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## COMMISSION ON MINERAL RESOURCES

### DIVISION OF MINERALS

# NEVADA EXPLORATION SURVEY 2000

by

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# **NEVADA COMMISSION ON MINERAL RESOURCES**

## **Division of Minerals**

The Nevada Division of Minerals, a part of the Commission on Mineral Resources, is responsible for administering programs and activities to promote, advance, and protect mining and the development and production of petroleum and geothermal resources in Nevada. The Division's mission is to conduct activities to further the responsible development and production of the State's mineral resources to benefit and promote the welfare of the people of Nevada. The seven-member Commission on Mineral Resources is a public body appointed by the Governor and directs mineral-related policy for the Division and advises the Governor and Legislature on matters relating to mineral resources. The Division focuses its efforts on three main areas: Industry relations and public affairs; regulation of oil, gas, and geothermal drilling activities and well operations; and abandoned mine lands.

The agency is involved in a wide array of activities relating to mineral development. Staff compiles annual data on all active mines in Nevada and maintains the State's mine registry. Information concerning mining operations and production is made available to the public through this yearly publication. Educational documents and materials concerning many aspects of the minerals industry are also produced. The Division participates in governmental activities affecting policies and laws concerning the minerals industry and resource development. The Division administers the State's reclamation bond pool.

The Division is responsible for permitting, inspecting, and monitoring all oil, gas, and geothermal drilling activities on both public and private lands in Nevada. Staff also monitors production of oil, gas, and geothermal resources to insure proper management and conservation. The Administrator is the Governor's Official Representative to the Interstate Oil and Gas Compact Commission.

The Division's abandoned mine lands program provides for public safety by identifying and ranking dangerous conditions at mines that are no longer operating, and by securing dangerous orphaned mine openings. The program continually urges the public to recognize and avoid hazardous abandoned mines.

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## EXECUTIVE SUMMARY

This is the seventh annual survey conducted by the Division of Minerals of companies engaged in mineral exploration in Nevada. The purpose of the survey is to determine the level of current and projected exploration activity, and to determine what factors are influencing those levels of activity.

The highlights of the survey are as follows:

- Thirty three companies responded to this survey.
- The respondents reported spending \$76.9 million on Nevada exploration activities in the year 2000, and project spending \$59.4 million in 2001, a 23 percent decline from 2000. \$41.6 million was spent on expansions and \$35.3 million was spent on grass-roots efforts.
- The respondents reported their worldwide exploration expenditures in the year 2000 were \$346.4 million, and are projecting a drop to \$254.6 million.
- The respondents spent 66 percent of their budgets on actual exploration costs, 12 percent on corporate costs, 11 percent on land-holding costs, 3 percent on permitting and compliance costs, and 8 percent on other costs.
- The respondents reported employing 125 geologists in the year 2000, down severely from the 225 reported for 1999. Projections for 2001 show a continuing drop to 91 geologists.
- The respondents reported holding 46,112 claims in Nevada and 55,230 in the U.S. in the year 2000.
- While the existence of favorable geology remained the most important factor influencing the respondents' level of exploration activity, commodity prices were a close second.
- The time for respondents to obtain approval of a Plan of Operations varied from 4 months to 5 years with an average of 13 months, up from an average of 10 months in 1999.
- Nine out of 19, or 47 percent of respondents who have Nevada production were able to replace their production with newly found reserves.
- 26 percent of the respondents reported they were optimistic about domestic exploration, while 32 percent were neutral and 42 percent were pessimistic.

## **INTRODUCTION**

In the spring of 2001, the Division of Minerals conducted its seventh annual survey of exploration companies engaged in projects or holding claims in Nevada. As in previous years, the purpose of this survey is to determine the current and projected levels of exploration activity, and to see what factors are influencing these levels. This survey is regarded as a portion of the official state mine registry, making the individual responses confidential.

One hundred and forty four questionnaires were sent out in late March, 2001. Responses were received from 33 companies. The author appreciates the efforts made by those who responded. Of the 33 respondents, 31 were focused on precious metals and 2 were looking for other minerals. Many, but not all, of the respondents to the surveys are the same from one year to the next. This makes it possible to compare trends from one year to the next only in a general way, rather than in an exact way. Table 1 shows the number and types of respondents from the previous surveys and this current one.

The main topics covered by the survey include exploration expenses and a breakdown of how the dollars were spent, geologists employed, number of claims held, a ranking of factors that influence respondent's levels of activity, success at reserve replacement, type of reserve replacement, and overall attitude toward domestic exploration.

The author appreciates the efforts of Alan Coyner, the Division Administrator, and Jonathan Price, the State Geologist, for their critical reviews of the manuscript. Thanks is also due to Deborah Selig and George Bishop of the Division of Minerals.

## **EXPLORATION EXPENDITURES**

Exploration expenditure is regarded as one of the two main indicators of exploration activity, the other being the number of geologists employed. Exploration expenditures reported for Nevada in the year 2000 totaled \$76.9 million, down significantly from the \$86.7 million reported for 1999. The actual reported expenditures for the year 2000 were far below the \$102.0 million that the previous survey had projected would be spent in 2000. In the current survey, the respondents project their Nevada exploration spending will be \$59.4 million in 2001. If this projection holds true, it would mark the fifth consecutive year of declining exploration expenditures in Nevada. Exploration spending remains important to Nevada's economy, particularly in the rural areas, but the figures indicate that a great deal of uncertainty and belt tightening exist.

Spending in the rest of the U. S. (non-Nevada) in 2000 was reported to be \$23.5 million, up from the \$20.6 million reported for 1999. The respondents project their non-Nevada U. S. spending will drop very sharply, to \$9.7 million in 2001. It should be pointed out that there is a Nevada bias in this survey as companies without known Nevada activity are not polled. Spending in Nevada was 76.6 percent of the total U. S. spending in the year 2000, and is projected to be 85.9 percent in 2001.

Respondents reported that their worldwide spending was \$346.4 million in the year 2000, down sharply from the \$414.5 million reported for 1999. Projections for 2001 show a continuing drop, to \$254.6 million. Spending in Nevada was 22.2 percent of the total worldwide spending in the year 2000, and is projected to be 23.3 percent in 2001.

In most previous surveys a distinction existed between the companies with Nevada exploration budgets greater than or equal to \$1 million (the GE companies) and those with budgets less than \$1 million (the LT companies). In this survey, there is only a gap of \$110,000 between the largest LT company and the smallest GE company. Graph 1 shows the distribution of respondent's budgets. Of the 33 respondents to this survey 10 are GE companies and 23 are LT companies. In the survey last year, there were also 33 respondents but 20 were GE companies and 13 were LT companies. The decline in the number of GE companies is the result of industry consolidation and the cessation of Nevada exploration by some former respondents. The GE companies were responsible for 94.4 percent of Nevada's total exploration spending in 2000. The GE companies also account for the bulk of total domestic and world-wide exploration spending at 94.2 percent and 92.6 percent respectively. Graph 2 shows the breakdown of exploration spending for Nevada in 2000 and projected for 2001. Table 2 shows the exploration expenditures reported in previous surveys from 1994 through 2000.

