

### IBC Advanced Alloys Corp. (TSXV: IB, OTCQX: IAALF) – IBC Achieves 37% YOY Revenue Growth – FINAL REPORT

Sector/Industry: Manufacturing

www.ibcadvancedalloys.com

#### Market Data (as of November 25, 2011)

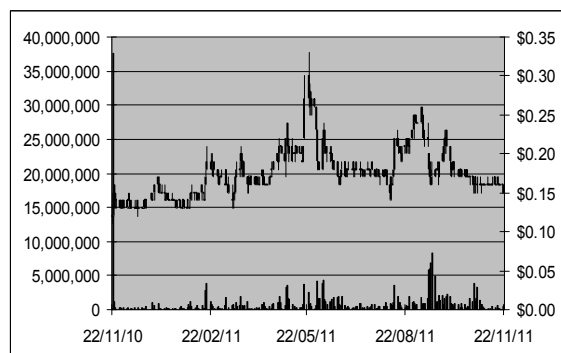
Current Price	CS\$0.15
Fair Value	CS\$0.17
Rating*	HOLD
Risk*	4 (Speculative)
52 Week Range	\$0.11 - \$0.32
Shares O/S	254.4 mm
Market Cap	\$38.2 mm
Current Yield	N/A
P/E (forward)	N/A
P/B	2.25
YoY Return	14%
YoY TSXV	-23%

\*see back of report for rating and risk definitions

#### Investment Highlights:

- **IBC Advanced Alloys Corp. (“IBC” and “the company”) recorded \$20.46 million in revenues in FY2011, up 37% YOY, and in line with our forecast of \$20.44 million.**
- **IBC has received permits, and approvals, and has commenced a drilling program in Juab County, Utah.** The drill program targets the high interest target zones identified in the previous airborne geophysical survey conducted in 2010.
- We have maintained our 2012 revenue estimate at \$24.0 million; our 2013 revenue estimate (which we introduce in this report) is \$25.7 million.
- **The company recorded a net loss of \$4.66 million (EPS: -\$0.02) in FY 2011**, compared to a net loss of \$4.12 million (EPS: -\$0.03) in FY 2010. We were expecting a net loss of \$2.97 million (EPS: -\$0.02) in FY2011. Earnings did not meet our expectations due to higher than expected relocation expenses to the new Wilmington plant and clean-up costs at the Royersford plant.
- We expect the company to report a net loss of \$3.17 million (EPS: -\$0.01) in FY 2012, and a net loss of \$2.99 million (EPS: -\$0.01) in FY 2013.
- **IBC’s common shares began trading on the OTCQX International under the symbol IAALF as of August 26, 2011.**
- IBC and Ceramic Tubular Products LLP signed a Memorandum of Understanding to jointly develop and advance their complementary nuclear fuel technologies.

(All figures in US\$, unless otherwise specified)



(US \$ in 000's)	2010	2011	2012 E	2013 E
Revenues	14,932	20,455	24,000	25,671
Cash and cash equivalents	5,528	7,514	3,235	2,498
Working Capital	5,902	4,392	7,165	6,578
Property, Plant and Equipment	7,534	9,606	8,627	7,560
Mineral Property Interests	936	1,065	2,065	2,065
Total Assets	26,474	31,400	26,741	24,565
Net Income	(4,117)	(4,664)	(3,171)	(2,991)
Earning (Loss) per Share	(0.03)	(0.02)	(0.01)	(0.01)

IBC is engaged in the development and manufacturing of advanced alloys, namely beryllium alloys and specialty copper alloys. They are also currently undertaking beryllium mineral exploration and research on increasing demand for beryllium-related products.

**Company Update**

Significant developments since our previous report were:

**IBC's shares started trading on the OTCQX under the symbol IAALF** as of August 26, 2011. We believe this is a good development for IBC and its shareholders as the cross listing will allow US investors easier access to the company's shares.

