



**Address**  
Level 8, 99 St Georges Terrace Perth, WA 6000  
**Phone**  
+61 8 9486 4036

**ABN**  
96 095 684 389  
**WEBSITE**  
[www.frontierresources.com.au](http://www.frontierresources.com.au)

**ASX: FNT**

ASX Limited  
Market Announcements Platform

31 October 2019

## **TECHNICAL REPORT – QUARTER ENDED 30<sup>th</sup> SEPTEMBER 2019**

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- Second phase Saki surface trench sampling results at the Saki prospect included:
  - **0.5m at 535 g/t Au** in Trench#29
  - **1.0m at 55.68 g/t Au** in Trench#11
  - **0.7m @ 30.90 g/t Au** in Trench#78
- Second phase Saki drilling demonstrated a 1.4km long by 700m wide system of gold veins with results including:
  - **13.2m @ 5.38 g/t Au** from 75.1m downhole depth (SK033)
  - **9.5m @ 1.82 g/t Au** from 45.2m downhole depth (SK035)
  - **9.8m @ 2.94 g/t Au** from 80.4m downhole depth (SK041)
- Historical Taula drilling and trench results show near surface bonanza gold grades including:  
*Drilling (1,315.75m in 18 diamond holes, completed in 2003):*
  - **3.0m @ 16.19 g/t Au** from 23m downhole depth in hole SSD003
  - **5.3m @ 7.19 g/t Au** from 37.6m downhole depth in hole SSD008 including;
    - **1.8m @ 18.8 g/t Au** from 41.1m downhole depth
  - **1.7m @ 12.55 g/t Au** from 31.1m downhole depth in hole SSD010
  - **5.3m @ 8.47 g/t Au** from 66m downhole depth in hole SSD011

### Trenching:

- **1.0m @ 80.5 g/t Au and 1.2m @ 1041.2 g/t Au** in continuous rock chip samples along the Taula structure
  - **1.0m @ 39g/t Au, 1.0m @ 30g/t Au, 1.0m @ 25g/t Au and 1.0m @ 20g/t Au at the Southern Taula Vein (SeriSeri prospect)** which were partly tested by the drilling program
  - **Spot samples of 42.9, 66.6 and 118 g/t Au** in Trench SST01 and spot trench samples of **332, 33.1 and 29.4 g/t Au** a further 750m to the northwest of SST01 along the Taula North vein
- Five different levels of gold bearing veins at Taula were intersected in the drilling
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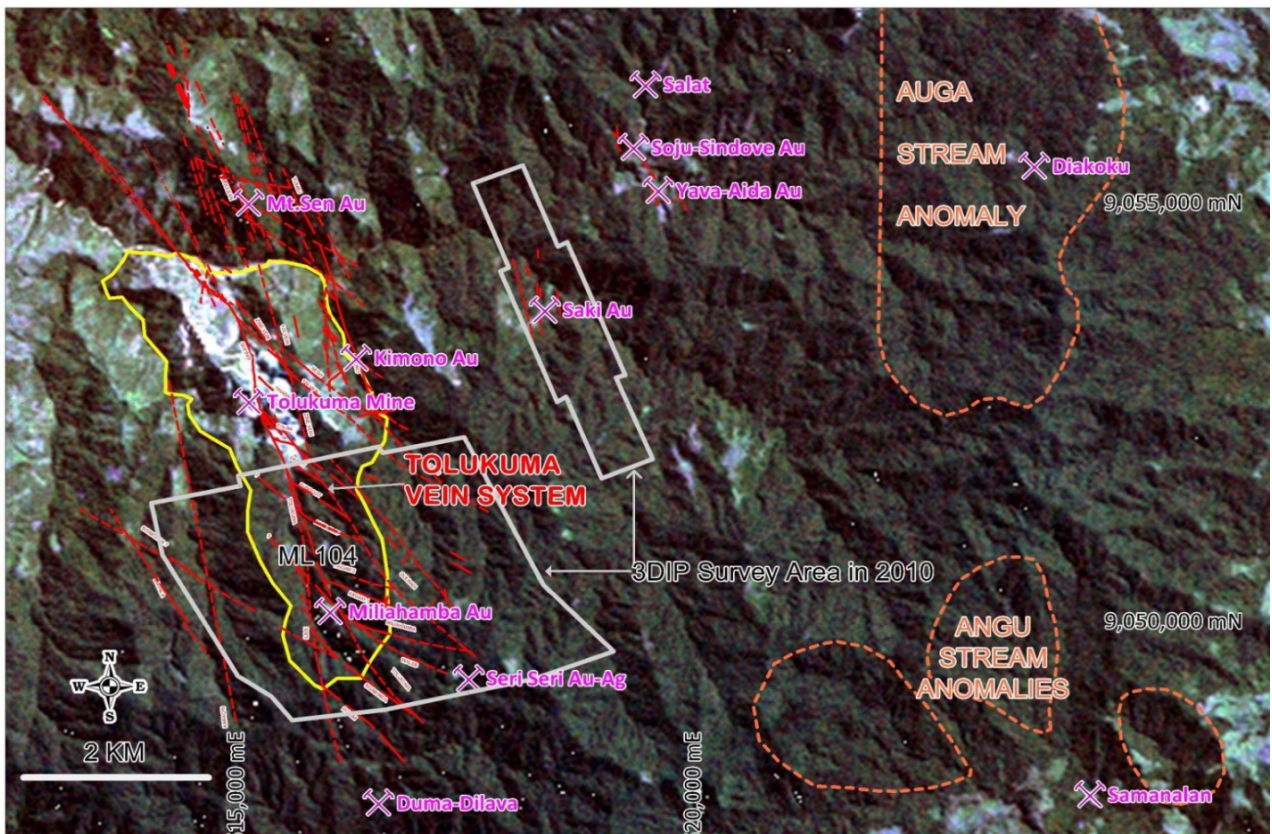
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Frontier Resources Ltd (ASX: FNT) (**Frontier** or the **Company**) is focussed on high grade precious and base metal mineral exploration. The Company currently holds three exploration projects in Papua New Guinea: Tolukuma, Muller Range and Bulago, with the most advanced being the Tolukuma exploration project which surrounds the currently inactive Tolukuma mine which contained an initial resource of 947 koz of Au @ 19.6 g/t and ~2Moz Ag @ 42.8 g/t<sup>1</sup>.

