

#### **BOARD OF COMMISSIONERS WORK SESSION MEETING**

117 South Main Street, Monticello, Utah 84535. Commission Chambers May 21, 2024 at 9:00 AM

#### **AGENDA**

The public will be able to view the meeting on San Juan County's Facebook live and Youtube channel

#### CALL TO ORDER

#### ROLL CALL

#### **AGENDA ITEMS**

- Presentation for Lisbon Valley Mines Plan Expansion. Alysen Tarrant, Environmental Manager
- 2. Discussion Regarding the Board of County Commissioner Rules of Order and Policy

#### **ADJOURNMENT**

\*The Board of San Juan County Commissioners can call a closed meeting at any time during the Regular Session if necessary, for reasons permitted under UCA 52-4-205\*

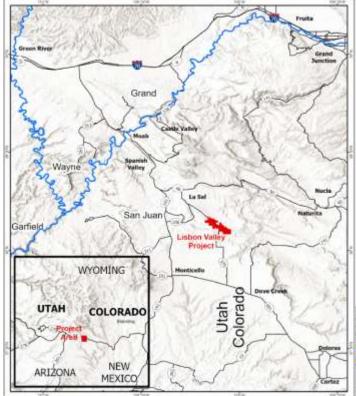
All agenda items shall be considered as having potential Commission action components and may be completed by an electronic method \*\*In compliance with the Americans with Disabilities Act, persons needing auxiliary communicative aids and services for this meeting should contact the San Juan County Clerk's Office: 117 South Main, Monticello or telephone 435-587-3223, giving reasonable notice\*\*



Plan of Operations for Major Modification in Lower Lisbon Valley

5.7.2024

### Introduction





- Located in San Juan County, Utah
- 9,892 acres of land holdings comprised of private, public, and State lands
- Approx. 40 miles southeast of Moab, 9 miles south of the community of La Sal
- Access is along paved roads



## **Project History**



1960 - 2004

Modern Exploration and Development Copper initially discovered in Lisbon Valley at two properties: "Big Indian Mine" in 1890s and "Blackbird" in 1900s

- . In 1960s, Cleveland Cliffs Copper completed first documented drilling
- Property lay dormant from 1974 1985, then was further evaluated from 1985 1996 by Noranda Exploration, Kelmine Corporation, MLP Associates and Kennecott Exploration
- Summo (renamed Constellation Copper Corp. in 2002) optioned the property in 1993 and submitted feasibility study in 1996

2004 - 2008

Present Day Facility Established by Constellation Copper . Constellation Copper began project construction in 2004 and commenced mining operations in 2006

Constellation Copper invested ~\$120mm

2009 - 2016

Ownership Change

Constellation Copper Corp. filed for Canadian Receivership in 2008

- LVCC's current CEO and CFO purchased LVCC through Plan of Reorganization under Chapter 11 Bankruptcy in 2009
- LVCC invested \$33mm as part of initial turnaround plan

2016 - 2020

Completed Operational Turnaround

- . Mining curtailed due to soft copper market conditions; LVCC continued copper production from leach pad inventory
- LVCC utilized curtailment period to continue installation of forced aeration system in leach pad as part of completing operational turnaround
- LVCC performed exploration RC drilling that identified Lone Wolf copper deposit as key strategic growth opportunity
- Additionally, LVCC began research and development of its ISR strategy based on development of Lone Wolf deposit
  combined with favorable naturally occurring hydrologic and geologic conditions

