RIO TINTO PLC Form 6-K October 19, 2010

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549 FORM 6-K REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13A-16 OR 15D-16 OF THE SECURITIES EXCHANGE ACT OF 1934 Dated 19 October 2010

Commission file number: 001-10533 Commission file number: 000-20122

Rio Tinto plc

Rio Tinto Limited ABN 96 004 458 404

(Translation of registrant s name into English)

(Translation of registrant s name into English)

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(Address of principal executive offices)

(Address of principal executive offices)

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

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THIS REPORT ON FORM 6-K SHALL BE DEEMED TO BE INCORPORATED BY REFERENCE IN THE REGISTRATION

STATEMENT ON FORM F-3 (NO. 333-151839) OF RIO TINTO FINANCE (USA) LIMITED, RIO TINTO PLC AND RIO

TINTO LIMITED AND THE REGISTRATION STATEMENTS ON FORM S-8 (NOS. 33-46865, 33-64380, 333-7328,

333-8270, 333-10156, 333-13988, 333-147914 AND 333-156093) OF RIO TINTO PLC AND RIO TINTO LIMITED.

AND TO BE PART THEREOF FROM THE DATE ON WHICH THIS REPORT HAS BEEN DEEMED FILED, TO THE EXTENT NOT

SUPERSEDED BY DOCUMENTS OR REPORTS SUBSEQUENTLY FILED OR FURNISHED.

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SIGNATURES

THIRD QUARTER 2010 OPERATIONS REVIEW 14 October 2010

Chief executive Tom Albanese said: We have delivered consistently strong operating performance in 2010 and the third quarter was no exception. We continue to run our operations at close to or above capacity rates, taking advantage of strong prices for our products. This quarter we achieved record production in iron ore, alumina and coking coal. Our investment in organic growth is gathering momentum. We approved more than \$4 billion of capital projects during the third quarter, including investment towards the expansion of our Pilbara iron ore operations to 330 million tonnes per annum. This takes our total approvals this year to \$5.5 billion and is consistent with our capex guidance of \$13 billion over the 18 months to December 2011.

Rio Tinto s attributable iron ore production set a new quarterly record across its global operations, with Hamersley benefiting from the ramp up of new replacement tonnes at Brockman 4 and Western Turner Syncline. Attributable production during the first nine months was 10 per cent higher than the same period of 2009.

The Pilbara system operated in excess of its nameplate capacity during the quarter and matched the record third quarter 2009 production of 56.8 million tonnes (100 per cent basis).

Mined copper and gold were down 19 per cent and 33 per cent on the third quarter of 2009 primarily due to lower grades at Grasberg. Refined copper and gold were up six per cent and 46 per cent on the third quarter of 2009 reflecting greater efficiencies at the Kennecott Utah Copper smelter.

Bauxite production increased 17 per cent on the third quarter of 2009 in line with higher demand. Alumina production was a quarterly record, up six per cent on the third quarter of 2009. Aluminium production was down two per cent.

Australian hard coking coal production was a record 2.4 million tonnes, up 17 per cent on the third quarter of 2009 reflecting increased investment at the Queensland operations. Australian thermal coal production was down 14 per cent on the same period, mainly due to wet weather in the Hunter Valley.

The continued recovery in diamonds and minerals production reflected improving market fundamentals compared with the difficult conditions of 2009.

Rio Tinto approved capital projects totalling \$4.2 billion during the third quarter, including \$1.3 billion for the Pilbara iron ore expansions, \$0.8 billion for the completion of the Argyle Diamonds underground mine and \$1.6 billion for the development of the Hope Downs 4 iron ore mine in the Pilbara.

All currency figures in this report are US dollars, and comments refer to Rio Tinto s share of production, unless otherwise stated

CORPORATE ACTIVITY

On 5 August 2010, Rio Tinto has received a binding offer from funds affiliated with Apollo Global Management, L.P. and the Fonds Stratégique d Investissement to buy a 61 per cent stake in Alcan Engineered Products excluding the Cable Division. The transaction follows the successful divestment last year of the Composites division of the Engineered Products business. The terms of the transaction are confidential.

On 13 September, Rio Tinto increased its ownership in Ivanhoe Mines Ltd. to 34.9 per cent, following the automatic conversion of the US\$350 million convertible credit facility Rio Tinto made available to Ivanhoe Mines Ltd. in 2007 which was fully drawn down by mid-2008.

IRON ORE

Rio Tinto share of production (000 tonnes)

		vs Q3	vs Q2	9 mths	vs 9 mths
	Q3 10	09	10	10	09
Hamersley	33,827	-3%	+14%	93,416	+5%
Hope Downs	3,554	+18%	-12%	11,659	+56%
Robe River	7,947	+2%	+4%	23,071	+11%
IOC (pellets and concentrate)	2,280	+72%	-0%	6,433	+13%

Markets

Third quarter sales volumes from the Pilbara region of Western Australia of 56 million tonnes (100 per cent basis) were consistent with the same quarter of 2009.

Pilbara expansion

During the third quarter, Rio Tinto announced investments totalling US\$1.3 billion for the expansion to 230 million tonnes per annum and for early lead items in its drive to expand the Pilbara by an additional one hundred million tonnes per annum.

The Pilbara 330 expansion centres on increasing Rio Tinto s port at Cape Lambert from its current annual capacity of 80 million tonnes to 180 million tonnes by 2015. This will be achieved through construction of a new 1.8 kilometre jetty and four-berth wharf to run parallel to the existing jetty and four-berth wharf.

Rio Tinto s planned growth of its Pilbara iron ore operations to 330 Mt/a capacity consists of the following steps:

225 Mt/a by end of Q1 2011 Dampier port systems efficiencies (in implementation)

230 Mt/a by end of Q1 2012 Dampier port incremental gains (in implementation)

280 Mt/a by end of H2 2013 Cape Lambert port \$\frac{1}{3}\$ 50 Mt/a increment (in feasibility study)

330 Mt/a by end of H2 2015 Cape Lambert port 2d 50 Mt/a increment (pre-feasibility completed)

Pilbara operations

Pilbara production matched the record third quarter of 2009 as the mines continued to operate at above nameplate capacity. Hamersley production rebounded from the second quarter as the new Brockman 4 and Western Turner Syncline mines ramped up. Production from Robe River similarly benefited from rising production from Mesa A. On 13 August, Rio Tinto announced that it would resist the application by Fortescue Metals to appeal the third party rail access decision by the Federal Court of Australia. Rio Tinto has also applied to the Federal Court to overturn the determination to declare access to the Robe line until 2018.

On 30 August Rio Tinto announced an investment of US\$1.6 billion (Rio Tinto share \$1.0 billion) to develop the Hope Downs 4 iron ore project in Western Australia and link with Rio Tinto s existing rail, power and port infrastructure in the Pilbara.

Iron Ore Company of Canada (IOC)

Strong third quarter production of pellets and concentrate at IOC reflected a recovery in demand, as well as a return to the normal proportions of concentrate and pellet sales in the overall sales mix. Third quarter production was 72 per cent higher than the same period of 2009 when a five week shutdown took place in response to weak market

conditions.

HIsmelt

The HIsmelt pig iron plant in Western Australia remains on a care and maintenance programme due to depressed global pig iron prices.

2010 production guidance

Rio Tinto s global iron ore operations are expected to remain producing at close to nameplate capacity for the remainder of the year. 2010 production is expected to be approximately 179 million tonnes (attributable) and 234 million tonnes on a 100 per cent basis.

COPPER

Rio Tinto share of production

	vs Q3	vs Q2	9 mths	vs 9 mths
Q3 10	09	10	10	09
65.2	-14%	+19%	181.3	-23%
74.8	+11%	+25%	204.5	+2%
2.7	-21%	-4%	8.7	+11%
105	-24%	-5%	372	-13%
164	+46%	+13%	484	+46%
73.3	-6%	-10%	227.1	-2%
23.5	-6%	+2%	65.4	-12%
2.2	-91%	-84%	29.4	-61%
53	-55%	+103%	117	-52%
8.1	+18%	+4%	23.2	+11%
10.9	-2%	+5%	31.9	-11%
	74.8 2.7 105 164 73.3 23.5 2.2 53	Q3 10 65.2 74.8 74.8 +11% 2.7 -21% 105 -24% 164 +46% 73.3 -6% 23.5 -6% 2.2 -91% 53 -55% 8.1 +18%	Q3 10 65.2 -14% 74.8 +11% -2.7 -21% -4% 105 -24% -5% 164 +46% +13% 73.3 -6% -10% 23.5 -6% -24% -55% +2% 2.2 -91% -84% 53 -55% +103% 8.1 +18% +4%	Q3 10 09 10 10 65.2 -14% +19% 181.3 74.8 +11% +25% 204.5 2.7 -21% -4% 8.7 105 -24% -5% 372 164 +46% +13% 484 73.3 -6% -10% 227.1 23.5 -6% +2% 65.4 2.2 -91% -84% 29.4 53 -55% +103% 117 8.1 +18% +4% 23.2

Kennecott Utah Copper

Production of copper, gold and silver in concentrates were lower than the third quarter of 2009 due to continued lower ore grades. To take advantage of higher copper prices during the third quarter, ore was mined with a bias towards copper, adversely affecting molybdenum production.

Refined copper and gold production increased 11 per cent and 46 per cent, respectively, compared with the third quarter of 2009, due to efficiencies achieved following the smelter shutdown. Refined metal production is expected to decline during the fourth quarter due to lower concentrate availability.

Escondida

Mined copper production was positively impacted by higher concentrate production due to completion of the SAG Mill repairs in the prior year. Overall, mined copper was six per cent lower than the third quarter of 2009 due primarily to a decrease in head grade.

Refined copper production declined by six per cent compared with the same quarter of 2009 primarily due to a decrease in head grade.

