



Detailed Metallurgical Test Work Confirms Gravity Recovery of 45% and overall recovery of 94.5% at a 150 µm grind size

- Detailed metallurgical test work results indicate achievable gravity recovery of 45% and overall recovery of 94.5% at a 150 µm grind size and up to 98% at finer grind sizes.
- As with the Phase 1 test work, the Phase 2 leach test work demonstrated rapid leach times with the majority of tests achieving total gold extraction in excess of 90% within 8 hours.
- Phase 2 metallurgical test work completed on representative drill core samples from the Tenera Gold Deposit resulted in high gravity and leach recoveries.
- These results will be used to set the process design criteria for Tenera confirming the potential for ore processing using a simple, conventional crush, grind, gravity recovery and leach flowsheet achieving high recoveries.

Tesoro Resources Limited (Tesoro or the Company) (ASX: TSO) is pleased to announce the final results from the Phase 2 metallurgical test work conducted on mineralised material from the Tenera Gold Deposit (**Tenera**) at the Company's El Zorro Gold Project, Chile.

The Phase 2 test work program was designed to assess the gravity recovered gold component and cyanide leaching characteristics over a range of gold grades using different grind sizes to allow the selection of the most appropriate grind size for future processing. The Phase 2 test work was completed using sea water.

The Phase 2 test work was conducted on representative samples from the various mineralised zones at Tenera over a range of grades. A total of 526kg of samples selected from the various mineralised zones that lie within the optimisation pit shell that was used to constrain the Tenera Mineral Resource Estimate as released on 29 July 2021. Samples were sent to the ALS Metallurgical Laboratory in Perth WA for test work.

The results of this testwork program and the main conclusions drawn regarding the possible metallurgical treatment of the El Zorro deposits are as follows;

- The test programme successfully determined a simple processing method for recovering gold from the Tenera gold deposit with the optimal results being:
 - Bond Ball Mill work index (BWi) = 20.4 kWh/t (from Phase 1 Test Work Program);
 - A leach feed grind size distribution of P80 = 150µm;
 - Cyanide consumptions of 0.5kg/t;
 - Lime consumption of 4.0kg/t;
 - Gravity recovery of 45%;

- Overall Au recovery of 94.5%; and
- Test work undertaken using seawater.

Results of the overall test work are summarised below for a 200 micron and 150 micron grind sizes:

COMP_ID	Recoveries					
	P ₈₀ = 200µm			P ₈₀ = 150µm		
	Gravity	Leach	Overall	Gravity	Leach	Overall
	%	%	%	%	%	%
NSF_FR_LG	48.6	42.2	90.8	48.2	44.5	92.7
NSF_FR_MG	51.6	40.6	92.2	52.9	42.7	95.5
NSF_FR_HG	54.8	37.0	92.4	57.7	39.8	97.5
EZT_FR_LG	48.5	47.3	95.8	48.0	47.9	95.9
EZT_FR_MG	51.8	39.9	91.6	52.1	42.5	94.6
EZT_FR_HG	49.1	42.3	91.5	49.9	42.5	93.4
SED_FR_LG	42.3	49.6	92.0	35.9	50.3	88.9
SED_FR_MG	49.5	42.3	91.8	52.2	42.5	94.6
SED_FR_HG	47.6	43.0	90.5	48.3	45.5	93.9
AVERAGE	49.3	42.7	92.1	49.5	44.2	94.1
MEDIAN	49.1	42.3	91.8	49.9	42.7	94.6
OX_HG	60.1	37.6	97.6			
OX_LG	28.1	67.0	95.1			

Tesoro Managing Director Zeff Reeves commented:

"These are first class metallurgical results confirming high gravity and cyanide leach recoveries that can be achieved for processing material from Ternera using conventional gravity and CIL processes at coarse grind sizes. These results have enabled the development of a very simple, generic, preliminary processing flowsheet and largely de-risks one of the projects key revenue drivers as it advances toward development."

