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ASX Limited
Market Announcements Platform

27 April 2021

Saki Hydro-Dam Site Preliminary Assessment Completed

- A preliminary geotechnical site investigation of an historically proposed hydro dam plant site has been completed at the Saki gold project, 3km east of the Tolukuma Gold Mine.
 - The initial site between the Hoyu and Auga Rivers was found to be unsuitable, however two alternate sites have been assessed and found to be suitable to support dam wall construction with suitable water flow. Further geotechnical drilling will be required to assess rock mass properties and ground water permeability.
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Frontier Resources Limited (**Frontier** or the **Company**) is pleased to announce the completion of a geotechnical site investigation of proposed Hydro-Electric power plant sites at the Saki Gold Prospect. The field investigation was conducted by Frontier's consultant field geotechnical engineer.

A preliminary geotechnical site investigation of the proposed hydro dam plant site by historical mining operator Petromin (PNG) Limited, between Hoyu and Auga Rivers (Figure 1), has been completed to determine if the site is suitable to construct a hydro-electric dam plant.

From the site investigation of the originally proposed hydro dam site at PHS (Photo 1), the location was found to not be feasible as the area is wide (~20m) and will cost more to build a dam wall across the two rivers instead of constructing a dam wall across only one river. Two alternate sites (PHS2 and PHS3) have been selected (Figure 1). Table 1 below describes the three sites.

The second alternate proposed hydro dam site **PHS2** (Photo 2) is 40m upstream of site **PHS** where the river width is about 10m wide. From a geotechnical perspective, the wall rock formation supporting the dam wall is strongly competent and the host rock formation is suitable to support dam wall construction (Table 1).

The third alternate proposed hydro dam site **PH3** is approximately 50m downstream of site **PHS** along the fast-flowing Auga River. The host rock formation is suitable to support dam wall construction.

If the proposed site **PHS3** is selected for the hydro dam plant site, then geotechnical drilling is required to investigate the rock mass properties (rockmass rating (RMR), rock strength etc.) and ground water permeability (packer testing) of the subsurface rock formation prior to hydro dam wall construction.

Rock samples from the drilling will also need to be sent to the laboratory for geotechnical tests (UCS, shear, triaxial, point load etc) to analyse rockmass properties and ensure they meet the geotechnical design parameters required by the engineers.

