Torex Gold
RESOURCES INC.
TSX: TXG

Muckahi Mining System

A Complete Re-Think Of Underground Mining

December 2019

Asset | Team | Game Changing Technology

Safe Harbour Statement

THE PRELIMINARY ECONOMIC ASSESSMENT (THE 'MEDIA LUNA PEA" OR "PEA") IS BASED ON THE TECHNICAL REPORT (DEFINED BELOW). THE PEA IS A CONCEPTUAL STUDY OF THE POTENTIAL VIABILITY OF MINERAL RESOURCES OF THE MEDIA LUNA PROJECT. THE PEA IS NOT A PREFEASIBILITY STUDY OR FEASIBILITY STUDY, AS THE ECONOMICS AND TECHNICAL VIABILITY OF THE MEDIA LUNA PROJECT HAVE NOT BEEN DEMONSTRATED AT THIS TIME. IT IS ALSO IMPORTANT TO NOTE THAT THE NEW MINING SYSTEM TECHNOLOGY (SOMETIMES REFERRED TO AS "MUCKAHI") IS EXPERIMENTAL IN NATURE AND HAS NOT BEEN TESTED IN AN OPERATING MINE. MANY ASPECTS OF THE SYSTEM ARE CONCEPTUAL, AND PROOF OF CONCEPT HAS NOT BEEN DEMONSTRATED. DRILL AND BLAST FUNDAMENTALS, STANDARDS AND BEST PRACTICES FOR UNDERGROUND HARD ROCK MINING ARE APPLIED IN THE MUCKAHI, WHERE APPLICABLE. THE PROPOSED APPLICATION OF A MONORAIL SYSTEM FOR UNDERGROUND TRANSPORTATION FOR MINE DEVELOPMENT AND PRODUCTION MINING IS UNIQUE TO UNDERGROUND HARD ROCK MINING. THERE ARE EXISTING UNDERGROUND HARD ROCK MINES THAT USE A MONORAIL SYSTEM FOR TRANSPORTATION OF MATERIALS AND EQUIPMENT, HOWEVER NOT IN THE CAPACITY DESCRIBED IN THE TECHNICAL REPORT. ASPECTS OF MUCKAHI MINING EQUIPMENT ARE CURRENTLY IN THE DESIGN STAGE. THE MINE DESIGN, EQUIPMENT PERFORMANCE AND COST ESTIMATIONS ARE CONCEPTUAL IN NATURE, AND DO NOT DEMONSTRATE TECHNICAL OR ECONOMIC VIABILITY. THE COMPANY EXPECTS TO COMPLETE THE DEVELOPMENT AND TEST THE CONCEPT BY THE END OF 2019 FOR THE MINE DEVELOPMENT AND PRODUCTION ACTIVITIES. FURTHER STUDIES WOULD BE REQUIRED TO VERIFY THE VIABILITY OF MUCKAHI. MUCKAHI IS NOT INTENDED AS A "TRADE OFF STUDY" BUT IS SHOWN TO MERELY DEMONSTRATE THE POTENTIAL BENEFITS MUCKAHI MAY HAVE USING THE MEDIA LUNA DEPOSIT AS AN EXAMPLE. THE PEA IS PRELIMINARY IN NATURE, AND EACH CASE, CONVENTIONAL METHODS AND MUCKAHI SYSTEM, THE PEA INCLUDES INFERRED MINERAL RESOURCES THAT ARE CONSIDERED TOO SPECULATIVE GEOLOGICALLY TO HAVE THE ECONOMIC CONSIDERATIONS APPLIED TO THEM THAT WOULD ENABLE THEM TO BE CATEGORIZED AS MINERAL RESERVES, AND THERE IS NO CERTAINTY THAT THE PRELIMINARY ECONOMIC ASSESSMENT WILL BE REALIZED. MINERAL RESOURCES THAT ARE NOT MINERAL RESERVES DO NOT HAVE DEMONSTRATED ECONOMIC VIABILITY.