IBC appointed Alastair Neill as a director of the company as of November 1, 2011. Mr. Neil's profile follows:

*Alastair Neill is former Vice President of Sales and General Manager of Rare Earth Division for AMR (now Neo-Material Technologies Inc., TSE: NEM). Mr. Neill brings over 15 years of direct rare earth elements experience with downstream end users in Korea, Japan, Europe and North America and with material suppliers in China. Mr. Neill is currently Executive Vice President of Dacha Strategic Metals and serves on the advisory board of Rare Earth Element World, an international organization dedicated to providing industry leadership in the rare earths, rare metals and critical metals sector. Mr. Neill replaces Denis Brady on the board of directors (Source, management).*

**Manufacturing division** (supplies beryllium related alloys and non-ferrous alloys for a range of industrial applications) — generates 100% of the company's revenues. This division has two main segments: Copper Alloys and Engineered Materials.

- **IBC and Ulba Metallurgical Plant JSC signed a memorandum of agreement.** Under the terms of the agreement, **Ulba and IBC intend to renew and extend their multi-year binding supply agreements for both beryllium metal and beryllium master alloys.** The agreement with Ulba allows IBC to secure a consistent supply of beryllium to meet increased customer demand. The two companies have also agreed to study and potentially develop mutually beneficial opportunities in resource exploration (tantalum, niobium and other rare earths), development, and production, as well as downstream manufacturing and distribution. **We believe this is a key strategic move in securing consistent beryllium supplies and expanding their complementary businesses.**
- In our last report, we mentioned the opening of a new manufacturing facility in Wilmington, MA. The opening of the new facility and relocation resulted in a loss of production for a couple of months, subsequently lowering FY2011 revenues. **The plant is operational now and we do not expect any more downtime related to the relocation.**
- In our previous update, we mentioned health issues in 5 employees from one of the company's copper alloy plants. Currently, 2 employees are still unable to return to their foundry jobs until their conditions improve. The company has taken steps to mitigate any future risks associated with this industry and believe that the problems were a result of old procedures. Margins were negatively affected and will continue to be until these employees return.

- **IBC has engaged Chris Huskamp (owner of Huskamp Motorsports Engineering, a consulting firm), a high performance autosports materials and metallurgical consultant, to assist the company in their automotive strategy.** Mr. Huskamp is an Associate Technical Fellow at the Boeing Company (NYSE: BA) where he is involved in developing strategies and solutions for a variety of military and commercial aerospace projects with high performance materials.

Financial results for the manufacturing segment:

Sales revenue was \$5.11 million in Q4 2011, up 12% YOY. FY2011 revenues were \$20.46 million, up 37% YOY and slightly higher than our projected revenues of \$20.44 million. The increase in revenues was a result of the acquisition of IBC Engineered Materials Corp. (formerly Beralcast Corp., completed in Q4 2010) as well as improvements in the economic recovery. We expect revenues to improve going forward as the relocation of the IBC Engineered Materials plant is completed and other operational improvements take affect. In FY2012, we expect the company to report revenues of \$24 million and \$25.67 million in FY2013. In the table below, we summarize sales and gross margin information over the current and previous year.

<b>Manufacturing (in US\$ 000's)</b>	<b>Q4 2011</b>	<b>Q4 2010</b>	<b>FY 2011</b>	<b>FY 2010</b>
Sales	5,106	4,034	20,455	14,932
Cost of Goods Sold	4,007	3,376	16,530	12,828
Gross Profit	1,099	658	3,925	2,104
Operating Income (loss)	-779	-538	-903	-739
Gross Margin	21.52%	16.31%	19.19%	14.09%

As can be seen in the above table, gross margins for FY 2011 have improved significantly over FY 2010. The increase in margins was largely due to operational improvements. Going forward, we expect margins to improve slightly from the Q4 2011 levels.

IBC incurred a net loss of \$2.37 million in Q4 2011, compared to a loss of \$2.04 million in Q4 2010. FY 2011 resulted in a net loss of \$4.66 million (EPS: -\$0.02) compared to the FY 2010 net loss of \$4.12 million (EPS: -\$0.03). We expect a net loss of \$3.17 million (EPS: -\$0.01) in FY 2012, and a net loss of \$2.99 million (EPS: -\$0.01) in FY 2013. In FY 2011, the company realized non-recurring costs for plant relocation, clean up of the Royersford facility, as well as operational difficulties. In FY2012, we expect higher net losses due to the newly leased Wilmington, MA manufacturing plant and new business development, and amortization and G&A expenses.

