

ZENYATTA VENTURES LTD.

TECHNICAL REPORT ON THE ALBANY GRAPHITE DEPOSIT, NORTHERN ONTARIO, CANADA

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1 SUMMARY

EXECUTIVE SUMMARY

Roscoe Postle Associates Inc. (RPA) was retained by Zenyatta Ventures Ltd. (Zenyatta) to prepare an independent Technical Report on the Albany graphite deposit, located on the Claim Block 4F (the Property) in northeastern Ontario, Canada. The purpose of this report is to support the Mineral Resource estimate prepared by RPA and disclosed by Zenyatta in a press release dated December 2, 2013. This Technical Report conforms to NI 43-101 Standards of Disclosure for Mineral Projects. RPA visited the Property in July 2013.

Claim Block 4F, which includes the Albany graphite deposit, is part of a larger group of non-contiguous claims held by Zenyatta known as the "Albany Project". Outside Claim Block 4F, the primary targets are copper, nickel, and platinum group metals. This Technical Report covers Claim Block 4F where the principal deposit is hydrothermal graphite.

RPA prepared a Mineral Resource estimate for the Property as summarized in Table 1-1.

TABLE 1-1 MINERAL RESOURCE ESTIMATE - NOVEMBER 15, 2013
Zenyatta Ventures Ltd. - Albany Graphite Deposit

	Tonnage	Grade	Contained Graphitic Carbon
	(Mt)	(% Cg)	(t Cg)
Indicated			
East Pipe and Halo	10.0	5.60	560,000
West Pipe	15.1	2.76	417,000
Total Indicated	25.1	3.89	977,000
Inferred			
East Pipe and Halo	7.6	2.04	155,000
West Pipe	12.5	2.29	286,000
Total Inferred	20.1	2.20	441,000

Notes:

- 1. CIM definitions were followed for Mineral Resources.
- 2. Cg graphitic carbon
- 3. Mineral Resources are estimated at a cut-off grade of 0.6% Cg.
- 4. Mineral Resources are estimated using a long-term price of US\$8,500 per tonne Cg, and a US\$/C\$ exchange rate of 1.0.
- 5. Bulk density is 2.6 t/m³ in the pipes and 2.65 t/m³ in the halo of the East Pipe.
- Mineral Resources are constrained by a preliminary pit shell generated in Whittle software.
- 7. Numbers may not add due to rounding.



CONCLUSIONS

Zenyatta has discovered a unique graphite deposit of hydrothermal origin at its 100% owned Claim Block 4F Property. The Albany graphite deposit is located in the Superior Province of the Canadian Shield, at the terrane boundary between the Quetico Subprovince to the north and the Marmion Subprovince to the south. Preliminary petrography indicates that the graphite-hosting breccias range in composition from diorite to granite. Graphite occurs both in the matrix, as disseminated crystals, clotted to radiating crystal aggregates and veins, and along crystal boundaries and as small veins within the breccia fragments.

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 CO₂-rich fluids that evolved due to pressure-related degassing of syenites of the Albany Alkalic Complex.

Diamond drilling has outlined two graphite mineralized breccia pipes with three-dimensional continuity, and size and grades that can potentially be extracted economically. Zenyatta's protocols for drilling, sampling, analysis, security, and database management meet industry accepted practices. The drill hole database was verified by RPA and is suitable for Mineral Resource estimation work.

Bench scale metallurgical testwork indicates that the mineralization can be concentrated using conventional methods and purified using a caustic bake process to 99.9% carbon or better. Zenyatta believes that the ultra-pure product will command higher prices than flake graphite products. Based on an assumed market price of \$8,500 per tonne Cg, RPA reported Mineral Resources at a relatively low cut-off grade of 0.6% Cg.

RPA estimated Mineral Resources for the Albany graphite deposit using drill hole data available as of November 15, 2013. The Mineral Resource estimate is based on a potential open pit mining scenario. RPA estimates Indicated Mineral Resources to total 25.1 million tonnes (Mt) at an average grade of 3.89% graphitic carbon (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 are constrained within a preliminary optimized pit shell in Whittle software. The Mineral Resource estimate is insensitive to cut-off grade up to at least 2% Cg. There are no Mineral Reserves estimated on the Property.



RECOMMENDATIONS

The Claim Block 4F Property hosts a significant hydrothermal graphite deposit and merits considerable work. RPA recommends a Phase 1 budget of C\$4.21 million (Table 1-2) to advance the Albany graphite deposit and explore elsewhere on the Property. Work should include:

- a Preliminary Economic Assessment;
- 1,200 m of drilling for geotechnical purposes;
- a marketing study;
- continued metallurgical testwork;
- various social and environmental baseline studies; and
- 5,000 m of drilling to define the extents of the deposit.

TABLE 1-2 PROPOSED BUDGET

Zenyatta Ventures Ltd. - Albany Graphite Deposit

Item	C\$
Preliminary Economic Assessment	150,000
Marketing Study	100,000
Metallurgical Testwork	1,150,000
Social Study	50,000
Environmental Studies	250,000
Geotechnical Study Including Drilling	360,000
Drilling (5,000 m at \$300/m total cost)	1,500,000
Operating costs/office	250,000
Sub-total	3,810,000
Contingency	400,000
Total	4,210,000

The recommended Phase 2 budget of C\$5 million would be contingent on Phase 1 results. Work would include additional drilling, metallurgical testwork, and a Preliminary Feasibility Study.

TECHNICAL SUMMARY

PROPERTY DESCRIPTION AND LOCATION

Claim Block 4F, which contains the Albany graphite deposit, is located within the Porcupine Mining District of northern Ontario, Canada, 30 km north of Highway 11. The nearest airport is in the town of Hearst, approximately 50 km to the southeast of the Property. The Timmins airport with scheduled flights is approximately four hours away by road.



The Property is part of a larger group of claim blocks held by Zenyatta located north of Lake Superior and west of James Bay. The claim blocks are unpatented, non-contiguous, and consist of seven groups of claims, 279 claims and 4,273 claim units, totalling 68,368 ha. The entire group of 279 claims is referred to by Zenyatta as the Albany Project.

Zenyatta holds 100% of Claim Block 4F. The Property consists of a total of 61 claims and 826 claim units, for a total of 13,216 ha, and is subject to two net smelter return (NSR) royalties.

The Albany Project, and more particularly the Claim Block 4F Property, is located in Constance Lake First Nations' (CLFN) Traditional Territory. On July 18, 2012, Zenyatta and CLFN announced that they had signed an Exploration Agreement for a mutually beneficial and co-operative relationship regarding exploration and pre-feasibility activities on the Albany Project.

EXISTING INFRASTRUCTURE

There is currently no permanent infrastructure on the Property.

The Property is located 30 km north of the Trans-Canada Highway, power line, and natural gas pipeline near the communities of Constance Lake First Nation and Hearst. A rail line is located 70 km away and an all-weather logging road, approximately four to five kilometres from the graphite deposit.

The Property is in the early stages of the exploration and development cycle. It is considered to have sufficient area for a potential future mining operation; however, appropriate surface rights will need to be secured from the government. Sources of water, grid power, mining personnel, potential tailings storage areas, potential waste disposal areas, and potential processing plant sites are all available on the Property.

HISTORY

Historical exploration was limited to a very small number of the claims: the Archean basement terrane is covered with thick glacial till that blankets Paleozoic limestone cover rocks. There is no outcrop exposure on the claim blocks and any targeted mineralization can only be observed from drill core.



Historical exploration within Claim Block 4F was carried out by several companies and included mostly geophysical surveys and drilling. Airborne magnetic and electromagnetic (EM) surveys identified a number of magnetic anomalies and electromagnetic conductors, verified by ground surveys and drilling. A total of three drill holes were completed at the Property by previous owners Algoma Ore Properties Ltd. (Algoma) and Shell Canada Exploration Ltd., which confirmed the results of the geophysical surveys but did not intersect any mineralization. Algoma concluded that mineralization could possibly be associated with other parts of the structure and recommended that the Property be referred to other companies interested in intrusive structures.

There are no historical mineral resource estimates known for the Property.

GEOLOGY AND MINERALIZATION

The Claim Block 4F area, which contains the Albany graphite deposit, is covered by a thick layer of overburden (up to 50 m) and there are no surface exposures of bedrock. Consequently, no surface geological mapping projects are reported for the area and the area's Precambrian geology is based mainly on available re-processed 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.

The Albany graphite deposit is hosted within gneissic to unfoliated syenite, granite, diorite, and monzonite of the Albany Alkalic Complex. The rocks of the complex are cross-cut by younger dykes, ranging from felsic to mafic in composition. The Precambrian basement rocks are overlain with Paleozoic limestone and are overprinted by graphite near the margins of the graphite breccia pipes.

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 and 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.



EXPLORATION STATUS

Zenyatta commenced exploration on the Albany Project claim blocks in 2010. Zenyatta was originally targeting nickel, copper, and platinum on the claim blocks, prior to the discovery of extensive graphite mineralization on Claim Block 4F.

In 2010, a helicopter borne versatile time domain electromagnetic (VTEM) and aeromagnetic (cesium magnetometer) geophysical survey was carried out over the 28 Albany Project claim blocks. A total of 22 EM and magnetic targets were identified for follow-up modelling and drill testing, two (Victor and Uniform) situated on Claim Block 4F. Drilling at the Uniform target led to the discovery of the Albany graphite deposit.

In 2013, a surface time-domain EM (TDEM) survey was conducted on the Property targeting the drill-confirmed East and West graphitic breccia pipes that were initially identified in the 2010 airborne VTEM survey. The TDEM ground survey appears to have outlined the lateral extent of the two graphite breccia pipes, although the boundary of the model is considered roughly approximate.

As of November 15, 2013, the effective date of the current Mineral Resource estimate, Zenyatta had drilled 63 holes totalling 26,011 m in the deposit area, of which 60 were used to estimate resources.

MINERAL RESOURCES

RPA estimated Mineral Resources for the Albany graphite deposit using drill hole data available as of November 15, 2013 (Table 1-1).

The Mineral Resource estimate is based on a potential open pit mining scenario. RPA estimates 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 are reported at a cut-off grade of 0.6% Cg. Mineral Resources are constrained within a preliminary optimized pit shell in Whittle software.

There are no Mineral Reserves estimated on the Property.



2 INTRODUCTION

Roscoe Postle Associates Inc. (RPA) was retained by Zenyatta Ventures Ltd. (Zenyatta) to prepare an independent Technical Report on the Albany graphite deposit, located on the Claim Block 4F (the Property) in northeastern Ontario, Canada. The purpose of this report is to support the Mineral Resource estimate prepared by RPA and disclosed by Zenyatta in a press release dated December 2, 2013. This Technical Report conforms to NI 43-101 Standards of Disclosure for Mineral Projects. RPA visited the Property in July 2013.

Claim Block 4F, which includes the Albany graphite deposit, is part of a larger group of non-contiguous claims held by Zenyatta known as the "Albany Project". Outside Claim Block 4F, the primary targets are copper, nickel, and platinum group metals. This Technical Report covers Claim Block 4F where the principal deposit is hydrothermal graphite.

Zenyatta is a junior exploration company based in Thunder Bay, Ontario, focused on exploring for graphite deposits in northeastern Ontario. Zenyatta also explores for nickel, copper, and platinum group metals (PGM or PGE) on its other claims in the region. Zenyatta is a public company with its common shares trading on the TSX Venture Exchange under the symbol ZEN. The Albany graphite deposit is Zenyatta's most significant asset.

SOURCES OF INFORMATION

A site visit was carried out by David Ross, P.Geo., Principal Geologist with RPA, on July 15 to 18, 2013. Mr. Ross reviewed logging and sampling methods, inspected core from several drill holes, and visited the drill while in operation and several previously drilled collars.

Discussions were held with personnel from Zenyatta and its advisors:

- Mr. Peter Wood, P.Eng., P.Geo., Vice President Exploration, Zenyatta
- Mr. Ardian Peshkepia, P.Geo., Contract Geologist for Zenyatta
- Mr. Michael Roberts, P.Geo., Contract Geologist for Zenyatta
- Mr. Don Hains, P.Geo., Consultant, Hains Engineering Company Limited

The documentation reviewed, and other sources of information, are listed at the end of this report in Section 27 References.



LIST OF ABBREVIATIONS

Units of measurement used in this report conform to the metric system. All currency in this report is Canadian dollars (C\$) unless otherwise noted.

	annum	kWh	kilowett hour
a ^	annum		kilowatt-hour
A	ampere	L	litre
bbl	barrels	lb	pound
btu	British thermal units	L/s	litres per second
°C	degree Celsius	m	metre
C\$	Canadian dollars	M	mega (million); molar
cal	calorie	m ²	square metre
cfm	cubic feet per minute	m ³	cubic metre
cm	centimetre	μ	micron
cm ²	square centimetre	MASL	metres above sea level
d	day	μg	microgram
dia	diameter	μg m³/h	cubic metres per hour
dmt	dry metric tonne	mi	mile
dwt	dead-weight ton	min	minute
۰F	degree Fahrenheit	μm	micrometre
ft	foot	mm	millimetre
ft ²	square foot	mph	miles per hour
ft ³	cubic foot	MVA	megavolt-amperes
ft/s	foot per second	MW	megawatt
g	gram	MWh	megawatt-hour
Ğ	giga (billion)	oz	Troy ounce (31.1035g)
Gal	Imperial gallon	oz/st, opt	ounce per short ton
g/L	gram per litre	ppb	part per billion
Gpm	Imperial gallons per minute	ppm	part per million
g/t	gram per tonne	psia	pound per square inch absolute
gr/ft ³	grain per cubic foot	psig	pound per square inch gauge
gr/m ³	grain per cubic netre	RL	relative elevation
ha	hectare	S	second
hp	horsepower	st	short ton
hr	hour	stpa	short ton short ton per year
Hz	hertz	stpd	short ton per day
in.	inch	t	metric tonne
in ²		-	
J	square inch	tpa	metric tonne per year
	joule	tpd US\$	metric tonne per day United States dollar
k	kilo (thousand)		
kcal	kilocalorie	USg	United States gallon
kg	kilogram	USgpm	US gallon per minute
km	kilometre	V	volt
km ²	square kilometre	W	watt
km/h	kilometre per hour	wmt	wet metric tonne
kPa	kilopascal	wt%	weight percent
kVA	kilovolt-amperes	yd ³	cubic yard
kW	kilowatt	yr	year



3 RELIANCE ON OTHER EXPERTS

This report has been prepared by RPA for Zenyatta. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to RPA at the time of preparation of this report,
- Assumptions, conditions, and qualifications as set forth in this report, and
- Data, reports, and other information supplied by Zenyatta and other third party sources.

For the purpose of this report, RPA has relied on ownership information provided by Zenyatta. RPA has not researched property title or mineral rights for the Property and expresses no opinion as to the ownership status of the Property.

Except for the purposes legislated under provincial securities laws, any use of this report by any third party are at that party's sole risk.



4 PROPERTY DESCRIPTION AND LOCATION

Zenyatta holds a group of claim blocks located in a large area of twenty townships north of Lake Superior and west of James Bay, Canada, within the Porcupine Mining District of northern Ontario, Canada (Figure 4-1). The claim blocks are all located north of Highway 11 and the Town of Hearst is situated approximately 86 km to the east of the southernmost claim block, 4B. The claim blocks are unpatented, non-contiguous and consist of seven groups of claims, 279 claims and 4,273 claim units, totalling 683.68 km², or 68,368 ha. The entire group of 279 claims is referred to by Zenyatta as the "Albany Project". This Technical Report covers a group of claims known as Claim Block 4F, which contains the Albany graphite deposit and is 100% owned by Zenyatta (Figures 4-2 and 4-3). Claim Block 4F is subject to two net smelter return (NSR) royalties as described later in this section.

Most claims making up Claim Block 4F are located in the Pitopiko River Area (G-1706), with the westernmost claims located in the Feagan Lake Area (G-1691). The claims are unpatented and contiguous, and are situated within NTS blocks 42K/01,02 and 42F/15,16 and centred on 682,400 mE and 5,544,514 mN, UTM Zone 16, NAD 83.

All of Claim Block 4F was staked during the months of March and May of 2010. Presently, Claim Block 4F has a total of 61 claims, 826 claim units, for a total of 13,216 ha. The yearly work required costs to keep the total claims in good standing amounts to \$330,400. A list of claims making up Claim Block 4F is shown in Table 4-1. All claims will be renewed in 2014.

RPA is not aware of any environmental liabilities on the Property. Zenyatta has all required access agreements, consents and permits to conduct the proposed work on the Property. RPA is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform the proposed work program on the Property.



