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Development of a strategic and tactical game plan for junior mining companies

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MINING COMPANY ANALYSIS: ANVIL MINING LIMITED

1. Corporate Profile

1.1	**Company Description**	➢ The company is a mineral producing, development & exploration company with a focus on base & precious metal exploration & mine development. ➢ The company holds a 90% beneficial interest in the Dikulushi Mine & surrounding exploration areas. ➢ Dikulushi commenced commercial production in October 2002
1.2	**Corporate structure**	➢ Anvil NL shares were traded on the Australian stock exchange since 1993. ➢ March 2004, Anvil Mining NL undertakes corporate reorganization to apply for a listing on the Toronto Stock Exchange (TSX) ➢ Anvil Mining Limited formed, following implementation of Scheme Arrangement, listing on TSX and ASX
1.3	**Shareholders**	➢ Major shareholders o First Quantum Minerals Ltd: 13.9% o Deans Knight management: 7.6% o Colonial first Estate: 5.2%
1.4	**Listing**	Toronto, Australia & Berlin. Symbol AVM
1.5	**# Shares**	➢ Issued shares: 29 mill ➢ Fully diluted: 33.4 mill
1.6	**Share price**	➢ Aus$ 0.70 (Dec 2005) , U$$ 0.53s
1.7	**Market cap**	➢ Aus$ 20.3mill (Dec 2005) , U$$15.38s

2. Company Strategy

2.1	**Vision & Mission**	➢ Expanding copper growth company developing the resource potential of the Congo
2.2	**Strategy**	➢ First Mover Status" DRC ➢ Staged development approach ➢ Initial capital investment was kept at a minimum with upgrades to be financed from internal generated cashflow surpluses ➢ Strong cashflow, acceptable gearing, unhedged producer ➢ Ability to balance risk & reward ➢ Strong management team with African experience ➢ Initiate 2 starter projects to produce combined 30,000 tpa cathode copper each within2-3 yrs ➢ Expand new operations to 45-60,000 tpa ➢ Move to mid tier producer status 75,000 tpa within 5 yrs ➢ Enter cobalt market within 2 yrs ➢ "First Mover Status" DRC ➢ Increase reserve base 3-4x by 2005 ➢ Prove up resource potential for 15-20 LOM ➢ Build strong partnerships with the community

3. Review of Operations

3.1 Mining Operations

i) Dikulushi Copper Silver Mine

<table>
<tr><td>1</td><td>Operation Description</td><td>➢ Commenced October 2002
➢ Mine established using staged development method

1. Stage 1 (Sep 2002): Openpit mining & heavy medium separation to produce concentrate grading 40% Cu & 1000g/t Au. Capex US$ 6.2 mill
2. Stage 2 (Oct 2004): Openpit mining & ball mill & floatation circuit to produce concentrate grading 55-58% Cu & 1700g/t Au. Capex US$ 7.5 mill
3. Stage 3: (2006-2008): Underground mining</td></tr>
<tr><td>2</td><td>Host Country Location</td><td>➢ DRC
➢ South-east part in Haut Katanga District</td></tr>
<tr><td>3</td><td>Legal</td><td>➢ 100%</td></tr>
<tr><td>4</td><td>Geology & Exploration</td><td>➢ Remodelling of ore body in compliance with JORC Code
➢ Diamond drilling program of 850m & reverse circulation programme of 1,370m, targeting reserves below previous openpit design & disseminated mineralization associated with hanging wall orebody
➢ Resources to a depth of 200m, using cut off of 1.5% copper
➢ Ore reserves based on copper price of $1650/ton (=US75c/lb) & silver price of $4.5/oz
➢ Dilution: 5%</td></tr>
<tr><td>5</td><td>Mineral Resources & Reserves</td><td>Reserves & Resource Statement
<table>
<tr><th>Orebody</th><th>Tons</th><th>Cu (%)</th><th>Ag (g/t)</th><th>Cu metal (tons)</th><th>Ag metal (tons)</th></tr>
<tr><td>Measured</td><td>573,000</td><td>7.48</td><td>205</td><td>42,900</td><td>118</td></tr>
<tr><td>Indicated</td><td>939,000</td><td>7.15</td><td>209</td><td>67,200</td><td>197</td></tr>
<tr><td>Inferred</td><td>210,000</td><td>6.45</td><td>153</td><td>13,500</td><td>32</td></tr>
<tr><td>Total</td><td>1,722,000</td><td>7.18</td><td>201</td><td>123,600</td><td>347</td></tr>
</table></td></tr>
<tr><td>6</td><td>Mining</td><td>➢ Stage 1& 2: Openpit mining to 120m depth
➢ Stage 3: Underground mining
➢ Use of South African Mining Contractor</td></tr>
<tr><td>7</td><td>Metallurgy</td><td>➢ Stage 1: 250,000 tpa Heavy Media Separation production circuit
➢ Stage 2: 350,000 tpa ball mill circuit
➢ June 2003: commissioned small spiral circuit to retreat tailings discharging from HMS plant</td></tr>
</table>