The company does business globally with 70% of its revenues coming from North America, 5% coming from Europe and 25% coming from Asia. We do not see the revenue sources as a problem as they are in line with competitors. However, IBC is focusing on broadening their revenue sources through increased sales to Asia and Europe. We believe this will only strengthen IBC's operations. The recent new business initiatives overseas and the appointment of Alastair Neill as a director should assist the company in diversifying its revenue sources. IBC has one customer which contributed 17.2% of FY 2011 revenues. This concentration of sales to one customer presents some risks to revenue; however, we expect

the concentration to decrease as the company focuses on expanding its sales globally.

**Exploration division** – IBC has received permits and approvals from the Utah State Office of the U.S. Bureau of Land Management and the Utah Division of Oil, Gas and Mining, and commenced drilling in Juab County, Utah. The drilling program is based on the airborne geophysical survey IBC conducted on the properties in 2010. The drilling program consists of up to 35 holes in the previously discovered target zones. The drilling program utilizes the services of Layne Christensen Drilling (Chandler, AZ); IBC projects the drilling activities will cost an estimated \$1 million. The final lab results and petrographic work is expected to be complete in early 2012. The properties incorporate 371 claims, totaling about 7,630 acres and are located adjacent to the large Spur Mountain beryllium mine (world’s largest beryllium mine).

**Research and Development (R&D) division** – IBC and Ceramic Tubular Products, LLC (CTP) signed a memorandum of understanding to jointly advance and develop their respective nuclear fuels technology. Ceramic Tubular Products has been developing and advancing an advanced nuclear fuel ceramic cladding, which uses silicone carbide. The ceramic cladding is being researched as a replacement of zirconium alloys which are used as the primary containment for nuclear fuel. The research is complementary to IBC’s research on beryllium oxide enhanced fuel. Both research initiatives are aimed at improving the economics and safety of light water nuclear reactors. In the agreement, IBC and CTP will collaborate to develop, test and potentially commercialize their combined technologies. We believe, with the recent accident at the Fukushima light water reactor in Japan, there will be increased government support and initiatives for the commercialization of safer nuclear fuels. The R&D of nuclear fuels is very rigorous and time consuming due to regulations by the US Nuclear Regulatory Commission and other committees; we do not expect any commercialization of new fuels in the short to medium term.

Jim Malone, Vice President of Nuclear Fuels, has been appointed Chairman of the World Nuclear Association’s recently initiated Fuel Technology Working Group. The working group has been formed to evaluate a number of new nuclear fuel variants, including the work done by IBC, Purdue and Texas A&M Universities.

## **Financials**

Liquidity position: As shown in the table below, free cash flows have consistently been negative; we expect cash flows from operations to improve as economies of scale are realized through the new operating plant and efficiencies are improved relative to FY 2010.

Cash Flow (US\$, 000s)	2010	2011	2012E	2013E
<b>CFO</b>	(1,146.0)	(2,910.0)	(1,403.6)	(437.3)
<b>CFF</b>	8,758.0	7,712.0	(1,575.0)	-
<b>CFI</b>	(2,901.0)	(2,877.0)	(1,300.0)	(300.0)
<b>FCFF</b>	(3,502.7)	(5,166.9)	(2,313.6)	(575.0)

As of FY2011, the company had \$7.51 million in cash and cash equivalents, and working capital of \$4.39 million (FY2010 working capital was \$5.9 million). The decrease in working capital was a result of \$5.17 million of debt becoming current. IBC issued shares in FY2011, receiving gross proceeds of \$8.21 million for plant expansion, research initiatives,

mineral properties and general working capital. Subsequent to FY2011, the company issued shares and raised gross proceeds of \$3.45 million, which was used to pay down \$3.0 million of debt. As a result, the company has approximately \$2.17 million of current debt for FY2012.

