# **Update Report**

# **February 18, 2010**

# ADEX MINING INC.

(\$0.13; TSX-V: ADE)

# Recommendation

Speculative Buy

#### Risk

High

**Price (February 17, 2010)** 

\$0.13

## **52-Week Range**

\$0.195 - \$0.04

# **Target Price (12 Months)**

\$0.35

#### **Shares O/S**

96.5 million

#### **Market Cap**

\$12.55 million

#### **Average Daily Volume**

50-day: 91,700 200-day: 92,300

## **Year-End**

December 31

## **Salient Statistics**

Book Value Per Share \$0.11 Price/Book Value 1.18x Properties Per Share \$0.07 Monthly Burn (2009e) \$66,667 Monthly Burn (2010e) \$99,999

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Data Source: www.BigCharts.com

# **UPFRONT**

There is lots of action at the North Zone (Mount Pleasant Mine property, New Brunswick): a recently-released Preliminary Assessment; a favourable NI 43-101-compliant Technical Report; the commencement of two pilot programs: one for the production of tin and indium-zinc concentrate, and the other for the production of indium sponge and zinc metal concentrate; a program to complete the upgrade of resource estimates from Inferred to Indicated; and the initiation of a feasibility study. With plenty of news flow, Adex should attract increasing investor attention as the year progresses.

# TARGET PRICE

Our calculations of an intrinsic value under various scenarios represent the basis for our \$0.35 per share 12-month Target Price. But, should any of the many initiatives planned by the Company exceed expectations, the shares could easily eclipse our price objective.

# RECOMMENDATION

We recommend the shares of Adex Mining Inc. ("Adex" or the "Company") as a Speculative Buy for risk-tolerant investors.

# **PROFILE**

Adex Mining Inc. is a mineral exploration company focused on its 100%-owned Mount Pleasant Mine property, a tungsten-molybdenum and tin-indium-zinc development project in New Brunswick, Canada.

# RECENT DEVELOPMENTS

Over the past year, the Company accomplished the following milestones:

- ► Filed, on January 26, 2010, a NI 43-101-compliant Preliminary Assessment ("PA") involving a technical and economic assessment of the production of tin, indium, and zinc products on the North Zone of its wholly-owned Mount Pleasant Mine Property. The results of the PA suggest two viable production options for the North Zone (see details in the Valuation section, page 6).
- ► Successfully produced the first grams of indium sponge metal at its North Zone in early 2010.
- ► Closed at the end of December 2009, a private placement of \$1.0 million at a price of \$0.12 per unit. A total of 8,408,665 units (about 9.5% of the shares outstanding at the time) were issued. Each unit consists of one common share and one-half of one common share purchase warrant. This private placement strengthens Adex's cash position to approximately \$3 million at the end of 2009 and improves the Company's ability to carry out its \$2.5 million 2010 expenditure program.
- ► Successfully developed a staged approach to the commencement of full production at the Mount Pleasant project. Staged production consists of two Phases: Phase 1 is focused on the tin-indium-zinc North Zone, and Phase 2 refers to the tungsten-molybdenum Fire Tower Zone.
- ▶ In September 2009, Adex provided an update on its evaluation program of the North Zone. In that update, a collection of 162 tonnes of mineralized material was obtained from rock previously mined from the 600 Adit. A metallurgical test program is being conducted on the samples and this work will be used in the evaluation of a potential processing scenario for the North Zone.
- ▶ In April 2009, an NI 43-101 compliant resource estimate was completed for the North Zone. The total tinindium-zinc resource estimate includes an Indicated Resource of 10.88 million tonnes and an Inferred Resource of 7.6 million tonnes. The resource estimate for the North Zone significantly increases the intrinsic value of the Company compared with that at the time of our February 2009 *Initiating Report*.
- ► The Company's senior management team changed: J. Errol Farr was appointed President and CEO, Alan Marshall as Chairman, and William C. Burton as CFO.

# TARGET PRICE

We have derived the following intrinsic values for Adex using various valuation methodologies, as set out fully in our Valuation section beginning on page 5.

- Peer Comparison (Market Cap/Resource): \$0.36 per share (based on 96.5 million shares O/S)
- Discounted Cash Flow Valuation: \$0.38 per share (based on 320 million shares O/S)
- Peer Comparison (Property Valuation): \$0.30 per share (based on a property ratio of 3.00x)

From these intrinsic value calculations, we have chosen a 12-month Target Price for the shares of Adex Mining Inc. of \$0.35.

**COMMENT:** Adex's stock price could significantly outperform our intrinsic values should the Company be able to accomplish the following:

- (1) Successful execution of the Company's strategy to bring the North Zone into the construction stage;
- (2) Successfully obtain financing for the construction of the North Zone;
- (3) Commodity prices increase significantly along with the recovery of the global economy; and
- (4) Investor interest is renewed in well-performing junior mining exploration companies.

# THE COMPANY

Adex Mining Inc. is headquartered in Toronto, Ontario. The Company is engaged in the exploration and development of its mineral property in New Brunswick.

In 1995, through its subsidiary Adex Minerals Corp., Adex acquired 100% of the Mount Pleasant property, consisting of 102 contiguous mining claims covering an area of approximately 1,600 hectares (about 4,000 acres). It holds surface rights on 405 hectares (1,000 acres) at Mount Pleasant, including the existing structures of the formerly-producing Mount Pleasant Mine.