8 Production

Stage 1/ Stage 2 Comparison

	Stage 1	Stage 2
Production		
Ore processed	276,000 t	
Cu tons	13,500 t	20,000 t
Silver (000oz)	1,200	1,600
Recovery	71%	93%
Concentrate grade		
Cu (%)	41%	56%
Silver (g/t)	1,000	1,700

Production Statistics

Parameter	UoM	2003-03	2003-04
Mining			
Ore mined	Tons	186,710	276,088
Ore grade Cu	%	7.68	7.21
Ore grade g/t	g/t	172	198
Waste mined	BCM	818,244	1,120,550
Processing			
Ore processed	Tons	171,260	266,598
Head grade Cu	%	7.87	7.25
Head grade Ag	g/t	176	201
Recovery	%	60	70
Cu produced	Tons	8,105	13,587
Ag produced	oz	589,074	1,211,731
Production of Concentrate			
Concentrate produced	Tons	21,929	33,411
Concentrate grade Cu	%	36.9	40.7
Concentrate grade Ag	g/t	866	1,128
Delivered Concentrate			
Concentrate delivered	Tons	18,854	33,797
Payable Cu	Tons	6,891	13,303
Payable Ag	oz	472,341	1,141,241
Cash cost of production			
Ex Mine	$/lb	0.14	0.21
Total cash cost (Mining operating costs, concentrate transportation costs, smelting costs, refining & realization costs)	$/lb	0.52	0.49

9 Infrastructure

- Road base needed to start the project: dropped truck load of sledge hammers at Dikulushi village. Showed local villagers size of stone needed & they set out to work
- Purchase of low speed 4.8 MW power generator plant costing $718,000
- New projects
  - Pwato water reticulation
  - Kilwa water reticulation expansion
  - Dikulushi-Pweto road
- Proposed projects
  - Koni-Pweto transmission line

<table>
<tr><td></td><td></td><td>➢ Kilwa-Kasomeno road
➢ Scoping studies $132,000</td></tr>
<tr><td>10</td><td>Logistics & Suppliers</td><td>➢ Material & equipment came from Zambia across Lake Mweru in refurbished old Zambian Ministry of Transport Barge
➢ Sourcing second-hand equipment for Stage 2 from diverse locations in Australia. Refurbishment work carried out in Perth and Johannesburg</td></tr>
<tr><td>11</td><td>Marketing</td><td>Outlook for copper
➢ Recent substantial increases in metal price
➢ Strong global economies
➢ Increasing demand from Asia, particularly China
➢ Declining exploration & capital expenditure since 1997
➢ Erosion of pipeline of development projects
➢ Constrained new sources of supply
➢ Concentrate export & smelting: 60% of concentrate delivered to Phalaborwa SA, remainder between O’okiep smelter in SA & Ongopolo smelter in Namibia</td></tr>
<tr><td>12</td><td>Human Resources</td><td>➢ Senior executives with considerable experience in the Congo mining industry
➢ More than 600 people employed at Dikulushi
➢ Most employees recruited and trained locally
➢ Key appointments:
o Former Secretary General of National Government as Administration Manager
o Former Manager of Financing Strategy department for Gécamines as Administration Superintendent
o Metallurgist Gecamines appointed as plant manager
➢ Teamwork essential
➢ Limited experience by many of new recruits
➢ Building of a “can do” culture</td></tr>
<tr><td>13</td><td>Environmental & Social</td><td>Anvil community health program: able to reduce incidents of Malaria by 30%