IBC is currently in discussions to refinance the loan and line of credit from M&I bank; we have assumed the loan and line of credit will be refinanced (however, there is a risk the debt will not be refinanced), which would further reduce the company's current debt to \$0.70 million plus the line of credit due on June 30, 2012, from Customers Bank.

The following chart summarizes the company's liquidity position as of June 30, 2011, (FY2011) and our estimates until 2013.

(US \$ in 000's, except ratio and %)	2010	2011	2012E	2013E
Working Capital	5,902	4,392	7,165	6,578
Current Ratio	1.87	1.38	2.47	2.30
LT Debt / Assets	16.0%	0.0%	5.5%	6.0%
Cash from Financing Activities	8,758	7,712	(1,575)	-

Stock Options and Warrants: The company has 20.92 million options outstanding with an average exercise price of \$0.19, and 78.64 million warrants outstanding, with an average exercise price of \$0.25. Below is a summary of the options and warrants on the company's shares.

Warrants	Exercise Price	Expiration
30,556,952	\$0.25	3/23/2012
3,962,714	\$0.17	3/23/2012
1,785,714	\$0.25	3/31/2012
6,834,832	\$0.29	5/23/2012
22,361,111	\$0.25	6/22/2013
3,130,555	\$0.18	6/22/2013
10,005,000	\$0.25	10/25/2013
<b>78,636,878</b>	<b>\$0.25</b>	

Stock Options	Exercise Price	Weighted Average Term (Years)
8,115,000	\$0.15	2.18
200,000	\$0.16	1.77
4,600,000	\$0.17	3.88
4,090,000	\$0.18	4.61
600,000	\$0.185	4.84
250,000	\$0.190	4.92
200,000	\$0.20	1.86
1,625,000	\$0.23	4.75
600,000	\$0.26	4.9
229,000	\$0.50	1.37
40,000	\$0.51	1.86
150,000	\$0.55	2.25
225,000	\$0.83	1.67
<b>20,924,000</b>	<b>\$0.19</b>	

**We estimate the company can raise up to \$1.22 million if all the “in-the-money” options and warrants are exercised.**

### Valuation

Although the company currently has three divisions (namely, manufacturing, mineral exploration and R&D), we have continued to base our valuation solely on the manufacturing division and exploration projects. Due to the early stage nature of its exploration projects, we value those projects at their book value. Our revised discounted cash flow (DCF) model gave a slightly lower fair value estimate of C\$0.12 per share, down from our previous estimate of C\$0.14 per share. The lower fair value estimate is primarily due to higher than expected SG&A expenses, and share dilution.

<b>DCF Valuation (USDS)</b>	<b>2012E</b>	<b>2013E</b>	<b>2014E</b>	<b>2015E</b>	<b>2016E</b>
AFFO	(184,885)	(125,213)	4,200,432	3,171,312	3,249,154
Change in WC	(828,700)	(149,829)	(143,147)	(134,728)	(438,737)
CFO	(1,013,585)	(275,042)	4,057,285	3,036,583	2,810,417
CAPEX	(300,000)	(300,000)	(300,000)	(300,000)	(300,000)
Free Cash Flow	(1,313,585)	(575,042)	3,757,285	2,736,583	2,510,417
PV	(1,183,410)	(466,717)	2,747,295	1,802,672	1,489,810
	<b>2017E</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>Terminal</b>
AFFO	3,456,226	3,677,471	3,913,900	4,166,600	4,436,734
Change in WC	(470,288)	(504,150)	(540,496)	(579,510)	(621,388)
CFO	2,985,939	3,173,321	3,373,404	3,587,090	3,815,347
CAPEX	(600,000)	(600,000)	(600,000)	(600,000)	(600,000)
Free Cash Flow	2,385,939	2,573,321	2,773,404	2,987,090	3,215,347
PV	1,275,620	1,239,462	1,203,453	1,167,727	15,711,983
Discount Rate	11%				
Terminal Growth	3%				
Firm PV	\$24,987,896				
Cash	\$7,514,000				
Debt	\$5,223,000				
Book value of mineral property	\$1,065,000				
PV Equity (US\$)	\$28,343,896				
PV Equity (C\$)	\$31,178,285				
Shares O/S (dil)	254,428,843				
<b>DCF Value(CS)/Share</b>	<b>\$0.12</b>				

In addition to the DCF model, we valued IBC based on Materion’s (formerly Brush Engineered Materials – NYSE: MTRN) average Enterprise Value to Sales and Price to Book ratios (shown below).

