

# The IMA Mine

## Idaho's Next Moly Producer?



### **Cautionary Notes**

The past exploration results for the IMA Mine are based on historic reported data from sources believed by the Company to be reliable. This information is referred to only to indicate the results of past exploration on the IMA Mine and is relevant only to the extent it indicates the presence of mineralization. There is no certainty that exploration of the IMA Mine will achieve results which are consistent with the historical exploration results.

This presentation contains certain statements that may be deemed "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. All statements in this presentation, other than statements of historical fact, that address future production, reserve potential, exploration drilling, exploitation activities and events or developments that the Company expects to occur, are forward looking statements. Forward looking statements are statements that are not historical facts and are generally, but not always, identified by the words "expects", "plans" "anticipates", "believes", "understands", "intends", "estimates", "projects", "potential" and similar expressions, or that events or conditions "will", "would", "may", "could" or "should" occur. Information inferred from the interpretation of drilling results and information concerning mineral resource estimates may also be deemed to be forward looking statements, as it constitutes a prediction of what might be found to be present when and if a project is actually developed. Such statements are not guarantees of future performance and actual results may differ materially from those in the forward-looking statements. Factors that could cause the actual results to differ materially from those in forward-looking statements include market prices, exploitation and exploration successes, and continued availability of capital and financing, and general economic, market or business conditions.



## RESERVES

- Familiar Classifications of Reserves are Proven, Probable and Possible
- If a deposit is not permit-able, then all of the classifications become impossible
- The IMA Mine is permit-able



### The IMA Mine



- Located in East-Central Idaho, in the Pahsimeroi Valley, near Salmon & Challis
- Formerly the USA's fifth largest tungsten producer from quartz veins.
- Paved Access to the property
- Located in "Mine-friendly" Idaho
- Majority of the population in Salmon, Challis and area welcome the economic benefits







## Land Ownership - Pahsimeroi Valley

- Brown BLM rangeland
- Green Forest Service mountains
- Magenta State of Idaho
- White Private where there was water the homesteaders converted federal land to private.

Salmon, ID

Lemhi

Thompson Creek Mine

Challis, ID

inster?

Patterson, Idaho

Image USDA Farm Service Agency © 2009 Tele Atlas

12 T 272804.51 m E 4958691.08 m N

Idaho



2003 Google

Eye alt 76.66 mi

(0)

1 200 3



## ACCESS TO IMA MINE

- Paved Access to Gentor private land holdings in Patterson on County road
- One mile up Patterson Creek Road to old mill and mine adits
- Mine is located on private land (patented claims)



### **Gentor IMA Mine Property Overview**

- Holds option to purchase IMA mine, with 22 patented claims on 376 acres
- Holds option to purchase 75 acres on patented ground outright, contiguous to IMA mine with water rights
- Holds option to purchase four parcels of land (216 acres) in adjacent Pahsimeroi Valley
- Has 72 staked claims (approx 1440 acres)in the IMA mine area



Map showing Gentor's patented claims (blue) and unpatented claims (black)



### **IMA Mine's History**

- Began as a silver mine in 19<sup>th</sup> Century
- From 1937 to 1957, the IMA Mine produced over 500,000 tons of ore, as America's 5<sup>th</sup> largest tungsten producer
- In 1960, American Metals Climax (Amax) drilled two holes into the intrusive to test molybdenum potential
- Between 1978 and 1981, Inspiration Development (Inspiration) explored the tungsten potential, and drilled 4 holes into the intrusive





## Inspiration Development Co "Indicated & Inferred Ore Reserves"

- Inspiration intended to mine the robust quartz veins on the upper levels of the IMA
- An extensive program of undg & surface drilling and undg. re-habilitation was conducted
- A quantity of 344,600 tons with an overall grade of .53% WO3, .043% MoS2, 2.29 opt Ag, .003 opt Au, .16% Cu, .31% Pb and .23% Zn was calculated