Projects being implemented:
➢ Dikulushi School: $75,000
➢ Lumakete School: $30,000
➢ Kilwa Hospital: $175,000</td></tr>
<tr><td>14</td><td>Financial</td><td><table><tr><th>Capex</th><th>Opex</th></tr><tr><td>Stage 1: $ 6 mill
Stage 2: $7.5 mill</td><td>Stage 1: $0.52/lb
Stage 2: $0.49/lb</td></tr></table>
NPV: No information
IRR: No information</td></tr>
<tr><td>15</td><td>Operations Risks</td><td>No information</td></tr>
</table>

3.2 Mine Development

No mine development projects.

3.3 Feasibility Studies

i) Mutoshi Joint Venture Pre-Feasibility

1	**Project Description**	Mutoshi JV ➢ Allows for staged development approach that will double AVM's production, rapid transition to significant cashflow ➢ Paves way for developing 15 – 20 year mine life in the kolwezi Klippe region ➢ Low entry cost relative to resource potential ➢ Quick entry into Co market
2	**Project Stage**	➢ Prefeasibility.
3	**Host Country / Location**	➢ DRC, Southeast ➢ Adjacent to world class historical copper & cobalt producing region, confined region 25km x 10 km, accountable for 70% of Cu & Co production of DRC
4	**Legal**	➢ Anvil Mining 70% ➢ Gecamines 20% ➢ De Monta Enterprises 10%
5	**Geology & Exploration**	➢ High quality copper & cobalt resources
6	**Mineral Resources & Reserves**	➢ No information provided
7	**Mining**	➢ No information ➢ Presume rehabilitation old mines
8	**Metallurgy**	➢ Kulumziba Coarse Rejects Starter Project ➢ Coarse rejects deposit grading >4% Cu ➢ Possible resource 5-7 mill tons ➢ Amenable to simple HMS processing ➢ Indicative recoveries: 70% ➢ Concentrate grades: 25-30% ➢ Stage 1: o 1 mtpa HMS plant o 25,000 tpa of Cu in oxide concentrate form ➢ Stage 2: o SXEW plant o Subsequent significant expansion
9	**Infrastructure**	➢ Reasonable infrastructure including access to hydroelectric grid
10	**Marketing**	➢ No information
11	**Human Resources**	➢ Close proximity to technically skilled workforce in Kolwezi
12	**Environmental**	➢ No information

<table>
<tr><td></td><td>& Social</td><td></td></tr>
<tr><td>13</td><td>Consultants</td><td></td></tr>
<tr><td>14</td><td>Financial</td><td>Mutoshi Acquisition Costs: total: $12.5 mill

Payable on closing:
➢ $ 3mill in cash
➢ $750,000 in AVM stock

Payable following closing
➢ $2 mill 90 days after closing
➢ $1.25 mill at 6 months after closing
➢ $1.25 mill at 12 months after closing
➢ $4.25 in 18 equal instalments, beginning 4 months after start of production

<table><tr><th>Capex</th><th>Opex</th></tr><tr><td>No information</td><td>$0.56/lb</td></tr></table>
NPV: No information
IRR: No information</td></tr>
<tr><td>15</td><td>Implementation</td><td>➢ No information</td></tr>
<tr><td>16</td><td>Project Risks</td><td>➢ No information</td></tr>
</table>

3.4 Exploration

3.4.1 Exploration Strategy

- Exploration work within a 30km radius of the Dikulushi Mine, where encouraging indications of sulphide copper and secondary copper mineralization have been located.

