

**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

**Form 6-K**

**Report of Foreign Private Issuer**

**Pursuant to Rule 13a-16 or 15d-16  
of the Securities Exchange Act of 1934**

For the month of May 2007

Commission File Number 000-51690

**Baja Mining Corp.**

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*(Translation of registrant's name into English)*

**2350 – 1177 West Hastings Street,  
Vancouver, British Columbia T2N 1X7**

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*(Address of principal executive offices)*

**Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.**

Form 20-F ☐

Form 40-F ☒

**Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):** ☐

**Note:** Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

**Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):** ☐

**Note:** Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

**Indicate by check mark whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.**

Yes ☐

No ☒

**If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b):** 82 -

## **TABLE OF CONTENTS**

1. Press Release dated May 29, 2007

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

**Baja Mining Corp.**  
(Registrant)

Date: May 29, 2007

By: /s/ John Greenslade

John Greenslade  
President



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May 29, 2007

TSX:BAJ

## NEWS RELEASE

### BAJA MINING COMPLETES DEFINITIVE FEASIBILITY STUDY

#### **ROBUST ECONOMICS CONFIRMED**

Baja Mining Corp. (the "Company") is pleased to announce the completion of the Definitive Feasibility Study ("DFS") for the Boleo project located at Santa Rosalia, Baja California Sur, Mexico. The DFS is based on long-term prices of \$1.50/lb copper, \$15/lb cobalt and \$1,200/t zinc sulphate, unless otherwise stated. All dollar amounts are in United States dollars.

#### **Highlights:**

- Commercial life of mine average cash cost of negative \$0.07/lb of produced copper, net of by-product credits
- Direct capital costs of \$407 million, an increase of only 2.5% above the capital costs outlined in the Company's January 2007 Updated Preliminary Economic Analysis ("PEA")
- Average annual production, for the first four years of full production:
  - Copper cathode: 55,750 tonnes
  - Cobalt cathode: 1,535 tonnes
  - Zinc contained metal: 6,300 tonnes
- Proven and probable reserves provide for 25-year mine life
- More than 275 million tonnes of measured and indicated resources grading 1.77% copper equivalent
- More than 250 million tonnes of inferred resources grading 1.29% copper equivalent
- After-tax IRR of 24.7%, or 46.0% at current market prices
- After-tax NPV (at 8% discount rate) of \$700 million or \$2.3 billion at current market prices

- Upside from potential manganese production is still available and will increase the base case NPV by an additional \$302 million.
- Manganese (contained in manganese carbonate) production could exceed 100,000 tonnes/year at the current design capacity.

John Greenslade, President, commented “the Company is pleased with the improvements confirmed since the Updated PEA, particularly with the increased resource estimate that will facilitate increased near-term copper production. The DFS has confirmed Boleo’s already robust economics while keeping capital costs in check. Baja Mining is now firmly positioned to complete the financing and construction of the Boleo Project and we look forward to bringing the Project into production.”

#### DFS Advisors

The DFS incorporates capital and operating cost estimates prepared by Bateman Engineering (“Bateman”) and Wardrop Engineering (“Wardrop”) for the process plant and mine plan developed by Agapito Associates, Inc (“AAI”), Australian Mine Design and Development (“AMDAD”) and Wardrop in accordance with NI 43-101 standards.

#### Project Description

The Boleo Cu-Co-Zn-Mn Project is located on the east coast of Baja California Sur, Mexico near the town of Santa Rosalia. The deposit contains seven (7) mineralized seams (“mantos”), stacked within a single formation, all dipping gently to the east towards the Sea of Cortez in a step-like fashion, due to post depositional faulting.

The Project consists of approximately 11,000 hectares of mineral concessions and 7,000 hectares of surface occupancy rights, each assembled as a contiguous titled block. The Project is located within the “buffer zone” of the El Vizcaino Biosphere, a Mexican National environmental reserve. An Environmental Impact Manifest (EIM) was submitted in early 2006, and approved by the Mexican authorities in December 2006. The Company has also received authorization to commence development of the Project within the Biosphere.