The average Nevada spending per respondent was \$2.3 million in 2000, down from \$2.6 million in 1999. The GE companies spent an average of \$7.3 million while the LT companies spent an average of \$187,000. The projected averages for 2001 show the GE companies dropping to \$1.8 million and the LT companies rising to \$243,000. The average spending for all respondents is projected to be \$1.8 million in 2001. Graph 3 illustrates the average spending per respondent.

## **BREAKDOWN OF EXPENDITURES**

In addition to the amount of spending, this survey asked for a breakdown of their Nevada expenditures. This is the second year this information has been requested. Respondents were asked to provide the percentages of their budget that was devoted to land-holding costs (claim staking and holding, lease payments, etc.), permitting and compliance costs (bonding, reclamation, etc.), corporate costs (overhead, taxes, etc.), actual exploration costs (drilling, mapping, assaying, etc.), and other costs (respondent was asked to specify). The percentages given by each respondent were weighted against that respondent's budget.

For all respondents weighted together, 66 percent of their 2000 budget was spent on actual exploration costs, down from 73 percent in 1999. They spent 12 percent on corporate costs, up from 11 percent in 1999; 11 percent on land-holding costs, up from 9 percent in 1999; 3 percent on permitting and compliance costs, down from 4 percent in 1999; and 8 percent on other costs, up from 3 percent in 1999. Other costs were generally specified as geophysics.

For the GE companies as a group, 66 percent of their 2000 budget was spent on actual exploration, down from 74 percent in 1999. They spent 12 percent on corporate costs, up from 10 percent in 1999; 10 percent on land-holding costs, up from 9 percent in 1999; 3 percent on permitting and compliance costs, down from 4 percent in 1999; and 8 percent on other costs, up from 3 percent in 1999.

For the LT companies as a group, 45 percent of their 2000 budget was spent on actual exploration, down from 46 percent in 1999. They spent 14 percent on corporate costs, down from 20 percent in 1999; 27 percent on land-holding costs, up from 23 percent in 1999; 12 percent on permitting and compliance costs, up from 3 percent in 1999; and 2 percent on other costs, down from 8 percent in 1999.

The GE companies spent a higher percentage of their 2000 budgets on actual exploration than the LT companies, while the LT companies spent a higher percentage on land holding and permitting than the GE companies. Graph 4 shows the breakdown of expense categories for all respondents, GE respondents, and LT respondents.

## **GEOLOGISTS EMPLOYED**

The second main indicator of exploration activity is the number of geologists employed. In Nevada, respondents reported 125 geologists on the payroll in the year 2000, sharply down from the 225 in 1999. Projections for 2001 indicate a continuing drop to 91 geologists. Of the 125 geologists, 100 were reported by GE companies, and 25 by LT companies. Graph 5 shows the number of geologists employed in Nevada as reported for the year 2000 and projected for 2001. Table 3 shows the numbers of geologists employed in the previous surveys from 1994 to 2000. While individual years have varied, a decrease of 61 percent from 1994 to 2000 in geologists employed in Nevada has been reported by respondents.

In the U.S., including Nevada, 158 geologists were reported to be at work in mineral exploration in the year 2000, down from the 282 reported for 1999. Of those, 114 were employed by the GE companies and 44 by the LT companies. Eighty-eight percent of the GE company's domestic geologists were employed in Nevada, while only 57 percent of the LT company's domestic geologists were. Overall, 79 percent of domestic geologists were at work on Nevada projects. Projections for 2001 domestic geologist employment show a drop in overall numbers and a drop in Nevada's percentage. The GE companies project employing 82 domestic geologists in 2001 and the LT companies project employing 37 for a total of 119. Eighty-four percent of the GE company's domestic geologists are projected to work in Nevada in 2001, compared to 59 percent for the LT companies and 76 percent overall.

Worldwide, including the U.S., respondents reported 318 geologists at work in the year 2000, less than half of the 782 reported in 1999. The reported worldwide employment for the year 2000 was also less than half of the 743 geologists who were projected in the previous survey to be at work in 2000. Of the 318 geologists employed in the year 2000, 232 were employed by the GE companies and 86 by the LT companies. Overall, 39 percent of the reported worldwide geologists were working in Nevada in the year 2000. This current survey projects that the number of geologists employed worldwide by the respondents will continue to drop, down to 259 in 2001. The percentage of the worldwide geologists working in Nevada in 2001 is projected to drop slightly, to 35.

## **EXPENDITURES PER GEOLOGIST**

Both expenditures and geologists employed for the year 2000 were down compared to 1999. The decline in geologists employed was, in general, sharper than the decline in expenditures which caused the expenditures per geologist to increase. In Nevada, the GE companies spent more per geologist than the LT companies did in the year 2000 with average amounts of \$726,000 and \$173,000 respectively. Overall, the average was \$615,000. The pervious survey had projected the average spending per geologist for the year 2000 would be \$499,000 for the GE companies, \$179,000 for the LT companies, and \$472,000 overall. For 2001, these averages are projected to increase to \$780,000 for the GE companies, \$254,000 for the LT companies, and \$653,000 overall.

Worldwide, the expenditures per geologist were higher in the year 2000 than they were in Nevada. Figures given by respondents show levels of spending per geologist for the GE companies, LT companies, and overall were \$1,382,000, \$299,000, and \$1,089,000 respectively. Projections for 2001 indicate a slight lowering of spending per geologist for GE companies, LT companies, and overall to be \$1,252,000, \$255,000, and \$983,000 respectively.

## **MINING CLAIMS**

The number of mining claims held in Nevada and the rest of the U. S. has dropped steadily since the enactment of the \$100 federal claim maintenance fee in 1992. As of September 1, 2000, according to the Nevada State Office of the Bureau of Land Management, there were 105,848 claims being held in Nevada. For the assessment year ending September 1, 2000, the \$100 fee had been paid on 100,903 claims, the small miner's exemption had been utilized on 3,675, and there were 1,270 claims in the second half of the patenting process. The number of Nevada claims is down about 4,000 from the approximate 110,000 held as of September 1, 1999.