TERNERA PHASE 2 METALLURGICAL TESTWORK PROGRAM

A total of 526kg of mineralised rock samples were collected from 53 diamond drill holes from Tenera, representing each of the mineralised and grade zones within the Mineral Resource.

In all, twenty-five tests were conducted in the Phase 2 program. This is in addition to the three tests conducted on the Phase 1 program in 2020 (ASX Announcement 9 June 2020).

Testwork Sample Selection

A total of 326 half HQ core samples were delivered to ALS Metallurgy Laboratory, Perth, weighing 526kg. The mineralogical and domain make-up of the samples is shown below:

- Material from the Tenera deposit of tonalite (intrusive igneous rock), identified as EZT-FR or EZ tonalite fresh samples;
- Material from the Tenera deposit which are not tonalite but are fresh, identified as NS-FR or EZ non-sediment fresh samples;
- Material from the Tenera deposit of sediments and are fresh, identified as SED-FR or fresh sedimentary samples; and
- Material from the Tenera deposit of weathered or "oxide" samples, identified as OX samples.

Details of the composite samples are shown below:

COMP_ID	EST Wgt (kg)	Calc Grade Au g/t	ALS Assay		DESCRIPTION
			Au g/t	As ppm	
NSF_FR_LG	49.00	0.76	1.07	130	<1g/t North South Fault Zone
NSF_FR_MG	49.00	1.70	1.54	15	1-2.5 g/t Au - north South fault zone
NSF_FR_HG	49.00	6.57	3.63	980	>2.5 g/t Au north south fault Zone
EZT_FR_LG	50.75	0.58	0.86	440	<1g/t main tonalite
EZT_FR_MG	50.75	1.76	1.84	605	1-2.5g/t Au main tonalite
EZT_FR_HG	49.00	5.07	2.98	2,985	>2.5g/t Main Tonalite
SED_FR_LG	49.00	0.66	0.41	40	<1 g/t Au sediment hosted
SED_FR_MG	50.75	1.88	0.81	45	1-2.5 g/t Au Sediment hosted
SED_FR_HG	49.22	4.88	4.62	825	>2.5 g/t Sediment hosted
OX_LG	80.61	0.54	0.73	170	<1 g/t Au Oxide zone
OX_HG	99.05	5.13	13.10	1,310	>1 g/t Au Oxide zone
LOM Composite			1.12		

Metallurgical Test Work Programme

Each individual sample was crushed to minus 4mm, homogenised, and split with one split stored for future use and the other half used for its respective composite of 15 to 30kg each. The composites were prepared for head assays analysing for Au, Ag, S and SiO₂ along with other analytes such as As.

11 composites were prepared to investigate grind times to reach particle size distributions of 80 percent passing 850, 250, 150 and 75 micron ("P80 = 850, 250, 150 and 75µm).

Following this a bulk portion of 15kg was ground to P80 = 850µm and processed through a laboratory size Knelson gravity separator. The Knelson concentrate was then intensively leached while the Knelson tailings were dried and split into 1kg samples for conventional cyanide leaching. All gravity and leach products were analysed for Au and Ag.

A 12th composite was also generated, composed of all fresh medium and low-grade composites.

This composite was called "LOM composite" and was used as the initial "scout" tests to better determine the leach parameters.

Following initial LOM sample tests, it was decided to test the composite samples at a leach grind size of P80 = 200µm. Following review of the results from this test work, the program was re-run at a lower grind size of P80 = 150µm.

Gravity Recoverable Gold (GRG) Testwork

Large scale gravity separation tests were conducted to eliminate individual 1kg gravity test variations.

Three of the LOM composite sample tests were conducted at a Knelson Concentrator feed grind size of P80 = 850µm, with the remainder conducted at P80 = 200µm.