The Project is to be developed as a series of underground mines using conventional soft rock mining methods, after which small open-cut mines will feed ore to a processing plant utilizing a two stage leaching circuit followed by solid/liquid separation and Solvent Extraction – Electrowinning to produce copper and cobalt as LME Grade metal and zinc as zinc sulphate.

#### Resource Model

Updated resource estimates (April 2007) have been prepared by Hellman & Schofield Pty Ltd (“H&S”) that include all results of the 2006 in-fill drill program. Total Measured and Indicated resources have increased to a level sufficient to support a 25 year project life.

Total reported Measured, Indicated and Inferred resources, estimated using 3D block models, are based on Copper equivalent (CuEq) cut-off grade of 0.5%. (CuEq =  $\text{Cu} + 15\text{Co}/1.50 + 1.20\text{Zn}/1.50$ )<sup>1</sup>. The block models were used for open cut mine design.

<b>Description Block Model</b>	<b>Tonnes (x millions)</b>	<b>CuEq.%</b>	<b>Cu%</b>	<b>Co%</b>	<b>Zn%</b>	<b>Mn%</b>
<b>Resources</b>						
<b>Measured</b>	74.6	2.09	0.93	0.08	0.48	2.72
<b>Indicated</b>	202.6	1.65	0.62	0.05	0.66	3.10
<b>Total M &amp; I</b>	277.2	1.77	0.70	0.06	0.62	3.00
<b>Inferred</b>	253.2	1.29	0.39	0.04	0.63	2.65

1. Mn is not considered in the equivalency formula.

For underground mine planning purposes, gridded seam models were produced to target higher grade copper mineralization situated towards the base of each manto in order to enable higher copper production and reduce dependence on by-product credits in the early years of the project. Gridded seam model resources are contained within the above block model and are not in addition to it. Resources for the gridded seam models follow and are based on the same CuEq cut-off and CuEq formula as used for the block models.

<b>Description Seam Model</b>	<b>Tonnes (x millions)</b>	<b>CuEq.%</b>	<b>Cu%</b>	<b>Co%</b>	<b>Zn%</b>	<b>Mn%</b>
<b>Resources</b>						
<b>Measured</b>	61.1	2.39	1.17	0.08	0.55	2.58
<b>Indicated</b>	85.8	2.02	0.84	0.06	0.73	3.13
<b>Total M &amp; I</b>	146.9	2.17	0.97	0.07	0.66	2.90
<b>Inferred</b>	85.6	1.67	0.52	0.05	0.81	3.10

1. Mn is not considered in the equivalency formula.

Under NI 43-101 that portion of the Block and Seam resource models covered by mine plans are allowed to be classified as reserves. The following reserves are contained within the above resource models and are not separate from them. The same copper equivalent cut-off grade of 0.5% and copper equivalent formula have been used (CuEq =  $\text{Cu} + 15\text{Co}/1.50 + 1.20\text{Zn}/1.50$ )<sup>1</sup>.

<b>Description Block Model</b>	<b>Tonnes (x millions)</b>	<b>CuEq.%</b>	<b>Cu%</b>	<b>Co%</b>	<b>Zn%</b>	<b>Mn%</b>
<b>Open Cut Reserves</b>						
<b>Proven</b>	11.1	2.03	0.75	0.10	0.37	2.74
<b>Probable</b>	6.5	1.75	0.70	0.07	0.48	3.08

1. Mn is not considered in the equivalency formula.

<i>Description Seam Model</i>	<i>Tonnes (x millions)</i>	<i>CuEq.%</i>	<i>Cu%</i>	<i>Co%</i>	<i>Zn%</i>	<i>Mn%</i>
<b>Underground Reserves</b>						
<b>Proven</b>	29.8	2.54	1.69	0.08	0.46	2.38
<b>Probable</b>	37.6	2.19	1.34	0.07	0.69	3.36

1. Mn is not considered in the equivalency formula.

### **Mining:**

Both surface and underground mining operations are planned for extracting ore for the first 25 years at a full mining rate exceeding 3.1 million dry metric tonnes per annum. Approximately 68 million tonnes of ore will be mined from underground operations and 9 million tonnes from surface open cuts. Approximately 18.8 million tonnes of limestone will also be quarried for use in the plant process.