2020 - 2021

Placed on C&M Due to COVID

Mine placed on care and maintenance due to economic impacts from COVID

2021 - 2024

Mine Restart

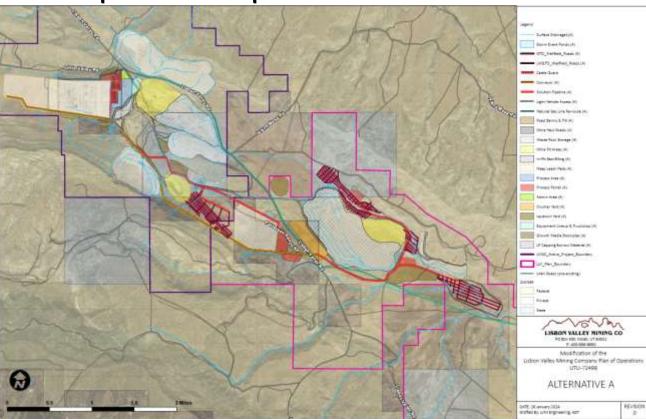
- Invested to restart operations, ramp up mining rate, and advance open pit and ISR permits
- . Increased P&P reserves from 65mm to 570mm lbs with additional upside potential.

### Current Operations

- Conventional truck ore stacking on existing lined heap leach pad transitioning to conveyor stack heap leach
- SX / EW plant nameplate capacity of 54mm lbs / year producing 99.999% pure copper cathode
  - Solution ponds, pumps and piping to / from 25mm ton leach pad are in place
  - Electric power supplied through 138 kV double pole power line
- Leach pad is triple-lined and monitored daily while solution ponds are double lined with compacted day sub-layer which is monitored hourly
  - Strives to re-use and recycle all materials in leaching circuit
- Ferric iron bioleach using forced aeration is in place and operating
- Ancillary Facilities:
  - Administration and training buildings
  - Shower houses
  - Warehouse and storage buildings
  - Core shed
  - Laboratory
  - Maintenance and electrical workshops
  - Line out building
  - Fuel storage and dispensing areas



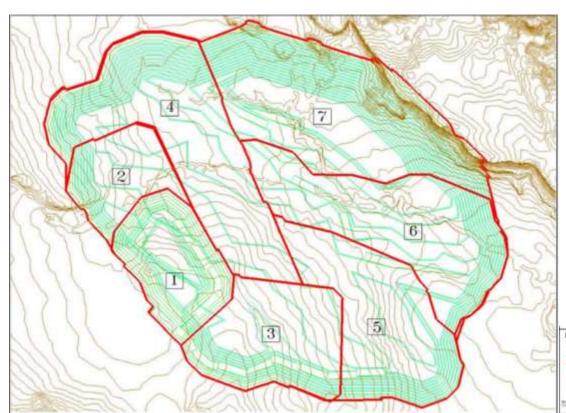






Advancing new technologies for mineral extraction

- Expansion of open pit operations
- Initiation of in-situ recovery within LLV
- Incorporation of crush/convey/stack of ore in lieu of truck-stacking
- Reclamation of Active Mine area to commence for Waste Dumps A & B, and backfilled portion of Centennial Pit
- Waste Dump C expected to be fully reclaimed by 2026

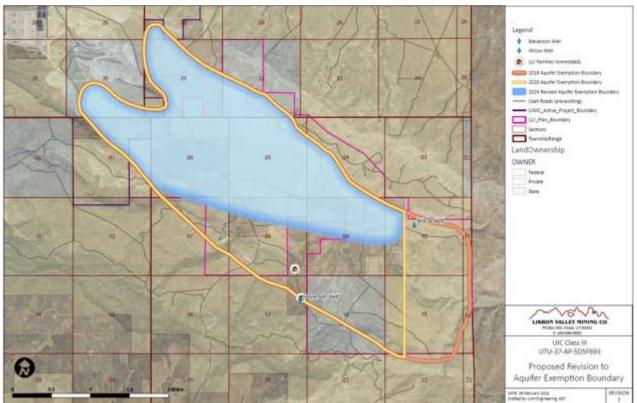




- Utilization of existing facilities for the first nine years of Lone Wolf operations
- Installation of LLV Leach Pad and Process Ponds at phase 5 of Lone Wolf