This presentation contains "forward-looking statements" and "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking information includes, but is not limited to, information with respect to the future exploration, development and exploitation plans concerning the Morelos Gold Property, the adequacy of the Company's financial resources to fund such plans, business plans and strategy and other events or conditions that may occur in the future, and the results set out in the Technical Report (defined below) including the PEA including with respect to mineral resource and mineral reserve estimates, the ability to exploit estimated mineral reserves, the Company's expectation that the ELG Mine Complex (as defined in the Company's Management's Discussion and Analysis ("MD&A") for 2018) will be profitable with positive economics from mining, recoveries, grades, annual production, receipt of all necessary approvals and permits, the parameters and assumptions underlying the mineral resource and mineral reserve estimates and the financial analysis, and gold prices, the expected successful ramp-up and achieving steady state production of 13,000 tpd, expected metal recoveries, gold production, projected cash flows and revenues from operations, estimated project capital expenditures and sustaining capital expenditures, continued uninterrupted access to the ELG Mine Complex and the Media Luna Project, potential multiple benefits of Muckahi, including expected reduction in capital and operating expenditures, time between investment and revenue and greenhouse gas emissions. expectation that Muckahi is capable of achieving two-lane traffic, minimizing re-handling, reducing ventilation requirements, and being completely electrified, the expected ability of the conveyor to transport broken rock directly from the face/stope to surface, the expected ability to make a ramp steep, straight, and operable with steep conveyors, the expectation that the roof mounted monorail transport system will achieve efficient transport of personnel, supplies, and muck, constant mucking and just in time delivery supply chain, the expectation that a Muckahi mine will be simpler to design and operate than a conventional mine, expectation of less tunneling both in length of tunnels and in size compared to conventional mines, expected ability to utilize low-cost technology such as slushers, expectation that safety concerns associated with shrinkage mining would be alleviated with roof-mounted equipment, the expectation that the Company will be able to consistent achieve the blasting fragmentation and the expectation of completing the development and test of the concept by the end of 2019 for the mine development and production activities. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "strive", "plans," "expects," "does not expect," "is expected," "budget," "designed", "scheduled," "goal," "estimates," "forecasts," "intends," "anticipates," "does not anticipate," or "believes" or variations of such words and phrases or statements that certain actions, events or results "can", "may," "could," "would," "might," "will," "will be," "will be taken," "occur," or "be achieved." Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including risks associated with skarn deposits, achieving planned gold recoveries, operational cost estimates, ability to identify and successfully address all potential issues or problems in changing the production system that achieves transport of personnel, supplies, and muck, on two lane roads, in tunnels half of the size of conventional mines, the ability to achieve operate the Muckahi system efficiently and at the rate needed to achieve the desired cost advantages and schedule reductions, ability to achieve the required fragmentation material in order to be transported from the face/stope to surface, the assumptions underlying the production estimates, estimated reductions in mining capital expenditures, mining operating expenditures, time from investment to revenue and greenhouse gas emissions not being realized, decrease of future gold prices, cost of labor, supplies, fuel and equipment rising, the availability of financing on attractive terms, actual results of current exploration, development and exploitation activities not being consistent with expectations, changes in project parameters, delays and costs inherent to consulting and accommodating rights of local communities, hiring and training the required personnel and maintaining personnel relations, the feasibility of the Muckahi system as well as those risk factors included in the MD&A, the Annual Information Form("AIF") the Technical Report and the Company's other public disclosure which are available on www.sedar.com and www.torexgold.com. Certain material assumptions regarding such forward-looking information and forward-looking statements are discussed in this presentation, the MD&A, the AIF, the Technical Report and elsewhere in the Company's public disclosure. Readers are cautioned that the foregoing, together with the risks and assumptions set out in the MD&A, the AIF, the Technical Report and elsewhere in the Company's public disclosure, is not exhaustive of all factors and assumptions which may have been used. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information and forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information or statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. The forward-looking information and forward-looking statements contained herein is presented for the purposes of assisting investors in understanding the Company's expected financial and operating performance and the Company's plans and objectives and may not be appropriate for other purposes. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws

