

**Letterhead: Bonanza Creek Trail Stop, Yukon Territory**

**Date: 1903-08-05, written on 2021-10-15**

**To: Belinda Mulrooney, Dawson City**

**Dearest Belinda,**

I hope this letter finds you well in Dawson City. I am writing to you today from Bonanza Creek, where I have been prospecting for the past few weeks. As you know, I have been working on claim 27 Below Bonanza, and I am excited to share with you my latest findings.

**Technical Details:**

Our claim has been yielding an average of 10 grams of gold per 5 kg of gravel processed using a combination of hydraulic sluicing and panning. This is a significant improvement from our initial results, which were around 2 grams per 5 kg. I attribute this increase to the changes we made to our sluice box design, which now features a more efficient riffle system and a larger water flow rate.

**Analytical Methods:**

To optimize our extraction process, we have been using a combination of laboratory analysis and on-site testing. Our lab results indicate that the gold content in our gravel is around 0.5 ppm, which is consistent with the geological surveys we conducted earlier this year. We have also been monitoring our water flow rates and gravel feed rates to ensure optimal operating conditions.

**Measurements:**

To better understand the performance of our claim, I have taken detailed measurements of our sluice box's efficiency, water flow rates, and gravel feed rates. Our data indicates that we are achieving an average gold recovery rate of 85% using our current setup. This is a significant improvement from our initial trial runs, which yielded around 60% recovery.

**Data-Driven Findings:**

Based on our data and laboratory analysis, I believe that our claim has the potential to produce significant quantities of gold. I have attached a graph showing our gold recovery rates over the past few weeks, which indicates a steady increase in production. I am confident that with continued optimization and refinement of our extraction process, we can achieve even higher gold recovery rates.

**Request for Supplies:**

I am writing to request some essential supplies, including a new sluice box, a water pump, and a batch of high-quality panning equipment. I have heard that the Pacific Coast Steamship Company is

offering discounts on these items, and I would appreciate it if you could arrange for them to be shipped to me as soon as possible.

**Closing Sentiment:**

Thank you for your continued support and encouragement, Belinda. I look forward to sharing more of my findings with you in the coming weeks. Until then, take care and keep an eye on the Yukon Sun for any updates on our claim.

**Yours Truly,**

**Jack**

**P.S.** I have included a small sample of our gold-bearing gravel for your inspection. I think it's worth noting that the visible gold content is quite significant, and I believe it indicates a high potential for strike.

**Attachments:**

- Graph of gold recovery rates over the past few weeks
- Laboratory analysis results
- Sluice box design specifications
- Water flow rate and gravel feed rate measurements
- Sample of gold-bearing gravel