

TEMAS RESOURCES CORP.

Temas to Commence Pilot Plant Test Work For Titanium Dioxide Production

VANCOUVER, British Columbia, July 28, 2021 — Temas Resources Corp. (CSE: TMAS, OTCQB: TMASF, FSE: 26P) (the “**Company**” or “**Temas Resources**”) is pleased to announce that it has engaged Process Research Ortech Inc. (“PRO”) to complete pilot plant testing for Titanium Dioxide (TiO₂), Vanadium Pentoxide (V₂O₅) and Magnetite (Fe₂O₃) production using the ORF Process for TiO₂ extraction, an effective and economically viable process for the recovery of titanium dioxide and other metal oxides from the La Blache deposit. Temas owns 100% of the Fe-Ti-V Project, and 50% of ORF Technologies.

The Pilot Plant is scheduled to run under continuous operation for 90 days and in keeping with the environmental benefits of the technology, all reagents will be recycled and reused. Material produced will be utilized for potential customer’s testing.

Titanium dioxide is a white pigment used in over 90% of paint products, to protect surfaces/objects in both consumer and industrial settings. It is also used in many other products such as plastics, textiles, ceramics, cosmetics, food and pharmaceuticals.

Titanium dioxide has excellent light scattering properties and is used in paints to give whiteness, covering power, brightness and durability of colour that cannot be achieved with any other raw material. It has been in use for almost 100 years in both industrial applications and consumer goods.

Ductile and malleable, Vanadium is often used as a strengthening agent for steel in applications such as construction rebar, bridges, buildings, tunnels, automotive parts, aerospace applications, ships, pipelines and many other sectors

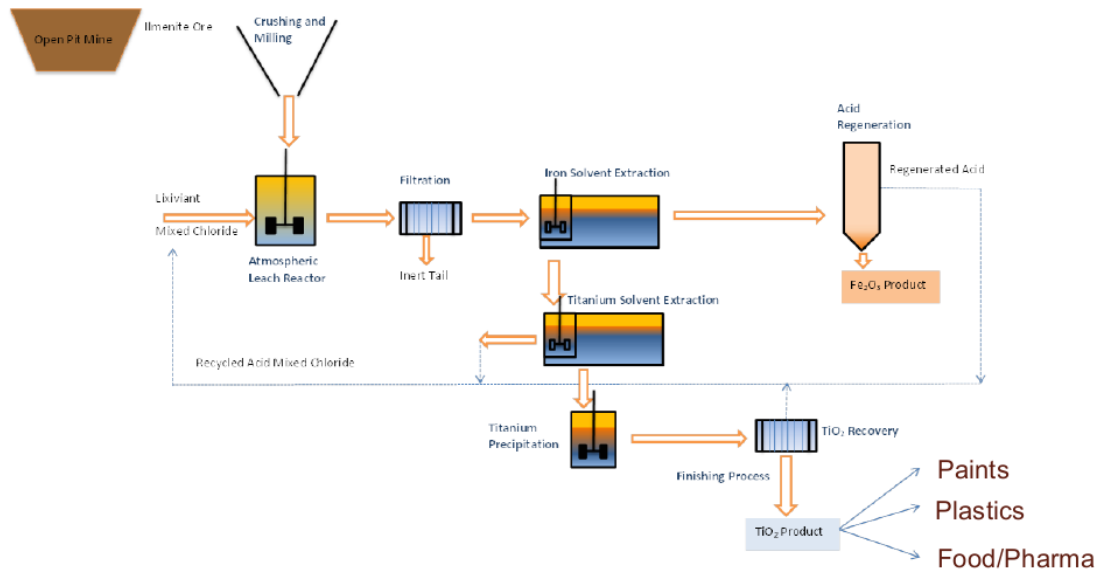
PRO has extensive experience in titanium processing, and ORF has several patents issued for the treatment of ilmenite ore and extraction of metal oxides at very high purity and recovery rates. The process has been previously demonstrated for other titanium containing ores from Canada and overseas, and in a publicly published report the technology has demonstrated of over 99.8 % pure titanium dioxide and pure iron oxides at 98.5 % (unoptimized) purity. [Link to Report](#)

Comparison of Technologies with ORF Process for TiO ₂ production			
	Chloride	Sulphate	ORF
Raw material	High cost, rutile	Low cost, Ilmenite	Lowest cost, Ilmenite
(\$/ton of TiO ₂ feed)	(\$2000 +)	\$300	\$250
TiO ₂ product	High value	Low value	High value
(\$/ton of TiO ₂)	~4500	(\$3500 +)	~4500
Capex	Highest	Medium	Lowest
	(including front-end)		
Opex	Highest	Medium	Lowest

	(including front-end)		
Environmental	Medium challenges	Major challenges	Most environmentally friendly
Flexibility in processing raw material	Limitation (Mn, Mg, size)	Limitation (Cr, V)	Can process
			(Flexible)
Process Condition	High Temp.	High Temp.	Atmospheric
	Chlorine	Sulphuric Acid	Mixed Chloride
	(800-1000 0C)	(140-180 0C)	(70 0C)
Technology	Old	Old	Patented, New
End to end in one location	Not practiced	Possible	Possible
Pigment production	Rutile	Rutile/Anatase	Rutile/Anatase
Commercially Proven process	In practice	In practice	Innovatively applied, will soon be in practice
Environmental challenges	Disposal of iron and other byproduct chlorides	Disposal of large iron sulphate product and dilute acid	Minimum environmental impact, Iron oxide as byproduct
Safety Requirements	High	High	Low
	(Cl ₂ at high and low temperature)	(High temperature acid digestion)	(no pressurized vessel and low temperature)
chlorine and carbon/carbon containing chemicals at high temperature	Challenges to handle	N/A	N/A
Energy consumption	High	High	Efficient
Sulfur price	No effect	Substantial effect	

"PRO's principals have conducted metallurgical test work and developed extraction processes for some of the largest names in the Canadian and international metals and mining industry. They are internationally recognized experts in process and extraction technology development including green extraction technology. They are experts in hydrometallurgical and pyrometallurgical processing" stated Temas' President and CEO Michael Dehn.

