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ASX Limited

Market Announcements Platform

12 April 2021

Saki Drill Pad and Trench Site Inspections Ahead of Fieldwork

- Frontier geologists have completed a geotechnical site investigation of eleven drillhole pads at the Saki prospect to ensure they are on competent ground away from potential geohazards.
- A total of 18 trench sampling sites have been inspected in preparation for a fieldwork sampling program to prioritise drill sites.
- Water quality testing at five stream sites were analysed by SGS Laboratories which showed the water to be safe for drinking by the local villagers and at the Saki exploration camp.

Frontier Resources Limited (**Frontier** or the **Company**) is pleased to announce the completion of a geotechnical site investigation of the proposed drilling pads at Saki Gold Prospect. The field investigation was conducted by Frontier's consultant geologist and field technical engineer to assess the surface conditions and slope stability of proposed drill pads (Figure 1) to ensure their safety against potential landslides. A number of the drill pads were relocated to safer sites (Figure 2).

Drill Pad Site Investigation:

The geotechnical site investigation identified potential geohazards (landslips, tension cracks, wedge failures etc) that required immediate corrective safety measures. Four (4) drill pads were identified to be in high risk zones (landslips, steep gullies) and were relocated to safer areas (Figure 2). Two drill pads (PDH30D and PDH38I) with medium risk rating have nearby landslip (35m down hill) and active soil creeping respectively and needs to be monitored during pad clearance.

- **1. Drill Pad# PDH30A & B (518348e, 9053536n):** Site had been cleared by the locals and currently used as a helipad and is on stable ground. The pad is on a gentle slope so there is no major risk of landslides within the pad vicinity. The pad dimension is 20m X 14m, completed and ready for drilling (Photo 1).
- **2. Drill Pad# PDH30C (518601e, 9053631n):** The proposed pad has been relocated 31m north of the original proposed site. The original site is within a steep gully that is 40m above a recent landslip. It may need to be re-located again following a major landslip in late December 2020.
- **3. Drill Pad# PDH30D (518553e, 9053467n):** Pad site is on favourable ground within a cleared area for gardening. Moderate to large trees/stumps are holding up the ground. Low to moderate slope angles and no signs of soil creeping. Will require 2 weeks of pad construction.