Grasberg

Freeport is due to release its 100 per cent operating data for the third quarter on 21 October 2010. Rio Tinto s third quarter share of joint venture copper and gold was impacted by the anticipated lower ore grades and lower mill throughput; these factors reduced the Rio Tinto share of cumulative production under the metal strip agreement.

Northparkes

Mined copper production at Northparkes rose by 18 per cent compared with the same quarter of 2009 due to increased feed grade from the E48 block cave.

Palabora

Mined copper production at Palabora was consistent with previous quarters. At the end of the third quarter, a bridge on the rail line linking the mine and the ports of Richards Bay and Maputo was destroyed by a freight train. Early indications are that the bridge is likely to be out of service for six to eight weeks. Magnetite volumes are being trucked

out of Palabora whilst copper volumes are not currently affected.

2010 production guidance

In 2010, Rio Tinto s share of mined and refined copper production is expected to be 660,000 tonnes and 380,000 tonnes, respectively.

ALUMINIUM

Rio Tinto share of production (000 tonnes)

		vs Q3	vs Q2	9 mths	vs 9 mths
	Q3 10	09	10	10	09
Bauxite	8,696	+17%	+9%	24,887	+15%
Alumina	2,347	+6%	+5%	6,797	+4%
Aluminium	939	-2%	-1%	2,828	-1%

Bauxite

Third quarter bauxite production was 17 per cent higher than the same quarter of 2009 with increased production at Weipa and Sangaredi in line with rising third party demand.

Alumina

Third quarter alumina production set a new quarterly record at 2.3 million tonnes and included record production at Yarwun following efficiencies in work management and process improvements. Production was six per cent higher than the third quarter of 2009 when production cutbacks were made, primarily at the Vaudreuil refinery. Idled capacity at this plant was restarted in the fourth quarter of 2009.

Aluminium

Third quarter aluminium production was two per cent lower than the same quarter of 2009, driven by lower production at Laterrière following a power outage in July which forced the temporary closure of one of the plant s two potlines. The process of gradually restarting the 216 pots on the suspended production line began in early August 2010 and the smelter returned to full production at the end of September. The loss of metal production during the partial shutdown is estimated to be around 25,000 tonnes.

Other movements included higher production at NZAS following a transformer failure in 2008 which impacted 2009 and a gradual return to full capacity at the operating UK smelters, partly offset by the cessation of smelting activities at Anglesey, all reflecting continued market discipline.

Low snow and rain levels in the Saguenay region of Quebec during the first half of 2010 has led to reduced power generation. This resulted in the need to purchase additional power under a specially negotiated power block from the state utility over the course of the next 12 months. As previously guided, the impact on EBITDA in the second half of 2010 is expected to be approximately \$100 million.

2010 production guidance

In 2010, Rio Tinto s share of alumina and aluminium production is expected to be 9.4 million tonnes and 3.8 million tonnes, respectively.

ENERGY

Australian coal

Rio Tinto share of production (000 tonnes)

		vs Q3	vs Q2		vs 9 mths
	Q3 10	09	10	9 mths 10	09
Rio Tinto Coal Australia					
Hard coking coal	2,434	+17%	+2%	6,688	+25%
Other coal	5,161	-14%	-7%	15,554	-9%

Hard coking coal production from the Queensland coal operations set a new quarterly record increasing by 17 per cent compared with the same quarter of 2009. Hail Creek production benefited from the recent investment in two additional shovels and two new truck fleets.

Thermal and semi-soft coal production was 14 per cent lower than the corresponding quarter of 2009, attributable to wet weather in New South Wales reducing the time available for waste removal. In addition, a planned 12 day

maintenance shutdown of the Hunter Valley Operations wash plant took place. Blair Athol continued to wind down to 3 million tonnes per annum, partly offset by the ramp up of Clermont which produced 1.1 million tonnes in the quarter.

2010 production guidance

In 2010, Rio Tinto s share of Australian hard coking, semi soft coking coal and thermal coal production is expected to be 9.5 million tonnes, 3.3 million tonnes and 19.1 million tonnes, respectively.

Uranium

Rio Tinto share of production (000 lbs)

		vs Q3	vs Q2	9 mths	vs 9 mths
	Q3 10	09	10	10	09
Energy Resources of Australia	1,421	-34%	+19%	3,979	-36%
Rössing	1,354	-17%	-5%	4,122	-10%

Third quarter production at both ERA and Rössing continued to be impacted by lower average feed grade compared with the same quarter of 2009.

DIAMONDS & MINERALS

Rio Tinto share of production

	Q3 10	vs Q3 09	vs Q2 10	9 mths 10	vs 9 mths 09
Diamonds (000 carats)	Q 0 10	0,2			0,2
Argyle	2,425	+7%	-7%	7,561	+7%
Diavik	1,070	+115%	+11%	2,974	+23%
Minerals (000 tonnes)					
Borates	141	+13%	+3%	388	+23%
Titanium dioxide feedstock	335	+103%	-6%	1,019	+24%
Talc	259	+8%	-2%	763	+15%

Recovery from the production slowdown at Argyle in 2009 has been partially offset by processing of lower grade open pit ore in 2010.

Carat production at Diavik recovered from the third quarter of 2009 when a six week shutdown took place, partly offset by a higher proportion of ore sourced from the lower grade A418 pipe. Operations were scaled back in 2009 in response to the economic slowdown.

Minerals production continued to increase in line in response to the recovery of the global economy. Higher borates production reflected stronger demand from the Asia Pacific region.

Third quarter titanium dioxide feedstocks production also reflected improved market conditions and reflected an eight week summer shutdown at RTIT in 2009.

Capital and major evaluation projects

Capital expenditure for the second half of 2010 through to the end of 2011 is anticipated to be approximately \$13 billion, subject to stable investment conditions.

PROJECT Approved in first half of 2010	Approved capital cost (100%)	STATUS/MILESTONES
Molybdenum investment in phases 1 and 2 of Moly autoclave project (MAP) to enable lower-grade concentrate to be processed more efficiently than conventional roasters and allow improved recoveries	\$340m	First approved in June 2008, the project was put on hold. Approval was given in April 2010 to restart the project. First production from phase 1 is anticipated in the fourth quarter of 2012 and full capacity of 30mlbs is scheduled for fourth quarter 2013. The phase 2 expansion to 60mlbs per annum is anticipated to be completed in the first quarter of 2015.
Iron ore expansion of Iron Ore Company of Canada s concentrate capacity (Rio Tinto 58.7%)	\$401m	Initially approved in March 2008, the project recommenced in May 2010 to expand concentrate capacity by 4mtpa to 22mtpa by 2012 with options to expand further to 26mtpa.
Nickel construction of the Eagle nickel and copper mine in Michigan (USA).	\$469m	Approved in June 2010, first production is expected in late 2013. The mine will produce an average of 17.3kt and 13.2kt per year of nickel and copper metal respectively over six years.
Approved / restarted in third quarter of 2010		
Iron ore preparation for the expansion of the Pilbara to 330Mtpa and beyond	\$990m	Approved in July and August 2010, the funding will allow dredging contracts to be issued and long lead items to be ordered as part of early works on the expansion of the Cape Lambert port to 180mtpa capacity.
Iron ore development of Hope Downs 4 mine in the Pilbara (RT 50%)	\$1.6bn	Approved in August 2010, first production is expected in 2013. The new mine will have a capacity of 15mtpa and a capital cost of \$1.2 billion (RT share \$0.6bn). RT will fully fund the \$425 million for the rail, rolling stock and power infrastructure.
Diamonds Argyle Diamond mine underground project	\$803m	Originally approved in 2005, project was slowed in 2009. The remaining \$803 million to complete was approved in September 2010. The underground will be fully operational in 2013 with targeted production of 20 million carats a year. It will extend the mine life to at least 2019.

	lebottlenecking of Dampier port to Pilbara capacity to 230 million tonnes	\$321m	Approved in September 2010, the project will add 10 million tonnes of annual capacity at the Dampier port by Q1 2012. No additional capex is required at the mines.						
Aluminium	ISAL modernisation	\$487m	Approved in September 2010, the project will increase production from 190kt to 230kt between April 2012 and July 2014. The total includes \$140m in a leading-edge casting facility to produced value-added billet.						
Sustaining c	Sustaining capital expenditure for 2010, excluding equity accounted units, is estimated to be \$2.5 billion (Rio Tinto								

Sustaining capital expenditure for 2010, excluding equity accounted units, is estimated to be \$2.5 billion (Rio Tinto funded).

EXPLORATION AND EVALUATION

Pre-tax and pre-divestment expenditure on exploration and evaluation charged to the profit and loss account in the first nine months of 2010 was \$371 million compared with \$356 million in same period of 2009. During the first nine months of 2010 the Group realised \$71 million (pre-tax) from the divestment of central exploration properties, compared with \$68 million in the same period of 2009.

Exploration highlights

Product Group

Iron Ore

Order of Magnitude work continued at the Amargosa bauxite project in Brazil. The project is on track to be handed over to Rio Tinto Alcan by the end of 2011.

Initial test flights of the VK1 airborne gravity gradiometer were successfully completed in Western Australia. Optimisation of the instrument is now underway in preparation for production flying. This is a step-change technology with exploration applications in a number of different commodities.

Greenfield programmes

Brazil, Canada, Democratic Republic of

Congo

of

A summary of activity for the period is as follows:

Advanced projects

Pilbara, Australia

Aluminium	Amargosa, Brazil	Australia, Brazil, Guyana, Laos
Copper	Copper: Bingham Orbit, US. Nickel: Tamarack, US	Copper: Chile, Kazakhstan, Mongolia, Peru, Russia, US Nickel: Canada, South Africa, US
Diamonds & Minerals		Diamonds: Canada, Democratic Republic o Congo, India, US
Energy	Coal: Bowen Basin, Australia; Altai Nuurs, Mongolia Uranium: Rössing, Namibia	Uranium: Australia, Jordan

Mine-lease exploration continued at a number of Rio Tinto businesses including Kennecott Utah Copper, Eagle, Northparkes, Energy Resources of Australia, Rössing, Diavik and Pilbara Iron.

