UPDATE ON PRODUCTION AND EXPLORATION ACTIVITY IN NEVADA

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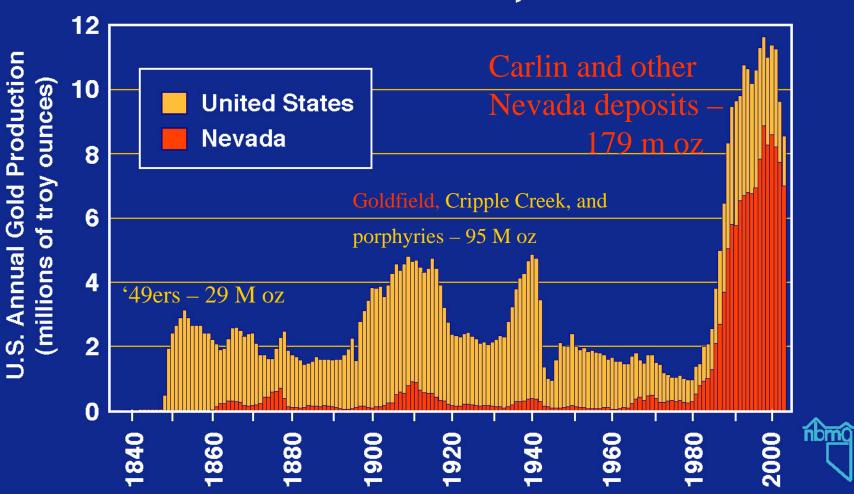
¹Nevada Bureau of Mines and Geology (www.nbmg.unr.edu)

²Nevada Division of Minerals (minerals.state.nv.us)

\$400+/oz Au

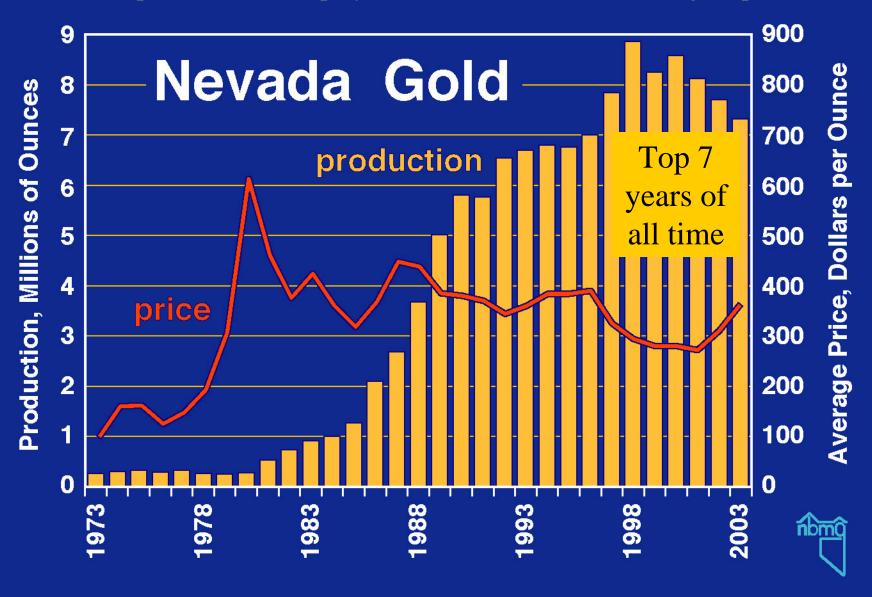
THE MAIN POINT:
Nevada is a really
great place to explore
for and mine gold.

Gold Production, 1835-2003

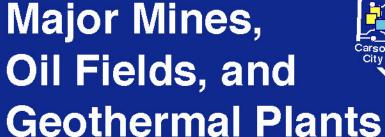


We are in the midst of the biggest gold boom in American history.

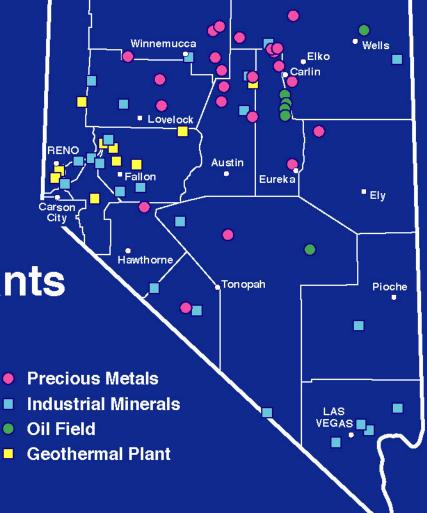
Value of production was up by 11% from 2002 because of higher price.

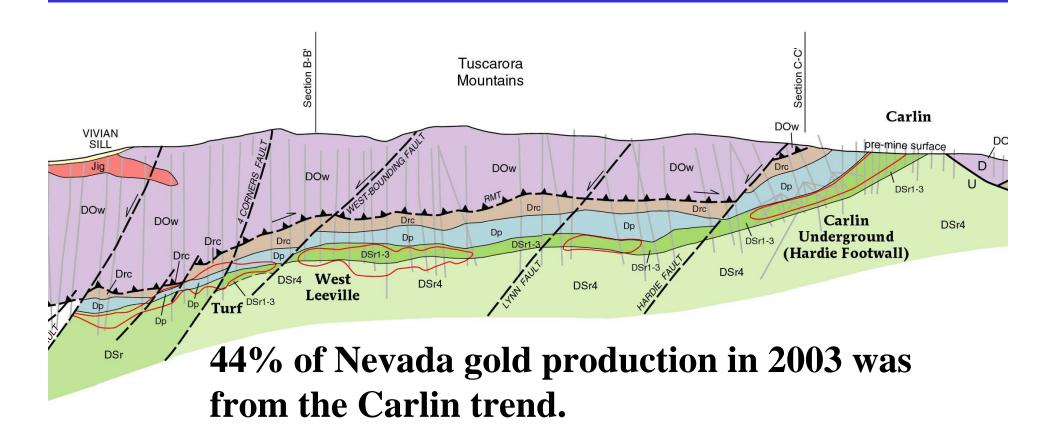


7.3 Moz in 2002, 82% of U.S. and 9% of world production



23 major gold mines (8 not on the trend with production > 100K oz)





Section by Steve Moore & others, Newmont, NBMG Bulletin 111 - *Gold Deposits of the Carlin Trend*, edited by Tommy Thompson, Lew Teal, and Dick Meeuwig (204 pages, with detailed geologic maps and sections – \$35 from www.nbmg.unr.edu)



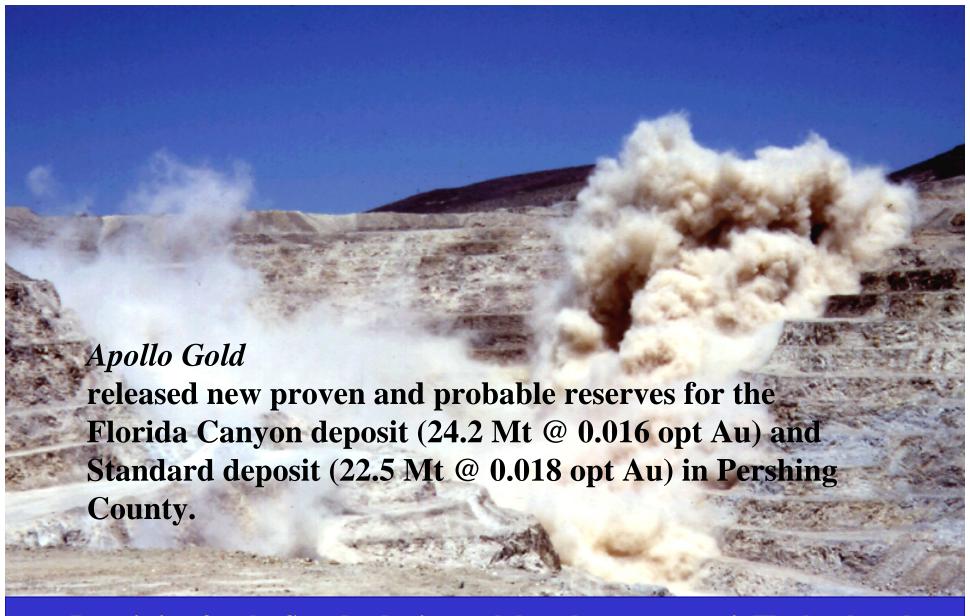
Cortez JV
drilling at Cortez Hills in Eureka County
(mineralization may be continuous with the Pediment deposit; overall resource = 62 Mt @ 0.09 opt Au (5.5 Moz Au, mostly oxidized); one hole not included in the resource estimate is 450 ft of 0.695 opt Au)