TABLE 4-1 LIST OF CLAIMS IN BLOCK 4F Zenyatta Ventures Ltd. Albany Graphite Deposit

Township/Area	Claim Number	Holders	No. of Units	Area (ha)	Recorded Date	Claim Due Date	Status	Percent Option
FEAGAN LAKE	4257701	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
FEAGAN LAKE	4257702	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
FEAGAN LAKE	4257703	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
FEAGAN LAKE	4257704	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
FEAGAN LAKE	4257705	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
FEAGAN LAKE	4257706	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
FEAGAN LAKE	4257707	Zenyatta	12	192	10-May-10	28-Feb-14	Α	100%
FEAGAN LAKE	4257708	Zenyatta	12	192	10-May-10	28-Feb-14	Α	100%
FEAGAN LAKE	4257709	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
FEAGAN LAKE	4257710	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
FEAGAN LAKE	4257711	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
FEAGAN LAKE	4257712	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
FEAGAN LAKE	4257713	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
FEAGAN LAKE	4257714	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	3002472	Zenyatta	4	64	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	3002473	Zenyatta	4	64	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4248214	Zenyatta	4	64	4-Jun-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4255101	Zenyatta	16	256	17-Mar-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4255102	Zenyatta	16	256	17-Mar-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4255103	Zenyatta	16	256	17-Mar-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4255104	Zenyatta	16	256	17-Mar-10	28-Feb-15	Α	100%
PITOPIKO RIVER	4255105	Zenyatta	16	256	17-Mar-10	28-Feb-19	Α	100%
PITOPIKO RIVER	4255106	Zenyatta	16	256	17-Mar-10	28-Feb-15	Α	100%
PITOPIKO RIVER	4255107	Zenyatta	16	256	17-Mar-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4255108	Zenyatta	16	256	17-Mar-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4255109	Zenyatta	16	256	17-Mar-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4255110	Zenyatta	13	208	17-Mar-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4255111	Zenyatta	7	112	17-Mar-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4255112	Zenyatta	10	160	17-Mar-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257715	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257716	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257717	Zenyatta	16	256	10-May-10	28-Feb-14	A	100%
PITOPIKO RIVER	4257718	Zenyatta	16	256	10-May-10	28-Feb-14	A	100%
PITOPIKO RIVER	4257719	Zenyatta	16	256	10-May-10	28-Feb-14	A	100%
PITOPIKO RIVER	4257720	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257721	Zenyatta	9	144	10-May-10	28-Feb-14	A	100%
PITOPIKO RIVER	4257722	Zenyatta	4	64	10-May-10	28-Feb-14	A	100%
PITOPIKO RIVER	4257723	Zenyatta	16	256	10-May-10	28-Feb-14	A	100%
PITOPIKO RIVER	4257724	Zenyatta	16	256	10-May-10	28-Feb-14	A	100%
PITOPIKO RIVER	4257725	Zenyatta	16	256	10-May-10	28-Feb-14	A	100%
PITOPIKO RIVER	4257726	Zenyatta	11	176	10-May-10	28-Feb-14	A	100%
PITOPIKO RIVER	4257727	Zenyatta	9	144	10-May-10	28-Feb-14	A	100%
PITOPIKO RIVER	4257728	Zenyatta	6	96	10-May-10	28-Feb-14	A	100%
PITOPIKO RIVER	4257730	Zenyatta	14	224	10-May-10	28-Feb-14	A	100%
PITOPIKO RIVER	4257731	Zenyatta	12	192	10-May-10	28-Feb-14	Α	100%



Township/Area	Claim Number	Holders	No. of Units	Area (ha)	Recorded Date	Claim Due Date	Status	Percent Option
PITOPIKO RIVER	4257732	Zenyatta	12	192	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257733	Zenyatta	14	224	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257734	Zenyatta	4	64	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257735	Zenyatta	7	112	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257736	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257737	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257738	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257739	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257740	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257741	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257742	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257743	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257744	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257745	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257746	Zenyatta	16	256	10-May-10	28-Feb-14	Α	100%
PITOPIKO RIVER	4257747	Zenyatta	2	32	10-May-10	28-Feb-14	Α	100%

ROYALTIES, HISTORY OF OWNERSHIP, AND AGREEMENT WITH CLIFFS

During the years 2010 to 2012, Claim Block 4F was part of a larger group of 28 claim blocks totalling 495 claims, 7,757 claim units, and 124,112 ha. At the time of Zenyatta's Initial Public Offering (IPO) in December 2010, the Albany claims were 25% owned by Zenyatta and 75% owned by Cliffs Natural Resources Exploration Canada Inc. (CNRECI), an affiliate of Cliffs Natural Resources Inc. (Cliffs), as defined by the 2010 Amended Albany Option and Joint Venture Agreement. The majority of the claims were staked during the late summer and fall of 2009, followed by additional staking in the winter and spring of 2010.

Most claim blocks were dropped in February 2013, except for Albany blocks 1C, 2C, 3A, 3B, 4A, 4B, and 4F. Four claims were also re-staked on Block 4E and additional seven buffer claims were also staked to the west and south.

In November 2012, Zenyatta reached an agreement with CNRECI and acquired 100% ownership of Claim Block 4F. Prior to this date and according to the agreement, Zenyatta had already exercised its right and acquired an 80% interest in Claim Block 4F by having spent a total of \$10 million on exploration on the larger group of Albany Project claims. After acquiring Cliffs' remaining 20% interest in the Claim Block 4F, Zenyatta now holds a 100% interest. Pursuant to the terms of the transaction, Zenyatta and Cliffs agree to the following with respect to the Claim Block 4F:



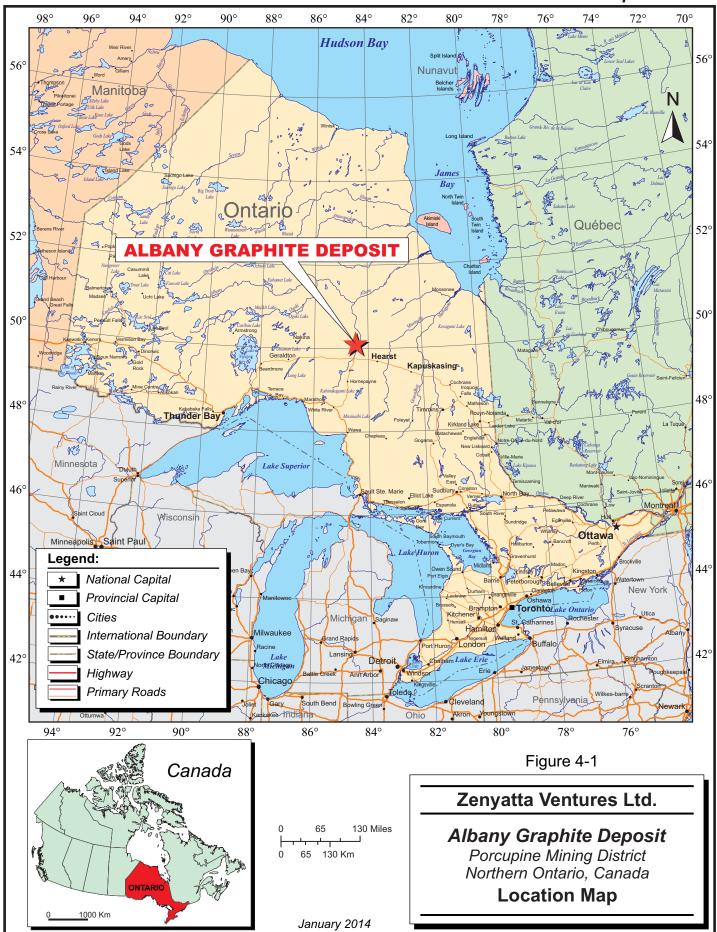
- a. Zenyatta will issue to Cliffs (or its designated affiliate) a total of 1,250,000 shares as follows: (i) 500,000 shares upon signing the agreement; (ii) 250,000 shares to be issued upon completion of a pre-feasibility study; and (iii) 500,000 shares to be issued upon completion of a feasibility study; and
- b. Zenyatta will grant Cliffs an NSR royalty of 0.75% on the Claim Block 4F, of which 0.5% can be purchased at any time for \$500,000.

There is an additional 2% NSR royalty on Claim Block 4F that was granted to Eveleigh Geological Consulting Inc. (EGC) of which 1.0% can be purchased at any time for \$1,000,000. This royalty was part of the 2010 Amended Albany Option and Joint Venture Agreement between Zenyatta, Cliffs, CNRECI, and EGC.

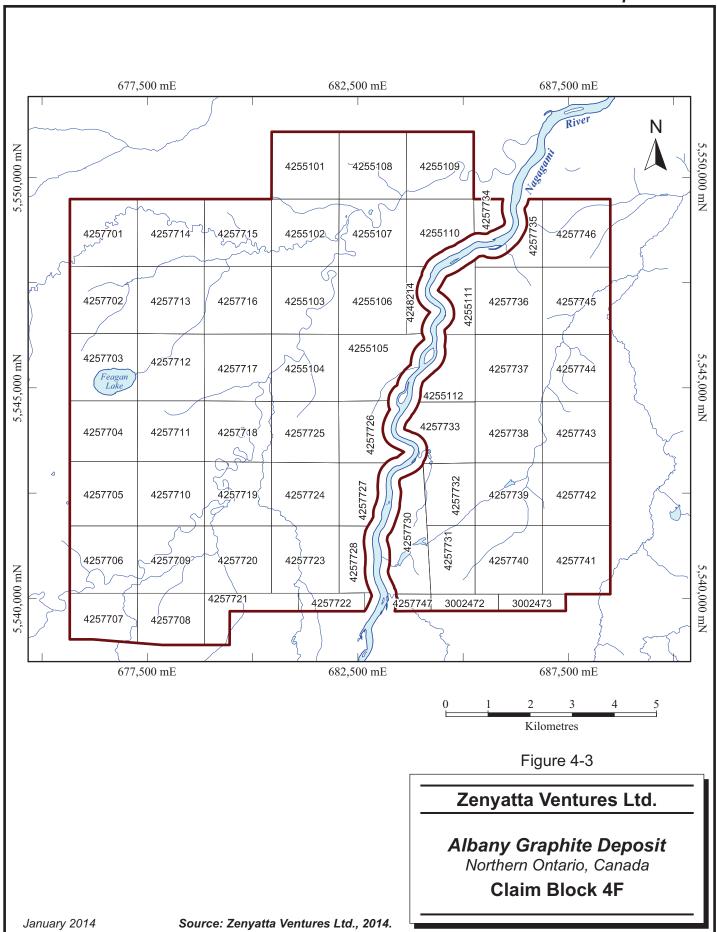
FIRST NATION AGREEMENT

The Albany Project claim blocks and more particularly the Claim Block 4F Property are located in Constance Lake First Nations' (CLFN) Traditional Territory. On July 18, 2012, Zenyatta and CLFN announced that they had signed an Exploration Agreement for a mutually beneficial and co-operative relationship regarding exploration and pre-feasibility activities on the Albany Project. Among other things, CLFN will participate in an implementation committee and receive, along with certain other First Nation communities, preferential opportunities for employment and contracting. Zenyatta also agreed to contribute to a social fund for the benefit of CLFN children, youth, and elders.











5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The following section is based on Carey (2012).

ACCESSIBILITY

The Property is approximately 30 km to the north of Highway 11, however, access to most of the Property is best achieved via helicopter. Boat or canoe access can also be used along the Nagagami River in the central area of the Property. Old forestry logging roads reach the southeast boundary of the Property, leading to several old ATV (all-terrain vehicle) trails through previously harvested forests just east of the Nagagami River. A winter access trail joins the end of the all-weather forestry road to the drill site and it can be reached by travelling northwards up the Pitopiko Road from Highway 11. This was added as a safety route to be used in emergency situations.

CLIMATE

Most of the region has a continental climate with warm to hot summers (June, July and August; 25°C to 35°C) and cold winters (December to March, 10°C to -30°C with lows down to -45°C). Annual precipitation ranges from 600 mm to 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.

LOCAL RESOURCES

The Town of Hearst, located approximately 50 km to the southeast of Claim Block 4F, has many facilities to keep an exploration camp well supplied. These include hotels, restaurants, a hospital, hardware stores, gas stations, mining supply store, and an airport. Float plane and helicopter services are also available in Hearst. Mining personnel, equipment, and supplies can also be accessed from Timmins, a major mining and exploration centre.



INFRASTRUCTURE

There is currently no permanent infrastructure on the Property. The nearest airport is in Hearst, approximately one hour by car. The Timmins airport with scheduled flights is approximately four hours away by road.

The Albany graphite deposit is located 30 km north of the Trans-Canada Highway, powerline, and natural gas pipeline near the communities of Constance Lake First Nation and Hearst. A rail line is located 70 km away and an all-weather logging road, approximately four to five kilometres from the graphite deposit.

The Property is in the early stages of the exploration and development cycle. It is considered to have sufficient area for a potential future mining operation; however, appropriate surface rights will need to be secured from the government. Sources of water, grid power, mining personnel, potential tailings storage areas, potential waste disposal areas, and potential processing plant sites are all available on the Property.

PHYSIOGRAPHY

The Property is located within the Hudson Bay-James Bay Lowlands, a vast wetland of peat lands, both bogs and fens, where the topography is essentially flat, low-lying, and swampy. Overburden is thick, approximately 35 m in the Claim Block 4F area with little or no outcrop exposure; Paleozoic limestone cover rocks are exposed along the banks of the Nagagami River. There are many creeks flowing between peat bogs throughout the area. The Nagagami River flows north through the Property with several meandering tributaries flowing in from the east and west. The Pitopiko River flows into the west side of the Nagagami. 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.



6 HISTORY

The Albany Project consists of 28 claim blocks and covers large amounts of ground, a majority of which were staked by Cliffs Canada during the late summer and fall of 2009, followed by additional staking in the winter and spring of 2010. The Albany Project claims cover sections of ground that are reported to have been explored by eight exploration companies: Nagagami River Prospecting Syndicate, Algoma Ore Properties Ltd., Satellite Metal Mines Limited, Keevil Mining, Cedam Limited, Shell Canada Explorations Limited, East-West Resource Corporation, and Gowest Amalgamated Resources Limited. GTA Resources and Mining Inc. holds a group of claims adjacent to and south of Claim Block 4F.

The areas were initially selected by Zenyatta for their potential to host nickel, copper, and PGM mineralization and this was based on geophysical information from Ontario Geological Survey (OGS) airborne magnetic maps, the geological interpretation (Stott, 2008) of these maps, and additional geological and geophysical data from historical exploration reports provided by Ontario Ministry of Northern Development and Mining (MNDM). Historical exploration work has been limited in this area of the James Bay Lowlands and mostly consists of geophysical surveys and diamond drill projects. The following section presents information related to prior ownership, exploration, development, and past production of Claim Block 4F, and is summarized from Geotech (2010) and Carey (2012).

EXPLORATION

The majority of the Albany claim blocks have not been previously explored. Historical exploration on a very small number of the claims has been minor: the Archean basement terrane is covered with thick glacial till that blankets Paleozoic limestone cover rocks. There is no outcrop exposure on the claim blocks and any targeted mineralization can only be observed from drill core. Table 6-1 summarizes exploration conducted on Claim Block 4F and Table 6-2 includes detailed location information on historical drilling.



TABLE 6-1 SUMMARY OF EXPLORATION

Zenyatta Ventures Ltd. Albany Graphite Deposit

Year	Company	Type of Work	Summary Result
1959	Nagagami River Prospecting Syndicate	A ground magnetic and electromagnetic (EM) survey initiated in the Feagan Lake/Pitopiko River Township area by Koulomzine and Brossard Ltd. The survey was not fully completed because of an early spring breakup.	Results showed three magnetic anomalies defining basement geology contacts and several lenticular-shaped electromagnetic conductors. It was concluded that the shape of the conductors and their occurrence in the vicinity of a diabase dyke may be indicative of sulphide lenses that could contain base metals. One coincident magnetic and EM anomaly could be caused by disseminated mineralization (Koulomzine, 1959). Four drill holes were recommended to follow up EM anomalies: no record of follow-up drilling has been found.
1961	Algoma Ore Properties Ltd.	Aeromagnetic survey flown in the Nagagami River and Pitopiko Township area.	The survey outlined a horseshoe-shaped anomaly which was ground confirmed in the same year. Led to further exploration in 1963.
1963	Algoma Ore Properties Ltd.	Airborne magnetometer survey flown in the Nagagami River area by Hunting Survey Corp.	The survey results indicated two large low intensity circular shaped anomalies (Anomalies #1 and #2), underlying the Paleozoic limestone. Interpretation suggested that the anomalies were caused by a complex syenitic to gabbroic intrusion. Anomaly #2 was reportedly near the northern boundary of Claim Block 4F and thought to potentially be associated with an alkaline and carbonatite complex, hosting columbium (Cb ₂ O ₅) 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, 1964).
1964- 1967	Algoma Ore Properties Ltd.	Exploration in the Nagagami River area. Ground magnetometer survey completed and claims staked. Nine drill holes completed, two in Claim Block 4F. Core was sporadically sampled and petrographic studies were undertaken. The core was tested with scintillometer, and samples were taken where radioactive responses occurred.	Assay results on the radioactive core samples indicated Cb_2O_5 content of 0.02% to 0.04%. Drilling intersected coarse syenite rock with 3-5% magnetite. Algoma concluded that the ground magnetometer survey and the diamond drilling verified the airborne survey, and although drilling did not intersect any ore minerals, mineralization could possibly be associated with other parts of the structure. Algoma recommended that the property be referred to other companies interested in intrusive structures (Venn, 1964).
1978	Shell Canada Explorations Ltd.	Initiated a diamond drill program in the area based on airborne survey results.	A single hole, DDH 7609-78-1, was drilled within Claim Block 4F and intersected graphitic breccia. Drill log is available from MNDM, but an accompanying report was not submitted.
1999	Ontario Geological Survey	Aeromagnetic geophysical maps released for the Hudson Bay and James Bay Lowlands areas, Geophysical Data Set 1036	Regional aeromagnetic survey data available for Claim Block 4F.
2008	Ontario Geological Survey	Precambrian Geology Map P.3599 published: Hudson Bay and James Bay Lowlands Region Interpreted from Aeromagnetic Data, G.M. Stott, 2007-2008.	Interpretation of regional aeromagnetic survey data available for Claim Block 4F.



TABLE 6-2 HISTORICAL DRILLING Zenyatta Ventures Ltd. Albany Graphite Deposit

Year	Company	Drill Hole ID	NTS	Datum	UTM-East	UTM-North
1964	Algoma Ore Properties Ltd.*	DDH-8-64	42K01	NAD 83	685,792	5,551,132
1964	Algoma Ore Properties Ltd.*	DDH-9-64	42K01	NAD 83	685,237	5,550,906
1978	Shell Canada Explorations Ltd.*	7609-78-19	42K02	NAD 27	648,901	5,541,668

^{*}Approximate location of drill hole collar

HISTORICAL RESOURCE ESTIMATES

There have been no estimates prepared by previous owners.