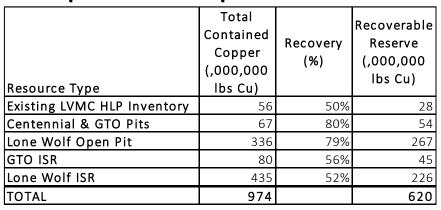


- Aquifer Exemption
   Boundary (AEB) to align
   with Proposed Action
   disturbance
- AEB is controlled laterally and vertically
- Burro Canyon (BC) Aquifer targeted for AE is further segregated by high net neutralizing rock types
- Company has over 2,500 acre-feet of water rights available to use for ongoing operations

Mine Component	Total Disturbance	Private	BLM	SITLA					
Roads (acres)									
Mine Haul Roads	80.1	15.4	44.5	20.2					
Road Berms & Fill	31.1	8.4	10.8	11.9					
Light Vehicle Access Roads	18.5	1.8	15.0	1.7					
ISR Well Roads	40.5	19.8	11.3	9.3					
ISR Well Pads	16.5	8.1	4.6	3.8					
Subtotal	186.7	53.5	86.3	46.9					
Leach Pad, Mine F	it, Waste Rock Dum	o, Borrow Area, Po	nds, Stockpiles (ac	res)					
A Dump WRS	135.1	-	87.7	47.4					
B Dump WRS	100.6	-	-	100.6					
C Dump WRS	258.0	-	258.0	-					
Lone Wolf WRS	54.6	-	54.6	-					
Centennial Pit (un-backfilled)	101.8	-	97.2	4.6					
Centennial Backfill Area	141.4	-	35.1	106.3					
GTO Pit	48.0	-	6.4	41.6					
Lone Wolf Pit (un-backfilled)	72.4	-	72.4	-					
Lone Wolf Backfill Area	362.8	10.5	336.3	16.0					
LVM Leach Pad	321.4	174.1	147.3	-					
LLV Leach Pad	141.3	132.6	8.7	-					
LVM Process Area	33.3	8.7	24.6	-					
LVM Process Ponds	29.8	29.8	(0.0)	-					
LLV Process Ponds	43.8	29.9	10.1	3.8					
Fresh Water Ponds	21.3	5.5	7.7	8.1					
Growth Media Stockpiles	133.7	10.4	99.3	24.0					
LP Capping Borrow Material	17.2	16.7	0.5	-					
Subtotal	2,016.5	418.2	1,245.9	352.4					
	Yards	(acres)							
Admin Area	5.1	-	5.1	-					
Crusher Yard	52.3	43.7	8.6	-					
Laydown Yards	11.0	4.2	6.8	-					
Equipment Lineup & Truckshop	10.4	-	10.4	-					
Yards Subtotal	78.8	47.9	30.9	-					
	Linear Features (acr	es (see project not	tes))						
Drainage Control Features	63.5	17.8	36.1	9.6					
Natural Gas Line Re-Route	2.4	-	1.8	0.6					
Ore Conveyor	2.0	1.2	0.8	-					
Solution Pipeline	16.7	5.7	8.0	3.1					
Subtotal	84.6	24.7	46.7	13.3					
Project Total	2,366.7	544.3	1,409.8	412.6					



