Idaho Exploration & Mining
2002
Virginia S. Gillerman
Idaho Geological Survey
Idaho Raw Ore Production

[Bar chart showing production in millions of dollars from 1997 to 2001 for different categories: Con S&G, Silver, and Totals.]
Idaho 2001 Top Commodities

- Phosphate Rock – fertilizer, Roundup etc.
- Silver - film, jewelry
- Sand & Gravel – construction
- Cement - construction
- Molybdenum – lube, alloy
Idaho Raw Ore Production

- **1999**
  - Metals: 57%
  - Industrials: 43%
  - Totals: $421 million

- **2000**
  - Metals: 59%
  - Industrials: 41%
  - Totals: $357 million

- **2001**
  - Metals: 70%
  - Industrials: 30%
  - Totals: $346 million
2002 Survival Mode

Gold, Silver Prices
Exploration – juniors
Phosphate Mines, Decorative Stone, Moly

Astaris – Dry Valley
More $ → Environment
Moly, Co, Base Metals?
Coeur d’Alene District

2002 Operations:
- Hecla Lucky Friday Mine
- Coeur Silver Valley – Galena Mine
- Sunshine Mine – For Sale
- Superfund Cleanup – Expansion
- Other Cleanup
- Exploration – NJ Mining

Metal Prices: Ag Up, Pb-Zn ?
Coeur d’Alene Mining District
Hecla’s Lucky Friday mine  (8/2002)
SUNSHINE MINE 2002 – For Sale
Galena Mine - 2002

- Record 5.2 million ounces of Silver (235,000 tons @ 23 opt Ag)
- Development of Silver Vein on 2400 and 3000 levels
- 50% of production from mechanized mining of 72 vein

Silver Vein – 5500 level, 2001
BLM – Pine Creek Reclamation

2002
CDA Superfund Issues - 2002

- Role of EPA Ombudsman
- Expansion of Superfund to entire CDA River Basin:
  - ROD for 30 years and $359 million
  - Supervising CDA Commission with counties, Idaho DEQ, EPA, Tribe, WA rep
  - Natl. Acad. Science review
  - Proposed work: yards, creeks, floodplain soils, sediments, drinking water testing
“YOU ARE MY SUNSHINE”

- 1972 Sunshine Mine Fire
- Video produced by NIOSH; Elaine Cullen, director
- Premiere – Wallace in August, 2002
IDAHO PHOSPHATE DISTRICT
Old Maybe Canyon Mine – Potential Se source
ASTARIS 2002 - Closures

- Dry Valley Mine – temp closure
- Elemental Plant, Pocatello – permanent closure, clean up activities (CERCLA)
Monsanto’s Enoch Valley mine reclamation – keyhole pond, 2002
2002 A Giant Rollercoaster
TC Conveyor Repair - 2002
Thompson Creek Mine: Bert Doughty and Teacher / Student Tour, 2002
RESCUE MINE, Warren, Idaho
Rescued at Rescue Mine

October 2002: Barramundi Mill Repair
Hecla Grouse Creek - 2002

H2O
Yellowjacket Mine Reclamation

Great Job by USAC

July 1999

June 2002
Black Pine Mine Reclamation

10/2002
Meridian Gold’s Beartrack Mine – 2002 reclamation & final leaching
BLM at the Ima mine, Lemhi County
Boise National Forest AML’s

Missouri Mine Vault - 2002
Dave and Mike – Looking for old mines, BNF 2002
Draft Environmental Impact Statement
Appendix A
September 2001

Recreational dig site in the West Fork of 281 Gulch.

Upper end of West Fork 281 Gulch Dig Site - Reclaimed in 1998.

Garnet diggers show off their day’s haul at the Forest Service Public Dig Site “A-Frame” in the West Fork of 281 Gulch.

Recreational garnet diggers getting down and dirty in the East Fork of 281 Gulch.

Garnet Stars & Sands

September 2001
St. Joe Ranger District
Idaho Panhandle National Forests
Ash Grove Cement, Inkom, Idaho
Bear River Zeolite
Preston, Idaho
Thermocal Mines of Idaho, LLC

Your source for Feed Grade Calcium, Dubois, Idaho
Idaho Rock

- Oakley Stone
- Table Rock Sandstone
- 3 Rivers Stone
- Lava Rock
- Pumice
- Travertine
- Gems

Examples of dimension stone used for construction in Home/Business
Three Rivers Quarry: L & W Stone

2002: A very busy year
Three Rivers Stone Splitter, 2002
Oakley Stone 2002

Oakley Valley Stone

Fish Creek Quarry
Northern Stone – Middle Mtn.
Mountain West Products
Rexburg
International Stone - Boise

Wind Drift Sandstone –
Surgically removed without a scratch!
Aggregate Buyouts: Idaho Concrete (formerly Monroc)

Is sand and gravel more valuable than gold?
Exploration 2002

Yes, Virginia, there is exploration!

- Gold! Placer and lode
- Phosphates w/ Simplot
- 3809 Regs, permits
Alchemy Kaolin Project: 2002 Regrouping
New Jersey Mining: 2002

- NJ Mine – Quartz Veins 2-10m wide
- 12.5 m of 2.76 g/t Au
- Drilled 1700 meters in 13 holes, HQ core
- Kellogg, Idaho
New Jersey Mining: Silver Strand

#3 Portal

2002

250 meters of underground drilling
Petsite Property: Orogrande

Canden Capital Corporation

5 core holes – Hit Au Zone

2002
Vinyard Gulch Resources

Kent Roche at Moon Adit, 2002
Prospector Kent Roche, 2002 core
Near Gibbonsville, Idaho
Au-bearing (?) Breccias
FCC Buys Sunshine Refinery

2002

Hydrometallurgical Facility

Silver to Cobalt?
Golden Hand mine

Frank Church River of No Return Wilderness, Payette NF

Jack Walker, American Independence Mines & Minerals
Exploration 2002
Nevada Contact:: War Eagle Property, 2002
Meeting Announcement

- August 6-13, 2003     Salmon, ID
- JOINT MEETING – Tobacco Root GS and BELT Association
- Stratigraphy, Tectonics and Structure, Ore Deposits
- Info at  http://trgs.org
IDAHO GEOLOGICAL SURVEY

- 2002 Summer Teacher Workshop – Salmon Region
- STATEMAP: North Idaho, Wood River, Twin Falls region geologic mapping
- New Digital Geologic Maps
- AML Inventories
- Check it out: www.idahogeology.org
Digital Web Maps (DWM)

Title: Surficial Geologic Map of the Orofino East Quadrangle, Clearwater and Lewis Counties, Idaho

Author(s): Kurt L. Othberg
Daniel W. Weisz
Roy M. Breckenridge

Year: 2002

Price: $0.00—View on Web

Publication ID: DWM-4

Scale: 1:24,000

www.idahogeology.org
IGS AML Inventories: 2002

On the trail of old mines in the Boise Forest
Cautious scientists and educators with HOT rocks at the Wonder Lode
New Geochronology at Lemhi Pass District (see Gillerman, et al., 2002 -GSA Mtg.)

Copper Queen Mine Molybdenite, Re-Os age of 1055 mya.

Thorium mineralization at Lucky Horseshoe mine, U-Pb chemical age of 1050 mya with Paleozoic hydrothermal event.
THANKS