1999 Developments in Idaho’s Mineral Industry
Virginia S. Gillerman
Idaho Geological Survey
Metal Mining Lowlights

- Low Metal Prices
- Closures: DeLamar mine, Yellowjacket mine
- Minimal Grass Roots Exploration
- Dormant Au-Ag Projects with Resource: Petzite, Kilgore, Stone Cabin, Atlanta, Thunder Mountain
- AML Reclamation: Triumph, Blackbird, North Creek, many small adit closures and gates
SUNSHINE PROPERTY TARGET AREAS & PRELIMINARY SUNSHINE LODE
MINE DEVELOPMENT PLAN

- High Priority Target Areas
  - Formation Claim Boundary
  - Cobalt in Soils Geochemical Anomaly (>100 ppm)
  - Copper in Soils Geochemical Anomaly (>300 ppm)
  - Drill Hole Pierce Point

Longitudinal Section Line

Surface Mineralization

Sunshine Lode Longitudinal Projection (Looking S70W)
Prior to the Grenvillian continent-continent collision at about 1.0 Ga, the southern margin of Laurentia was a long-lived convergent margin that extended from Greenland to southern California. The truncation of these 1.8-1.0 Ga orogenic belts in southwestern and northeastern Laurentia suggests that they once extended farther. We propose that Australia contains the continuation of these belts to the southwest and that Baltica was the continuation to the northeast. The combined orogenic system was comparable in length to the modern American Cordilleran or Alpine-Himalayan systems. This plate reconstruction of the Proterozoic supercontinent Rodinia called AUSWUS (Australia-Southwest U.S.) differs from the well-known SWEAT (Southwest U.S.-East Antarctic) reconstruction in that Australia, rather than northern Canada, is adjacent to the southwestern United States. The AUSWUS reconstruction is supported by a distinctive “fingerprint” of geologic similarities and tectonic histories between Australia and the southwestern United States from 1.8 to 0.8 Ga, and by a better agreement between 1.45 and 1.0 Ga paleomagnetic poles for Australia and Laurentia.
Idaho Non-fuel Mineral Production

Millions of Dollars


Total
Phosphate
Gold
S & G
Moly
Coeur d’Alene District Developments

• Asarco sold 1/2 interest in Silver Valley Resources to Coeur
• Increased Ag production, stable Ag price
• Sunshine Mine Exploration: West Chance area, Consil Ramp Project
• Basinwide expansion of Superfund site???
Phosphate District Developments

- Selenium Studies:
  - Working Group tests and sampling
  - BMP’s to minimize Se release from waste shales
- Longer Permitting Times
- Astaris LLC. Marketing JV: FMC/Solutia
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FOR IMMEDIATE RELEASE Newport Beach, CA October 12, 1999

INTERGOLD CORPORATION WHOLLY OWNED SUBSIDIARY FILES LAW SUIT AGAINST DAMES & MOORE, AURIC METALLURGICAL LABORATORIES, LLC., AND AHMET ALTINAY, AND RICHARD DANIELE

Summary: On behalf of the Board of Directors, Intergold Corporation, (“the Company”) reports that...
THE FUTURE???

- Industrial Minerals
  - Sand and Gravel
  - Dimension Stone
  - Exotics: gemstones, rare earths?
- Metals
  - Underground Mining
  - Australian Analog??
MATERIALS & CONSTRUCTION

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ARSENIC PRESENT IN SOIL

PRECAUTIONS

* WASH HANDS AFTER CONTACT WITH SOIL OR PETS.

* BRUSH OFF CLOTHING AND SHOES WHEN LEAVING THE AREA OR ENTERING TENTS.

INFORMATION

FRAN ALLANS, EPA 1-208-378-5775
OR COBALT RANGER STATION
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Slide No. Description

AA. 1999 DEVELOPMENTS IN IDAHO’S MINERAL INDUSTRY

1. Author is VSG, IGS.  Good morning. Thanks to Earl and agency/company folks.

BB. 1995-1998 NONFUEL MINERAL PRODUCTION

For raw ore value only, preliminary USGS value of nonfuel mineral production in 1998 was $ 444 million, down slightly from $ 469 million in 1997. Gold and molybdenum values were down, principally due to lower prices.