Geotechnical information on the seam formation and low material strength of the mantos suggested that conventional “soft rock” mining methods such as those used in underground coal, potash or salt mining would be successful. Room-and-pillar mining using continuous miners was chosen because of the method’s flexibility for changing layout designs, its efficient recovery of resources and lower initial capital cost. The resource block seam model was used to define manto areas that could be mined.

Underground mining plans for high grade copper targets have been prepared for mantos 1, 2, 3 and 4 by AAI. These plans focus on a strategy based on advancing a narrow set of mine workings into areas identified with high grade copper and then retreat mining the mantos and allowing the ground to collapse after removing the ore.

Surface mining plans for mantos 2, 3a, 3aa, and 3, as well as the limestone quarry have been prepared by AMDAD. The first 25 years focus on first providing limestone rock to the plant process and then manto ore after underground mined ore grades fall to comparable levels.

### **Process Plant**

The process plant is being designed to treat 3.1 million dry metric tonnes per annum at a head grade of 2.2% copper, 0.1% cobalt and 0.6% zinc through an integrated hydrometallurgical facility to produce LME Grade ‘A’ copper cathode; high purity (>99.8% Co) cobalt cathodes and zinc sulphate monohydrate. A conservative ramp-up rate of 4 years is assumed before achieving design throughput of ore, however the run-of-mine ore grades are highest in these years and copper production will still reach the capacity of the electrowinning circuit by year three (3). Recovery of cobalt and zinc will commence in year 2, allowing an accelerated construction schedule for copper production and a focused technical effort on the start-up of the copper circuit.

The process plant design includes a 2,400 tonnes/day (t/d) acid plant with a cogeneration facility to produce electrical energy from the burning of sulphur. It is expected that the acid plant will generate essentially all of the power requirements of the process and electrowinning plants as well as the desalinated water requirements. The leach circuit will utilize sea water. The potential value of carbon credits that may be available from the use of a heat recovery system to increase the production of power has not been incorporated into the economic analysis of the project.

Marketing of the copper and cobalt products is assumed to be through a metal trading company as an off-take partner. "Expressions of Interest" have been received from several potential partners and it is expected that transfer of title for the products would occur at, or close to, the plant gate to assist the company with minimizing working capital requirements. Marketing of zinc sulphate is assumed to be done by agents who are expert in the business and allowances have been made for freight to the markets and agents' commissions in the net price received.

### **Capital Costs:**

Capital costs have been prepared by Bateman, Wardrop, AMDAD, AAI and the Company. The estimated direct capital cost of the project, excluding working capital requirements, is \$407 Million. The total project cost, including Engineering, Procurement, and Construction Management, Owner's Costs, and 12.5% overall Contingency is \$568 Million. A summary of capital costs is listed below:

<i><b>Project Area</b></i>	<i><b>Capital Cost</b></i>
<b>Overall Site</b>	\$39,142,000
<b>Mining</b>	\$59,678,000
<b>Process Plant</b>	\$160,322,000
<b>Site Services</b>	\$94,285,000
<b>Buildings</b>	\$14,956,000
<b>Construction Indirects and Freight</b>	\$39,063,000
<b>Direct Field Costs</b>	\$407,446,000
<b>EPCM</b>	\$45,805,000
<b>Contingency</b>	\$62,349,000
<b>Owner's Costs</b>	\$36,773,000
<b>Mine Pre-development</b>	\$16,019,000
<b>Total DFS Value</b>	\$568,392,000

Mine and Mine Pre-Development capital costs are as at April 30, 2007.