The EL2531 Tolukuma tenement was granted on 25 February 2019 and Frontier has since been acquiring and compiling historical technical reports and data to best determine a strategy for developing the gold resources surrounding the Tolukuma Mining Lease ML104 (Figure 1). During the quarter, Frontier compiled extensive analysis of historical trench and drilling results at the Saki and Taula vein systems.

The partly mined Tolukuma vein system occurs on a parallel structure 3km SSE from the Saki vein system and continues in a number of splays further southeast to the Taula vein and Seri-Seri gold-silver prospect.



**Figure 1: Gold Prospects Near the Tolukuma Gold Mine**

In 2002, Tolukuma Gold Mines (TGM) completed a Phase 1 drilling program at the Saki prospect with an objective to supplement the ever-depleting ore at the Tolukuma Gold Mine. A subsequent Phase 2 trenching program was completed with over 1,500 trench samples being taken, resulting in 29 trenches that were anomalous in gold.

The Saki veins are up to 6m wide with best surface grades of **0.5m @ 535g/t Au** in Trench #29 in the Saki I vein and **1.0m @ 55.69g/t Au** in Trench # 11 in the Saki II vein (Figure 2). A number of these gold anomalous trenches were subsequently drill tested in 2009 with 17 diamond core holes for 1,873.5m for a total of 4,187.25m (refer ASX release 5 August 2019).

<sup>1</sup> Tolukuma Gold Mines Ltd Resource Update, 2015. Petromin Mine Planning Engineer