3.4.2 Exploration Projects

i) Dikulushi Deeps

1	**Project Description**	➢ Infill & deeper drilling of Dikulushi Orebody ➢ Indications of sulphide copper & secondary copper ➢ Geophysical programs have been run
2	**Project Stage**	➢ Advanced exploration
3	**Host Country / Location**	➢ DRC, southeast ➢ Exploration within a 30km radius of the Dikulushi Mine
4	**Legal**	➢ Ownership Structure o 100%?
5	**Exploration Activities**	➢ 6 x diamond drillholes ➢ 2004: 5 drill holes for 1,318m of drilling ➢ Extension of resource down dip to vertical depth of 300m ➢ Downhole surveys at 50 m intervals

		➢ Drilling program by *Stanley Mining Services Ltd,* samples analysed by *Genanalysis laboratory Services Ltd*
6	**Results**	➢ New resource model currently being developed ➢ Underground feasibility study expected to be completed by Sep 2004 ➢ Expected to increase proposed mine life by 2 years

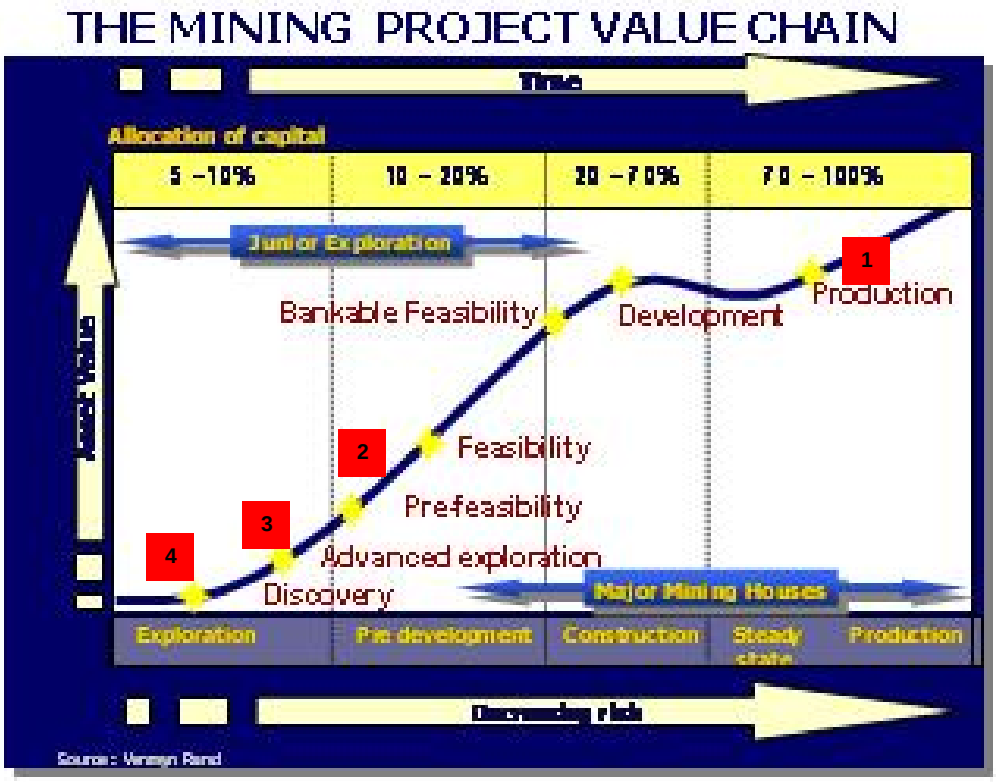
ii) Kinsevere-Nambulwa Project

1	**Project Description**	➢ 9 Quality Cu & Co Co prospects ➢ 25 km from sealed road & hydroelectric grid ➢ Kinsevere project : Cu – Co ➢ Tshifufia project :Cu- Co ➢ Tschifufiamashi prospect:: Cu- Co ➢ Nambulwa Prospect: Cu-Co
2	**Project Stage**	➢ Early stage exploration
3	**Host Country / Location**	➢ DRC, southeast
4	**Legal**	➢ Ownership structure o Anvil Mining 70% o MCK 30%
5	**Attributes of Project**	➢ Exploitation permits 19.5 km^2 ➢ Exploration Permits 819km^2 ➢ Opion to aquire or lease ➢ Low cost entry into project ➢ Close to technically skilled workforce in Lubumbashi
6	**Exploration Activities**	➢ No information
7	**Results**	➢ No information ➢