PAST PRODUCTION

There has been no known production from the Property up to the effective date of this report.



7 GEOLOGICAL SETTING AND MINERALIZATION

REGIONAL GEOLOGY

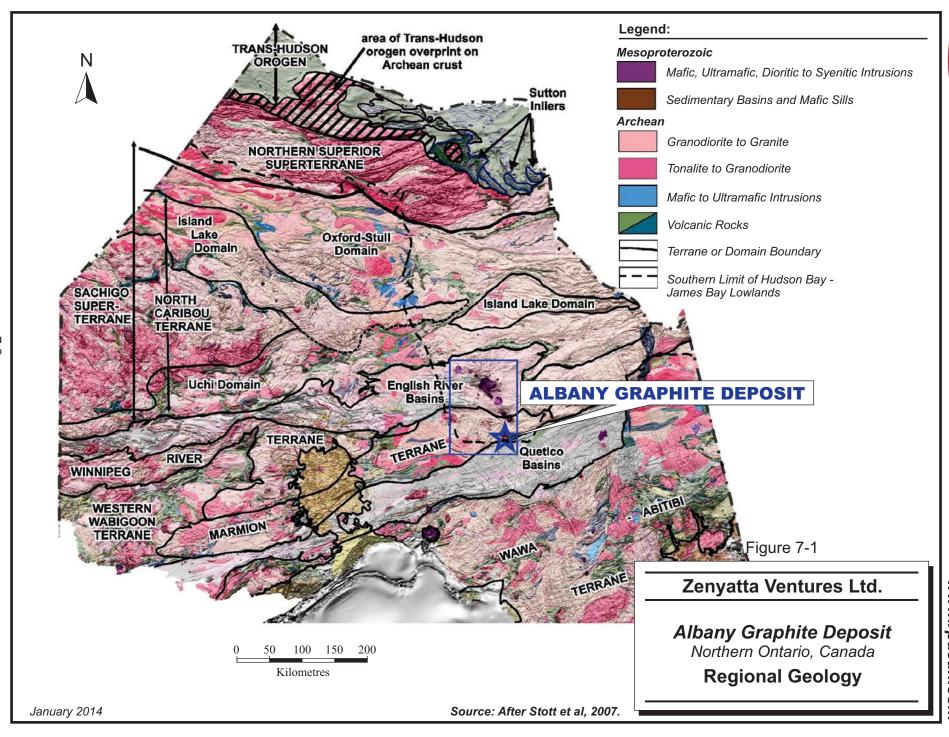
The Albany claims were staked based on geological information acquired from OGS Map P3599, Precambrian Geology of the Hudson Bay and James Bay Lowlands Region. Stott et al. (2007) interpreted the regional tectonic subdivisions and mapped the Albany claim blocks as part of the English River Basins, the Marmion Terrane, and the Quetico Basins of the Superior Province of the Canadian Shield (Figure 7-1). Based on the interpretation of Sage (1988), it appears that the Nagagami Alkalic Rock Complex underlies most of Claim Blocks 4E and 4F.

The following is a summary of the major rock units in the area, as cited in Geotech (2010):

The relatively flat-lying Hudson Bay and James Bay Lowlands consist mostly of carbonates of Paleozoic to Mesozoic age. These sediments 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. The region's Precambrian geology is based mainly on available re-processed 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 7-1).

THE QUETICO SUBPROVINCE

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 rocks and granitoids located in the west-central part of the Superior Province. 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 km²) and form sills, plugs, and small stocks composed of a variety of lithologies, mainly wehrlites, clinopyroxenites, hornblendites, monzodiorites, syenites, foidites, and silicocarbonatites. They are locally enriched in Ni-Cu and PGEs (Vaillancourt et al., 2003).





THE 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).

MARMION TERRANE/SUBPROVINCE

This 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 were once also interpreted as part of the Western Wabigoon and Winnipeg River terranes.

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 is composed of two ring-shaped subcomplexes with more mafic rims and more leucocratic cores. Aeromagnetic data interpretation may indicate that the northern subcomplex is cut by the southern subcomplex, indicating the southern subcomplex is younger. The middle-to-late Precambrian diabase dykes, which are characterized by linear northwest-trending aeromagnetic patterns, do not cross-cut the aeromagnetic signature of the Nagagami Alkalic Rock complex. This indicates 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 Nagagami Alkalic Rock Complex lies on trend with the extension of the northeast-striking Gravel River Fault.

The dominant rock type is an amphibole-pyroxene syenite which varies from fine to coarse-grained, and 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 Nagagami River Alkalic Rock Complex has strong similarities to the pyroxene-bearing syenites of the Port Coldwell Alkalic Rock Complex.



Based on the fact that the intrusion underwent unsuccessful testing for iron and niobium in 1964 by the Algoma Ore Properties Division of Algoma Steel Corporation, it was previously 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 ROCK COMPLEX

The Albany Alkalic Complex (Conly, 2014), which hosts the graphitic breccia pipes, occurs to the south of the two Nagagami Alkalic sub-complexes. 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 suggests that the dominant rock type is a syenite. All drilling by Zenyatta has focused on the immediate area which hosts the graphite deposit. The limits of the intrusion are based on geophysical interpretation.

PROPERTY GEOLOGY

The Albany graphite deposit is centred on Claim Block 4F (Figure 7-2). The area is covered by a thick layer of overburden (up to 50 m) and there are no surface exposures of bedrock. Consequently, no surface geological mapping projects are reported for the area.

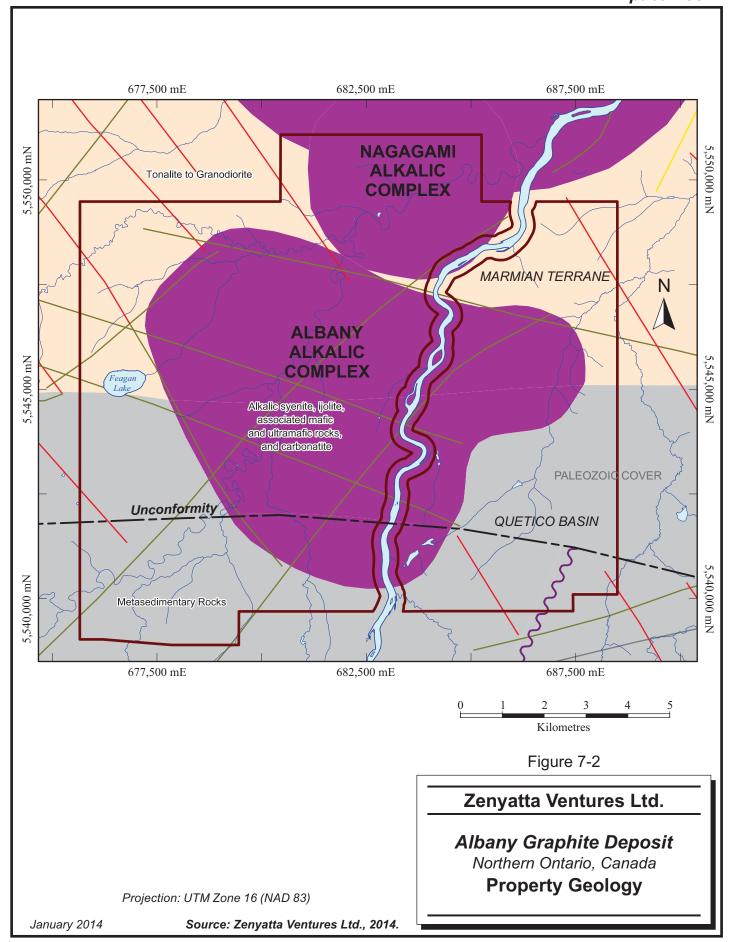
Precambrian rocks in the southern section of Claim Block 4F primarily comprise paragneissitic and migmatitic metasedimentary rocks, and mafic rocks together with related intrusive rocks of the Quetico Subprovince (Stott, 2007). The northern section of Claim Block 4F is underlain by metamorphosed tonalite to granodiorite, foliated to gneissic 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, and associated mafic and ultramafic rocks and carbonatite (Stott, 2007).

Precambrian basement rocks are overlain with Paleozoic limestone, and drilling on the property by Zenyatta suggests that thicknesses can range from one to greater than fifteen metres. The Albany graphite deposit is hosted within gneissic to unfoliated syenite, granite, diorite, and monzonite (Albany Alkalic Complex) that are cross-cut by younger dykes, ranging from felsic to mafic in composition. The basement rocks are overprinted by graphite near the margins of the graphite breccia pipes.



Zenyatta is currently supporting a Master of Science research program to be supervised by Dr. Andrew Conly of Lakehead University, Thunder Bay, Ontario. The research will focus on the genesis of the Albany deposit including: the age of mineralization, the source and chemical nature of the graphite-forming fluids, and the mineralogical and geochemical characteristics of the hydrothermal graphite.







MINERALIZATION

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 and 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. 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. Syenite breccia fragments are angular to subangular to subrounded and range in size from subcentimetre to approximately one metre, most being between three centimetres and 30 cm. Dyke and graphite fragments range from one centimetre to five centimetres.

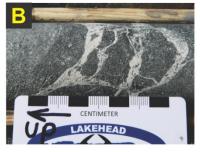
Representative core photographs of key features of the Albany graphite mineralization are provided in Figure 7-3.

Resistivity is significantly influenced by the degree of crystallinity of the graphite particle orientation and temperature. Higher crystallinity results in lower resistivity and therefore higher conductivity (and value). Whereas graphite formed in situ from carbonaceous material (syngenetic) is amorphous, studies on the graphite in the Albany deposit indicate low resistivity and therefore high conductivity, characteristic of a high degree of crystallinity (Zenyatta News Release of October 3, 2013), typical of formation from hydrothermal C-O-H fluids at high T/P.



FIGURE 7-3 CORE PHOTOGRAPHS OF ALBANY GRAPHITE MINERALIZATION



















Description of the photographs:

- 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 cross-cutting 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).



8 DEPOSIT TYPES

Most economic geologists and geophysicists are familiar with graphite as a nuisance in geophysical exploration due to its excellent electric 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 matter is well understood, however, the heating and compression of organic matter *in situ* is only one of the ways in which graphite is produced in nature. Another is the precipitation of solid carbon (i.e., graphite) from natural carbon-fluids such as those containing CO₂, CO, and/or CH₄.

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 CO₂-rich fluids that evolved due to pressure-related degassing of syenites of the Albany Alkalic Complex and is described below (Conly, 2014):



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 CO₂-bearing fluid, occurred in response to depressurization of the magma at mid to shallow crustal levels, and accumulation of CO₂ at the top of the ascending dyke. Possible sources for the carbon include: i) generation of primary CO₂-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 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 CO₂-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. 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 μ m to 300 μ m 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 growth of coarser-crystalline graphite and led to the crystallizing of the degassing syenite magma at depth.

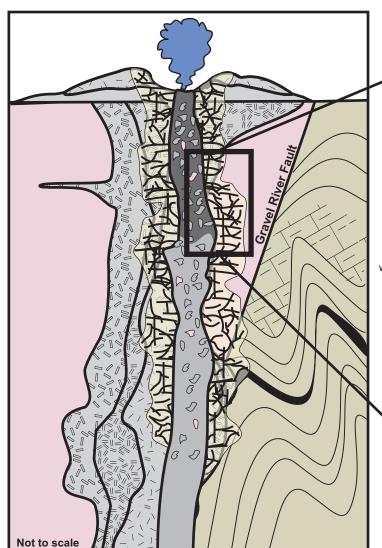
STAGE 4 - POST-MINERALIZATION MAGMATIC AND EROSIONAL EVENTS

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



Graphite Breccia

Unbrecciated Syentite

Rapid nucleation and crystallization of finegrained graphite forming the matrix of the vent pipe and veins in fractured wall-rock

Graphite deposition occurs in response to sudden depressurization and quenching at shallow levels within the vent breccia pipe. This likely coincided with extensive venting of CO₂ at surface and collapse of the volcanic structure.

Crystallization of syenite magma

> Graphite veined syenite and country rock, with weak graphite overprint

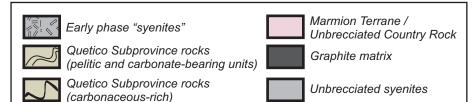
Unbrecciated **Country Rock**

Figure 8-1

Zenyatta Ventures Ltd.

Albany Graphite Deposit

Northern Ontario, Canada



Albany Graphite Deposit Model

January 2014

Source: Conly, 2014.

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9 EXPLORATION

Zenyatta commenced exploration on the Albany Project claim blocks in 2010. All prior exploration conducted by other companies and government agencies is summarized in Section 6. Zenyatta was targeting nickel, copper, and platinum on the claim blocks, prior to the discovery of extensive graphite mineralization on Claim Block 4F.

2010

As part of a staged approach, preliminary exploration began in March 2010 with a helicopter borne versatile time domain electromagnetic (VTEM) and aeromagnetic (cesium magnetometer) geophysical survey flown by Geotech Ltd. (Geotech) of Aurora, Ontario, over the 28 Albany Project claim blocks. Ancillary equipment included a GPS navigation system and a radar altimeter.

The survey operations were based out of the Town of Hearst. In-field data quality assurance and preliminary processing were carried out on a daily basis during the acquisition phase. Preliminary and final data processing, including generation of final digital data and map products, was undertaken from the office of Geotech in Aurora, Ontario.

The VTEM system has the highest signal to noise ratio of any airborne electromagnetic (EM) system resulting in the deepest possible depth of investigation. This technology enabled a more effective means to explore the Albany claim blocks, where thick glacial overburden and Fe-deficient shallow marine carbonate/clastic sediments cover prospective geological and structural settings within the underlying Archean basement terrane. Furthermore, processing of the VTEM data allowed for the derivation of multiple products used collectively in identifying priority targets for follow-up work.

The field portion of the survey commenced on March 17, 2010 and ended on May 19, 2010, with lines flown in a north-south direction using 150 m line spacing. The survey covered an area of 2,485 km² and totalled approximately 9,450 line km over 28 claim blocks. A final survey report was prepared by Geotech (Geotech, 2010) describing the procedures for data acquisition, processing, final image presentation, and the specifications for the digital data



set. EM time-constant (Tau) and magnetic derivative analyses were performed and Geotech provided Zenyatta with a list of EM anomalies.

Results of this survey were used to identify several high priority geophysical EM targets for follow-up drilling under the recommended Phase I and II Drill Budgets, commencing in 2011. A total of 22 EM and magnetic targets were identified for follow-up modelling and drill testing, two (Victor and Uniform) situated on Claim Block 4F (Figure 9-1). Drilling at the Uniform target led to the discovery of the Albany graphite deposit. Inversion modelling analyses, both 2D and 3D and magnetic derivative analysis was recommended prior to ground follow-up and drill testing.

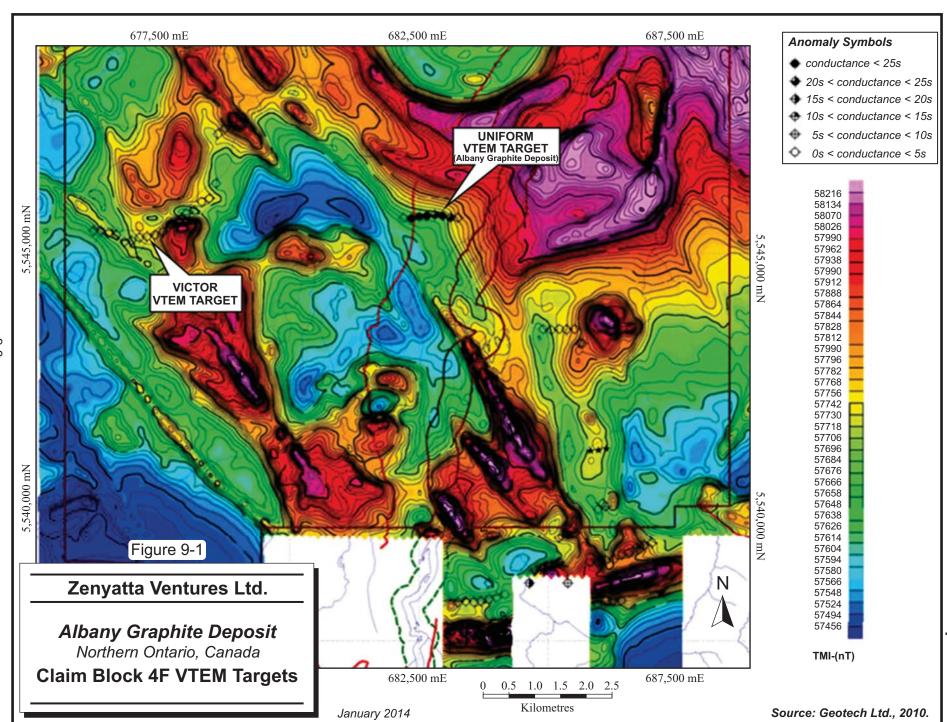
2011 AND 2012

Excluding drilling, which is described in Section 10, no exploration work was conducted on the Property in 2011-2012.

2013

Crone Geophysics & Exploration Ltd. (Crone) was contracted by Zenyatta to perform surface time-domain EM (TDEM) surveys on the Property during February and March 2013. Crone targeted the drill-confirmed East and West graphitic breccia pipes that were initially identified in Geotech's 2010 airborne VTEM survey. Crone anticipated that surface TDEM surveys could be influenced by the top, presumably flat edge of the pipe as well as any of the vertical faces if the pipe had a significant depth extent. The survey design incorporated both an inloop mode (Loop 1) to couple with the top, flat edge of the body and an out-of-loop mode (Loop 2) to couple with the steeply dipping edges (Crone, 2013).

The processed data from Loop 1 showed two separate isolated response patterns, apparently the result of two separate breccia pipes (Figure 9-2). The response pattern of the in-loop surveys is dominated by the top edge of these conductive sources and in the modelling results, excellent fits were obtained with the assumption of these being due to thin units. Bodies of varying thicknesses were utilized as well, but gave little appreciable difference in the modelling studies, suggesting the response patterns were indeed dominated by the relatively flat-lying tops of these bodies.