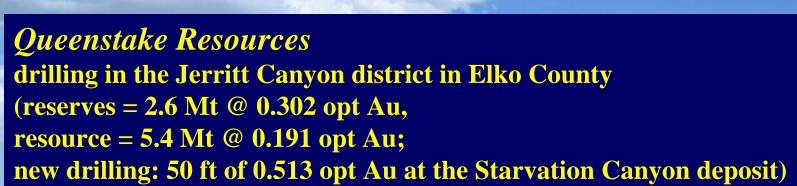
Newmont Mining terminated its JV with Midway Gold in Nye County; but started permitting of the Emigrant deposit in Elko County (over 1 million ounces of Au, on the Carlin trend)



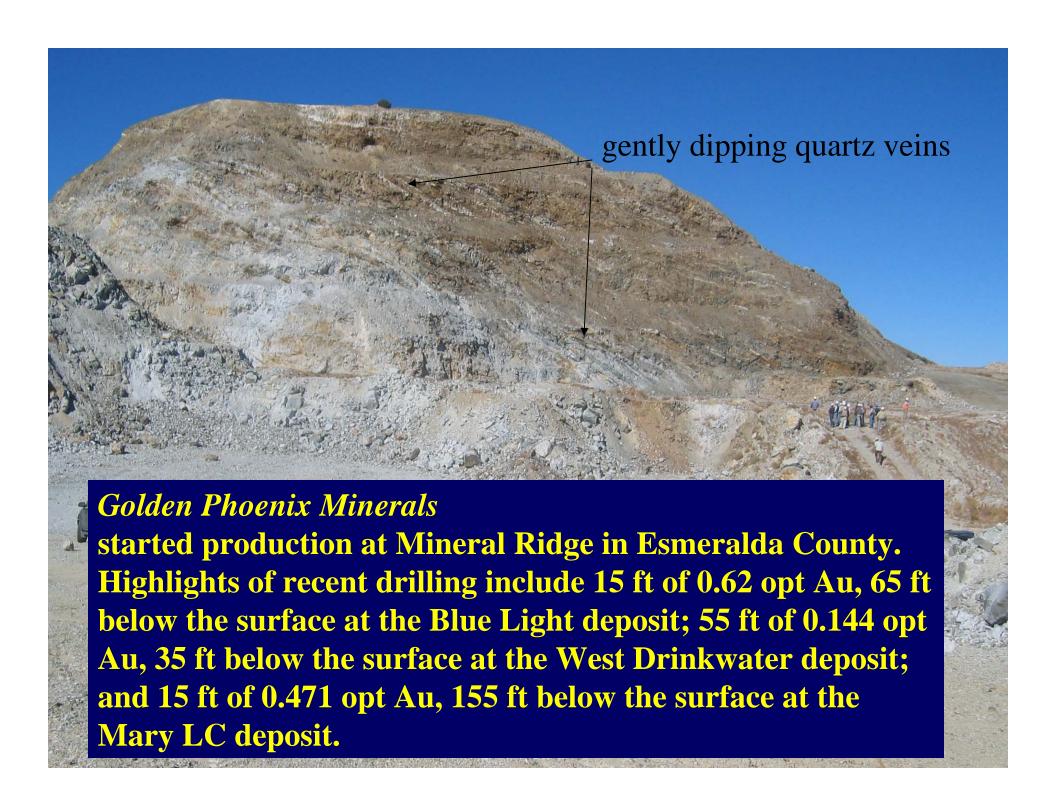
Barrick Gold is reopening the Ruby Hill mine in Eureka County.



Permitting for the Standard mine took less than two years! The leach pad has been built; mining has begun, and gold production is expected to begin in 2005, with final processing at Florida Canyon.







Planned New Production

Phoenix Project

(Newmont)

6.03 million ounces of gold (reserve)
515 million pounds of copper (reserve)
Planned production to begin in 2006
(accelerated since last year):
400,000 to 450,000 ounces of Au/yr
and 18 to 20 million pounds of Cu/yr
(+ 2.2 million ounces of Ag/yr)

Planned New Production

Expansion fully underway at the **Marigold mine**

When new production is phased in (in 2005), production will rise from about 75,000 oz Au/year to about 180,000 oz Au/year.

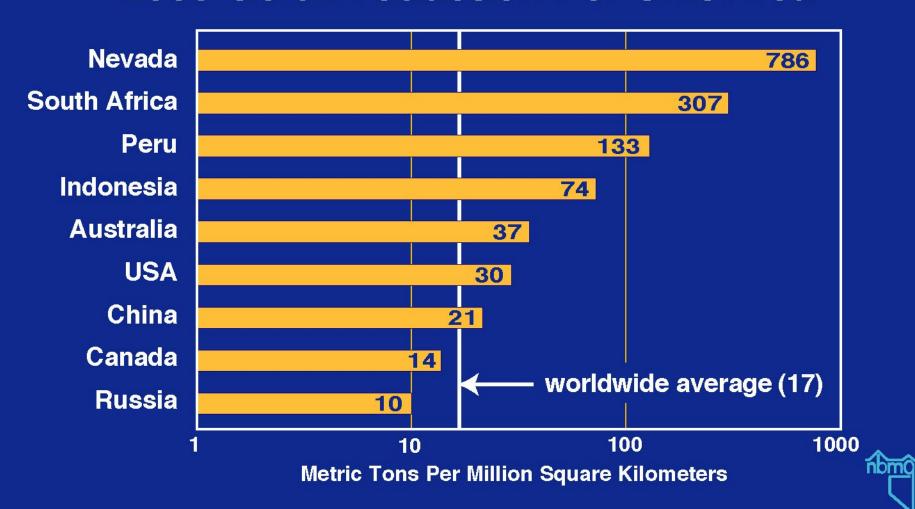
Millenium Project
(Marigold JV of Glamis Gold Ltd. & Barrick)
south of the Marigold Mine, Humboldt County
MEASURED AND INDICATED RESOURCE:

71.6 million tons @ 0.031 opt = 2.22 million oz Au INFERRED:

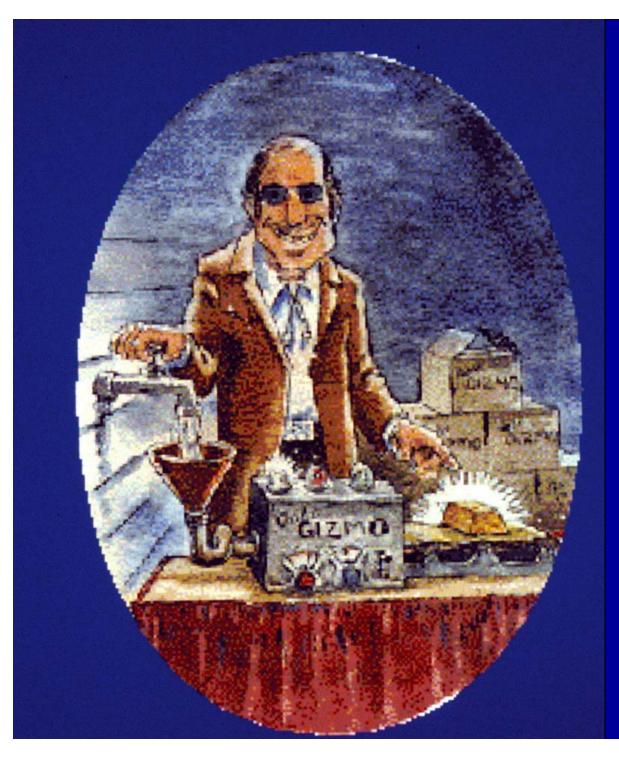
94.7 million tons @ 0.022 opt = 2.06 million oz Au RESERVE AT \$275/oz:

50 million tons @ 0.033 opt = 1.57 million oz Au

2003 Gold Production Per Unit Area



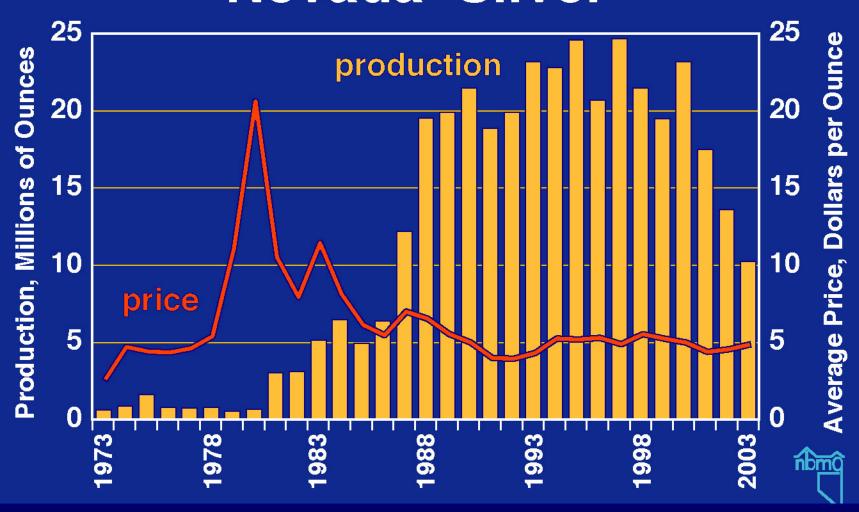
Nevada is a really great place to explore for and mine gold.