2. 1997 Pie Chart with Processed Phosphate. Phosphate is Idaho’s largest mineral industry. If we estimate the value of the processing done in southeastern Idaho’s plants, the total mineral production is close to a billion dollars, and the phosphate industry produces over half of that, and metals about 25% of the value in 1997. (+ $ 100 million in recycled Al)

CC. CDA DISTRICT MAP (Hosted in Proterozoic sediments of the Belt Basin, the famous Silver Valley has produced over a billion ounces of silver, plus lead, zinc, and copper, totaling over $ 5 billion in value since the 1880’s.)

3. UI Tour Group at Lucky Friday.  District has strong link over years with College of Mines at University of Idaho. And this tour group included UI President, Provost, and of course Dean Earl Bennett, with Hecla mine geologist Randy Anderson, in front of the Silver Shaft.

4. Hecla Map with Lucky Friday and Gold Hunter. Hecla’s Lucky Friday operation was mining the Friday vein from 2 stope on the 5840 level, and now accounts for only a minor part of production. The bulk of silver produced is from the Gold Hunter vein system, which had 4 stope above and below the 4900 level. Mining began in June, 1997, at the Gold Hunter, which is connected with a mile-long haulage tunnel to the Silver Shaft at the Friday. Production in 1998 was 4.1 million ounces Ag.
5. **Sunshine mine, Jewell Shaft.** Sunshine Mining started the year with good news at their famous Sunshine mine by announcing new discoveries in the West Chance area. This somewhat reversed a $50 million writedown late last year. Operationally, the mine had a very good year, with the LHD diesel equipment extracting over 5 million ounces of Ag. The mine employs some 300 people.

6. **East Sunshine Targets.** The company started work on a major exploration project, a ramp eastward to the Con Sil shaft, in order to access exploration targets and connect ventilation and access. The ramp was shut down temporarily in November, with the heading some 1300 feet east of the Sunshine workings. The company had to do a reverse split on their stock in August and is also doing a feasibility on the Pirquitas Ag-tin project in Argentina.

7. **Galena mine.** The Galena mine is operated by Silver Valley Resources, formerly a joint venture (1994) of Asarco and Coeur, The Precious Metals Company. The Galena produced 3.2 million ounces Ag in 1998. In May, Asarco traded most of its silver properties in the CDA District, including its 50% interest in Silver Valley Resources to Coeur, for a 19.3% interest in Coeur. The sale also included the Coeur mine.

**DD. CDA Developments, 1999.** Production for 1999 should top the 13 million ounces of silver produced in 1998, and silver prices have been fairly stable, though hardly sufficient to fund needed exploration. Reclamation and Superfund is a big issue.

8. **Reclaimed Bunker Hill smelter site.** Work is nearing completion on the Bunker Hill Superfund site. The old smelter and zinc refinery site is almost totally reclaimed. $100 million spent to date on BH Superfund site.

9. **Reclamation in the District** (Campbell Tunnel, Canyon Creek) by Silver Valley Trustees (a private partnership) on Canyon Creek and Ninemile Creek. Cleans up some of the old mines and mills. A big question is the threat of expanding the Superfund to the entire Coeur d'Alene River basin, which would be a mammoth undertaking. Not popular with many.

10. **Clarkson Reagent Feeder.** Bob Clarkson will receive an honorary Ph.D. at the University of Idaho this month for his efforts on behalf of the industry, including this reagent feeder at the Lucky Friday mill.

**EE. PHOSPHATE DISTRICT MAP**

11. **1999 Phosphate Producers List.** Phosphate rock is the most valuable of Idaho's many mineral products. Four large mines and processing plants in
southeastern Idaho use ore from the Pennsylvanian-Permian Phosphoria Formation, a black shale-chert unit with the rich Meade Peak phosphatic member. Idaho is the nation’s only producer of elemental phosphorus (P₄) which is used in detergents and numerous food additives, as well as herbicide.

12. **FMC Dry Valley mine, B Pit.** FMC was stripping the 2000 year phase of the B pit at their Dry Valley mine near Soda Springs. They expect to produce about 1.4 million short tons this year.