Gravity Recovered Au Results are shown below,

COMP_ID	-200µ Grind	-150µ Grind
NSF_FR_LG	48.6	48.2
NSF_FR_MG	51.6	52.9
NSF_FR_HG	54.8	57.7
EZT_FR_LG	48.5	48.0
EZT_FR_MG	51.7	52.2
EZT_FR_HG	49.1	49.9
SED_FR_LG	42.3	35.6
SED_FR_MG	49.5	50.0
SED_FR_HG	47.8	48.3
OX_LG	28.1	n/a
OX_HG	60.1	n/a
LOM Composite*	41.7	n/a

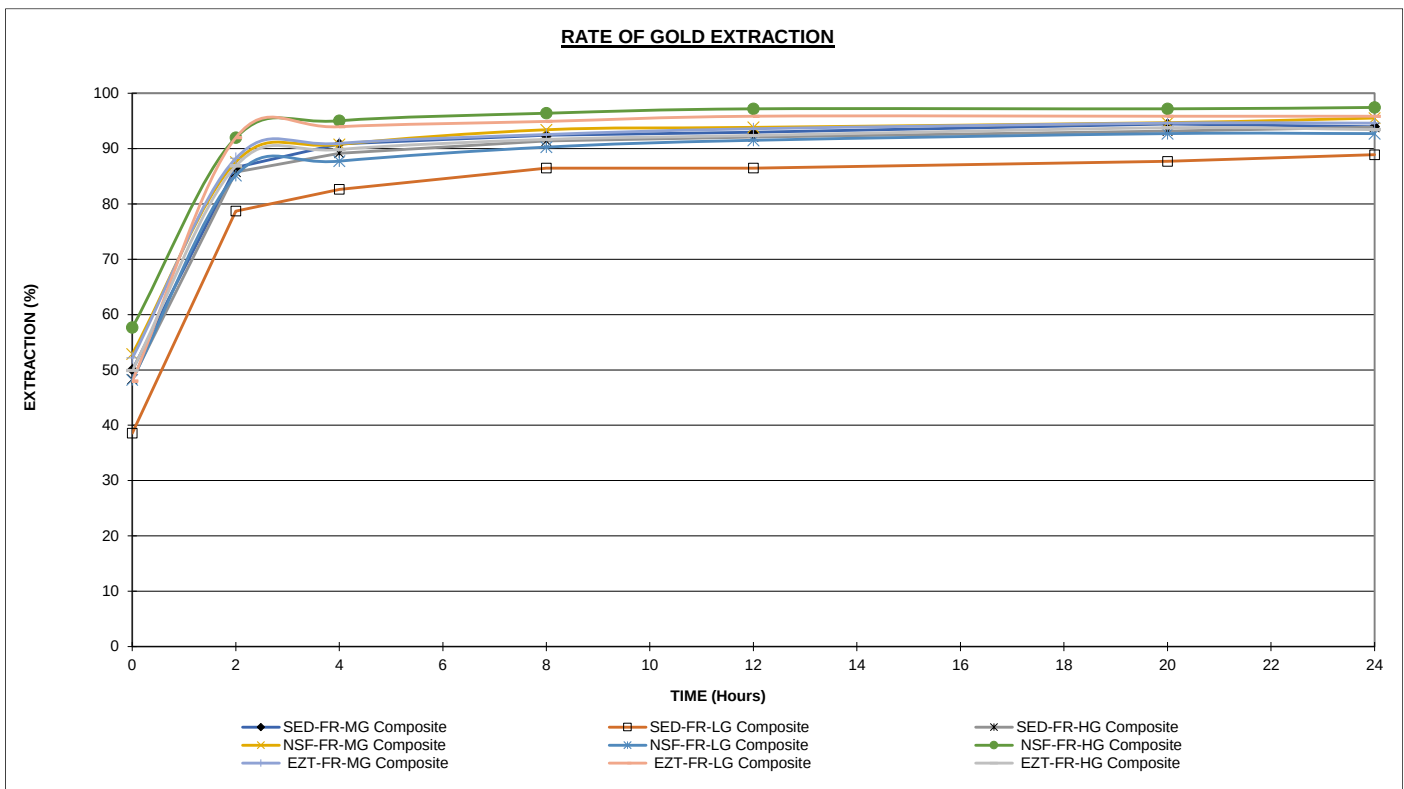
Gravity recovery is relatively consistent at around 49% to 50%, disregarding the three anomalous oxide results. For study purposes the design gravity will be set at 45%.