Capital expenditures of over \$150 million were spent on the Mount Pleasant property in the past, and nearly one million tonnes of tungsten-molybdenum ore were milled at the property between 1983 and 1985.

The two main zones at the Mount Pleasant property are:

- (1) The North Zone, bearing tin-indium-zinc; and
- (2) The Fire Tower Zone, bearing tungsten and molybdenum.

# **STRATEGY**

Our assessment indicates that the Company pursues an aggressive strategy with respect to developing the Mount Pleasant project, but with moderate investment risk.

In our February 25, 2009 *Initiating Report*, based on the information available at the time, we believed that the Company was on track for achieving its intended start-up of production in 2011. However, the severity of the global financial crisis caused project delays. With the gradual improvement in the global economy and the greater stabilization of financial markets, we believe that the Company's strategy to pursue staged production is appropriate.

In particular, the Company's focus for the property, which includes the North Zone and the Fire Tower Zone, will be as follows:

- 1. Production: implement a staged approach to the commencement of production at Mount Pleasant, with initial production from the North Zone targeted for late 2011 and production from the Fire Tower Zone by 2014;
- 2. Pilot Program #1: production of tin and indium-zinc concentrates, intended for winter and spring 2010;
- 3. Pilot Program #2: production of indium sponge and zinc metal and a tin concentrate.
- 4. The completion of metal off-take sales contracts, intended for winter and spring 2010;
- 5. Drilling Program: to upgrade Inferred Resources to Indicated Resources, intended for spring-summer 2010;
- 6. Feasibility Study: to be completed before the end of 2010;
- 7. Financing: Obtain financing to accomplish the Phase 1 construction program, through a possible combination of debt financing, partnership, and equity financing.
- 8. Construction: complete the construction phase for the tin-indium-zinc production by the end of 2011;
- 9. Start the North Zone production in Q4/2011;
- 10. Start the Phase 2 feasibility study on Fire Tower Zone in Q1/2012.
- 11. Obtain additional financing to accomplish its Phase 2 construction through partnership and cash flow retained from Phase 1; and
- 12. Continue a Phase 2 construction program beginning in 2013 and commence Fire Tower Zone production by 2014.

**COMMENT**: In our view, the strategy of staged production seems economically feasible. Furthermore, with approximately \$3 million in cash available, the Company should be able to accomplish all, or almost all, of its planned 2010 capex program.

# INVESTMENT PERSPECTIVES

# (1) The Mount Pleasant Property:

- The North Zone contains the world's largest indium resource and North America's largest tin resource;
- The Fire Tower Zone's resources include zinc, tungsten, molybdenum, bismuth and copper, and the variety of minerals significantly increases the intrinsic value of the property.
- The Fire Tower Zone has the potential to become a profitable tungsten-molybdenum mining operation, with a milling/processing capacity of 2,400 tonnes of ore per day.
- The Fire Tower Zone milled approximately one million tonnes of tungsten-molybdenum ore between 1983 and 1985 when the mine ceased operations because of declining tungsten prices.
- An October 2008 scoping study by Aker Solutions Canada Inc. ("Aker Solutions") for the Fire Tower Zone is as follows:
  - Production rate of 2,400 tpd;
  - After-tax IRR of 19.8%; and
  - After-tax NPV of \$154.6 million.

Further details are provided in the Valuation section beginning on page 5.

- The 2009 Preliminary Assessment report, based on a 10-year projected life for the North Zone, shows the following:
  - Production rate of 850 tonnes per day (tpd);
  - Option 1: Tin concentrate; indium sponge; and zinc metal:

    After-tax internal rate of return (IRR) of 22.55% with an after-tax net present value (NPV), discounted at 8%, of \$47.18 million; and
  - **Option 2:** Tin concentrate; and zinc-indium concentrate:

After-tax IRR of 18.00%, with discounted 8% NPV of \$18.06 million.

Further details are provided in the Valuation section.

# (2) Favourable Regulations and Strong Infrastructure:

- The Mount Pleasant property is located in New Brunswick, a province that is one of the strongest supporters of mining companies in Canada.
- The mine location is favourable, reflecting all-weather access to the property, good infrastructure (existing buildings, water, and electricity supplies), and proximity to all major urban centres in the province.
- Substantial capital expenditures (over \$150 million) were spent on the property in the past.

# (3) Strong Fundamental Demand for the Company's Products:

The future demand will be driven by:

- **Tin:** Used in the coating of other metals, and in alloys.
- **Indium**: Increasing use for thin-film solar panels and flat-screen TVs;
- **Zinc**: Strong demand from the auto sector in China;
- **Molybdenum**: Increase in the use of advanced steels for automotive, drilling exploration, nuclear power generation, and oil refining; and
- Tungsten: Lead replacement in ammunition and can be substitute for chrome-plating.

# (4) Staged Production Should Provide Cash Flow; Reduces Need for External Financing:

- With a well-defined staged production approach, the Company could complete a feasibility study on the North Zone in late 2010 and, subject to financing availability, could start zinc, indium, and tin production as early as 2011.
- We view the Company's staged production approach strategy as positive since: (1) it reduces the financing amount (only \$41.17 million required for pre-production capital should the Company go with Option 2 (see page 7); and (2) it provides cash flow at an early stage to support the Company's liquidity position, which should make the stock more attractive to investors.