Gold from Water
(and Other Mining
Scams) – NBMG
Special Publication 22
(www.nbmg.unr.edu –
free on the Web)

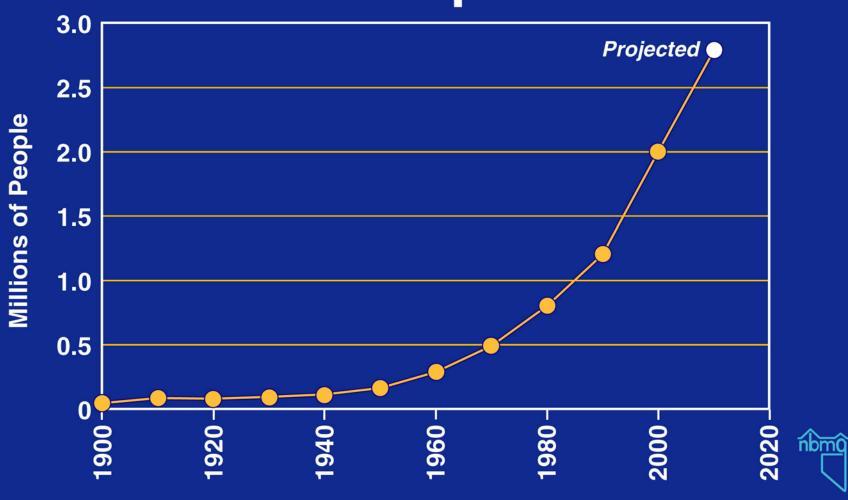
Report suspected scams to the Nevada Division of Minerals.

Nevada Silver

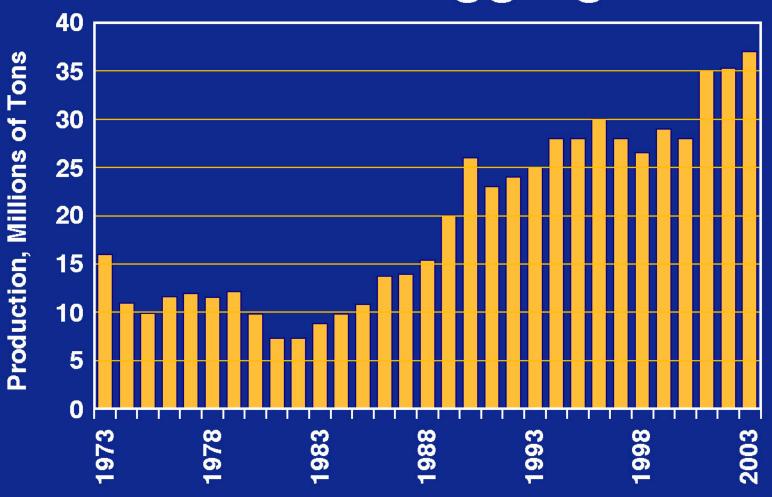


The Coeur Rochester mine in Pershing County produced its 100 millionth ounce of silver in January 2004. It is the world's 7th largest silver mine.

