

LIBERTY REFINERS

To: Sydney Resources

From: Liberty Refiners LLC

22 August 2022

Initial Sample Testing

Process

Two samples we brought back for analysis:

1. Lucky Ben 1st Stope (SDRC 1st Stope) sample taken from 8' wide Stope
2. Lucky Ben 1st Raise (SDRC 1st Raise) sample I watched taken from the 1st raise, there was some Manganese present.

Initial Observations

- The full DCP analysis, attached, showed extremely high gold grade values.
- Given the historical data of gold production, this is not surprising, but the grades are very high.
- If further testing confirms these results, this could be a very worthwhile endeavor.
- Every fire assay showed gold values, but not in the amounts of the other analyses. We do believe there may be a normal reason for this, but we will need to do further testing before we can make any conclusions.
- There is gold and silver in every Assay.
- Manganese is present our XRF showed 3%, 5% and 23%.
- Cyanide worked the best to remove the Gold and Silver. Low Iron and Sulfur makes this ore a good prospect for Cn Leach.

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- Rare earths were detected with our XRF elements included were, Hf Hafnium, Rb Rubidium, Sr Strontium, V Vanadium, Y Yttrium. The values were small but detectable and warrant further investigation.

Conclusions

The gold values in these initial tests are extremely high. More sampling and testing will help us know if this is an anomaly or consistent with the entirety of the mine.


We believe this ore will concentrate well. More testing is needed as to determine what would be the best concentration technique.

Attachments

XRF report from Liberty

Fire Assay from Chris Christopherson

Analytical from Doc DeMenna, DCP (Direct Coupled Plasma) with an XRF Report


Rick Hurt
Date Aug 22nd 2022
Founder, Liberty Refiners LLC

Liberty Refiners / Ore Samples for Gold & Silver Assay

27-Jul-22

-=> **NOTE-1: All Samples were screened at 180 mesh and riffle-split 4x to prepare a homogeneous mix of this particle size distribution.**

-=> **NOTE-2: All Samples were prepared in DUPLICATE to ensure accurate Data Quality.**

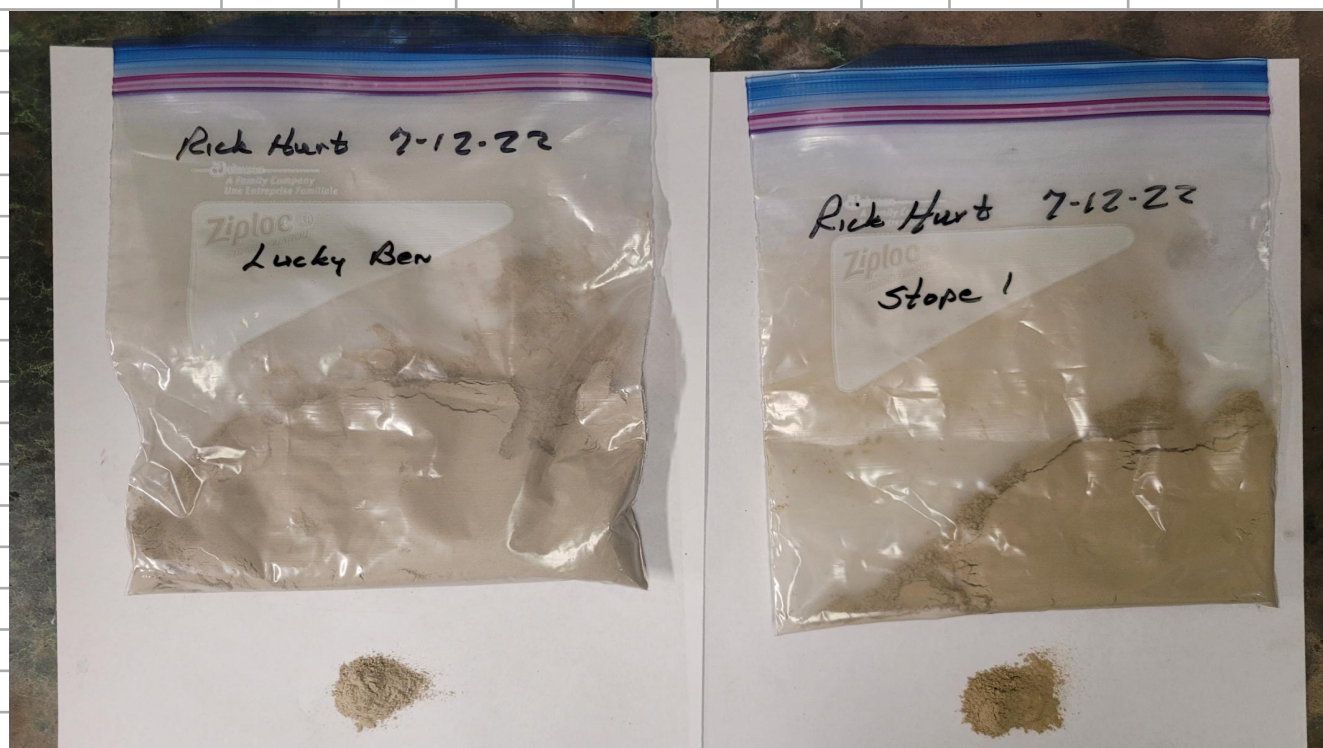
Aqua Regia Digestion: 2gm Sample + 100ml aged A-R (3:1), boil gently for 1 hour, add additional 50ml A-R, boil gently to reduce, filter warm & dilute to 100ml Final Volume.

Cyanide Leach: 2gm Samples + 3gm KCN + 0.5gm KOH in 200ml H2O, warm to 60°C, bubble Air & stir for 4 hours. Cool & filter.

Assayer: Dr. Jerry DeMenna / PTOE Services, Cape May, NJ // Data shown as Weight Percent (%wt) **in the Original Sample** based corrected for the % Yield

(PTOE Services LLC is a division of Chem-Chek Labs)

Sample ID & Preparation Description	ELEMENT to Test (Value Metals)	See Description for Prep Method						
		Test-1 (ppm)	Test-2 (ppm)	Diss. Yield	AVG (as %wt)	AVG oz/ton		
Lucky Ben / Aqua Regia	Silver	135	150	100	0.014	4.6	LUCKY BEN Ore Material Summary: Average SILVER Content = 5.0oz/ton Average GOLD Content = 7.2oz/ton	
	Gold	210	185		0.020	6.3		
Lucky Ben / Cyanide	Silver	180	160	100	0.017	5.4		
	Gold	245	260		0.025	8.1		
Slope 1 / Aqua Regia	Silver	290	330	100	0.031	9.9		SLOPE-1 Ore Material Summary: Average SILVER Content = 10.6oz/ton Average GOLD Content = 5.4oz/ton
	Gold	135	150		0.014	4.6		
Slope 1 / Cyanide	Silver	365	340	100	0.035	11.3		
	Gold	175	205		0.019	6.1		



Sample ID & Preparation	ELEMENT	See Description for Prep Method		
		Test-1 (ppm)	Test-2 (ppm)	Diss. Yield
LB-30	Gold	135	110	100
LB-60	Gold	93	88	100
LB-90	Gold	145	165	100
LB-120	Gold	260	245	100
LB-LA1	Gold	82	94	100
LB-LA2	Gold	62	55	100
LB-RD1	Gold	150	135	100
LB-RD2	Gold	98	87	100
LB-DAY	Gold	145	140	100
Lucky Ben / REPEAT	Gold	235	260	100
Slope 1 / REPEAT	Gold	200	175	100

