Nwt Exploration Survey - A Survey Of Exploration Companies Active In The Nwt
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NWT EXPLORATION SURVEY

A Survey of Exploration Companies

Active in the NWT

1993 & 1994

A Survey Conducted April 1994

for the

Department of Energy, Mines& Petroleum Resources

Governrnent of the N. W.T.

NWT EXPLORATION SURVEY - 1993/94

In early 1994, the N WT Chamber of Mines conducted a survey of exploration companies believed to be active in the Northwest Territories for the NWT Government's Department of Energy, Mines and Petroleum Resources. Companies known to have explored, and those who might explore, were asked questions relating to their past year's work, as well as on work they contemplated in the NWT in the upcoming year. The survey was similar to that conducted annually over the past six years, allowing a statistical comparison to be made with previous exploration expenditures.

SURVEY METHODOLOGY

Every effort was made to contact companies known to be involved in exploration in the NWT. A list was constructed from information gathered from various sources, including the Chamber of Mines' membership, the mining recorder's office, DIAND-Geology Division, and GNWT-Energy, Mines& Petroleum Resources. As a result, a list of approximately 190 companies was compiled (Appendix B).

Companies were mailed a copy of the survey form (Appendix C) in mid to late March. The intent of this timing was to have the survey reach companies after their 1994 exploration budgets had been established. Sufficient time was given for completion of the survey, after which phone calls were made to try and encourage companies who had not yet responded to return their surveys.

SURVEY RESPONSE

Of the 190 companies solicited, 54 officially responded (information for two companies was taken from news releases and added to the survey). The apparent low response is due to several reasons. Many companies, especially those in diamond exploration, are "arms-length partners" and are not directly involved in exploration, i.e. they do not have crews working in the field. Since they are not the active explorer, they do not feel compelled to complete the survey. Some companies do not see the value of completing surveys; others are frustrated at having to complete another of several surveys being conducted; still others, despite our assurances, were concerned about the confidentiality of their reporting. With some companies there is an added complication of several divisions, often located in different cities, participating in an exploration play, No single division could provide a total figure for the project.

SURVEY VALIDITY

Naturally, increasing the response rate should increase the validity of the survey.

If allowances were made in future surveys to survey only those companies actually conducting the exploration work, our apparently low response rate of 27% could increase substantially. If a much stronger case was made on the value of these surveys to industry, our response could be given an additional boost

Given the response rate, the results presented by our survey are conservative estimates of exploration expenditures.

SURVEY DEFINITIONS

In the survey, exploration is categorized as ***basic*** or ***advanced***. In addition, exploration expenditures are subdivided into those made by ***major*** and ***junior*** exploration companies.

> ***Basic exploration***, commonly also called grassroots exploration, involves all reconnaissance type exploration up to, but not including, underground exploration and pre-feasibility studies.
>
> ***Advanced exploration,*** on the other hand, involves more major work including delineation drilling, underground exploration and extensive pre-feasibility/feasibility studies.
>
> ***Junior companies are*** those companies that do not have producing mines and rely on investors to provide exploration dollars.
>
> ***Major companies are*** producers that can, in addition to funds provided by investors, use profits from mining or other industrial operations to pay for exploration.

SURVEY RESULTS

***Note:** As stated at the outset, because all companies surveyed did not report, all results expressed are relatively conservative estimates of exploration expenditures.*

AN OVERVIEW OF EXPLORATION IN 1993

A quick review of the events leading up to the 1993/94 exploration seasons is helpful.