The scientific and technical data contained in this has been reviewed and approved by Dr. Lars Weiershäuser, P.Geo, an employee of the Company. Dr. Lars Weiershäuser is a Qualified Person under National Instrument 43-101. Additional technical information is contained in the technical report entitled "Morelos Property, NI 43-101 Technical Report, ELG Mine Complex Life of Mine Plan and Media Luna Preliminary Economic Assessment, Guerrero State, Mexico" dated effective March 31, 2018, and filed on September 4, 2018 (the "Technical Report"). The technical information contained in this presentation is based upon the information contained in the Technical Report which is available on SEDAR as www.sedar.com and the Company's website at www.torexgold.com and as updated in the Company's continuous disclosure documents also available on www.sedar.com and www.torexgold.com.

A Complete Re-think Of Underground Mining

Muckahi
MINING SYSTEM

Up to 30% reduction in underground mining capital expenditures

+

Up to 30% reduction in mining operating expenses

+

Up to 80% reduction in time between investment and revenue

+

Up to 95% reduction in underground greenhouse gas emissions

See first paragraph of slide 2.

Innovation By Changing Processes, Not By Automating Current Processes

Mining is a logistics business that currently operates inefficiently on single-lane roads. The anticipated benefits of Muckahi are delivered through three pragmatic paradigm shifts in transport architecture.

1) Continuous conveyor transport of broken rock (muck) directly from the face/stope to surface.

2) Utilization of steep ramps (30°) make continuous conveyor transport practical.

3) Twin roof mounted monorails (inbound/outbound) make transport of personnel and supplies practical on the steep ramps. Monorails also allow for efficient 'two-lane' traffic in smaller tunnels.

Expected Benefits Are A Result Of Eliminating And Improving Processes

Muckahi MINING SYSTEM

We expect a Muckahi mine will be simpler to design and operate than a conventional mine. There are fewer processes to design and the remaining processes require less labour and energy to operate.

1) Less tunneling, both in length and cross sectional area.

2) Efficient two-lane traffic instead of single lane traffic, facilitates just in time delivery.

3) Greater mining rates are possible due to continuous ore removal from stopes.

4) Muckahi equipment is designed to be long-narrow-low, which is ideal for narrow veins.

5) Complete electrification is readily possible because the 'heavy lifting' is done by electric conveyors.

6) Automated transport is readily possible due to the absence of a need to steer on the monorails.

Steeper Ramps Expected To Result In Less Underground Development

Less tunneling anticipated, both in the length of tunnels and the size of tunnels given the use of narrower equipment and ability to drive ramps at 30 degrees.

We have proven we can drive a ramp at a 30° down angle with a monorail mounted jumbo. Now we need to prove we can do it efficiently and at rate needed to achieve the desired cost advantages.

- 30° ramps are 4x steeper and ¼ the length of ramps used in conventional mines.
- Muckahi transport systems are long-narrow-low, allowing for smaller tunnels than conventional truck operated mines.
- Less infrastructure is expected to be excavated:
  - No crusher stations
  - No muck bins
  - No supply storage
  - Much less excavation for ventilation

