

NORTHERN DYNASTY MINERALS LTD
Form 20-F
April 11, 2005

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 20-F

“ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) or 12(g) OF THE SECURITIES EXCHANGE
ACT OF 1934

OR

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE *SECURITIES EXCHANGE ACT OF 1934*

For the fiscal year ended December 31, 2004 (with other information to March 15, 2005 except where noted)

OR

“ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE *SECURITIES EXCHANGE ACT OF
1934*

For the transition period from _____ to _____

CIK Number 0001164771
Commission file number 0-31224

NORTHERN DYNASTY MINERALS LTD.

(Exact name of Registrant specified in its charter)

NORTHERN DYNASTY MINERALS LTD.

(Translation of Registrant's name into English)

BRITISH COLUMBIA, CANADA

(Jurisdiction of incorporation or organization)

**Suite 1020, 800 West Pender Street
Vancouver, British Columbia, Canada, V6C 2V6**

(Address of principal executive offices)

COMMON SHARES WITHOUT PAR VALUE

(Title of Class)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of Each Class

Name of each exchange on which registered

None Not applicable
Securities registered or to be registered pursuant to Section 12(g) of the Act

- 2 -

Common Shares without Par Value

(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

None

Number of outstanding shares of Northern Dynasty's only class of capital stock as on December 31, 2004

47,690,287 Common Shares without Par Value
(the number outstanding on March 15, 2005 was 49,316,165).

Indicate by check mark whether Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the *Securities Exchange Act of 1934* during the preceding 12 months (or for such shorter period that Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

NOT APPLICABLE

Indicate by check mark which financial statement item Registrant has elected to follow:

Item 17 x Item 18 "

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether Registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the *Securities Exchange Act of 1934* subsequent to the distribution of securities under a plan confirmed by a court.

NOT APPLICABLE

Currency and Exchange Rates

All monetary amounts contained in this Annual Report are, unless otherwise indicated, expressed in Canadian dollars. On March 15, 2005 the Federal Reserve noon rate for Canadian Dollars was US\$1.00:C\$ 1.2078 (see Item 4 for further historical Exchange Rate Information).

TABLE OF CONTENTS

	Page
<u>ITEM 1</u> <u>IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS</u>	6
<u>ITEM 2</u> <u>OFFER STATISTICS AND EXPECTED TIMETABLE</u>	7
<u>ITEM 3</u> <u>KEY INFORMATION</u>	8
<u>ITEM 4</u> <u>INFORMATION ON THE COMPANY</u>	13
<u>ITEM 5</u> <u>OPERATING AND FINANCIAL REVIEW AND PROSPECTS</u>	35
<u>ITEM 6</u> <u>DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES</u>	42
<u>ITEM 7</u> <u>MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS</u>	54
<u>ITEM 8</u> <u>FINANCIAL INFORMATION</u>	58
<u>ITEM 9</u> <u>THE OFFER AND LISTING</u>	59
<u>ITEM 10</u> <u>ADDITIONAL INFORMATION</u>	61
<u>ITEM 11</u> <u>QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u>	75
<u>ITEM 12</u> <u>DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES</u>	76
<u>ITEM 13</u> <u>DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES</u>	77
<u>ITEM 14</u> <u>MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS</u>	78
<u>ITEM 15</u> <u>CONTROLS AND PROCEDURES</u>	79
<u>ITEM 16</u> <u>AUDIT COMMITTEE, CODE OF ETHICS, ACCOUNTANT FEES, AND EXEMPTIONS</u>	80
<u>ITEM 17</u> <u>FINANCIAL STATEMENTS</u>	82
<u>ITEM 18</u> <u>FINANCIAL STATEMENTS</u>	83
<u>ITEM 19</u> <u>EXHIBITS</u>	84

Geological Terms and Mineral Symbols

Composite Hydrothermal System	Created by hydrothermal process or processes in which there is evidence of more than one centre or source of hydrothermal fluids, and potentially more than one mineral deposit.
Hydrothermal Alteration	Alteration of rocks or minerals by the reaction of hot, or hydrothermal, water with pre-existing (or host) rocks or minerals. The products of this reaction may also be a hydrothermal mineral deposit, that is, gangue and ore minerals that have been deposited in fractures, faults, breccia openings, etc., by replacement or open-space filling from watery fluids of 50-700° C temperature and of 1-3 kilobars pressure.
Induced Polarization (“IP”) Survey	A geophysical survey used to identify a feature that appears to be different from the typical or background survey results when tested for levels of electro-conductivity; IP detects both chargeable, pyrite-bearing rock and non-conductive rock that has high content of quartz.
Mineral Resource	Mineral resource means a deposit or concentration of natural, solid, inorganic or fossilized organic substance in such quantity and at such greater quality that extraction of the material at a profit is currently or potentially possible. “Inferred Resource” means the estimated quantity and grade of a deposit, or a part thereof, that is determined on the basis of limited sampling, but for which there is sufficient geological information and a reasonable understanding of the continuity and distribution of metals values to outline a deposit of potential economic merit. “Indicated Resource” means the estimated quantity and grade of a part of a deposit for which the continuity of grade, together with the extent and shape, are so well-established that a reliable grade and tonnage estimate can be made. “Measured Resource” means the estimated quantity and grade of that part of a deposit for which the size, configuration and grade have been very well-established by observation and sampling of outcrops, drill holes, trenches and mine workings.
Mineral Symbols	Au - Gold; Ag - Silver; Al - Aluminum; Cu - Copper; Fe - Iron; Mo - Molybdenum; Na - Sodium; O - Oxygen; Pb - Lead; S - Sulphur; Zn - Zinc.
Porphyry deposit	A type of mineral deposit in which ore minerals are widely disseminated, generally of low grade but large tonnage.

Currency and Measurement

All currency amounts in this Annual Report are stated in Canadian dollars unless otherwise indicated (see Item 3A for exchange rate information).

The following measurements may be used.

Ton Imperial measure equal to 2,000 pounds.
 Tonne Metric measure of mass equal to 1,000 kilograms or 2,204.6 pounds.

Conversion of metric units into imperial equivalents is as follows:

<u>Metric Units</u>	<u>Multiply by</u>	<u>Imperial Units</u>
hectares	2.471	= acres
metres	3.281	= feet
kilometres	0.621	= miles (5,280 feet)
grams	0.032	= ounces (troy) = tons (short)
tonnes	1.102	(2,000 lbs)
grams/tonne	0.029	= ounces (troy)/ton

PART 1

ITEM 1 IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable

ITEM 2 OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable

ITEM 3 KEY INFORMATION**A. Selected Financial Data**

The following constitutes selected financial data for Northern Dynasty Minerals Ltd. (“Northern Dynasty” or the “Company”) for the last five fiscal years ended December 31, 2004, in Canadian dollars, presented in accordance with Canadian generally accepted accounting principles (“GAAP”) and United States GAAP.

<u>Balance Sheet Data</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>	<u>2000</u>
Total assets according to financial statements (CDN GAAP) ⁽¹⁾	\$ 25,440,941	\$ 3,682,646	\$ 685,149	\$ 2,588,367	\$ 2,644,832
Total Assets (US GAAP) ⁽²⁾	25,630,081	3,682,646	685,149	2,588,367	2,644,832
Total liabilities	3,025,155	429,722	186,288	768,544	4,500
Share capital	76,109,561	21,064,437	11,035,977	7,907,717	7,273,342
Deficit (CDN GAAP)	(61,198,495)	(19,499,848)	(11,200,387)	(6,087,894)	(4,633,010)
Deficit (US GAAP)	(61,198,495)	(19,499,848)	(11,200,387)	(6,087,894)	(4,633,010)

Period End Balances

<u>(as at December 31)</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>	<u>2000</u>
Working capital	\$ 10,229,064	\$ 3,240,887	\$ 496,048	\$ 1,816,289	\$ 2,639,000
Equipment, net	398,101	12,037	2,813	3,534	1,332
Mineral property interests	11,788,621	---	---	---	---
Shareholders' equity	22,415,786	3,252,924	498,861	1,819,823	2,640,332
Number of outstanding Shares	47,690,287	31,733,186	15,515,223	9,292,455	7,182,455

No cash or other dividends have ever been declared.