Respondents to this survey reported holding 46,112 claims in Nevada and 55,230 in the U.S. as a whole, down from the 57,466 reported in Nevada and 69,354 in the U.S. as a whole last year. Projections for 2001 show this trend continuing, with the respondents planning to hold 42,360 claims in Nevada and 51,421 in the U.S. as a whole. As has been the case in previous surveys, the GE companies held considerably more claims than the LT companies did in 2000. In Nevada, the GE companies held 35,289 claims compared to 10,823 for the LT companies. In the U.S. as a whole, the GE companies held 40,846 claims compared to 14,384 for the LT companies.

Overall, the respondents reported holding 83 percent of their claims in Nevada in the year 2000, the same as in 1999. The GE companies held 86 percent of their claims in Nevada while the LT companies held 75 percent of theirs in Nevada. Projections for 2001 indicate very close to the same percentages of claims will be held in Nevada.

Graph 6 shows the breakdown of claims held by respondents. Table 4 shows the claims held by respondents reported in the previous surveys from 1994 to 2000.

## **FACTORS INFLUENCING ACTIVITY**

As in previous surveys, this one asked respondents to rank the factors influencing their level of exploration activity. The composite of all respondent's ranking of these factors is listed below in order of decreasing importance.

1. Existence of favorable geology
2. Commodity prices
3. Corporate demands
4. Actual length of permitting time
5. Uncertainty over permitting time frames
6. Uncertainty over mining law reform
7. Federal claim maintenance fees
8. Wilderness Study Areas / ACECs
9. Announcements of new discoveries

10. Land exchanges / withdrawals
11. Changes in foreign mining laws

Other factors mentioned were the difficulty raising capital and the veto provision contained in the new 43 CFR 3809 regulations.

The ranking of factors is similar to previous years, but not identical. Actual length of permitting time edged out uncertainty over permitting time frames. Wilderness Study Areas and Areas of Critical Environmental Concern (ACECs) gained in importance over announcements of new discoveries. It should be pointed out that this ranking is an average of all of the respondent's replies. Some respondents thought certain factors were very important even though that factor ranked low overall, or vice-versa. One respondent said commodity prices were so important that nothing else came close.

The GE companies in general ranked actual permitting time and uncertainty over permitting time as more important factors than the LT companies did. Graphs 7, 8, and 9 show the relative importance of the factors for all respondents, the GE companies, and the LT companies, respectively.

Due to the relative importance of permitting time, this year's survey again asked how long it took to get a notice of intent through the permitting process, and the time it took to get a plan of operations approved. The range of permitting times varied considerably from the averages. For a notice the time ranged from 2 weeks to a full year. Approval of a plan of operations ranged from 4 months to 5 years. The overall average was 2 ½ months for a notice and 13 months for a plan of operations. The GE companies were generally able to get permits faster than the LT companies. For a notice, the GE company's average time was 1 ½ months compared to the LT company's average time of 3 months. For plans of operation the GE company's average time was 8 ½ months compared to the LT company's average time of 15 months.

The permitting time increased compared to the responses in the 1999 survey. In 1999 the time required for a notice ranged from 2 weeks to 3 months, and approval of a plan of operations ranged from 2 months to 2 years. While plans of operation vary in complexity and can not individually be compared to one another, these data suggest that permitting is taking longer in general.

## **REPLACEMENT OF RESERVES**

Respondents were asked whether or not they were able to replace their reserves lost to production with newly found reserves. In this question, a "yes" answer indicates total replacement of reserves, and a "no" answer indicates that reserves were not totally replaced. The response from the smallest company carries the same weight as the response from the biggest company, thus the results signify the number of companies replacing their reserves, and NOT the amount of reserves being replaced. Table 5 shows the percentages of respondents who replaced their reserves. Companies with no production were not figured in to the results.

On a worldwide basis, 10 of 16 (62 percent) of the respondents replaced their reserves. Seventeen companies had no worldwide production. A higher percentage of GE companies

replaced their reserves than the LT companies. Five of seven (71 percent) of the GE companies replaced their reserves compared to 5 of 9 (56 percent) of the LT companies.

In the U.S., including Nevada, 6 of 17 (35 percent) of the respondents replaced their reserves. Sixteen of them had no domestic production. Thirty-seven percent of the GE companies (3 of 8) replaced their domestic reserves compared with 33 percent for the LT companies (3 of 9).

In Nevada, reserve replacement is a real challenge due to the relatively high rate of production. Nine of 19 respondents (47 percent) replaced their Nevada reserves. Forty-four percent of the GE companies (4 of 9) replaced their Nevada reserves while 50 percent of the LT companies (5 of 10) were able to replace their reserves.

The method of reserve replacement included expansions around existing operations and grass-roots efforts. Reserves may also be purchased or acquired through mergers, but those methods were not considered in this survey. Overall, 60 percent of the respondents focused primarily on grass-roots efforts and 40 percent focused primarily on expansions. The GE companies relied on expansions (65 percent) over grass-roots efforts (35 percent), while the LT companies relied on grass-roots efforts (74 percent) over expansions (26 percent). Overall, 54 percent of the Nevada exploration dollars spent were devoted to expansions (\$41.6 million), while 46 percent were devoted to grass-roots efforts (\$35.3 million). The GE companies spent \$39.7 million or 54.7 percent of their Nevada budget on expansions compared with \$32.9 million or 45.3 percent of their budget on grass-roots efforts. The LT companies spent \$1.8 million or 42.8 percent of their budget on expansions and \$2.3 million or 57.2 percent of their budget on grass-roots efforts. This is the first year that a dollar breakdown of expansion vs. grass-roots efforts has been requested, so no statement can be made about historical trends.

## **CONCERN OVER THE 43 CFR 3809 REGULATIONS**

In this survey, respondents were asked to rank the impact the new 43 CFR 3809 regulations have on their level of exploration activity from 1 to 5 with 1 being a little and 5 being a lot. The overall average was a 2.8, indicating a moderate impact. The GE company's impacts were a little higher with an average of 3.1 than the LT company's average of 2.7. These average figures, however, are a little misleading. The most common rankings were ones and fives, with few twos, threes, or fours. Even though the average indicates a moderate impact, the individual rankings show that about half of the respondents were impacted a lot and about half were impacted a little. Hardly any respondents were actually impacted moderately.

## **ATTITUDES**

Respondents were asked whether they were optimistic, neutral, or pessimistic about domestic exploration. Overall, more respondents reported being pessimistic about domestic exploration than either optimistic or neutral. Only 26 percent of the respondents were optimistic. Thirty-two percent reported being neutral and 42 percent were pessimistic. The GE companies were a little less optimistic than the LT companies. Only 20 percent of the GE companies responded that they were optimistic compared to 26 percent for the LT companies. Forty percent of the GE companies were neutral and 40 percent pessimistic, while 32 percent of the LT companies were neutral and 42 percent were pessimistic.