13. **FMC Dry Valley mine, B Pit with lake.** This mined out section of the B Pit shows the stratigraphy, with the lower ore zone below water, the middle waste shales, an upper ore zone, and capping Rex Chert. The waste shales are enriched in selenium, which has been showing up in water and vegetation near old mine sites. The problem is forcing the mines to revise their reclamation procedures, and is lengthening the permitting process. FMC expects to mine out their reserves next summer, and drilled 70 holes to delineate the C Pit further south. They hope the revised EIS will be completed next spring, without appeal.

14. **FMC Dry Valley mine, Chicken Creek Reclamation.** In response to selenium enriched seeps from this old external South B waste dump along Chicken Creek, the company went in and excavated 100,000 cu. yards of affected material, covering it with straw and using Best Management Practices to decrease erosion and infiltration.

15. **FMC El. Phos Plant, dome.** FMC’s ore goes by train to their elemental phosphorus plant in Pocatello, the largest of its kind in the world. As reported last year, FMC incurred a heavy fine under RCRA and is committed to spend over $150 million to upgrade air and hazardous waste treatment operations at the plant on the Shoshone-Bannock Indian Reservation in next few years. This new silver dome encloses some of the ore handling equipment and will reduce dust emissions.

16. **FMC El. Phos Plant, Calciner.** The crushed ore is formed into briquettes and run through this calciner at 2300 degrees F. to drive off water and other volatiles.

17. **FMC El. Phos Plant, furnace building with electricity.** The calcined ore is mixed with silica and coke and sent to one of four electric arc furnaces. The plant consumes about 10% of Idaho Power’s electrical capacity. At very high temperatures, the bonds in the apatite ore are broken and the Phosphorus is reduced to its elemental state. (260 megawatt total)

18. **FMC El Phos Plant, slag ladle on truck.** The company is converting its slag collection system to a ladle process to reduce dust emissions and is also working on eliminating the waste ponds and dust.
19. **FMC El Phos Plant, at sunset.** The plant employs nearly 500 people and can produce over 250 million pounds of P4 a year. Ore going in averages 25% P2O5 and the outgoing product is 99.99% pure elemental phosphorus.

20. **Simplot Phosphoric Acid Fertilizer Plant.** Next door is J.R. Simplot’s plant to produce phosphoric acid fertilizer. 450 employees. Simplot’s Smoky Canyon mine near the Idaho-Wyoming border is the state’s largest, with 2.8 million short tons mined in their just completed production year. They purchased a new Hitachi hydraulic excavator and two new trucks this year. 205 employees. Mining was from the E area south of Sage Creek. 3 years ore left. Doing a full SEIS for expansion to B and C panels to north, having to more fully address the Se and waste disposal issues. Estimate 2 years for SEIS. Drilled 42 RC holes at Deer Creek and 45 holes at Sulfur Canyon for exploration.

21. **Agrium Rasmussen Ridge mine.** Agrium purchased the Rasmussen Ridge mine from Rhone-Poulenc in 1997. This view is to the north, with the backfilled South Rasmussen pit in front and the South - Central Rasmussen pit being mined in back. Over a million tons per year goes to:

22. **Agrium Phosphoric Acid Plant, Conda.** The phosphoric acid plant at Conda. The company has been upgrading and modernizing the plant, including the digestion system. Will be close to record production this year, though markets a bit soft.

23. **Solutia Enoch Valley mine.** Solutia, formerly Monsanto, produced nearly 1.3 million tons this year, mining on the south end of their Enoch Valley mine. Will soon start connecting the north and south pits. Their approved mine plan for the South Rasmussen mine was held up by an appeal from the Greater Yellowstone Coalition on a special use application for a haul road. And so they are working on more detailed planning and mitigation for selenium.

24. **Solutia, Plant.** Solutia runs an elemental phosphorus plant at Soda Springs. Much of the production is used in Round-Up herbicide.