Subsequent to Loop 1, Loop 2 was positioned with the loop located just north of the conductive features/breccia pipe identified from TDEM results. This loop was positioned to provide optimal coupling with any near vertical or steeply dipping edges. As with Loop 1, the Loop 2 results suggest the presence of two isolated bodies.

Crone completed numerical modelling on Loop 1 and 2 datasets. The results provided excellent fits with the observed data.

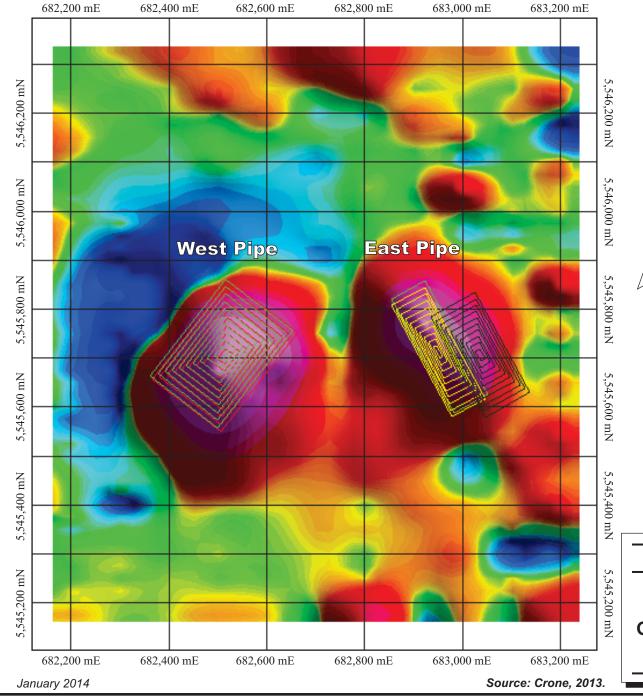
The TDEM ground survey appears to have outlined the lateral extent of two graphite breccia pipes (inferred from previous drilling results), although the boundary of the model is considered roughly approximate. The Western anomalous zone (West Pipe) is characterized by a rough circular response pattern with a slight elongation in the northeast-southwest direction and the Eastern anomalous zone (East Pipe) is characterized by an ovoid shaped source with its long axis oriented in a north-northwest–south-southeast sense.

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2.5 1.7 1.1

0.7 0.5 0.3 0.2 0.2 0.1







10 DRILLING

As of November 15, 2013, the effective date of the current Mineral Resource estimate, Zenyatta had drilled 63 holes totalling 26,011 m in the deposit area (Table 10-1), however, only 60 of the 63 holes were used to estimate resources. The three metallurgical holes that were drilled on the West Pipe were excluded as the assay data was still pending on November 15, 2013. The single historic drill hole thought to be in the area of the deposit was not used to estimate resources. The drill hole collar locations and hole traces are shown Figure 10-1.

TABLE 10-1 SUMMARY OF DRILLING Zenyatta Ventures Ltd. Albany Graphite Deposit

Pipe	Year	Number of Holes	Total Length (m)	No. of Samples
East	2011	0	0	0
	2012	4	1,296	584
	2013	27	10,968	9132
	Total	31	12,264	9,716
West	2011	1	543	380
	2012	4	1,690	804
	2013	27	11,495	8178
	Total	32	13,728	13,779

Drilling was contracted to Chibougamau Diamond Drilling Ltd. (Chibougamau) of Chibougamau, Quebec. At the time of RPA's site visit in July 2013, Chibougamau was operating one drill on the Property but later added a second rig in August 2013 to drill holes required for metallurgical testwork.

Diamond drill holes were collared using NQ (47.6 mm core diameter) equipment for the 57 resource drill holes and HQ (63.5 mm core diameter) for the six metallurgical drill holes. Most collar locations were surveyed using a Reflex North Finder Azimuth Pointing System (APS) and reported in the coordinate system UTM Zone 16 NAD 83. The orientation of the drill collar was measured using the APS and downhole orientations were monitored using a Reflex multishot instrument with most readings taken at three metre intervals.



A Zenyatta geologist was at the drill to end each hole. Once the hole was completed, all casings were left in place, capped, and the collar was identified with labelled pickets. Drill core was delivered via helicopter to the core shack twice daily at crew change.

At the West Pipe, most holes we drilled to either the northwest or southeast, with dips ranging from -50° to -75°. Drill sections were spaced at 40 m to 50 m along strike, with intercepts on each section averaging 70 m apart down dip. At the East Pipe, most holes were drilled to either the northeast or southwest, with dips ranging from -48° to -78°. Drill sections were spaced at 40 m to 50 m along strike, with intercepts on each section averaging 60 m apart down dip. Holes drilled for metallurgical purposes, on both the East and West pipes, were angled at -85°. Drill hole recoveries are mostly greater than 99%.

RPA has not identified any drilling, sampling, or core recovery issues that could materially affect the accuracy or reliability of the core samples.

DRILL HOLE TARGETING AND RESULTS

All holes drilled in the deposit area intersected graphitic carbon (Cg) mineralization. A list of drill hole intercepts are listed in Table 10-2. The resource modelling method used by RPA manages the relationship between core length and true thickness. A detailed description of the grade, thickness, depth, and general geometry of the pipes is provided in Section 14 under Geological Interpretation.

The initial phase (Phase I) of drilling began in February 2011 and was completed on December 17, 2011. Twenty-six drill holes were completed on the Albany Project, totalling approximately 10,000 m, and tested 21 targets identified by Geotech's VTEM survey. In September, drill hole Z11-4F1 tested a strong, large airborne EM conductor measuring 1,400 m by 800 m on Claim Block 4F located in what is now referred to as the West Pipe. The hole intersected eight separate and extensive breccia zones consisting of variably sized granitic clasts set in a black matrix containing graphite.

In 2012, Zenyatta drilled between March and June. Eight holes were completed: Z12-4F2 through Z12-4F9, for a total of 2,985 m of drilling. The Phase II drill holes were designed to test EM conductors/graphite mineralization within the brecciated graphitic zone, and to determine the extent of the graphite mineralization. The drill holes delineated two discrete



bodies associated with the EM anomalies: the West Pipe and the East Pipe. Four drill holes targeted the West Pipe and four drill holes targeted the East Pipe.

Based on the results of metallurgical testing, Zenyatta commenced a third drilling program in March 2013. Drilling was focused on defining the size and grade of the graphite deposit, expanding on the 2012 drilling campaign. Drilling helped define and constrain both pipes. The drill program ran between March and November, with 54 drill holes completed: Z13-4F10 through Z13-4F57 and six metallurgical drill holes Z13-4FM01 through Z13-4FM06, for a total of 26,011 m of drilling.

DOWNHOLE PROBING

In late 2013, Zenyatta 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. Two of the seven holes (Z13-4F18 and Z13-4F34) were also surveyed for magnetic susceptibility, inductive conductivity, apparent resistivity, natural gamma, and fluid temperature. A total of 3,192 m was logged. Results were provided as strip logs and Wulff stereoplots and will be incorporated into a Preliminary Economic Assessment (PEA). Density and rock quality designation (RQD) data correlated well with Zenyatta's drill logs.



TABLE 10-2 SELECT DRILL HOLE INTERSECTIONS
Zenyatta Ventures Ltd. Albany Graphite Deposit

Pipe	Hole ID	From (m)	To (m)	Length (m)	Grade (Cg%)
West	Z13-4F39	63.22	294.00	230.78	3.63
West	Z13-4F41	64.05	304.90	240.85	3.15
West	Z13-4F50	80.36	239.71	159.35	3.59
West	Z13-4F55	67.87	264.15	196.28	2.81
West	Z13-4F46	72.01	296.00	223.99	2.35
West	Z13-4F32	115.00	302.97	187.97	2.76
West	Z13-4F57	106.80	345.00	238.20	2.11
West	Z13-4F30	62.77	198.85	136.08	3.33
West	Z13-4F40	82.00	234.00	152.00	2.97
West	Z13-4F49	64.00	203.64	139.64	3.11
West	Z13-4F26	100.57	226.07	125.50	3.32
West	Z13-4F54	64.82	281.00	216.18	1.80
West	Z13-4F34	166.00	306.15	140.15	2.54
West	Z13-4F29	59.90	186.85	126.95	2.69
West	Z13-4F33	155.62	320.23	164.61	1.93
West	Z11-4F1	329.90	542.92	213.02	1.47
East	Z13-4F45	55.48	330.25	274.77	5.85
East	Z13-4F10	48.34	341.56	293.22	5.37
East	Z13-4FM03	46.78	307.00	260.22	5.36
East	Z13-4FM01	45.59	304.33	258.74	5.40
East	Z13-4FM02	48.97	301.64	252.67	5.27
East	Z13-4F43	62.06	231.00	168.94	6.98
East	Z12-4F5	47.82	214.30	166.48	6.44
East	Z13-4F13	147.53	315.00	167.47	5.57
East	Z13-4F14	185.85	374.75	188.90	4.64
East	Z12-4F9	168.60	326.49	157.89	5.14
East	Z13-4F28	94.59	209.80	115.21	6.93
East	Z13-4F12	123.89	240.20	116.31	6.39
East	Z13-4F22	90.10	187.30	97.20	6.49
East	Z13-4F11	395.09	596.04	200.95	3.00
East	Z13-4F25	61.76	164.36	102.60	5.48
East	Z13-4F15	172.00	256.74	84.74	6.48
East	Z13-4FM01	383.00	512.22	129.22	4.16

10-5

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11 SAMPLE PREPARATION, ANALYSES AND SECURITY

Zenyatta uses industry standard sample preparation, analysis, data management, and security procedures. A total of 22,449 samples, including quality control (QC) samples from drill holes Z11-4F1 to Z13-4F57 and metallurgical holes Z13-4FM01 to Z13-4FM03, were submitted to ALS Group (ALS).

In summary, RPA concurs with the adequacy of the samples taken, the security of the storage and shipping procedures, the sample preparation, analytical procedures used, and data management practices.

SAMPLING METHOD AND APPROACH

Drill core was delivered twice daily via helicopter to Zenyatta's core logging facility located at the Eagle's Earth camp on Highway 11. Prior to sampling, the drill core was logged into an XLogger software database. Lithological names were standardized and drop down menus used to reduce data input errors. Core boxes were labelled with aluminum tags showing the drill hole number, box number, and from-to metres and photos of the core are taken with a digital camera. A Zenyatta geologist marked the sample intervals in the core box.

Most drill core was sampled using one metre intervals. Less than 10% was sampled at greater than 1.5 m. A four part sample book was used. All core samples were identified with a unique sample identification (ID) number tag: two sample tags were inserted in the plastic bag with the split core, one sample tag was affixed within the core box at the start of the sample run, and one remained in the sample book. The sample ID number was also written on the outside of each sealed sample bag with a permanent marker. The sample bags were zip tied and placed in groups of ten in larger rice bags. The rice bags were also sealed before being transported to the ALS Minerals facility in Thunder Bay, Ontario, by Zenyatta company employees. Shipping information was recorded and stored digitally.

Once the sampling was completed, both the sampled and unsampled core was stored sequentially in core racks at Zenyatta's core handling facility.



SAMPLE PREPARATION

ALS Minerals received the samples, verified them against the shipping documents, and logged them into their tracking system.

Preparation was carried out under ALS protocol PREP-31B. Each bagged core sample was dried, crushed to better than 70% passing 2 mm, and a 1,000 g split of the crushed material was pulverized to better than 85% passing 75 µm for assaying. Samples from the high grade graphite breccia were noted on the sample submittal sheet and ALS cleaned the crushers and pulverizers with barren material after every sample to avoid contamination. The sample pulps were then shipped to the ALS Minerals laboratory in Vancouver, British Columbia, for assay. Prior to June 3, 2013, ALS shipped the sample pulps to their laboratory in Brisbane, Australia, for assay. ALS Minerals has ISO 9001:2008 and ISO 17025 Accreditation as per the Standards Council of Canada at all of its global laboratories.

SAMPLE ANALYSIS

Samples were analyzed for graphitic carbon using ALS protocol C-IR18. A 0.1 g sample was leached with dilute hydrochloric acid to remove inorganic carbon (carbonate). After filtering, washing and drying, the remaining sample residue was roasted at 425°C to remove any organic carbon. The roasted residue was finally analyzed for graphitic carbon using a high temperature LECO furnace with infra-red (IR) detection. Sulphur dioxide released from the sample was also measured by IR detection and the total sulphur result was provided following ALS protocol S-IR 08.

The drill core samples taken in 2011 and 2012 from holes Z11-4F1, Z12-4F2, and Z12-4F3 were shipped to Activation Laboratories Ltd. (Actlabs) in Thunder Bay for preparation and analysis for total carbon by combustion and IR analysis (Actlabs protocol 4F-C). The sample pulps, some reject material and split core were re-assayed by ALS for graphitic carbon and sulphur in 2013 and the database was updated accordingly.

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.

The QA/QC program exceeds industry standards. From an early stage, Zenyatta has implemented a comprehensive QC program that includes blanks, CRMs, duplicates, and check samples. Moreover, a QA monitoring system is used to detect failed batches and identify samples and/or sample batches for follow-up and reanalysis.

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. Zenyatta 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 (S): ZEN-1, ZEN-2, ZEN-3, and ZEN-4. Table 11-1 lists the mean and standard deviation for each CRM. A total of 1,134 CRMs were inserted with the 22,932 regular core samples submitted by Zenyatta to ALS, for a rate of approximately 1 in 20 samples.

TABLE 11-1 EXPECTED VALUES FOR CUSTOM CRMS
Zenyatta Ventures Ltd. - Albany Graphite Deposit

CRM ID	Cg	(%)	S (%)		
	Mean	Std. Dev.	Mean	Std. Dev.	
ZEN-1	0.91	0.045	0.316	0.025	
ZEN-2	3.13	0.125	0.374	0.018	
ZEN-3	7.42	0.415	0.305	0.017	
ZEN-4	14.12	0.99	0.306	0.016	

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 CRM assay results are illustrated in Figure 11-1 and data are summarized in Table 11-2.





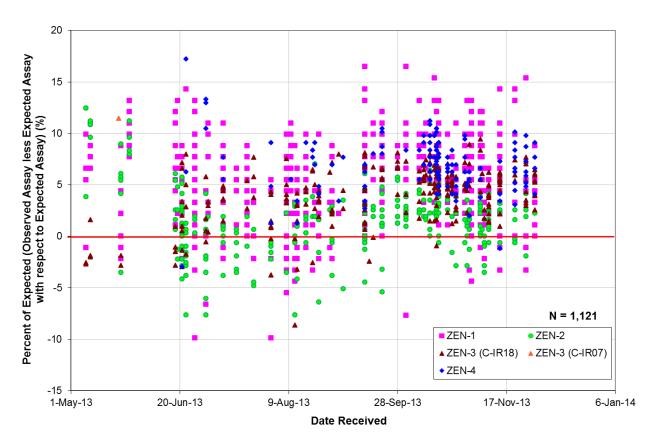


TABLE 11-2 SUMMARY OF CRM RESULTS Zenyatta Ventures Ltd. - Albany Graphite Deposit

CRM No.		Expected Cg (%)		Observe	ed Cg (%)	% of	Mislabels
CRIVI	No.	Average	Std. Dev.	Average	Std. Dev.	Expected	Misiabeis
ZEN-1	489	0.91	0.045	0.96	0.04	105.3	4
ZEN-2	272	3.13	0.125	3.18	0.10	101.4	7
ZEN-3	243	7.42	0.415	7.71	0.21	103.9	1
ZEN-4	130	14.12	0.99	15.08	0.39	106.8	2
Total	1,134		*-Weighte	104.2*	14		

Fourteen cases were identified where either the CRM code was recorded incorrectly or there was a sample mix-up with an adjacent sample. Two CRMs (representing <1% of the submitted CRMs) where identified as QC failures based on sulphur results. As sulphur is of secondary interest, Zenyatta chose not to re-assay results based on these failures.

Figure 11-1 and Table 11-2 suggest that results may be biased high for three of the four CRMs. Additional discussion on this potential bias is provided below in the subsection titled



Assay Check Samples. Overall, the average results are generally within ±10% and RPA considers the CRM results acceptable, but recommends that the expected values for the inhouse CRMs be re-evaluated prior to the next drilling campaign.

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 detection limit of 0.02% Cg. The matrix of the blank sample should be similar to the matrix of the material being routinely analyzed.

A blank consisting of coarse-grained granite was purchased from Analytical Solutions Ltd., Toronto. A total of 1,128 blanks were submitted with the 22,932 field and QC samples for an insertion rate of about 5%, or approximately 1 in 20 samples. Blank assay results are plotted in Figure 11-2, and statistics are listed in Table 11-3. Based on these results, there is no evidence of systematic sample contamination.



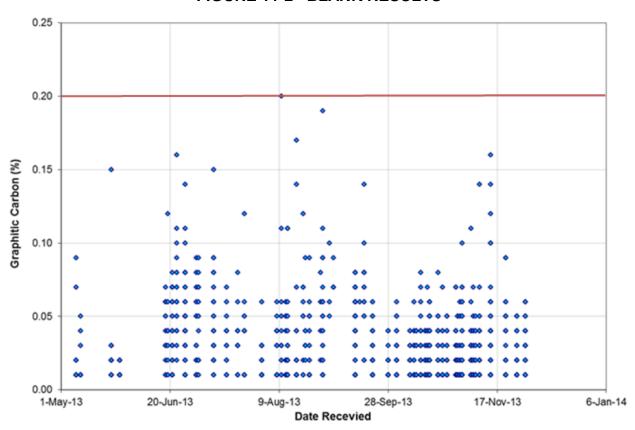


FIGURE 11-2 BLANK RESULTS

TABLE 11-3 SUMMARY OF BLANK RESULTS Zenyatta Ventures Ltd. - Albany Graphite Deposit

Criteria	Cg	S
No. of Cases	1,128	1,128
Minimum (%)	0.010	0.030
Maximum (%)	0.200	0.160
Arithmetic Mean (%)	0.030	0.110
Standard Deviation (%)	0.026	0.020
No. of Mislabelled Samples	1	1
No. of Failures	2	1

DUPLICATES

Field duplicates assess the variability introduced by sampling the same drill core interval. The duplicate splits are bagged separately with separate sample numbers so as 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. They are also a check on possible sample over selection, that is, the sampler has either



purposely or inadvertently sampled the drill core so as to preferentially place visible mineralization in the sample bag sent for analysis.