The remainder of capital costs are as at 31 July 2006 and exclude escalation.



### Production and Operating Costs:

Start-up of the process plant is scheduled for end of second quarter, 2009. Provision has been made for a ramp-up to full production capacity over the first four years. No cobalt or zinc sulphate production is scheduled in year one, with recoveries reduced in year two, while the cobalt and zinc circuits are being brought into production. As the first year is a partial year of production, it has not been included in the following tables.

<i><b>Base Case Production Summary</b></i>						
	<u>Yrs 2-5</u>	<u>Yrs 6-10</u>	<u>Yrs 11-15</u>	<u>Yrs 16-20</u>	<u>Yrs 21-25</u>	<u>Average</u>
<b>Ore Treated (kt/y)</b>	2,828	3,120	3,120	3,120	3,120	3,071
<b>Grade: % Cu</b>	2.15	1.80	1.60	1.05	0.93	1.52
<b>% Co</b>	0.071	0.067	0.074	0.091	0.084	0.076
<b>% Zn</b>	0.36	0.46	0.59	0.61	0.77	0.57
<b>% Mn</b>	2.02	2.50	2.46	3.30	4.21	2.93
<b>Production (t/y):</b>						
<b>Copper</b>	55,755	51,389	45,486	29,909	26,391	41,204
<b>Cobalt</b>	1,535	1,644	1,796	2,222	2,061	1,865
<b>Zinc Sulphate</b>	17,917	26,702	34,361	35,692	45,131	32,546

<i><b>Unit Operating Costs, without Mn production (expressed in \$/tonne of ore treated)</b></i>						
	<u>Yrs 2-5</u>	<u>Yrs 6-10</u>	<u>Yrs 11-15</u>	<u>Yrs 16-20</u>	<u>Yrs 21-25</u>	<u>Average</u>
<b>Mining</b>	\$9.87	\$7.67	\$8.15	\$7.94	\$5.10	\$7.62
<b>Process</b>	\$20.80	\$20.51	\$20.87	\$19.77	\$22.83	\$20.96
<b>G&amp;A, Sales</b>	\$1.56	\$1.71	\$1.98	\$2.02	\$2.34	\$1.94
<b>Total (\$/t)</b>	\$32.24	\$29.89	\$30.99	\$29.72	\$30.72	\$30.53
<b>Cash cost* \$/lb</b>	\$0.18	\$0.06	\$(0.04)	\$(0.36)	\$(0.48)	\$(0.07)
<b>Cash Flow \$000/yr</b>	\$196,925	\$116,007	\$107,086	\$85,661	\$89,303	\$115,749

\*Cash cost/lb of Cu is net of cobalt and zinc credits. Cash flows are after-tax, using Base Case prices of \$1.50/lb Cu, \$15/lb Co and \$1,200/tonne ZnSO<sub>4</sub>.

When production of manganese carbonate commences the costs shown above will increase somewhat due to the requirement for additional reagents (soda ash) and distribution costs of the product. The estimated production, and costs, when manganese is recovered are shown in the table above.

<i><b>Production and Costs, with Mn production (assuming Mn starts in 2011)</b></i>						
	<u>Yrs 2-5</u>	<u>Yrs 6-10</u>	<u>Yrs 11-25</u>	<u>Yrs 16-20</u>	<u>Yrs 21-25</u>	<u>Average</u>
<b>MnCO<sub>3</sub> prod'n</b>	66,673	134,359	132,446	177,304	226,365	144,603
<b>Mn contained</b>	30,866	63,149	62,250	83,333	106,392	67,693
<b>Unit Op cost (\$/t)</b>	\$37.54	\$39.73	\$40.69	\$42.71	\$46.85	\$41.73
<b>Cash cost* of Cu</b>	\$(0.04)	\$(0.44)	\$(0.60)	\$(1.49)	\$(2.12)	\$(0.77)
<b>Cash Flow \$000/yr</b>	\$217,817	\$156,544	\$147,208	\$139,077	\$158,953	\$161,674

\*Cash cost/lb of Cu is net of by-product credits. Cash flows are after-tax, using Base Case prices of \$1.50/lb Cu, \$15/lb Co and \$1,200/tonne ZnSO<sub>4</sub>.