Nevada Population

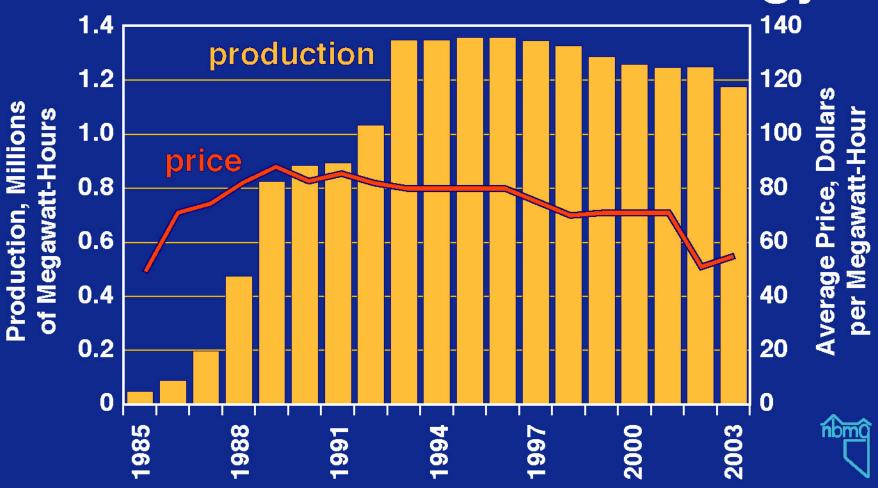


Nevada Aggregate

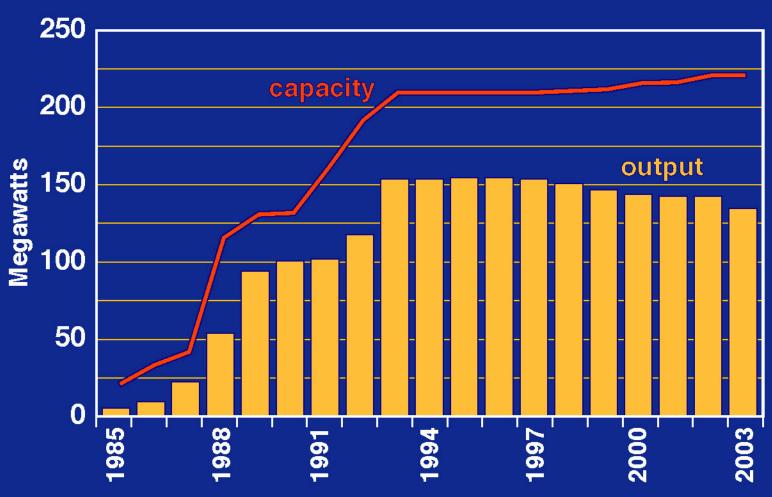




Nevada Geothermal Energy



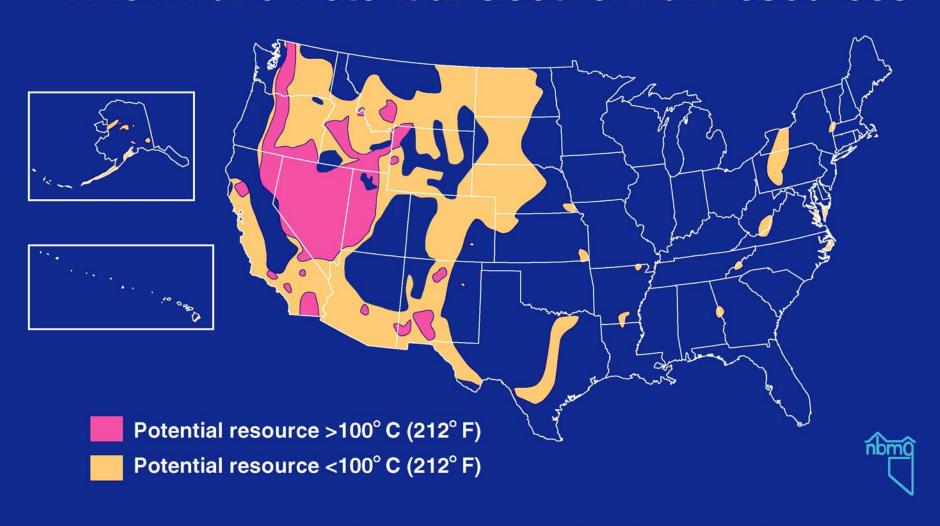
Nevada Geothermal Power



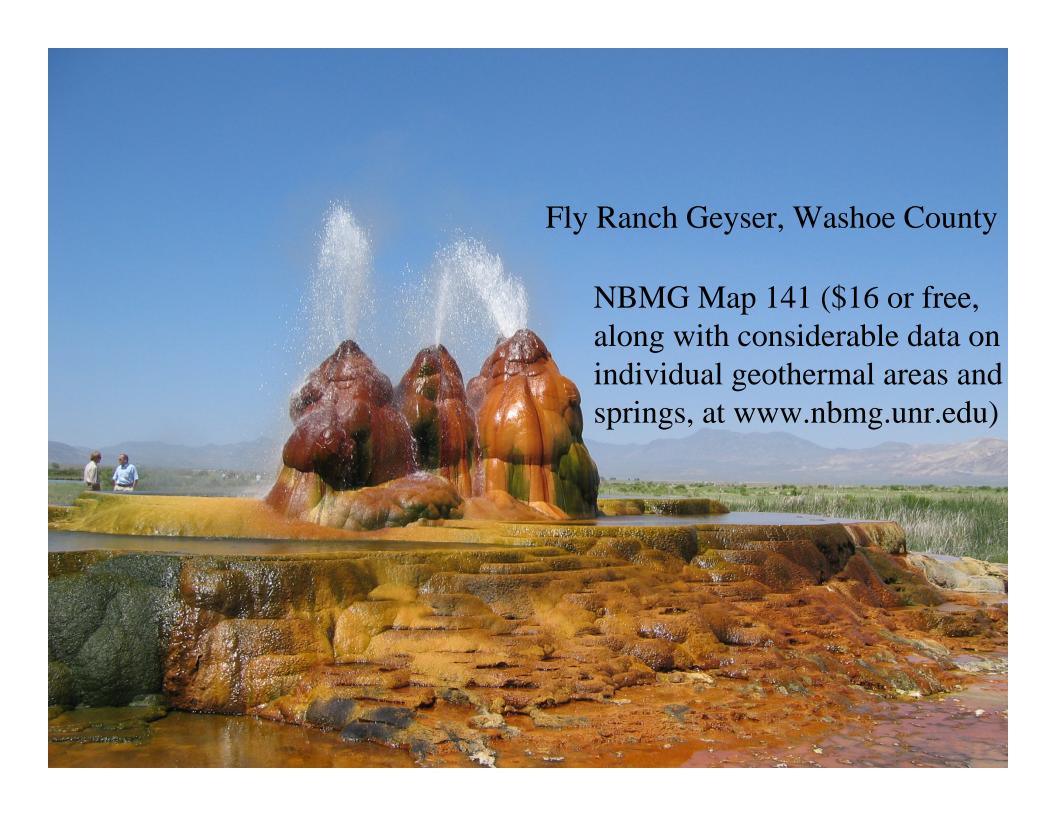


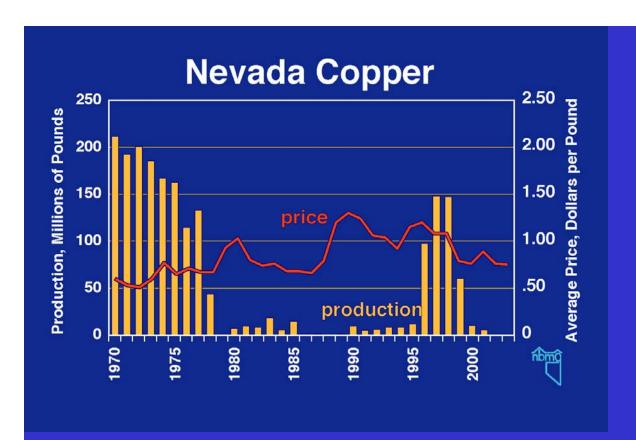
We expect to see a significant increase in production soon.

Known and Potential Geothermal Resources



Compiled by the Energy and Geoscience Institute, University of Utah





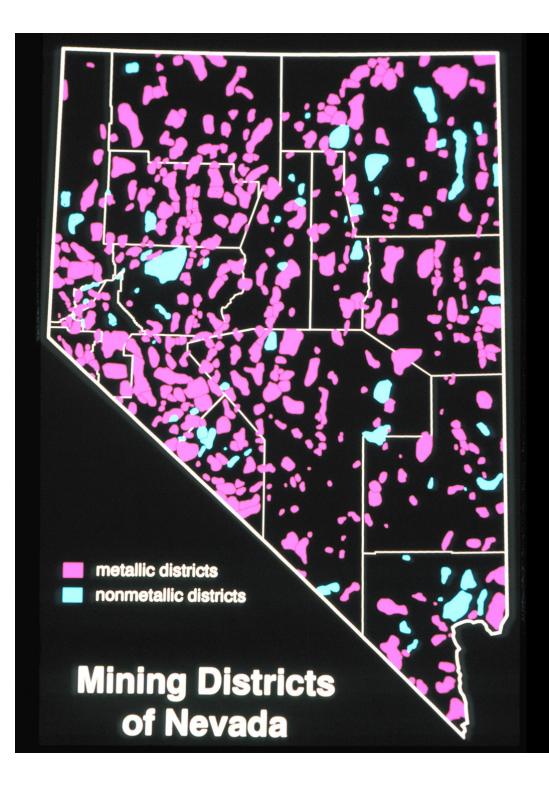
Quadra Mining

restarted production at the Robinson (Ely) mine in White Pine County in 2004

(reserve = 145 million tons @ 0.687% Cu and 0.008 opt Au; ten-year mine life averaging 165 million pounds of Cu and 57,000 ounces of Au per year; purchased from BHP Billiton for \$18 million)

Arnold Schwarzenegger – Jesse Ventura Tag Team

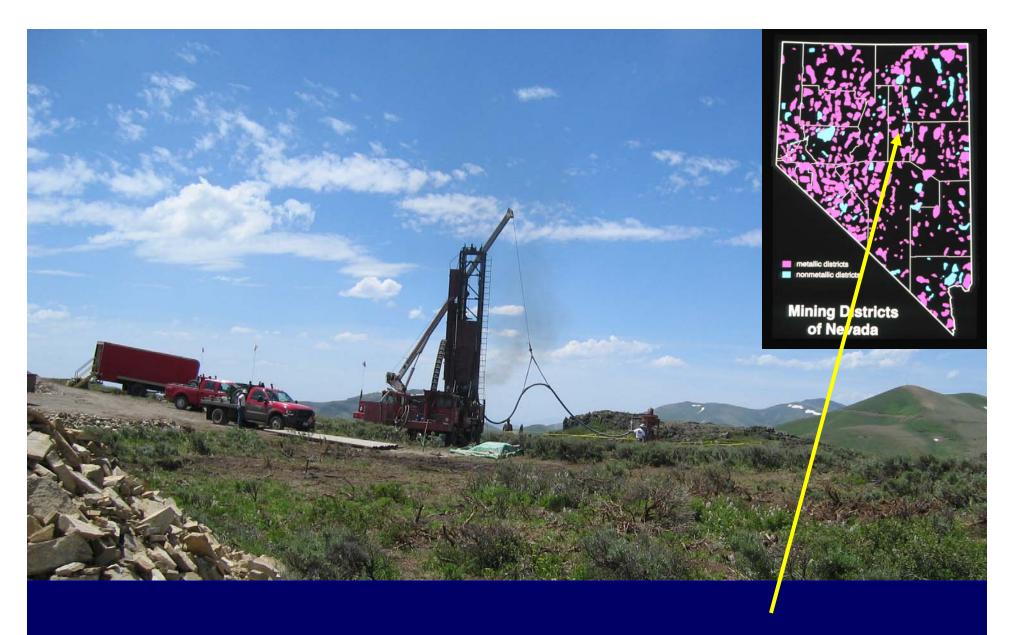




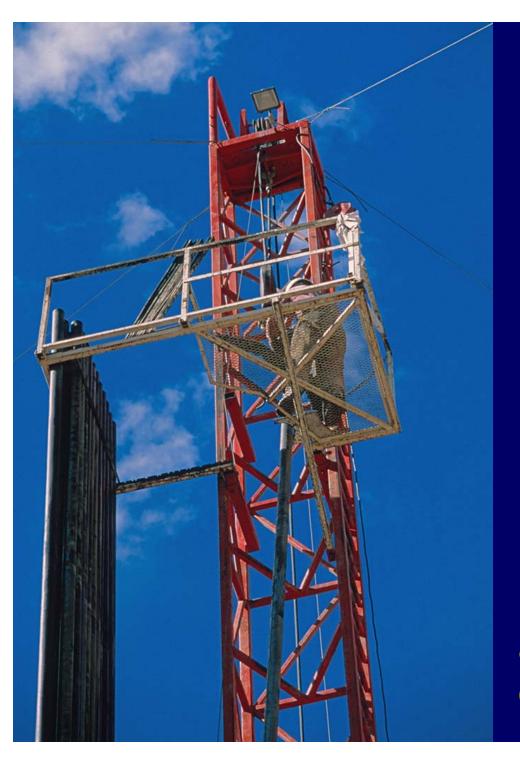
Significant exploration (including drilling, geochemical sampling, and geological mapping) was reported in 13 of Nevada's 17 counties in 2003, and new claims were staked in 16 counties (with only the county of Carson City not showing activity).