Pre-feasibility or feasibility work progressed on a number of projects including Resolution (copper/molybdenum, US), La Granja (copper, Peru), Bunder (diamonds, India), Simandou (iron ore, Guinea) and several Pilbara iron ore deposits.

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Rio Tinto production summary

RIO TINTO SHARE OF PRODUCTION

		Quarter			9 Mc	onths	% Change		
		2009 Q3	2010 Q2	2010 Q3	2009 9 MTHS	2010 9 MTHS	Q3 10 vs	Q3 10 vs	9 MTHS 10 vs 9
							Q3 09	Q2 10	MTHS 09
Principal Commodities							0)	10	0)
Alumina	('000 t)	2.208	2,240	2,347	6,533	6,797	6%	5%	4%
Aluminium	('000 t)	956	952	939	2,846	2,828	-2%	-1%	-1%
Bauxite	('000 t)	7,443	7,945	8,696	21,625	24,887	17%	9%	15%
Borates	('000 t)	124	136	141	315	388	13%	3%	23%
Coal hard									
coking coal	('000 t)	2,077	2,395	2,434	5,348	6,688	17%	2%	25%
Coal other									
Australian	('000 t)	6,031	5,530	5,161	17,081	15,554	-14%	-7%	-9%
Coal US	('000 t)	23,327	11,143	11,848	65,888	33,057	-49%	6%	-50%
Copper mined	('000 t)	197.2	167.9	159.7	601.4	492.9	-19%	-5%	-18%
Copper refined	('000 t)	100.6	90.6	106.7	306.9	293.3	6%	18%	-4%
Diamonds	('000 cts)	2,787	3,610	3,536	9,575	10,643	27%	-2%	11%
Iron ore	('000 t)	46,977	43,610	47,608	122,810	134,579	1%	9%	10%
Titanium dioxide									
feedstock	('000 t)	165	355	335	822	1,019	103%	-6%	24%
Uranium	('000 lbs)	3,778	2,628	2,776	10,780	8,101	-27%	6%	-25%
Other Metals & Minerals									
Gold mined	('000 ozs)	278	169	187	737	581	-33%	11%	-21%
Gold refined	('000 ozs)	112	146	164	332	484	46%	13%	46%
Molybdenum	('000 t)	3.4	2.8	2.7	7.9	8.7	-21%	-4%	11%
Salt	('000 t)	1,731	1,459	1,115	4,657	3,761	-36%	-24%	-19%
Silver mined	('000 ozs)	2,122	1,634	1,595	6,193	5,013	-25%	-2%	-19%
Silver refined	('000 ozs)	886	1,112	1,207	2,902	3,638	36%	9%	25%
Talc	('000 t)	240	264	259	666	763	8%	-2%	15%

Throughout this report, figures in italics indicate adjustments made since the figure was previously quoted on the equivalent page. Production figures are sometimes more precise than the rounded numbers shown, hence small differences may result between the total of the quarter figures and the nine month figures.

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Rio Tinto share of production

ALUMINA	Rio Tinto interest	3Q 2009	4Q 2009	1Q 2010	2Q 2010	3Q 2010	9 MTHS 2009	9 MTHS 2010
Production (000 tonnes)								
Gardanne (a)	100%							
Gove	100%	641	656	595	615	642	1,863	1,852
Jonquière (Vaudreuil)	100%	261	288	316	309	340	836	966
Queensland Alumina	80%	803	813	762	790	765	2,354	2,317
São Luis (Alumar)	10%	37	53	59	51	68	112	177
Yarwun	100%	345	341	336	318	364	1,005	1,018
Specialty alumina	100 /6	373	571	330	310	304	1,003	1,010
plants	100%	121	129	143	157	168	363	468
Rio Tinto total								
alumina production		2,208	2,282	2,211	2,240	2,347	6,533	6,797
ALUMINIUM Production (000 tonnes)								
Australia Bell Bay Australia Boyne	100%	44	44	43	44	45	133	132
Island	59%	84	84	82	83	84	247	248
Australia Tomago	52%	69	68	67	68	69	204	203
Cameroon Alucam								
(Edéa)	47%	9	10	8	6	10	24	24
Canada six wholly		-	-	-				
owned (b)	100%	343	345	337	339	315	1,045	991
Canada Alouette							,	
(Sept-Îles)	40%	58	58	57	57	56	172	170
Canada Bécancour	25%	26	27	26	27	26	78	78
France two wholly	 , , ,						, 0	
owned	100%	89	90	88	89	89	255	267
Iceland ISAL						-		
(Reykjavik)	100%	48	48	47	47	48	141	142
New Zealand Tiwai	10070	10	10	1,	1,	10	111	1.2
Point	79%	57	64	65	68	70	151	203
Norway SORAL	1770	37	0.1	03	00	70	131	203
(Husnes)	50%	11	11	11	11	11	38	33
Oman Sohar	20%	18	19	18	18	19	52	55 55
UK two wholly	2070	10	17	10	10	17	32	33
owned	100%	36	40	41	47	49	107	137
UK Anglesey (c)	51%	18	40	41	+/	4 7	54	137
USA Sebree	100%	48	49	48	49	48	144	146
OSA SCOICE	10070	40	47	40	1 7	40	144	140

Rio Tinto total aluminium production		956	957	937	952	939	2,846	2,828
BAUXITE Production (000 tonnes) (d)								
Awaso (e)	0%	22	47	34			305	34
Gove	100%	1,822	1,996	1,849	1,799	1,771	5,188	5,419
Porto Trombetas	12%	480	521	457	487	548	1,356	1,492
Sangaredi	(f)	1,171	1,565	1,356	1,392	1,415	3,482	4,163
Weipa	100%	3,949	4,942	4,550	4,266	4,962	11,293	13,778
Rio Tinto total								
bauxite production		7,443	9,072	8,246	7,945	8,696	21,625	24,887

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BORATES Production (000 tonnes B ₂ O ₃ content) Rio Tinto Minerals borates	Rio Tinto interest	3Q 2009	4Q 2009	1Q 2010	2Q 2010	3Q 2010	9 MTHS 2009	9 MTHS 2010
COAL HARD COKING Rio Tinto Coal Australia (000 tonnes)	920	1.407	1.512	1.000	1.460	1 700	2.660	4 193
Hail Creek Coal Kestrel Coal	82% 80%	1,496 581	1,513 607	1,006 852	1,468 927	1,709 726	3,660 1,688	4,182 2,505
Rio Tinto total hard coking coal production	0070	2,077	2,119	1,858	2,395	2,434	5,348	6,688
COAL OTHER (g) Rio Tinto Coal Australia (000 tonnes)								
Bengalla	30%	445	434	372	447	337	1,221	1,156
Blair Athol Coal Clermont (h) Hunter Valley	71% 50%	2,142	1,858	1,525	1,569 265	1,260 560	6,210	4,354 825
Operations	76%	2,085	2,305	1,955	1,961	1,932	6,199	5,848
Kestrel Coal	80%	111	163	143	182	141	516	466
Mount Thorley Operations	61%	583	711	299	499	374	1,313	1,172
Warkworth	42%	665	549	569	607	557	1,622	1,733
Total Australian		6.021	6 022	1 962	5 520	E 141	17.001	15 554
other coal		6,031	6,022	4,863	5,530	5,161	17,081	15,554
US Coal (000 tonnes)								
Antelope (i)	48%	8,057	5,898	3,708	3,907	4,155	23,133	11,767
Colowyo Cordero Rojo (i)	100% 48%	845 9,586	717 7,289	582 3,906	506 4,389	684 4,535	2,497 26,071	1,772 12,827
Cordero Rojo (1)	70 70	7,500	1,209	5,500	ਜ,੭੦੭	7,333	20,071	12,021

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Decker (i) Spring Creek (i)	24% 48%	588 4,251	387 2,803	103 1,774	180 2,161	171 2,303	1,630 12,557	454 6,236
Total US coal		23,327	17,095	10,073	11,143	11,848	65,888	33,057
Rio Tinto total other coal production		29,358	23,117	14,936	16,673	17,009	82,969	48,611

	Rio Tinto interest	3Q 2009	4Q 2009	1Q 2010	2Q 2010	3Q 2010	9 MTHS 2009	9 MTHS 2010
COPPER Mine production								
(000 tonnes) (d)								
Bingham Canyon	100%	75.8	66.8	61.3	54.8	65.2	236.7	181.3
Escondida	30%	78.2	85.9	72.7	81.0	73.3	232.5	227.1
Grasberg Joint								
Venture (j)	40%	25.2	32.5	13.4	13.8	2.2	75.2	29.4
Northparkes	80%	6.9	6.5	7.3	7.8	8.1	20.9	23.2
Palabora	58%	11.1	11.6	10.6	10.4	10.9	36.0	31.9
Rio Tinto total mine								
production		197.2	203.3	165.3	167.9	159.7	601.4	492.9
Refined production (000 tonnes)								
Escondida	30%	25.0	24.0	18.9	23.1	23.5	74.2	65.4
Kennecott Utah								
Copper	100%	67.6	72.9	70.1	59.6	74.8	201.3	204.5
Palabora	58%	8.0	8.7	6.9	7.9	8.5	31.3	23.3
Rio Tinto total								
refined production		100.6	105.5	95.9	90.6	106.7	306.9	293.3
DIAMONDS Production (000 carats)								
Argyle	100%	2,274	3,504	2,531	2,605	2,425	7,086	7,561
Diavik	60%	497	918	938	967	1,070	2,421	2,974
Murowa	78%	17	29	29	38	42	68	108
Rio Tinto total diamond production		2,787	4,451	3,497	3,610	3,536	9,575	10,643
GOLD Mine production (000 ounces) (d)								
Barneys Canyon	100%	0	0	1	0	0	2	2
Bingham Canyon	100%	138	158	157	109	104	424	370
Escondida	30%	9	13	12	13	14	30	39
Grasberg Joint	4001	110	107	20	26	5 0	242	115
Venture (j)	40% 80%	118 7	187 9	38 11	26 14	53 14	242 19	117 39
Northparkes Rawhide (k)	80% 0%	5	5	4	5	14	19 14	39 9
Rawmuc (K)	070	3	3	4	3		14	9