# **VALUATION**

We provide various valuation methods to determine an appropriate value for the share price of Adex:

- 1. Market Capitalization-Resource Valuation, for the North Zone and Fire Tower Zone.
- 2. Discounted Cash Flow (DCF) Valuation, for the North Zone and Fire Tower Zone.
- 3. Property Ratio Valuation, for Adex Mining Inc. as a whole.

# (1) Market Capitalization-Resource Valuation

# (a) eResearch Approach

- Use the same company comparables, for consistency, as we did in our *Initiating Report*;
- Acknowledge that these companies are at different stages of the mining cycle and have a difference in the quality of their respective resources;
- Calculate and assess the market capitalization-to-resource ratio (MC/MTU Value (metric tonne units)) of each company; the MC/MTU Value indicates the relationship of the Company's market capitalization to its estimated tonnage of tungsten and tungsten equivalent (underground); our Value does not take into account the production cost per unit, which differs amongst these companies.

**Table 1: Market Capitalization and Resources Data** 

|      |  |      |    | 5.0 |                  |       |        |
|------|--|------|----|-----|------------------|-------|--------|
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|      |  |      |    |     |                  |       |        |

|                             | Stock    | Stock   | Shares  | Market | EV     | Tungsten   | Market  | Grade  | Cash         | Debt         |
|-----------------------------|----------|---------|---------|--------|--------|------------|---------|--------|--------------|--------------|
| Company                     | Symbol   | Price   | O/S (M) | Cap    | (M)    | MTU (M)(*) | Cap/MTU | (%WO3) | (\$ million) | (\$ million) |
| Adex Mining (FTZ - tungste  | en-moly) |         |         |        |        | 9.75       |         | 0.33   |              |              |
| Adex Mining (NZ - tin-indiu | ım-zinc) |         |         |        |        | 11.59      |         | 0.25   |              |              |
| Total Adex                  | ADE      | \$0.130 | 96.5    | \$12.5 | \$12.5 | 21.34      | \$0.588 |        | 3.00         |              |
|                             |          |         |         |        |        |            |         |        |              |              |
| Geodex Minerals             | GXM      | \$0.105 | 87.6    | \$9.2  | \$9.1  | 20.13      | \$0.457 | 0.13   | 0.61         | 0.55         |
| Largo Resources (**)        | LGO      | \$0.230 | 219.0   | \$50.4 | \$49.8 | 23.33      | \$2.158 | 0.11   | 0.53         | -            |
| North American Tungsten     | NAT      | \$0.190 | 189.3   | \$36.0 | \$41.5 | 37.85      | \$0.950 | 0.50   | 2.62         | 8.18         |
| Playfair Mining             | PLY      | \$0.100 | 76.0    | \$7.6  | \$7.6  | 3.72       | \$2.040 | 0.20   | 0.02         | -            |
| Strategic Metals (**)       | SMD      | \$0.530 | 57.7    | \$30.6 | \$19.8 | 11.83      | \$2.587 | 0.10   | 10.77        | -            |
|                             |          |         |         |        |        |            |         |        |              |              |
| Peer Average                |          |         |         |        | ·      |            | \$1.639 |        |              |              |

<sup>(\*)</sup> Tungsten and tungsten equivalent; Tungsten is often quoted in MTU (metric tonne units); 1 tonne = 100 MTU

Source: The Company and & Research

#### (b) Comparison Analysis

- The current MC/MTU Value for Adex, at \$0.588 per MTU, is low compared with the peer average ratio of \$1.639 per MTU. The peer average ratio reflects the fact that, except for North American Tungsten, none of the comparable companies are in production. (Adex is in an advanced stage and could be in production within two years.)
- The MC/MTU Value of Largo Resources, at \$2.158 per MTU, is approximately 3.7 times higher than that of Adex. Yet, Largo is at approximately the same stage of the mining cycle as Adex.
- When compared with Largo, Playfair Mining, and Strategic Metals, Adex's stock seems undervalued.
- Should Adex be successful in obtaining the Phase 1 feasibility study on the North Zone project (in approximately 12 months), its MC/MTU Value could, over time, approach that of the comparables' average of \$1.639.

<sup>(\*\*)</sup> Largo is deemed to own 70% interest in the Northern Dancer tungsten project and Strategic Metals 30%

# (c) Sensitivity Analysis

The following table takes different MC/MTU Values for Adex over the next 12 months. (Approximately \$2.5 million in capital expenditures is assumed for this period.)

| Market Capitalization (MC) per MTU |        |                     |             |  |  |  |  |  |
|------------------------------------|--------|---------------------|-------------|--|--|--|--|--|
|                                    | MC/MTU | Value (\$ millions) | Value/Share |  |  |  |  |  |
| Scenario 1                         | \$0.75 | \$16.01             | \$0.166     |  |  |  |  |  |
| Scenario 2                         | \$1.00 | \$21.34             | \$0.221     |  |  |  |  |  |
| Scenario 3                         | \$1.50 | \$32.01             | \$0.332     |  |  |  |  |  |
| Scenario 4 (peer average)          | \$1.64 | \$34.97             | \$0.362     |  |  |  |  |  |
| Scenario 5                         | \$1.75 | \$37.35             | \$0.387     |  |  |  |  |  |
| Scenario 6                         | \$2.00 | \$42.68             | \$0.442     |  |  |  |  |  |

Source: eResearch

- Our analysis shows Adex's stock price ranging from \$0.17 per share at \$0.75 per MTU, to \$0.44 per share at \$2.00 per MTU.
- At the peer average, the value per share would be \$0.36.
- Higher MC/MTU Values for Adex would be expected when it reaches such milestones as: (1) receiving a favourable Phase 1 feasibility study; and (2) reaching a decision on production.