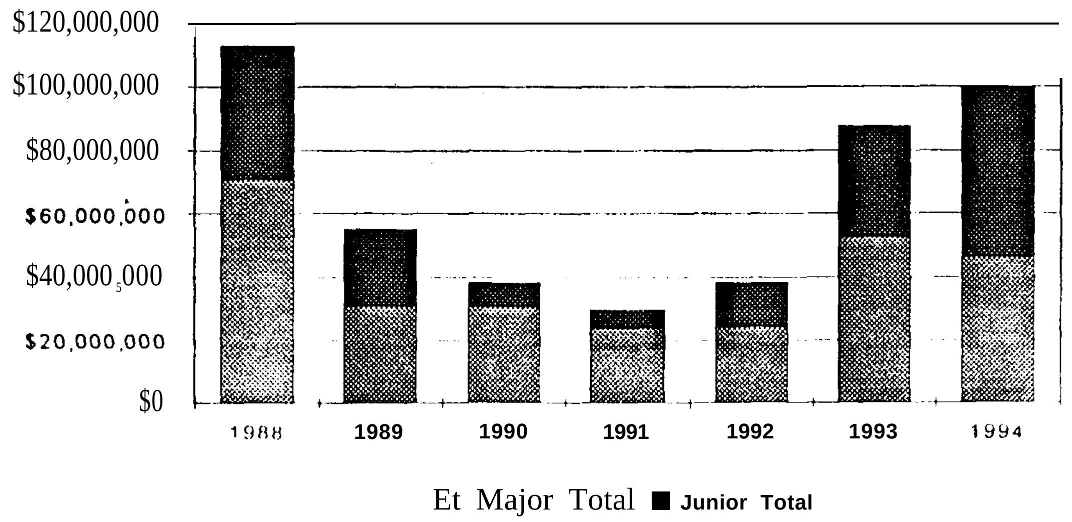
The announcement in late 1991 that diamond-bearing kimberlites had been discovered in the Lac de Gras area, kicked off a staking rush of major proportions. Since then, over 50 million acres of land have been staked, mostly for diamonds. This rush has continued in spurts since then, with the latest activity occurring in early 1994 east and south of Yellowknife.

With the diamond staking rush largely completed in 1993, most companies are now actively exploring their properties. Since this is costlier than staking, expenditures have increased. Thus the trend over the past three years is one of increasing exploration expenditures.

In addition to diamonds, Metall Mining has been actively exploring the Izok Lake zinc-copper-lead deposit 80 kilometres west of the Lupin gold mine. Given assistance with expensive transportation infrastructure required, they plan to process ore from an open pit, truck concentrates by road to the Arctic Coast, and ship to European and/or Pacific Rim markets. Their confidence in establishing new deep-water shipping access to the Coronation Gulf has provided industry with a renewed optimism over base metal exploration in this remote area of the country. As a result, several companies once again are exploring for base metals in the Kitikmeot region.

Along with ongoing gold exploration, exploration for base metals and diamonds has greatly enhanced exploration expenditures once again in the NWT in 1994.

TOTAL NWT EXPLORATION, 1988-94
Major vs Junior Companies



TOTAL EXPLORATION

Total exploration expenditures increased 130% from $38.14 million in 1992 to $87.8 **million** in 1993. In addition, expenditures are expected to increase a further 14°/0 from 1993 levels to $100.2 **million** in 1994

MAJORS VS JUNIORS

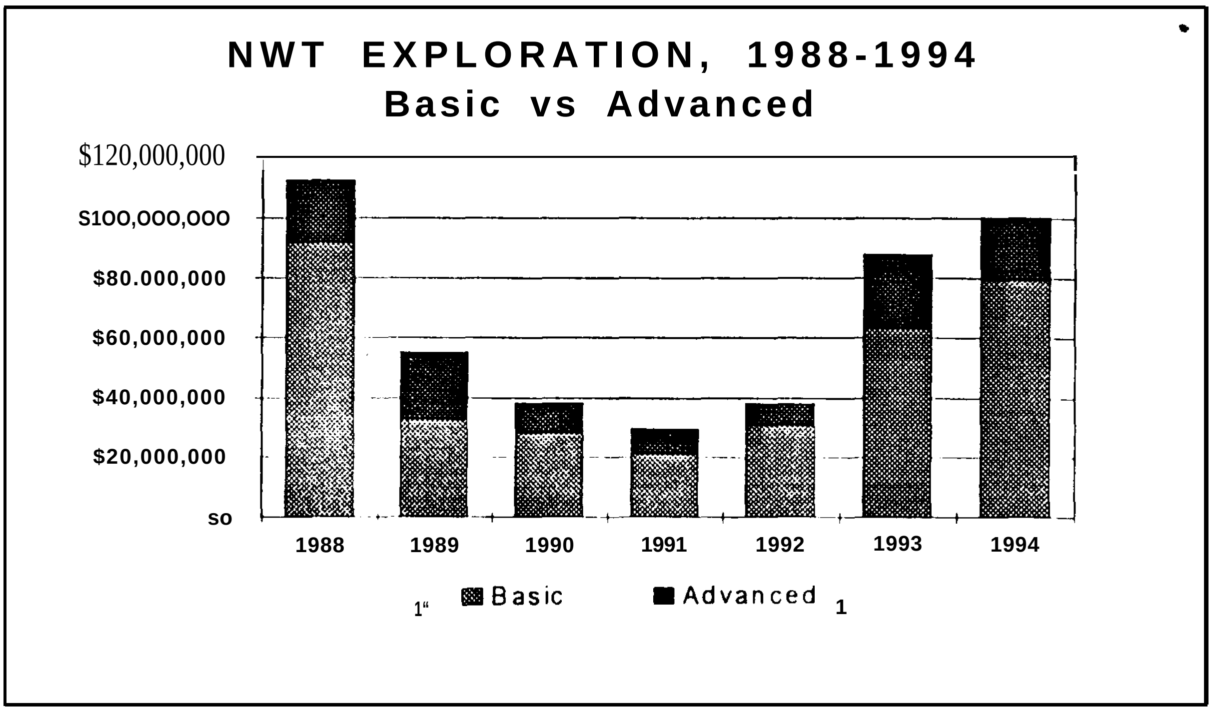
Of the over 190 companies surveyed, approximately 10'% are majors, while 90% are juniors. Of the 54 companies responding to the survey, 37 companies, or 69%, are juniors and 31'?40 are majors.