Graph 10 shows the calculated “optimism indices” for all respondents, GE respondents, and LT respondents for the past 7 years. This is the first year that the optimism index for both GE companies and LT companies has been on the pessimistic side of neutral. The optimism index is a number calculated by scoring 100 points for each optimist, negative 100 points for each pessimist, and 0 points for each of the neutral respondents. The sum of the scores divided by the total number of respondents is the optimism index. The higher the optimism index, the greater the optimism, and the lower the optimism index, the greater the pessimism. The optimism index for the year 2000 was down compared to 1999 for all categories of respondents.

## **CONCLUSIONS**

The respondents of the 2000 survey reported lower spending, employment, and claims held than in 1999. Nevada exploration expenditures in 2000 were reported to be down 11 percent from 1999, and projections for 2001 show an additional drop of 23 percent. Respondents reported an even sharper decline in their worldwide spending, with a drop of 16 percent in 2000 from 1999 levels and an additional drop of 27 percent projected in 2001 from 2000 levels. The respondents have reported a drop in their spending worldwide and in Nevada by approximately the same percentages. This may indicate that continued low commodity prices, which have worldwide impact, are as significant as domestic issues such as uncertainty over the mining regulations or mining law reform. This is also reflected in the respondents’ ranking of factors influencing their activities. Nevada still needs to maintain a reasonable regulatory and political climate recognizing the importance of mineral exploration.

**TABLE 1**

<b>Respondents</b>	<b>Number and Types of Respondents</b>						
	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Total	46	47	49	51	47	33	33
Companies with budget > = \$1 million	27	24	36	26	15	13	10
Companies with budget < \$1 million	19	23	13	25	32	20	23

**TABLE 2**  
**Exploration Expenditures in Millions of Dollars**

<b>All Respondents</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Nevada	\$154.0	\$140.8	\$120.9	\$138.8	\$90.8	\$86.7	\$76.9
Rest of U.S.	\$52.0	\$56.2	\$37.4	\$87.6	\$28.5	\$20.6	\$23.5
Outside U.S.	\$252.0	\$596.5	\$755.8	\$855.6	\$270.3	\$307.3	\$246.0
Total World	\$458.0	\$793.5	\$914.1	\$1,082.0	\$389.6	\$414.6	\$346.4

**Companies with  
Nevada budget >  
= \$1 million**

	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Nevada	\$120.5	\$137.9	\$120.2	\$134.6	\$86.6	\$83.1	\$72.6
Rest of U.S.	\$44.7	\$51.5	\$35.7	\$78.9	\$25.1	\$11.3	\$22.0
Outside U.S.	\$202.6	\$589.7	\$753.5	\$812.8	\$208.4	\$236.9	\$226.0
Total World	\$367.8	\$779.1	\$909.4	\$1,026.3	\$320.3	\$330.4	\$320.6

**Companies with  
Nevada Budget <  
\$1 million**

	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Nevada	\$33.5	\$2.9	\$0.7	\$4.2	\$4.0	\$3.5	\$4.3
Rest of U.S.	\$7.3	\$4.7	\$1.7	\$8.7	\$3.4	\$9.3	\$1.5
Outside U.S.	\$49.4	\$6.8	\$2.3	\$42.8	\$61.9	\$71.3	\$20.0
Total World	\$90.2	\$14.4	\$4.7	\$55.7	\$69.3	\$84.1	\$25.8

**TABLE 3****Geologists Employed by Respondents**

<b>All Respondents</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Nevada	322	269	273	309	214	225	125
Rest of U.S.	184	149	NA	NA	80	48	33
Outside U.S.	557	1570	NA	NA	529	449	160
Total World	1063	1988	NA	NA	823	722	318
<b>Respondents with Nevada Budget &gt; = \$1 million</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Nevada	248	239	249	271	187	205	100
Rest of U.S.	135	139	NA	NA	40	38	14
Outside U.S.	454	1182	NA	NA	347	359	118
Total World	837	1560	NA	NA	574	602	232
<b>Respondents with Nevada Budget &lt; \$1 million</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Nevada	74	30	24	38	27	20	25
Rest of U.S.	49	10	NA	NA	40	10	19
Outside U.S.	103	388	NA	NA	182	90	42
Total World	226	428	NA	NA	249	120	86

**TABLE 4****Mining Claims Held by Respondents**

<b>All Respondents</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Nevada	NA	59,504	65,929	89,833	53,292	57,466	46,112
Rest of U.S.	NA	27,114	19,022	23,780	15,743	11,888	9,118
Total Claims	84,226	86,618	84,951	113,613	69,035	69,354	55,230

<b>Respondents with Nevada Budget &gt; = \$1 million</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Nevada	NA	53,069	63,349	77,683	43,584	51,729	35,289
Rest of U.S.	NA	22,397	17,352	13,839	5,553	9,863	5,557
Total Claims	65,129	75,466	80,701	91,522	49,137	61,592	40,846

<b>Respondents with Nevada Budget &lt; \$1 million</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Nevada	NA	6,435	2,580	12,150	9,708	5,737	10,823
Rest of U.S.	NA	4,717	1,670	9,941	10,190	2,025	3,561
Total Claims	19,097	11,152	4,250	22,091	19,898	7,762	14,384

**TABLE 5****Respondents' Success at Reserve Replacement**

(Numbers refer to the percentage of respondents who answered "yes")

**For all respondents with production:**

<b>Are you replacing your reserves</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Worldwide?	68	81	72	66	75	74	62
Domestically?	56	60	69	60	54	62	35
In Nevada?	42	48	60	28	43	54	47