# (2) Discounted Cash Flow (DCF) Valuation

### (a) Fire Tower Zone

The October 2008 Aker Solutions Report indicated the following:

- Indicated Resources are estimated at 13.489 million tonnes, grading 0.33% WO3 and 0.2% MoS2;
- Inferred Resources are estimated at 841,700 tonnes, grading 0.26% WO3 and 0.21% MoS2;
- Revenues are estimated to be C\$1.16 billion over 13 years;
- Assumed US\$215 per MTU WO3;
- Assumed US\$23.17 per lb MoS2;
- Used a discount rate of 8%; and
- Resulting after-tax NPV is expected to be C\$154.6 million.

**COMMENT**: To finance the Fire Tower Zone to production, eResearch assumes the Company will issue additional shares such that the amount outstanding will total 320 million shares. On this basis, the resulting after-tax NPV per share is calculated to be C\$0.48.

**COMMENT**: If the current prices of tungsten (\$210/MTU) and molybdenum (\$15/lb) are used, the after-tax NPV per share would decrease to around C\$0.38 (and using the assumed 320 million shares outstanding).

### (b) North Zone

The January 2010 Preliminary Assessment indicates that there are two viable production options for the NZ: (1) the production of tin concentrate, indium sponge, and zinc metal; and (2) the production of tin concentrate and zinc-indium concentrate, as shown in the following table:

| Option 1 - Production of Tin Concentrate, Indium Sponge, and Zinc Metal |                           |                           |  |  |  |  |
|---|---------------------------|---------------------------|--|--|--|--|
| Option 2 - Production of Tin Concentrate and Zinc-Indium Concentrate    |                           |                           |  |  |  |  |
|   | Option 1                  | Option 2                  |  |  |  |  |
| Project life  | 10 Years                  | 10 years                  |  |  |  |  |
| Pre-production capital  | \$71.10 million           | \$41.17 million           |  |  |  |  |
| Production rate (tonnes per day)  | 850                       | 850                       |  |  |  |  |
| Pre-tax IRR   | 28.87%                    | 23.49%                    |  |  |  |  |
| After-tax IRR   | 22.55%                    | 18.00%                    |  |  |  |  |
| After-tax NPV discounted at 8%<br>After-tax NPV Per Share               | \$47.18 million<br>\$0.15 | \$18.06 million<br>\$0.06 |  |  |  |  |
| Pre-production capital  | \$71.10 million           | \$41.17 million           |  |  |  |  |
| Pay-back Period   | 5.55 years                | 4.43 years                |  |  |  |  |

Source: Company

# (c) Combined Estimated Value

The combined findings of the Aker Solutions Report and the Preliminary Assessment indicate the following per share values:

- The value of the Fire Tower Zone and the North Zone combined would yield after-tax NPV per share of \$0.63 on Option 1.
- The value of the Fire Tower Zone and the North Zone combined would yield after-tax NPV per share of \$0.54 on Option 2.
- Using current mineral prices, these after-tax NPV per share values would be \$0.53 and \$0.44 respectively.

**COMMENT:** The Aker Solutions Report was conducted between July and October 2008, at a time when commodity prices were higher than currently. We would expect that, if Aker Solutions updated its Report with current commodity prices, its conclusions would parallel our own.

# (3) Property Ratio Valuation Method

#### (a) Methodology

This method determines an appropriate valuation for the shares of Adex based on:

- Current and expected market value of the Company over the next 12 months;
- Book value of the mineral properties of the Company compared to those of its peers;
- Expected capital expenditures for the Company for the next 12 months; and
- Expected number of shares to be issued to finance capital expenditures.