Dual Monorail Allows For Two-Lane Traffic

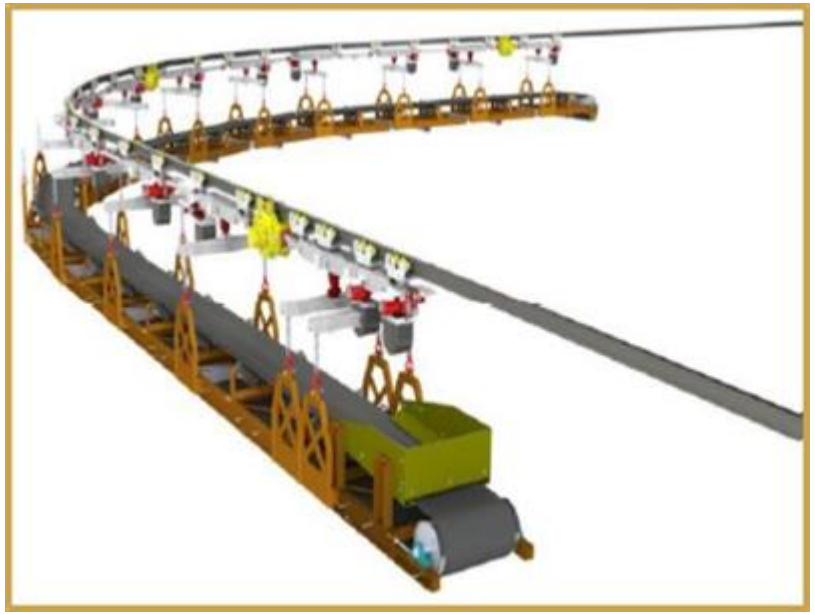
The dual monorail system, one inbound and one outbound, allows for efficient two-lane traffic throughout the mine.

2-way traffic flow made possible by dual monorails hung off the back.

- Will allow for predictable logistics and just-in-time delivery of supplies, potentially eliminating the need for underground storage.
- Expected to minimize supplies storage and re-handling costs.
- Dual track based system can accommodate efficient 'trains' as opposed to using single trucks for personnel and supplies transport.

Old Fashioned Slushers Solve The 'Conveyor Loading' Problem

With the conveyor right to the stope, mining rates are expected to be higher as ore removal is effectively continuous.



The tramming conveyor, in combination with a slusher, eliminates the need for rubber-tired haulage vehicles.

- Tramming conveyor will travel to the face/stope to be loaded.
- Low cost/low-tech slushers are expected to load efficiently, directly onto the belt. Expected to be much cheaper than the conventional process of using LHD machines.
- Potential to achieve continuous mucking at the face/stope.

Better Match Of Equipment To Vein Size

Muckahi equipment is all designed to be long-narrow-low to facilitate two-way traffic in narrow tunnels. This makes the equipment well suited to minimizing dilution in narrow veins.

Muckahi jumbo melds off-the-shelf drilling equipment with a purposed built carrier. Eliminates the need for wider tire mounted equipment.

- Roof mounted equipment versus floor based equipment opens up the opportunity to re-think older, but efficient mining methods.
- Shrinkage mining was phased out based on safety concerns.
  - Such concerns would be alleviated with roof-mounted equipment.

Conveyors To Lift Muck, Solve The 'How To Electrify' Problem

Complete electrification of the mine is expected to result in materially lower ventilation costs and a better work environment for team members.

A Muckahi Mine has the ability to be electrified with conveyors connected to the grid as well as monorail based equipment driven by battery powered locomotives.

- Complete electrification is more practical in a Muckahi mine.
- Ore will be transported to surface with conveyors.
  - Directly connected to the grid.
- Conventional mines use trucks.
  - Batteries to handle this power draw don't exist yet.
- Battery powered locomotives will move personnel and supplies along the monorail.

For Automation, The Monorail Solves The 'Steering' Problem

Monorail system allows for the full automation of the transport process.

Equipment can be easily transported and steered as track mounted. A number of subways are already automated.

- Conveyors are generally automated.
- Monorail based system for all other processes eliminates the need to steer, as transport is track guided.
- Without the need to steer, automation will be fairly straight forward.
  - A number of subway systems around the world are automated.
- Whether or not to automate should be considered in the context of the social realities of the region.

The Key Variable To Control Is Fragmentation In The Stope

There is one process in a Muckahi mine that requires increased management attention, drilling and blasting in the stope.