<u>Statement of Operations Data</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>	<u>2000</u>
Investment and Other Income (loss)	\$ (244,303)	\$ 130,318	\$ (10,676)	\$ 108,631	\$ 157,138
General and administrative expenses	2,480,567	1,252,986	771,881	395,121	316,033
Write-down of mineral property interests and investments	--	---	---	--	--
Exploration Expenditures	32,594,900	5,501,729	4,329,936	1,168,394	--
Stock-based compensation	6,378,877	1,675,064	---	--	--
Income (loss) according to financial statements (CDN GAAP)	(41,698,647)	(8,299,461)	(5,112,493)	(1,454,884)	(158,895)
Income (loss) from continuing operations per Common Share (CDN GAAP)	(1.04)	(0.35)	(0.41)	(0.20)	(0.02)
Income (loss) per Share (US GAAP) ⁽²⁾	(1.04)	(0.35)	(0.41)	(0.20)	(0.02)

Notes:

- (1) Northern Dynasty follows Canadian GAAP applicable to junior mining exploration companies whereby mineral exploration expenditures can be deferred on prospective properties until such time as it is determined that further exploration is not warranted, at which time the property costs are written off. Under US GAAP exploration costs are generally written off as incurred unless there is a feasibility report which confirms the existence of economic ore making the recovery of costs likely. As Northern Dynasty did not record any deferred exploration expenditures effective December 31, 2001 there is no difference between presentation of Northern Dynasty's accounts under Canadian and US GAAP.
- (2) Statement of Financial Accounting Standards No. 128: Earnings per Share ("SFAS 128") replaces the presentation of primary earnings per share ("EPS") with a presentation of both basic and diluted EPS for all entities with complex capital structures, including a reconciliation of each numerator and denominator. Basic EPS excludes dilutive securities and is computed by dividing income available to common stockholders by the weighted-average number of common shares outstanding for the year. Diluted EPS reflects the potential dilution that could occur if dilutive securities were converted into common stock and is computed similarly to fully diluted EPS pursuant to previous accounting pronouncements. SFAS 128 applies equally to loss per share presentations. Stock options and warrants outstanding were not included in the computation of diluted loss per share as their inclusion would be anti-dilutive.

On March 15, 2005 the Federal Reserve noon rate for Canadian Dollars was US\$1.00:C\$ 1.2078. The following table sets out the exchange rates, based on the noon buying rates as posted on the Bank of Canada website (www.bankofcanada.ca), for the conversion of Canadian dollars into United States dollars. These rates are comprised of those in effect at the end of the six months including and immediately prior to December 31, 2004 and the average exchange rates and the range of high and low exchange rates for such periods.

	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>	<u>2000</u>
End of Period	1.20	1.30	1.58	1.59	1.52
Average for Period	1.30	1.40	1.57	1.55	1.49
High for Period	1.40	1.58	1.62	1.60	1.56
Low for Period	1.17	1.30	1.50	1.49	1.43

Monthly Low and High Exchange Rates:

<u>Month</u>	<u>Low</u>	<u>High</u>
March 2005	1.20	1.25
February 2005	1.22	1.26
January 2005	1.19	1.25
December 2004	1.18	1.24

See Item 17 for accompanying audited year-end financial statements (prepared in accordance with Canadian GAAP) for further details.

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

Northern Dynasty's Pebble Property Contains No Known Reserves of Ore. Although there is a known body of mineralization on the Pebble Property (see Items 4, 7 and 19), and Northern Dynasty has completed a major definition and in-fill core drilling program within, and adjacent to, the deposit to determine indicated and measured resources to allow for completion of planned feasibility studies, there are currently no known reserves or body of commercially viable ore and the Pebble Property must be considered an exploration prospect only. Extensive additional exploration work is required before Northern Dynasty can ascertain if any mineralization may be economic and hence constitute 'ore'. Engineering, socioeconomic and environmental studies are ongoing. Additional drilling is planned to further define a new zone on the eastern flank of the deposit. Exploration for minerals is a speculative venture necessarily involving substantial risk. If the expenditures Northern Dynasty makes on the Pebble Property do not result in discoveries of commercial quantities of ore, the value of exploration and acquisition expenditures will be totally lost and the value of Northern Dynasty stock negatively impacted.

Further Funding Needed to Explore and Retain Rights to Pebble Property. Northern Dynasty's primary means of generating funds is through the sale of common shares, and Northern Dynasty will need to continue to find buyers for its treasury shares in order to generate sufficient funds to allow Northern Dynasty to conduct further work on the Pebble Property and completion of the planned exploration and engineering, socioeconomic and environmental programs. If Northern Dynasty cannot fund such programs, its share value will be severely negatively impacted. Northern Dynasty believes that it will need to raise additional funds to pursue the current level of exploration of the Pebble Property.

Northern Dynasty Has No History of Earnings and No Foreseeable Earnings. Northern Dynasty has a history of 20 years of losses. Northern Dynasty may never be profitable. Northern Dynasty has paid no dividends on its shares since incorporation and does not anticipate paying dividends in the foreseeable future. A failure to eventually achieve profitability will negatively impact on Northern Dynasty's share value.

Assets May be Subject to Future Write-Downs. Northern Dynasty's financial statements have been prepared assuming that Northern Dynasty will continue its business on a going-concern basis; however unless additional funding is obtained this assumption will have to change and Northern Dynasty's assets may then have to be written-down from carrying values based on costs to asset prices which are realizable in insolvency or distress circumstances.

Significant Potential Equity Dilution and End of Lock-ups. At March 15, 2005, Northern Dynasty had 49,316,165 common shares and 4,006,300 share purchase options and 2,925,478 warrants outstanding. The resale of outstanding shares from the exercise of dilutive securities could have a depressing effect on the market for Northern Dynasty's shares. At March 15, 2005, dilutive securities represent approximately 14.1% of Northern Dynasty's currently issued shares. As of March 15, 2005 Northern Dynasty had agreed to issue a further 14,002,268 shares, subject to regulatory approval, for a related party property acquisition. (See Item 7)

Exploration is a Risky Business. The exploration for mineral deposits involves significant financial and other risks over an extended period of time, which even a combination of careful evaluation, experience and knowledge may not eliminate. Few properties that are explored are ultimately developed into producing mines. Factors beyond Northern Dynasty's control will affect the marketability of any substances discovered.

Gold, copper and molybdenum prices improved in 2004, but had been depressed for several years prior to that, and may continue to fluctuate widely. Even if exploration is successful (and a mine deemed warranted), mining requires huge capital investment, long capital recovery periods and it is difficult to suspend operations pending a recovery of prices.

Risk of Adverse Government Policies. Government regulations relating to mineral rights tenure, permission to disturb wilderness areas and the right to operate and export minerals can adversely affect Northern Dynasty. Northern Dynasty may not be able to obtain all necessary licenses and permits that may be required to carry out exploration at our projects. Environmental concerns in general continue to be a significant challenge for Northern Dynasty as they are for all exploration companies. Any changes in regulations or shift in political attitude are beyond the control of Northern Dynasty and may adversely affect its business.

Environmental Risks. Unexpected environmental damage from spills, accidents and severe acts of nature such as earthquakes are risks which may not be fully insurable and if catastrophic could mean the total loss of shareholders' equity.

Volatility of Northern Dynasty's Shares Could Cause Investor Loss. The market price of a publicly traded stock, especially a resource issuer like Northern Dynasty, is affected by many variables in addition to those directly related to exploration successes or failures. Such factors include the general condition of market for resource stocks, the strength of the economy generally, the availability and attractiveness of alternative investments, and the breadth of the public market for the stock. The effect of these and other factors on the market price of the common shares on the TSX Venture suggests Northern Dynasty's shares will continue to be volatile. Therefore, investors could suffer significant losses if Northern Dynasty's shares are depressed or illiquid when an investor seeks liquidity and needs to sell Northern Dynasty shares.

Northern Dynasty's Directors, Officers and Staff are only Part-Time. Most of Northern Dynasty's directors and senior officers also serve as officers and/or directors of other resource exploration companies and, as such, are engaged in and will continue to be engaged in the search for additional resource opportunities on behalf of such other companies. In particular, the success of Northern Dynasty and its ability to continue to carry on operations is dependent upon its ability to retain the services of its senior technical and management personnel. (See Item 7.)

Management May be subject to Conflicts of Interest Due to Affiliation With Other Resource Companies. As most of Northern Dynasty's directors and officers serve as officers and/or directors of other resource exploration companies which are themselves engaged in the search for additional opportunities, situations may arise where these directors and officers are presented with or identify resource exploration opportunities and may be or perceived to be in competition with Northern Dynasty for exploration opportunities. Such potential conflicts, if any arise, will be dealt with in accordance with the relevant provisions of British Columbia corporate and common law. Northern Dynasty's directors and officers expect that participation in exploration prospects offered to the directors will be allocated between the various companies that they serve on the basis of prudent business judgment and the relative financial abilities and needs of the companies to participate. In addition, all of Northern Dynasty's officers and directors have a financial interest in other resource issuers to which they serve as management and hence may never be financially disinterested in the outcomes of these potential conflict of interest situations. This situation may require that shareholders favorably consider ratification of directors' decisions where financial conflicts arise resulting in uncertainty with respect to completion of such matters. The Company has access to the full resources of Hunter Dickinson Inc. ("HDI"), an experienced exploration and development firm with in-house geologists, engineers and environmental specialists, to assist in its technical review of the various opportunities; however the Company does not have the right to require HDI to bring to the Company all corporate opportunities that come to HDI's attention.