3.5 Anvil Project Locations



3.6 Company Portfolio Overview



1. Dikulushi
2. Mutoshi Joint Venture
3. Dikulushi Deeps
4. Kinsevere-Nambulwa Project

4. The Team

4.1 Board of Directors

Non Exec Chairman: Philipp Pascali
- BSc Control Engineering Sussex, MBA UCT
- 26 years experience in mineral development projects
- CEO of First Quantum Minerals

Director, President & CEO: Bill Turner
- BSc Geology & Mineralogy, MSc, MBA Monash
- Worked internationally for 15 years in central & southeast Asia & Africa
- Joined Anvil 1995
- Worked for Dominion Mining Ltd for 10 years as GM / Indonesia & Special Projects Manager
- Fellow of Australasian Institute of Mining & Metallurgy

Independent Director: Peter Bradford
- BSc Applied Science, F. Aus.I.M.M
- Metallurgist with 20 years experience in mining industry
- President & CEO of Golden Star Resources
- Director of Guyanor Resources
- Member of Audit Committee, Corporate Governance Committee & nomination & Compensation Committee

Independent Director: John Sabine
- B.A. LL.B
- Partner of Canadian law firm Fraser Milner Casgrain LLP
- Leading mining practitioner in Canada, experience in mining & resource law & corporate finance
- Member of Securities Advisory Committee
- Member of Audit Committee, Chairman Corporate Governance Committee

Independent Director: John Sabine
- B.A. LL.B
- Partner of Canadian law firm Fraser Milner Casgrain LLP
- Leading mining practitioner in Canada, experience in mining & resource law & corporate finance
- Member of Securities Advisory Committee
- Member of Audit Committee, Chairman Corporate Governance Committee

Independent Director: Lance Tigert
- BSc Mining Eng, MBA, CFA
- 35 years experience in acquisition & development of mineral properties with Noranda inc
- Previous Senior Vice President Business & project Development
- Worked in Zambia, Congo, Peru, Chile & Argentina
- Chairman of Audit Committee, Corporate Governance Committee & nomination & Compensation Committee

4.2 Management team

- DRC Country manager
- Resident manager – Dikulushi
- GM – Development
- CFO
- Financial Controller

- Manager Investor
- Corporate Secretary

5. Corporate Governance Practices

- Board responsibilities defined
- Committees:
    - Audit Committee
    - Nomination & Compensation Committee
    - Corporate Governance Committee

6. Finance

6.1 Financing: Equity

Key movements in share capital

Date	Activity	Capital raised	Comment
2002	Issued of 3 mill shares at A$0.10 and 3 mill unlisted options, at an exercisable price of A$0.12 through a placement. Issue of 2.961 mill shares at A$0.10 & 2.961 mill unlisted options at an exercisable price of A$0.12 to a nominee of the convertible note holder.		Share capital: US$9.81mill
2003	Issued 2.9 mill shares & 2.96 mill unlisted options, at an exercisable price of A$ 0.12 to a nominee of convertible note holder FQM Issued 5.2 mill fully paid up shares.		Share capital: US$9.81mill
2004	Issued 1.65 mill common shares at C$ 4.25 each in accordance with IPO on the Toronto Stock Exchange.		Share capital: US$16.8mill