	Total Disturbance Acres	Temporary (1)	Short Term (2)	Long-Term (3)	Permanent (4)
Mine Haul Roads	80.1	0.0	80.1	0.0	0.0
Road Berms & Fill	31.1	0.0	31.1	0.0	0.0
Light Vehicle Access Roads	18.5	0.0	0.0	18.5	0.0
ISR Well Roads	40.5	0.0	32.4	8.1	0.0
ISR Well Pads	16.5	0.0	11.6	5.0	0.0
A Dump WRS	135.1	0.0	135.1	0.0	0.0
B Dump WRS	100.6	0.0	100.6	0.0	0.0
C Dump WRS	258.0	0.0	258.0	0.0	0.0
Lone Wolf WRS	54.6	0.0	54.6	0.0	0.0
Centennial Pit (un-backfilled)	101.8	0.0	0.0	0.0	101.8
Centennial Backfill Area	141.4	0.0	141.4	0.0	0.0
GTO Pit	48.0	0.0	0.0	0.0	48.0
Lone Wolf Pit (un-backfilled)	72.4	0.0	0.0	0.0	72.4
Lone Wolf Backfill Area	362.8	0.0	362.8	0.0	0.0
LVM Leach Pad	321.4	0.0	321.4	0.0	0.0
LLV Leach Pad	141.3	0.0	141.3	0.0	0.0
LVM Process Area	33.3	0.0	33.3	0.0	0.0
LVM Process Ponds	29.8	0.0	0.0	26.8	3.0
LLV Process Ponds	43.8	0.0	0.0	39.4	4.4
Fresh Water Ponds	21.3	0.0	0.0	0.0	21.3
Growth Media Stockpiles	133.7	0.0	133.7	0.0	0.0
LP Capping Borrow Material	17.2	0.0	17.2	0.0	0.0
Admin Area	5.1	0.0	0.0	5.1	0.0
Crusher Yard	52.3	0.0	52.3	0.0	0.0
Laydown Yards	11.0	0.0	11.0	0.0	0.0
Equipment Lineup & Truckshop	10.4	0.0	10.4	0.0	0.0
Drainage Control Features	63.5	0.0	0.0	0.0	63.5
Natural Gas Line Re-Route	2.4	0.0	0.0	0.0	2.4
Ore Conveyor	2.0	0.0	2.0	0.0	0.0
Solution Pipeline	16.7	0.0	0.0	16.7	0.0
TOTAL	2,366.7	-	1,930.3	119.6	316.8



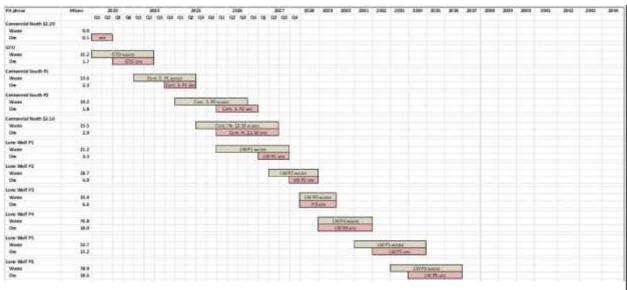


#### Alternative A Copper Production = 620 million pounds

82 million pounds of copper produced from the existing open pit Active Mine area 267 million pounds of copper produced from LLV open pit mining 271 million pounds of copper produced from ISR operations

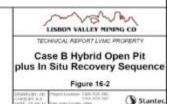
Employee Base per Alternative						
		Average	Reclamation			
	Life of Mine	Employee	Duration	Average Employee		
Alternative	(years)	Count	(years)	Count		
Alternative A	20	200	10	30		
Average Salaried employee annual wage			\$85,000			
average hourly employee annual wage			\$56,000			

## Project Timeline





- Planned completion of mining in Active Mine Area to occur in 2027
- Stripping of Lone Wolf scheduled to commence Q1 2026 in order to ensure ore supply continuity
- Stripping of Lone Wolf waste to expose first ore zone expected to take one year from initiation



### Project Timeline



PROPOSED ACTION IS HYBRID CASE, HOWEVER IF THERE ARE DELAYS DUE TO AQUIFER EXEMPTION, THE COMPANY FULLY INTENDS TO PERFORM OPEN PIT MINING TO ITS FULLEST EXTENT.

### Sustainable Practices



- Regenerative Rangeland Analyses
- Subsurface wetlands & Phytoremediation
- Incorporation of solar facilities
- Active reasearch and development of effective and more environmentally benign leaching technologies

## Summary



#### THANK YOU!

#### **Lisbon Valley Mining Company**

For follow-up questions, please contact:

Alysen Tarrant

atarrant@lisbonmine.com

801.918.0799