

FORM 51-102F3 - MATERIAL CHANGE REPORT

1. **NAME AND ADDRESS OF COMPANY**

Titan Mining Corporation (“Titan” or the “Company”)
Suite 555 -999 Canada Place
Vancouver, BC V6C 3E1

2. **DATE OF MATERIAL CHANGE**

October 23, 2023

3. **NEWS RELEASE**

News release dated October 23, 2023, was disseminated through the facilities of Newswire and filed on SEDAR.

4. **SUMMARY OF MATERIAL CHANGE**

The Company announced the discovery of the Kilbourne graphite trend, an extensively drill tested graphite-bearing trend located on the permitted lands hosting Titan’s currently operating Empire State Mine (“ESM”) in upstate New York.

5. **FULL DESCRIPTION OF MATERIAL CHANGE**

Titan announced the discovery of the Kilbourne graphite trend, an extensively drill tested graphite-bearing trend located on the permitted lands hosting Titan’s currently operating Empire State Mine (“ESM”) in upstate New York.

The Company believes that the Kilbourne target has the potential to host between 3.36 Mt and 26.25 Mt of Cg, contained within 210 to 1,050 Mt grading 2.0% to 4.5% Cg. The potential tonnages and grades are conceptual in nature and have been estimated using the available drill data, with extents restricted to areas of accessibility and probability of extraction. There has been insufficient exploration to define a current mineral resource and the Company cautions that there is a risk further exploration will not result in the delineation of a current mineral resource.

The Kilbourne target was generated through the review of historic geologic data, recent drilling and assays within the known stratigraphic sequence that hosts Empire State Mines’ zinc ore bodies. The high metamorphic grade of the host rocks has increased the size and morphology of the contained graphite to flake sizes.

Fifty-three (53) drill holes have tested the Kilbourne target. All 53 drill holes contain graphite however, to date only six of the holes have been assayed for Cg (Table 1/Figure 1 and 2). Based on the grades of the initial samples and large volumes of the potentially mineralized areas, the Company has retained an independent laboratory for continued testing and evaluation to determine the quality and character of the concentrated graphite product.

The presence of graphite mineralization in the district is well documented, with historic exploration and very limited production occurring in the first half of the 20th century. The Company currently holds over 80,000 acres of mineral rights within St. Lawrence County, NY and will continue to evaluate historic occurrences, prospective lithologies, and geophysical data to aid in identifying additional graphite exploration targets within the district.

The Company has an aggressive plan to fast-track exploration and development of the Kilbourne target with the goal of being the first domestic supplier of materials to the auto industry battery

market.

Figure 1: Cross section looking east highlighting the downdip continuity of the #2 geologic unit which host the Kilbourne mineralization.