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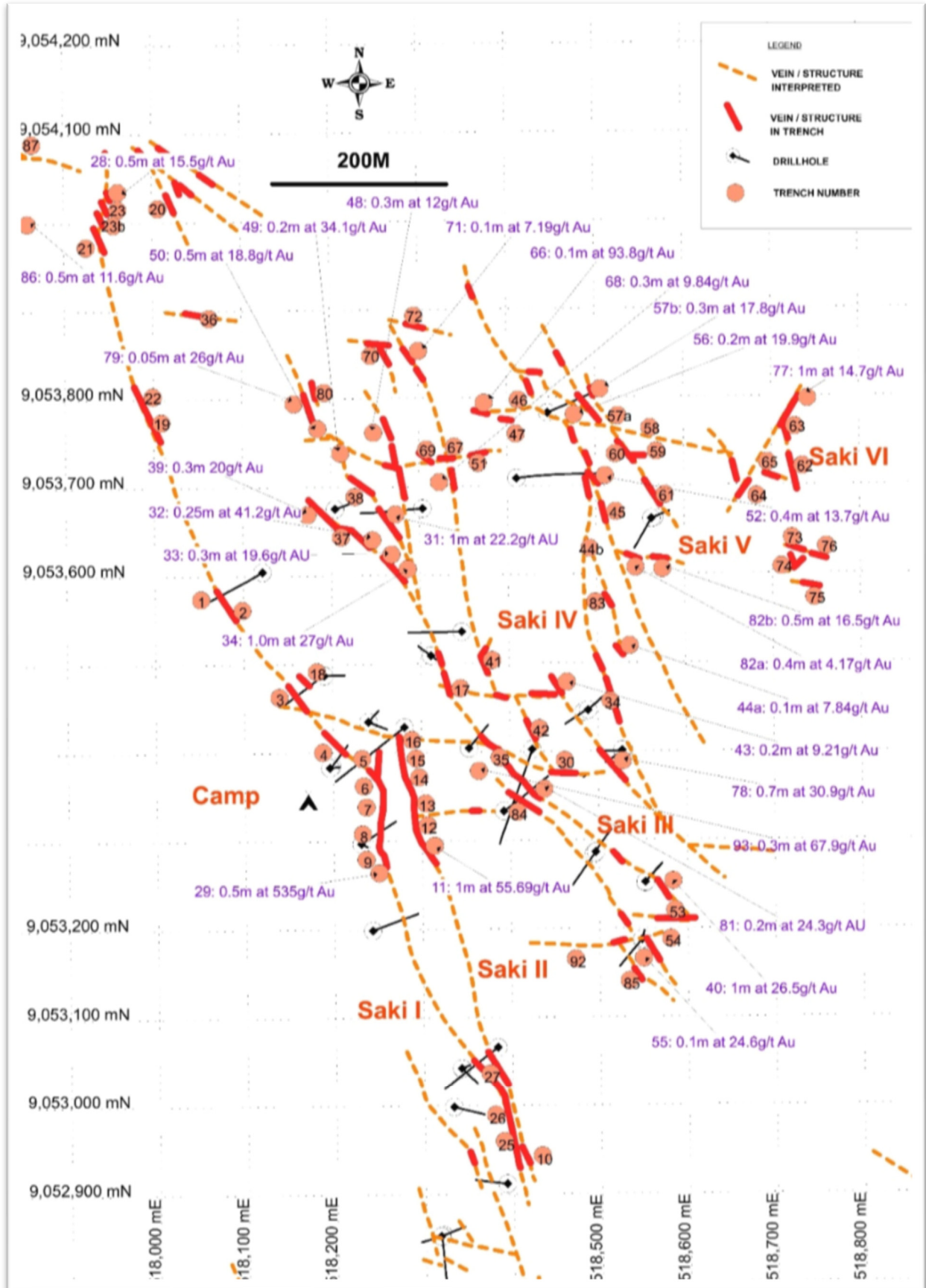


Figure 2: Phase 2 Saki Trenching Results (5g/t cut-off)





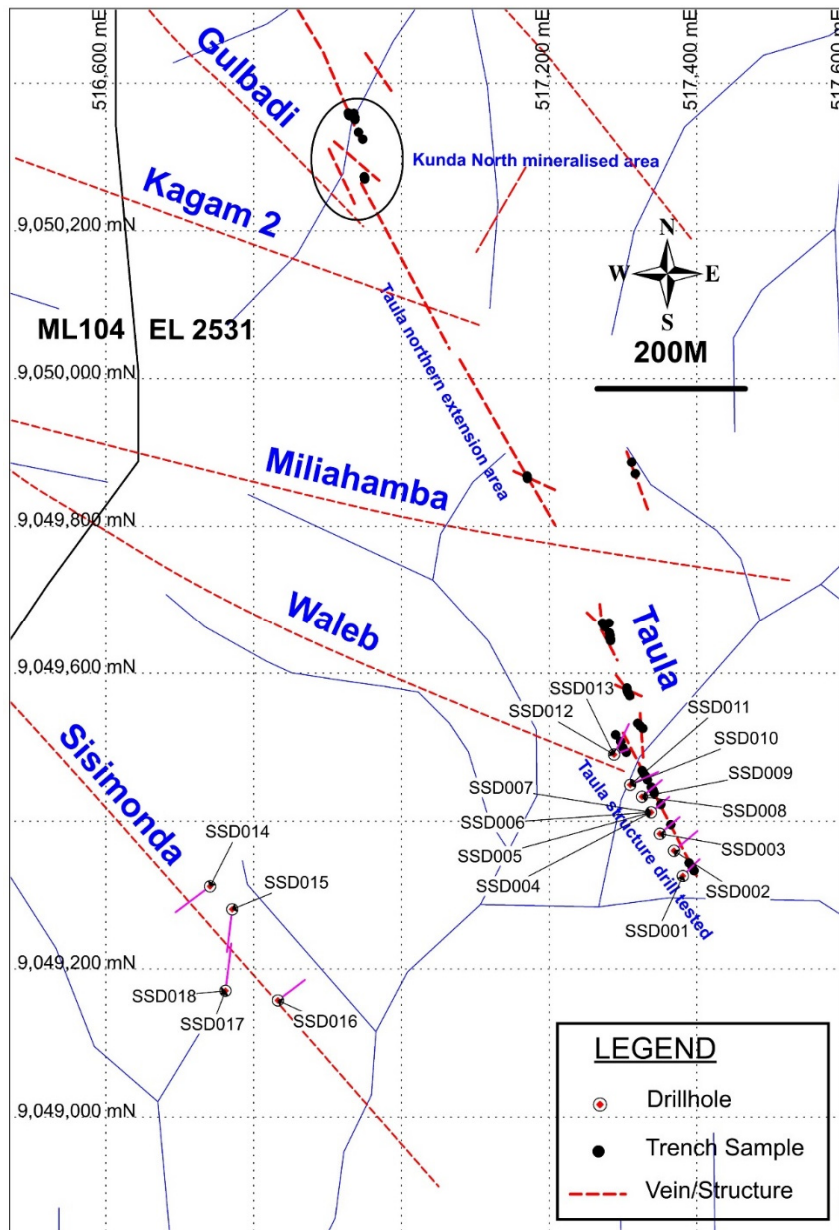
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The Taula vein occurs as a southern extension of the northwest trending Gulbadi structural corridor that extends 2.6 km from the Tolukuma mine into Frontier’s tenement. TGM completed over 53 trenches accessible via 4WD along the Miliamba haulage road and then half hour walk along tracks.