6.2 Financing: Debt

Date	Loan	Institution	Interest	Terms
2003	$5mill	RMB	LIBOR plus 2.5%	➢ Facility for Stage 2 by way of an expansion of an existing facility provided by RMB for Stage 1 development ➢ Establishment fee of 5% ➢ Commitment fee of 0.75% ➢ Drawdown conditional on conditions precedent ➢ Anvil issued RMB 5 million options at exercise price of A$0.30. Options will expire August 2006. ➢ Will increase existing debt from $2.65 mill to $7.62 mill, to be repaid by March 2006.
2004	$0.5 mill cost overrun facility	MDM	➢ LIBOR +2.5%	➢ Loan unsecured ➢ As part of contractual arrangements in relation to construction of Stage I of Mine Process Facilities at Dikulushi.
2004	$0.5 mill	Shareholder FQM	LIBOR +2.5%	➢ Unsecured convertible note facility ➢ Term: 18 months ➢ Notes convertible to shares

6.4 Financial Assessment

COMPANY FINANCIAL ASSESSMENT — **COMPANY:** **ANVIL MINING LTD** — **2004**

Share price ASX: Dec 2005 (US$) **0.53**

Exchange rate: US$/Aus$ **1.32**

1.CONSOLIDATED INCOME STATEMENT

		Jun-04	Jun-03
	Income ($ mill)		
1	Copper Silver Concentrate Sales	$29.08	$10.40
2	Other Africa	$1.41	$0.22
3			
4			
5			
	Total Income	**$30.49**	**$10.62**
	Expenditure ($ mill)		
1	Operating expenses	$16.66	$8.54
2	Amortisation	$2.30	$0.89
3	General, administrative & marketing	$1.61	$0.68
4	Exploration expense	$0.52	$0.17
5	Foreign exchange gains/ (losses)	$0.33	$0.15
6	Stock based compensation	$0.19	$0.18
7	Interest & financing fees	$2.15	$0.81
8			
	Total Expenses	**$23.76**	**$11.42**
	Profit/Loss Analysis		
1	**Profit/Loss for period before tax**	**$6.73**	**($0.79)**
2	**Net Profit /Loss**	**$6.05**	**($0.79)**
3	Earning (loss) per share ($)	$0.31	($4.44)

Analysis

Income increase by	$19.87
Costs increased by	$12.34
Profit increase by	$6.85
Earnings per share increases by	4.75

2. CONSOLIDATED BALANCE SHEET

		Jun-04	Jun-03
	Assets ($ mill)		
1	Current assets	$11.12	$3.25
2	Deferered financing fees	$0.71	$0.12
3	Deferred mining costs	$1.98	$0.67
4	Exploration & evaluation expenditure	$2.19	$0.62
5	Property, plant & equipment	$16.02	$10.39
	Total Assets	**$32.02**	**$15.06**
	Liabilities ($ mill)		
1	Current liabilities	$7.77	$6.36
2	Long term debt	$2.83	$1.88
3	Environmental & mine closure liabilities	0.2946	0.254
4	Non controllin interest	$0.64	
	Total Liabilities	**$11.53**	**$8.48**
	Shareholders Equity ($ mill)		
1	**Total**	**$20.49**	**$6.58**

Analysis

Assets have increased by	$16.96
Liabilities have increased by	$3.04
Shareholders equity has increase by	$13.91

3. CONSOLIDATED CASH FLOW STATEMENT

		Jun-04	Jun-03
	Cashflows ($ mill)		
1	Cash flows provided by operating activities	$4.63	$0.63
2	Cash flows from investing activities	($6.79)	($5.10)
3	Cashflows from financing activities	$8.52	$3.29
4	Cash at beginning of period	$0.64	$1.68
5	**Cash at end period**	**$7.17**	**$0.64**

Analysis	
Cash flows provided by operating activities increase by	$4.00
Cash flows from investing activities increased by	($1.69)
Cashflows from financing activities increased by	$5.23
Cash at end of period increased by	$6.53