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Others		2	1	2	2	2	6	5
Rio Tinto total mine production		278	374	225	169	187	737	581
Refined production (000 ounces) Kennecott Utah Copper	100%	112	147	174	146	164	332	484

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IRON ORE & IRON Production (000 tonnes) (d)	Rio Tinto interest	3Q 2009	4Q 2009	1Q 2010	2Q 2010	3Q 2010	9 MTHS 2009	9 MTHS 2010
Hamersley six wholly owned mines Hamersley Channar	100% 60%	30,353 1,851	30,050 1,517	25,510 2,006	25,712 1,534	30,334 1,312	76,758 5,108	81,555 4,852
Hamersley Eastern Range Hope Downs Iron Ore Company of	(m) 50%	2,636 3,019	2,349 2,843	2,473 4,054	2,354 4,052	2,182 3,554	6,969 7,474	7,008 11,659
Canada Robe River	59% 53%	1,329 7,789	2,432 8,037	1,870 7,448	2,284 7,675	2,280 7,947	5,698 20,804	6,433 23,071
Rio Tinto total mine production		46,977	47,228	43,361	43,610	47,608	122,810	134,579
Pig iron production (000 tonnes) HIsmelt® (l)	60%							
MOLYBDENUM Mine production (000 tonnes) (d) Bingham Canyon	100%	3.4	3.4	3.2	2.8	2.7	7.9	8.7
SALT Production (000 tonnes) Dampier Salt	68%	1,731	1,192	1,187	1,459	1,115	4,657	3,761
SILVER Mine production (000 ounces) (d)								
Bingham Canyon Escondida Grasberg Joint	100% 30%	1,189 316	1,187 492	1,146 471	870 436	845 469	3,684 1,135	2,861 1,377
Venture (j) Others	40%	460 158	557 138	16 151	147 181	159 121	917 458	322 454
Rio Tinto total mine production		2,122	2,375	1,784	1,634	1,595	6,193	5,013

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Refined production (000 ounces) Kennecott Utah Copper	100%	886	1,148	1,320	1,112	1,207	2,902	3,638
TALC Production (000 tonnes) Rio Tinto Minerals talc	100%	240	222	240	264	259	666	763
TITANIUM DIOXIDE FEEDSTOCK Production (000 tonnes) Rio Tinto Iron & Titanium	100%	165	325	329	355	335	822	1,019

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URANIUM	Rio Tinto interest	3Q 2009	4Q 2009	1Q 2010	2Q 2010	3Q 2010	9 MTHS 2009	9 MTHS 2010
Production (000 lbs								
U_3O_8)								
Energy Resources of								
Australia	68%	2,138	1,663	1,361	1,196	1,421	6,202	3,979
Rössing	69%	1,640	1,697	1,336	1,432	1,354	4,578	4,122
Rio Tinto total uranium production		3,778	3,360	2,697	2,628	2,776	10,780	8,101

PRODUCTION DATA NOTES

- (a) Production of smelter grade alumina at Gardanne ceased at the end of 2008. Production continues from the Gardanne specialty alumina plant.
- (b) Includes data for the Beauharnois smelter which ceased smelting operations in the second quarter of 2009.
- (c) The Anglesey smelter ceased smelting operations at the end of the third quarter of 2009.
- (d) Mine production figures for metals refer to the total quantity of metal produced in concentrates, leach liquor or doré bullion irrespective of whether these products are then

refined onsite, except for the data for bauxite and iron ore which represent production of marketable quantities of ore plus pellets.

- (e) Rio Tinto Alcan had an 80% interest in the Awaso mine but purchased the additional 20% of production. Rio Tinto Alcan sold its interest in Ghana Bauxite Company, owner of the Awaso mine, with an effective date of 1 February 2010. Production data are shown up to that date.
- (f) Rio Tinto has a 22.95% shareholding in the Sangaredi mine but receives 45.0% of production under the partnership agreement.
- (g) Coal other includes thermal coal and semi-soft coking coal.
- (h) Production commenced at Clermont in the second quarter of 2010.
- (i) As a result of the initial public offering of Cloud Peak Energy Inc. on 20 November 2009,

Rio Tinto now holds a 48.3% interest in the Antelope, Cordero Rojo and Spring Creek mines and a 24.1% interest in the Decker mine. These interests were formerly reported under Rio Tinto Energy America but are now managed by Cloud Peak Energy.

- Through a joint venture agreement with Freeport-McMoRan Copper & Gold (FCX), Rio Tinto is entitled to 40% of additional material mined as a consequence of expansions and developments of the Grasberg facilities since 1998. Rio Tinto s share of production reflects actual production for the periods shown.
- (k) Rio Tinto sold its 100% interest in the Rawhide mine with an effective date of 25 June 2010.

 Production data are shown up to that date.
- (1) In March 2009, Rio Tinto announced that HIsmelt would be placed on an extended care and maintenance programme.

(m)

Rio Tinto s share of production includes 100% of the production from the Eastern Range mine. Under the terms of the joint venture agreement, Hamersley Iron manages the operation and is obliged to purchase all mine production from the joint venture.

The Rio Tinto percentage interest shown above is at 30 September 2010.

Where Rio Tinto s beneficial interest in an operation has changed, as footnoted above, the share of production has been calculated using the weighted average interest over the relevant periods. Rio Tinto s interests in the Ningxia aluminium smelter, Corumbá and Jacobs Ranch mines were sold in 2009. No data for these operations are included in the Share of Production table.

Rio Tinto operational data

	Rio Tinto interest	3Q 2009	4Q 2009	1Q 2010	2Q 2010	3Q 2010	9 MTHS 2009	9 MTHS 2010
ALUMINIUM								
Rio Tinto Alcan								
Bauxite Mines								
Bauxite production (000 tonnes)								
Australia								
Gove mine Northern Territory	100.0%	1,822	1,996	1,849	1,799	1,771	5,188	5,419
Weipa mine Queensland	100.0%	3,949	4,942	4,550	4,266	4,962	11,293	13,778
Brazil								
Porto Trombetas (MRN) mine	12.0%	4,000	4,345	3,809	4,058	4,569	11,300	12,437
Ghana								
Awaso mine (a)	80.0%	28	59	42			381	42
Guinea								
Sangaredi mine (b)	23.0%	2,602	3,478	3,013	3,094	3,145	7,737	9,252
Rio Tinto Alcan share of bauxite shipments								
Share of bauxite shipments (000 tonnes)		7,803	9,140	7,671	8,458	8,513	22,431	24,642
(a) Rio Tinto Alcan had an 80% interest in the Awaso mine but								

purchased the additional 20% of production. Rio Tinto Alcan sold its interest in Ghana **Bauxite** Company, owner of the Awaso mine, with an effective date of 1 February 2010. Production data are shown up to that date.

(b) Rio Tinto has a 22.95% shareholding in the Sangaredi mine but receives 45.0% of production under the partnership agreement.

Smelter-Grade Alumina Refineries

Alumina production (000 tonnes)

Australia

Gove refinery Northern Territory	100%	641	656	595	615	642	1,863	1,852
Queensland Alumina Refinery Queensland	80%	1,003	1,017	953	987	956	2,942	2,896
Yarwun refinery Queensland	100%	345	341	336	318	364	1,005	1,018
Brazil								
São Luis (Alumar) refinery	10%	373	532	588	507	676	1,125	1,770
Canada								

Jonquière (Vaudreuil)

refinery Quebec (a) 100% 261 288 316 309 **340** 836 **966**

France

Gardanne refinery (b) 100%

- (a) Jonquière s
 production
 shows smelter
 grade alumina
 only and
 excludes
 hydrate
 produced and
 used by
 Specialty
 Alumina.
- (b) Production of smelter grade alumina at Gardanne ceased at the end of 2008. Production continues from the Gardanne specialty alumina plant.

Rio Tinto percentage interest shown above is at 30 September 2010. The data represent full production and sales on a 100% basis unless otherwise stated.

	Rio Tinto	3Q	4Q	1Q	2Q	3Q	9 MTHS	9 MTHS
	interest	2009	2009	2010	2010	2010	2009	2010
ALUMINIUM (continued)								
Specialty Alumina Plants								
Specialty alumina production (000 tonnes)								
Canada								
Brockville plant								
Ontario	100.0%	3	4	4	5	4	12	13
Jonquière (Vaudreuil) plant Quebec	100.0%	27	26	24	29	31	82	84
France								
Beyrède	100.0%	4	6	4	5	4	10	14
Gardanne plant our Annual Report on Form	100.0% m 10-K for the	76 e year ende	ed Decembe	er 31, 2013	;			

our Current Reports on Form 8-K filed on January 7, 2014, January 30, 2014, and February 5, 2014 (except for information deemed furnished).

All of the documents incorporated by reference may be accessed on our website www.appliedminerals.com.

Any statement contained in a document we incorporate by reference will be modified or superseded for all purposes to the extent that a statement contained in this prospectus modifies or is contrary to that previous statement. Any statement so modified or superseded will not be deemed a part of this prospectus except as so modified or superseded.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any or all of the reports or documents that have been incorporated by reference in the prospectus contained in the registration statement but not delivered with the prospectus;

You may request a copy of such documents at no cost (other than exhibits unless such exhibits are specifically incorporated by reference) by oral request or by writing or telephoning us at the following address and telephone number:

Nat Krishnamurti Applied Minerals, Inc.