Northern Dynasty's Management May Not Be Subject to U.S. Legal Process. As Canadian citizens and residents most of Northern Dynasty's directors and officers may not subject themselves to U.S. legal proceedings, so that recovery on judgments issued by U.S. courts may be difficult or impossible. While reciprocal enforcement of judgment legislation exists between Canada and the U.S., Northern Dynasty's insiders may have defenses available to avoid in Canada the effect of U.S. judgments under Canadian law, making enforcement difficult or impossible. Northern Dynasty's management may not have any personal assets available in the U.S. to satisfy judgments of U.S. courts. Therefore, Northern Dynasty shareholders in the United States may have to avail themselves of remedies under Canadian corporate and securities laws for perceived oppression, breach of fiduciary duty and like legal complaints. Canadian law may not provide for remedies equivalent to those available under U.S. law.

Likely PFIC Status Has Possible Adverse Tax Consequences for U.S. Investors. Potential investors who are U.S. taxpayers should be aware that Northern Dynasty expects to be classified for U.S. tax purposes as a passive foreign investment company ("PFIC") for the current fiscal year, and may also have been a PFIC in prior years, and may also be a PFIC in subsequent years. This status arises due to the fact that Northern Dynasty's excess exploration funds are invested in interest-bearing, securities creating "passive income" which, while modest and ancillary to the exploration business, is Northern Dynasty's only source of income. If Northern Dynasty is a PFIC for any year during a U.S. taxpayer's holding period, then such a U.S. taxpayer, generally, will be required to treat any so-called "excess distribution" received on its common shares, or any gain realized upon a disposition of common shares, as ordinary income and to pay an interest charge on a portion of such distribution or gain, unless the taxpayer makes a qualified electing fund ("QEF") election or a mark-to-market election with respect to the shares of Northern Dynasty. In certain circumstances, the sum of the tax and the interest charge may exceed the amount of the excess distribution received, or the amount of proceeds of disposition realized, by the taxpayer. A U.S. taxpayer who makes a QEF election generally must report on a current basis its share of Northern Dynasty's net capital gain and ordinary earnings for any year in which Northern Dynasty is a PFIC, whether or not Northern Dynasty distributes any amounts to its shareholders. A U.S. taxpayer who makes the mark-to-market election generally must include as ordinary income each year the excess of the fair market value of the common shares over the taxpayer's tax basis therein. (See also ITEM 10E - Passive Foreign Investment Company.)

For more information about penny stocks, contact the Office of Filings, Information and Consumer Services of the U.S. Securities and Exchange Commission, 450 Fifth Street, N.W., Washington, D.C. 20549 telephone (202) 272-7440.

ITEM 4 INFORMATION ON THE COMPANY**SUMMARY****A. History and Development of Northern Dynasty**

1. The legal name of the corporation, which is the subject of this Annual Report on Form 20-F, is “Northern Dynasty Minerals Ltd.”
 2. Northern Dynasty was incorporated in May 1983 under the laws of the Province of British Columbia, Canada. Northern Dynasty was originally incorporated as “Dynasty Resources Inc.” and subsequently changed its name on November 30, 1983 to “Northern Dynasty Explorations Ltd.” Northern Dynasty became a reporting company in the Province of British Columbia on April 10, 1984 by having a receipt issued for its initial prospectus offering by the British Columbia Securities Commission. Northern Dynasty was formerly listed on the Vancouver Stock Exchange (now the TSX Venture Exchange and herein generally “TSX Venture”) from 1984-1987, inter-listed on the Toronto Stock Exchange from 1987-1993, and unlisted but remained in good standing with all securities commissions from 1993 to 1994, and thereupon reactivated and listed solely on TSX Venture from 1994 to present. In November, 2004 the common shares of Northern Dynasty were listed on the American Stock Exchange. (“AMEX”)
 3. Northern Dynasty continues to subsist under the laws of the Province of British Columbia, Canada. Northern Dynasty’s business office is located at Suite 1020, 800 West Pender Street, Vancouver, British Columbia V6C 2V6 telephone (604) 684-6365. Northern Dynasty’s registered legal office is located c/o its British Columbia attorneys at Suite 1500, 1055 West Georgia Street, Vancouver, British Columbia V6E 4N7 telephone (604) 689-9111.
 4. During the period 1984-1993, Northern Dynasty held a participating interest in the Little Bald Mountain Project in Nevada, from which modest-scale gold production and cash flow was obtained. Northern Dynasty utilized this cash flow and the proceeds from other financings to conduct exploration programs on a number of properties in Nevada, USA, Ontario, Canada and Yukon, Canada. Subsequently all these properties were written off or written down to nominal value. In 1994, Northern Dynasty’s name was changed to “Northern Dynasty Minerals Ltd.” and it was reorganized, including a change of management, new investors and a three old for one new common share consolidation (also known as a “reverse-split”), and re-listed on the Vancouver Stock Exchange.
 5. On October 29, 2001, Northern Dynasty entered into an Assignment Agreement with Hunter Dickinson Group Inc. (“HDGI”), whereby it was assigned rights to acquire up to 100% of HDGI’s interest in certain options granted by Teck Cominco American Incorporated (“Teck Cominco”) in its Pebble Property (herein called the “Pebble Property” or the “Pebble Project”) with HDGI retaining a carried interest (callable by Northern Dynasty) to the point of the exercise of the main option under the Pebble Property Agreements (see Item 3). HDGI holds its interest in the options in trust for the family trusts of J. Mason, R. Dickinson, R. Thiessen, S. Cousens and D. Copeland (all Company insiders), D. Jennings and A. Shariff. The Pebble Property has become the principal focus of Northern Dynasty’s exploration and development work. The terms of the Assignment Agreement and options are more particularly described below.
-

As of March 15, 2005 the options had been exercised with the final 20% acquisition exercise pending TSX Venture Exchange and AMEX acceptance. The options were exercised in the period November 2004 through March 15, 2005 and were exercised in consideration of the allotment of an aggregate of 16,752,788 shares of which the issuance of 14,002,268 shares as of the date of filing hereof is pending regulatory acceptance. On completion of the issuance, Northern Dynasty will own 100% of the Pebble project subject only to a small royalty interest to Teck Cominco on a portion of the property.

6. Northern Dynasty has made no other material capital expenditures (there have been no material divestitures) over the three fiscal years ended December 31, 2004 except for the Pebble Property acquisition and related matters described herein.

B. Business Overview

Northern Dynasty's Business Strategy and Principal Activities

Pebble Property, Alaska USA - Overview

Northern Dynasty is generally in the business of acquiring, exploring and developing mineral properties.

Since October 2001 its principal focus has been exploration and since 2004, feasibility level engineering studies for all project components, including road access, port and power transmission, of the Pebble Property ("the Pebble Property") that hosts a large gold copper molybdenum porphyry deposit and is located in the State of Alaska. Comprehensive environmental and socioeconomic base line data collection and studies are also underway.

On October 29, 2001, Northern Dynasty acquired from a related party two options which provided for the right for Northern Dynasty to purchase up to a 100% working (i.e. beneficial) interest in the Pebble Property. The options were granted by Teck Cominco American Incorporated ("Teck Cominco") (as to 80%) and Hunter Dickinson Group Inc. ("HDGI") a related party which retained an interest in the options (see Item 7), (as to 20%, carried) as more particularly described below.

The first of the two options permitted Northern Dynasty to purchase the previously drilled (by Teck Cominco) portions of the Pebble Property on which the majority of the known gold/copper mineralization is known to exist (the "Resource Lands"). The Resource Lands option required the payment of cash or shares during the three year term of the option (as extended by one year) and a balloon option payment at the end of the third year of approximately US\$10 million (prior to November 30, 2004) at which time Northern Dynasty would own 80% of the Resource Lands (and HDGI, 20%) The second part of the Teck Cominco option permitted Northern Dynasty to earn a minimum of 40% (and up to 80% with HDGI holding 20%) interest in the remainder of the Pebble Property which was the area outside of the known mineralization (the "Exploration Lands") by doing 60,000 feet of exploration drilling by November 30, 2004.

As of November 30, 2004 Northern Dynasty had completed its option requirements and had exercised 80% of the Resource Lands and by February 2005, 80% of the Exploration Lands was acquired by exercise of the second option. The right to purchase the final 20% (by then participating working interest) in both Resource Lands and Exploration Lands options was agreed to be exercised by Northern Dynasty and acquired from HDGI on March 14, 2005 (but in respect of which regulatory approval has been applied for and is pending as of March 31, 2005). Upon regulatory approval to complete the acquisition of the final 20% working interest, Northern Dynasty will thereupon own a 100% working interest in the Pebble project subject only to a royalty (2-5% of after pay back net profits) held by Teck Cominco on the Exploration Lands.