**Table 2: Corporate Comparison** 

| C\$1 = US\$1.00)  | Adex<br>Mining Ltd.<br>ADE: TSX-V | Geodex<br>Minerals Ltd.<br>GXM:TSX-V | Largo<br>Resources Ltd.<br>LGO: TSX-V | North American<br>Tungsten Corp.<br>NTC: TSX-V | Playfair<br>Mining Ltd.<br>PLY: TSX-V | Strategic<br>Metals Ltd.<br>SMD: TSX |
|---|-----------------------------------|--------------------------------------|---------------------------------------|--|---------------------------------------|--------------------------------------|
| inancial Statement Date:  | September-09                      | September-09                         | September-09                          | September-09                                   | November-09                           | September-09                         |
| Corporate:  |                                   |                                      |                                       |  |                                       |                                      |
| Share Price (50-day Average)  | C\$ 0.12                          | C\$ 0.11                             | C\$ 0.23                              | C\$ 0.19                                       | C\$ 0.10                              | C\$ 0.53                             |
| 52-Week High-Low  | \$0.195 - \$0.04                  | \$0.21 - \$0.10                      | \$0.275 - \$0.065                     | \$0.25 - \$0.105                               | \$0.17 - \$0.04                       | \$0.60 - \$0.165                     |
| Shares O/S  | 96,526,026                        | 87,589,000                           | 218,971,000                           | 189,290,058                                    | 75,987,361                            | 57,726,000                           |
| Market Cap  | C\$ 11,747,217                    | C\$ 9,196,845                        | C\$ 50,363,330                        | C\$ 35,965,111                                 | C\$ 7,598,736                         | C\$ 30,594,780                       |
| Mineral Properties:   |                                   |                                      |                                       |  |                                       |                                      |
| Book Value (Cost) (1)   | C\$ 7,308,416                     | C\$ 22,901,768                       | C\$ 44,621,202                        | C\$ 21,492,605                                 | C\$ 9,844,354                         | C\$ 13,397,237                       |
| Market Value  | C\$ 9,573,426                     | C\$ 10,007,934                       | C\$ 43,710,886                        | C\$ 5,838,138                                  | C\$ 6,985,274                         | C\$ 15,484,15                        |
| Difference  | C\$ 2,265,010                     | -C\$ 12,893,834                      | -C\$ 910,316                          | -C\$ 15,654,467                                | -C\$ 2,859,080                        | C\$ 2,086,914                        |
| Property Ratio  | 1.31                              | 0.44                                 | 0.98                                  | 0.27   | 0.71                                  | 1.16                                 |
| Average Ratio (Peers)   | 0.71                              |                                      |                                       |  |                                       |                                      |
| Adjusted Book Value (Cost)(1)   | C\$ 9,808,416                     |                                      |                                       |  |                                       |                                      |
| Adjusted Property Ratio   | 1.27                              |                                      |                                       |  |                                       |                                      |
| Selected Ratio  | 3.00                              |                                      |                                       |  |                                       |                                      |
| Common Equity (Per Statements)  | C\$ 9,297,097                     |                                      |                                       |  |                                       |                                      |
| Adjusted Common Equity (Selected Ratio)(2)  | C\$ 29,613,929                    |                                      |                                       |  |                                       |                                      |
| quity Per Share (Per Statements)  | C\$ 0.10                          |                                      |                                       |  |                                       |                                      |
| Adjusted Equity Per Share (Selected Ratio)(3)   | C\$ 0.30                          |                                      |                                       |  |                                       |                                      |
| Note 1: Book Value is adjusted for debt, and A<br>Note 2: Shareholders' Equity is adjusted for ad<br>Note 3: Adjusted Equity Per Share is calculate | lditional equity (esti            | mate) issued to fina                 | ınce capital expend                   | itures over the next                           | 12 months.                            | •                                    |

# (b) Analysis

The Property Valuation approach is based upon an analysis of the Property Ratio, which measures the premium the market currently places on a company's mineral properties. All else being equal, a higher premium indicates the market is anticipating greater future value from the assets in the ground, while a lower premium may represent an undervalued asset. Our analysis utilizes the latest available financial statements for the respective companies.

In the table above, we have estimated the value of Adex's mineral property portfolio 12 months forward by adding the anticipated capital expenditures for the forecast period to the existing mineral property value. Then we apply, to the Adjusted Book Value of the mineral property, the selected Mineral Property Ratio, as determined by analyzing and comparing the relative merits of the peer companies with the subject company.

The Property Ratio for the peer group is an average of 0.71x, while the Property Ratio of Adex is 1.31x.

The two-year high for Adex stock was \$0.385 and the 52-week high was \$0.195. At these prices, the Property Ratio for Adex would have been 4.79x and 2.28x, respectively. Although we do not expect Adex's Property Ratio will reach the 4.00x level soon, should Adex successfully produce a positive feasibility study within the next 12 months, there could be sufficient investor interest that could result in the Property Ratio approaching 3.00x, which yields an intrinsic value price of \$0.30 per share.

Shown below is a table indicating the intrinsic value over the next 12 months for Adex at Property Ratio levels ranging between 2.00x and 4.00x (last five items).

| Adex Mining                    | Property Ratio | Intrinsic Value |
|--------------------------------|----------------|-----------------|
| Current Book Value             | 1.00x          | C\$ 0.10        |
| Current Property Ratio         | 1.31x          | C\$ 0.12        |
| Property Ratio: Next 12 Months | 2.00x          | C\$ 0.20        |
| Property Ratio: Next 12 Months | 2.50x          | C\$ 0.25        |
| Property Ratio: Next 12 Months | 3.00x          | C\$ 0.30        |
| Property Ratio: Next 12 Months | 3.50x          | C\$ 0.35        |
| Property Ratio: Next 12 Months | 4.00x          | C\$ 0.40        |

Source: eResearch

# (4) Conclusion

- Our Market Capitalization-Resource Valuation yields an intrinsic value of \$0.36 per share for Adex;
- The Discounted Cash Flow Methodology indicates an intrinsic value per share of \$0.38; and
- Our Property Ratio Methodology shows an intrinsic value of \$0.30.

In light of significant developments achieved by the Company in 2009 and a realistic strategy to bring the North Zone into production, and since the Company should be able to finance its 2010 capex program to achieve the Phase 1 feasibility study, the outlook for Adex is promising, particularly should there be a return of investor interest in high-risk/high-potential junior mining companies.