### **Gentor Overview Of Drill Sites**









### **IMA Mine Cross Section - Historic**



Showing historic drilling



### **IMA Mine X Section -** Historic & Initial Gentor



Showing historic drilling and initial Gentor drilling www.gentorresources.com







### Summary - Exploration Drill Program



- Exploration commenced in August 07, with 10 drill holes (25,000 ft) completed as at mid – 2008
- Initial objective was to confirm AMAX's and Inspiration's historical drilling results:
  - AMAX #2: 230 ft of 0.193% MoS<sub>2</sub>
  - AMAX #1: 133 ft of 0.075% MoS<sub>2</sub>
    456 ft of 0.129% MoS<sub>2</sub>
  - Inspiration #16: 355 ft of 0.150% MoS<sub>2</sub>
- First hole (#21) conf. the AMAX results.
- Next drilling was to the E and W of #21.
- Increasing grades and thicknesses to the East were achieved.
- Higher grade zone within the intrusive was indicated



### **GENTOR DRILL RESULTS** FROM EASTERN HOLES

- Hole 23, 675 ft grading 0.144% MoS2, .037% W, .25 oz/ton Ag, including 225 feet grading 0.280% MoS2, 0.04%W, 0.42 oz/ton Ag
- Hole 27, 1,586 ft grading 0.135% MoS2, including intercepts of 475 ft grading 0.247% MoS2, .021%W, .085% Cu and .095 oz/ton Ag
- Hole 30, 368 ft grading 0.269% MoS2, 0.102 oz/ton Ag



## PLAN VIEW-DRILL HOLES WITH +0.15% Mo(+0.25% MoS2)

- Higher grade intersections highlighted in blue
- Note section line 341







### Wardrop 43-101 Report

- Inferred Mineral Resource at the IMA Mine of 5.7 million tons grading 0.15% Mo.
- Included in this estimate is 720,000 tons of material grading greater than 0.20% Mo and averaging 0.235% Molybdenum.

























## LOWELL-GUILBERT MODEL

- The IMA deposit has similarities to the porphyry model developed at the University of Arizona by Drs. David Lowell and J.M. Guilbert.
- Note the high grade shell zones in the periphery of the intrusion, with a larger zone of low grade in the interior potassic zone, and an overlying pyritic zone.



### LOWELL – GUILBERT PORPHYRY DEPOSIT MODEL





Hydrothermal Alteration Zoning Patterns for the Lowell-Guilbert Model of Porphyry Copper Deposit. Principal Zones of Sulfide Mineralization for Porphyry Copper Deposits.

### THOMPSON CREEK'S LUCKY JACK DEPOSIT - COLORADO

The high grade Lucky Jack deposit (Mt. Emmons) conforms to the Lowell-Guilbert model.

The deposit has been extensively explored including 157,000 feet of drilling.

Amax estimated a resource of 157 million tons of high grade moly, peripheral to the core of the intrusive, averaging 0.44% MoS2.

Lucky Jack is now controlled by Thompson Creek Metals, through an option agreement.

Thompson Creek states that the Lucky Jack is one of the largest undeveloped deposits in the world.

### PLAN VIEW OF LUCKY JACK DEPOSIT SHOWING HIGH GRADE IN PERIPHERY



## SATELLITE VIEWS OF THE IMA DEPOSIT

- Located on patented ground
- Easy access to paved roads in the Pahsimeroi Valley
- Elevation of 6,000 feet
- Zones of oxidized pyrite indicating presence of the tungsten-moly intrusive
- Co-incident moly soil anomaly
- Note similarities to Lucky jack model



## MOLY SOIL ANOMALY





## **GENTOR DRILL HOLES**





## LONG SECTION THROUGH HOLE 27

- LOOKING NORTH 19 DEGREES WEST
- PERPENDICULAR TO SECTION 341
- PROPOSED NEXT HOLE (#31) TO BE DRILLED
- HOLE 31 WOULD BE PART OF A ROW DRILLED TO EXTEND THE HIGH GRADE ZONE TO THE EAST
- FUTURE ROWS OFHOLES WOULD BE DRILLED STEEPER THAN #31 FURTHER EXTENDING THE HIGH GRADE ZONE BENEATH THE SOIL ANOMALY