4. FINANCIAL RATIOS

	Ratio	Jun-04	Jun-03	Analysis
	LIQUIDITY			
1	Current Ratio	1.43	0.51	(>2 = healthy position): 2004 ratio improves but not yet 2
	LEVERAGE			
2	Debt Ratio	36%	56%	(if >50%, shareholders provide most risk): shareholder risk is decreasing
3	Gearing	12%	22%	(Gearing levels acceptable at < 50%): acceptable
	PROFITABILITY			
4	Gross Profit Margin	22%	-7%	2004 profits, good year
5	Return on Shareholder Funds	$0.33	($0.12)	2004 positive return on shareholder funds
	INVESTMENT PERFORMANCE			
6	P/E ratio	2		
7	Dividend yield	$0.31	$0.00	Dividends in 2004

Ratio definition

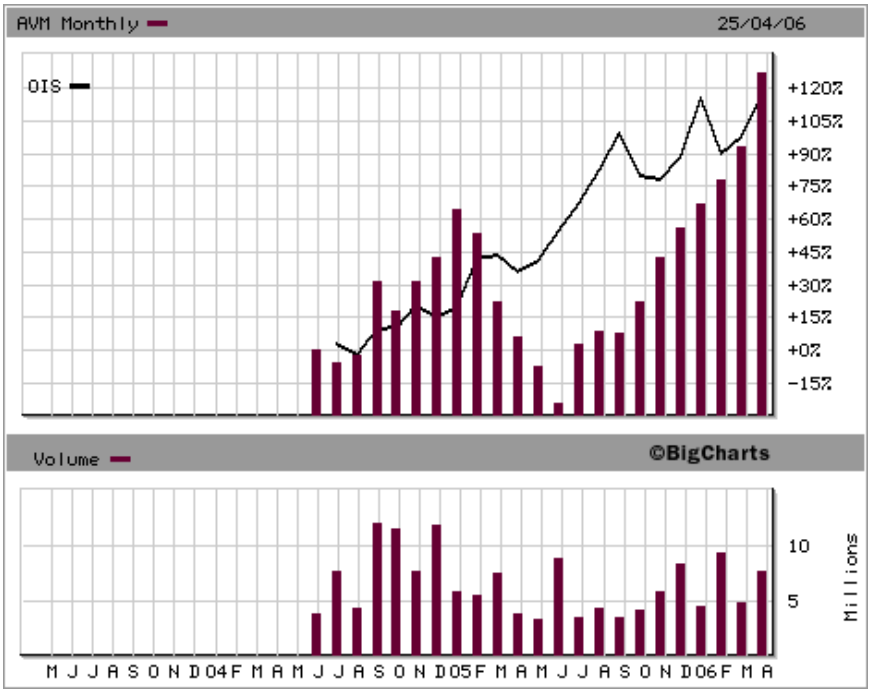
1. Current ratio = current assets / current liabilities
2. Debt ratio = total liabilities / total assets
3. Gearing =long term liabilities / total capital employed
4. Gross profit margin = gross profit / sales
5. Return on shareholder funds = net income / shareholder interest
6. P/E ratio= market price per share / earning per share
7. Dividend yield = dividend per share / current market price

Notes

1. Source: Anvil Mining Annual Report 2004
2. Australian Stock Exchange: www.asx.com
3. All figures in US $mill
4. All figures rounded to $ 0.01 mill

6.5. Share Price Movement

i) Comparison Share Price vs. Dow Jones Global Exploration & Mining Index (April 2006)



ii) Analysis of Share Price Movement

- Anvil's share price has exceeded the Index until Feb 2005.
- Thereafter the share price fell 60%
- In June 2005 the share price turned radically and has increased by 135%
- In April 2006 the share price caught up with the Exploration index, highlighting the market confidence in the share.

7. Information Sources

1. Anvil Mining Limited Annual Report 2004
2. "Forging a great future in the Congo". Anvil Mining Limited, Slides Mining Indaba, February 2005
3. The Anvil. New about Anvil Mining Limited. January 2005, Volume 1, Issue 1
4. Financial Times analytical charting, *www.mwprices.ft.com,* 25 April 2006