### **Project Economics:**

Project economics are presented for four cases: 1) Base Case; 2) Base Case with Manganese production; 3) Five Year Average (three year trailing plus two year leading) Price case; and 4) the current prices scenario. No manganese production is assumed for cases three and four.

#### **1) Base Case:**

Base Case economics for the project have been developed using long-term metal prices of \$1.50 per pound of copper, \$15.00 per pound of cobalt, and \$1,200 per metric tonne of zinc sulphate monohydrate. The LME five year forward price curve for copper has been used for pricing in the first three years of production with an extrapolated transition to the long term price in the fourth year.

#### **2) Base Case with Manganese Recovery:**

The Boleo deposit is endowed with a rich resource of manganese which is now being recognized as being in short supply. Manganese prices have more than doubled in recent months and manganese metal is now selling in the US in excess of \$4,000/tonne. The process selected for the project enables recovery of manganese (as manganese carbonate) with very little additional capital investment (approximately \$20 Million) and utilizes uncomplicated technology. The market for manganese carbonate is limited but the material can be further processed into metal, electrolytic manganese dioxide (EMD), or manganese sulphate. For the purpose of evaluating this project it has been assumed that manganese carbonate can be sold, as an intermediate product, for \$650/tonne and that it will be necessary to ship it offshore for further processing. The assumed price is less than one third of the current value of the contained metal to allow for third party conversion costs and a potential decline in overall prices from current levels.

### 3) Five Year Price Case:

For comparison purposes the project economics are also shown using the weighted average three year trailing plus two year leading price for copper and cobalt (\$2.25/lb and \$16.00/lb). **No manganese production is assumed for this case.**

### 4) Current Price Case:

The Base Case prices are considerably lower than current prices, which as of mid-May, 2007 are approximately \$3.50/lb for copper, \$30.00/lb for cobalt, and \$1,500/tonne for zinc sulphate. A case is shown using current prices but the Company does not expect that current prices will be sustained over the long term and the case is shown for comparative purposes only. **No manganese production is assumed in this case.**

	<u>Base Case</u>	<u>Base Case w. Mn</u>	<u>5 Yr Avg prices</u>	<u>Current Prices</u>
<b>IRR – Pre-tax</b>	29.4%	32.5%	32.7%	53.9%
<b>IRR – After tax</b>	24.7%	27.5%	27.7%	46.0%
<b>NPV* @ 0%</b>	\$2,218	\$3,297	\$3,229	\$6,388
<b>NPV @ 6%</b>	\$924	\$1,345	\$1,366	\$2,913
<b>NPV @ 8%</b>	\$700	\$1,020	\$1,045	\$2,313
<b>NPV @ 10%</b>	\$531	\$777	\$803	\$1,860

\*Note: all NPVs are after-tax

### Sensitivities:

The project is most sensitive to 4 key variables: copper price, cobalt price, capital costs, and operating costs. The sensitivity of the after-tax IRR and NPV (at 8% discount rate) relative to the Base Case (without manganese) are shown in the table below to indicate the effect of + or – 10% changes in the key variables.