Major companies spent $52.77 **million** in 1993, up 117% from $24.36 million in 1992. Major companies surveyed indicated that in 1994 they expect to spend slightly less than their 1993 expenditure, at $46.28 **million.** In terms of relative expenditures, majors' share increased slightly from 15°/0 of the total exploration expenditures in 1992 to 28°/0 in 1993 and is projected to drop to 16% of the total in 1994. This latter drop in 1994 is a function of which companies reported.

Junior companies' exploration expenditures increased again in 1993, from $13.78 million in 1992 to $35.08 **million** in 1993, a dramatic increase of 154%. They are projected to increase a further 54°A to $53.9 **million** in 1994.

BASIC Vs ADVANCED EXPLORATION

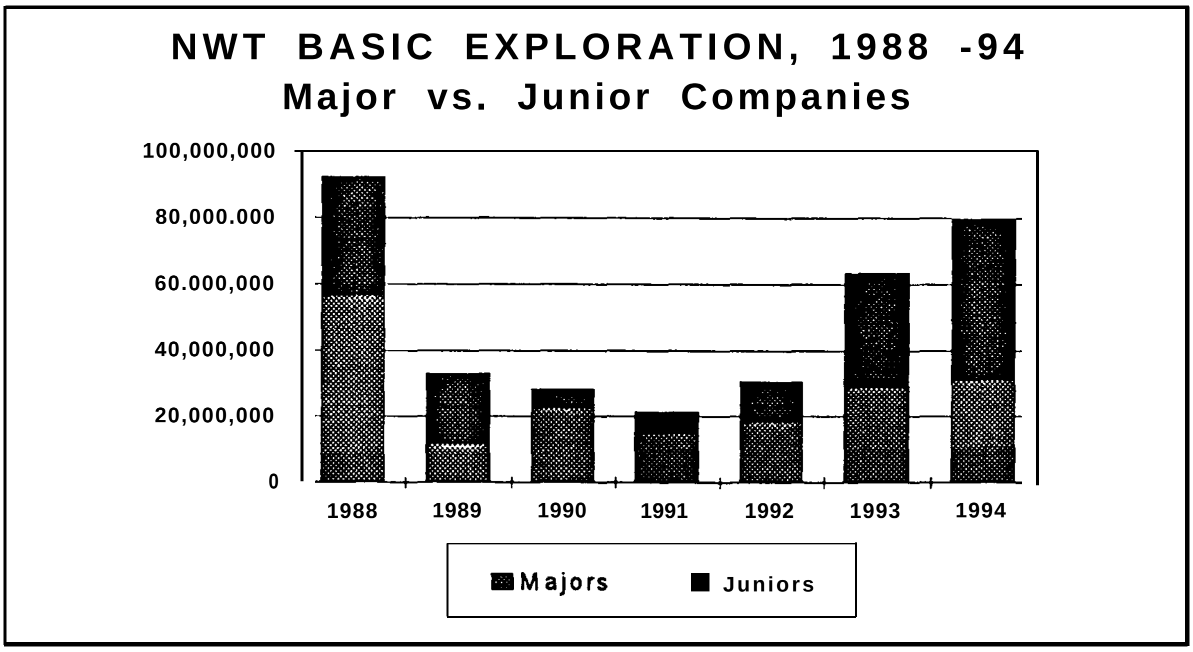
Basic exploration continues its four year increase. Advanced exploration also saw an increase in 1993, but is projected to decrease slightly in 1994. However, since some companies conducting advanced exploration in 1994 did not respond to the survey, this apparent decrease may simply reflect the reporting.