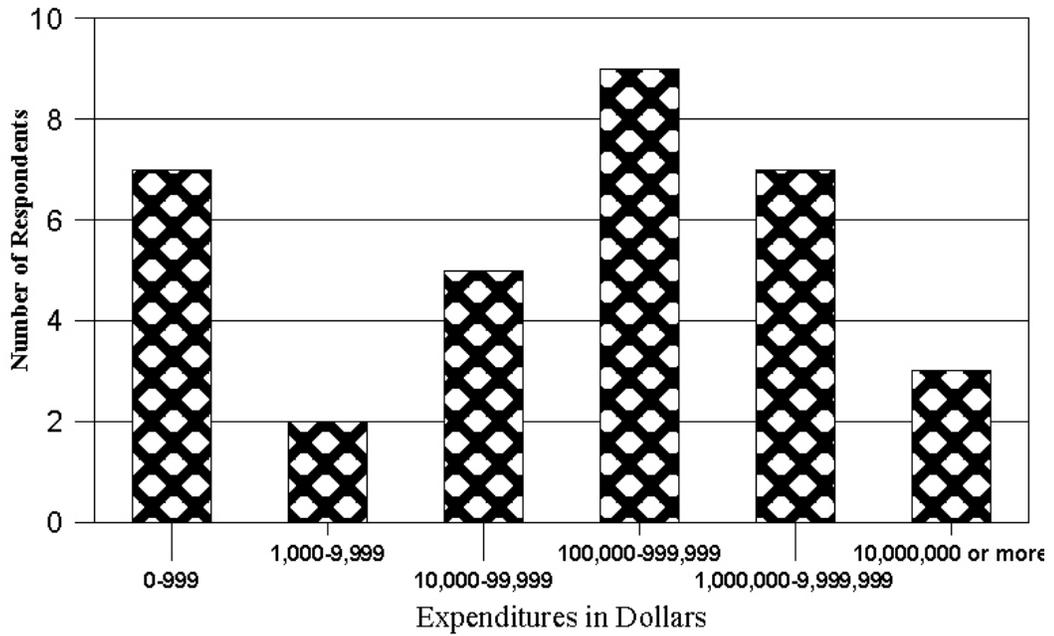
**For producing respondents with Nevada exploration budget > = \$1 million**

<b>Are you replacing your reserves</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Worldwide?	76	90	76	65	91	80	71
Domestically?	56	71	76	67	56	50	37
In Nevada?	50	76	70	42	50	44	44

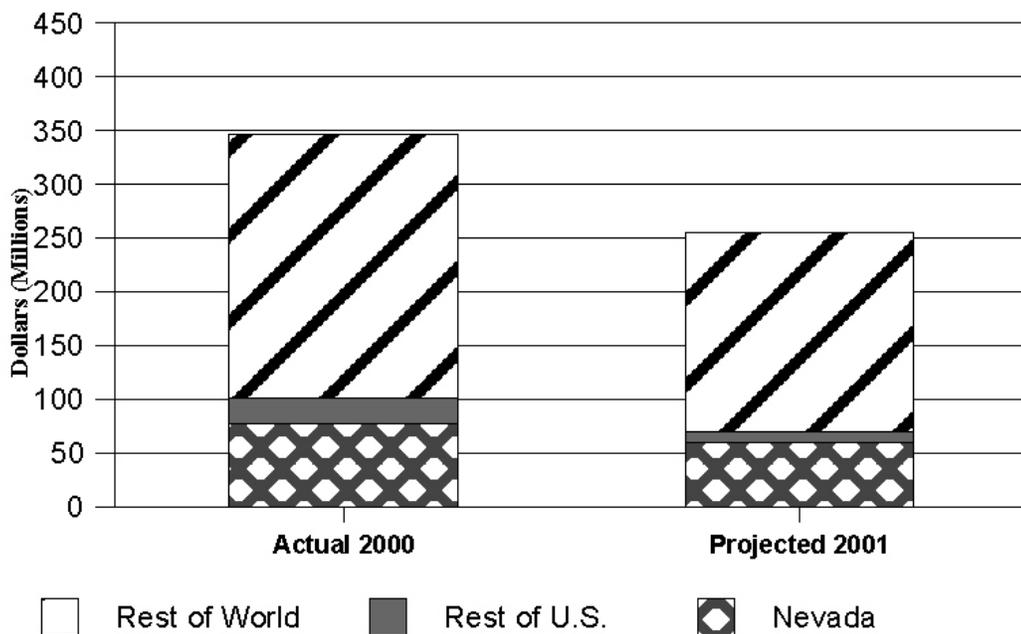
**For producing respondents with Nevada budget < \$1 million**

<b>Are you replacing your reserves</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Worldwide?	54	67	60	67	65	67	56
Domestically?	57	43	45	55	53	80	33
In Nevada?	31	8	40	16	38	75	50

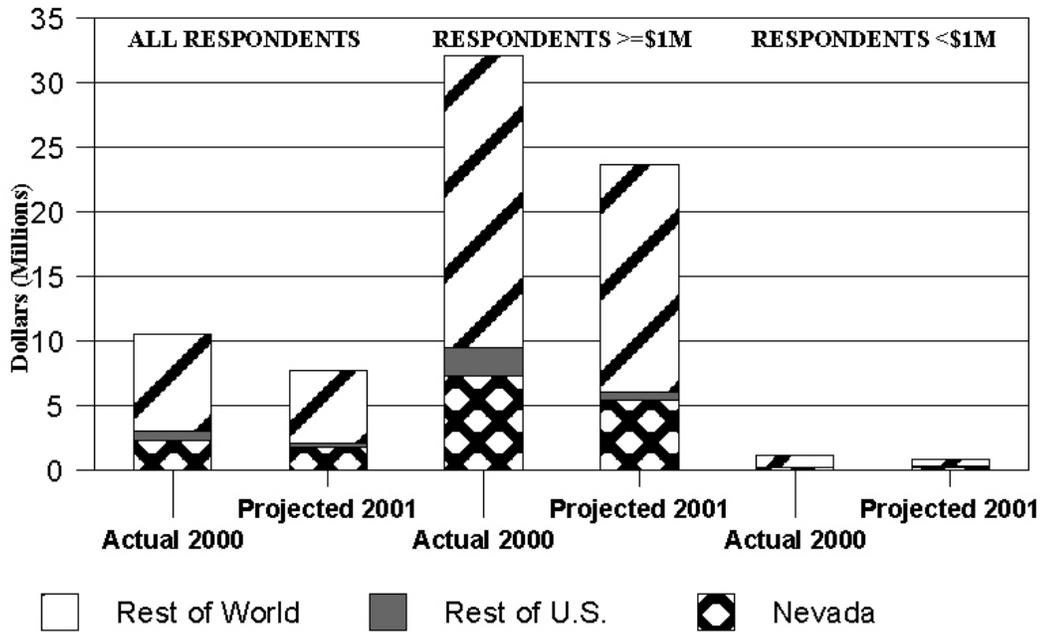
**Graph 1**  
**RESPONDENTS' NEVADA EXPLORATION EXPENDITURES 2000**