Coarse duplicates (or coarse reject duplicates) are duplicate samples taken immediately after the first crushing and splitting step. At Zenyatta's request, the coarse duplicates pairs were created by splitting the crushed sample in two equal parts. The coarse duplicates will inform about the subsampling precision, that is, they report the errors due to sample size reduction after crushing, and the errors associated with weighing and analysis of the pulp. In order to ensure repeatability conditions, both the original and the coarse duplicate samples should be submitted to the primary laboratory, in the same sample batch and under a different sample number, so that pulverization and assaying follow the same procedure.

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. In order 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.

Zenyatta incorporated core, reject, and pulp duplicates into the sample stream. Results are summarized below.

DRILL CORE DUPLICATES

Drill core duplicates consist of two quarter core samples; the other half of the drill core is left in the box. RPA recommends that Zenyatta instead submit two half core samples instead of quarter core, to maintain a consistent sample size.

Ninety-four pairs of drill core duplicate samples were submitted for analysis. The original and duplicate sample assay results are plotted in Figure 11-3 and statistics are summarized in Table 11-4. Results confirm that there has been no bias introduced by preferentially submitting the more mineralized half of the core for assay.





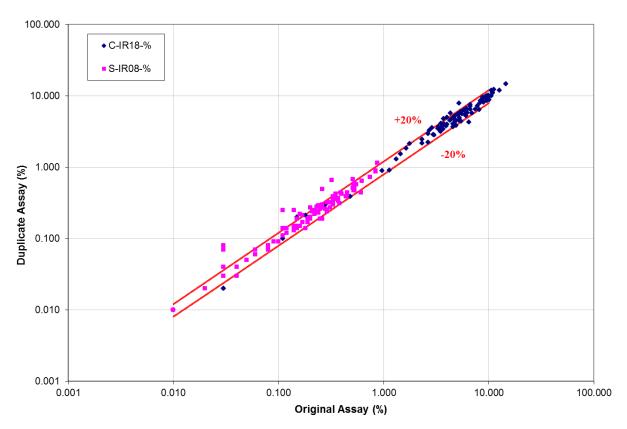


TABLE 11-4 DRILL CORE DUPLICATE RESULTS
Zenyatta Ventures Ltd. - Albany Graphite Deposit

Element (units)	Criteria	No.	Original > Duplicate	Original < Duplicate	Original = Duplicate
	all	94	46	47	1
C~ (0/)	samples	94	49%	50%	1%
Cg (%)		04	44	47	0
	> 5 x DL*	91	48%	52%	0%
	all	94	28	45	21
C (0/)	samples		30%	48%	22%
S (%)	. E v DI *	0.5	27	43	15
	> 5 x DL*	85	32%	50%	18%

^{*}Detection Limit



REJECT DUPLICATES

A total of 992 pairs of reject duplicate samples were submitted for analysis. The original and duplicate sample assay results are plotted in Figure 11-4 and statistics are summarized in Table 11-5.

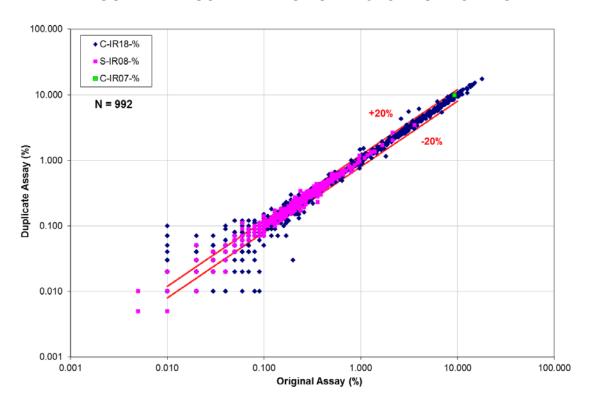


FIGURE 11-4 SCATTERPLOT OF REJECT DUPLICATES

TABLE 11-5 SUMMARY OF REJECT DUPLICATE RESULTS

Zenyatta Ventures Ltd. - Albany Graphite Deposit

Element (units)	Criteria	No.	Original > Duplicate	Original < Duplicate	Original = Duplicate
	all	992	414	426	152
Ca (9/)	samples	992	42%	43%	15%
Cg (%)	> 5 x DL*	679	319	311	49
	> 3 X DL	679	47%	46%	7%
	all	992	310	286	396
C (0/)	samples	992	31%	29%	40%
S (%) > 5 x DL*		795	275	259	261
	> 3 X DL	795	35%	32%	33%

^{*}Detection Limit



One case was identified where the difference between reject duplicates was greater than ±100% and average assays were greater than 0.1% Cg.

It is RPA's opinion that there is no bias evident between original and duplicate halves of the drill core. That is, there has been no selection bias introduced.

LABORATORY PULP DUPLICATES

A total of 953 pairs of laboratory pulp duplicate samples were assayed for graphitic carbon and 809 for sulphur. The original and duplicate sample assay results are plotted in Figure 11-5 and statistics are summarized in Table 11-6.

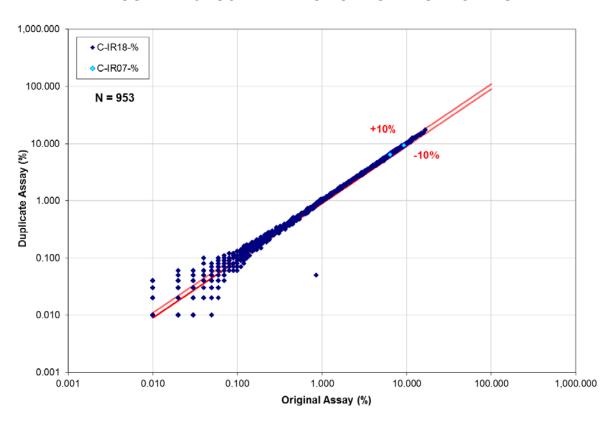


FIGURE 11-5 SCATTERPLOT OF PULP DUPLICATES

It is RPA's opinion that laboratory reproducibility of assays on the same pulp and at the same laboratory fall within the expected ranges. Overall, the precision for the field, reject, and pulp duplicates is very good. Most duplicates are well within ±10% to ±20%.



ASSAY CHECK SAMPLES

Check samples consist of second splits of the final prepared pulverized samples routinely analyzed by the primary laboratory and re-submitted to a secondary laboratory under a different sample number. These samples are used to assess the assay accuracy of the primary laboratory relative to the secondary laboratory.

Zenyatta's QA/QC protocol calls for check samples to be taken at a rate of approximately 3% (1 in every 35 to 40 samples) and submitted to a secondary laboratory. RPA received the results for 555 check samples, which covered the entire Albany drilling campaign to date. Zenyatta used ISO/IEC 17025 accredited SGS Mineral Services in Lakefield, Ontario (SGS), as the secondary laboratory.

SGS employed the following methods:

- Carbon: graphitic carbon by LECO furnace/IR (GE CSA05V), with a 0.01% detection limit, and
- Sulphur: total sulphur by LECO furnace/IR (GE CSA06V), with a 0.005% detection limit.

Along with the 555 check samples submitted to SGS, Zenyatta inserted 22 blanks and 22 CRMs. No blank failures were identified, although a mislabelled sample was noted. Four QC failures and a mislabelled sample were identified from the submitted CRMs. All four failed for graphitic carbon and one failed for both graphitic carbon and sulphur. Zenyatta requested re-assaying for the failures, including four samples that preceded and five samples that followed these failures. The four CRM repeat assays reported within ±20% of the expected value, but were biased low for both graphitic carbon (-12.26%) and sulphur (-2.86%).

Graphitic carbon check assays results are plotted on a scatterplot in Figure 11-6.





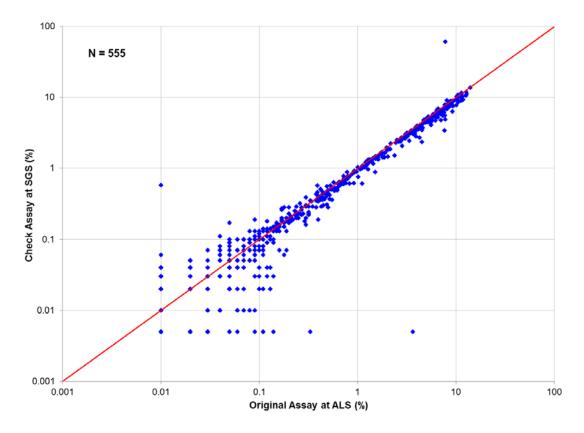


Table 11-6 summarizes the check assay pair results, highlighting the relative differences between the primary and secondary laboratories. There should be a near equal number of cases where one laboratory reports higher than the other, and vice versa. For the 391 samples with graphitic carbon concentrations greater than five times detection limit, there are 329 cases where ALS assays are higher than SGS assays and 53 cases where SGS assays are higher than ALS assays. Sulphur is equally distributed between the two laboratories



TABLE 11-6 CHECK SAMPLE ASSAY RESULTS
Zenyatta Ventures Ltd. - Albany Graphite Deposit

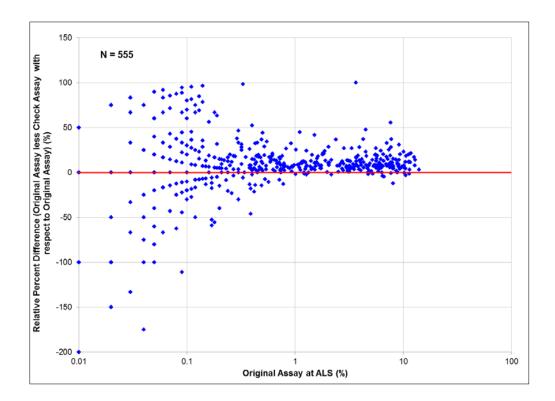
Element	Criteria	No.	ALS > SGS	ALS < SGS	ALS = SGS	Average Difference (%)
	all	555	414	120	21	-6.16%
O~ (0/)	samples	555	74%	22%	4%	-0.10%
Cg (%)	. F. D. *	204	329	53	9	9.73%
	> 5 x DL*	391	84%	14%	2%	
	all		184	217	154	0.070/
C (0/)	samples	555	33%	39%	28%	-6.37%
S (%)	. F., DI *	457	167	175	115	0.420/
	> 5 x DL*	457	37%	38%	25%	-0.13%

^{*}Detection Limit

For check assay samples greater than five times detection limit, the average Relative Percent Difference (RPD) was 9.7%, indicating that ALS assays are biased high by 9.7% when compared to the SGS assays. In Figure 11-7, graphitic carbon results from ALS are plotted with the RPD of the check assay pair as the vertical scale to illustrate precision as it relates to grade.



FIGURE 11-7 GRADE VERSUS RPD OF CHECK SAMPLES SENT TO SGS



It should be noted, however, that SGS, on average, reported 7.3% low on CRM samples, implying that the two sets of assays are, in fact, comparable.

Three check samples returned assays that differed by more than 100%: one sample for Cg only, one sample for S only, and one sample for both Cg and S. A clerical error is the likely source of the Cg only assay error.

Results of the check sampling for the Albany drilling program to date has highlighted a potential high bias in the primary laboratory (ALS) assays of graphitic carbon. Zenyatta's check assay QC program, however, also suggests a low bias in the secondary laboratory (SGS) assays of graphitic carbon. It is RPA's opinion that Zenyatta's program of check sampling is rigorous, but RPA suggests that Zenyatta further investigate the potential of a high bias in the analytical method employed by the primary laboratory, ALS.



SAMPLE SECURITY

Drill core is delivered directly to Zenyatta's core handling facility. After logging, sawing, and bagging, core samples for analysis are stored in a secure building at the same facility. The warehouse is either locked or under direct supervision of the geological staff. Prior to shipping, drill core samples are placed in large rice bags and sealed. A sample transmittal form is prepared that identifies each batch of samples. The samples are transported directly to the ALS Minerals facility in Thunder Bay, Ontario, for sample preparation. ALS forwards sample pulps to its laboratory facility in North Vancouver, British Columbia, Canada, for analysis. Analytical results are emailed to Zenyatta staff for review and importation into the resource database.



12 DATA VERIFICATION

RPA reviewed and verified the resource database used to estimate the Mineral Resources for the Albany graphite deposit. The verification works included a review of the QA/QC methods and results, checking assay certificates against the database assay table, a site visit and review of drill core, standard database validation tests, and independent sampling of drill core. The review of the QA/QC program and results is presented in Section 11, Sample Preparation, Analyses and Security.

RPA considers the resource database reliable and appropriate to prepare a Mineral Resource estimate.

MANUAL DATABASE VERIFICATION

The review of the resource database included header, survey, lithology, assay, and specific gravity tables. Database verification was performed using tools provided within the Dassault Systèmes GEOVIA GEMS Version 6.6 software package (GEMS). As well, the assay and density tables were reviewed for outliers. A visual check on the drill hole GEMS collar elevations and drill hole traces was completed. Minor inconsistencies were noted and promptly corrected by Zenyatta.

RPA verified thousands of assay records. This included comparison of 18,444 assays and 782 specific gravity results in the resource database to the digital laboratory certificates of analysis, which were received directly from ALS. No discrepancies were found.

RPA SITE VISIT

David Ross, P.Geo., RPA Director of Resource Estimation, Principal Geologist and an independent Qualified Person (QP), visited the Property on July 12 and 13, 2013. During the visit, Mr. Ross verified the collar locations of drill holes Z12-4F-3, Z12-4F-4, Z12-4F-9, Z13-4F-11, Z13-4F-19, and Z13-4F-30. Core from the following drill holes were reviewed:

• East Pipe: Z13-4F-11, Z13-4F-20, and Z13-4F-13.



West Pipe: Z11-4F-1, Z12-4F-6, Z13-4F-26, Z13-4F-27, and Z13-4F-30.

INDEPENDENT DRILL CORE SAMPLING

Four samples of split core were marked and quarter core duplicate samples were cut under the supervision of Mr. Ross. Duplicate samples were selected on the basis of graphitic carbon assays in Zenyatta's drill logs. In addition, Mr. Ross obtained a sample of Zenyatta's blank material and certified reference material (CRM) ZEN-2 for confirmation analyses.

The selected samples were bagged, tagged, sealed, and submitted to ALS's Thunder Bay laboratory for preparation. Each bagged core sample was dried, crushed, and pulverized to better than 85% passing 75 µm following ALS protocol PREP-31B (see Section 11). The sample pulps were forwarded to ALS's Vancouver, British Columbia facility for assay. Graphite assays were obtained using the graphitic carbon by LECO method (ALS protocol C-IR18, see Section 11).

Table 12-1 lists those samples taken for duplicate analysis. Four duplicate samples are insufficient to make statistical comparisons; however, RPA's sampling confirms that significant graphitic carbon mineralization exists on the Albany graphite deposit.

TABLE 12-1 RPA CHECK SAMPLE SUMMARY Zenyatta Ventures Ltd. - Albany Graphite Deposit

Drill Hole	From	То	Pipe	Zenyatta Sa	mpling	RPA Sam	pling
Dilli Hole	(m)	(m)	ripe	Sample ID	Cg (%)	Sample ID	Cg (%)
Z13-4F20	80	81	East	N471445	6.63	215601	6.99
Z13-4F20	81	82	East	N471446	4.69	215602	5.58
Z13-4F13	263	264	East	N468507	7.26	215603	9.96
Z13-4F11	470	471	East	N473130	8.67	215604	8.23
Blank	-	-	-	BLANK	0.00	215605	0.02
Standard	-	-	-	ZEN-2	3.13	215606	3.26



13 MINERAL PROCESSING AND METALLURGICAL TESTING

In early 2013, Zenyatta retained SGS Canada Inc. (SGS Lakefield) to test two hydrometallurgical processing options to purify graphite from a flotation concentrate. Lakefield tested a H_2SO_4 leach and a caustic baking process. Although both processes successfully purified the concentrate to 99.9% carbon or better, Lakefield recommended that the caustic baking process be pursued due to several issues with the H_2SO_4 leach including: high HF consumption, waste water production, and the requirement of two leaches to reach the high purity level.

The initial bench-scale tests demonstrated that the caustic baking process could produce ultra-high purity graphite product with 99.97% carbon. The process was successfully applied to a variety of graphite concentrate samples that had initial carbon grades between 46% and 90% using conventional flotation techniques. Different particle sizes were also tested. In all trials, the final purity values were over 99.97% carbon and up to 99.99% carbon in many cases, regardless of initial concentrate grades. The graphite purification process is effective across a wide range of initial concentrate grades and particle sizes, producing ultra-high purity graphite with good recoveries (Zenyatta News Release of April 25, 2013).

In September 2013, Zenyatta shipped a 5,546.8 kg sample from the East Pipe to Lakefield. The sample was composited from HQ size core from holes drilled specifically for the testwork. A 4,623.4 kg sample from the West pipe was shipped in November 2013. Testwork is scheduled to begin in January 2014 with results available in March 2014.

The primary objectives of the current work at Lakefield are to generate data regarding the concentration process for engineering design, produce concentrates and tailings for downstream characterization and testing, further develop the purification process, and generate bulk samples of the high purity products.