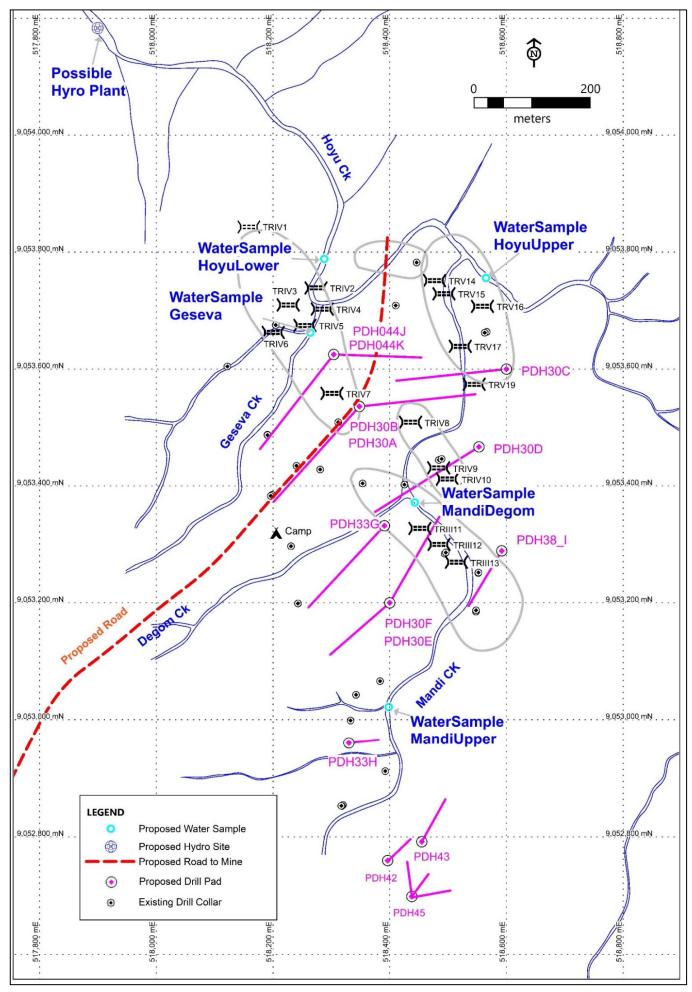


Figure 1: Saki Prospect Proposed Drill Pad, Trench and Water Testing Sites

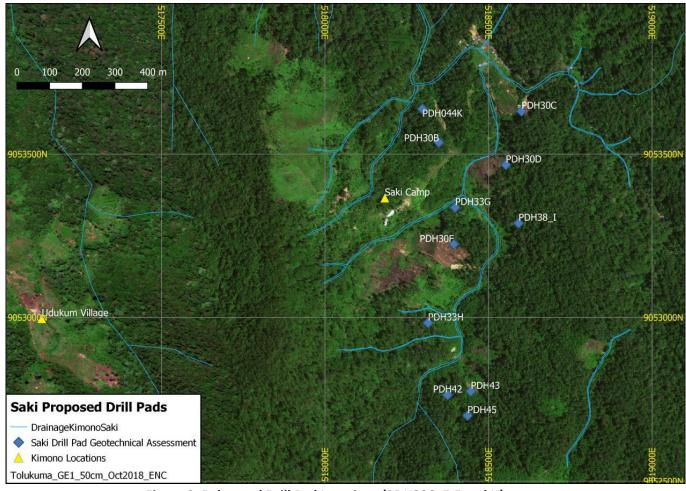


Figure 2: Relocated Drill Pad Locations (PDH30C, E-F and H)



Photo 1: Constructed Drill Pad PDH30A & B Completed and Ready for Drilling.

- **4. Drill pad PDH30E & F (518394e, 9053224n):** Original proposed site unfavourable due to massive landslide. Pad relocated 24m north towards to a stable gentle slope (20°). Slope stability okay. Saprolite and brownorange soil. Large area which will require 1 week of pad construction.
- **5. Drill Pad# PDH33G (518398e, 9053337n):** Pad is on favourable competent ground and down slope angles are low-moderate. Pad dimension is 17m X 10m and ready for drilling. Will need to remove a local villager's hut on the pad prior to drilling (Photo 2).



Photo 2: Drill Pad PDH30G

- **6. Drill Pad# PDH33H (518315e, 9052983n):** Original site is unsuitable so pad has been relocated 27m north west up to the ridge. Favourable site along bush track and near ridge top. Ground is stable, composed of competent pyroclastics. Slope stability okay. 2-3 weeks pad construction required.
- **7. Drill Pad# PDH38I (518592e, 9053289n):** On a ridge on totally oxidised and weathered pyroclastics but still competent. No signs of landslips but some bit of soil creeping shown by trees (Photo 3). Pad dimension is 11m X 5m and needs extensions of 3m X 3m with 1 week of digging required to complete.