Victoria Resources - Mill Canyon - Eureka County (80 ft of 0.303 opt Au at 1,475 ft down the hole)





Coral Gold - Robertson Lander County

(best hole: 195 ft of 0.059 opt Au, including 30 ft of 0.229 opt Au)





Klondex Mines Fire Creek Lander County

(Main Vein underground potential, 3 to 30 ft of mostly > 0.20 opt, up to 1.246 opt Au)



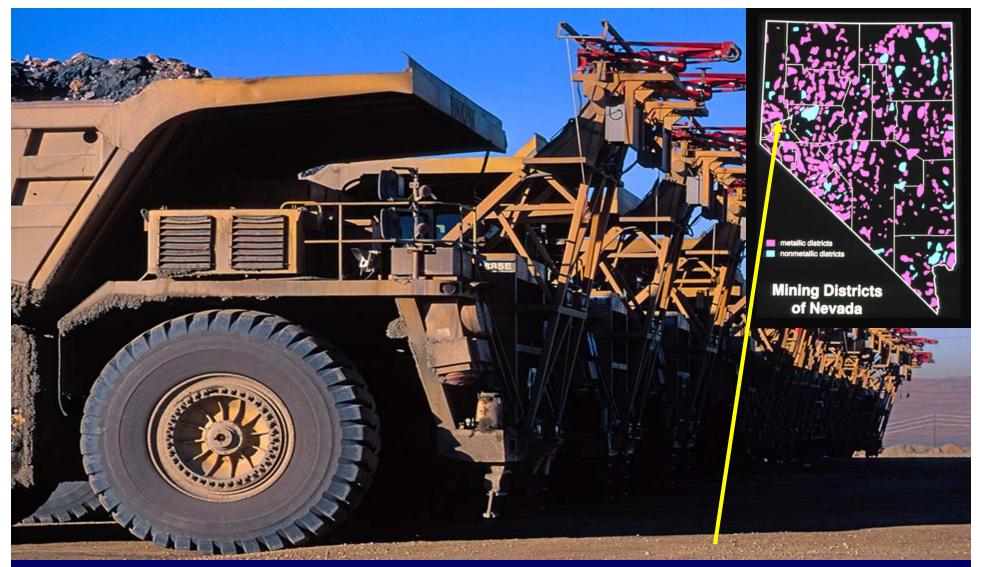
Rio Fortuna - Highland - Lander County high-grade vein (best hole: 5 ft of 1.95 opt Au and 11.6 opt Ag within a 35-ft zone of 0.28 opt Au and 3.19 opt Ag)





Midway Gold
Spring Valley
Pershing County

(one hole: 25 ft of 0.13 opt Au in quartz-tourmaline veins)



Plum Mining Company - GoldSpring, Inc. Comstock District - Gold Canyon - Storey County

Billie the Kid and Lucerne (500,000 t @ 0.06 opt Au and 0.4 opt Ag; 850,000 t @ 0.06 opt Au and 0.51 opt Ag) plus potential 1.2Moz placer deposit south of Gold Canyon





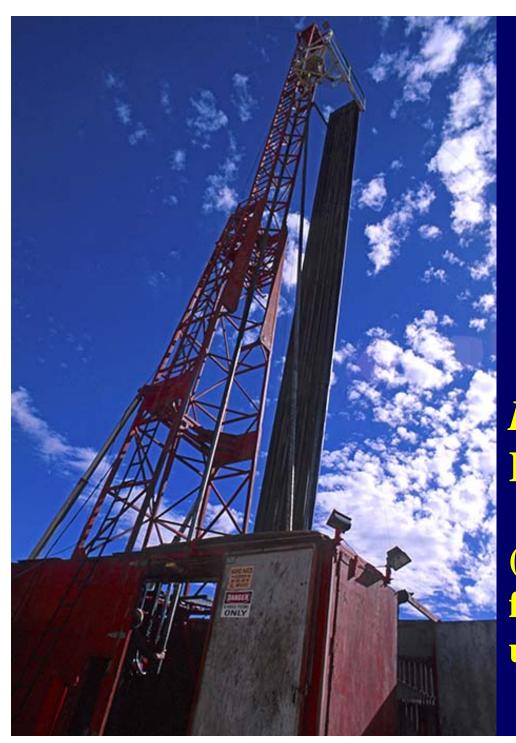
Castleworth Ventures
Pan/Pilot Ridge
White Pine County
(best hole: 115 ft of 0.067
opt Au; one hole: 120 ft of
0.026 opt Au, including 45
ft of 0.043 opt Au 100 ft
below the surface)



Pacific Ridge Exploration

Golden Arrow - Nye County

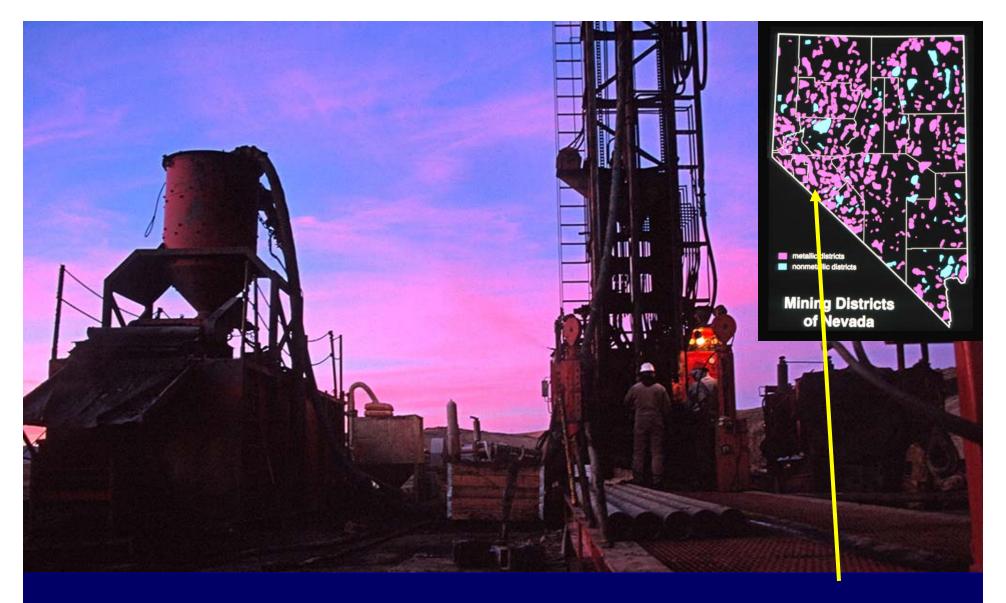
(vein with 600 ft of strike length, 9 ft width, ~ 0.5 opt)





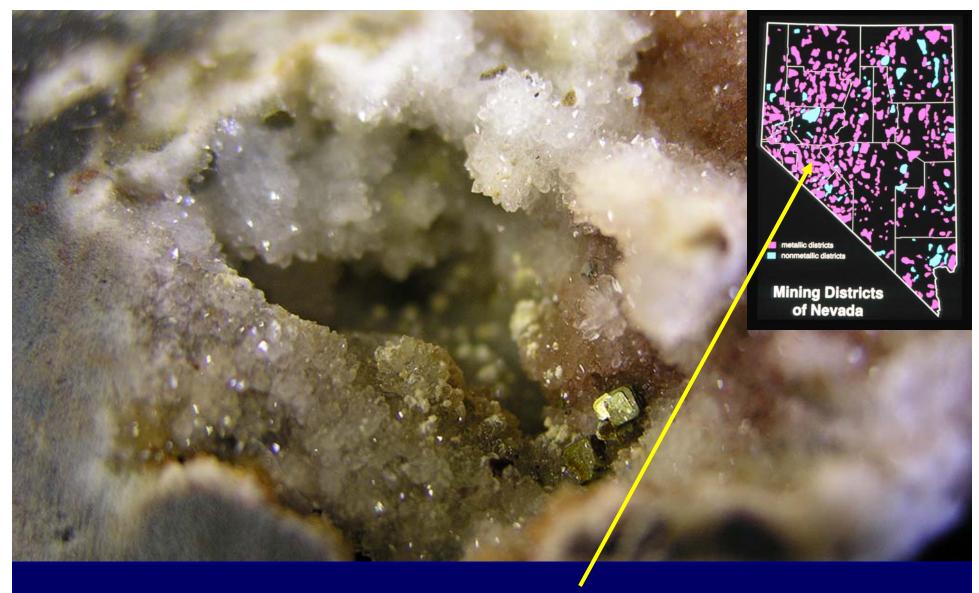
Rare Earth Metals Corp.
Longstreet - Nye County

(best hole intercept 10 to 35 ft of 0.01 to 0.13 opt Au and up to 3 opt Ag)



Metallic Ventures - Aurora district - Mineral Co.