110 Greene Street, Suite 1101 New York, NY 10012 Phone: (212) 226-4232 Fax: (917) 591-6397

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Securities Exchange Act of 1934 and, in accordance therewith, file reports, proxy statements and other information with the SEC. Our reports, proxy statements and other information filed pursuant to the Securities Exchange Act of 1934 are available to the public over the Internet from the SEC's website at http://www.sec.gov and may be inspected and copied at the public reference facilities maintained by the SEC at 100 F. Street, N.E., Room 1580, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

We have filed with the SEC registration statements on Form S-1 under the Securities Act of 1933 with respect to the Securities offered by this prospectus. As permitted by the rules and regulations of the SEC, this prospectus, which is part of the registration statement, omits certain information, exhibits, schedules and Securities Stock offered hereby, please refer to the registration statements and the exhibits filed as part of the registration statements.

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Exhibit A

WARRANT BETWEEN APPLIED MINERALS, INC. AND

DATED DECEMBER 22, 2011

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WARRANT
To Purchase Shares of Common Stock,
Par Value \$0.001 Per Share,
of
APPLIED MINERALS, INC.

Initial Issuance Date: December 22, 2011

THIS COMMON STOCK PURCHASE WARRANT (this "Warrant") certifies that, for value received, Samlyn Onshore Fund, LP, a Delaware limited partnership (the "Holder"), is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the date hereof (the "Initial Exercise Date") and on or before 5:00 p.m. New York City time on the five year anniversary of the Initial Issuance Date (the "Termination Date") but not thereafter, to subscribe for and purchase from Applied Minerals, Inc., a Delaware corporation (the "Company"), up to 1,925,000 shares (the "Warrant Shares") of common stock, \$.001 par value per share (the "Common Stock"), of the Company. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price (as defined in Section 1.2 of this Warrant). This Warrant is issued pursuant to the Investment Agreement, dated as of the date hereof (the "Investment Agreement"), by and between the Company and the Holder.

WHEREAS, the Holder wishes to acquire this Warrant from the Company, and the Company wishes to issue this Warrant to the Holder, pursuant to the terms and conditions set forth below.

NOW, THEREFORE, in consideration of the promises and the mutual covenants and undertakings contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the Holder, intending to be legally bound, agree as follows:

ARTICLE I

EXERCISE

Section 1.1 Exercise of Warrant.

- (a) For so long as this Warrant remains outstanding, exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by:
- (i) delivery to the Company (or such other office or agency of the Company as it may designate by notice in writing to the Holder pursuant to Section 6.9 of this Agreement) of a duly executed copy of a Notice of Exercise in the form attached to this Warrant (the "Notice of Exercise") (provided, however, within five Trading Days of the date said Notice of Exercise is delivered to the Company, if this Warrant is exercised in full, the Holder shall have surrendered this Warrant to the Company); and
- (ii) payment to the Company of the aggregate Exercise Price of the Warrant Shares thereby purchased (as well as all taxes required to be paid by the Holder, if any, pursuant to Section 1.3(g) of this Warrant) by wire transfer or cashier's check drawn on a United States bank.
- (b) Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and this

Warrant has been exercised in full. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases.

(c) Section 1.3(c) notwithstanding, by reason of the provisions of this Section 1.1, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face of this Warrant.

Section 1.2 Exercise Price

. The exercise price per share of the Common Stock under this Warrant shall be \$2.00 per Warrant Share, subject to adjustment hereunder (the "Exercise Price").

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Section 1.3 Mechanics of Exercise.

- (a) Authorization of Warrant Shares. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment of the Exercise Price therefor, be duly authorized, validly issued, fully paid and non-assessable and free from all taxes, liens and charges in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).
- (b) Delivery of Certificates upon Exercise. Certificates representing Warrant Shares shall be transmitted by the Company (whether through its transfer agent or otherwise) to the Holder to the address specified by the Holder in the Notice of Exercise within three Business Days from the delivery to the Company of the Notice of Exercise, together with an amount in cash in lieu of any fractional share(s), surrender of this Warrant (if required) and payment of the aggregate Exercise Price as set forth above ("Warrant Share Delivery Date"). The Warrant Shares shall be issued free of all legends, unless, in the reasonable opinion of outside counsel to the Company (after taking into account any representations of the Holder), the securities laws require a legend(s) to be affixed to the certificate(s) representing the Warrants Shares. This Warrant shall be deemed to have been exercised on the first date on which the Notice of Exercise has been properly delivered to the Company, the Company has received the Exercise Price and all taxes required to be paid by the Holder, if any, pursuant to Section 1.3(g) of this Warrant before the issuance of such shares have been paid. The Warrant Shares shall be deemed to have been a holder of record of such shares for all purposes, on the first date on which the Notice of Exercise has been properly delivered to the Company, the Company has received the Exercise Price and all taxes required to be paid by the Holder, if any, pursuant to Section 1.3(g) of this Warrant before the issuance of such shares have been paid.
- (c) Delivery of New Warrants upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of the Holder and upon surrender of this Warrant, at the time of delivery of the certificate or certificates representing Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.
- (d) Rescission Rights. If the Company fails to, or fails to cause its transfer agent to, transmit to the Holder a certificate or certificates representing the Warrant Shares pursuant to this Section 1.3 by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.
- (e) Compensation for Buy-In on Failure to Timely Deliver Certificates Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to, or fails to cause its transfer agent to, transmit to the Holder a certificate or certificates representing the Warrant Shares pursuant to an exercise on or before the Warrant Share Delivery Date pursuant to this Section 1.3, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall:
- (i) pay in cash to the Holder the amount by which (A) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (B) the amount obtained by multiplying (x) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue multiplied by (y) the price at which the sell order giving rise to such purchase obligation was executed, and
- (ii) at the option of the Holder, either reinstate the portion of this Warrant and equivalent number of Warrant Shares for which such exercise was not honored or deliver to the Holder the number of shares of Common Stock that would

have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, under Section 1.3(e)(i), the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In, together with applicable confirmations and other evidence reasonably requested by the Company. Nothing herein shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock upon exercise of this Warrant as required pursuant to the terms of this Warrant.

- (f) No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall pay a cash adjustment in respect of such final fraction on the basis of the Market Price per share of Common Stock on the date of such exercise.
- (g) Charges, Taxes and Expenses . Issuance of certificates for Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense (including the fees of counsel) in respect of the issuance of such certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided , however , that in the event certificates for Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder; and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.
- (h) Closing of Books . The Company will not close its shareholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms of this Warrant.

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ARTICLE II

DISSOLUTION

Section 2.1 Dissolution; Liquidation.

(a) If, on or prior to the Expiration Date, the Company (or any other Person controlling the Company) shall propose a voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, the Company shall give written notice thereof to the Holder in the manner provided in Section 6.9 prior to the date on which such transaction is expected to become effective or, if earlier, the Record Date for such transaction. Such notice also shall specify the date on which the holders of record of the shares of Common Stock shall be entitled to exchange their shares for securities, money or other property deliverable upon such dissolution, liquidation or winding up, as the case may be. On the date of and as a condition to the consummation of any such transaction, the Holder shall receive the securities, money or other property that the Holder would have been entitled to receive had the Holder been the holder of record of the shares of Common Stock issuable upon exercise of this Warrant immediately prior to such dissolution, liquidation or winding up (net of the then applicable Exercise Price) and the rights to exercise this Warrant shall terminate.

ARTICLE III

ADJUSTMENT

Section 3.1 Adjustments Generally

. In order to prevent dilution of the rights granted under this Warrant and to grant the Holder certain additional rights, the Exercise Price shall be subject to adjustment from time to time as provided in this Article III and the number of shares of Common Stock obtainable upon exercise of this Warrant also shall be subject to adjustment from time to time as provided in this Article III.

Section 3.2 Stock Dividends and Splits

. In the event of any issuance of Common Stock as a dividend or distribution to all holders of Common Stock, or a subdivision, combination or reclassification of the outstanding shares of Common Stock into a greater or smaller number of shares, the Exercise Price shall be adjusted pursuant to the following formula:

N 0 E = E 0 x ------N 1

where:

- E = the Exercise Price in effect immediately after the Open of Business on the Ex-Date for such dividend or distribution, or immediately after the Open of Business on the effective date for such subdivision, combinationor reclassification, as the case may be;
- E 0 = the Exercise Price in effect immediately prior to the Open of Business on the Ex-Date for such dividend

or distribution, or immediately prior to the Open of Business on the effective date for such subdivision, combination or reclassification, as the case may be;

- N 0 = the number of shares of Common Stock outstanding immediately prior to the Open of Business on the Ex-Date for such dividend or distribution, or immediately prior to the Open of Business on the effective date for such subdivision, combination or reclassification, as the case may be; and
- N 1 = the number of shares of Common Stock equal to (i) in the case of a dividend or distribution, the sum of the number of shares outstanding immediately prior to the Open of Business on the Ex-Date for such dividend or distribution plus the total number of shares issued pursuant to such dividend or distribution or (ii) in the case of a subdivision, combination or reclassification, the number of shares outstanding immediately after suchsubdivision, combination or reclassification.

Such adjustment shall become effective (a) in the case of a dividend or distribution, immediately after the Open of Business on the Ex-Date for such dividend or distribution or (b) in the case of a subdivision, combination or reclassification, immediately after the Open of Business on the effective date for such subdivision, combination or reclassification. If any dividend or distribution or subdivision, combination or reclassification of the type described in this Section 3.2 is declared or announced but not made, the Exercise Price shall again be adjusted to the Exercise Price that would then be in effect if such dividend or distribution or subdivision, combination or reclassification had not been declared or announced, as the case may be.