**COMMENT**: Our intrinsic values are based on a number of internal factors including commodity prices and the Company's ability to finance, which are beyond our control. However, we believe that our valuations closely reflect the fundamentals of the Company and the market at the time of this report. Adex's stock price could significantly outperform our intrinsic values should the following be accomplished:

- (1) A successful execution of the Company's strategy to bring the North Zone into the construction stage;
- (2) Successfully obtain financing for the construction of the North Zone;
- (3) Increased commodity prices along with the recovery of the global economy; and
- (4) Renewed investor interest in well-performing junior mining exploration companies.

# FINANCIAL REVIEW AND OUTLOOK

#### **Financial Year End**

December 31

#### Revenues

The Company currently generates no revenues.

#### Cash Burn Rate

The cash burn rate for 2009 decreased significantly over the prior year to approximately \$66,700 per month (eResearch estimate) from almost \$100,000 per month in 2007 and \$78,500 per month in 2008. The decline in the cash burn rate reflects the Company's efforts to control its spending through a decrease in exploration activities in 2009.

The monthly cash burn rate for 2010 is expected to increase, reflecting more corporate activities before the construction period. The burn rate is estimated as follows:

- \$60,000 per month for corporate overhead.
- \$40,000 per month for site maintenance.
- Total of \$100,000 per month, or \$1.2 million for 2010.

#### Cash

As a result of the December 2009 new issue, the current cash balance is approximately \$3.0 million. This amount is sufficient to cover 30 months of operating cash burn, excluding capital expenditures. Including capex (see below), current cash coverage is just under 10 months. Thus, as 2010 progresses, we expect Adex will need to return to the capital markets for further funds.

# **Capital Expenditures for Exploration**

The Company's capital expenditure program for 2010 is estimated to be \$2.5 million, the uses indicated as follows:

- \$500,000 for the concentrate pilot program.
- \$500,000 for the metal pilot program.
- \$500,000 for drilling.
- \$1,000,000 for a feasibility study of the North Zone.

# **Financing**

Although the current cash is almost sufficient to cover operating and capital expenses in 2010, we expect the Company will need to raise more funds, probably through private placements, some flow-through, but the majority hard dollars.

For the construction of the North Zone production mine and facilities, the Company needs between \$41 million (for Option 2) and \$72 million (for Option 1). We believe that, if the Company produces a positive feasibility study by the end of 2010, its ability to obtain financing for the construction would increase significantly. In particular, we would expect some form(s) of partnership with companies that have stronger financial resources.

**TABLE 3: SELECTED FINANCIAL INFORMATION** 

| (C\$)                               | Year End        | Year End    | 12 months   | Dec. 31      | Dec. 31               |
|-------------------------------------|-----------------|-------------|-------------|--------------|-----------------------|
| Statement of Income (Loss)          | Dec 31 2007     | Dec 31 2008 | Sep. 2009   | <b>2009E</b> | <b>2010E</b>          |
| Revenues Administrative & General   | (1,194,426)     | (942,696)   | (826,867)   | (800,000)    | (1,200,000)           |
| Depreciation                        | (3,107)         | (942,696)   | (820,807)   | (2,534)      | (1,200,000) $(3,000)$ |
| Mineral Property Expenses           | (360,363)       | (502,592)   | (470,568)   | (350,000)    | (350,000)             |
| Stock-based Compensation            | (678,355)       | (532,152)   | (303,277)   | (202,901)    | (200,000)             |
| Interest Income                     | 139,683         | 128,097     | 18,214      | 25,000       | 20,000                |
| Interest Expense                    | (157,205)       | 0           | 0           | 0            | 0                     |
| Non-cash items adjustments          | 1,005,000       | 0           | 35,658      | 32,000       | 25,000                |
| Net Income/(Loss)                   | (1,248,773)     | (1,850,519) | (1,549,083) | (1,298,435)  | (1,708,000)           |
| ` ,                                 |                 |             |             |              |                       |
| Total Shares Outstanding            | 74,659,015      | 88,117,361  | 88,117,361  | 96,526,026   | 103,000,000           |
| Weighted Average Shares Outstanding | 49,546,058      | 84,579,008  | 88,117,361  | 88,617,361   | 99,763,013            |
| Earnings (Loss) Per Share           | (\$0.03)        | (\$0.02)    | (\$0.02)    | (\$0.01)     | (\$0.02)              |
|                                     |                 |             |             |              |                       |
| Cash Flow Statement                 |                 |             |             |              |                       |
| Net Income (Loss)                   | (1,248,773)     | (1,850,519) | (1,549,083) | (1,298,435)  | (1,708,000)           |
| All Non-Cash Items                  | (273,530)       | 541,232     | 303,625     | 173,435      | 178,000               |
| Cash Flow from Operations           | (1,522,303)     | (1,309,287) | (1,245,458) | (1,125,000)  | (1,530,000)           |
| Capital Expenditures (Properties)   | (252,081)       | (4,793,190) | (1,093,605) | (650,000)    | (2,150,000)           |
| Other Investing Items               | (178,087)       | (41,154)    | (92,000)    | (52,000)     | (75,000)              |
| Free Cash Flow                      | (1,952,471)     | (6,143,631) | (2,431,063) | (1,827,000)  | (3,755,000)           |
| Working Capital Changes             | (1,212,187)     | 96,277      | 248,314     | (44,724)     | (63,000)              |
| Cash Flow before Financing          | (3,164,658)     | (6,047,354) | (2,182,749) | (1,871,724)  | (3,818,000)           |
| Equity Financing                    | 11,683,678      | 1,345,745   | -           | 1,000,000    | 1,000,000             |
| Debt Financing                      | 9.510.020       | (4.701.600) | (2.192.740) | (971.724)    | (2.919.000)           |
| Change in Cash                      | 8,519,020       | (4,701,609) | (2,182,749) | (871,724)    | (2,818,000)           |
| Cash, Beginning of the Period       | 66,410          | 8,585,430   | 4,450,584   | 3,883,821    | 3,012,097             |
| Cash, End of the Period             | 8,585,430       | 3,883,821   | 2,267,835   | 3,012,097    | 194,097               |
|                                     |                 |             |             |              |                       |
| Balance Sheet As At:                | Dec. 31         | Dec. 31     | Sep. 30     | Dec. 31      | Dec. 31               |
| (C\$)                               | 2007            | 2008        | 2009        | 2009E        | 2010E                 |
| Cash                                | 8,585,430       | 3,883,821   | 2,267,835   | 3,012,097    | 194,097               |
| Other Current Assets                | 316,044         | 340,984     | 188,938     | 190,000      | 180,000               |
| Mining Properties                   | 815,551         | 5,608,741   | 6,240,581   | 6,300,000    | 8,450,000             |
| Capital Assets + Reclamation Bonds  | 704,829         | 736,633     | 784,853     | 785,000      | 785,000               |
| Total Assets                        | 10,421,854      | 10,570,179  | 9,482,207   | 10,287,097   | 9,609,097             |
| Short-term Debt                     | -               | -           | -           | -            | -                     |
| Current Liabilities                 | 255,805         | 316,753     | 185,110     | 220,000      | 250,000               |
| Long-Term Debt                      | 10.166.040      | 10 102 426  | - 0.207.007 | 10.067.007   | 0.250.007             |
| Shareholders' Equity                | 10,166,049      | 10,193,426  | 9,297,097   | 10,067,097   | 9,359,097             |
| Total Liabilities & Equity          | 10,421,854      | 10,510,179  | 9,482,207   | 10,287,097   | 9,609,097             |
| Pook Value (S.E.) Per Share         | \$0.14          | ¢0.12       | \$0.11      | ¢0.10        | \$0.00                |
| Book Value (S.E.) Per Share         | *               | \$0.12      | \$0.11      | \$0.10       | \$0.09                |
| Source: Company and eResearch       | E = Estimate by | e Nescaicii |             |              |                       |