25. **Solutia Plant, new underpass tunnel.** A new safety project was completed at the plant - this 330-foot tunnel under the highway allows ore to be unloaded and the ore conveyed to the plant on a 1700-foot overland conveyor, without heavy ore trucks having to cross the highway. $1.8 million.
PHOSPHATE DISTRICT DEVELOPMENTS: 1999
(Selenium Studies-Working Group, BMPs; longer permitting times; Astaris = marketing JV FMC/Solutia; New PPA plant = FMC/Agrium)

26. South Maybe Canyon Dump. This old valley fill waste dump at South Maybe Canyon is part of the Se problem. Provides easy access to oxidized water that percolates through dump and mobilizes Se.

27. FMC Dry Valley mine, reclaimed 1996 pit. This totally backfilled and reclaimed 1996 pit at FMC's Dry Valley mine is one of new methods. Pit was backfilled and capped with 4 feet of alluvium and 2 feet of top soil. Se-enriched waste shales isolated back underground rather than exposed on surface. Working group and USGS and UI studies are continuing.

Some of biggest news in phosphate district was on corporate side. FMC and Solutia announced a marketing joint venture to be called Astaris LLC. And in October, FMC and Agrium/NuWest Industries announced plans to build a $90 million new purified phosphoric acid plant at Conda. The new plant will produce industrial grade phosphoric acid; FMC will build it and Agrium will operate it, next to their existing plant. Expect completion in July 2001. New environmental upgrades will also be added to existing plant.

ACTIVE MINES MAP, 1999. Closures took their toll on metals.

28. Thompson Creek mine, overview. Idaho's huge Thompson Creek molybdenum mine continued to operate, though Moly prices were down considerably. About 170 people work at the mine in Custer County.

29. Thompson Creek tailings dam. The company has been preparing a Supplemental EIS over last 2 years, partly due to concerns over incipient oxidation of pyrite-bearing tailings. The company built a pyrite reduction plant to separate the pyrite-bearing tails. Early this year, the Forest Service issued a Record of Decision that allowed the mill to run the pyrite reduction plant, as proposed by the company. The decision was appealed by environmental groups, and the appeal reversed by the Forest Service. The mine is still awaiting biological opinions by the NMFS and US Fish and Wildlife Service.

30. Thompson Creek map. Thompson Creek has proposed separating and isolating the pyritic tails by subaqueous deposition in the tailings pond. The mine has at least another 15 years of reserves.

31. Beartrack mine, South Pit. Meridian Gold operates the Beartrack heap leach
gold mine in Lemhi County near Salmon. This year’s production should be close to the 110,000 ounces gold poured last year. Mining was centered in the South Pit, which will be exhausted near year’s end. They started mining in the Mason-Dixon pit late this year. Estimate about 5.4 million tons of ore to crusher.

32. **Beartrack mine open house.** The mine is slated to finish mining next year, and the company hosted an open house on July 10 to show their appreciation for hundreds of local citizens and guests. The mine is the largest employer in the Salmon area.

33. **Beartrack mine, North Pit reclamation.** Reclamation of the North Pit is nearly complete. It was backfilled and partly capped and winterized late this year.

34. **Rescue mine with Jim Striker.** CSC Mining did more development work at Rescue gold mine near Warren. They started another down ramp to access the high grade ore, built a new tailings pond and made surface improvements. CSC plans to mine ore this winter and run the gravity mill next summer.

**HH. METAL MINING LOWLIGHTS**
(Low metal prices, closures-DeLamar, Yellowjacket, low prices, dormant AuAg projects-Petzite, Kilgore, Stone Cabin, Atlanta, Thunder Mtn.; AML reclamation- Triumph, Blackbird, North Creek, adit closures)


36. **Stibnite District, reclaimed Meadow Creek tailings area.** Reclamation continued at Stibnite District by State, FS, and Mobil Oil. They completed the Meadow Creek tailings project, reclaimed haul roads and exploration roads, and removed miscellaneous junk from Dakota’s efforts, plus water quality monitoring.

37. **Stibnite District, Thor Kiilsgaard at Bradley Pit.** Interest in Idaho’s mining history remains high. Thor Kiilsgaard and Ben Leonard, retired USGS geologists, entertained and enlightened visitors on a public field trip sponsored by Idaho Museum of Mining and Geology.