14 MINERAL RESOURCE ESTIMATE

SUMMARY

RPA estimated Mineral Resources for the Albany graphite deposit (Table 14-1) using drill hole data available as of November 15, 2013. The Mineral Resource estimate is based on a potential open pit mining scenario. RPA estimates Indicated Mineral Resources to total 25.1 million tonnes (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 are reported at a cut-off grade of 0.6% Cg. There are no Mineral Reserves estimated on the Property.

TABLE 14-1 MINERAL RESOURCE ESTIMATE - NOVEMBER 15, 2013
Zenyatta Ventures Ltd. - Albany Graphite Deposit

	Tonnage	Grade	Contained Graphitic Carbon
	(Mt)	(% Cg)	(t Cg)
Indicated			
East Pipe and Halo	10.0	5.60	560,000
West Pipe	15.1	2.76	417,000
Total Indicated	25.1	3.89	977,000
Inferred			
East Pipe and Halo	7.6	2.04	155,000
West Pipe	12.5	2.29	286,000
Total Inferred	20.1	2.20	441,000

Notes:

- 1. CIM definitions were followed for Mineral Resources.
- 2. Cg graphitic carbon
- 3. Mineral Resources are estimated at a cut-off grade of 0.6% Cg.
- 4. Mineral Resources are estimated using a long-term price of US\$8,500 per tonne Cg, and a US\$/C\$ exchange rate of 1.0.
- 5. Bulk density is 2.6 t/m³ in the pipes and 2.65 t/m³ in the halo of the East Pipe.
- 6. Mineral Resources are constrained by a preliminary pit-shell generated in Whittle software.
- 7. Numbers may not add due to rounding.



RESOURCE DATABASE

RPA received data from Zenyatta in Microsoft Excel format. Data were amalgamated and parsed as required and imported into GEMS for modelling. Listed below is the number of records directly related to the resource estimate:

Holes: 63Surveys: 5,060Assays: 19,078

Composites
 7,925 (>0.5 m in length)

Lithology: 1,952Full zone width composites: 214Density measurements: 812

Assays for metallurgical drill holes Z13-4FM04, Z13-4F05, and Z13-4FM06 were not received by the database cut-off date and were used only for geological interpretation and wireframing.

Section 12, Data Verification, describes the verification steps made by RPA. In summary, no discrepancies were identified and RPA is of the opinion that the GEMS drill hole database is valid and suitable to estimate Mineral Resources for the Albany graphite deposit.

GEOLOGICAL INTERPRETATION AND 3D SOLIDS

Wireframe models of the mineralized zones were built to study geological and grade continuity and to constrain the block model interpretation.

RPA created northeast and northwest looking vertical sections spaced 50 m apart on the West and East Pipes, respectively, level plans spaced 10 m, 25 m, and 50 m apart, and longitudinal sections parallel to the strike of each pipe (approximate azimuth of 020° for the West Pipe and 335° for the East Pipe). Mineralized zones were interpreted on plan sections and snapped to drill holes to generate a set of 3D wobbly polylines on each cross-section (Figure 14-1). At model extremities, polylines were extrapolated approximately 100 m beyond the last drill section. Polylines were joined together in 3D using tie lines and the continuity was checked using the longitudinal and vertical sections. Once the mineralized wireframes were triangulated, clipping boundaries were used to constrain the solids along strike using EM geophysical survey data (Figure 14-2). The East Pipe mineralized



wireframes were clipped to a depth of -500 MASL and the West Pipe to -400 MASL (Figure 14-2).

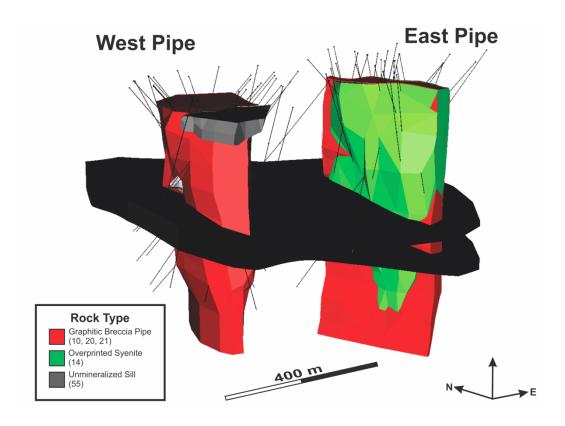
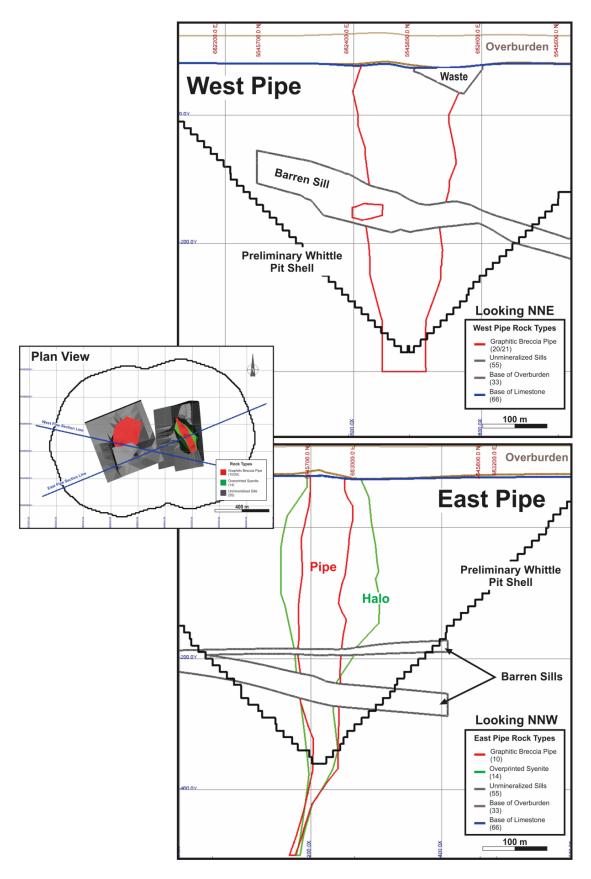


FIGURE 14-1 3D VIEW OF WIREFRAME MODELS

The Albany graphite deposit comprises two separate pipes, West and East. The West Pipe consists of a single mineralized zone, which encompasses graphitic breccia and some lower grade graphitic overprint in some marginal areas. The East Pipe consists of two mineralized zones: graphitic breccia and a low grade halo (Figure 14-1). The West and East graphitic breccia pipes were interpreted using geology. The low grade halo was constructed considering geology and a minimum 0.4% Cg in the overprinted zones. Wireframes were extended through drill holes with low grade or barren intersections to preserve continuity. A description of each modelled zone follows.



FIGURE 14-2 VERTICAL CROSS SECTION OF WIREFRAME MODELS





ROCK TYPE 20 – WEST PIPE

Rock type 20 is a graphitic breccia pipe intersected by 29 drill holes. It occurs as a steep-sided, inverted cone, narrowing with depth. It is elliptical, but somewhat irregular, in plan, elongated in a north-northeast direction. Dimensions are somewhat variable, ranging from 175 m at its widest, to less than 68 m at its base (Figure 14-3). Where the pipe is capped by Paleozoic limestone it is 160 m wide by 350 m long and the pipe is modelled to a depth of approximately 525 m below surface (-400 MASL).

The West Pipe is cut by a late stage barren sill at a depth of approximately 200 m. The sill ranges from 40 m to nearly 65 m in thickness. In addition, two large blocks of unmineralized waste material occur within the West Pipe. In the southern part of the pipe apex, a large slab of syenite (65 m in length by 40 m in thickness, see Figure 14-3) has been intersected by several drill holes, and just above the barren sill another large block of internal waste has been modelled (approximately 110 m x 60 m x 90 m). At the margins of the pipe, some graphitic overprint has been incorporated into the wireframe model.

ROCK TYPE 21 – WEST PIPE MINERALIZED WEDGE

Within the barren sill of the West Pipe, a small (approximately 25 m x 50 m) "wedge" of mineralization has been modelled. It occurs in the western part of the pipe, at a depth of approximately 215 m. Samples within this mineralized wedge have returned assays higher than 5% Cg, and the average grade is 1.7% Cg.

ROCK TYPE 10 – EAST PIPE

Rock type 10 is a graphitic breccia pipe intersected by 31 drill holes. It occurs as a near-vertical tabular body, ranging from a width of 50 m at its apex to nearly 75 m, and tapers to a modelled width of approximately ten metres. The pipe is modelled to a depth of -500 MASL, or approximately 625 m below the topographic surface. In plan, the East Pipe is elongated in a north-northwest direction, extending for approximately 250 m. The pipe is cut by two late stage barren sills. The thinnest and shallowest is intersected in drill holes at a depth of roughly 310 m and ranges from 10 m to 12 m in thickness. The second, thicker sill, is intersected at a depth of approximately 340 m to 345 m, and averages 35 m thick.

ROCK TYPE 14 - EAST PIPE MINERALIZED HALO

Rock type 14 is a 0.4% Cg halo of overprinted syenite country rock surrounding the East Pipe. Grades range to over 16% Cg, but overall the grade averages 0.7% Cg. In general, there is a significant drop in grade at the contact between the graphitic breccia of rock type



10 and the overprinted syenite. Minor intersections of higher grade graphite breccia occur within the overprinted syenite.

At surface, the East Pipe, including the graphitic breccia and overprinted syenite, has an average width of approximately 80 m and reaches widths of up to 150 m. On its own, the low grade halo (above the barren sills) ranges in thickness from 30 m to 60 m and it is thicker on the eastern side of the pipe. Beneath the barren sills, there only remains a thin skin of overprinted syenite on the western side of the pipe, averaging about five metres in thickness. The overprinted syenite halo is modelled to the same depth as the East Pipe graphitic breccia.

ROCK TYPE 55 – BARREN SILL

All barren intrusive rocks within the West and East pipes are designated as rock type 55.

The West Pipe is cut by a sub-horizontal barren sill at a depth of approximately 250 m that dips approximately 10° to 15° to the east. Its thickness ranges from less than 40 m to greater than 60 m. There is a minor amount of graphitic mineralization within the sill, and where sufficient continuity was demonstrated, a small wedge of mineralization (rock type 21) was modelled. Two fairly substantial blocks of barren intrusive rock (predominantly syenite) have been modelled in the West Pipe. At the top of the pipe, a 40 m by 100 m unmineralized zone of syenite has been delineated and just above the barren sill is an irregular-shaped block of internal waste that measures approximately 100 m by 90 m.

The East Pipe is cut by two barren sills. The upper sill, intersected at a depth of approximately 310 m, ranges from 10 m to 12 m in thickness and is nearly horizontal. A second, wider (35 m thick) sill is intersected 40 m below the upper unit and has a shallow dip to the east. The sills that cut both pipes are likely part of the same body.

RPA created 3D wireframes to represent barren sills that cut the graphite breccia pipes. In addition, a large block of barren material was wireframed in the West Pipe and designated as waste material.

Wireframes for the base of the overburden and Paleozoic sedimentary unit were generated utilizing Leapfrog software and imported into GEMS. The topographic surface was



constructed in GEMS using drill collar elevation data. The West and East Pipe mineralized wireframes were constrained by the base of the sedimentary unit.

Table 14-2 summarizes the rock types in the Albany Graphite Deposit.

TABLE 14-2 ALBANY RESOURCE ROCK TYPES Zenyatta Ventures Ltd. - Albany Graphite Deposit

Pipe	Rock type	Name	Description
East	10	10_EAST	East Graphitic Breccia Pipe
	14	10.4_EAST	Low grade graphitic overprint halo
	55	WASTE1	Barren sill
	55	WASTE2	Barren sill
West	20	20_WEST	Graphitic Breccia Pipe minor graphitic overprint along margins
	21	21_WEST	Graphitic Breccia "Wedge" within barren sill
	55	WASTE3	Barren sill
	55	WASTE4	Internal barren waste
	55	WASTE5	Barren syenite in the top of the pipe
Other	33	Overburden	Glacial till
	66	Sedimentary Rock	Paleozoic Limestone unit
	99	Country Rock Waste	Archean country rock

RPA notes that there is additional mineralization in assays outside the mineralized wireframes in the West and East pipes well above the cut-off grade of 0.6% Cg. It is RPA's opinion that the narrower thickness and lower grade of these intercepts together with intervening material that is below cut-off grade precludes the inclusion of the intercepts as Mineral Resources at this time.

The Indicated Mineral Resources are located in the West and East Pipe graphitic breccia (rock types 10 and 20), exclusively above the barren sills. All mineralization below (or within) the barren sills as well as the East Pipe low grade halo (rock type 14) are classified entirely as Inferred Mineral Resources.



STATISTICAL ANALYSIS

Assay values located inside the wireframe models were tagged with domain identifiers (rock type) and exported for statistical analysis. Results assisted in verifying the modelling process. Basic statistics are summarized in Table 14-3.

TABLE 14-3 SUMMARY STATISTICS OF RESOURCE ASSAY VALUES
Zenyatta Ventures Ltd. - Albany Graphite Deposit

	Length (m)	Cg (%)
East Pipe - F	Rock Type 10	
No. of Cases	4,695	4,695
Minimum	0.05	0.02
Maximum	3.02	20.80
Median	1.00	5.18
Arithmetic Mean	1.01	5.18
Length Weighted Mean		5.17
Standard Deviation	0.25	3.89
Coefficient of Variation	0.25	0.75
East Pipe Halo	- Rock Type 14	
No. of Cases	1,642	1,642
Minimum	0.24	0.02
Maximum	4.00	16.25
Median	1.00	0.40
Arithmetic Mean	1.08	0.71
Length Weighted Mean		0.69
Standard Deviation	0.44	1.08
Coefficient of Variation	0.41	1.53
West Pipe - F	Rock Type 20	
No. of Cases	4,821	4,821
Minimum	0.22	0.02
Maximum	3.19	14.65
Median	1.00	2.25
Arithmetic Mean	1.01	2.70
Length Weighted Mean		2.66
Standard Deviation	0.25	2.39
Coefficient of Variation	0.25	0.89
West Pipe Wedg	e - Rock Type 21	
No. of Cases	83	83
Minimum	0.26	0.02
Maximum	1.38	5.23
Median	0.99	1.20
Arithmetic Mean	0.84	1.70
Length Weighted Mean		1.71
Standard Deviation	0.26	1.46
Coefficient of Variation	0.31	0.86



CUTTING HIGH GRADE VALUES

Where the assay distribution is skewed positively or approaches lognormal, erratic high grade assay values can have a disproportionate effect on the average grade of a deposit. One method of treating these outliers in order to reduce their influence on the average grade is to cut or cap them at a specific grade level.

In the absence of production data to calibrate the cutting level, inspection of the assay distribution can be used to estimate a first pass cutting level. Figures 14-3 and 14-4 show the histogram and cumulative frequency log probability plot of Cg assays within the mineralized zone wireframes. Figure 14-5 shows the percentage of Cg loss with average cut grades.

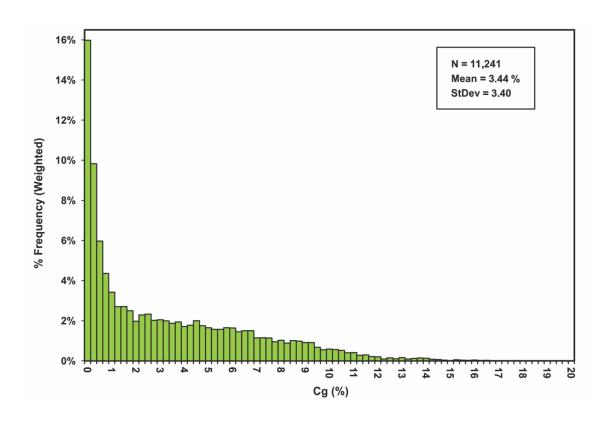
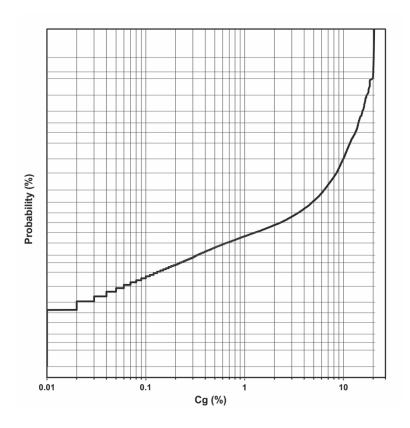


FIGURE 14-3 HISTOGRAM OF RESOURCE ASSAYS



FIGURE 14-4 CUMULATIVE FREQUENCY LOG PROBABILITY PLOT





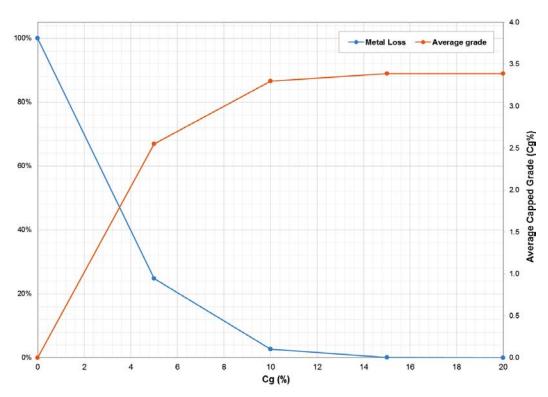


FIGURE 14-5 PERCENT GRAPHITE LOSS AND AVERAGE CUT GRADES

Review of the resource assay histograms within the wireframe domains (Figure 14-3), cumulative probability plots (Figure 14-4), and Cg loss with cutting (Figure 14-5) suggests that no cutting of high grades is required for the Albany graphite deposit. Additionally, the coefficients of variation (CV) of the assays (Table 14-2) are mostly less than one, another indication that cutting is unnecessary.