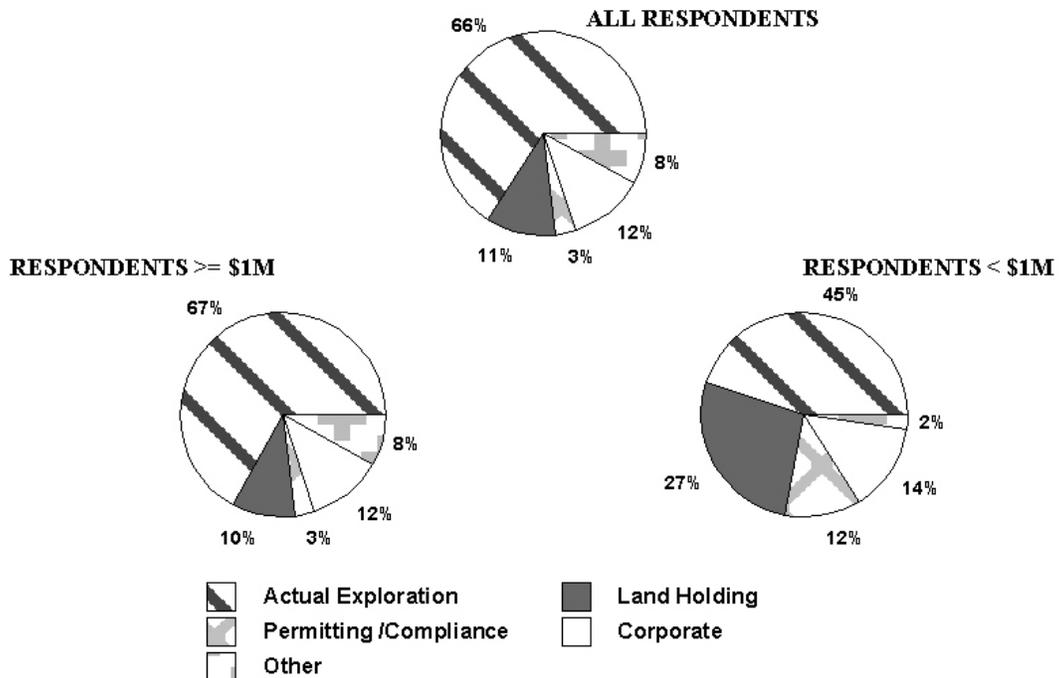
**Graph 2**  
**TOTAL EXPLORATION SPENDING 2000/2001**



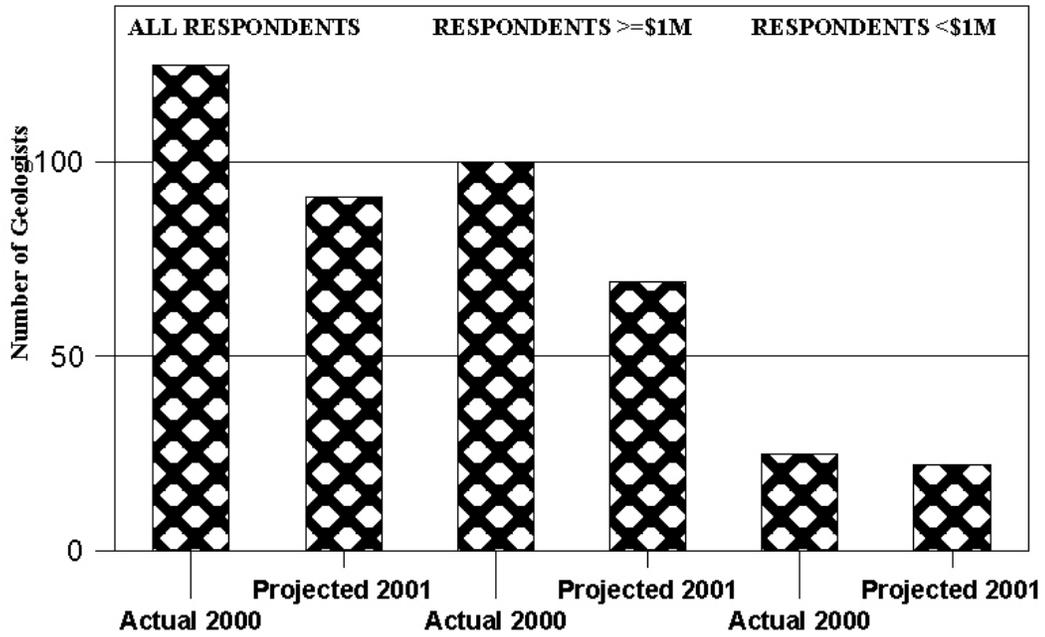
**Graph 3**  
**AVERAGE SPENDING PER RESPONDENT 2000/2001**



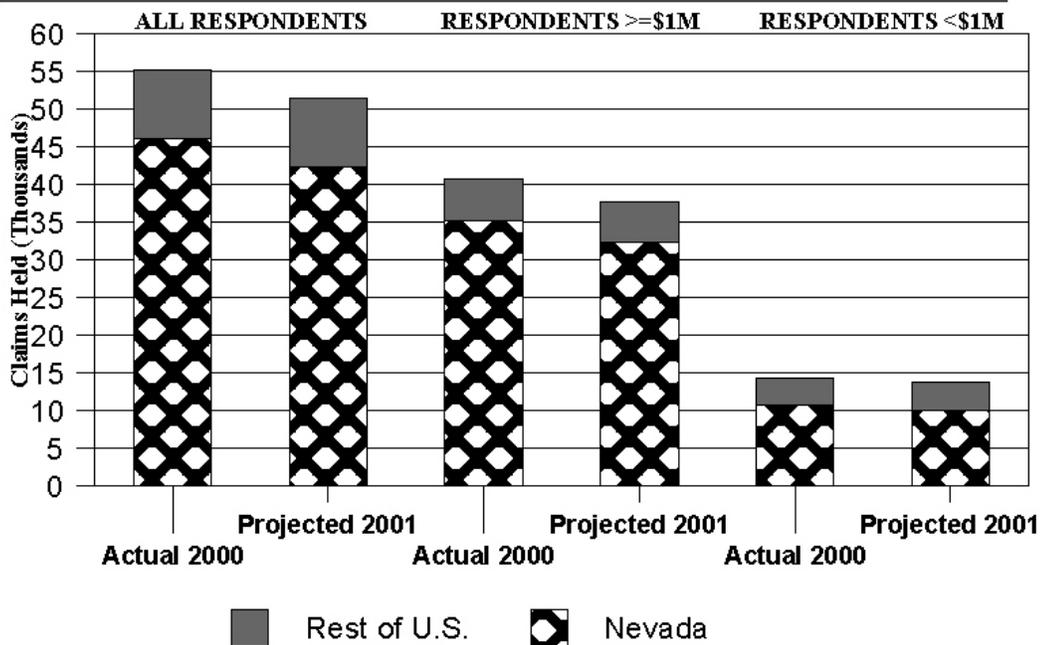
**Graph 4**  
**BREAKDOWN OF NEVADA EXPENSES 2000**