Leaching Test Work

All leach tests conducted in the Phase 2 programme were undertaken using sea water.

As with the Phase 1 test work, the Phase 2 leach test work demonstrated rapid leach times with the majority of tests achieving total gold extraction in excess of 90% within 8 hours.

The total extraction curves for the P80 = 150µm leach test work are shown below,



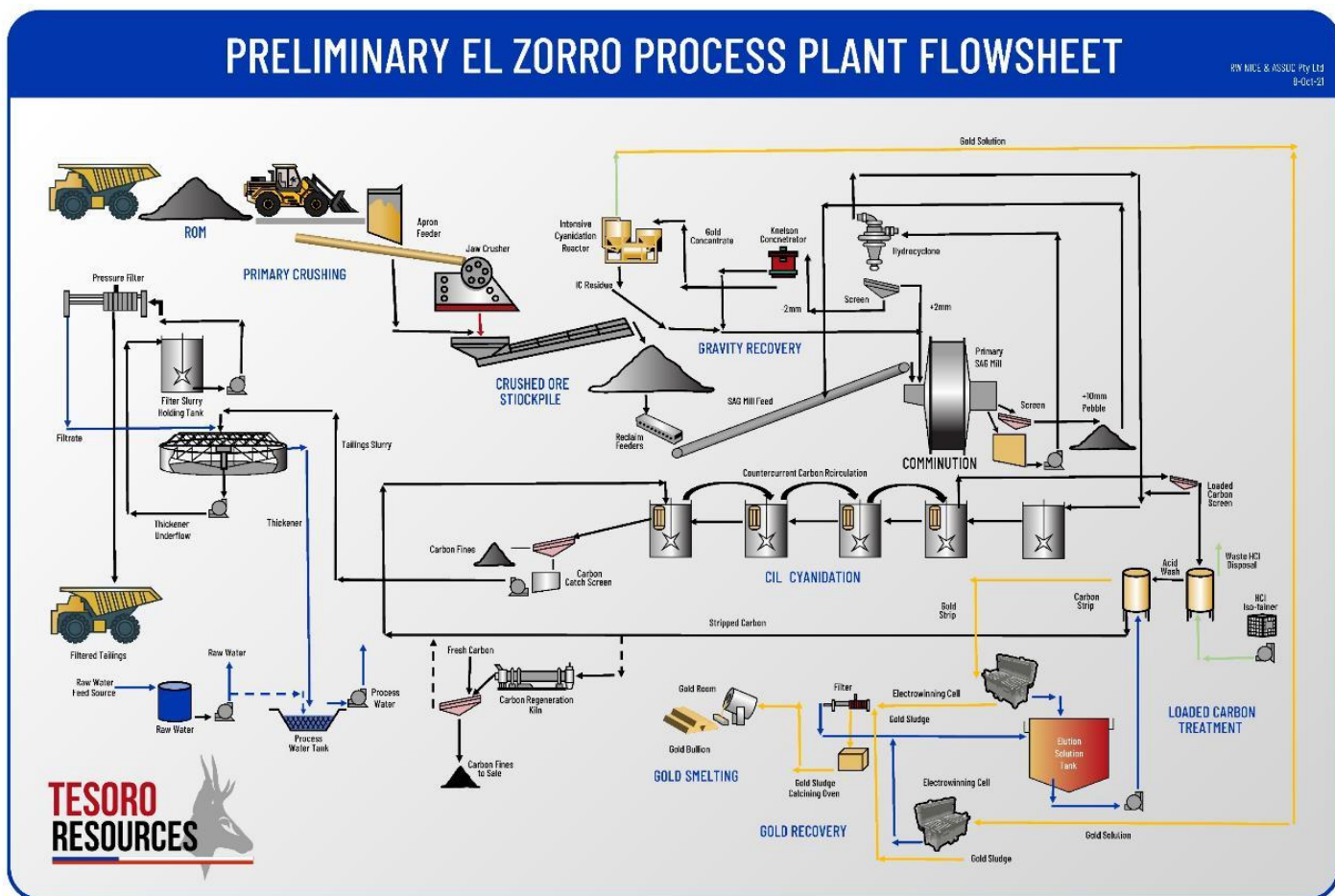
Gravity, leach and overall recoveries for each of the Phase 2 test along with respective reagent consumptions are shown below.