Northern Dynasty's exploration and feasibility determination program for fiscal 2005 involves exploration drilling of the newly discovered East Zone on the flank of the known Pebble deposit, and the continued collection of environmental and socioeconomic data and ongoing engineering studies required for the completion of a feasibility study and the initiation of the permitting process in 2006. The program encompasses approximately 97,000 feet (30,000 m) of exploration and infill drilling as well as holes for metallurgical testing, and 60 days of rotary drilling for hydrological testing.

The budget for Northern Dynasty's proposed 2005 program is C\$44.5 million. The Company's working capital as of March 21, 2005 was approximately \$36 million, and there were approximately 2.3 million in-the-money warrants (exercisable at \$4.15). It will however need to raise funds cover the future exploration programs and ongoing administrative costs. If the equity markets for resource issuers are not receptive to additional financings, Northern Dynasty will likely have to reduce the planned expenditures.

Northern Dynasty does not have any operating revenue, although historically it has had annual interest revenue as a consequence of investing surplus exploration funds pending the completion of exploration programs. Although exploration activities can be more challenging in winter conditions, Northern Dynasty's business cannot be said to be significantly seasonal in nature. Metals prices have traditionally seen multi-year cycles of higher and lower prices, which often impact the availability of exploration and development funds in years with depressed prices.

Alaska Statutes 38.05.185 and following establish the rights to mining claim and mineral leases on lands owned by the State of Alaska and open to mineral entry. This group of statutes also covers annual labour, annual rental, and royalties.

Operations on claims or leases on state owned land must be permitted under a plan of operations as set out in 11 Alaska Administrative Code 86.800. This regulation generally provides that the State Division of Mining can be the lead agency in coordinating the comments of all agencies, which must consent to the issuance of a plan of operations, and sets the requirements for the approval of a plan of operations.

Environmental conditions are controlled by Alaska Statute 46.08 (prohibits release of oil and hazardous substances), Alaska Statute 46.03.060 and following (sets water quality standards), and Alaska Statute 46.14 (sets air quality standards).

The Company completed a private placement financing for gross proceeds of C\$30.5 million in March 2005 included in working capital amounts as noted above. However, it may have to raise additional funds to carry on the planned exploration program.

Further Particulars of the Origins of the Pebble Property Options, 2001 Assignment from Related Party

By an Assignment Agreement dated October 29, 2001 between Northern Dynasty as assignee and Hunter Dickinson Group Inc. ("HDGI") as assignor, (the "HDGI Assignment") (see Item 7 and Item 19), Northern Dynasty was assigned the right to acquire up to a 100% interest in two discrete but interdependent options which were granted to HDGI by Teck Cominco, respecting its 22,582 hectare "Pebble" copper/gold prospect in southwestern Alaska. The two options relate to separate portions of the Pebble Property, which are referred to as (a) the "Resource Lands" on which a mineralized body had already been outlined by Teck Cominco, and (b) the "Exploration Lands" which constitute the remainder of the Pebble Property area. In this Annual Report, these two options may be referred to as the "Resource Lands Option" and the "Exploration Lands Option" and together they are referred to as the "Teck Cominco Options". HDGI is a private company owned by certain directors of Northern Dynasty and their associates and hence is a related party to Northern Dynasty. (See Item 7)

Under the HDGI Assignment, Northern Dynasty was assigned the options at HDGI's out-of-pocket costs of \$586,966 (which includes HDGI's 2001 exploration and additional property staking costs related to the Pebble Property), an 80% interest in the Teck Cominco Options, together with the right to acquire HDGI's retained 20% interest which is a "carried" interest up to the point of the termination of the resource Lands Option. HDGI was carried with respect to its retained 20% interest, meaning that Northern Dynasty must incur 100% of all exploration costs and 100% of all underlying option payments to Teck Cominco required by the Teck Cominco Options to the point of exercise of the Resource Lands Option (assuming Northern Dynasty decided to exercise the Teck Cominco Options). Northern Dynasty had the right to purchase (or "call") HDGI's carried interest for a 90-day period commencing at the time that, and in the event that, Northern Dynasty exercised the Resources Lands Option which it did on November 23, 2004. The Assignment Agreement provided that the carried interest call price was to be determined as the independently appraised value of the carried interest which call amount will be payable by Northern Dynasty in common shares of Northern Dynasty valued at market at that time.

On November 26, 2004, Northern Dynasty exercised the 80% option from Teck Cominco on the Resource Lands by issuing 1.77 million Northern Dynasty common shares to Teck Cominco American Inc., which represents the adjusted final payment of US\$10 million (adjusted to US\$9.94 million for previous excess proceeds of share resale proceeds received by Teck Cominco). On February 23, 2005, Northern Dynasty acquired an 80% interest in the Exploration Lands by acquiring Teck Cominco's residual interest in the Exploration Lands, consequent upon Teck Cominco's election, through the issuance of US\$4 million in Northern Dynasty common shares at the prevailing market price (approximately 977,795 shares). On March 14, 2005 Northern Dynasty, on the recommendation of an independent committee of its directors, elected to call HDGI's 20% interest for 14,002,268 shares based on an independent appraisal of the 20% interest and a fairness opinion to separate parties (see item 19). Teck Cominco now retains only a 4% pre-payback nets profits interest (after debt service) and 5% after-payback net profits interest in any mine production from the Exploration Lands portion of the Pebble Property.

The Teck Cominco Options provide Teck Cominco with the right to require Northern Dynasty to in effect guarantee that Teck Cominco will receive cash proceeds equivalent to the approximately US\$14 million deemed value of the 2,750,520 shares issued to it for exercise of the Resource Lands Option and the Exploration Lands Option. However, in order to avail itself of this right Teck Cominco must permit Northern Dynasty the right to determine the timing and method of resale of the shares. Teck Cominco's election to require the minimum proceeds guarantee must be made within 180 days of the receipt of these shares (November 23, 2004 as to 1772,725 shares and February 25, 2005 for 977,795 shares). As of March 31, 2005 Northern Dynasty is awaiting Teck Cominco's determination (to be made by May 23, 2005 and July 25, 2005) as to whether Northern Dynasty will be required to manage the resale of the two tranches of shares. Northern Dynasty's commitment extends to seeking investors to purchase the shares and by using reasonable efforts to achieve an orderly resale market for these shares. Northern Dynasty is not obligated (nor permitted by law) to re-purchase the shares itself. In the event Northern Dynasty secures purchasers after Teck Cominco's election, any excess of resale proceeds over the US\$14 million will be credited to Northern Dynasty (by way of cancellation of excess shares) and any share resale shortfall must be made up by Northern Dynasty.

Other interim option payments to Teck Cominco were made during 2001 to 2004, including US\$250,000 in cash plus 500,000 two-year share purchase warrants (exercisable at \$0.75) prior to December 31, 2001 (which consideration was paid on December 31, 2001) and 500,000 shares and 500,000 two-year share purchase warrants (exercisable at \$1.15) prior to March 31, 2002 (which consideration was paid on March 28, 2002) and a further 500,000 shares and 250,000 warrants before December 31, 2002 (which consideration was paid on December 19, 2002). Pursuant to an agreement, an additional 200,000 shares

were issued to Teck Cominco on December 19, 2002 to extend the deadline to purchase the Resource Lands from November 30, 2003 to November 30, 2004.

If Teck Cominco gives notice to Northern Dynasty by May 23, 2005 or July 25, 2005 (respecting the US\$10 million and US\$4 million share tranches respectively) that it wishes Northern Dynasty to control the resale of the 1,772,725 shares or 977,795 shares respectively, then Northern Dynasty shall manage the resale of those shares so that the return to Teck Cominco is US\$9.94 million for the 1,772,725 shares (or applicable portion thereof) if resold within the following 12 months from the date of notice to sell or US\$11 million if sold within the following 24 months, but in either case with a minimum requirement of US\$1 million per each 3-month period after the notice. Any shares remaining after the required US\$9.94 million resale proceeds has been received by Teck Cominco will be returned to Northern Dynasty's treasury for cancellation, and if there are any deficiencies in the resale proceeds, Northern Dynasty must provide top-up shares or the cash equivalent until the minimum is achieved. If Teck Cominco does not give notice by the notice to sell deadline, there will be no minimum proceeds requirement and Northern Dynasty will have no influence over the timing or manner of any resales of these shares.