<b>Materion (5 Year Average)</b>	
Materion TEV/S	0.56
Materion P/B	1.40

<b>IBC valuation based on industry peer</b>	
(in 000's)	
TEV/S (2012E)	\$13,392
P/B	\$24,725
<b>Average</b>	<b>\$19,059</b>
Cash	\$7,514
Debt	\$5,223
Book value of mineral property	\$1,065
PV Equity (US\$)	\$22,415
PV Equity (C\$)	\$24,656
Shares O/S (dil)	254,429
<b>DCF Value/Share</b>	<b>\$0.10</b>

Our comparables valuation increased from C\$0.07 to C\$0.10 primarily due to the increased book value of IBC.

### **Rating**

**We have maintained our C\$0.17 per share fair value estimate and HOLD rating as the refinancing of the company's debt remains uncertain.**

### **Risks**

The following risks, though not exhaustive, may cause our estimates to differ from actual results:

- The company depends on a single supplier for its raw beryllium production source.
- The company faces larger manufacturing competitors in the industry that have considerable financial resources and an established customer base.
- The company has no history of mineral production or mining operation.
- The company's business may be adversely affected by changes in the price of copper.
- The company's manufacturing operations involve beryllium, which is under extensive government regulations.

**We rate the company's shares a RISK of 4 (Speculative).**

**IBC Advanced Alloys Corp. - Balance Sheets**  
(in US\$ 000's)

	2009	2010	2011	2012E	2013E
<b>Assets</b>					
<b>Current Assets</b>					
Cash and cash equivalents	841	5,528	7,514	3,235	2,498
Receivables	1,730	3,167	3,756	4,320	4,364
Income taxes refundable	562	49	16	16	16
Prepaid Expenses and Deposits	44	80	147	147	147
Inventories	3,524	3,835	4,571	4,320	4,621
	<b>6,701</b>	<b>12,659</b>	<b>16,004</b>	<b>12,038</b>	<b>11,646</b>
Property, Plant and Equipment	6,461	7,534	9,606	8,627	7,560
Mineral Property	1,284	936	1,065	2,065	2,065
Deferred acquisition costs	-	-	-	-	-
Intangible assets	2,762	3,117	2,261	1,546	831
Deposits	13	53	289	289	289
Goodwill	-	2,154	2,154	2,154	2,154
Note receivable from related party	-	-	-	-	-
Other assets	85	21	21	21	21
	<b>17,306</b>	<b>26,474</b>	<b>31,400</b>	<b>26,741</b>	<b>24,565</b>
<b>Liabilities</b>					
<b>Current Liabilities</b>					
Accounts Payable and Accrued Liabilities	1,048	2,934	3,282	2,766	2,961
Line of credit	2,979	2,601	3,051	2,000	2,000
Current portion of loans payable	2,681	1,007	2,172	-	-
Current portion of notes payable	-	-	3,000	-	-
Other current liabilities	-	161	92	92	92
Interest rate swap	63	54	15	15	15
	<b>6,771</b>	<b>6,757</b>	<b>11,612</b>	<b>4,873</b>	<b>5,068</b>
Notes payable	3,000	3,000	-	-	-
Other long term liabilities	-	-	638	568	498
Loans payable	4	1,473	-	1,474	1,474
Future income taxes	2,255	1,800	2,215	2,215	2,215
	<b>12,030</b>	<b>13,030</b>	<b>14,465</b>	<b>9,130</b>	<b>9,255</b>
<b>Shareholders' Equity</b>					
Common shares	19,654	31,192	38,558	41,732	41,732
Equity component of convertible debt	-	-	-	-	-
Contributed Surplus	3,462	4,169	4,762	5,435	6,125
Brokers' warrants	483	523	719	719	719
Deficit	(18,323)	(22,440)	(27,104)	(30,275)	(33,266)
	<b>5,276</b>	<b>13,444</b>	<b>16,935</b>	<b>17,611</b>	<b>15,310</b>
<b>Total Liabilities and S.E</b>	<b>17,306</b>	<b>26,474</b>	<b>31,400</b>	<b>26,741</b>	<b>24,565</b>