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Section 3.3 Below Market Issuances

. If the Company, at any time while this Warrant is outstanding, shall issue shares of Common Stock or Convertible Securities at an Effective Consideration per share that is less than the Market Price on the Trading Day immediately before the issuance is announced, then the Exercise Price shall be adjusted pursuant to the following formula:

N 0 + C/M E = E 0 x -------------N 0 + N A

where:

E = the Exercise Price in effect immediately after the Open of Business on the Trading Day of such issuance;

E 0 = the Exercise Price in effect immediately prior to the Open of Business on the Trading Day of such issuance;

N 0 = the number of shares of Common Stock outstanding immediately prior to the Open of Business on the Trading Day of such issuance;

N A = the number of shares of Common Stock issued and/or issuable upon exercise, conversion or exchange of any Convertible Securities, full physical settlement assumed;

C = the total consideration receivable by the Company on issuance and/or the exercise, conversion or exchange of any Convertible Securities, full physical settlement assumed; and

M = the Five-Day VWAP as of the Trading Day immediately preceding the date on which such issuance is announced.

Such adjustment shall become effective immediately after the Open of Business on the Trading Day of such issuance. In the event that an issuance of such Common Stock or Convertible Securities is announced but such Common Stock or Convertible Securities are not issued, the Exercise Price shall again be adjusted to be the Exercise Price that would then be in effect if such issuance had not been announced.

Section 3.4 Issuances Below the Exercise Price

. If the Company, at any time while this Warrant is outstanding, shall issue shares of Common Stock or Convertible Securities at an Effective Consideration per share that is less than the Exercise Price in effect at the Close of Business on the Trading Day immediately preceding such issuance (other than issuances to directors, officers, employees or consultants of the Company as compensation for services rendered to the Company by such persons), then the Exercise Price shall be adjusted pursuant to the following formula:

N0 + C/E0

E = E 0 x ----- N 0 + N A

E = the Exercise Price in effect immediately after the Open of Business on the Trading Day of such issuance;

E 0 = the Exercise Price in effect immediately prior to the Open of Business on the Trading Day of such issuance;

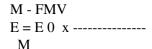
- N 0 = the number of shares of Common Stock outstanding immediately prior to the Open of Business on the Trading Day of such issuance;
- N A = the number of shares of Common Stock issued and/or issuable upon exercise, conversion or exchange of any Convertible Securities, full physical settlement assumed; and
- C = the total consideration receivable by the Company on issuance and/or the exercise, conversion or exchange of any Convertible Securities, full physical settlement assumed.

Such adjustment shall become effective immediately after the Open of Business on the Trading Day of such issuance. In the event that an issuance of such Common Stock or Convertible Securities is announced but such Common Stock or Convertible Securities are not issued, the Exercise Price shall again be adjusted to be the Exercise Price that would then be in effect if such issuance had not been announced.

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Section 3.5 Pro Rata Distributions

. If the Company, at any time while this Warrant is outstanding, shall issue as a dividend or distribution evidences of indebtedness, assets (including cash and cash dividends, other than those addressed in Section 3.2, Section 3.3 or Section 3.4), shares of capital stock (other than Common Stock) or rights, warrants, options or other securities convertible into or exchangeable or exercisable for capital stock (other than Common Stock), then the Exercise Price shall be adjusted pursuant to the following formula:



where:

- E = the Exercise Price in effect immediately after the Open of Business on the Ex-Date for such dividend or distribution;
- E 0 = the Exercise Price in effect immediately prior to the Open of Business on the Ex-Date for such dividend or distribution;
- M = the Five-Day VWAP as of the Trading Day immediately preceding the Ex-Date for such dividend or distribution; and
- FMV = the fair value of the portion of such dividend or distribution applicable to one share of Common Stock on the Trading Day immediately preceding the Ex-Date for such dividend or distribution as determined by the Board of Directors in good faith.

Such adjustment shall become effective immediately after the Open of Business on the Ex-Date for such dividend or distribution. In the event that such dividend or distribution is declared or announced but not made, the Exercise Price shall again be adjusted to be the Exercise Price that would then be in effect if such distribution had not been declared or announced..

Section 3.6 Rights Plans

. If the Company has a shareholder rights plan in effect with respect to the Common Stock, upon exercise of a Warrant the Holder shall be entitled to receive, in addition to any shares of Common Stock, the rights under such shareholder rights plan, unless, prior to such exercise, such rights have separated from the Common Stock, in which case the Exercise Price and the number of Warrant Shares shall be adjusted at the time of separation as if the Company had made a distribution as described in Section 3.5, subject to readjustment in the event of the expiration, termination or redemption of such rights.

Section 3.7 Tender Offers; Exchange Offers

. If, at any time while this Warrant is outstanding, the Company proposes to make a tender offer or exchange offer for Common Stock, in which the cash and fair value of any other consideration included in the payment per share of Common Stock exceeds the Market Price as of the Trading Day immediately following the expiration date of the tender offer or exchange offer (the "Offer Expiration Date"), the Exercise Price shall be adjusted pursuant to the following formula:

E = the Exercise Price in effect immediately after the Close of Business on the Offer Expiration Date;

E 0 = the Exercise Price in effect immediately prior to the Close of Business on the Offer Expiration Date;

N 0 = the number of shares of Common Stock outstanding immediately prior to the expiration of the tender offer or exchange offer (prior to giving effect to the purchase or exchange of shares);

N 1 = the number of shares of Common Stock outstanding immediately after the expiration of the tender or exchange offer (after giving effect to the purchase or exchange of shares);

A = the aggregate cash and fair value of any other consideration payable for shares of Common Stock purchased in such tender offer or exchange offer, as determined by the Board of Directors in good faith; and

M = the Five-Day VWAP on the Trading Day immediately following the Offer Expiration Date.

Any adjustment to the Exercise Price pursuant to this Section 3.7 shall become effective immediately after the Close of Business on the Offer Expiration Date. In the event that the Company or a subsidiary of the Company does not purchase shares of Common Stock pursuant to any such tender offer or exchange offer, or all such purchases are rescinded, then the Exercise Price shall again be adjusted to be the Exercise Price that would then be in effect if such tender offer or exchange offer had not been made.

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Section 3.8 Fundamental Transactions.

- (a) If, at any time while this Warrant is outstanding, the Company effects a merger, acquisition, consolidation or similar transaction (including any Fundamental Transaction), then, the Company shall make appropriate arrangements to ensure that the Holder will thereafter receive upon an exercise of this Warrant at any time after the consummation of a Fundamental Transaction (and subject to continuing adjustment in accordance with the terms hereof) but before the Termination Date, in lieu of the Warrant Shares issuable upon the exercise of this Warrant immediately prior to such Fundamental Transaction, such cash, stock, assets, securities, warrants, options, subscription rights or other property that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction had this Warrant been exercised immediately before such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant). If any holder of Common Stock is given any choice as to the cash, stock, assets, securities, warrants, options, subscription rights or other property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to what it receives upon any exercise of this Warrant following such Fundamental Transaction.
- (b) The Company hereby grants to the Holder an irrevocable option to require the Company to repurchase this Warrant in the event of a Fundamental Transaction upon the closing of such Fundamental Transaction (provided that the Holder elects to exercise this option by giving written notice to the Company within 10 Business Days of the Holder receiving written notice of such Fundamental Transaction from the Company) at a price equal to the product of (i) the number of Warrant Shares issuable upon exercise of this Warrant and (ii) the Five-Day VWAP as of the fifth Trading Day immediately following public announcement of the Fundamental Transaction less the Exercise Price..

Section 3.9 Adjustment to the Number of Warrant Shares

. Concurrently with any adjustment to the Exercise Price under this Article III, the number of Warrant Shares also will be adjusted such that the number of Warrant Shares immediately following the effectiveness of such adjustment will be equal to the number of Warrant Shares immediately prior to such adjustment multiplied by a fraction, (a) the numerator of which is the Exercise Price in effect immediately prior to such adjustment and (b) the denominator of which is the Exercise Price in effect immediately following such adjustment.

Section 3.10 Additional Considerations

. In no event will the Company adjust the Exercise Price or make a corresponding adjustment to the number of Warrant Shares if that adjustment would increase the Exercise Price, except in the event of a reverse stock split or in the event that an adjustment is made in respect of an event but such event does not occur and the adjustment is reversed. The Company covenants that, while this Warrant is outstanding, it will not amend its certificate of incorporation to increase the Common Stock's par value above \$0.001 per share. Notwithstanding anything else in this Warrant to the contrary, the Exercise Price shall not be adjusted to an amount below the Common Stock's par value per share. If any single action would require adjustment of the Exercise Price pursuant to more than one Sections of this Article III, only one adjustment shall be made and such adjustment shall be the amount of adjustment that has the highest absolute value. The adjustments required by this Article III shall be made whenever and as often as any specified event requiring an adjustment shall occur, except that no adjustment of the Exercise Price that would otherwise be required shall be made unless and until such adjustment either by itself or with other adjustments not previously made decreases the Exercise Price immediately prior to the making of such adjustment by at least 1%. Any adjustment representing a change of less than such minimum amount shall be carried forward and made as soon as such adjustment, together with other adjustments required by this Article III and not previously made, would result in such minimum adjustment. If the Company issues to any Person any Convertible Securities that, in the sole and absolute discretion of the Holder, contain adjustment provisions more favorable than those of this Warrant, this Warrant shall be amended to include such provisions.

Section 3.11 Calculations

. All calculations under this Article III shall be made to the nearest cent or the nearest share, as the case may be. For purposes of this Article III, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

Section 3.12 Notice to the Holder.

- (a) Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to this Article III, the Company shall promptly mail to the Holder a notice setting forth the Exercise Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.
- (b) Notice to Allow Exercise by the Holder. If (i) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (ii) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (iii) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (iv) the approval of any shareholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party (including any Fundamental Transaction), any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, (v) the Company commences any tender offer (including any exchange offer) as announced from time to time for all or a portion of the outstanding shares of Common Stock, (vi) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company or (vii) the Company shall engage in any other transaction that would result in an adjustment to the Exercise Price in accordance herewith, then, in each case, the Company shall cause to be mailed to the Holder at its last address as it shall appear upon the Warrant Register (as defined below) of the Company, at least 20 calendar days before the applicable record or effective date hereinafter specified, a notice stating (i) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (ii) the date on which such reclassification, consolidation, merger, sale, transfer, share exchange, tender offer, exchange offer or other action is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer, share exchange, tender offer, exchange offer or other action; provided, however, that, the failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Company or any of its subsidiaries, the Company shall forthwith file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder is entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice.

