Technical Report
On the
Keezhik Gold Project
Thunder Bay Mining Division
Northwestern Ontario

Prepared for
Zephyr Minerals Ltd.
5234 Morris Street, Suite 707
Halifax, Nova Scotia B3J 1B4

Prepared by:
R.T. Chataway, P.Geo
139 Peter Street
Thunder Bay, Ontario P7A 5H6
August 2, 2011
TABLE OF CONTENTS

ITEM 1: SUMMARY........................................................................................................ 4
ITEM 2: INTRODUCTION............................................................................................... 6
ITEM 3: RELIANCE ON OTHER EXPERTS ................................................................. 6
ITEM 4: PROPERTY DESCRIPTION AND LOCATION................................................. 7
ITEM 5: ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY................................................................. 12
ITEM 6: HISTORY ........................................................................................................ 13
ITEM 7: GEOLOGICAL SETTING AND MINERALIZATION ....................................... 15
ITEM 8: DEPOSIT TYPES............................................................................................ 21
ITEM 9: EXPLORATION .............................................................................................. 24
ITEM 10: DRILLING ..................................................................................................... 28
ITEM 11: SAMPLE PREPARATION, ANALYSIS AND SECURITY ............................ 33
ITEM 12: DATA VERIFICATION .................................................................................. 36
ITEM 13: MINERAL PROCESSING AND METALLURGICAL TESTING .................... 37
ITEM 14: MINERAL RESOURCE ESTIMATES ........................................................... 37
ITEM 15 TO ITEM 22: ADVANCED PROPERTIES ..................................................... 37
ITEM 23: ADJACENT PROPERTIES........................................................................... 37
ITEM 24: OTHER RELEVANT DATA AND INFORMATION ....................................... 38
ITEM 25: INTERPRETATION AND CONCLUSIONS................................................... 38
ITEM 26: RECOMMENDATIONS................................................................................. 40
  26.1 Proposed Budget.......................................................................................... 41
ITEM 27: REFERENCES.............................................................................................. 43
DATE AND SIGNATURE PAGE .................................................................................. 45
CERTIFICATE OF QUALIFICATIONS......................................................................... 46

LIST OF TABLES

Table 1 - Keezhik Project Claims...............................................................................9
Table 2 -Table of Lithological Units ..........................................................................17
Table 3 - Drillhole Location and Setup Data ..............................................................29
Table 4 - Assay Results from SLAM Keezhik Drilling 2004 to 2010....................31
LIST OF FIGURES

Figure 1. Keezhik Gold Property Location Map................................................9
Figure 2. Keezhik Gold Project Claim Location Map .....................................11
Figure 3. Keezhik Gold Project Regional Geology...........................................19
Figure 4. Keezhik Gold Project Geology and Gold Occurrences....................22
Figure 5. Keezhik Gold Project Diamond Drill Holes Geology.......................23
Figure 6. Keezhik Gold Project Total Magnetic Intensity ..............................22
Figure 7. Keezhik Gold Project Vertical Magnetic Gradient .........................23
ITEM 1: SUMMARY

R.T. Chataway, P.Geo. of Thunder Bay, Ontario was contracted by Zephyr Minerals Ltd. (“Zephyr”) of Halifax, Nova Scotia, to review historic data for the Keezhik Project (the “Property”), identify its merits, propose an appropriate exploration program and budget for gold exploration on the property, and prepare a Technical Report (the “Report”) compliant with NI 43-101 and suitable for the purposes of a qualifying transaction for Zephyr.

The Property is located in northwestern Ontario centered roughly at $51^\circ 46' N$ and $88^\circ 30' W$ approximately 120 km east of Pickle Lake, and approximately 40 km northwest of the settlement of Fort Hope.

The Property is comprised of twelve (12) unpatented mining claims, registered 100% to SLAM Exploration Ltd., (“SLAM”) totalling 169 claim units. The contiguous claim group is located in the Thunder Bay Mining District, Ontario on NTS map sheets 52P16SW (Keezhik Lake claim map), 52P15SE (North Bay claim map) and 52P9NW (Ferguson Lake claim map). The Property is roughly 11 km by 5 km and covers an 11 km strike of volcano-sedimentary stratigraphy that includes a large gold mineralized system encompassing 7 known gold occurrences.

The Property is owned 100% by SLAM of Miramichi, NB. Zephyr has an option to earn up to 70% interest.

The Property is situated within Precambrian aged rocks of the Uchi Sub-province of the Superior Province, a subdivision of the Canadian Shield. The Uchi Sub-province is a 600-kilometre long greenstone belt that extends from Lake Winnipeg to the Hudson Bay Lowlands, hosting the Pickle Lake, Rice Lake and Red Lake gold mining camps. This belt of rocks is famous for its gold and base metal mineral potential and contains the world-famous Red Lake Mine of Goldcorp Inc. The historic Pickle Lake gold camp contains the past-producing Pickle Crow and Central Patricia mines. The Keezhik Gold Project is located east and along strike of these two famous mining camps. In the Keezhik area the 40 kilometre wide greenstone belt is bounded on the north and south by granitic stocks. Uchi Sub-province rocks in the Keezhik project area comprise an easterly-trending bi-modal sequence of meta-volcanics intercalated with meta-sedimentary rocks.

Mineral deposits in the region are predominantly classified into four main groups: 1) gold bearing quartz-carbonate veins and shear zones in volcano-sedimentary sequences including clastic metasediments, metamorphosed iron formation and porphyry bodies; 2) magnetite-quartz and carbonate-quartz iron formation associated with wacke-mudstone sequence; 3) lithium bearing pegmatite dykes and 4) base metal sulphide deposits associated with sulphide iron formation and felsic to intermediate meta-volcanics.
As evidenced by the numerous gold occurrences, past producing and producing mines along the Uchi Sub-province, this greenstone belt that crosses through the Keezhik Gold Project shows potential for developing new gold discoveries and expanding known occurrences.

The cluster of zones and occurrences within the Property, particularly the porphyry contact area is indicative of the presence of a significant gold mineralized system. SLAM and previous workers have achieved a high success ratio using humus geochemistry combined with induced polarization and aeromagnetics to define drill targets for gold exploration. The recently completed high resolution aeromagnetic gradient survey is an additional tool for this gold exploration process.

The expenditures on the property from 2002 until SLAM’s 2010 drill program totalled CDN $180,303; with additional expenditures by SLAM for the 2010 drill program and the 2011 aeromagnetic survey, the total expenditures on the property from 2002 to the present are CDN $373,743.

It is recommended that Zephyr’s Phase One work on the project consist of a comprehensive compilation of all the previous work, geochemical sampling, geophysical surveying and structural mapping to produce a database to assist in identifying and prioritizing targets on the property. While this work will lead to new targets for drilling, or at least to modifications of current drill plans, it is the opinion of the author that Phase Two be contingent on the success of Phase One. The existing drill targets on the property are “drill ready” and the known zones justify drilling in order to better define the zones and they should be incorporated into Phase Two.

A budget of $593,000 CDN is recommended to carry out the above work. It is the opinion of the author that the property merits the described work program.