BASIC EXPLORATION "

Basic exploration expenditures in 1993 totaled $63.3 **million,** a **107%** increase from **$30.54** million in **1992.** Basic exploration is projected to increase by another 25°/0 in 1994 to $79.2 **million.**

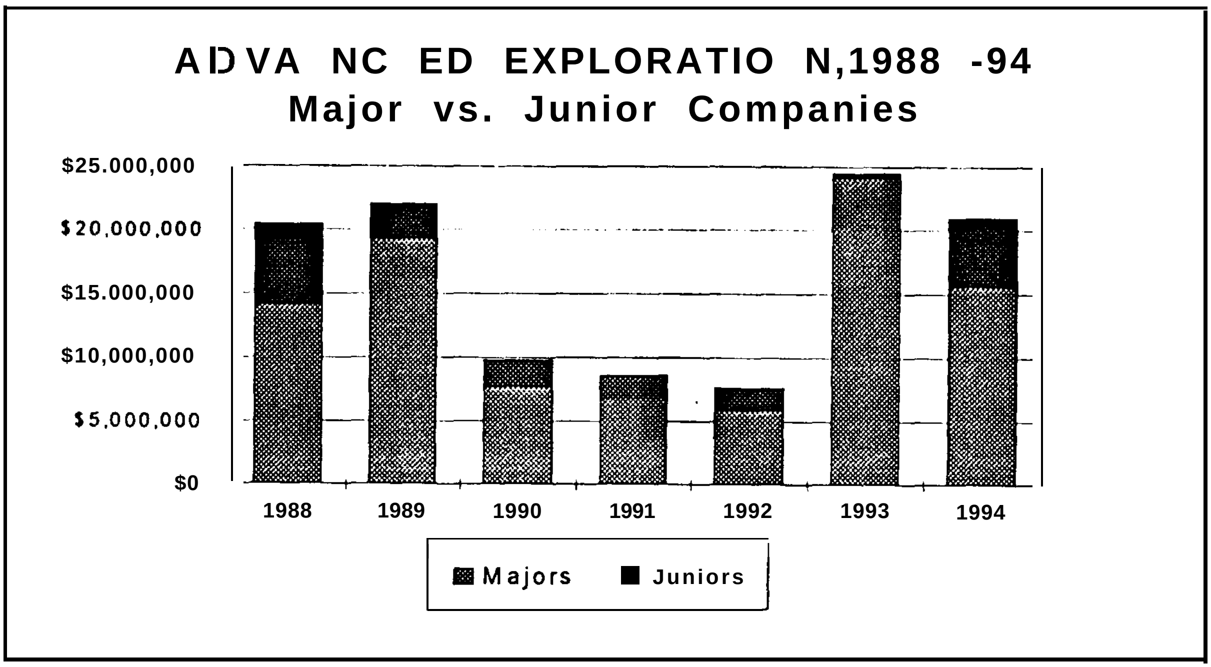
In 1993, junior companies spent **$34.0 million (54%** of the total basic) on basic exploration while major companies spent $29.3 **million (46°/0** of the total basic). In 1994, junior companies are expecting to spend $47.9 **million** on basic exploration, representing an increase to 60°A of total basic exploration expenditures. Major companies, on the other hand, project they will spend **$31.4 million** (40% of the total basic) on basic exploration in 1994.



ADVANCED EXPLORATION

Advanced exploration expenditures in 1993 totaled $24.5 **million** an increase of 223% from $7.6 million in 1992. Advanced exploration is projected to slightly decrease by 15% in 1994 to $20.9 **million.**

In 1993, junior companies spent $0.26 **million (1%** of the total advanced) on advanced exploration while major companies spent $24.2 **million** (990/0). In 1994, juniors project to spend $5.2 **million on** advanced exploration (25°/0 of the advanced total). Major companies project their 1994 advanced exploration spending at $15.7 **million, 75%** of the total advanced exploration expenditure.