On February 25, 2005 Teck Cominco elected to sell its 50% interest in the Exploration Lands to Northern Dynasty and, consequently, Northern Dynasty purchased the interest by paying Teck Cominco US\$4 million in 977,795 shares valued at \$5.03 and by granting Teck Cominco a net profits royalty on any mine in the Exploration Lands. Prior to the recovery of the capital costs of constructing a mine on the Exploration Lands, the net profits royalty will be based upon the net cash flow from the sale of minerals after operating, marketing, distribution and debt-financing repayments to a maximum of 4% of the net cash flow. Following payback of any mine's capital costs, the royalty is 5% of net profits.

If Teck Cominco elects to liquidate these 977,795 shares, it may, by notice to Northern Dynasty by July 25, 2005 require Northern Dynasty to manage the resale of these shares with a view to realizing at least US\$4 million over the 12-month period after the notice. Any deficiencies from this figure will require Northern Dynasty to provide top-up with shares or cash so that the US\$4 million is achieved. Any Northern Dynasty shares remaining unsold after the maximum of US\$4 million has been realized will be returned to Northern Dynasty's treasury for cancellation. If Teck Cominco does not give notice of sale by the notice to sell deadline, there is no resale proceeds protection, and if Teck Cominco elects to sell after the notice to sell deadline, then Northern Dynasty may retain control of the share resale process for a 48-month period with any profit or loss on the share resale (measured from the initial issuance value) which will be for the account of Teck Cominco. Northern Dynasty must direct the resale of the shares in good faith with a view to maximizing Teck Cominco's proceeds with all such resale activities in compliance with applicable US and Canadian securities laws and the policies of the TSX Venture. All negotiations between Northern Dynasty and Teck Cominco took place in Canada. Teck Cominco American Incorporated is a US holding subsidiary of Teck Cominco Ltd. (whose shares are listed on The Toronto Stock Exchange and bonds are listed on the American Stock Exchange). Securities issued to Teck Cominco are issued relying on the exemption from US registration found in Rule 903(c)(1) of Regulation S to the United States Securities Act of 1933 and are expected to be eligible for resale through the TSX Venture Exchange under Rule 904 to Regulation S.

On March 14, 2005, Northern Dynasty had agreed to exercise its right to acquire the 20% remaining carried working interest in the Resource Lands portion and the Exploration Lands portion of the Pebble Property for a purchase price consisting of 14,002,268 Northern Dynasty common shares, which represents approximately 20% of the adjusted market capitalization of Northern Dynasty. This is subject to regulatory approval as of the date hereof. There are no resale provisions with respect to these shares (except securities laws of general application). Upon receipt of the approvals and issuance of the 14,002,268 common shares, the Company will hold a 100% interest in the entire Pebble property, subject only to Teck Cominco's net profits interest royalty in the Exploration Lands.

Pebble Property, Alaska, USA - Technical Summary**Cautionary Note to Investors Concerning Estimates of Measured, Indicated and Inferred Resources**

The following sections use the terms 'measured resources', 'indicated resources' and 'inferred resources'. The Company advises U.S. investors that while those terms are recognized and required by Canadian regulations (under National Instrument 43-101 "*Standards of Disclosure of Mineral Projects*"); the U.S. Securities and Exchange Commission does not recognize them. In addition, 'inferred resources' have a great amount of uncertainty as to their existence, and economic and legal feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resource will ever be upgraded to a higher category. Under Canadian rules, estimates of Inferred Mineral Resources may not form the basis of economic studies, except for a preliminary assessment. **Investors are cautioned not to assume that any part or all of mineral deposits in these categories will ever be converted into reserves.**

Location and Access

The Pebble Property is centered at latitude 59 degrees 53 minutes 54 seconds North and longitude 155 degrees 17 minutes 44 seconds West in the Iliamna region of southwestern Alaska. It is approximately 380 km southwest of Anchorage and 27 km northwest of the village of Iliamna (Figure 1).

Access to the Pebble Project from Anchorage is via fixed wing aircraft to Iliamna. Iliamna has a state-operated airport with two 1,700 m paved runways. It is serviced by several passenger and cargo flights daily from Anchorage, using Convair, Hercules and DC-6 aircraft, as well as smaller charter aircraft. Current access from Iliamna to the property is by helicopter, a flying distance of 27 km.

The Pebble Property is located 95 km from tidewater. Access to the coast from Lake Iliamna is provided by a 30 km, state-maintained road, which extends from Pile Bay at the eastern end of Lake Iliamna to Williamsport near Iniskin Bay on Cook Inlet. Bulk fuel and heavy freight can also be barged in during the summer months to Lake Iliamna via the Kvichak River. There is currently no road from Iliamna northwest to the Pebble Property.

Figure 1 Location

Topography and Climate

The climate of the Iliamna area is similar to Anchorage with summer daytime high temperatures range from 10 to 17 degrees Celsius, and low temperatures varying from -10 to -13 degrees Celsius in December through to March. Average annual precipitation is 69 cm. The climate, although periodically harsh, is sufficiently moderate to allow a well-planned mineral exploration program to be conducted year-round.

The Pebble Property lies within an area of rolling hills and low mountains. Valley bottoms are at elevations of 250 m above sea level. The highest point on the property is Kaskanak Peak, at an elevation of 841 m. The currently known mineralized deposit (a mass of naturally occurring mineral material without regard to mode of origin) is situated at the 325 m elevation. Vegetation consists of sparse patches of alder trees separated by expanses of tundra and grass. The area was recently glaciated and glacial soil deposits and hummocky terrain abound. There are numerous streams and small, shallow lakes and ponds in the vicinity of the project, which provide water for exploration drilling.

Mineral Claims Status

The property forms a continuous block consisting of 1,331 located Alaska State mineral claims totaling 39,600 hectares (98,000 acres). Annual rental fees are US\$160,295 and annual assessment work obligations are US\$245,000.

Exploration History

In the mid 1980s, Teck Cominco began reconnaissance exploration in the Pebble region and in 1984 discovered the Sharp Mountain gold prospect. Gold occurs in drusy quartz veins of probable Tertiary age that cut Cretaceous rocks near the peak of Sharp Mountain. Grab samples of veins in talus ranged from 1.5 g/t Au to 9.32 oz/ton Au and 3.0 oz/ton silver. No record of further work is available.

Examination and sampling of several color anomalies in 1987 yielded anomalous gold concentrations from the Sill prospect, recognized as a precious-metal, epithermal-vein occurrence, and the Pebble discovery outcrop, which was of uncertain affinity. The 1988 exploration program included 24 diamond drill holes at the Sill epithermal gold prospect, soil sampling, geological mapping and two diamond drill holes at the Pebble target. Drilling at the Sill prospect intercepted mineralization with gold grades that justified more work, but the initial Pebble drill holes yielded only modest encouragement. In 1989, an expanded soil sampling program, an IP survey and 12 diamond drill holes were completed at the Pebble target, and 15 diamond drill holes were completed at the Sill prospect. Although limited in scope, the IP survey at Pebble displayed a response characteristic of a large, porphyry-copper system. This interpretation was validated through subsequent drilling by Teck Cominco that intercepted significant intervals of porphyry-style gold, copper, and molybdenum mineralization.

When it became apparent that a significant copper-gold porphyry deposit had been discovered, exploration was accelerated in 1990 and 1991 when 73 additional diamond drill holes were completed. In 1991, baseline environmental and engineering studies were initiated and weather stations were established. A preliminary economic evaluation was undertaken by Cominco Engineering Services Ltd. ("CESL") in 1991 and subsequently revised in 1992. In 1992, 14 drill holes were completed in the deposit area. In 1993, IP surveying and a 4-hole drilling program were completed at a target 6 km to the south of the Pebble deposit. In 1997, Teck Cominco did IP surveying, geochemical sampling and geological mapping, and drilled 20 holes into and around the Pebble deposit. Preliminary engineering studies carried out by CESL in 1991-1992 indicate several road access options, including a 130 km gravel access road connecting the Pebble project to a deep-draft ocean port site on Iniskin Bay. The State of Alaska has provided significant financial assistance for the construction of similar access roads and ports for major mineral development projects, such as that at the Red Dog Mine in northwestern Alaska. Power required for project development could be provided by natural gas from offshore wells in Cook Inlet, transported by pipeline to the mine site, where natural gas turbines would be situated. The preliminary engineering work also evaluated and selected a number of possible sites for processing facilities, a water source, accommodations, tailings storage, and waste rock disposal.

Preliminary metallurgical testing was conducted on various samples from the Pebble project during the period 1991 through 1994. In 1991, two independent metallurgical laboratories conducted grindability test work on six core samples. In 1992, flotation testing utilized material assaying 0.41% Cu and 0.34 g/t Au, comprised of 1.2% chalcopyrite, 12.3% pyrite and 86.5% host rock with minor amounts of molybdenite. Metallurgical testing in 1994 utilized a 310 kg composite sample of mineralization collected from 8 core drill holes. The holes were a good spatial mix from within the central part of the deposit.