	<u>After Tax IRR</u>			<u>NPV @ 8% (\$Millions)</u>		
	<u>-10%</u>	<u>Base Case</u>	<u>+10%</u>	<u>-10%</u>	<u>Base Case</u>	<u>+10%</u>
<b>Copper price</b>	21.6%	24.7%	27.5%	\$571.5	\$700.3	\$821.5
<b>Cobalt price</b>	24.1%	24.7%	25.3%	\$662.9	\$700.3	\$737.7
<b>Capital cost</b>	27.3%	24.7%	22.3%	\$743.6	\$700.3	\$652.2
<b>Operating cost</b>	26.0%	24.7%	23.4%	\$765.2	\$700.3	\$635.4

### Current Activity:

#### Site Preparation:

Environmental permit requirements to re-locate flora and fauna at several identified areas prior to construction are currently underway. Groundwater monitoring and baseline environmental data collection work is continuing. Geo-technical drilling and trenching is currently being conducted at the future sites of the process plant, the marine dock and tailings dam under the direction of Klohn Crippen Berger, Vancouver, BC.

Financing:

Strong support of the Boleo project has been shown by the financial community, including project finance lenders and metal off-take parties. Baja is working closely with its advisor, Endeavour Financial, which has prepared an Information Memorandum that will be distributed to the commercial bank market and other potential lenders immediately following release of the DFS Summary. Offers of bridge financing have also been received which will allow the Project development to go ahead without being delayed by the main financing process.

Endeavour Financial, the Company's financial advisor, commented "The DFS confirms the robust economics of the Boleo Project and supports considerable debt capacity. There has been very strong interest in the Project from the commercial debt market and metal offtake sector, and we look forward to working with Baja in completing the financing of the project in the shortest timeframe possible."

Engineering and construction:

Contracts are being finalized for basic engineering and construction. Wardrop Engineering in Vancouver, BC has commenced the set-up and basic engineering phase. It is expected that they will be supported by Bateman Engineering for Process Engineering and by a major construction company with experience in Mexico for constructability and pricing reviews during this phase.

Minor metals and Laboratory work:

Work is continuing in investigation of low energy methods for production of manganese and zinc sulphate products. As well reviews are being conducted into the possible recovery of minor metals such as indium, gallium and germanium.

William Yeo, of Hellman and Schofield Pty Ltd, a Qualified Person, has reviewed the Resource Model and the disclosure contained herein regarding the same and accepts responsibility for such disclosure. John Wyche, of Australian Mine Design and Development, a Qualified Person, has reviewed the surface mining reserves and the disclosure contained herein regarding the same and accepts responsibility for such disclosure. Tim Ross, of Agapito Associates Inc., a Qualified Person, has reviewed the underground mining reserves and the disclosure contained herein regarding the same and accepts responsibility for such disclosure. Michael Holmes, of Bateman Engineering, a Qualified Person, has reviewed the process plant discussion and the disclosure contained herein regarding the same and accepts responsibility for such disclosure.

**ON BEHALF OF THE BOARD OF DIRECTORS OF  
BAJA MINING CORP.**

*"John W. Greenslade"*

**JOHN W. GREENSLADE, PRESIDENT**

For further information please contact John Greenslade, President, at (604) 685-2323

*Some of the statements contained in this release are forward-looking statements, such as statements that describe the anticipated mine life; the Company's expected NPV of the project; expected future metal prices; expected timing of start-up; expected timing for construction and other statements. Since forward-looking statements are not statements of historical fact and address future events, conditions and expectations, forward-looking statements by their nature inherently involve unknown risks, uncertainties, assumptions and other factors well beyond the Company's ability to control or predict. Actual results and developments may differ materially from those contemplated by such forward-looking statements. Material factors that could cause actual revenues to differ materially from those contained in such forwarding-looking statements include (i) fluctuations on the prices of copper, cobalt, zinc and manganese, (ii) interpretation of contract terms, (iii) accuracy of the Company's and consultants' projections, (iv) the Company's ability to finance, receive permits for, obtain equipment, construct and develop the El Boleo Project, (v) the effects of weather; operating hazards; adverse geological conditions and global warming, (vi) impact of availability of labor, materials and equipment; and (vii) changes in governmental laws, regulations, economic conditions or shifts in political attitudes or stability.*

*These forward-looking statements represent the Company's views as of the date of this release. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Readers should not place undue reliance on any forward-looking statements.*