**IBC Advanced Alloys Corp. - Income Statement**  
(in US\$ 000's)

	2009	2010	2011	2012E	2013E
<b>Revenues</b>	<b>11,617</b>	<b>14,932</b>	<b>20,455</b>	<b>24,000</b>	<b>25,671</b>
Cost of Goods Sold	11,363	12,828	16,530	18,442	19,741
<b>Gross profit (loss)</b>	<b>254</b>	<b>2,104</b>	<b>3,925</b>	<b>5,558</b>	<b>5,930</b>
<b>Expenses</b>					
General and Administrative	3,595	4,424	6,141	6,720	7,188
Stock-Based Compensation	718	279	585	603	621
<b>EBITDA</b>	<b>(4,058)</b>	<b>(2,599)</b>	<b>(2,801)</b>	<b>(1,765)</b>	<b>(1,879)</b>
Amortization	479	354	739	806	863
<b>EBIT</b>	<b>(4,538)</b>	<b>(2,953)</b>	<b>(3,540)</b>	<b>(2,571)</b>	<b>(2,741)</b>
Interest Expenses	(450)	(759)	(591)	(600)	(250)
Interest Income	72	6	10		
<b>EBT</b>	<b>(4,916)</b>	<b>(3,706)</b>	<b>(4,121)</b>	<b>(3,171)</b>	<b>(2,991)</b>
Write-off of Mineral Properties	(191)	(718)			
Foreign Exchange Gains/Losses	(1,000)	(15)	61		
Other assets write-off	(9,640)	(75)			
Gain (loss) on financial instruments held for	(63)	9	39		
Loss on disposale of assets			(42)		
Imparment of intangibles			(141)		
Other income	31	68	68		
Income Tax	1,148	320	(528)	-	-
<b>Net Earnings for the period</b>	<b>(14,631)</b>	<b>(4,117)</b>	<b>(4,664)</b>	<b>(3,171)</b>	<b>(2,991)</b>
EPS	(0.14)	(0.03)	(0.02)	(0.01)	(0.01)