Grindability test results among the various metallurgical programs were fairly consistent; the metric ballmill work index range is 15.6 to 17.5 kilowatt hours per tonne of mineralization (kWh/t), averaging 17.1 kWh/t. The grindability tests are initial tests and only provide information on the known mineralized area only. Test work comprised bench scale as well as lock cycle testing. A variety of grind sizes, pH conditions, reagent suites and simulated flow schematics were tried. The Pebble sulphide mineralization is fine grained and disseminated throughout the host rock as well as in the veins and veinlets that occur

throughout the deposit. As a result, much of the test work involved optimization of primary liberation size within a wide range.

Flotation (separation of minerals from waste rock in solution) test work was conducted during several programs from 1991 to 1994. The 1992 work utilized rougher, scavenger and cleaner flotation schematics. During the four years of test work, the range of recoveries obtained was 81% to 94% for copper and 60% to 84% for gold. The 1994 flotation results did not achieve the 1992 high results, but coarser grinds and various regrind schemes were investigated. Much of the work in 1994 included pyrite depression and separation, which reduced gold recovery. Results were not conclusive and additional test work will have to be done, including optimization of flotation, regrind and pyrite handling.

In 2001, HDGI staked the PEB claims to cover ground where Teck Cominco had detected a multi-element, soil-geochemical anomaly and high IP chargeability on two, widely spaced, reconnaissance lines. On the new PEB claims, HDGI collected and analyzed 601 soil samples and did 30-line km of IP/resistivity surveying.

During 2002, Northern Dynasty drilled 68 holes totaling 11,306 m exploring for additional porphyry deposits within which to define higher-grade resources. Four new mineral zones were discovered. One of these, the Thirty-Eight Zone, is a till-covered copper-gold porphyry deposit located 12 km south-southwest of the Pebble deposit. Some 86% of Teck Cominco's drill core from the Pebble deposit (16,000 m) was relogged and a sectional geological model was completed. Based on this model, the Pebble deposit resource was calculated (Snowden, 2003). Surface work included an 18.5 -line-km ground magnetometer survey; a 328-sample soil geochemical survey and a few man-days of geological traverses.

Prior to the 2003 drilling program, Northern Dynasty commissioned an independent mineral resource estimate. Inferred resources in the Pebble deposit were estimated to be 1.0 billion tonnes grading 0.40 g/t gold, 0.30% copper, and 0.015% molybdenum (0.61% copper-equivalent) above a cut-off grade of 0.30% copper-equivalent, and 271 million tonnes of 0.59 g/t gold, 0.43% copper and 0.018% molybdenum (0.86% copper-equivalent) above a cut-off grade of 0.70% copper equivalent.

In 2003, Northern Dynasty drilled 58 holes totaling 19,729 m to define higher-grade portions in the Pebble deposit and 9 holes totaling 1,987 m to test four other prospective zones. Limited surface exploration was conducted, consisting of 5 days of geological mapping and collection of 97 samples in three soil geochemical traverses.

Nine holes drilled on the Exploration Lands in 2003 included three holes at the Central IP Anomaly area, three holes at the Northeast IP Anomaly area, one hole at the 38 Porphyry Deposit and two holes at the 37 Skarn Zone. Drilling at the Central IP target intersected weak mineralization, indicating potential for porphyry mineralization at depth but not near to the surface. Drilling at the Northeast IP target indicates good potential for an extension to the Pebble deposit to the northeast. The 2003 drilling continued to indicate the presence of substantial porphyry mineralization at the 38 Porphyry Deposit. Drilling at the 37 Skarn intersected moderate gold and copper values; further work is necessary to fully determine the potential of the skarn mineralization.

Drilling on the Resource Lands in 2003 was designed to test for continuity and extensions of higher-grade zones within and adjacent to the deposit, and to further delineate the extent of the deposit. The program was successful in achieving both of these objectives and a new independent resource estimate was done in February 2004.

The estimated inferred mineral resource was 2.74 billion tonnes grading 0.55% copper-equivalent¹ (0.30 g/t Au, 0.27% Cu and 0.015% Mo above a cut-off grade of 0.30% copper-equivalent), containing 26.5 million ounces of gold and 16.5 billion pounds of copper. In addition, higher-grade material of 435 million tonnes grading 0.49 g/t Au, 0.42% Cu and 0.021% Mo, or 0.84% copper-equivalent above a cut-off grade of 0.70% copper-equivalent was also estimated.

¹Copper and gold equivalent calculations use metal prices of US\$0.80/lb for copper, US\$350/oz for gold, and US\$4.50/lb for molybdenum. The contained gold and copper represent estimated contained metal in the ground and have not been adjusted for metallurgical recoveries. Adjustment factors to account for differences in relative metallurgical recoveries for gold, copper and molybdenum will depend upon the completion of definitive metallurgical testing. $CuEQ = Cu \% + (Au \text{ g/t} \times 11.25/17.64) + (Mo \% \times 99.23/17.64)$

Property Geology

The Pebble property encompasses the eastern and southern margins of the approximately 200 square km in size, Late Cretaceous (89.7 Ma) in age, tonalite-granodiorite Kaskanak Batholith (coarse grained igneous rocks of intermediate composition, covering a large area), and the adjacent Jurassic-Cretaceous sedimentary and interbedded volcanic rocks that the batholith had intruded. On the east side of the batholith, a northeast-trending structural corridor is marked by a linear cluster of multi-phased, compositionally and texturally variable, irregular stocks, sills, dikes and breccia bodies (igneous bodies that are relatively small and circular, flat-lying, linear and structurally shattered, respectively) that are associated with and formed at the same time as the batholith. Numerous gold and copper-gold mineral occurrences, including the large Pebble and Thirty-Eight porphyry copper-gold-molybdenum deposits, are related to this diverse group of intrusions (coarse grained igneous rocks).

The Pebble deposit is a calc-alkalic porphyry (hosted by igneous rocks with potassium feldspar), encompassing four small granodiorite-quartz monzodiorite (coarse grained igneous rocks of intermediate composition) stocks and related sill-like intrusions. These stocks intrude folded and previously hornfelsed (metamorphosed) volcanoclastic (eroded and re-deposited volcanic rocks) sedimentary rocks that host earlier diorite sill-like intrusions, and later intrusion breccias (composed of angular fragments of intrusive rocks).

Mineralization

Mineralization consists principally of pyrite, chalcopyrite and molybdenite (common sulphide minerals of iron, iron-copper and molybdenum, respectively), occurring in and disseminated adjacent to stockworks (crosscutting network of veins) of fine veins in intrusive and sedimentary host rocks. Gold is present with the sulphides in a ratio of approximately 1 g/t gold to 1% copper. Mineralization is strongest within and around the upper parts of the granodiorite stocks and is associated with strong secondary potassium-silicate alteration and development of quartz vein stockworks. The deposit mineralization occurs over an area of at least 2.8 km by 2.2 km, and to a depth of 500 m, and is unconstrained to the east under Tertiary cover, to the south, southwest, and to depth. A phyllic and propylitic alteration envelope (potassic, phyllic and propylitic alteration consists of assemblages of minerals that are commonly associated with porphyry mineralization; they occur in successive zones or envelopes in the deposit), up to 5.5 km by 2.5 km in area, is present around the deposit and contains gold concentrations exceeding 100 parts per billion (ppb).

Primary copper-gold-molybdenum mineralization occurs throughout the zone of potassic alteration and is concentrated in and surrounding the upper parts of the granodiorite stocks. Copper occurs in chalcopyrite as disseminated grains and along sulphide-rich veins. Most gold grains are a few microns in diameter and occur near grain boundaries of pyrite and chalcopyrite. The pyrite content is low in the zone of potassic alteration. The overall ratio of gold grade (in g/t) to copper grade (in %) is about one. Molybdenite commonly occurs in quartz + pyrite veins and veinlets. The central higher-grade portions of the deposit contain >200 parts per million (ppm) molybdenum.

The intrusive complex is defined by widely spaced drilling, extending south from the southern edge of Pebble deposit for 1.5 km and with a width on the order of 600 m. Relatively sparse drilling defines persistent low-grade (0.2 to 0.3 g/t Au and 0.07 to 0.1% Cu) mineralization in this intrusion breccia. It is not clear if this mineralization is related to additional granodiorite stocks at depth (none have been encountered in drilling) or if it is related genetically to one or more of the older intrusive phases. High copper concentrations occur where the intrusive complex was intruded by the granodiorite; this might be

related to a subordinate copper/gold contribution from one or more of the earlier intrusive phases, combined with the main copper mineralizing phase related to the later granodiorite.