In 2003, a follow-up diamond drilling program targeted anomalous gold in trench results at the southern extent of the known Taula structure with a total of 13 drillholes (SSD001 to 13) for 851.90 metres drilled (Figure 3). An additional five drillholes (SSD014 to 18) targeted the adjacent Sisimonda vein system to the west with a total of 463.85 metres drilled (Figure 3).

The Sisimonda structure is a continuation of the Tolukuma structure and drilling intersected **1m @ 0.84g/t Au** from 56.4m depth and the last 1m of the hole ended in mineralisation at 86.7m with **1m @ 3.1g/t Au**. SSD016 also intersected four zones of gold mineralisation with the best intercept of **3.7m @ 1.9g/t Au** from 16.4m downhole depth (refer ASX release 5 September 2019).



**Figure 3: Taula and Sisimonda Vein Drillhole Locations**



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### **Next steps on existing project portfolio:**

- Analysis of recently acquired data from near mine prospects at EL2531.
- Satellite imagery analysis over EL2531 as partial requirement of work commitment on the EL.
- Fieldwork to include geological mapping, trench and rock chip sampling program along the NW and SE extensions of the Saki prospect in order to expand on the area of known gold mineralisation and define drill targets.
- Additional trench sampling and mapping along the Taula north extension area to determine further extents of gold mineralisation at depth.
- Warden's hearings, design and completion of required fieldwork at the Muller Range EL2356 project.
- Seeking strategic partners for the two highlands projects at Bulago and Muller Range.

During the quarter the Company also assessed a number of additional project opportunities that fit within the Company's strategy to explore and develop high grade precious and base metal projects. The Company will update shareholders accordingly as further advancements progress.

### **Additional information released during the quarter:**

- Frontier established a sale facility for holders of unmarketable parcels for shareholders with holdings valued at less than A\$500. The sale facility enables eligible shareholders to sell their Frontier shares without incurring any brokerage or handling costs. This initiative will substantially reduce administration costs incurred by Frontier.
- Corporate Governance Manual as adopted September 2019.
- Annual report for year ended 30 June 2019.
- New Company web site now live.

### **Releases Submitted to the ASX During the Quarter Included:**

3 July 2019	Director Appointment/Resignation
5 July 2019	Director Appointment/Resignation
10 July 2019	Major Gold Structures Modelled at Tolukuma
5 Aug 2019	Saki Drilling & Trench Results Reveal 535g/t Gold at Surface
5 Sept 2019	Taula Drill & Trench Results-Near Surface Bonanza Au Grades
5 Sept 2019	Unmarketable Parcel Share Sale Facility Established
19 Sept 2019	Corporate Governance Manual
19 Sept 2019	Annual Report to Shareholders

For additional information please visit our website at [www.frontierresources.com.au](http://www.frontierresources.com.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.



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**Frontier Resources Ltd Exploration Licence Information**

<b>Exploration Licence Number and Name</b>	<b>Ownership</b>	<b>sub-blocks</b>	<b>AREA (sq.km)*</b>	<b>Grant Date</b>	<b>Expiry Date</b>
EL 1595 - Bulago	100% Frontier Gold PNG Ltd	22	75.02	07-Jul-08	06-Jul-20
EL2356 - Muller Range	100% Frontier Copper PNG Ltd	56	190.46	31-Dec-15	30-Dec-19
EL2351 - 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
<b>Total of Granted EL's</b>		<b>208</b>	<b>707.20</b>		

\*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.