Drilled the Prospectus vein
(best hole: 12 ft of 4.26 opt Au and 12.74 opt Ag)



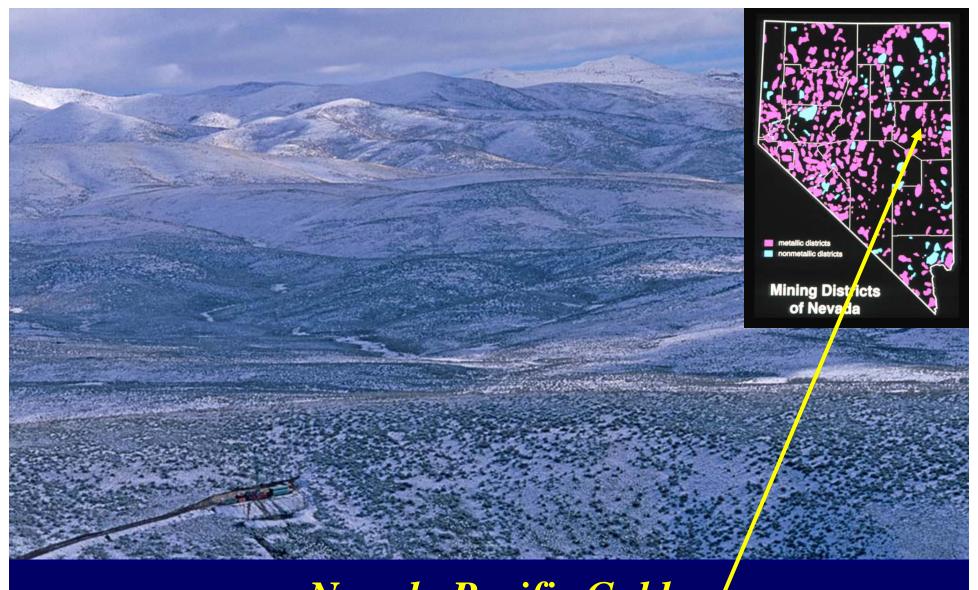
Fjordland Exploration - Ashby mine — Mineral Codrilled a quartz vein (Au-Cu mineralization up to 5 ft thick with grades up to 0.25 opt Au and 0.5% Cu)





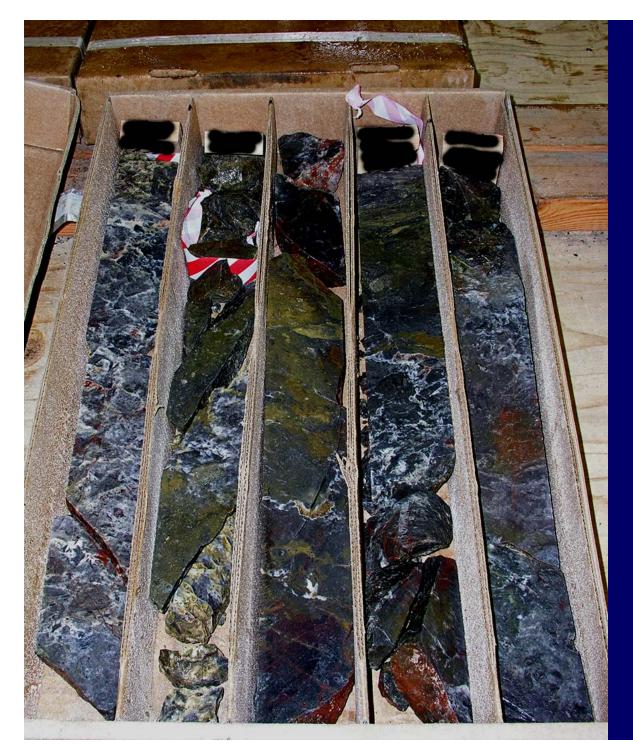
Gold Summit Monte Cristo Esmeralda County

(best hole: 5 ft of 0.498 opt Au in massive quartz vein)



Nevada Pacific Gold

Limousine Butte - White Pine County
(best hole: 155 ft of 0.61 opt Au)





Romarco Minerals Hog Ranch Washoe County

(best hole: 70 ft of 0.152 opt Au, including 20 ft of 0.382 opt Au





Vista Gold Mountain View Washoe County

(best hole: 230 ft of 0.039 opt Au)



New Sleeper Gold Corp. & X-Cal Resources

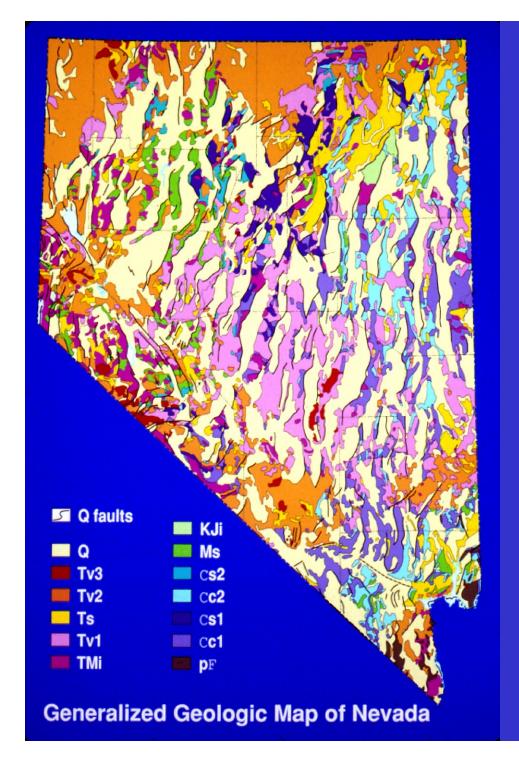
Sleeper - Humboldt County
(zones of 10 to 60 ft with 0.167 to 0.455 opt Au, below 500')





Cypress Development Gorman White Pine County

oxide Zn-Ag (smithsonite and hemimorphite) best hole 210 ft of 12.4% Zn)



The Nevada Bureau of Mines and Geology is updating its "Gold and Silver Resources in Nevada" map as a GIS layer as well as a paper copy.

Come to the GSN Symposium, May 15-18, 2005.

www.gsn2005.org

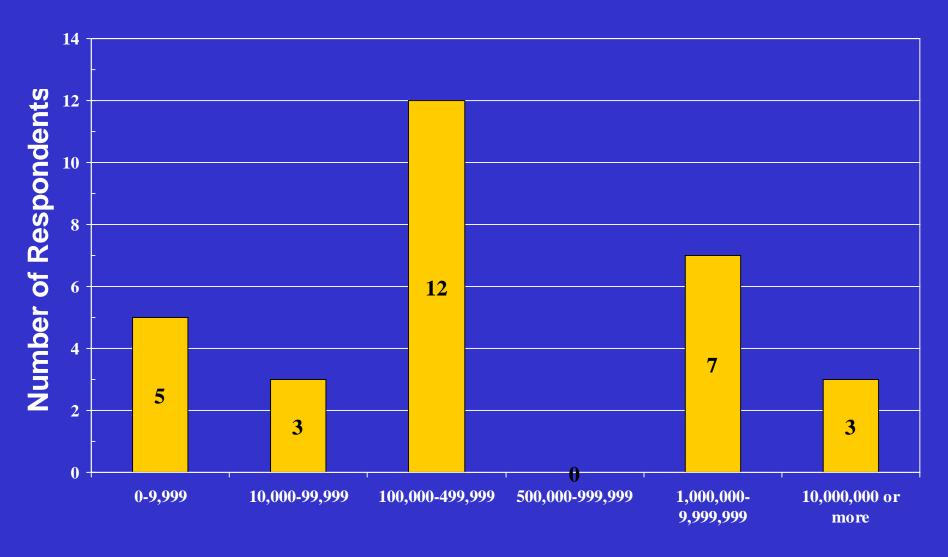
NEVADA EXPLORATION SURVEY 2003

- NDOM tenth annual survey
 - Level of exploration activity
 - Factors influencing these levels
- Exploration and mining companies with projects or claims in Nevada
- 30 respondents from 106 questionnaires
 - 29 exploring for precious metals; one for industrial minerals