38. **IMCO, Al recycling plant furnace.** On a 90’s note, IMCO (formerly IMSAMET)’s Al can recycling plant at Hauser Lake in north Idaho, was busy melting some $100 million worth of Al.

**II. INDUSTRIALS MAP. 1999.** Another good year for the many smaller industrial minerals operations around Idaho.
39. **Acme Sand and Gravel, Rathdrum.** Demand was high for Sand and Gravel which contributed some $47 million to the State's economy last year. Acme mines glacial Missoula Flood gravel deposits, which are also the sole-source aquifer for the Spokane-Coeur d'Alene area.

40. **MONROC manager, Mike Matzdorf, in Texas hard hat** explaining Monroc's quality assurance lab to BSU students. Monroc makes concrete with high quality floodplain deposits along the Boise River. Increasingly limited resource.

41. **Chemical Lime operates lime plant at Bancroft,** market-related shutdowns. Also in SE Idaho, **Ash Grove Cement** runs cement plant in Inkom; will have another record year, shipping over 270,000 tons of clinker.

42. **Hess Pumice, Malad.** Hess Pumice mines and crushes pumice near Malad for lightweight aggregate and also a ultrafine and pure pumice powder used for polishing television screens. Markets starting to improve (25,000 tons fine grind). Hess has two new businesses- **US Grout** produces ultrafine pumice grout. In June, Hess purchased the Malad perlite operation from Idaho Minerals for $3.5 million. New company is **Idaho Minerals LLC.** Hess did some much needed maintenance on expander plant in Malad and opened a new pit with new equipment at perlite minesite. They also abandoned plans for a controversal plant at Virginia.

43. **CARCO BenJel clay mine.** CARCO was busy extracting bentonite from the BenJel mine in Owyhee County in southwest Idaho.

44. **Teague Mineral Products plant.** Teague Mineral Products operates this processing plant near Adrian, Oregon, just over the state line. They mine and process Oregon bentonite and also Idaho zeolite from several pits. They size and grind the material and focus on high-quality specialty markets. Sales were good this year. (Ship 20,000 tons, inc. 3-4,000 zeolite)

45. **Teague’s CH pit, Idaho.** Clinoptilolite is mined from these beds at the CH pit in Owyhee County, Idaho. Zeolite is used as a cation exchange filter and odor control and has applications in radionuclide treatment.

46. **Three Rivers Stone, Clayton.** The good economy and building boom has resulted in strong demand for decorative stone. L and W Stone operates the Three Rivers quarry near Clayton in central Idaho. Expanded and built new haul road. Ship 15,000 tons this year, about a 30% increase. Two pits in argillaceous quartzite with shades of purple and brown.

47. **Northern Stone Supply, quarry.** Northern Stone has operated this Rocky Mountain Quartzite quarry near Oakley in southern Idaho since 1971. The popular facing and ledge stone, a micaceous quartzite, comes in shades of gold
and silver. Two other companies also produce the stone.

48. **Northern Stone, tile cutting plant.** Northern Stone also operates a tile cutting plant in Oakley.

49. **Stags Leap Wine Cellar flooring.** Doing geology, I accidently happened across this example of “Idaho Quartzite” ready for installation in a new underground wine cellar at the Stags Leap winery in Napa Valley, CA. Good wine also.

50. **Table Rock Sandstone quarry.** In Boise, Table Rock Sandstone operates the historic silicified sandstone quarry for landscaping and building stone jobs.

51. **MWCA yard, Rexburg.** This gold Moonstone pumice is from one of three pits operated by MWCA, based in Rexburg. The company, which also produces black and red Idaho cinders for landscaping, is currently owned by Hecla which is in the process of selling MWCA to raise money.

52. **Idaho Travertine, wire saw.** Idaho Travertine operates a large stone-cutting plant in Idaho Falls. The company is nearing the end of a multiyear job to quarry and cut granite for the new LDS Assembly building in Salt Lake City. Here, one of the special wire saws cuts a 6 foot block of granite into slabs. The wire blades are wrapped with diamonds. The complex job requires thousands of custom cut and sized pieces of granite; some 24,000 tons in all will be quarried.