COMPOSITING

Sample lengths range from five centimetres to four metres within the wireframe models. Two-thirds (67%) of samples were taken at one metre intervals (Figure 14-6). Approximately 1.25% have sample lengths greater than two metres. Given these distributions and considering the width of mineralization, RPA chose to composite to two metre lengths. The resource assays were composited starting at the first mineralized wireframe boundary from the collar and resetting at each new wireframe boundary. Composites less than 0.5 m were removed from the database for resource estimation, but were used for variography.



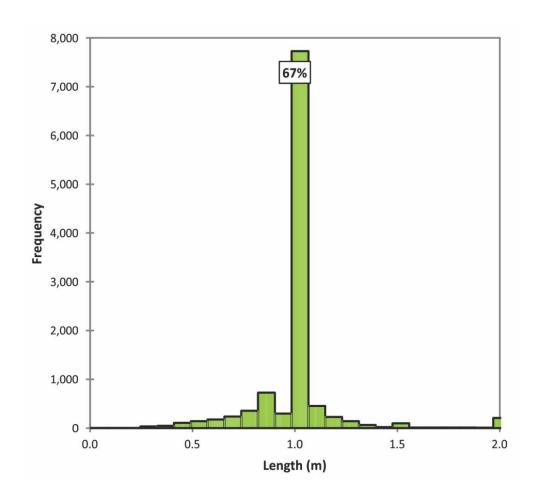
Table 14-4 summarizes the composite statistics. When compared to Table 14-3, the average grades are essentially the same and the CV values have been reduced.

TABLE 14-4 SUMMARY STATISTICS OF RESOURCE COMPOSITES

Zenyatta Ventures Ltd. - Albany Graphite Deposit

Domain	East Pipe	East Pipe Halo	West Pipe	West Pipe Wedge
Rock Type	10	14	20	21
No. of Cases	2,382	891	2,617	36
Minimum (Cg %)	0.02	0.02	-	0.27
Maximum (Cg %)	14.99	9.08	10.36	3.99
Median (Cg %)	5.37	0.46	2.29	1.72
Arithmetic Mean (Cg %)	5.16	0.69	2.59	1.71
Standard Deviation (Cg %)	3.18	0.79	2.04	1.09
Coefficient of Variation	0.62	1.16	0.79	0.64

FIGURE 14-6 HISTOGRAM OF SAMPLE LENGTHS





VARIOGRAPHY AND KRIGING PARAMETERS

RPA used the GEMS 6.5 geostatistics module to prepare a series of variograms from Cg composite values located within the mineralized wireframes. The downhole variogram was well developed and indicates a nugget effect of 25% and 29% for the West and East pipes respectively. Variograms were attempted in a variety of directions and indicated that the longest ranges were 100 m for the West and 76 m for the East Pipe. A single structure spherical model was used with a 25% nugget effect to model the West Pipe experimental variograms and a spherical model using two structures with a 29% nugget effect was applied to the East Pipe. The variograms for the West and East pipes are shown in Figures 14-7 and 14-8, respectively.

A two-pass approach was used to interpolate block grades for both pipes, and no holes located outside the mineralized zone wireframes were used to interpolate block grades. The search ellipses are illustrated in Figures 14-9 and 14-10, and the ranges varied by pipe (Table 14-5). For the West Pipe, the search ellipse was ovoid in the vertical (XY) plane, using an X and Y search distance of 76 m and 58 m, and 36 m in the Z direction (Figure 14-8). The second pass used X and Y search distances of 152 m and 116 m and 72 m in the Z direction (Figure 14-9). For the East Pipe, the search ellipse was isotropic in the vertical (XY) plane, using an X and Y search distance of 100 m and a search distance of 35 m in the Z direction (Figure 14-10). The second pass used an X and Y search distance of 200 m and a search distance of 70 m in the Z direction (Figure 14-10).

The wireframe mineralized zone shells were used as hard boundaries to prevent the use of composites outside of the zones. The first pass search was limited to a minimum of four and a maximum of twelve composites per block estimate with a maximum of three composites per drill hole. The second pass search allowed an estimate with a minimum of two composites per block, a maximum of 24, and no limit placed on the number of composited used per drill hole.





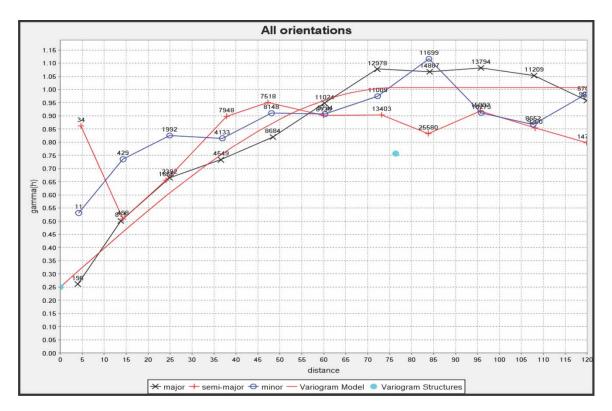


FIGURE 14-8 EAST PIPE 3D VARIOGRAMS

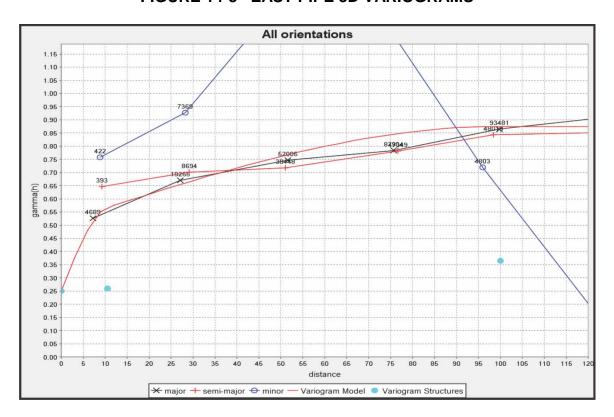




FIGURE 14-9 WEST PIPE INTERPOLATION SEARCH ELLIPSOIDS:

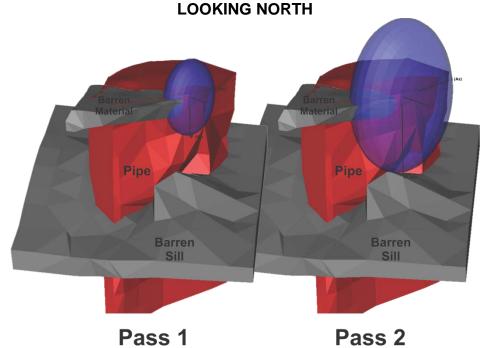


FIGURE 14-10 EAST PIPE INTERPOLATION SEARCH ELLIPSOIDS: LOOKING NORTH

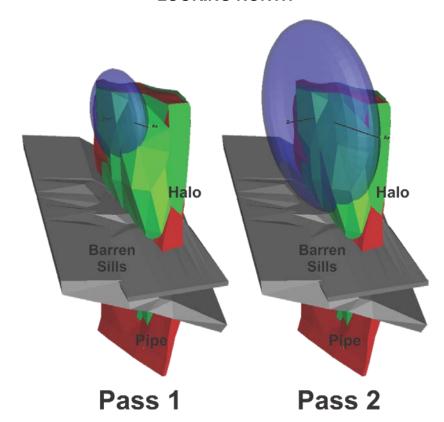




TABLE 14-5 BLOCK ESTIMATE ESTIMATION PARAMETERS
Zenyatta Ventures Ltd. - Albany Graphite Deposit

Parameter			West	Pipe	East	Pipe
	Rock Type		20	21	10	14
	Method		OK	OK	OK	OK
	Boundary Type		Hard	Hard	Hard	Hard
	Min No Compo	Pass 1	4	4	4	4
	Min. No. Comps.	Pass 2	2	2	2	2
	Max. No. Comps.	Pass 1	12	12	12	12
	iviax. No. Comps.	Pass 2	24	24	24	24
	Max. Comps. Per Drill Hole	Pass 1	3	3	3	3
	wax. Comps. Fer Drill Hole	Pass 2	NA	NA	NA	NA
	Principal Azimuth		245	245	290	290
Search Anisotropy	Principal Dip		-90	-90	-90	-90
	Int. Azimuth		155	155	20	20
	Danga V (m)	Pass 1	76	76	100	100
	Range X (m)	Pass 2	152	152	200	200
Socrah Ellipso	Danga V (m)	Pass 1	58	58	100	100
Search Ellipse	Range Y (m)	Pass 2	116	116	200	200
	Panga 7 (m)	Pass 1	36	36	35	35
	Range Z (m)	Pass 2	72	72	70	70
Variagram Madal	Nugget (C ₀)		1.05	1.05	2.87	2.87
Variogram Model	Relative Nugget		25%	25%	29%	29%
Structure	C ₁		3.16	3.16	2.98	2.98
	Range X (m)		76.4	76.4	10.5	10.5
	Range Y (m)		57.8	57.8	10.5	10.5
	Range Z (m)		36.4	36.4	3.7	3.7
	C ₂		-	-	4.19	4.19
	Range X (m)		-	-	100.0	100.0
	Range Y (m)		-	-	100.0	100.0
	Range Z (m)		-	-	35.0	35.0
	Total Sill		4.21	4.21	10.04	10.04

BULK DENSITY

To convert volumes to tonnes, a density value of 2.6 t/m³ was used for the West and East Pipe graphitic breccia (rock types 10, 20 and 21) and 2.65 t/m³ was used for the East Pipe low grade halo (overprinted syenite, rock type 14). The density values for all mineralized wireframes are based on Zenyatta's specific gravity testing results carried out by ALS (Thunder Bay) on pre-selected assay samples in 2013. Following specialty assay procedure OA-GRA08, ALS removed a representative piece of drill core from the sample prior to crushing. The method is based on Archimedes Principle. The DGI in situ density



measurements which were collected by the Focused Density probe are in close agreement with the ALS density measurements. Density box plots by rock type are shown in Figure 14-11, and Table 14-6 summarizes the descriptive statistics for samples taken within the mineralization wireframes and waste rock of the West and East pipes.

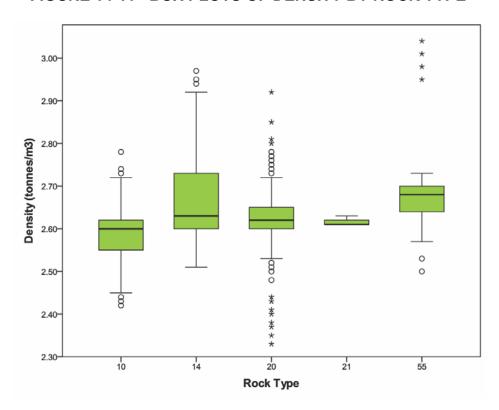


FIGURE 14-11 BOX PLOTS OF DENSITY BY ROCK TYPE

TABLE 14-6 SUMMARY STATISTICS OF DENSITY MEASUREMENTS

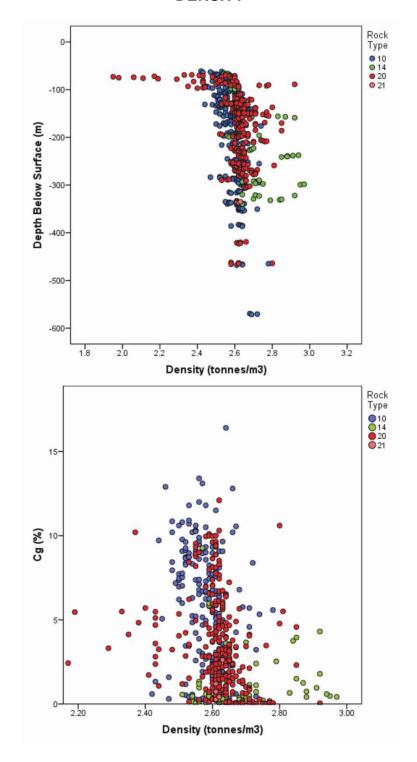
Zenyatta Ventures Ltd. - Albany Graphite Deposit

	East Pipe	East Pipe Halo	West Pipe	West Pipe Wedge	Waste
No. of Cases	214	69	293	5	80
Minimum	2.42	2.51	1.95	2.61	2.50
Maximum	2.78	2.97	2.92	2.63	3.09
Median	2.60	2.63	2.62	2.61	2.68
Arithmetic Mean	2.59	2.68	2.61	2.62	2.68
Standard Deviation	0.06	0.12	0.11	0.01	0.10
Coefficient of Variation	0.02	0.04	0.04	0.00	0.04

Figure 14-12 plots density versus depth and Cg grade for measurements within the modelled pipes. Neither graph shows a correlation. RPA therefore applied unique tonnage factors by rock type only.



FIGURE 14-12 SCATTERPLOTS OF DEPTH AND GRADE VERSUS DENSITY





BLOCK MODEL

The Gemcom block model is made up of 210 columns, 185 rows, and 80 levels for a total of 3,108,000 blocks. The model origin (lower-left corner at highest elevation) is at UTM Zone 16 NAD 83 coordinates 681,700 m E, 5,544,750 m N and 150 m elevation. Each block is 10 m (x) by 10 m (y) by 10 m (z). A whole block model with attributes that include rock type, density, and Cg grades is used to manage blocks filled by mineralized rock types. The rock type model was created using majority rules with the main lithology solids (Table 14-2). The block model contains the following information:

- domain identifiers with mineralized rock type;
- estimated grade of Cg within the wireframe models;
- tonnage factors (density model), in tonnes per cubic metre, specific to each rock type;
- the distance to the closest composite used to interpolate the block grade;
- the average composite distance used to interpolate the block grade;
- the number of drill holes used to interpolate the block grade;
- the number of composites used to interpolate the block grade;
- the interpolation pass, and
- the resource classification of each block.

CUT-OFF GRADE AND PRELIMINARY OPEN PIT SHELL

To fulfill the NI 43-101 requirement of "reasonable prospects for economic extraction", RPA prepared a preliminary open pit shell to constrain the block model for resource reporting purposes. The preliminary pit shell was generated using Whittle software.

The assumptions used in the Whittle pit shell analysis are listed in Table 14-7.



TABLE 14-7 PIT SHELL OPTIMIZATION FACTORS Zenyatta Ventures Ltd. - Albany Graphite Deposit

Overburden Pit Slope -30° Bedrock Pit Slope -45°

Exchange Rate US\$1.00 = C\$1.00 Waste Cost US\$3.00 per tonne Ore Mining Cost US\$4.50 per tonne US\$40.00 per tonne

Process Recovery 80%

G&A US\$10.00 per tonne
Graphite Price US\$8,500 per tonne
Selling Cost US\$50.00 per tonne
Block Size 10 x 10 x 10 m

The Whittle analysis gave a discard cut-off grade of 0.59% Cg. RPA used a cut-off grade of 0.6% Cg for reporting of Mineral Resources. The revenue factor 1 pit shell was then transferred to GEMS for open pit resource reporting and served as a limit for underground resource reporting.

The relatively low cut-off grade of 0.6% Cg used to report Mineral Resources, compared to flake graphite projects, is due to an assumed market price of \$8,500 per tonne Cg. Zenyatta and its technical advisors believe that hydrothermal graphite from the deposit will command higher prices than flake graphite products, based on process testwork completed in early 2012. Bench scale testing of the Albany graphite material using a caustic bake method at SGS Lakefield generated a product at 99.99% carbon purity with good crystallinity.

BLOCK MODEL VALIDATION

RPA validated the Albany block model in the following ways:

- Volumetric checks
- Inverse distance squared (ID²) interpolation as a check on kriging (OK)
- Visual comparison of block grades with composite grades
- Comparison of block grade with assay and composite statistics

Block model grades were visually examined and compared with composite and assay grades in vertical cross sections and plan sections. RPA confirmed that the block grades are reasonably consistent with local drill hole assay and composite grades.



The total volume of the West and East Pipe wireframes were checked against the total volume of the blocks within the wireframe and the same check was carried out for the volume of the wireframe within the preliminary Whittle pit shell. As shown in Table 14-8, the volumes corresponded closely for both pipes. Within the preliminary pit shell, a volume difference of -1.7% for the West Pipe and -0.4% for the East Pipe is considered acceptable by RPA.

TABLE 14-8 VOLUMETRIC CHECKS WITHIN WIREFRAME MODELS
Zenyatta Ventures Ltd. - Albany Graphite Deposit

Rock Type		Wireframe Volumes (m³)	Block Model Volume (m³)	Difference
West Pipe				
20	Total wireframe	12,786,000	12,750,000	-0.3%
	Wireframe within pit shell	11,181,000	11,144,000	-0.3%
21	Total wireframe	73,000	64,000	-14.6%
	Wireframe within pit shell	73,000	64,000	-14.6%
Total	Total wireframes	9,446,000	9,263,000	-2.0%
	Wireframes within pit shell	11,254,000	11,208,000	-0.4%
East Pipe				
10	Total wireframe	6,182,000	6,165,000	-0.3%
	Wireframe within pit shell	5,118,000	5,115,000	-0.1%
14	Total wireframe	3,263,000	3,098,000	-5.3%
	Wireframe within pit shell	3,193,000	3,054,000	-4.5%
Total	Total wireframes	12,859,000	12,814,000	-0.4%
	Wireframes within pit shell	8,311,000	8,169,000	-1.7%

Grade statistics for all assays, all composites, and all blocks were examined and compared for all rock types in the West and East pipes (Table 14-9). The comparisons of average grades of assays, composites, and blocks are reasonable in RPA's opinion. In some cases, average block grades are slightly higher than average composite grades, for example rock type 21 in the West Pipe and 14 in the East Pipe. This is attributed to a larger influence of some higher grade drill holes in some parts of these zones due to their relative location and spacing locally.