SURVEY TOPICS

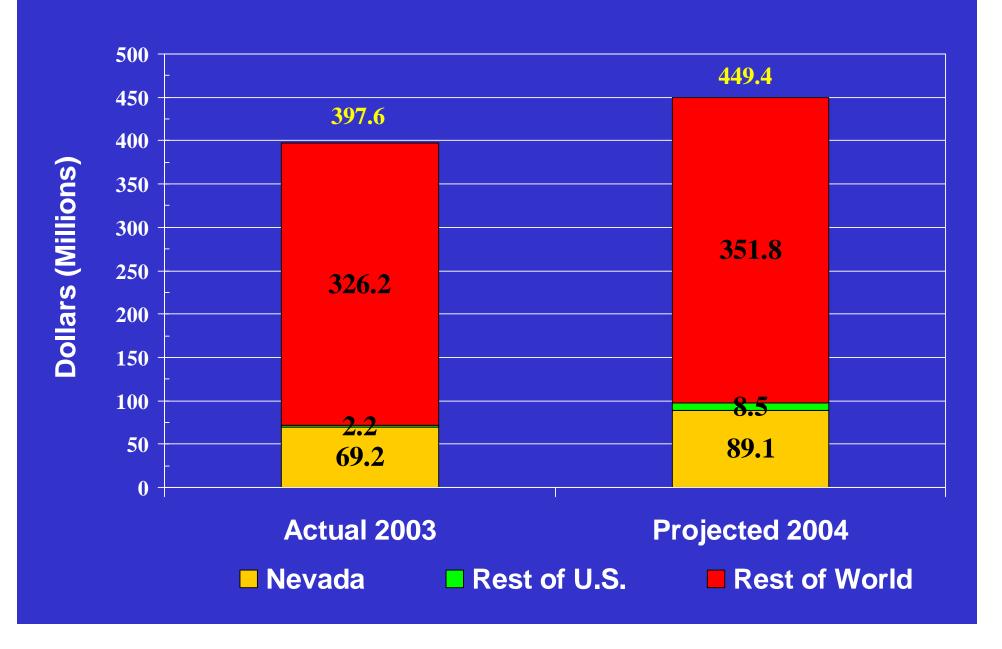
- Exploration expenditures
- Geologists employed
- Number of claims held
- Breakdown of exploration expenditures
- Factors influencing activity
- Type of reserve replacement
- Overall attitude toward exploration

