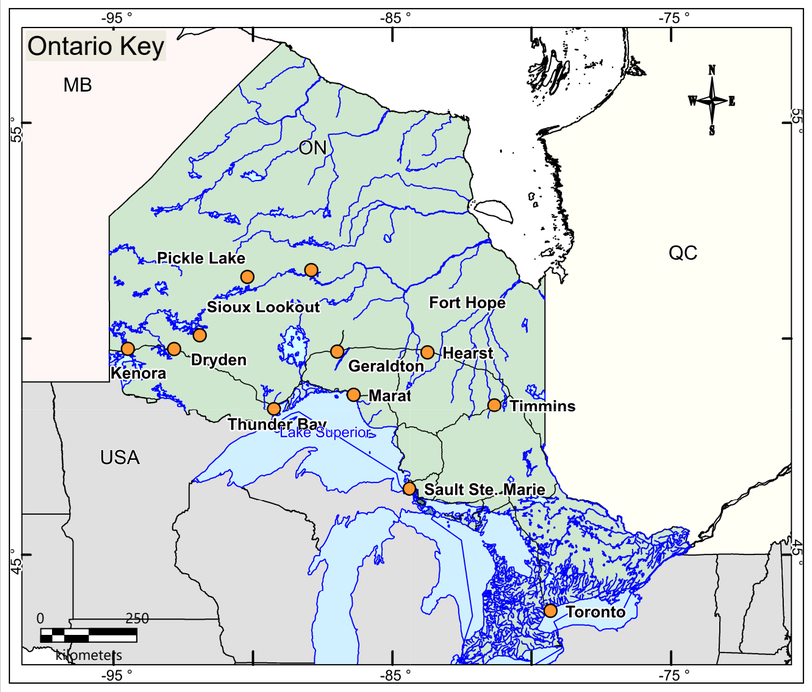
Projection: Non-Earth (meters) & Nad 83, UTM Zone 16

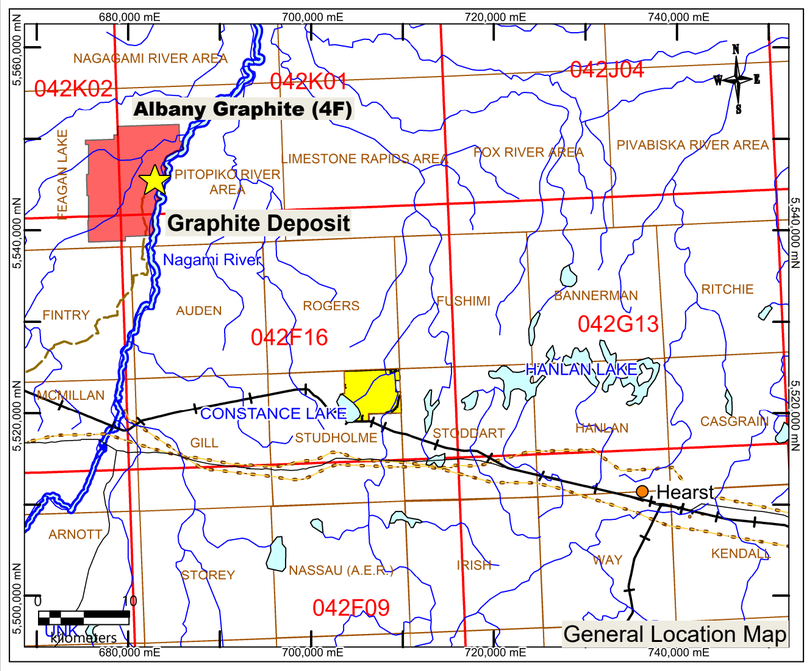
Plan View

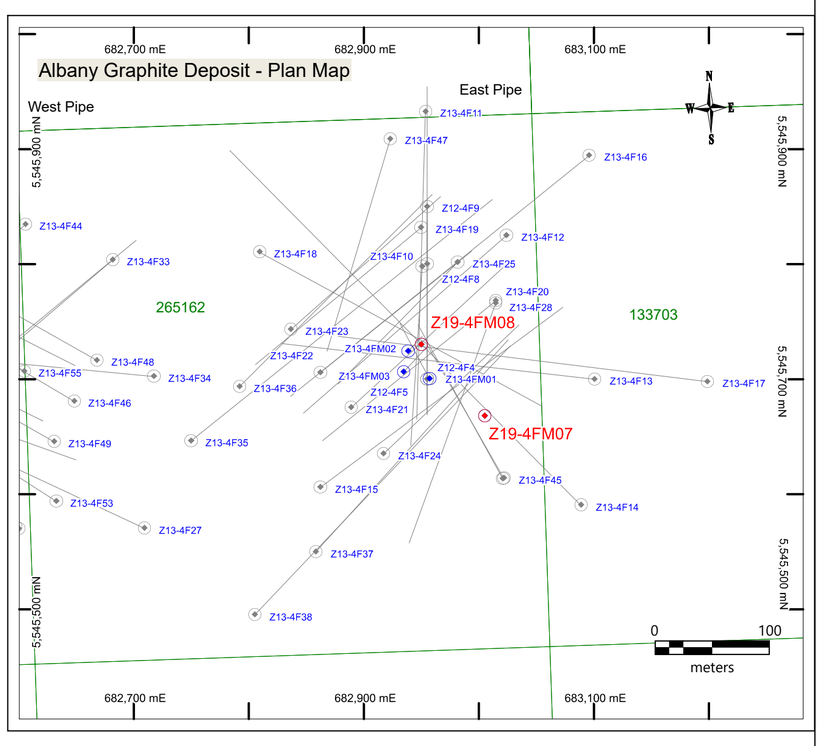


Cross Section









Legends
Carbon (%)

- 0-3
- 3 - 5
- 5 - 8
- 8 - 10
- 10 - 13

Carbon Histogram 7.8 mm/unit

Carbon (%) — Sample Weight (kg) — HoleID

EOH

mm given at scale of 1:2000

- Property Boundary
- Winter Road
- NTS
- gplan
- Zen Graphene Solutions Claims
- Constance Lake First Nation

- 2019 Bulk RC Drill Hole Collar
- 2013 Bulk RC Drill Hole Collar
- 2011-2013 Diamond Drill Hole Collar
- Drill Hole Trace

ZEN Graphene Solutions

	Albany Graphite Deposit 2019 Bulk Drilling
Date: 2020-12-10	Drill Hole Z19-4FM07 @ 683,005E, 5,545,668N
Author: csalo	
Office:	Map 2
Drawing:	
Scale: 1:1000	

Projection: Non-Earth (meters) & Nad 83, UTM Zone 16

APPENDIX 3

2019 BULK SAMPLE PROGRAM
LIST OF CONTRACTORS

Contractors
1921189 Ontario Inc. (QA/QC)
2087121 Ontario Inc. (Coreshack/warehouse rental)
ALS Canada Ltd. (Bulk sample assays)
Amik Nuna Forestry Services Joint Venture (Winter road preparation, snow removal)
C&M Transport Ltd. (Transportation of bulk samples from drill site to core shack)
Constance Lake First Nation (Winter road preparation - snowmobile rental)
Expedition Camp Service & Logistics (Drill camp)
Geodigital Mapping Systems Inc. (Geologist/Supervision - Peter Wood)
Les Forages L.B.M. Inc. (Bulk sample drill)
Lessard Welding (Portable bridge engineer)
Northland Well Drilling (Drilling water well for drill camp)
Pepco Corp. (Fuel for drill and trucks)
Villeneuve Construction Co. Ltd. (Winter road preparation, snow removal)