COMP_ID	Reagent Consumption				Recoveries					
	P ₈₀ = 200µm		P ₈₀ = 150µm		P ₈₀ = 200µm			P ₈₀ = 150µm		
	NaCN	Lime	NaCN	Lime	Gravity	Leach	Overall	Gravity	Leach	Overall
	kg/t	kg/t	kg/t	kg/t	%	%	%	%	%	%
NSF_FR_LG	0.47	2.08	0.50	3.12	48.6	42.2	90.8	48.2	44.5	92.7
NSF_FR_MG	0.54	1.78	0.46	3.55	51.6	40.6	92.2	52.9	42.7	95.5
NSF_FR_HG	0.54	2.17	0.47	3.73	54.8	37.0	92.4	57.7	39.8	97.5
EZT_FR_LG	0.54	2.74	0.57	3.67	48.5	47.3	95.8	48.0	47.9	95.9
EZT_FR_MG	0.54	3.18	0.47	4.32	51.8	39.9	91.6	52.1	42.5	94.6
EZT_FR_HG	0.54	1.71	0.48	3.63	49.1	42.3	91.5	49.9	42.5	93.4
SED_FR_LG	0.61	2.80	0.43	4.36	42.3	49.6	92.0	35.9	50.3	88.9
SED_FR_MG	0.57	2.66	0.43	4.49	49.5	42.3	91.8	52.2	42.5	94.6
SED_FR_HG	0.57	2.88	0.41	4.25	47.6	43.0	90.5	48.3	45.5	93.9
AVERAGE	0.55	2.44	0.47	3.90	49.3	42.7	92.1	49.5	44.2	94.1
MEDIAN	0.54	2.66	0.47	3.73	49.1	42.3	91.8	49.9	42.7	94.6
OX_HG	0.47	3.22			60.1	37.6	97.6			
OX_LG	0.54	2.61			28.1	67.0	95.1			

INTERPRETATION OF RESULTS

The Phase 2 metallurgical results confirm high gravity and cyanide leach gold recoveries from Ternera material using conventional gravity and CIL processes at a coarse grind size. Information was also produced to provide guidance on expected reagent usage to achieve these recoveries at a level appropriate for use in a Scoping Study level of assessment for the project.

These results provide the basis for a very simple, generic, preliminary processing flowsheet for the project as shown below.



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About Tesoro

Tesoro Resources Limited was established with a strategy of acquiring, exploring and developing mining projects in the Coastal Cordillera region of Chile. The Coastal Cordillera region is host to multiple world class copper and gold mines, has well established infrastructure, service providers and an experienced mining workforce. Large areas of the Coastal Cordillera remain unexplored due to the unconsolidated nature of mining concession ownership, but Tesoro, via its in-country network and experience has been able secure rights to a district scale gold project in-line with the Company's strategy. Tesoro has rights to acquire up to 80% of the El Zorro Gold Project.



Future Performance

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