FLOW-THROUGH FINANCING

Flow-through shares were a major source of exploration finding for junior companies in the period 1983-1988. With the Federal Government's removal of the attractive flow-through taxation incentives in 1988, companies largely abandoned use of flow-through share finding.

With the resurgence in exploration, particularly diamond exploration by junior companies, we are seeing an increase in the use of flow-through finding. Thirteen of the fifty-two companies that responded stated that they used flow-through financing to pay from 60% to 100% of their total exploration expenditures. In actual dollar figures, in 1993, $7.7 **million** or 11 % of the total exploration dollars were flow-through financed, an increase from 5.5% in 1992.

In 1994, eleven companies indicated they would use flow-through financing to fund from 40 to 100 per cent of their total exploration expenditures, for a total of **$8.5 million** or 8.4°A of total projected 1994 expenditures.

DISTRICTS

Districts used in this year's survey differ from those used previously,

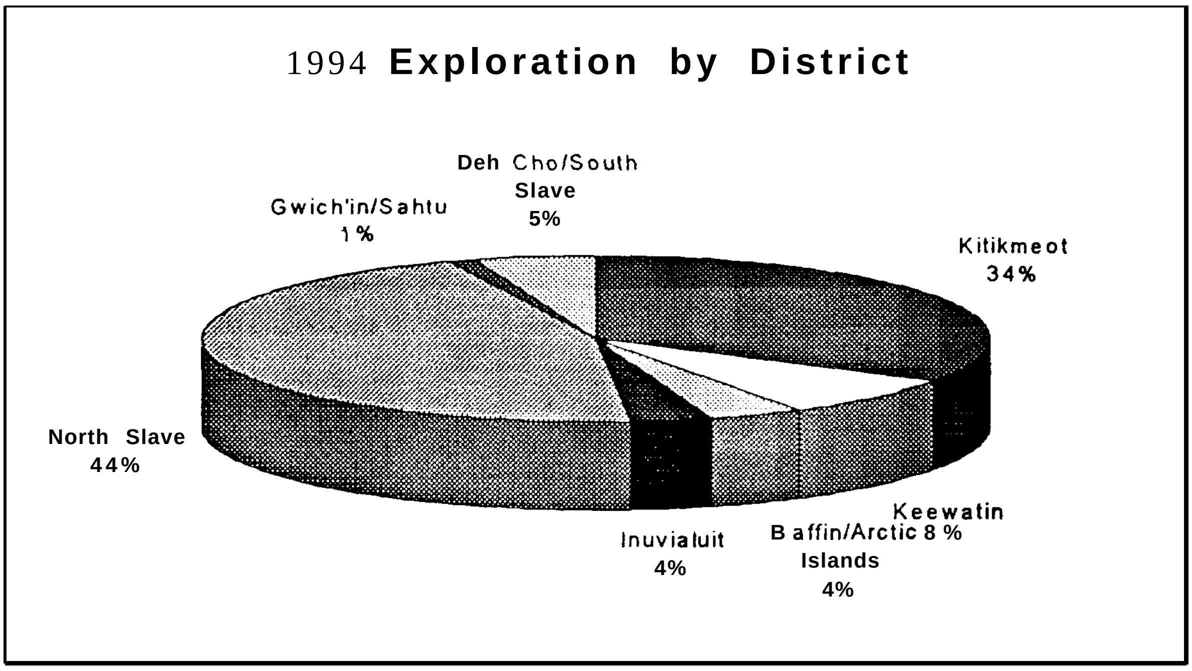
Exploration districts have been divided into seven different regions, There are three districts in Nunavut (the proposed new eastern Territory): Kitikmeot, Keewatin, and Baffin/Arctic Islands, In the western territory, there are four districts: the Inuvialuit Settlement Region, North Slave, Gwich'in/Sahtu, and Deh Cho/South Slave.

Clearly, most of the exploration in 1993 and 1994 occurred in the North Slave and Kitikmeot districts, which cover the mineral-rich Slave Geological Province, where the bulk of the diamond play and much of the gold and base metal exploration has occurred.

