# Prophecy Receives Batch Metallurgical Testing Results from Titan Samples

written by Raj Shah | January 31, 2018



January 31, 2018 (Source) — Prophecy Development Corp. ("Prophecy" or the "Company") (TSX:PCY, OTCPK:PRPCF, Frankfurt:1P2N) announces further to its news release updating the status of the Company's Titan property dated July 11, 2017, that Prophecy has now

received results from batch metallurgical testing of samples obtained from its Titan property. The Company's 100% owned, Titan vanadium-iron-titanium property (the "Titan Property") is located at Flett and Angus Townships, 120 kilometres northwest of Sudbury, Ontario. The goal of the batch testing was to determine the percentage of metals soluble by hydrochloric acid and the effect of time and temperature under conditions for maximum recovery. The tests were carried out by NMR360, an independent laboratory located in Ville St. Laurent, Quebec, Canada.

A core sample was obtained by NMR360 staff and remained securely in their possession during transport, storage and through testing. The sample was crushed to -60 mesh. A representative subsample was obtained for a head analysis. The head analysis results are shown below in Table 1.

Table 1

Sample	TiO <sub>2</sub> (wt %)	V <sub>2</sub> O <sub>5</sub> (wt %)	Fe <sub>2</sub> O <sub>3</sub> (wt %)
1	19.2	0.64	62.2
2	19.2	0.63	61.9

Two 200g representative subsamples of -60m material were leached in 800mL of concentrated (33%) hydrochloric acid at two different temperatures (60°C and 90°C).

The results indicate that vanadium dissolution occurred almost instantaneously at both temperatures, with extraction rates >95%. A summary of the acid dissolution results are shown below in Table 2.

Table 2

Temperature	Time	Solution (g/L)		Extraction (%)			
(°C)	(hr)	Fe	Ti	V	Fe	Ti	V
60	2	75.6	4.2	0.80	73.1	16.1	96.3
	4	75.5	5.6	0.83	74.6	21.7	96.6
90	2	NA	14.2	0.77		52.9	95.1
	5	NA	18.6	0.82	99.9	74.9	97.7

Note: Fe extraction for 90°C test calculated on solids analyses only.

Temperature	Time	Residue Fall (%)	Solids (%)		(%)
(°C)	(hr)		Fe	Ti	V
60	4	47.2	24.1	18.9	0.027
90	5	22.0	14.6	10.4	0.032

These quick tests suggest the possibility of recovering both vanadium and titanium in solution through a simple processing circuit.

The circuit could include a selective vanadium leach (with little accompanying titanium extraction) at lower temperature and short duration, followed by a higher-temperature, longer duration titanium leach.

Prophecy is very encouraged by these positive preliminary results and is considering further work. One scope of work under consideration would involve the testing of a 150kg sample

of Titan Property material under realistic conditions that would be adequate to generate preliminary engineering and cost data. Simultaneously, such a program would generate samples of vanadium pentoxide (0.5-1.0 kg) and titanium dioxide (10-15 kg) and hematite for end-user evaluation.

### **Titan**

A technical report titled "Technical Report, Titan Project, Ontario, Canada" dated October 23, 2017 was prepared by Mine Development Associates (the "Technical Report"). The Technical Report (available under the Company's SEDAR profile at <a href="https://www.sedar.com">www.sedar.com</a>) was prepared in compliance with National Instrument 43-101, Standards of Disclosure for Mineral Projects ("NI 43-101") and reports an inferred resource for the Titan Property as follows:

Resource Category	Tonnes (t)*	Fe <sub>2</sub> 0 <sub>3</sub> (%)	V (%)	TiO <sub>2</sub> (%)
Inferred	46.0 million	48.32	0.24	14.88

#### Notes:

- (1) V converted to  $V_2O_5$ : 0.24 % V = 0.43%  $V_2O_{5}$ .
- (2) The metal content calculated by the Company totals 434 million pounds of vanadium pentoxide and 6,844 million kg of titanium dioxide\*\*.
- \*Based on resource estimated at cutoff grade of 40%  $Fe_2O_3$  inside an optimized pit.
- \*\*100% metals recovery is assumed.

Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.

The Technical Report is authorized by Neil Prenn, P. Eng. and Neil Pettigrew, P. Geo., who were independent Qualified Persons under NI 43-101 at the time the report was prepared.

#### **Dabolava**

Further, to the Company's news release dated August 25, 2017, wherein Prophecy announced that it entered into a binding letter agreement with an arm's-length party (the "Seller") to acquire the Dabolava gold project located in the Republic of Madagascar, due to an ongoing plague epidemic in Madagascar, Prophecy was unable to complete project due diligence and enter into a comprehensive definitive agreement with the Seller before the November 30, 2017 deadline. The parties are continuing discussion on a non-binding basis with no assurance that a transaction will be consummated.