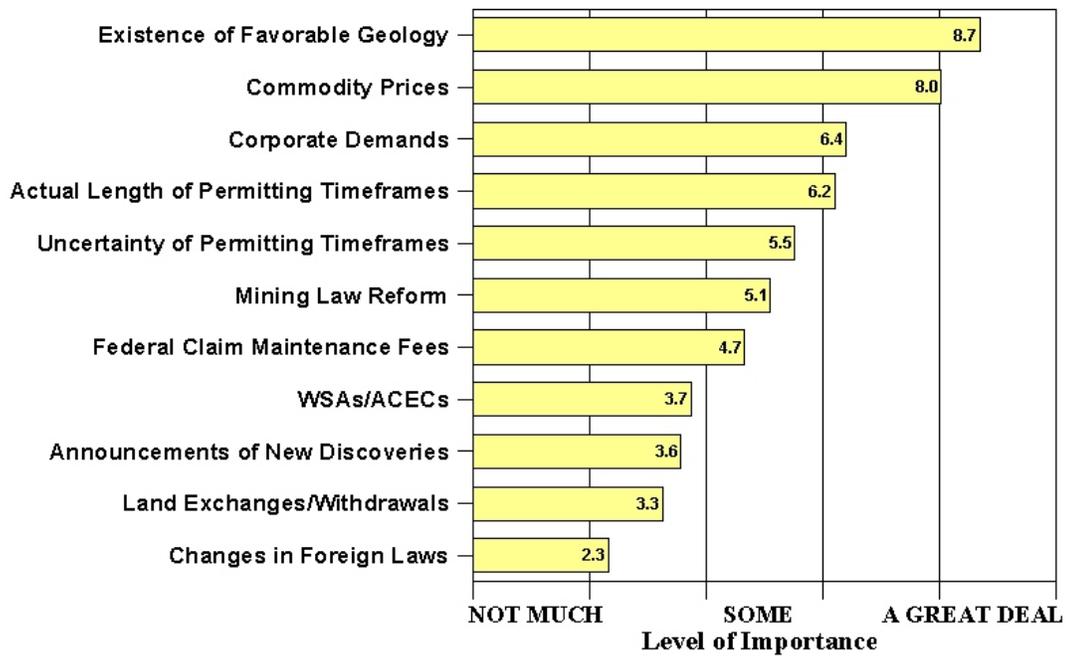
**Graph 5**  
**EXPLORATION GEOLOGISTS EMPLOYED IN NEVADA 2000/2001**



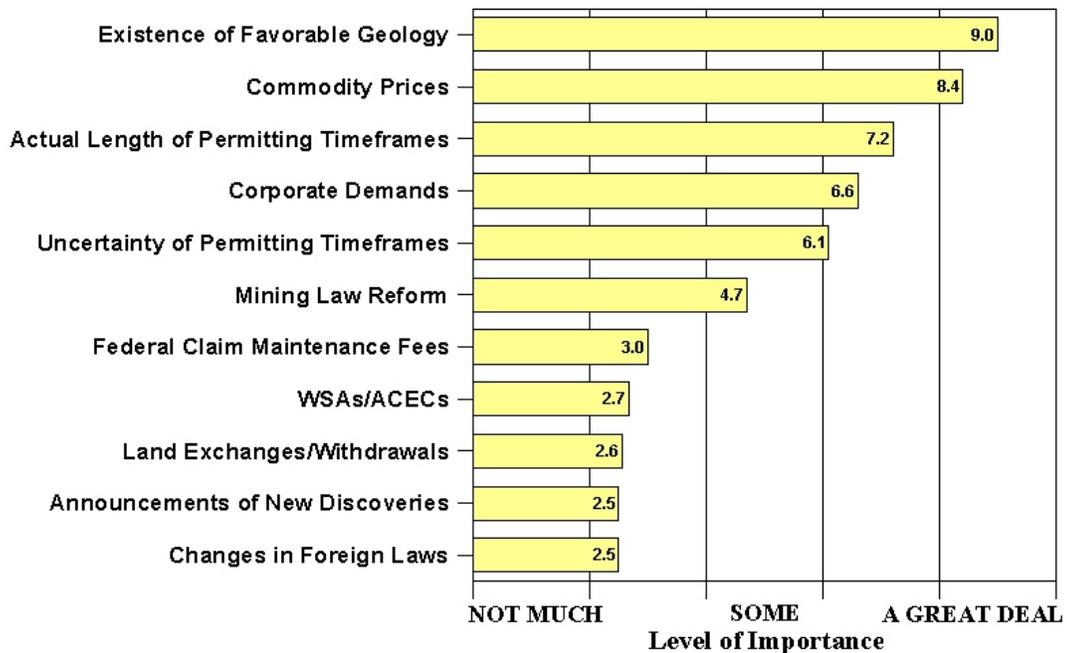
**Graph 6**  
**NUMBER OF CLAIMS HELD 2000/2001**



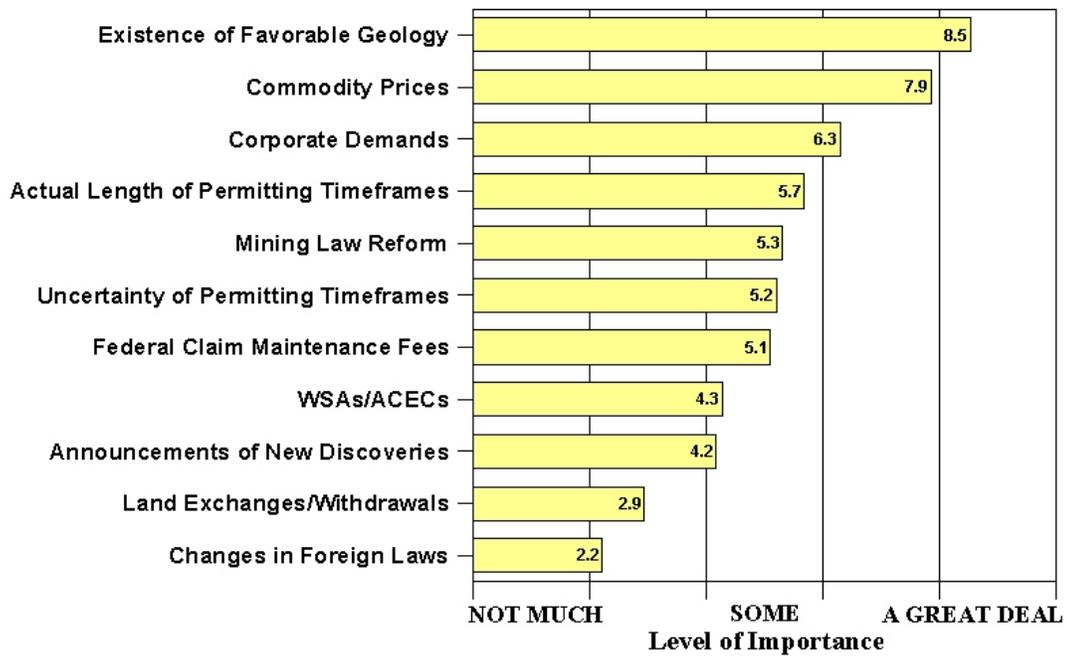
**Graph 7**  
**FACTORS INFLUENCING ACTIVITY 2000**  
**ALL RESPONDENTS**