TABLE 14-9 COMPARISON OF GRADE STATISTICS FOR ASSAYS, COMPOSITES AND BLOCKS

Zenyatta Ventures Ltd. - Albany Graphite Deposit

Pipe and Rock Type	Assays (Cg %)	Composites (Cg %)	Block Model (Cg %)
West Pipe			
20			
Number of Cases	4,821	2,617	12,577
Minimum	0.02	0.00	0.05
Maximum	14.65	10.36	6.97
Median	2.25	2.29	2.23
Arithmetic Mean	2.70	2.59	2.33
Standard Deviation	2.39	2.04	1.28
Coefficient of Variation	0.89	0.79	0.55
21			
Number of Cases	83	36	64
Minimum	0.02	0.27	0.42
Maximum	5.23	3.99	3.17
Median	1.20	1.72	1.80
Arithmetic Mean	1.70	1.71	1.76
Standard Deviation	1.46	1.09	0.66
Coefficient of Variation	0.86	0.64	0.37
East Pipe			
10			
Number of Cases	4,695	2,382	6,165
Minimum	0.02	0.02	0.09
Maximum	20.80	14.99	9.26
Median	5.18	5.37	4.60
Arithmetic Mean	5.18	5.16	4.60
Standard Deviation	3.89	3.18	1.93
Coefficient of Variation	0.75	0.62	0.42
14			
Number of Cases	1,642	891	3,098
Minimum	0.02	0.02	0.04
Maximum	16.25	9.08	3.92
Median	0.40	0.46	0.63
Arithmetic Mean	0.71	0.69	0.75
Standard Deviation	1.08	0.79	0.42
Coefficient of Variation	1.53	1.16	0.56

RPA carried out a block model interpolation using ID² in parallel with the interpolation by OK (Table 14-10). Within the West Pipe resource wireframes, the difference in average Cg grade between the OK and ID² at a cut-off grade of 0.6% Cg is 0.02% Cg for Indicated



Resources and -0.01% Cg for Inferred Resources. Within the East Pipe resource wireframes, the average Cg grade at a cut-off grade of 0.6% Cg is the same for OK and ID² for Indicated Resources, and differs by 0.05% Cg for Inferred Resources.

TABLE 14-10 COMPARISON OF ORDINARY KRIGING AND ID² AT A 0.6% CG CUT-OFF GRADE

Zenyatta Ventures Ltd. - Albany Graphite Deposit

		ок			ID^2			Differenc	е
Class /	Tonnes	Grade	Contained Cg	Tonnes	Grade	Contained Cg	Tonnes	Grade	Contained Cg
Pipe	(Mt)	(% Cg)	(t Cg)	(Mt)	(% Cg)	(t Cg)	(Mt)	(% Cg)	(t Cg)
Indicated									
West	15.1	2.76	417,000	15.1	2.74	415,000	0	0.02	2,000
East	10.0	5.60	560,000	10.0	5.60	560,000	0	0	0
Total	25.1	3.88	977,000	25.1	3.88	975,000	0	0	2,000
Inferred									
West	12.5	2.29	286,000	12.5	2.30	286,000	0	-0.01	0
East	7.6	2.04	155,000	7.6	1.99	152,000	0	0.05	3,000
Total	20.1	2.20	441,000	20.1	2.18	438,000	0	0.02	3,000

CLASSIFICATION

Definitions for resource categories used in this report are consistent with those defined by CIM (2010) and adopted by NI 43-101. In the CIM classification, a Mineral Resource is defined as "a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth's crust in such form and quantity and of such grade or quality that it has reasonable prospects for economic extraction". Mineral Resources are classified into Measured, Indicated, and Inferred categories, according to the confidence level in the estimated blocks.

Exploration results from geophysical surveys and drilling suggest the presence of two discrete mineralized breccia pipes with lower grade graphitically overprinted bedrock occurring as a halo surrounding the pipes. Although work on the deposit is at an early exploration stage, drill holes are closely spaced near the centre of each pipe, but more widely spaced at their margins. Both pipes are cut by barren, post-emplacement sills. Given that the drill hole density and pipe contact data below these sills are markedly lower, all



Mineral Resources below the sills (or within, as in the case with rock type 21 in the West Pipe) were classified as Inferred.

RPA classified the Mineral Resource above the sills in the West and East pipes based on the distance to the nearest sample and the number of samples and drill holes, while at the same time taking into account the understanding and use of the geology. On this basis, the low grade halo in the East Pipe (rock type 14) was classified as Inferred, regardless of the distance to the nearest sample or the number of samples and drill holes. From the base of the limestone to the top of the barren sills, the West and East Pipe graphitic breccia rock types (20 and 10) were classified as Indicated if the block grade was interpolated during the first pass and Inferred if interpolated in the second pass (Table 14-5). Areas of Indicated Mineral Resources in the West and East pipes had an average drill hole spacing of approximately 15 m near the pipe centres to approximately 50 m near the pipe margins. Figure 14-13 shows the classified blocks for the Albany graphite deposit. Note that in this view the blocks have not been constrained by a preliminary Whittle pit shell.

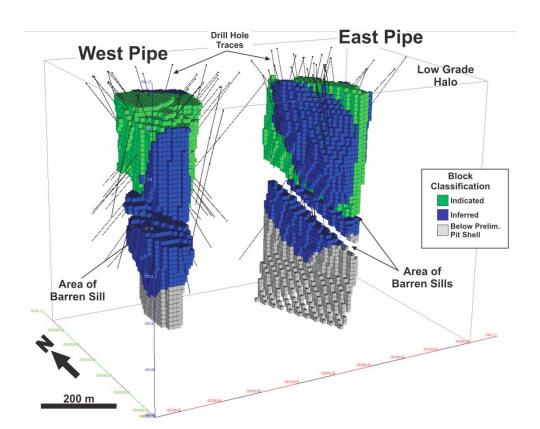


FIGURE 14-13 3D VIEW OF MINERAL RESOURCE CLASSIFICATION



The Mineral Resource estimate for the Albany graphite deposit is shown by pipe, rock type, and resource category at a range of cut-off grades in Table 14-11. The Mineral Resource estimate is insensitive to cut-off grade up to at least 2% Cg. Figure 14-14 shows the distribution of Cg grades in the block model. As with Figure 14-13, the blocks in this view have not been constrained by the preliminary Whittle pit shell. Figures 14-15 and 14-16 show the Cg grades for the West and East pipes in long section.



TABLE 14-11 TONNAGE GRADE SENSITIVITY BY CLASSIFICATION

Zenyatta Ventures Ltd. - Albany Graphite Deposit

Classification	Cut-off Grade	Tonnage (Mt)	Grade (%Cg)	Tonnes Cg (t Cg)
West Pipe		()	(****3)	(* - 3)
Indicated	2.0	10.8	3.29	356,000
	1.0	14.3	2.86	411,000
	0.6	15.1	2.76	417,000
	0.4	15.4	2.72	419,000
Inferred	2.0	6.6	3.16	208,000
	1.0	11.1	2.48	274,000
	0.6	12.5	2.29	286,000
	0.4	12.9	2.22	288,000
East Pipe				
Indicated	2.0	9.9	5.63	558,000
	1.0	10.0	5.60	560,000
	0.6	10.0	5.60	560,000
	0.4	10.0	5.60	560,000
Inferred	2.0	2.8	3.76	106,000
	1.0	4.8	2.79	134,000
	0.6	7.6	2.04	155,000
	0.4	10.0	1.67	167,000
Totals				
Indicated	2.0	20.7	4.41	914,000
	1.0	24.3	3.99	971,000
	0.6	25.1	3.89	977,000
	0.4	25.4	3.85	978,000
Inferred	2.0	9.4	3.34	315,000
	1.0	15.9	2.57	408,000
	0.6	20.1	2.20	441,000
	0.4	23.0	1.98	455,000

Notes:

- 1. CIM definitions were followed for Mineral Resources.
- 2. Cg graphitic carbon.
- 3. Mineral Resources are estimated at a cut-off grade of 0.6% Cg.
- 4. Mineral Resources are estimated using a long-term price of US\$8,500 per tonne Cg, and a US\$/C\$ exchange rate of 1.0.
- 5. Bulk density is 2.6 t/m³ in the pipes and 2.65 t/m³ in the halo of the East Pipe.
- 6. Mineral Resources are constrained by a preliminary pit-shell generated in Whittle software.
- 7. Numbers may not add due to rounding.



FIGURE 14-14 3D VIEW OF BLOCK MODEL GRAPHITE GRADES

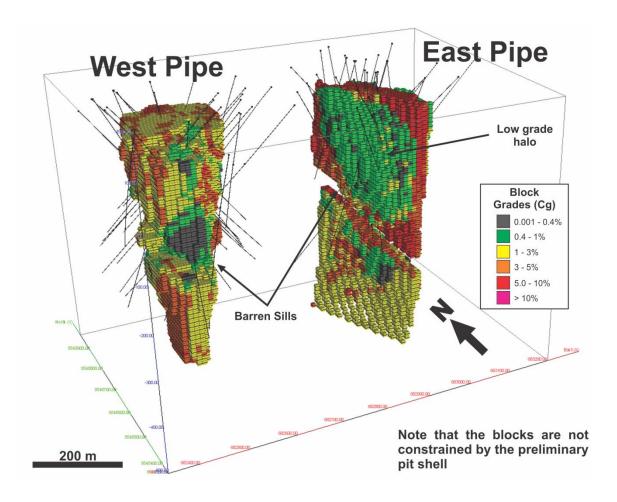




FIGURE 14-15 WEST PIPE LONG SECTION VIEW LOOKING NORTHWEST

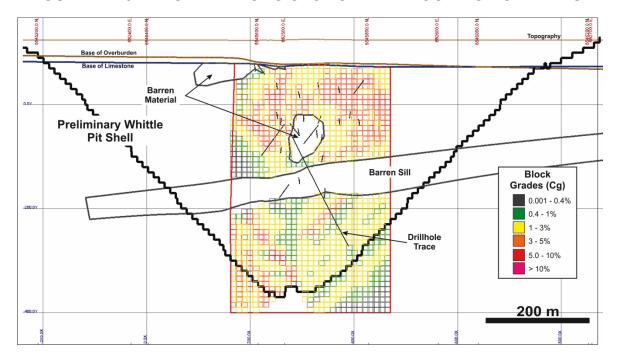
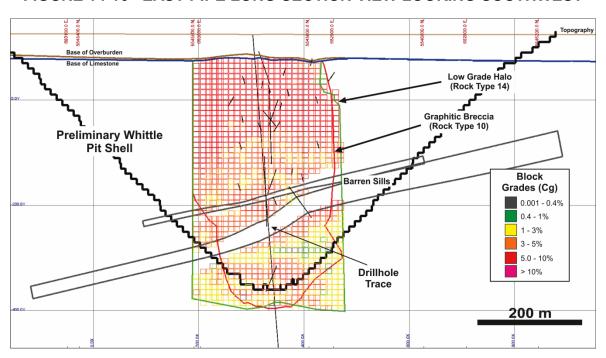


FIGURE 14-16 EAST PIPE LONG SECTION VIEW LOOKING SOUTHWEST





15 MINERAL RESERVE ESTIMATE



16 MINING METHODS



17 RECOVERY METHODS



18 PROJECT INFRASTRUCTURE



19 MARKET STUDIES AND CONTRACTS



20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT



21 CAPITAL AND OPERATING COSTS



22 ECONOMIC ANALYSIS



23 ADJACENT PROPERTIES

There are no significant properties adjacent to the Claim Block 4F Property.



24 OTHER RELEVANT DATA AND INFORMATION

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.



25 INTERPRETATION AND CONCLUSIONS

Zenyatta has discovered a unique graphite deposit of hydrothermal origin at its 100% owned Claim Block 4F Property. The Albany graphite deposit is located in the Superior Province of the Canadian Shield, at the terrane boundary between the Quetico Subprovince to the north and the Marmion Subprovince to the south. Preliminary petrography indicates that the graphite-hosting breccias range in composition from diorite to granite. Graphite occurs both in the matrix, as disseminated crystals, clotted to radiating crystal aggregates and veins, and along crystal boundaries and as small veins within the breccia fragments.

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 CO₂-rich fluids that evolved due to pressure-related degassing of syenites of the Albany Alkalic Complex.

Diamond drilling has outlined two graphite mineralized breccia pipes with three-dimensional continuity, and size and grades that can potentially be extracted economically. Zenyatta's protocols for drilling, sampling, analysis, security, and database management meet industry accepted practices. The drill hole database was verified by RPA and is suitable for Mineral Resource estimation work.

Bench scale metallurgical testwork indicates that the mineralization can be concentrated using conventional methods and purified using a caustic bake process to 99.9% carbon or better. Zenyatta believes that the ultra-pure product will command higher prices than flake graphite products. Based on an assumed market price of \$8,500 per tonne Cg, RPA reported Mineral Resources at a relatively low cut-off grade of 0.6% Cg.

RPA estimated Mineral Resources for the Albany graphite deposit using drill hole data available as of November 15, 2013. The Mineral Resource estimate is based on a potential open pit mining scenario. RPA estimates 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. The Mineral Resource estimate is insensitive to cut-off grade up to at



least 2% Cg. Mineral Resources are constrained within a preliminary optimized pit shell in Whittle software. There are no Mineral Reserves estimated on the Property.



26 RECOMMENDATIONS

The Claim Block 4F Property hosts a significant hydrothermal graphite deposit and merits considerable work. RPA recommends a Phase 1 budget of C\$4.21 million (Table 26-1) to advance the Albany graphite deposit and explore elsewhere on the Property. Work should include:

- a Preliminary Economic Assessment;
- 1,200 m of drilling for geotechnical purposes;
- a marketing study;
- continued metallurgical testwork;
- · various social and environmental baseline studies; and
- 5,000 m of drilling to define the extents of the deposit.

TABLE 26-1 PROPOSED BUDGET

Zenyatta Ventures Ltd. - Albany Graphite Deposit

Item	C\$
Preliminary Economic Assessment	150,000
Marketing Study	100,000
Metallurgical Testwork	1,150,000
Social Study	50,000
Environmental Studies	250,000
Geotechnical Study Including Drilling	360,000
Drilling (5,000 m at \$300/m total cost)	1,500,000
Operating costs/office	250,000
Sub-total	3,810,000
Contingency	400,000
Total	4,210,000

The recommended Phase 2 budget of C\$5 million would be contingent on Phase 1 results. Work would include additional drilling, metallurgical testwork, and a Preliminary Feasibility Study.



27 REFERENCES

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Zenyatta Ventures Ltd., 2013: Electrical Resistivity Test on Albany Graphite Yield Exceptional Results, a press release of October 3, 2013, on the Zenyatta Ventures Ltd. website, http://www.zenyatta.ca/article/press-release-1309.asp.



28 DATE AND SIGNATURE PAGE

This report titled "Technical Report on the Albany Graphite Deposit, Northern Ontario, Canada" and dated January 16, 2014 was prepared and signed by the following authors:

Dated at Toronto, ON January 16, 2014

(Signed & Sealed) "David Ross"

David Ross, M.Sc., P.Geo. Principal Geologist

Dated at Toronto, ON January 16, 2014

(Signed & Sealed) "Katharine Masun"

Katharine M. Masun, MSA, M.Sc., P.Geo. Senior Geologist



29 CERTIFICATE OF QUALIFIED PERSON

DAVID ROSS

I, David Ross, P.Geo., as an author of this report entitled "Technical Report on the Albany Graphite Deposit, Northern Ontario, Canada", prepared for Zenyatta Ventures Ltd., and dated January 16, 2014, do hereby certify that:

- 1. I am a Director of Resource Estimation and Principal Geologist with Roscoe Postle Associates Inc. of Suite 501, 55 University Ave., Toronto, ON, M5J 2H7.
- 2. I am a graduate of Carleton University, Ottawa, Canada, in 1993 with a Bachelor of Science degree in Geology and Queen's University, Kingston, Ontario, Canada, in 1999 with a Master of Science degree in Mineral Exploration.
- 3. I am registered as a Professional Geologist in the Province of Ontario (Reg. #1192). I have worked as a geologist for a total of 20 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - Review and report as a consultant on numerous mining and exploration projects around the world for due diligence and regulatory requirements
 - Exploration geologist on a variety of gold and base metal projects in Canada, Indonesia, Chile, and Mongolia.
- 4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 5. I visited the Property on July 15 to 18, 2013.
- 6. I am responsible for the overall preparation of the Technical Report and collaborated with my co-author on all of the sections of the Technical Report.
- 7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
- 8. I have had no prior involvement with the property that is the subject of the Technical Report.
- 9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
- 10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 16th day of January, 2014

(Signed & Sealed) "David Ross"

David Ross, P.Geo.



KATHARINE M. MASUN

- I, Katharine M. Masun, P.Geo., as an author of this report entitled "Technical Report on the Albany Graphite Deposit, Northern Ontario, Canada", prepared for Zenyatta Ventures Ltd., and dated January 16, 2014, do hereby certify that:
- 1. I am a Senior Geologist with Roscoe Postle Associates Inc. of Suite 501, 55 University Ave Toronto, ON, M5J 2H7.
- 2. I am a graduate of Lakehead University, Thunder Bay, Ontario, Canada, in 1997 with an Honours Bachelor of Science degree in Geology and in 1999 with a Master of Science degree in Geology. I am also a graduate of Ryerson University in Toronto, Ontario, Canada, in 2010 with a Master of Spatial Analysis.
- 3. I am registered as a Professional Geologist in the Province of Ontario (Reg. #1583). I have worked as a geologist for a total of 15 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - Review and report as a professional geologist on many mining and exploration projects around the world for due diligence and regulatory requirements
 - Project Geologist on numerous field and drilling programs in North America, South America, Asia and Australia
 - Experience with GEMS block modelling
- 4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 5. I have not visited the Property.
- 6. I collaborated with my co-author on all of the sections of the Technical Report.
- 7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
- 8. I have had no prior involvement with the property that is the subject of the Technical Report.
- 9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
- 10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 16th day of January, 2014

(Signed & Sealed) "Katharine M. Masun"

Katharine M. Masun, MSA, M.Sc., P.Geo.