**COMMENT**: The above table shows the financial results up to September 2009 and our estimates for the calendar years of 2009 and 2010. The estimates show that Adex will need to raise \$1.0 million to finance capital expenditures and operating expenses in 2010 on top of the recently-raised \$1.0 million (December 2009).

# **APPENDIX 1: PROPERTIES**

**COMMENT**: For a detailed description of the Company's properties, see our February 25, 2009 Initiating Report at <a href="www.eresearch.ca">www.eresearch.ca</a>. In this section, we are reporting only new developments and significant features with respect to the Company's properties since our Initiating Report was published.

- The Mount Pleasant project potentially contains the world's largest indium resource and North America's largest tin resource.
- The project is well located with solid infrastructure in place or nearby.
- Over \$150 million in capital expenditures have been spent on the property in the past.
- The project benefits from a favourable regulatory environment, as New Brunswick is known to be one of the strongest supporters of mining companies in Canada.
- The project contains two significant zones the North Zone and the Fire Tower Zone, which are the focus of our valuation.

### **North Zone Resource Summary:**

| The NZ (NI 43-101 compliant - 2009) |            |              |        |        |      |  |  |
|-------------------------------------|------------|--------------|--------|--------|------|--|--|
|                                     |            | Zinc         | Copper | Indium | Tin  |  |  |
| Grade                               | Tonnes     | % <b>Z</b> n | %Cu    | g/t    | %Sn  |  |  |
| Indicated                           | 10,882,000 | 0.67         | 0.11   | 67.8   | 0.43 |  |  |
| Inferred                            | 7,603,000  | 0.99         | 0.09   | 74.6   | 0.22 |  |  |
| Total                               | 18,485,000 |              | 0.21   |        |      |  |  |

## **Significant Developments on the North Zone:**

- A Preliminary Assessment (PA) study on the tin-indium-zinc North Zone was completed in 2009 and filed on January 26, 2010.
- A favourable NI 43-101 resource estimate was completed in 2009.
- A staged production approach was adopted in 2009 as follows:
  - The NZ will be bought into production first, followed by production from the Fire Tower Zone. Phase 1 refers to the North Zone and Phase 2 refers to the Fire Tower Zone.
  - A Phase 1 feasibility study is expected to be completed by the end of 2010.
  - The construction period is expected to follow the feasibility study, subject to financing.
  - Production is expected to start in late 2011. At the same time, the Company would commence the Phase 2 feasibility study.
  - Phase 2 construction is expected to start in early 2013 following the completion of the Phase 2 feasibility study.
  - In early 2014, full production on both the North Zone and the Fire Tower Zone is expected.
  - Total capital cost for Option 1, Phase 1 is estimated to be \$71.10 million.
  - Total capital cost for Option 2, Phase 1 is estimated to be \$41.17 million.