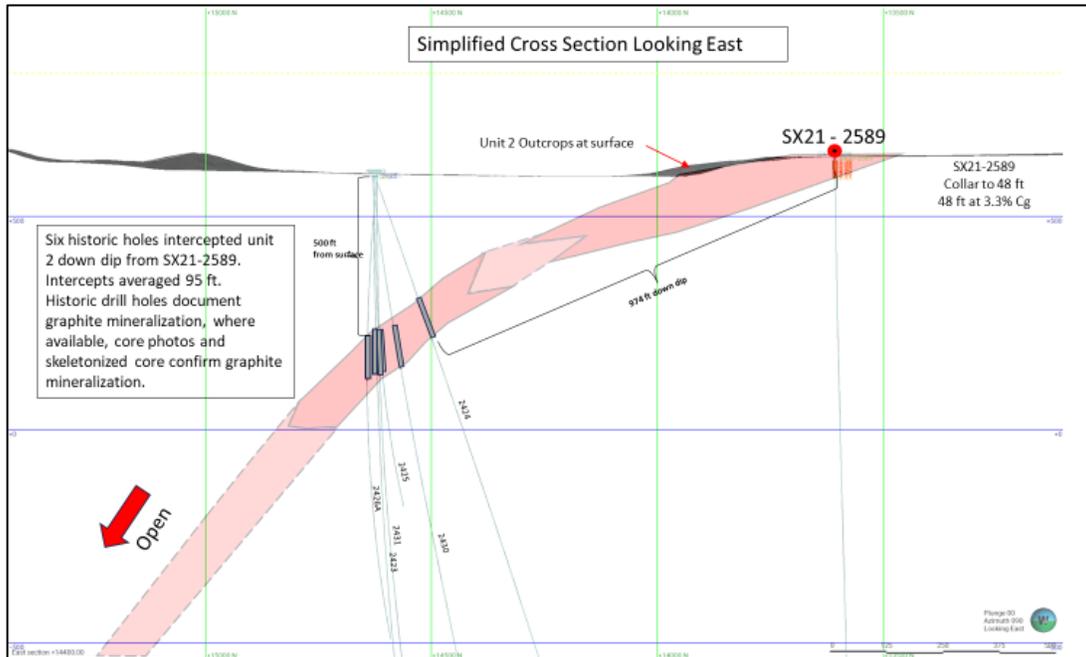


Table 1: Kilbourne Drilling Intercepts

2020-2022 Kilbourne Drilling							
Hole ID	From (ft)	To (ft)	Interval (ft)	From (m)	To (m)	Interval (m)	Cg%
SX20-2563	632.3	665.6	33.3	192.7	202.9	10.1	3.1
	673.9	697.0	23.1	205.4	212.4	7.0	1.5
	723.1	760.8	37.7	220.4	231.9	11.5	2.3
SX20-2564	652.0	742.5	90.5	198.7	226.3	27.6	2.3
SX20-2565	612.0	642.0	30.0	186.5	195.7	9.1	3.1
	742.0	768.1	26.1	226.2	234.1	8.0	1.9
SX21-2589	0.0	47.9	47.9	0.0	14.6	14.6	3.3
SX21-2601	70.0	101.2	31.2	21.3	30.8	9.5	2.1
SX22-2621	1,031.9	1,140.0	108.1	314.5	347.5	32.9	2.6
	1,243.9	1,255.0	11.1	379.1	382.5	3.4	1.9
	1,310.0	1,350.0	40.0	399.3	411.5	12.2	3.1
	1,375.0	1,400.0	25.0	419.1	426.7	7.6	2.1
	1,465.0	1,831.0	366.0	446.5	558.1	111.6	2.2
Including	1,495.0	1,510.0	15.0	455.7	460.2	4.6	3.3
and	1,530.0	1,560.0	30.0	466.3	475.5	9.1	3.5
and	1,695.0	1,831.0	136.0	516.6	558.1	41.5	3.1

Figure 2: Relative location of Kilbourne drilling and ESM’s #4 Mine and the Turnpike project. The mineralized horizon has a mapped surface expression over 27,000 ft in length. The Blue shading represents Titan held mineral rights and the grey shading represents the Kilbourne host lithology.

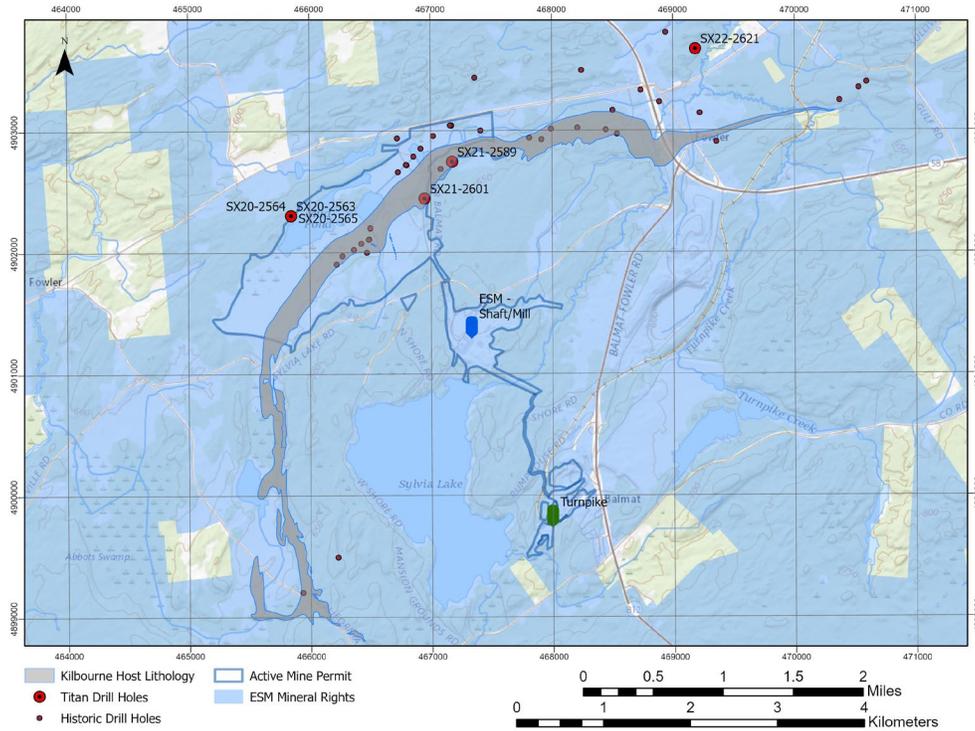


Table 2: Kilbourne Collar Information (NAD 1983 UTM Zone 18N)