Photo 3: Pad PDH38I with Soil Creeping Shown by Slight Bending of Trees

- **8. Drill Pad# PDH44J and K (518298e, 9053638n):** Incomplete drill pad on steep slope but stable ground but might have landslip issues. Need to monitor slope stability once pad clearance commences. Pad dimension: 4m X 2m.
- **9. Drill Pad# PDH42 (518375e, 9052763n):** Pad is on hard competent bedrock with no signs of landslip or soil creeping of trees. On hard moderately siliceous andesite outcrop. Pad dimension: 12m X 5m. Needs 2m digging into the wall rock and 3m wooden platform extension.
- 10. Drill Pad# PDH43 (518446e, 9052700n): Pad site is 24m north east of pad coordinates. Pad is on competent ground with no signs of tension cracks and landslips. No soil creeping observed. Pad dimension; 11m X 8.5m. Will need 4m X 1.5m wooden platform extension to meet the minimum drill pad 14m X 8m area requirements. Will take about 3-5 days to complete the pad extension.
- **11. Drill Pad# PDH45 (518436e,9052700n):** Incomplete drill pad on steep slope but stable ground. May have landslip issues when site is cleared due to steep slope and high rainfall. Need to monitor slope stability once pad clearance commences. Pad dimension: 4m X 2m. Will require 10m X 6m pad extension.

Trench Site Investigation:

During this inspection of drill pad sites, a series of proposed trench sites were also inspected (Table 1) to ensure their location is suitable to sample and define mineralised Saki vein extensions (Figure 3). Due to a landslide in December 2020, geologists are currently revising the location of trench and drill pad sites at the Saki V vein to a safe location away from the landslide area, which was inspected by Frontier geologists with MRA Officers in late December 2020.