### EXPLORATION MAP, 1999.

53. **Metal Mining Lowlights.** What can I say? Exploration in Idaho was dismal in 1999. I know you are more than aware of the low metal prices which strongly impacted exploration. Grass Roots Exploration was minimal; Kennecott did drill one hole in Belt rocks near Murray in north Idaho looking for base metals. There were a few small placer Au projects. IGS and USGS new mapping in Belt areas of north Idaho.

We had several dormant precious metal projects, some with substantial resources delineated. Among them, Kilgore in eastern Idaho, drilled by Latitude Minerals last year; Latitude is seeking a joint venture partner. Also, the Atlanta project of Twin Gold Corporation, who diluted Quest USA’s interest in the 1.37 million ounce gold resource.

54. **Buffalo Gulch property.** Idaho Consolidated Metals Corporation of Lewiston continued to hold the Buffalo Gulch property near Elk City. Results from IP/Resistivity work indicate several untested targets at this heap leachable gold property with minimal stripping required. At their nearby Petsite joint venture with Kinross Gold, ICMC reported final results from last year’s drilling, indicating
substantial widths of grades over 1.1 g/t with some higher grade zones along the shear. Contact Kinross to see the full data for this 600,000 ounce gold resource, open to the north where two of the best holes were drilled at very end of '98 program. From yesterday's talk on Ft. Knox and Fairbanks District in Alaska, I noted geochemical and geologic features similar to several Idaho gold districts, including Stibnite, Petsite area, and even the Boise Basin (Au-Bi-Te).

55. **Dewey deposit.** Thunder Mountain Gold announced plans to open the Thunder Mountain mine at the old Dewey deposit, where previous drilling by USMX outlined a 300,000 ounce gold reserve. SAIC is doing the EIS. Thunder Mountain is east of Yellow Pine in central Idaho. Coeur d'Alene Mines operated a heap leach mine in the Thunder Mountain District for several years in the early 1990's.

**INTERNET NEWS: INTERGOLD CORP.**

56. **Blackhawk Property, 1998 drilling.** As reported last year, Intergold Corporation reported a new discovery in Lincoln County. The company has been drilling and working on assay procedures for the Blackhawk project north of Shoshone, Idaho. Gold mineralization is purported to be hosted in unaltered Pliocene Moonstone rhyolite. Not every fire assay can recover the gold, apparently. Intergold and Auric Labs of Salt Lake developed a procedure to analyse last year's core drilling and reported an average of 0.075 oz/ton Au and 0.179 oz/ton Ag over the 4000 feet of drilling in 8 holes from 0 to 500 feet. Intergold hired Dames and Moore to verify and validate the analytical work and and help Auric convert their proprietary procedures to a production-scale lab. In June, Intergold announced the 1999 chain of custody drill program of 60 RC holes. That was terminated apparently after a few holes.

In September, Intergold started a series of core holes, under the chain of custody supervision of Dames and Moore. And on October 1, 1999, Intergold announced it was terminating that work and commencing legal proceedings in Utah against Dames and Moore and Auric Labs for breach of contract. The action shocked Dames and Moore, Auric, and their personnel who were personally named in the $10 million lawsuit. It also stopped payment on money owed by Intergold to the defendants. The complaint alleges breach of contract and other charges. Apparently Dames and Moore was not successful in transferring the technology to a third independent lab - one can only wonder why.

Recently, Strathcona is being hired to audit the analytical procedures and assays. The lawyers are going to love this one! I couldn't have made it up if I tried!
FORMATION CAPITAL CORP.  RAM DH MAP.

57. Formation Capital Corp., Sunshine project, Blackbird, 1998 core. Fortunately, there was one real good exploration project this year. Formation Capital drilled 11 core holes, totaling 5210 feet, at their RAM Co-Cu-Au target in the Blackbird Mining District of Lemhi County. Blackbird is only domestic Co reserve. Extended ore horizon along strike and down dip. Cobalt grades of ½ to 1% over true widths of 3-12 ft. were intersected as projected from stratigraphy.

58. Formation Capital Target Map. The 1999 results are being incorporated into a prefeasibility study by Mine Development Associates of Reno. Preliminary results are encouraging, and company began baseline environmental monitoring this fall. A number of other targets on Sunshine project remain to be drilled.