Gold mineralization, in the range 0.5 to 1.5 g/t, is widespread in the zone of phyllic alteration bordering the zone of potassic alteration and propylitic alteration zone in diorite/gabbro to the northwest of the deposit (Hole 1 Gold Zone). Copper concentrations are very low in these areas. Gold mineralization is also associated with phyllic and locally k-feldspar alteration zones, up to a few metres wide, cutting across the major potassic alteration zone. Some of the phyllic zones are envelopes of quartz-pyrite-(sericite-chlorite) veinlets and veins. Some crosscutting zones of phyllic alteration contain strongly anomalous concentrations of zinc, lead, and silver; some also contain strongly anomalous concentrations of gold. These zones represent a later, lower-temperature phyllic alteration that was superimposed on earlier, higher-temperature potassic alteration.

Exploration in 2004

The 2004 program involved collection of engineering, environmental and socioeconomic data required for the completion of feasibility studies and the commencement of preparation of permitting applications. The program encompassed approximately 130,000 feet (40,000 m) of drilling, including holes to establish measured and indicated resources and others to collect geotechnical, metallurgical and hydrological data to use for mine planning for the Pebble deposit. Some exploratory drilling for new zones and unexplored targets was also done and enabled the Company to complete the 60,000 feet of drilling required exercise its option on the Exploration Lands (67,651 feet had been completed to September 30, 2004).

In 2004, core drilling by Northern Dynasty was targeted primarily in and adjacent to the Pebble deposit where 132 geology holes, totaling 32,826 m, and 26 metallurgy holes, totaling 6505 m, were completed in the Resource Lands, and 15 holes, totaling 7177 m, were completed in the Exploration Lands to test for continuity and extensions of higher-grade zones. One hole, totaling 263 m, was drilled in the southwestern part of the Exploration Lands to test an IP/resistivity anomaly. Various sites for proposed tailings and waste disposal were tested by 53 engineering holes, totaling 2,778 m.

This drilling identified a significant, new porphyry centre (the East Zone) on the eastern side of the Pebble deposit beneath a cover of Tertiary rocks that apparently thickens to the east (Figures 2 and 3). The characteristics of the East Zone indicate a setting proximal to a thermal and fluid centre. These include intense biotite (potassic) alteration, a high density of early-stage quartz veins, the extent to greater depth of strong Au-Cu-Mo mineralization and alteration, the presence of numerous granodiorite sills and dykes at depth, and the weakness of late-stage, lower-temperature alteration overprints. The source of heat and fluids for the East Zone may be a stock of granodiorite below and/or to the east of the current drilling. The East Zone is unconstrained to the east, northeast and southeast under Tertiary cover, and to depth. Considerable additional drilling will be necessary to adequately assess its full extent.

Figure 2 Drill Hole Plan Pebble Deposit

Figure 3 Cross Section Pebble Deposit

In the Pebble deposit, potentially economic mineralization extends over a known area of 3 km by 2.2 km and to a depth of 600 m in the Central zone, and to a depth of 800 m in the East Zone. A phyllic alteration envelope around the deposit is up to 5.5 km by 2.5 km in area and contains abundant gold concentrations over 100 ppb (0.1 g/t).

The intrusive and intrusive breccia complex that extends south for more than 1.5 km from the presently defined southern edge of the deposit has been tested mainly by shallow and widely spaced holes. Alteration assemblages indicate that is a prospective area for exploration for another porphyry copper-gold centre. The margins of the intrusive complex are zones that may have undergone multiple stages of dilation, intrusion and hydrothermal activity, which could be conducive to formation of higher-grade copper-gold mineralization; these also warrant further drill testing.

In 2004, a drill hole in the southwestern part of the Exploration Lands intersected a 247-m long zone of porphyry-style mineralization in an arm of the Kaskanak batholith that extends southwest from the main batholith into a broad area of hornfelsed, andesitic sedimentary rocks, which on surface contains 2-5% disseminated pyrite. This 308 Zone is similar in character and grade to the Thirty-Eight Zone a few

kilometers to the east-northeast. To determine the extent and grade of the 308 Zone will require further drill testing.

Estimates of Mineralization – Pebble Deposit

Subsequent to year end in March 2005, a new resource estimate based on diamond drilling programs by Northern Dynasty up to and including 2004 and previous drilling by Teck Cominco through to 1997, was announced. The estimate, completed by Roscoe Postle Associates, Inc., shows that Pebble deposit contains a Measured and Indicated Mineral Resource of 3.03 billion tonnes grading 0.28% Cu, 0.32 g/t Au, and 0.015% Mo (0.56% copper equivalent²), with an additional Inferred Mineral Resource of 1.13 billion tonnes grading 0.24% Cu, 0.30 g/t Au, and 0.014% Mo (0.50% copper equivalent) above a cut-off grade of 0.30% copper equivalent. The Measured and Indicated Resource contains 31.3 million ounces of gold 18.8 billion pounds of copper and nearly 1 billion pounds of molybdenum. A higher-grade Measured and Indicated Mineral Resource core consists of 569 million tonnes grading 0.46% Cu, 0.50 g/t Au, and 0.021% Mo (0.88% copper equivalent) above a cut-off grade of 0.70% copper equivalent. A technical report by independent qualified persons D.W. Rennie, P.Eng., and R.M. Srivastava, P.Geo., can be found at www.sedar.com.

Mineral resources that are not mineral reserves do not have demonstrated economic viability.

²Copper-equivalent calculations use metal prices of US\$1.00/lb for copper, US\$400/oz for gold, and US\$6.00/lb for molybdenum. $CuEQ = Cu \% + (Au \text{ g/t} \times 12.86/22.06) + (Mo\% \times 132.28/22.06)$. Copper-equivalent has not been adjusted for metallurgical recoveries. Adjustment factors to account for differences in relative metallurgical recoveries for gold, copper and molybdenum will depend upon the completion of definitive metallurgical testing.

Sampling, Analysis, Security and Quality Assurance/Quality Control Procedures

During the period 1988-1997, several phases of soil geochemical surveys in the northeastern part of the property were completed with a total of 7,337 samples collected. As well, a total of 164 core drill holes were completed prior to 2002. Samples of the NQ (6.3 cm diameter) drill core generally consisted of 3.05 m (10 ft) lengths of half core that was split using a mechanical core splitter. Holes within the Pebble deposit were sampled from top to bottom whereas in some outlying holes, sampling was more selective and related to mineralized intervals.

All Pebble deposit core samples were analyzed for gold (Au). Copper (Cu) assays were done for samples from Hole 4 onward. Molybdenum assays were done on some drilling campaigns, representing 83.7% of the assay database in the Pebble deposit. Multi-element Inductively Coupled Plasma (ICP) analysis was also done on every sample beginning with hole 15. In the Sill area, samples from selected core intervals were analyzed for Au and silver (Ag).

The 1997 drill core samples were prepared by drying, then crushing to 10 mesh (<2mm); a 250 g portion was pulverized to 200 mesh (<75 microns). The sample was analyzed for Cu using an Aqua Regia (AR) digestion and Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES). Au was analyzed using Fire Assay (FA) on a one assay ton sample with an Atomic Absorption Spectrometry (AAS-AES) finish. Trace elements were also analyzed by AR digestion and ICP-AES. One blind standard was inserted for every 20 samples analyzed. One duplicate sample was taken for each ten samples analyzed. The 1997 drill hole samples were check analyzed with excellent correlation for Cu and good correlation for Au. Every 40 soil samples analyzed included four random repeats, one standard and one blank sample. There was excellent correlation for Cu among these samples and good to adequate Au correlation.

Northern Dynasty personnel or agents collected all samples during the 2001-2004 programs. A total of 658 analytical results were received for soil samples from 601 locations in 2001, and 374 analytical results for soil samples from 341 locations in 2002. The results included 30 lab duplicates and 60 lab

standards. In 2001, samples were air dried, then shipped by airfreight from the project site to Acme Analytical Laboratories ("Acme") in Vancouver, B.C. via Anchorage, Alaska. At Acme, the soils were dried and sieved through an 80-mesh screen and then analyzed for 32 elements using two methods. Au content was determined to the 0.2 ppb level using the Acme Group 3A wet digestion method. A 10 g sample was digested in AR, and analyzed by Graphite Furnace Atomic Absorption Spectroscopy or Inductively Coupled Plasma Mass Spectroscopy (ICP-MS) finish. The Acme Group 1D multi-element method was used on a minimum one gram pulp to determine other elements and gold to the ppm level. In this method, the samples were digested in hot AR and analyzed by ICP-AES.

For all Northern Dynasty drilling programs, core is boxed at the drill rig and transported daily by helicopter to the secure core logging facility in Iliamna, Alaska, where it is geologically logged and digital photographs of each box of core taken prior to sampling. These images were archived on electronic data storage disk, and provide an indication and record of the core recovery and rock quality. Sampling is performed by mechanically splitting the core in half lengthwise. The remaining half core was returned to the core boxes and is stored at a secure Iliamna warehouse. Samples were placed in bags and stored in a locked aircraft hangar prior to shipping via twice-weekly scheduled air service to Anchorage. From Anchorage, the samples are taken by commercial surface transport to sample preparation laboratories at Fairbanks, Alaska.