Collars						
Hole ID	Length (ft)	Easting (m)	Northing (m)	Elevation (m)	Azimuth	Dip
SX20-2563	3153	465846	4902302	186.010	120	-55
SX20-2564	3487	465846	4902302	186.010	125	-63
SX20-2565	3407	465846	4902302	186.100	125	-50
SX21-2589	2287	467176	4902744	186.000	0	-90
SX21-2601	1877	466948	4902442	193.000	0	-90
SX22-2621	3487	469184	4903668	182.837	150	-70

Qualified Person

The scientific and technical information contained in this news release relating to the Kilbourne target and the sampling, analytical and test data underlying the scientific and technical information has been reviewed, verified and approved by Donald R. Taylor, MSc., PG, President and Chief Executive Officer of the Company, a qualified person for the purposes of NI 43-101. Mr. Taylor has more than 25 years of mineral exploration and mining experience and is a Registered Professional Geologist through the SME (registered member #4029597). The data was verified using data validation and quality assurance procedures under high industry standards.

Assays and Quality Assurance/Quality Control

To ensure reliable sample results, the Company has a rigorous QA/QC program in place that monitors the chain-of-custody of samples and includes the insertion of blanks and certified reference standards at statistically derived intervals within each batch of samples. Core is photographed and split in half with one-half retained in a secured facility for verification purposes.

Analysis has been performed as SGS Canada Inc. (“SGS”) an independent ISO/IEC accredited lab. Sample preparation (crushing and pulverizing) and total graphitic carbon analysis has been completed at SGS Lakefield, Ontario, Canada. SGS prepares a pulp of all samples and sends the pulps to their analytical laboratory in Burnaby, B.C., Canada for multielement analysis. SGS analyzes the pulp sample by leach and IR combustion for total graphitic carbon (GC_CSA05V) and aqua regia digestion (GE-ICP21B20 for 34 elements) with an ICP – OES finish including Cu (copper), Pb (lead), and Zn (zinc). All samples in which Cu (copper), Pb (lead), or Zn (zinc) are greater than 10,000 ppm are re-run using aqua regia digestion (GO_ICP21B100) with the elements reported in percentage (%).

Additional sample preparation (crushing and pulverizing) has been performed at ALS Geochemistry (“ALS”), an independent ISO/IEC accredited lab located in Sudbury, Ontario, Canada. ALS prepares a pulp of all samples and sends the pulps to their analytical laboratory in Vancouver, B.C., Canada, for analysis. ALS analyzes the pulp sample by an aqua regia digestion (ME-ICP41 for 35 elements) with an ICP – AES finish including Cu (copper), Pb (lead), and Zn (zinc). All samples in which Cu (copper), Pb (lead), or Zn (zinc) are greater than 10,000 ppm are re-run using aqua regia digestion (Cu-OG46; Pb-OG46; and Zn-OG46) with the elements reported in percentage (%). Silver values are determined by an aqua regia digestion with an ICP-AES finish (ME-ICP41) with all samples with silver values greater than 100 ppm repeated using an aqua regia digestion overlimit method (Ag-OG46) calibrated for higher levels of silver contained. Gold values are determined by a 30 g fire assay with an ICP-AES finish (Au-ICP21). Graphite values are determined by leach and induction furnace/IR (C-IR18).

The Company has not identified any drilling, sampling, recovery, or other factors that could materially affect the accuracy or reliability of the data set out in this news release. True widths of the mineralized zones described in this news release are not presently known.

1. RELIANCE ON SUBSECTION 7.1(2) OF NATIONAL INSTRUMENT 51-102

Not applicable.

2. OMITTED INFORMATION

Not applicable.

3. EXECUTIVE OFFICERS

Tom Ladner, VP Legal, (604) 638-1470

4. DATE OF REPORT

November 1, 2023