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ARTICLE IV

TRANSFERS

Section 4.1 Transferability

. Subject to compliance with applicable federal and state securities laws, this Warrant and all rights hereunder are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable pursuant to Section 1.3(g). Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees and in the denomination or denominations specified in such instrument of assignment and, if the assignor assigns less than the entirety of this Warrant, shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled.

Section 4.2 New Warrants

. This Warrant may be divided or combined with other Warrants upon presentation of this Warrant at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4.1 of this Warrant, as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for this Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the initial issuance date set forth on the first page of this Warrant and shall be identical to this Warrant, except as to the number of Warrant Shares issuable pursuant thereto.

Section 4.3 Warrant Register

. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name of the record holder from time to time. The Company may deem and treat the registered holder of this Warrant as the absolute owner of this Warrant for the purpose of any exercise of this Warrant or any distribution to the Holder and for all other purposes, absent actual notice to the contrary.

ARTICLE V

CALL OPTION

Section 5.1 Call Option

. The Company, subject to compliance with this Article V, has an option (the "Call Option") to acquire all or a portion of this Warrant; provided, that, the following conditions are met: (a) the VWAP for the 60 consecutive Trading Days immediately preceding the date on which the Holder receives the Call Notice (as defined below) is in excess of \$2.00 and (b) the closing market price of the Common Stock (on the Trading Market or, if the Common Stock currently is trading on multiple Trading Markets, the principal Trading Market for the Common Stock) (the "Market Price") is in excess of \$2.00 on the date immediately preceding the date on which the Call Notice is received; provided further, that, if the Company exercises a Call Option for a portion of this Warrant, the Company may not acquire less than that portion of this Warrant equal to 962,500 Warrant Rights.

Section 5.2 Option Price

. For each part of this Warrant representing the right to acquire one share of Common Stock (each, a "Warrant Right"), the price to be paid in cash by the Company to the Holder for each Warrant Right (the "Option Price") shall be equal to the difference between (a) the greater of (i) the Market Price on the date immediately preceding the date on which the Holder receives the Call Notice and (ii) the VWAP for the 60 consecutive Trading Days immediately preceding the date on which the Holder receives the Call Notice and (b) \$2.00; provided, that, under no circumstances shall the Company acquire the Warrant Rights from the Holder for less than \$0.10 per Warrant Right.

Section 5.3 Procedures

. Subject to the limitations set forth herein, for so long as this Warrant remains outstanding, the Company may exercise a Call Option at anytime and from time to time by delivering to the Holder written notice of its intention to exercise the Call Option (the "Call Notice") setting forth the date of the Call Closing and the number of Warrant Rights with respect to which such Call Option is being exercised Each closing of the purchase of the Warrant Rights pursuant to the exercise of a Call Option (a "Call Closing") will occur not less than 10 Business Days nor more than 20 Business Days following the delivery of the Call Notice; provided, however, that, the Holder may exercise this Warrant or any portion thereof prior to the Call Closing, in which case the Company will issue to the Holder the requisite Warrant Shares duly and validly issued, fully paid and non-assessable, free and clear of all liens, claims or encumbrances in accordance with the terms and conditions of this Warrant.

Section 5.4 Call Closing

. At the Call Closing, the Company shall pay to the Holder in cash an amount equal to Option Price multiplied by the number of Warrant Rights being acquired, which payment shall be made by wire transfer in immediately available funds to a bank account designated by the Holder prior to the Call Closing, and in the event that a Call Option is being exercised with respect to all of the Warrant Rights, the Holder, after receiving such payment, shall surrender the Warrant to the Company.

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ARTICLE VI

MISCELLANEOUS.

Section 6.1 Transferability

. Before the Termination Date and subject to compliance with applicable laws and Article IV of this Warrant, this Warrant and all rights hereunder are transferable, in whole or in part, at the office or agency of the Company by the Holder in person or by duly authorized attorney, upon surrender of this Warrant together with the Assignment Form annexed hereto properly endorsed.

Section 6.2 No Rights or Obligations as Holder of Common Stock Until Exercise

. This Warrant does not entitle the Holder to any voting rights or other rights as a holder of Common Stock of the Company before the exercise of this Warrant. No provision of this Warrant, in the absence of any affirmative action by the Holder to exercise this Warrant or purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a shareholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

Section 6.3 Loss, Theft, Destruction or Mutilation of Warrant

. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which shall not include the posting of any bond), and upon surrender and cancellation of such Warrant, if mutilated, the Company will make and deliver a new Warrant of like tenor and dated as of such cancellation, in lieu of such Warrant.

Section 6.4 Saturdays, Sundays, Holidays, etc.

If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday, Sunday or a legal holiday, then such action may be taken or such right may be exercised on the next succeeding day not a Saturday, Sunday or legal holiday.

Section 6.5 Authorized Shares.

- (a) The Company covenants that during the period this Warrant is outstanding, the Board of Directors has authorized and reserved (and, in the case of any adjustment to the number of Warrant Shares hereunder, will authorize and reserve) for issuance such number of shares of Common Stock to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company covenants that all shares of Common Stock that shall be so issuable shall be duly or validly issued, fully paid and non-assessable. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for the Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed.
- (b) Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, whose purpose or

effect is to avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of the Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will

- (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately before such increase in par value,
- (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and non-assessable Warrant Shares upon the exercise of this Warrant, and
- (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof as may be necessary to enable the Company to perform its obligations under this Warrant.
- (c) Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any Government Authority.

Section 6.6 Damages

. Without limiting any other provision of this Warrant or the Investment Agreement, if the Company willfully and knowingly fails to comply with any provision of this Warrant, which failure results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

Section 6.7 Fees and Expenses

. Except as otherwise provided herein, all fees and expenses incurred in connection with or related to this Warrant shall be paid by the Person incurring such fees or expenses.

Section 6.8 Amendment; Modification; Waivers

. A provision of this Warrant may be amended or waived if, and only if, such amendment or waiver is in writing and signed, in the case of an amendment, by the Company and the Holder, or in the case of a waiver, by the Person against whom such waiver is intended to be effective, which writing shall specifically reference this Warrant, specify the provision(s) hereof that it is intended to amend or waive and further specify that it is intended to amend or waive such provision(s). No failure or delay by any Person in exercising any right, power or privilege hereunder shall operate as a waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies herein provided shall be cumulative and not exclusive of any rights or remedies provided by law.

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Section 6.9 Notices

. All notices and other communications hereunder shall be in writing and shall be deemed duly given if (a) served by personal delivery upon the Person for whom it is intended, (b) delivered by registered or certified mail, return receipt requested, (c) delivered by overnight air courier or (d) sent by facsimile transmission or email, with prompt confirmation by telephone of such transmission or email, if to the Company, to the address set forth on the signature pages hereto opposite the signature block of the Company, and as to the Holders, on the records of the Company, to receive such notice or to such other address as may be designated in writing, in the same manner, by such Person.

Section 6.10 Third-Party Beneficiaries

. Nothing in this Warrant, express or implied, is intended to confer upon any Person other than the Company and the Holder and their respective successors and permitted assigns any rights, benefits or remedies of any nature whatsoever.

Section 6.11 Governing Law; Submission to Jurisdiction

. This Warrant and all disputes or controversies arising out of or relating to this Warrant shall be governed by, and construed in accordance with, the internal laws of the State of New York, without regard to principles of conflicts of laws that would apply the laws of other jurisdictions. Each of the Company and the Holder agrees that it shall bring any litigation with respect to any claim arising out of or related to this Agreement, exclusively in the United States District Court for the Southern District of New York or any New York State court sitting in New York County (together with the appellate courts thereof, the "Chosen Courts"), and solely in connection with claims arising under this Agreement or the Transactions, each of them (a) irrevocably submits to the exclusive jurisdiction of the Chosen Courts, (b) waives any objection to laying venue in any such action or proceeding in the Chosen Courts, (c) waives any objection that the Chosen Courts are an inconvenient forum or as not having jurisdiction over either the Company or the Holder, (d) agrees that to the extent permitted by the rules of the court in which any such action or proceeding is brought, service of process in such action or proceeding shall be effective if notice is given in accordance with Section 6.9 of this Warrant, although nothing contained in this Agreement shall affect the right to serve process in any other manner permitted by law and (e) agrees not to seek a transfer of venue on the basis that another forum is more convenient. Notwithstanding anything herein to the contrary, (a) nothing in this Section 6.11 shall prohibit any Party from seeking or obtaining orders for conservatory or interim relief from any court of competent jurisdiction and (b) each of the Company and the Holder waives any and all objections or defenses to the recognition, recording, registration or enforcement of such judgment issued by a Chosen Court in any jurisdiction in the world.

Section 6.12 Waiver of Trial by Jury

. EACH OF THE COMPANY AND THE HOLDER ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS WARRANT OR IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND THEREFORE EACH SUCH PERSON HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT SUCH PERSON MAY HAVE TO A TRIAL BY JURY WITH RESPECT TO ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT. EACH OF THE COMPANY AND THE HOLDER CERTIFIES AND ACKNOWLEDGES THAT (a) NO REPRESENTATIVE, AGENT OR ATTORNEY OF THE OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER, (b) SUCH PERSON UNDERSTANDS AND HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (c) SUCH PERSON MAKES THIS WAIVER VOLUNTARILY, AND (d) SUCH PERSON HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND EACH ANCILLARY AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL

WAIVERS AND CERTIFICATIONS IN THIS SECTION.

Section 6.13 Assignment; Successors

. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors of the Company and the successors of the Holder. The provisions of this Warrant are intended to be for the benefit of all holders from time to time of this Warrant and shall be enforceable by any such holder or holder of Warrant Shares.