#### **Qualified Persons**

The technical contents of this news release have been prepared under the supervision of Christopher M. Kravits, CPG, LPG, General Mining Manager of Prophecy. Mr. Kravits is a Qualified Person as defined in NI 43-101. Mr. Kravits is a consultant to the Company and is not independent of the Company since most of his income is derived from the Company.

# **About Prophecy**

Prophecy Development Corp. is a Canadian public company listed on the Toronto Stock Exchange. The Company aims to provide exposure and leverage to rising vanadium prices by defining and adding attributable vanadium resources in the ground in politically safe jurisdictions.

PROPHECY DEVELOPMENT CORP.

ON BEHALF OF THE BOARD

#### Executive Chairman

Neither the Toronto Stock Exchange nor its Regulation Services Provider (as that term is defined in the policies of the Toronto Stock Exchange) accepts responsibility for the adequacy or accuracy of this release.

## Cautionary Note Regarding Forward-Looking Statements

Certain statements contained in this news release, including statements which may contain words such as "expects", "anticipates", "intends", "plans", "believes", "estimates", or similar expressions, and statements related to matters which are not historical facts, are forward-looking information within the meaning of applicable securities laws. Such forward-looking statements, which reflect management's expectations regarding Prophecy's future growth, results of operations, performance, business prospects and opportunities, are based on certain factors and assumptions and involve known and unknown risks and uncertainties which may cause the actual results, performance, or achievements to be materially different from future results, performance, or achievements expressed or implied by such forward-looking statements. These estimates and assumptions are inherently subject to significant business, economic, competitive and other uncertainties and contingencies, many of which, with respect to future events, are subject to change and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by Prophecy. In making forward-looking statements as may included in this news release, Prophecy has made several assumptions that it believes are appropriate, including, but not limited to assumptions that: all required third party contractual, regulatory and governmental approvals will be obtained for the development, construction and production of Prophecy's properties and the Chandgana power plant; there being no significant disruptions affecting operations, whether due to labour disruptions or other causes; currency exchange rates being approximately consistent with current levels; certain price assumptions for vanadium, silver, coal and other metals, prices for and availability of fuel, parts and equipment and other key supplies remain consistent with current levels; production forecasts meeting expectations; the accuracy of Prophecy's current mineral resource estimates; labour and materials costs increasing on a basis consistent with Prophecy's current expectations; any additional required financing will be available on reasonable terms; and market developments and trends in global supply and demand for vanadium, energy, silver, coal and other metals meeting expectations. Prophecy cannot assure you that any of these assumptions will prove to be correct.

Numerous factors could cause Prophecy's actual results to differ materially from those expressed or implied in the forwardlooking statements, including the following risks and uncertainties, which are discussed in greater detail under the heading "Risk Factors" in Prophecy's most recent Management Discussion and Analysis and Annual Information Form as filed on SEDAR and posted on Prophecy's website: Prophecy's history of net losses and lack of foreseeable positive cash flow; exploration, development and production risks, including risks related to the development of Prophecy's mineral properties; Prophecy not having a history of profitable mineral production; commencing mine development without a feasibility study; the uncertainty of mineral resource and mineral reserve estimates; the capital and operating costs required to bring Prophecy's projects into production and the resulting economic returns from its projects; foreign operations and political conditions,

including the legal and political risks of operating in Bolivia and Mongolia, which are developing countries and being subject to their local laws; the availability and timeliness of various government approvals, permits and licenses; the feasibility, funding and development of Prophecy's projects; protecting title to Prophecy's mineral properties; environmental risks; the competitive nature of the mining business; lack of infrastructure; Prophecy's reliance on key personnel; uninsured risks; commodity price fluctuations; reliance on contractors; Prophecy's need for substantial additional funding and the risk of not securing such funding on reasonable terms or at all; foreign exchange risk; anti-corruption legislation; recent global financial conditions; the payment of dividends; the inability of insurance to cover all potential risks associated with mining operations; and conflicts of interest.

These factors should be considered carefully, and readers should not place undue reliance on Prophecy's forward-looking statements. Prophecy believes that the expectations reflected in the forward-looking statements contained in this news release and the documents incorporated by reference herein are reasonable, but no assurance can be given that these expectations will prove to be correct. In addition, although Prophecy has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Prophecy undertakes no obligation to release publicly any future revisions to forwardlooking statements to reflect events or circumstances after the date of this news or to reflect the occurrence of unanticipated events, except as expressly required by law.