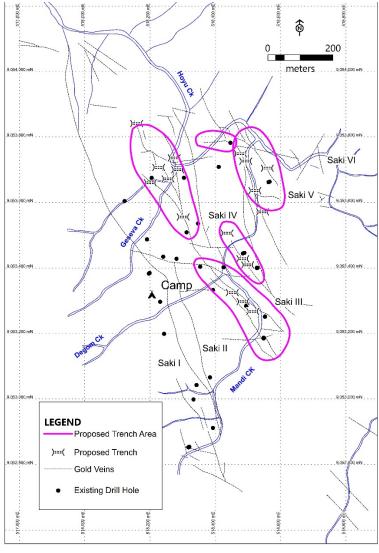


Figure 3: Saki Prospect Vein System and Proposed Trench Sites

Table 1: Description of Surveyed Proposed Trench Sites

| Trench | Table 1: Description of Surveyed Proposed Trench Sites Trench Easting Northing Vein Location Comments | | | | | | | | |
|----------|--|-------------|----------|---------|--|--|--|--|--|
| ID | Easting | Northing | | | Comments | | | | |
| | F104F1 67 | 0053336.40 | Target | Flagged | Translation required the set Fig. CF to the detuction | | | | |
| TRIII11 | 518451.67 | 9053326.19 | Saki III | Yes | Trench location moved about 5m SE to the actual vein | | | | |
| | | | | | outcrop exposed by local artisanal workings. Massive | | | | |
| TD11140 | 540404.40 | 0050000 70 | 6 1 : | | 3m wide quartz vein on opposite side of the creek. | | | | |
| TRIII12 | 518484.42 | 9053298.79 | Saki III | Yes | Good location, no outcrop, gentle slope. Vein sub- | | | | |
| | | | | | outcrop/boulders observed halfway between 12-13. | | | | |
| TRIII13 | 518514.20 | 9053268.42 | Saki III | Yes | Location moved up about 5m to actual vein outcrop. | | | | |
| | | | | | Steep slope. Massive vein 1m wide quartz-clay. | | | | |
| TRIV1 | 518158.54 | 9053842.33 | Saki IV | Yes | Good location, no outcrop - thick humus, above old | | | | |
| | | | | | walking track. | | | | |
| TRIV2 | 518273.62 | 9053737.68 | Saki IV | Yes | Located near Geseva/Hoyu creek junction. Trench | | | | |
| | | | | | cuts across Geseva creek. A strong NS structure with | | | | |
| | | | | | quartz-silicification-pyrite 3m wide in Geseva creek. | | | | |
| TRIV3 | 518225.98 | 9053708.50 | Saki IV | Yes | Good location. Strong silicification-clay-limonite at | | | | |
| | | | | | flagging. If vein is intersected in 3 then maybe | | | | |
| | | | | | propose another trench between 3 and 1. | | | | |
| TRIV4 | 518284.34 | 9053701.35 | Saki IV | Yes | Good location and slope. 3m wide outcrop nearby | | | | |
| | | | | | crackle breccia of quartz-pyrite-silica-limonite. | | | | |
| TRIV5 | 518254.56 | 9053673.37 | Saki IV | Yes | Trench located above Geseva/Wambi creek junction, | | | | |
| | | | | | good location. Outcrop in creek junction - 3m wide | | | | |
| | | | | | quartz-silica-pyrite. | | | | |
| TRIV6 | 518200.37 | 9053661.46 | Saki IV | Yes | Location on steep slope but ok. Quartz vein floats | | | | |
| | | | | | found nearby. | | | | |
| TRIV7 | 518301.01 | 9053557.24 | Saki IV | Yes | Good location on bush track below Mamando | | | | |
| | | | | | canteen/helipad. Boulders of cloudy-chalcedonic | | | | |
| | | | | | quartz vein were found possibly in old trench. | | | | |
| TRIV8 | 518435.60 | 9053507.82 | Saki IV | Yes | Good location above western bank of Mandi creek. | | | | |
| | | | | | 2m wide vertical mineralised structure exposed in | | | | |
| | | | | | creek below trench 8 of quartz-silica-pyrite-limonite. | | | | |
| TRIV9 | 518483.83 | 9053429.81 | Saki IV | Yes | OK but near steep slope to the east located 36m SW | | | | |
| | | | | | from a 2m wide quartz vein on walking track, | | | | |
| | | | | | comprised of massive quartz, comb & bladed textures | | | | |
| | | | | | with fine sulphides - possibly a cross vein. | | | | |
| TRIV10 | 518498.72 | 9053410.75 | Saki IV | Yes | Good location near steep slope to east, no outcrop, | | | | |
| | | 3000 120170 | | . 55 | thick humus-brush need clearing. | | | | |
| TRV14 | 518476.69 | 9053750.18 | Saki V | Yes | Located near an alluvial mining settlement adjacent | | | | |
| 11(114 | 310470.03 | 3033730.10 | Juki | 103 | Mandi creek. Needs to be moved downstream. | | | | |
| TRV15 | 518492.77 | 9053727.56 | Saki V | Yes | Located on landslide area adjacent Mandi creek. | | | | |
| 11/473 | 310432.77 | 3033727.30 | Juni V | 103 | Strong silicification observed outcrop 10m away. | | | | |
| TRV16 | 518558.87 | 9053706.12 | Saki V | Yes | Need to be moved south but huts nearby. Very steep | | | | |
| 111.4 10 | 310330.07 | 3033700.12 | Juki v | 103 | slope and actual location inaccessible. | | | | |
| TRV17 | 518520.75 | 9053637.63 | Saki V | Yes | Near alluvial mining area. Two vein trends are | | | | |
| 11//1/ | 310320.73 | 3033037.03 | Jan v | 163 | exposed at Saki V vein and SSW trending cross vein. | | | | |
| | | | | | , | | | | |
| TRV19 | 518544.58 | 9053572.73 | Saki V | Yes | Near alluvial mining area at Saki V vein - quartz-mno- | | | | |
| | | | | | limonite-clay at 330deg/85NE dip. | | | | |

Water Quality Testing:

Five water sampling sites were proposed to be sampled at Hoyu Lower, Hoyu Upper (SWS04), Geseva (SWS05), MandiDegom (SWS02) and Mandi Upper (SWS01) creeks (Figure 1). The Lower Hoyu sample site was not accessible and instead Degom Creek (SWS03) was sampled upstream from the Saki camp (Figure 2). All samples were analysed at the SGS Environmental Laboratory in Port Moresby, Papua New Guinea for general water quality testing.