In 1993, at $445 million, exploration in the North Slave saw 51% of-the total exploration; in 1994 expenditures will rise slightly to $45.2 million but reduce to 45% of total

The Kitikmeot district witnessed $26.8 million in 1993, 31% of the total exploration activity. In 1994 it is expected that Kitikmeot expenditures will be up to $33.6 million, 34% of the total expenditure.

The district of Keewatin witnessed $7.0 million, 8% of the total in 1993 and in 1994 is expected to increase to $79 million, again 8°/0 of the total exploration expenditures.



Deh Cho/South Slave saw expenditures of $4.38 million or 5% in 1993 and in 1994 expenditures increasing to $5.04 million, again So/O of the total.

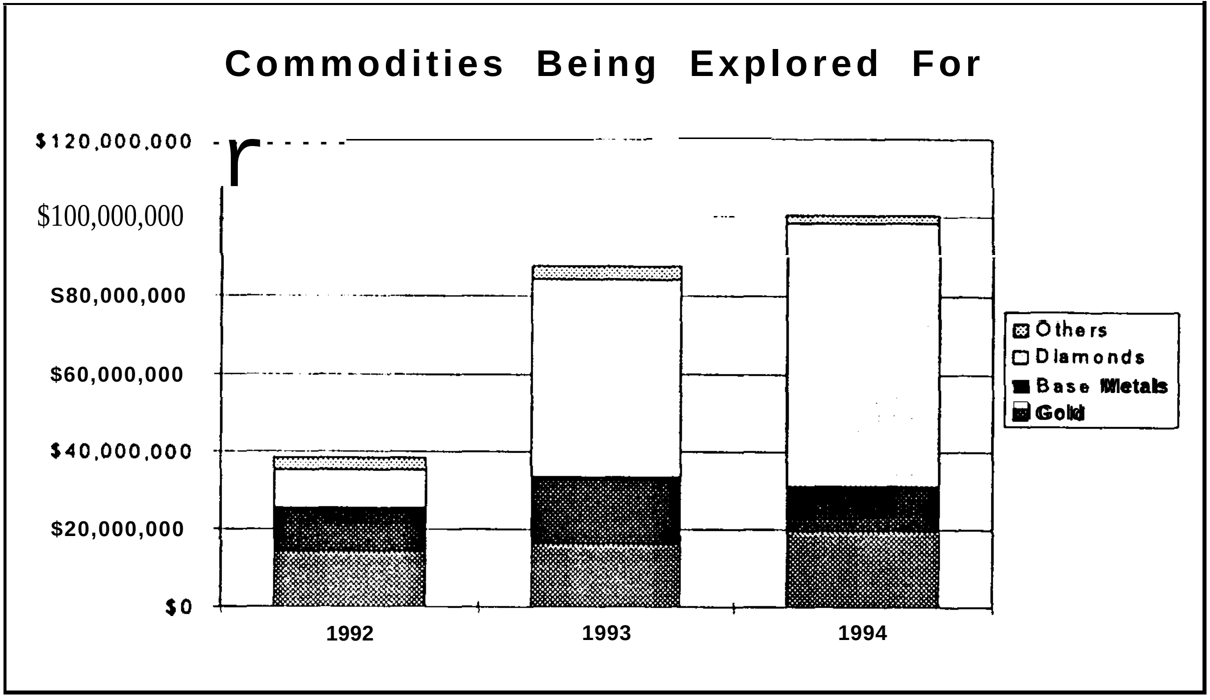
The Baffin/Arctic Islands witnessed $3.2 million, 4% of the total in 1993 and in 1994 it is expected to increase to $3.76 million, again 4°/0

The Inuvialuit Settlement Region saw exploration expenditures of $1.5 million, 2% of the total in 1993 and in 1994 expenditures are expected to more than double to $3.6 million, 4'% of the total exploration expenditures.

Gwich'in/Sahtu also saw some exploration with $0.4 million (0.5% of the total) spent in the district in 1993 and expenditures are expected to triple to $1.2 million (1% of the total) in 1994.

COMMODITIES

In 1993, **diamond** was the most sought after commodity by exploration companies. Nearly $50.8 **million,** or 58% of the total exploration dollars, was spent looking for the newly discovered mineral. It is projected that 1994 expenditures will be nearly $67 **million** or 67% of the total expenditure.