NEVADA EXPLORATION EXPENDITURES 2003

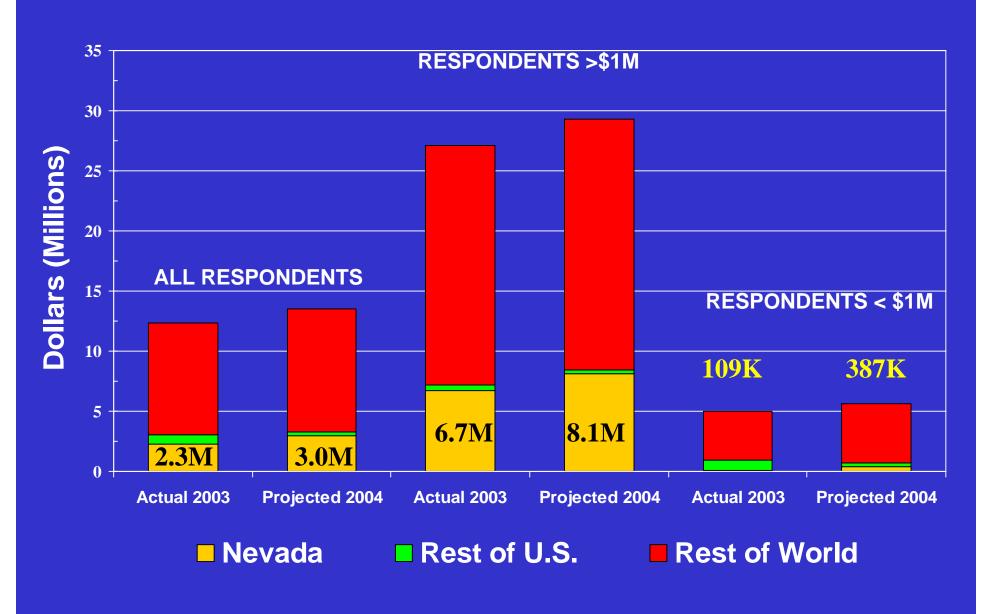


Expenditures in Dollars

TOTAL EXPLORATION SPENDING 2003/2004

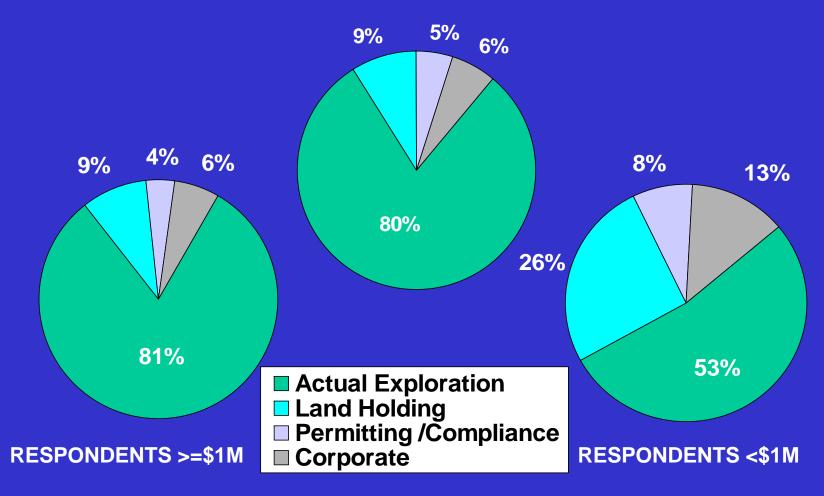


AVERAGE SPENDING 2003/2004

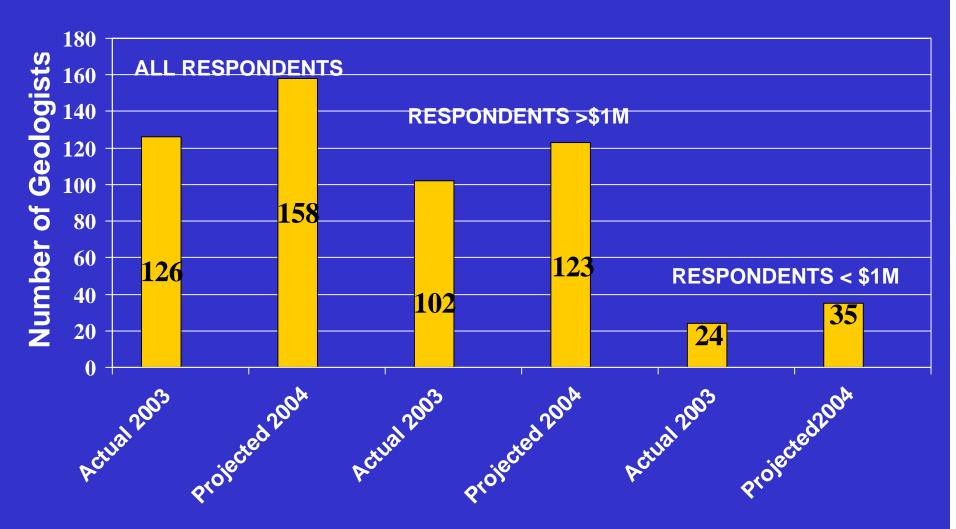


BREAKDOWN OF NEVADA EXPENSES 2003

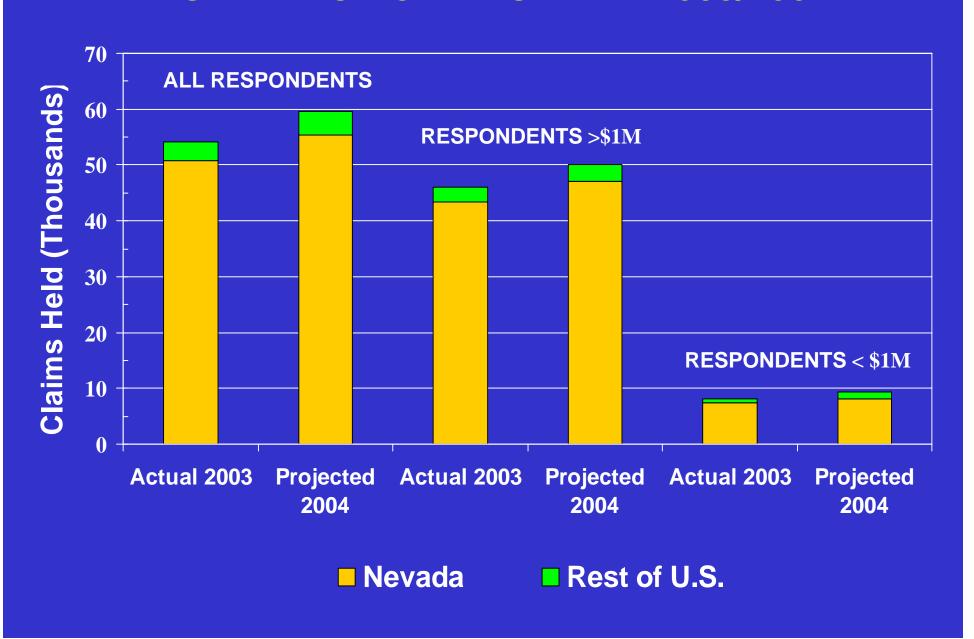




EXPLORATION GEOLOGISTS EMPLOYED IN NEVADA 2003/2004



NUMBER OF CLAIMS HELD 2003/2004



Active Claims in Nevada

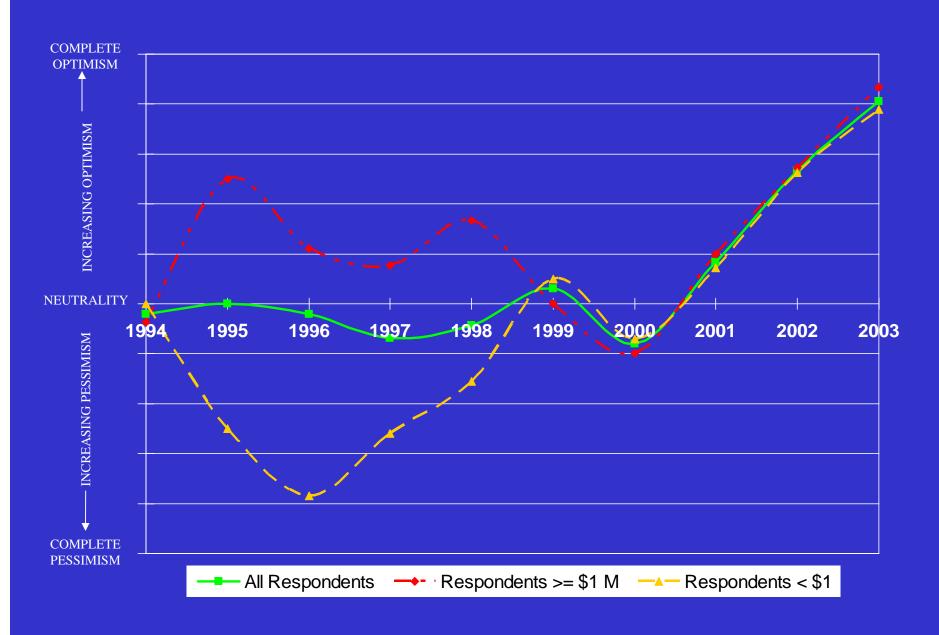


30% more new claims filed in 2003 than in 2002

FACTORS INFLUENCING ACTIVITY 2003 ALL RESPONDENTS



OPTIMISM INDEX 1994-2003

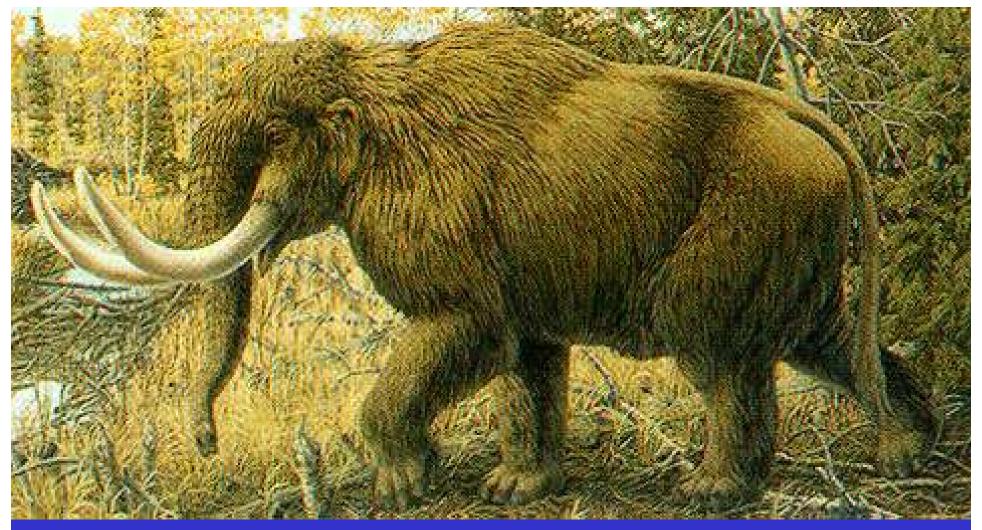


SUMMARY

- Higher spending and more new claims filed in 2003 than in 2002
- Nevada exploration expenditures projected to increase 29% from \$69.2 M in 2003 to \$89.1 M in 2004
- Worldwide exploration to increase 13% from \$397.6 M in 2003 to \$449.4 M in 2004 for these companies exploring in Nevada
- Exploration geologists employed with these companies in Nevada to rise from 126 in 2003 to 158 in 2004

SUMMARY

- 80% of budgets spent on direct exploration expenditures
- Number of claims held in Nevada rose over 10% from 2002 figures to 99,755 in 2003, and the number of new claims filed rose by 30%
- Most important factors influencing activity continue to be favorable geology and commodity prices
- Domestic exploration 81% optimistic, 19% neutral, and none pessimistic



Nevada is a <u>really great</u> place in which to explore for and mine gold, silver, and other mineral commodities

Q faults CC1 DF Generalized Geologic Map of Nevada

Ten Top Reasons to Explore in Nevada

- 1. Great geology and potential
- 2. Many large producing mines, including high-grade, underground mines
- 3. Mines operated by the leading international companies



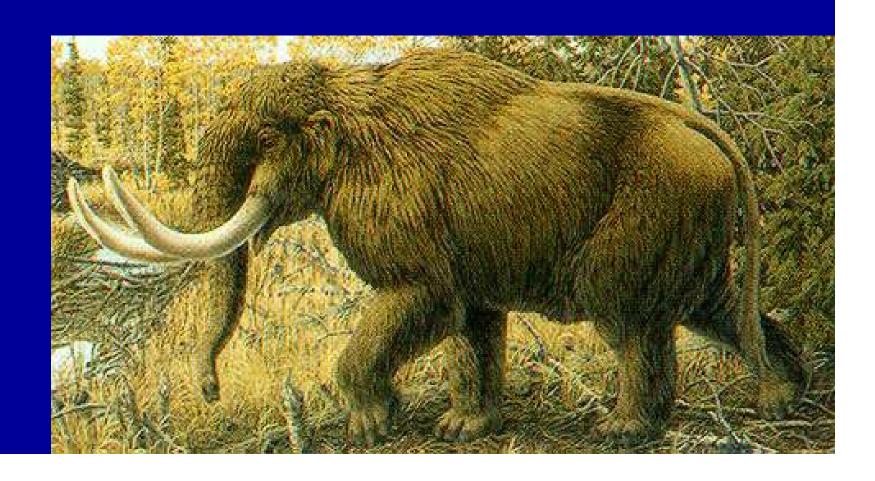
- 4. Regulatory system with recent examples of rapid permitting and recent changes that favor mining
- 5. Excellent infrastructure (roads, drillers, supplies, assayers, hotels, etc.)
- 6. Large areas open to exploration on BLM lands



- 7. Dry climate and year-round access in many areas
- 8. Network of knowledgeable exploration geologists, organizations, and agencies (Geological Society of Nevada, Nevada Mining Association, Nevada Division of Minerals, Nevada Bureau of Mines & Geology, Ralph J. Roberts Center for Research in Economic Geology and other units of the Mackay School of Earth Sciences and Engineering, building on the tradition of the Mackay School of Mines)
- 9. Recent discoveries and new mines

Ten Top Reasons to Explore in Nevada (continued)

10. No malaria, black flies, moose, polar bears, desert death adders, or crocodiles (just elephants).





Minerals of Nevada

NBMG Special Publication 31 (2003, 512 pages, \$75)

www.nbmg.unr.edu

minerals.state.nv.us