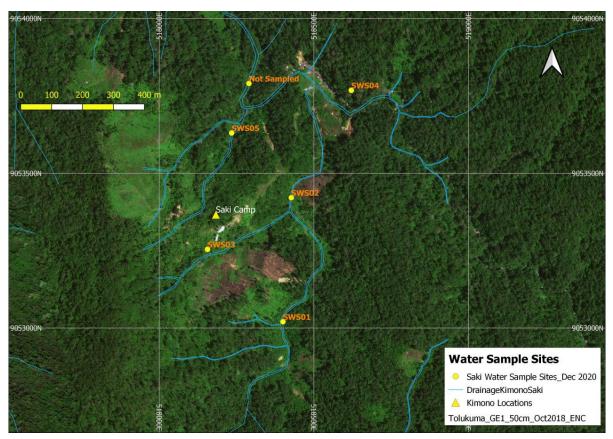


Figure 3: The Five Water Quality Sites Sampled Saki

Samples were mainly taken in a pool area where the water is deeper so any fine solid particles have settled to the bottom (Photos 4 and 5). Prior to sampling the water, the plastic water container is rinsed with the in-situ water first and then sampled and returned to the camp and stored in the esky supplied by SGS laboratory for dispatch back to the laboratory.





Photo 4: Container Rinsed in Mandi Creek

Photo 5: Sampling Site in Upper Hoyu River

SGS laboratory results (Table 2) show mercury levels at all five sampling sites to be much lower than the maximum allowable contaminant level (MCL) of 0.002 mg/L.

Table 2: Results of Mercury Levels in the Water Samples

| Site ID | Sample ID | Sample Type | Units (mg/L) | Remarks |
|--|--------------|-------------|--------------|--|
| SWS01 | CE150131.001 | Water | <0.00005 | Very low mercury levels below reporting limit. Water safe for drinking. |
| SWS02 | CE150131.002 | Water | <0.00005 | Very low mercury levels below reporting limit. Water safe for drinking. |
| SWS03 | CE150131.003 | Water | <0.00005 | Very low mercury levels below reporting limit. Water safe for drinking. |
| SWS04 | CE150131.004 | Water | <0.00005 | Very low mercury levels below reporting limit. Water safe for drinking. |
| SWS05 | CE150131.005 | Water | 0.00020 | Low mercury level below the maximum contaminant level 0.002 mg/L. Water safe for drinking. |
| Limit of reporting = 0.00005 mg/L | | | | |
| Maximum contaminant level = 0.002 mg/L | | | | |

Results for arsenic, copper, lead and zinc were below their respective MCL values. The total dissolved solid (TDS) refers to all inorganic minerals/salts (mainly calcium, magnesium, potassium, sodium, bicarbonates, chlorides and sulphates) and some small amounts of organic matter that are dissolved in water. TDS levels at all five water testing sites varies from 20 mg/L to 40 mg/L. TDS levels between 50-150 mg/L is rated good for drinking. The pH of the water from the sample sites varies from 7.2 pH at site SWS04 to 7.7 pH at site SWS05. The values are near the neutral pH of fresh surface water which is 7.

In summary, water quality testing of the surface water at Mandi Creek, Degom Creek, Geseva Creek and Hoyu River returned acceptable water quality results with the water safe for drinking by the local villagers and for use at the Saki exploration camp along Degom Creek.

Additional Information:

- The Warden's Hearing at the Saki village has been re-scheduled for 10am Monday 19th April at the Saki camp.
- Frontier geologists are currently planning a follow-up fieldwork program at Saki which includes trench sampling, geological mapping, soil and rock sampling.
- All samples from the Kimono sampling program are currently being processed at ALS Laboratories.

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

| Trontier Resources Eta Exploration Electice information | | | | | | | | | | |
|---|------------------------------|--------|----------|-------------------|--------------------|--|--|--|--|--|
| Exploration Licence | | sub- | AREA | | | | | | | |
| Number and Name | Ownership | blocks | (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 FL's | 130 | 441 72 | | | | | | | |

*1 sub-block approx. 3.41 sq.kn

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 if granted.