# Fire Tower Zone Resource Summary:

| FTZ: Mineral Resource Estimate by SRK (2008) |            |          |            |         |         |  |  |  |
|--|------------|----------|------------|---------|---------|--|--|--|
|  |            | Tungsten | Molybdenum | Arsenic | Bismuth |  |  |  |
| Indicated                                    | Tonnes     | %WO3     | % MoS2     | % As    | %Bi     |  |  |  |
| Fire Tower West                              | 9,148,900  | 0.32     | 0.21       | 0.29    | 0.04    |  |  |  |
| Fire Tower North                             | 4,340,100  | 0.35     | 0.20       | 1.15    | 0.09    |  |  |  |
| Total Indicated                              | 13,489,000 | 0.33     | 0.21       | 0.57    | 0.06    |  |  |  |
| Inferred                                     | Tonnes     | %WO3     | % MoS2     | %As     | %Bi     |  |  |  |
| Fire Tower West                              | 831,000    | 0.26     | 0.20       | 0.21    | 0.04    |  |  |  |
| Fire Tower North                             | 10,700     | 0.26     | 0.17       | 0.26    | 0.05    |  |  |  |
| Total Indicated                              | 841,700    | 0.26     | 0.20       | 0.21    | 0.04    |  |  |  |

# **Planning for the Fire Tower Zone:**

- The Company expects to start the production of the Fire Tower Zone two years after the North Zone goes into production.
- Phase 2 of the staged approach is focused on the Fire Tower Zone.
- A feasibility study is expected to be completed in 2011; the Fire Tower Zone production decision will be based on the outcome of the feasibility study.
- The construction on the Fire Tower Zone is expected in early 2013.
- Production from the Fire Tower Zone is expected in 2014.

# **APPENDIX 2: MANAGEMENT**

#### J. Errol Farr, CMA: President and CEO, Director

Errol Farr has over 15 years of experience in finance, accounting and operations with publicly-listed junior mining companies. He has been involved with Adex Mining since its acquisition of Mount Pleasant in 1995.

#### Victor Hendricken, BA, MA: Operations Manager

Victor Hendricken has over 25 years of direct hands-on experience in the operation of mine and milling plants, including General Foreman at the Mount Pleasant Mine. He is also a technical consultant for the Beaver Brook Antimony Mine in Newfoundland.

# **J. Dean Thibault, P. Eng, MSc:** Senior Consultant - Metallurgical Environmental Planning Dean Thibault has worked or consulted with BHP, Gulf Canada, Inco Smelter Division, Iron Ore of Canada, Syncrude, Rio Tinto and Tiberon Resources. His expertise includes development of mineral extraction flowsheets and environmental management plans as well as design and construction of metallurgical facilities.

# William B. Burton, BSc. (Hon) Geology: Technical Advisor and Director

William B. Burton is the founder of Adex (1993) and was CEO from 1994 to 1998. He is currently President, CEO and Director of MagIndustries Corp. (TSX: MAA) and is a Director of Erdene Gold Inc. (TSX: ERD).

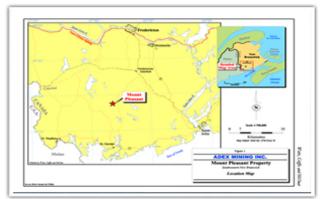
# William C. Burton, BBA, CA: CFO

Willliam C. Burton has extensive public company accounting and audit experience. He is also CFO of MagIndustries Corp. His previous work was Audit Manager with Deloitte & Touche LLP.

# APPENDIX 3: MOUNT PLEASANT PROPERTY, NEW BRUNSWICK



**Mount Pleasant Site View** 



**Location Map Mount Pleasant** 



Mine Site Buildings and Mt. Pleasant

# **CORPORATE INFORMATION**

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# eResearch analysts on this report:

**Eric Eng, BA (Acct., Econ.), MBA**: Eric Eng worked at DBRS as an Analyst/Vice President for 10 years. He obtained a BA in Accounting/Economics and an MBA in Finance at the University of Toronto. He joined *e*Research in January 2008.

**Bob Weir, B. Comm, B.Sc., CFA:** Bob Weir has 43 years of investment research and analytical experience in both the equity and fixed-income sectors, and in the commercial real estate industry. He joined *eResearch* in 2004 and has been its President, CEO, and Managing Director, Research Services since May 2005. Prior to joining *eResearch*, Mr. Weir was at Dominion Bond Rating Service (DBRS), latterly as Executive Vice-President responsible for supervising the firm's 34 analysts and conducting the day-to-day management affairs of the company.

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Graham Wilson

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working capital solvency, no dividends.

Operational - Weak competitive market position, early stage of development, unproven operating plan, high cost

structure, industry consolidating, business model/technology unproven or out-of-date.

Medium Risk: Financial - Several years of revenue and positive earnings, balance sheet in line with industry average, positive free

cash flow, adequate working capital solvency, may or may not pay a dividend.

Operational - Competitive market position and cost structure, industry stable, business model/technology is well

established and consistent with current state of industry.

Low Risk: Financial - Strong revenue growth and earnings over several years, stronger than average balance sheet, strong positive

free cash flows, above average working capital solvency, company may pay (and stock may yield) substantial dividends

or company may actively buy back stock.

Operational - Dominant player in its market, below average cost structure, company may be a consolidator, company may

have a leading market/technology position.

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