**IBC Advanced Alloys Corp. - Cash Flows**  
**(in US\$ 000's)**

	2009	2010	2011	2012E	2013E
<b>Operating Activities</b>					
<b>Net Income</b>	<b>(14,631)</b>	<b>(4,117)</b>	<b>(4,664)</b>	<b>(3,171)</b>	<b>(2,991)</b>
Non-Cash Items:					
Amortization	1,006	1,425	1,877	1,994	2,083
Future Income Tax	(586)	(455)	415		
Stock Based Compensation	718	279	585	603	621
Exploration property write-off	191	718			
Impairment	9,640	75	141		
Doubtful debts expense	59	6	(19)		
Inventory write-down	332	-			
Net loss on financial instruments held for trac	-	-	(39)		
Accrued income / (expense)	0	146			
Unrealized foreign exchange loss	1,000	15	(115)		
Non-cash disposal of assets			42		
Non cash payment of salary			18		
	<b>(2,271)</b>	<b>(1,908)</b>	<b>(1,759)</b>	<b>(575)</b>	<b>(287)</b>
<b>Change in Non-Cash Working Capital Items:</b>					
Receivable	1,181	(1,565)	(570)	(564)	(44)
Inventories	2,465	(311)	(736)	251	(301)
Prepaid expenses	15	(35)	(67)	-	-
Other current assets	75	115	(74)		
Accounts Payable and Accrued Liabilities	(1,344)	1,877	258	(516)	195
Others				-	-
Income taxes payable or refundable	(559)	681	38	-	-
	<b>1,834</b>	<b>762</b>	<b>(1,151)</b>	<b>(829)</b>	<b>(150)</b>
<b>Net Cash Used in Operating Activities</b>	<b>(438)</b>	<b>(1,146)</b>	<b>(2,910)</b>	<b>(1,404)</b>	<b>(437)</b>
<b>Financing Activities</b>					
Issuance of shares	976	9,103	7,570	3,174	
Recapitalization (net of share issue and recap	-	-			
Related party transactions	1,673	-			
Loan repayments	-	(205)	(308)	(2,172)	
Convertible note payables	-	238		(3,000)	
Loan proceeds	-			1,474	
Line of credit proceeds		230	1,078		
Repayments of line of credit	(638)	(608)	(628)	(1,051)	
Deferred financing costs					
Shareholder advances	-				
	<b>2,010</b>	<b>8,758</b>	<b>7,712</b>	<b>(1,575)</b>	<b>-</b>
<b>Investing Activities</b>					
Advances to subsidiary before acquisition	-				
Deposit	-	(51)	(236)		
Deferred acquisition costs	-				
Investment in mineral properties	(334)	(362)	(127)	(1,000)	
Purchase of plant, equipment, and intangible	(312)	(238)	(2,514)	(300)	(300)
Purchase of subsidiaries, net of cash acquired	(6,006)	(2,250)			
Repayment of advances from shareholder	485				
	<b>(6,167)</b>	<b>(2,901)</b>	<b>(2,877)</b>	<b>(1,300)</b>	<b>(300)</b>
<b>Foreign exchange effect on cash</b>	<b>-929</b>	<b>-24</b>	<b>61</b>		
<b>Increase (decrease) in Cash</b>	<b>(5,525)</b>	<b>4,687</b>	<b>1,986</b>	<b>(4,279)</b>	<b>(737)</b>
Cash (BOP)	6,366	841	5,528	7,514	3,235
<b>Cash (EOP)</b>	<b>841</b>	<b>5,528</b>	<b>7,514</b>	<b>3,235</b>	<b>2,498</b>

**Fundamental Research Corp. Equity Rating Scale:**

**Buy** – Annual expected rate of return exceeds 12% or the expected return is commensurate with risk

**Hold** – Annual expected rate of return is between 5% and 12%

**Sell** – Annual expected rate of return is below 5% or the expected return is not commensurate with risk

**Suspended or Rating N/A**— Coverage and ratings suspended until more information can be obtained from the company regarding recent events.

**Fundamental Research Corp. Risk Rating Scale:**

**1 (Low Risk)** - The company operates in an industry where it has a strong position (for example a monopoly, high market share etc.) or operates in a regulated industry. The future outlook is stable or positive for the industry. The company generates positive free cash flow and has a history of profitability. The capital structure is conservative with little or no debt.

**2 (Below Average Risk)** - The company operates in an industry where the fundamentals and outlook are positive. The industry and company are relatively less sensitive to systematic risk than companies with a Risk Rating of 3. The company has a history of profitability and has demonstrated its ability to generate positive free cash flows (though current free cash flow may be negative due to capital investment). The company's capital structure is conservative with little to modest use of debt.

**3 (Average Risk)** - The company operates in an industry that has average sensitivity to systematic risk. The industry may be cyclical. Profits and cash flow are sensitive to economic factors although the company has demonstrated its ability to generate positive earnings and cash flow. Debt use is in line with industry averages, and coverage ratios are sufficient.

**4 (Speculative)** - The company has little or no history of generating earnings or cash flow. Debt use is higher. These companies may be in start-up mode or in a turnaround situation. These companies should be considered speculative.

**5 (Highly Speculative)** - The company has no history of generating earnings or cash flow. They may operate in a new industry with new, and unproven products. Products may be at the development stage, testing, or seeking regulatory approval. These companies may run into liquidity issues, and may rely on external funding. These stocks are considered highly speculative.

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