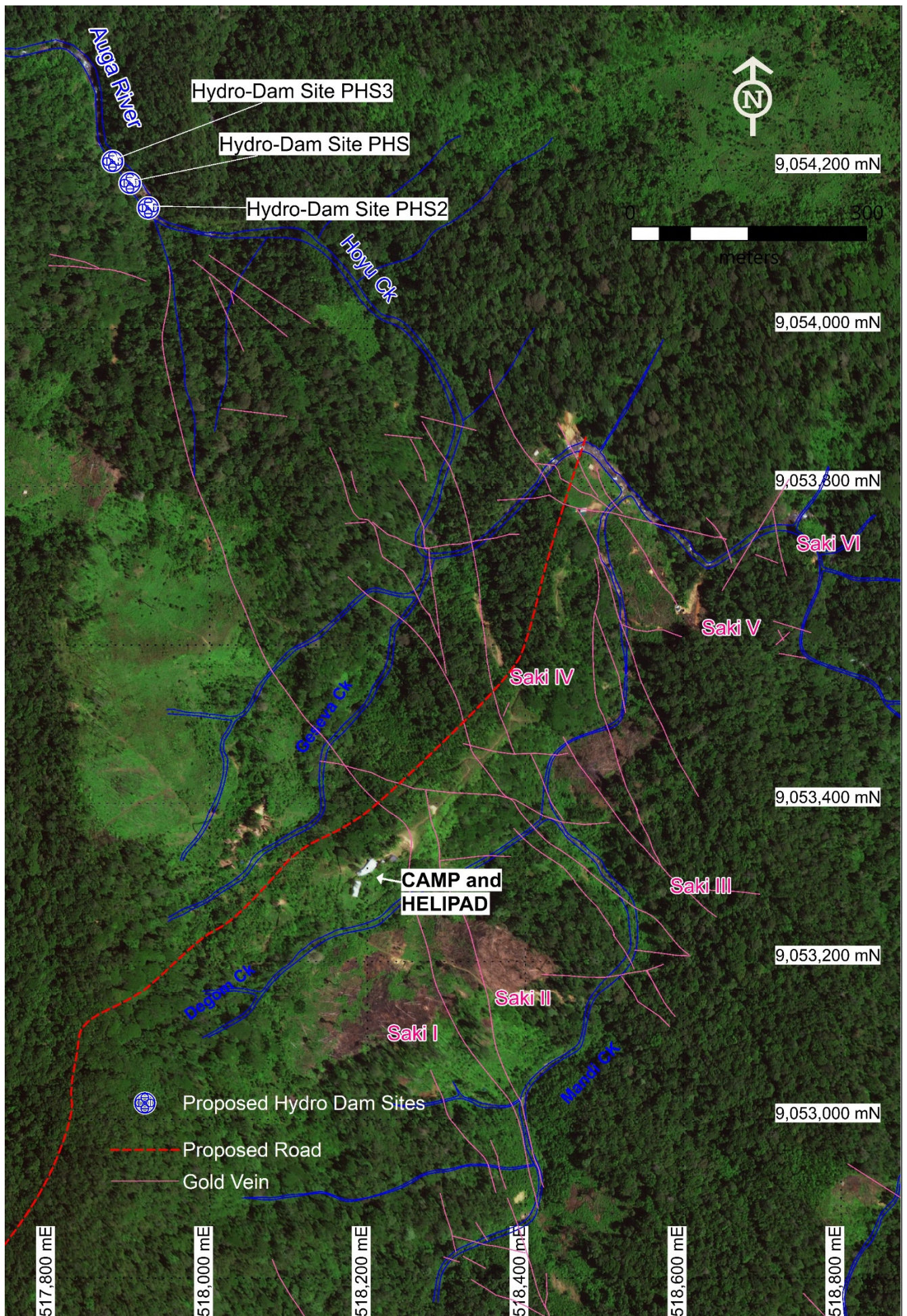


Figure 1: Saki Vein System and Proposed Hydro-Electric Dam Sites



Photo 1: Initially Proposed Hydro Dam Site PHS



Photo 2: Proposed Hydro Dam Site PHS2 at Hoyu River



Photo 3: Alternate Proposed Hydro Dam Site PHS3 along the Fast Flowing Auga River

Table 1: Proposed Hydro Dam Sites Review

Site ID	Easting	Northing	RL (m)	Site Description
PHS	517900	9054185	1423	Original proposed hydro dam site by Petromin. The location was found to be not feasible due to the location being at the junction of the Hoyu and Auga Rivers and over 20m wide.
PHS2	517922	9054153	1469	Alternate hydro dam site ~40m upstream of PHS along Hoyu River. The river width is about 8-10m wide along a narrow gorge with 40-60° steep ridges on both sides of the gorge. This is a suitable area for hydro dam site with moderate water velocity. Engineers may prefer a higher water velocity (energy) to turn the hydro plant water turbine. The wall rock formation supporting the dam wall is strongly competent being moderately propylitic altered fine grained melanocratic andesite with very weak calcite

				veining (<1mm) and is moderately calcareous. The host rock is very weakly fractured and suitable to support dam wall construction.
PHS3	517880	9054211	1418	Alternate hydro dam site approximately 50m downstream of PHS along the fast-flowing Auga River. The river width is about 5m wide along a narrow gorge with steep 50-70° ridges on both sides of the gorge. This location is suitable as a hydro dam site due to the high water velocity (energy) required to turn the water turbine in the hydro plant. The rock formation is moderately propylitic altered fine grained melanocratic andesite with very weak calcite veining (<1mm) and is moderately calcareous. The rock is weakly fractured and strongly competent.

Additional Information:

- A trench sampling program at the Saki prospect is planned to commence after the landowner Warden's hearing scheduled by the MRA for Wednesday the 19th of May. The trench sampling is designed to confirm vein continuity, extend zones of gold mineralisation and define drill targets.
- ALS laboratories have completed sample preparation procedures on all Kimono samples which are now currently undergoing final element analysis procedures.

This announcement has been authorised for release by the Directors of the Company. For additional information please visit our website at www.frontierresources.net.au

FRONTIER RESOURCES LTD

Competent Person Statement:

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by or compiled under the supervision of Peter Swiridiuk - Member of the Aust. Inst. of Geoscientists. Peter Swiridiuk is a Technical Consultant and Non-Executive Director for Frontier Resources. Peter Swiridiuk has sufficient experience which is relevant to the type of mineralisation and type of deposit under consideration to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code of Reporting Exploration Results, Mineral Resources and Ore Resources. Peter Swiridiuk consents to the inclusion in the report of the matters based on the information in the form and context in which it appears. Additionally, Mr Swiridiuk confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report.

Frontier Resources Ltd Exploration Licence Information

Exploration Licence Number and Name	Ownership	sub-blocks	AREA (sq.km)*	Grant Date	Expiry Date
EL2531 - Tolukuma	100% Frontier Copper PNG Ltd	130	441.72	25-Feb-19	24-Feb-21
ELA2529 - Gazelle	100% Frontier Copper PNG Ltd	211	719.51	N/A	N/A
Total of Granted EL's		130	441.72		

*1 sub-block approx. 3.41 sq.km

NB: The PNG Mining Act-1992 stipulates that EL's are granted for a renewable 2 year term (subject to satisfying work and expenditure commitments) and the PNG Government maintains the right to purchase up to 30% project equity at "Sunk Cost" if/when a Mining Lease is granted.