## **Follow-Up Program**

- PROVE A RESERVE OF +10 MILLION TONS GRADING +0.15% Mo (0.25% MoS2) AT THE IMA PROPERTY WITH ADDITIONAL DRILLING
- ADVANCE TO PRODUCTION WITH A 3000 TONS PER DAY MINE/MILL FACILITY



## PATTERSON CREEK

- Bull trout creek!!
- Avoid by tunneling from patented land in the Pahsimeroi Valley
- 6000 feet of ramp at -7.5% will access the bottom of the hi-grade
- Practical?? Compare to Henderson Mine 6000 ft compared to 50,000 feet



#### CONTRACTOR OF CALL OF CALL ON THE REAL PROPERTY AND THE P





## Discharge to "waters of the U.S."?

- Discharge to alluvium on patented ground in the valley, distant from Patterson Creek
- "Test" well to depth of 1000 feet has been drilled in area of proposed injection system
- Treatment is required to meet the Idaho Ground Water Rule before discharging to alluvium



## IDAHO GROUND WATER RULE

- Primary need to treat for beryllium, cadmium and nitrates
- Secondary need to treat for PH, TDS and manganese
- By discharging to alluvium need for MPDES is avoided



## Mine-Friendly Idaho

- Fast-Track permitting of underground operations located on private land (IMA mining permits are in hand)
- Low-cost Tier 1 power (3 cents per KWH)
- Paved access through the IMA property
- Experienced labor force in near-by Challis and Salmon
- Populace comfortable with development of large projects (e.g. near-by Thompson Creek Mine)
- Development and new jobs are welcomed by citizens and their political leaders at all levels

### **COST ESTIMATES** UNDERGROUND MINING AND FLOATATION MILLING

Mining costs are based on blast-hole stoping methods. Milling costs are for three concentrate products in a std flotation mill.

Costs are derived from Aventurine Engineering/InfoMine USA

OPERATING COSTS /TON USD								
TONS PER DAY	2000	3000	4000	5000				
MINE OP	17.27	14.92	12.58	12.27				
MILL OP	12.97	11.70	10.42	9.16				
TOTAL	30.24	26.62	23.00	21.43				

#### **CAPITAL COSTS-MILLIONS USD**

MINE CAP	28.70	32.60	36.50	40.40
MILL CAP	35.80	42.10	48.30	54.60
TOTAL	64.50	74.70	84.80	95.00

	\$ VALUE Of MINERAL	QTY. OF MINERAL IN MILLIONS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Drilling and Engineering			-4.0									
MINE CONST.				-16.3	-16.3							
VILL CONST.				-21.1	-21.1							
SALES OF MOLY Ibs	17.5	2.295				40.1625	40.1625	40.1625	40.1625	40.1625	40.1625	40.1625
SALES OF BY PRODUCT												
W lbs	10	0.2484				2.484	2.484	2.484	2.484	2.484	2.484	2.484
Cu lbs	3.3	0				0	0	0	0	0	0	0
Pb/Zn lbs	1	0				0	0	0	0	0	0	0
Ag troy ounces	18.45	0.18				3.321	3.321	3.321	3.321	3.321	3.321	3.321
VINE OPERATION COSTS						-13.428	-13.428	-13.428	-13.428	-13.428	-13.428	-13.428
MILL OPERATION COSTS						-8.9631	-8.9631	-8.9631	-8.9631	-8.9631	-8.9631	-8.9631
BY PROD MILL COSTS						-0.18	-0.18	-0.18	-0.18	-0.18	-0.18	-0.18
NET CASH FLOW			-4.0	-37.4	-37.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4
Cumulative Cash Flow			-4.0	-41.4	-78.8	-55.4	-32.0	-8.6	14.8	38.2	61.6	85.0
Net Present Value of Cumulative Cash Flow												
- At Discount rate of:	6.0%	(excl inflation)	-4.0	-\$39.28	-\$72.57	-\$52.92	-\$34.39	-\$16.91	-\$0.42	\$15.14	\$29.82	\$43.67
- At Discount rate of:	10.0%	(excl inflation)	-4.0	-\$38.00	-\$68.91	-\$51.33	-\$35.35	-\$20.82	-\$7.62	\$4.39	\$15.30	\$25.23
nternal Rate of return			24%									