Simplified ORF TiO₂ Flowsheet and Layout



PRO's existing operations include a laboratory and pilot facilities for hydrometallurgical processing: pilot scale continuous atmospheric leaching system; bench scale titanium and pilot scale stainless steel autoclaves for high pressure leaching with capacity of up to 50 gallons; solvent extraction system consisting of mixer settlers, pulse column and fixed bed and continuous ion exchange systems; lab and pilot scale liquid/solid separation equipped with thickeners and filters; and electrowinning cells for product recovery.

Temas also wishes to announce that it has engaged Northern Equities as consultants to help optimize the Company's Social Media and Client Outreach strategies.

Additionally, Temas has completed a major website update and encourages stakeholders, investors and technology users to visit www.temasresources.com

About Temas Resources

Temas Resources Corp. ("Temas Resources") (CSE:TMAS) (OTCQB:TMASF) (FSE: 26P) is focused on the advancement of mineral independence and the processes in which minerals are extracted in an environmentally friendly manner. Temas Resources invests in and works to apply green technology across its mining portfolio to reduce the environmental impact and carbon footprint of metal extraction through advanced processing and patented leaching technologies.

Temas Resources is advancing Fe-Ti-V projects in Quebec and soon expects to be active on the Piskanje Boron Project in Serbia with its joint venture partner.

Qualified Person

Rory Kutluoglu, B.Sc, P.Geo, is the Qualified Person as defined by NI 43-101 who has reviewed and approved the technical information contained within this press release.

On behalf of the Board of Directors of Temas Resources Corp.,

“Kyler Hardy”
Director

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Forward Looking Statements

This news release includes certain “Forward-Looking Statements” within the meaning of the United States Private Securities Litigation Reform Act of 1995 and “forward-looking information” under applicable Canadian securities laws. When used in this news release, the words “anticipate”, “believe”, “estimate”, “expect”, “target”, “plan”, “forecast”, “may”, “would”, “could”, “schedule” and similar words or expressions, identify forward-looking statements or information.

Forward-looking statements and forward-looking information relating to any future mineral production, liquidity, enhanced value and capital markets profile of Temas Resources, future growth potential for Temas Resources and its business, and future exploration plans are based on management’s reasonable assumptions, estimates, expectations, analyses and opinions, which are based on management’s experience and perception of trends, current conditions and expected developments, and other factors that management believes are relevant and reasonable in the circumstances, but which may prove to be incorrect. Assumptions have been made regarding, among other things, the price of iron, titanium, vanadium and other metals; no escalation in the severity of the COVID-19 pandemic; costs of exploration and development; the estimated costs of development of exploration projects; Temas Resources’ ability to operate in a safe and effective manner and its ability to obtain financing on reasonable terms.

These statements reflect Temas Resources’ respective current views with respect to future events and are necessarily based upon a number of other assumptions and estimates that, while considered reasonable by management, are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Many factors, both known and unknown, could cause actual results, performance or achievements to be materially different from the results, performance or achievements that are or may be expressed or implied by such forward-looking statements or forward-looking information and Temas Resources has made assumptions and estimates based on or related to many of these factors.

Such factors include, without limitation: the Company's dependence on one mineral project; precious metals price volatility; risks associated with the conduct of the Company's mining activities in Quebec; regulatory, consent or permitting delays; risks relating to reliance on the Company's management team and outside contractors; risks regarding mineral resources and reserves; the Company's inability to obtain insurance to cover all risks, on a commercially reasonable basis or at all; currency fluctuations; risks regarding the failure to generate sufficient cash flow from operations; risks relating to project financing and equity issuances; risks and unknowns inherent in all mining projects, including the inaccuracy of reserves and resources, metallurgical recoveries and capital and operating costs of such projects; contests over title to properties, particularly title to undeveloped properties; laws and regulations governing the environment, health and safety; the ability of the communities in which the Company operates to manage and cope with the implications of COVID-19; the economic and financial implications of COVID-19 to the Company; operating or technical difficulties in connection with mining or development activities; employee relations, labour unrest or unavailability; the Company's interactions with surrounding communities and artisanal miners; the Company's ability to successfully integrate acquired assets; the speculative nature of exploration and development, including the risks of diminishing quantities or grades of reserves; stock market volatility; conflicts of interest among certain directors and officers; lack of liquidity for shareholders of the Company; litigation risk; and the factors identified under the caption "Risk Factors" in Temas Resources' management discussion and analysis. Readers are cautioned against attributing undue certainty to forward-looking statements or forward-looking information. Although Temas Resources has attempted to identify important factors that could cause actual results to differ materially, there may be other factors that cause results not to be anticipated, estimated or intended. Temas Resources does not intend, and does not assume any obligation, to update these forward-looking statements or forward-looking information to reflect changes in assumptions or changes in circumstances or any other events affecting such statements or information, other than as required by applicable law.