A total of 2,467 core samples, averaging 3.9 m in length, were taken from the 68 NQ2 (5.02 cm diameter) core holes drilled during 2002. All core drilled was sampled, except for 170 m of overlying Tertiary volcanic rocks in holes 2036 and 2040. In 2002, sample preparation was done at ALS Chemex's Fairbanks laboratory. Each sample bags was verified against the numbers listed on the shipment notice. The entire sample of drill core was dried, weighed and crushed to 70% passing 10 mesh (1.7 mm), then a 250 g split was taken and pulverized to 85% passing 200 mesh (75 micron). The pulp was split, and approximately 125 g shipped by commercial airfreight for analysis at ALS Chemex, North Vancouver, British Columbia, an ISO 9002 certified laboratory. The remaining pulps were shipped to the Company's secure warehouse at Port Kells, BC. The coarse rejects were held for several months at the Fairbanks laboratory until all Quality Assurance/Quality Control (QAQC) measures were completed, then discarded.

All 2,467 samples taken during the 2002 program were analyzed for Au by FA and for 34 elements, including Cu and molybdenum (Mo), using a standard multi-element geochemical method. In addition, several drill holes exhibiting copper-gold porphyry style mineralization were subject to Cu assay level determinations, and a few Mo assay level determinations were also performed. Au content was determined by 30 g FA fusion with lead as a collector and an AAS finish. The four samples that returned Au results greater than 10,000 ppb (10 g/t) were re-analyzed by 1 assay ton FA fusion with a gravimetric finish. All samples were subject to multi-element analysis for 34 elements, including Cu and Mo, by AR digestion with ICP-AES finish. A total of 1,822 samples from 31 holes drill holes exhibiting porphyry-style mineralization were assayed for Cu by four-acid (total) digestion with an AAS finish to the ppm level. For Cu assays >10,000 ppm, another total digestion-AAS finish analysis was performed to the percent level. A further 61 samples from drill hole 2034 were assayed for Mo by four-acid digestion-AAS finish to the ppm level.

As part of Northern Dynasty's analytical QAQC program, Cu-Au-bearing or Au-bearing standard reference samples were inserted with the regular samples. The 118 analyses of these standards represent over 5% of the total samples analyzed. For drill holes 2044 through 2068, an in-line reject duplicate was made and analyzed with the regular samples. The 65 analyses of duplicates, represents 4% of the total number of samples in this series. These standards and duplicates are in addition to the laboratory's internal quality control work. Inter-laboratory analysis included a total of 25 pulp duplicates analyzed for gold, and 13 reject duplicates analyzed for gold and four ¼ core reject splits assayed for metallic gold by Acme in Vancouver.

In 2003, SGS Minerals Services (“SGS”) laboratories completed all analytical work. A total of 6,443 drill core samples, averaging 3.3 m in length, were taken from the 19,552 m drilled in this program. At SGS in Fairbanks, the sample bags were verified against the numbers listed on the shipment notice. The entire sample was dried, weighed, crushed to 75% passing 2 mm (10 mesh), a 400 g split taken and pulverized to 95% passing 75 micron (200 mesh). The pulp was split and 125 g shipped by commercial air freight. In June 2003, 96 soil samples were taken, expanding the surface geochemical survey coverage. These samples were sent to SGS in Fairbanks Alaska, dried at 60° C and sieved through an 80-mesh screen. All samples were shipped to SGS Canada Inc., an ISO 9002 registered ISO 17025 accredited laboratory in Toronto, Ontario, for AR digestion ICP-AES and Cu analyses. Au was determined by one assay ton (30 g), lead collection FA fusion with an AAS finish at the SGS laboratory in Rouyn, Québec.

Gold was determined at the SGS laboratory in Rouyn, Québec, by one assay ton (30 g), lead collection FA fusion with an AAS finish. Ten samples with Au results greater than 2,000 ppb (2 g/t) were reanalyzed by 30 g FA fusion with a gravimetric finish. All samples were subject to multi-element analysis, for 33 elements including Cu and Mo, by AR digestion ICP-AES finish. Total Cu content was determined for all 6,226 drill core samples taken from porphyry-style deposits. Samples were fused with sodium peroxide, digested in dilute nitric acid and the solution analyzed by ICP-AES, results reported in percent. Five drill holes were not assayed for Cu by peroxide fusion: hole 3103 drilled on the Hole 5 Zone, holes 3088 and 3090 drilled on the 37 Skarn Zone, and holes 3107 and 3109 drilled on the North IP Anomaly target. Copper results for these holes are by multi-element ICP. The remaining pulp was shipped to the Company’s Port Kells warehouse. The coarse reject is stored at the Fairbanks laboratory.

Drilling, sampling and QAQC are supervised by qualified persons employed by Northern Dynasty. Core samples were logged and identified in the field with consecutively numbered sample tags, on which the analytical QAQC designations for standards and duplicates were pre-marked. In the 2003 program, Au-Cu-bearing or Cu-bearing standard reference samples were inserted with the regular samples. The 331 blind analyses of standards represent over 5% of the total samples analyzed. A total of 381 reject duplicate samples were also prepared and analyzed at the ALS Chemex, representing a further 6% of the total. The program is separate from the internal procedures used at the analytical laboratory.

In 2004, NQ2 (5.02 cm), HQ (6.35 cm) and PQ (8.31 cm diameter) core was drilled. The drill core was boxed at the drill rig and transported daily by helicopter to Northern Dynasty’s secure logging facility at the village of Iliamna, AK. Between May and October 2004, 49,533 m (162,510 feet) were drilled in 227 holes. The 13,208 samples taken in this Phase averaged 3 m (10 feet) in length.

The 2004 drilling program included 26 large diameter holes for metallurgical testing. A total of 1990 samples were taken from these holes for analysis. Samples were taken by cutting an off-center slice representing 20% of the core volume, which was submitted for analysis. The remaining 80% was used for metallurgical purposes.

ALS Chemex laboratory in Fairbanks, Alaska, performed sample drying and crushing. ALS Chemex Laboratories of North Vancouver, an ISO 9001:2000 registered laboratory pulverized the samples and performed the analytical work for the 2004 drill program. All 13,208 samples were analyzed for 25 elements, including copper (Cu) and molybdenum (Mo), by a four acid digestion multi-element method. All samples, except for 188 Tertiary waste rock characterization samples, were analyzed by fire assay for gold (Au).

Gold content was determined by one assay ton (30 g) lead collection Fire Assay (FA) fusion with an Atomic Absorption Spectroscopy (AAS) finish, with results reported in parts per million (ppm). One sample which returned Au results greater than 10 ppm was re-analyzed by 30 g FA fusion with a gravimetric finish, with results reported in ppm. Total copper content was determined by four acid (HF-HNO₃-HClO₄-HF-HCl) digestion and the solution analyzed by Inductively Coupled Plasma – Atomic Emission Spectroscopy (ICP-AES) with results reported in ppm. All samples were subject to multi-element analysis for 25 elements, including Cu, Mo and S, by four acid digestion with an ICP-AES finish.

Coarse rejects are stored at Delta Junction, Alaska. Remaining pulps have been shipped for long term storage to Northern Dynasty's secured warehouse at Port Kells, B.C.

Drilling, sampling and QAQC are supervised by qualified persons employed by Northern Dynasty. Core samples were logged and identified in the field with consecutively numbered sample tags, on which the analytical QAQC designations for standards and duplicates were pre-marked. In the 2004 program, Au-Cu-bearing standard reference samples and unmineralized blank samples were inserted with the regular samples. The blind analyses of 688 standards and 167 blanks represent over 6% of the total samples analyzed. A total of 658 reject duplicate samples were also prepared and analyzed at the Acme Analytical Laboratories in Vancouver, BC, representing a further 5% of the total. The program is separate from the internal procedures used at the analytical laboratory.

Engineering Studies in 2004

Preliminary Assessment

In November, 2004, a preliminary economic assessment of the Pebble project was done based on an early 2004 resource estimate. The following is a summary of the technical report, entitled "Preliminary Assessment of the Pebble Gold-Copper-Molybdenum Project, Iliamna Area, Alaska, USA" November 2004 by qualified persons Derek J. Barratt, P.Eng., and Peter G. Beaudoin, P.Eng., filed on www.sedar.com.

The Preliminary Assessment was prepared in order to quantify the Pebble project's cost parameters and to provide guidance for the ongoing engineering work that will ultimately define the optimal scale of production. Preliminary forec