THE FUTURE?

Industrial minerals, especially sand and gravel, and decorative stone look good. We also see some interest in exotic placers and lodes (gems, rare earths, etc.) For metals, underground mining will probably be easier to permit for environmental reasons.

59. Rodinia Article with map, GSA Today, Oct. 1999. We also need creative thinking on where the really big ones might be.

I’d like to propose an Australian analogue for north Idaho. The Belt Basin shares the same age, lithologies, and Pb-Zn-Ag-Cu metal suite with Proterozoic Mt. Isa terrane in Australia. This recent article by Karlstrom, et al., and a recent GSA talk by Ross, et al., document increasing evidence that Proterozoic Australia was once connected to western North America. Detrital zircons in the Belt record 1500 m.y. ages, most likely derived from Australia. The last 20 years of exploration in Australia has discovered several new giant, sediment-hosted deposits, such as Cannington and Century, in the Mt. Isa terrane.

Let’s use this model to find more big ones hiding in the Belt.

60. Total Solar Eclipse. As this millenia eclipses into twilight, the mining industry in Idaho and elsewhere is vastly different from 100 years ago, much less 1000 years ago. What will mining and Idaho be like in the new millenia? Who knows? Increasing need for big targets, new technology, new ideas to solve geological, technological, environmental, and political conflicts which affect the mining industry as Y2K approaches.

THANK YOU
Lucky Friday underground tour. L to R; Brian Pitcher (Provost, UI), Bill Booth (Hecla), Bob Hoover (Pres. U of I), Earl Bennett (Dean, College of Mines, UI), Randy Anderson (Hecla geologist).
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FOR IMMEDIATE RELEASE: Newport, Beach, CA October 12, 1999
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Summary: On behalf of the Board of Directors, InterGold Corporation, "the Company," DENIES THE
Slide 55
Slide Phosphate map

Slide 56
Slide CDA district map showing Hecla properties in red.

Slide 57
Slide Underground tour to Lucky Friday; L to R- unknown (Hecla), Bob Hoover (Pres of UI), Randy Anderson (Hecla geologist), Brian Pitcher (UI Provost), Bill Booth (Hecla).
Slide 58
Star-Morning mill at Burke and old Hecla headframe.

Slide 59
Lucky Friday underground tour; Bob Hoover (Pres, U of I), Randy Anderson (Hecla geologist), Brian Pitcher (Provost, U of I).

Slide 60
Slide Silver Valley Trustees, cleanup of lower Canyon Creek.
Slide 61
Slide Smelterville flats reclamation

Slide 62
Slide Looking at Bunker Hill smelter site from across I90. Note barren hillsides.

Slide 63
Interstate-Callahan mill site after reclamation
Slide 64
Rex Mill in 1997

Slide 65
Rex Mill during cleanup, 1999

Slide 66
Acme ready mix near Rathdrum.
Slide 67
Acme sand/gravel quarry. Will sell home sites along edge of old quarry with provision that home owners accept the view.

Slide 68
L & W Stone at Clayton, ID

Slide 69
L&W Stoner at Clayton, ID
Slide 70
View of Thompson Creek mill and conveyor from tailings impoundment.

Slide 71
View of Thompson Creek mill and conveyor from tailings impoundment.

Slide 72
Map of Thompson Creek workings.
Slide 73
Thompson Creek Tailings impoundment.

Slide 74
“Moly” Concentrate ready to ship from Thompson Creek.

Slide 75
Dam/spillway at Blackbird mine reclaimed tailings impoundment.
Slide 76  
Signs along Panther and Blackbird creeks.

Slide 77  
Looking up Napias Creek at Beartrack mine.

Slide 78  
Leesburg near Beartrack gold mine.
Slide 79
Map of Beartrack project.

Slide 80
Conveyor from Beartrack (Meridian Gold) mine (South Pit) to heap leach pads.

Slide 81
Truck garage at Meridian’s Beartrack heap leach gold mine north and west of Salmon, ID
Slide 82
Beartrack mine, South Pit.,

Slide 83
Community day at Beartrack mine.

Slide 84
Explanation of slide notes.

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