Base **metals** saw the second largest amount of moneys spent in their search at $17 **million** or 19% of the total expenditure reported. Projected expenditures for 1994 indicate a drop in exploration expenditures for base metals to $11.4 **million** or 11% of total exploration,

In 1993, $16.4 **million,** or 19% of total exploration was spent on the search for **gold.** The survey projects that $19.7 million, or 20% will be spent looking for gold in 1994

Finally, **other minerals** (largely uranium) saw just over $3.6 **million,** or 4%, spent on their search in 1993; projected 1994 expenditures are $2.15 million or 2°A of the total.

SUMMARY OF GENERAL COMMENTS

The survey also asked for comments on northern purchasing, northern employment, government regulations, and aboriginal issues.

Due to their detail nature, general comments have been collected in Appendix A. Following is a summary of these comments.

Northern Purchasing

Of the 49 companies that responded, 47 said they purchased from northern businesses in 1993; 2 said they did not,

Companies were asked to bracket the percentage of their 1992 total budgets that were paid to northern businesses. Because of this bracketing, the actual expenditures can only be estimated within a range of values

Companies paid from between $17.47 **million** and **$27.16** million to northern businesses.

Similar to requests in the 1992 survey, some companies asked to help them find northern contractors, and a few companies requested that a directory be prepared emphasizing what the north has to offer in the way of consultants, self-employed technical people, and suppliers, as well as services offered by the local mineral exploration community. Onc company suggested that a labour office be opened that would be able to supply a range of mining/exploration personnel.

Northern Employment

Of the companies that responded, thirty said they hired northern residents in 1993. Nine companies said they did not. Of those responding, companies indicated they hired from each of the groups, Labourers/Trades people, Technical Assistants, Contractors, and Professionals. The majority of responses were in the O-5 or 6-10 range for numbers of people hired. Three companies responded in the +30 range.

Depending on the nature of the exploration program, the majority of companies did not have a problem finding northerners to do certain jobs. There was a problem however, when it came to finding northerners with specialized skills. The category of northern workers that companies identified as being most difficult to find were professionals, e.g. geologists, geophysicists, etc. Services needed in Yellowknife are a "respectable" laboratory and certain equipment manufactures.

Government Regulations

Bureaucracy was mentioned as a problem to some companies. "Too much government is the main problem, too many rules, too much wasted time and too little help for the mining industry. "

Once again in 1993, delays in the issuing of land-use permits was a concern to a number of companies: "uncooperative administrative people, lengthy waiting period, and onerous paper work. "

Companies have indicated that the additional paper work resulting from the recent division of the NWT into several new administrative districts is an inconvenience. "We have to apply and report to separate offices. Not a big deal but an annoyance. Juniors would rather spend time. 'exploring rather than that pushing paper. Not a problem but confusion may present problems in the future."

In general, companies reported that government agencies have been helpful and willing to assist.

Aboriginal Issues

In general, companies seem to understand more about land claims this year; however, they are concerned about different rules being established for each land claim area. It would be helpful if land claims offices were centralized. "Our exploration area is contiguous within various land claim areas, " "1 would like to see them share the same offices. "

Companies with properties located near communities generally discussed their work both written and in person, with the local band council.

One company was concerned with a suggestion that no uranium development will be permitted cm Inuit lands

CONCLUSION

In conclusion, recognizing that the results of the survey are conservative, total exploration expenditures reported for 1993, at $76.8 **million,** have increased substantially from previous years largely as a result of diamond exploration. Projections for total exploration in 1994 suggest a further, but smaller increase, at $87.2 **million,** and this is also due primarily to diamond exploration.

There are a few companies making major investments that, unfortunately, did not respond to our survey. Our best guess of these expenditures, at $20 million, would bring total exploration for 1994 to nearly $110 million. This is approaching record highs reached in 1988, at the height of flow-through share supported investment.

In 1993, diamonds took the lead as the commodity of choice, with base metals and gold coming second and third, respectively. In 1994, diamonds increased their lead, but base metals dropped to third behind gold. Uranium and other commodities area more distant fourth for both years.

Companies directly involved in the NWT in 1993, i.e. not using consultants or other companies as operators, indicated they purchased supplies from northern businesses. This accounted on average of21 -40°/0 of their total exploration dollar, which translates into a total value between **$18** million and $27 **million.**

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