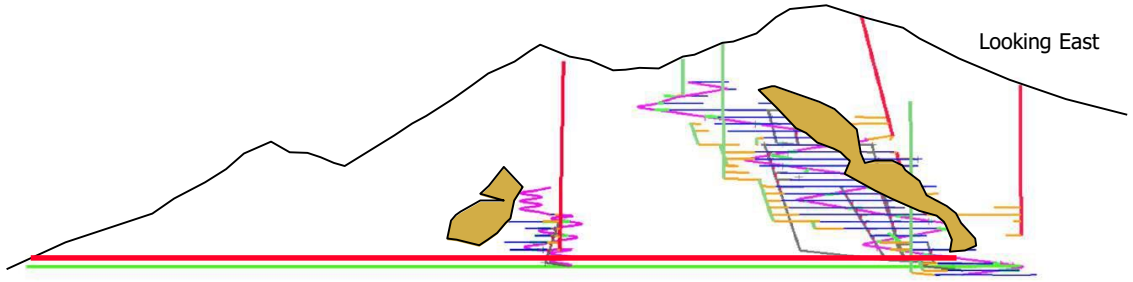
In development ore, we have already demonstrated we can get the required fragmentation of 400 mm or less (above sticks are 1 m). We are now in the process of blasting our first long-hole stope.

- Mining is basically a materials handling business.
- Poor drilling and blasting can lead to over-sized material that is larger than can be handled by a conveyor (+400 mm).
- Some over-size can be handled with localized secondary breaking.
  - However, too much oversize will slow the process down and increase costs.
  - Drilling and blasting specifications can be achieved, it will just require greater management attention.

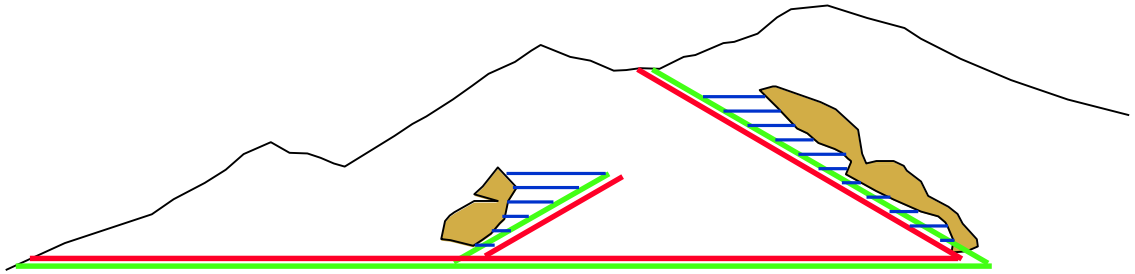
We Expect A Muckahi Mine To Be A Much Simpler Mine

For our Media Luna project, the 2018 preliminary economic assessment outlined an after-tax IRR of 27% under conventional mining. With Muckahi, the estimated IRR is 46%.

Media Luna Designed with Rubber Tired Equipment



Media Luna Designed with Muckahi



Impact of Muckahi Mining System on Media Luna PEA

After-tax IRR estimate increases to 46% from 27%

Improvement in IRR driven by:

- 30% reduction in underground capital expenditures
- 20% reduction in underground operating costs
- 60% reduction in time to achieve commercial production
- 86 km of underground development versus 113 km with conventional mining

September 4, 2018 Technical Report and Press Release

1) See first paragraph of slide 2

Muckahi Has The Potential To Be An Industry Disruptive Technology

Muckahi MINING SYSTEM

Not only do we expect we can lower underground mining and development costs, we expect Muckahi can significantly reduce the time to first production, while lowering GHG emissions.

Up to 30% reduction in underground mining capital expenditures

+

Up to 30% reduction in mining operating expenses

+

Up to 80% reduction in time between investment and revenue

+

Up to 95% reduction in underground greenhouse gas emissions

See first paragraph of slide 2.

Torex Gold
RESOURCES INC.
TSX: TXG

Dan Rollins, CFA
Vice President, Corporate Development & Investor Relations
Email: dan.rollins@torexgold.com Direct: 1-647-260-1503
www.torexgold.com

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