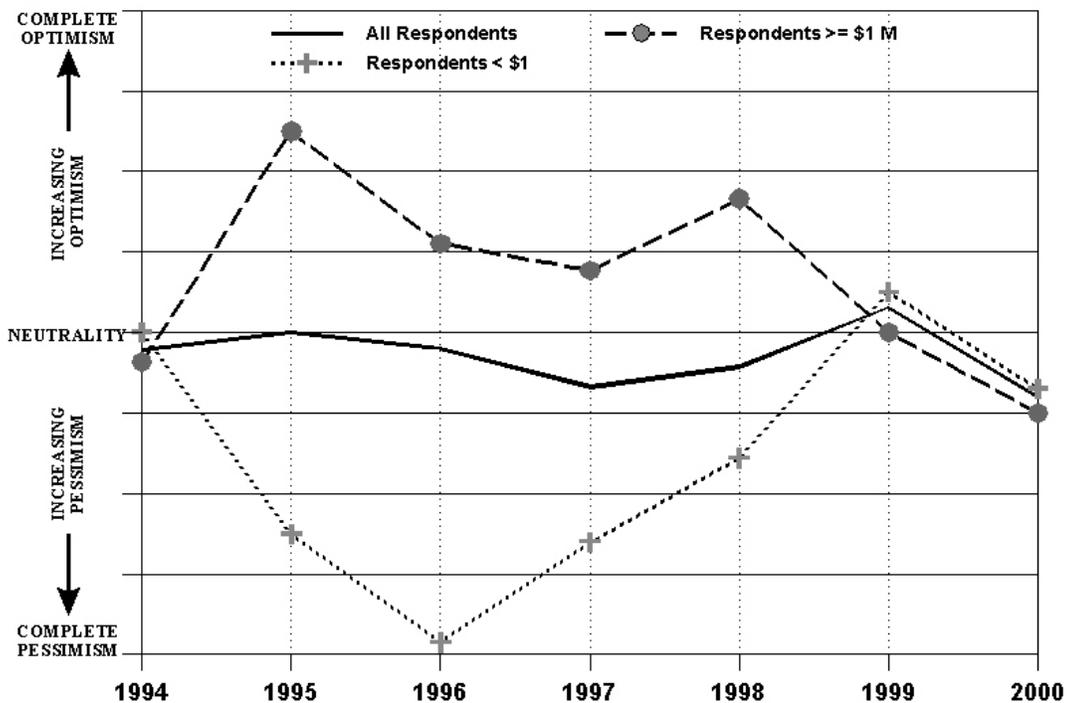
**Graph 8**  
**FACTORS INFLUENCING ACTIVITY 2000**  
**RESPONDENTS >= \$1 MILLION**



**Graph 9**  
**FACTORS INFLUENCING ACTIVITY 2000**  
**RESPONDENTS < \$1 MILLION**



**Graph 10**  
**OPTIMISM INDEX 1994-2000**



## Nevada Division of Minerals Seventh Annual Exploration Survey

Company Name: \_\_\_\_\_

Contact Person/Phone: \_\_\_\_\_

**A. Level of Exploration Activity**

		2000 Actual	2001 Planned
1.	Total Worldwide Expenditures	_____	_____
2.	Total U.S. Expenditures	_____	_____
3.	Nevada Expenditures	_____	_____
4.	Number of Geologists Worldwide	_____	_____
5.	Number of Geologists in U.S.	_____	_____
6.	Number of Geologists in Nevada	_____	_____
7.	Number of Claims held in U.S.	_____	_____
8.	Number of Claims held in Nevada	_____	_____

**B. Please estimate your Nevada exploration expenditures into components by percentage. Include salaries and benefits within their appropriate component. If you do not know exact percentages, please provide your best approximation.**

1.	Land holding costs (claim staking/holding, lease payments, etc.)	_____ %
2.	Permitting and compliance costs (bonding, reclamation, etc.)	_____ %
3.	Corporate costs (overhead, taxes, etc.)	_____ %
4.	Actual exploration (mapping, drilling, interpreting, etc.)	_____ %
5.	Other (please specify _____ )	_____ %
<b>Total .....</b>		<b>100 %</b>

**C. Please estimate the percentage of your Nevada exploration expenditures dedicated to expansions around existing operations and grass-roots efforts.**

Expansions \_\_\_\_\_%      Grass-roots efforts \_\_\_\_\_%

(Total should equal 100 %)

**D. Please rank the following factors in the order they influence your exploration activity. Please rank the most important factor with a "1" and the least important factor with a "12".**

- \_\_\_ Actual length of permitting time
- \_\_\_ Announcements of new discoveries
- \_\_\_ Changes in foreign mining laws
- \_\_\_ Commodity prices
- \_\_\_ Corporate demands
- \_\_\_ Existence of favorable geology
- \_\_\_ Federal claim maintenance fees
- \_\_\_ Land exchanges / withdrawals
- \_\_\_ Uncertainty over mining law reform
- \_\_\_ Uncertainty over permitting time frames
- \_\_\_ Wilderness Study Areas / ACECs
- \_\_\_ Other (please specify) \_\_\_\_\_

**E. General questions. (Please circle your response)**

- |    |   |                            |         |             |   |   |
|----|---|----------------------------|---------|-------------|---|---|
| 1. | Are you replacing your worldwide production with new worldwide reserves?  | Yes                        | No      | N/A         |   |   |
| 2. | Are you replacing your U.S. production with new U.S. reserves?  | Yes                        | No      | N/A         |   |   |
| 3. | Are you replacing your Nevada production with new Nevada reserves?  | Yes                        | No      | N/A         |   |   |
| 4. | How do you feel about domestic exploration?   | Optimistic                 | Neutral | Pessimistic |   |   |
| 5. | With "1" being a little and "5" being a lot, how much impact have the new 43 CFR 3809 regulations had on your Nevada exploration? | 1                          | 2       | 3           | 4 | 5 |
| 6. | Estimated time required to get approval for:  |                            |         |             |   |   |
|    | A Notice of Intent _____  | A Plan of Operations _____ |         |             |   |   |

**Please return this survey to the Nevada Division of Minerals, 400 W. King Street, Ste. 106, Carson City, NV 89703, or fax it to (775) 687-3957.**

**Thank you. All individual responses will be held confidential.**