Section 6.14 Headings

. All heading references contained in this Warrant are for convenience purposes only and shall not be deemed to limit or affect any of the provisions of this Warrant.

Section 6.15 Severability

. The provisions of this Warrant shall be deemed severable and the invalidity or unenforceability of any provision hereof shall not affect the validity or enforceability of any other provision. Whenever possible, each provision or portion of any provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant, or the application thereof to any Person or any circumstance, is invalid or unenforceable, (a) a suitable and equitable provision shall be substituted therefor to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision and (b) the remainder of this Warrant and the application of such provision to other Persons or circumstances shall not be affected by such invalidity or unenforceability, nor shall such invalidity or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction; provided, that, if any one or more of the provisions contained in this Warrant shall be determined to be excessively broad as to activity, subject, duration or geographic scope, it shall be reformed by limiting and reducing it to the minimum extent necessary, so as to be enforceable under applicable law.

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Section 6.16 Specific Performance

. The Company hereby acknowledges and agrees that its failure to perform its agreements and covenants hereunder will cause irreparable injury to the Holder for which damages, even if available, will not be an adequate remedy. Accordingly, the Company hereby consents to the issuance of injunctive relief by the Chosen Courts to compel performance of the Company's obligations and to the granting by the Chosen Courts of the remedy of specific performance of the Company's obligations hereunder.

Section 6.17 Counterparts

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. This Warrant may be executed in counterparts, all of which shall be considered one and the same instrument, and shall become effective when one or more counterparts have been signed by each of the Company and the Holder and delivered to the other.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized.

APPLIED MINERA	LS, INC.	Address for Notices:
By:	Name: Title:	
SAMLYN ONSHO	RE FUND, LP	Address for Notices: 500 Park Avenue, New York, New York 10022 Attn: Michael Barry, General Counsel
By:	Name: Title:	

Signature Page to Warrant

APPENDIX A

Definitions

Term Section Buy-In Section 1.3(e) Call Closing Section 5.3 Call Notice Section 5.3 Section 5.1 Call Option **Chosen Courts** Section 6.11 Common Stock Preamble Company Preamble **Exercise Price** Section 1.2 Holder Preamble Preamble Initial Exercise Date Preamble **Investment Agreement** Market Price Section 5.1 Notice of Exercise Section 1.1(a)(i) Offer Expiration Date Section 3.7 **Option Price** Section 5.2 **Termination Date** Preamble Warrant Preamble Warrant Register Section 4.3 Warrant Right Section 5.2 Warrant Shares Preamble Warrant Share Delivery Date Section 1.3(b)

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- "Board of Directors" means the Board of Directors of the Company.
- "Business Day" means any day except Saturday, Sunday, any day which shall be a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.
- "Close of Business" means 5:00 p.m. New York City time.
- "Convertible Securities" means any rights, options, warrants or other securities convertible into or exercisable or exchangeable for shares of Common Stock.
- "Effective Consideration" means the amount paid or payable to acquire shares of Common Stock (or, in the case of Convertible Securities, the amount paid or payable to acquire the Convertible Security, if any, plus the exercise price for the underlying Common Stock).
- "Ex-Date" means (i) when used with respect to any issuance or distribution, means the first date on which the Common Stock trades, regular way, on the relevant exchange or in the relevant market from which the VWAP was obtained without the right to receive such issuance or distribution, and (ii) when used with respect to any subdivision, split, combination or reclassification of shares of Common Stock, means the first date on which the Common Stock trades, regular way, on such exchange or in such market after the time at which such subdivision, split, combination or reclassification becomes effective.
- "Five-Day VWAP" means the VWAP for the immediately preceding five consecutive Trading Days.
- "Fundamental Transaction" means, at any time while this Warrant is outstanding,
 - (a) a merger, consolidation or other similar transaction or series of transactions to which the Company is a party and pursuant to which (i) the Company is not the surviving Person in such transaction or (ii) if the Company is the surviving Person, the holders of shares of Common Stock immediately prior to such transaction (including for this purpose any shares issuable upon exercise of this Warrant) represent less than 50% of the shares of Common Stock outstanding immediately following such transaction (including for this purpose the shares of Common Stock issuable upon exercise of this Warrant) and
 - (b) any sale of all or substantially all of the Company's assets in one transaction or a series of related transactions.
- "Governmental Authority" means any federal, state or local governmental authority or agency or any instrumentality thereof.
- "Open of Business" means 9:00 a.m. local New York City time.
- "Person" shall be construed broadly and shall include an individual, a trust, a corporation, a partnership, an association, a joint venture, a limited liability company, a joint stock company, an unincorporated organization and a Government Authority.

- "Record Date" means, with respect to any dividend, distribution or other transaction or event in which the holders of Common Stock have the right to receive any cash, securities or other property or in which Common Stock (or other applicable security) is exchanged for or converted into any combination of cash, securities or other property, the date fixed for determination of holders of Common Stock entitled to receive such cash, securities or other property (whether such date is fixed by the Board of Directors or by statute, contract or otherwise).
- "Trading Day" means a day on which the Common Stock is traded on a Trading Market.
- "Trading Market" means the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: OTCBB, OTCQX, OTCQB, OTC Pink, The NYSE Amex, The NASDAQ Capital Market, The NASDAQ Global Market, The NASDAQ Global Select Market, or the New York Stock Exchange).
- "VWAP" means, for any date, the price determined by the first of the following clauses that applies:
 - (a) if the Common Stock is listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is listed or quoted for trading as reported by Bloomberg, L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time));
 - (b) if the Common Stock is not quoted for trading on the OTCBB, OTCQX, or OTCQB, and if prices for the Common Stock are reported in the OTC Pink, the most recent bid price per share of the Common Stock so reported; or
 - (c) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Holder and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

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ANNEX I

NOTICE OF EXERCISE

TO: Applied Minerals, Inc.	
	cts to purchase Warrant Shares of the Company pursuant to the terms ised in full), and tenders herewith payment of the exercise price in full, together ny.
(2) Payment shall be in lawful	money of the United States.
(3) Please issue a certificate or in such other name as is specified bel	certificates representing said Warrant Shares in the name of the undersigned or ow:
The Warrant Shares shall be delivered Commission Account Number or by J	d to the following Depository Trust Company Deposit Withdrawal Agent physical delivery of a certificate to:
	ANNEX II
	ASSIGNMENT & ASSUMPTION FORM
	(To assign the foregoing warrant, execute
	nis form and supply the required information.
1	Do not use this form to exercise the warrant.)
Dated: []	
FOR VALUE RECEIVED, the forego	oing Warrant and all rights evidenced thereby are hereby assigned to _(the "Assignee"). The Assignee, by executing this Assignment and Assumption,
hereby agrees to comply with all of the were originally the Holder thereunder	ne provisions of the Warrant, with the same force and effect as if the Assignee
[HOLDER]	whose address is:
Ву:	
Name:	

Title:	
[ASSIGNEE]	whose address is:
By:	
Name: Title:	
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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 1. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth estimated expenses we expect to incur in connection with the resale of the shares being registered. All such expenses are estimated except for the SEC registration fee.

Registration Fee – Securities and Exchange Commission	\$ 2,959
Accounting Fees and Expenses	10,000
Legal Fees and Expenses	-0-
Miscellaneous	2,000

TOTAL \$ 14,959

ITEM 2. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

As permitted by the Delaware General Corporation Law, the Registrant's Certificate of Incorporation includes provisions that (i) eliminate, to the fullest extent permitted by the Delaware General Corporation Law, the personal liability of its directors for monetary damages for breach of fiduciary duty as a director, and (ii) require the Registrant to advance expenses, as incurred, to its directors and officers in connection with a legal proceeding to the fullest extent permitted by the Delaware General Corporation Law, subject to certain very limited exceptions.

As permitted by the Delaware General Corporation Law, the Bylaws of the Registrant provide that (i) the Registrant is required to indemnify its directors and officers to the fullest extent permitted by the Delaware General Corporation Law, (ii) the Registrant may indemnify any other person as set forth in the Delaware General Corporation Law, and (iii) the rights conferred in the Bylaws are not exclusive.

We currently maintain liability insurance for our directors and officers. In connection with this offering, we expect to obtain additional liability insurance for our directors and officers. Such insurance would be available to our directors and officers in accordance with its terms.

ITEM 3. RECENT SALES OF UNREGISTERED SECURITIES.

1. Offerings to investors for cash to raise working capital.

No underwriter or placement agent was used and no underwriting, placement agent fee or commission was paid. All of the issuances described in this section were exempt from registration pursuant to Section 4(2) of the Securities Act, as transactions not involving a public offering. The sales were separate transactions and were not part of a continuous offering. The first and the third transactions below were investments by funds managed by the largest beneficial holder of our common stock, who was and is also a director. With respect to each transaction listed above, no general solicitation was made by either the Company or any person acting on our behalf; the number of purchasers was limited; the securities sold are subject to transfer restrictions; each purchaser was an accredited investor and sophisticated; each purchaser had access to the Company's public filings and could ask questions of management; and the certificates for the shares contained an appropriate legend stating such securities have not been registered under the Securities Act and may not be offered or sold absent registration or pursuant to an exemption therefrom.

- (a) 3/28/11. Private placement of 2,815,000 shares of common stock to four investors, including three related investment funds in a family of investment funds managed by entities owned by a director of the Company, all of the funds being accredited investors (sales to the individual funds of 1,385,000, 459,000 and 656,000 shares, respectively) and one individual accredited investor of 312,000 shares. Price per share was \$.80 per share and the aggregate price was \$2,250,000.
- (b) 4/18/11. Private placement of 150,000 shares of common stock to an investment fund accredited investor. Price per share was \$.90 per share and the aggregate price was \$135,000.
- (c) 6/27/11. Private placement of 1,250,000 shares of common stock to the same three related investment funds that purchased on 3/28/11, with sales to individual funds706,000, 205,000 and 339,000 shares, respectively. Price per share was \$1.60 and the aggregate price was \$2,000,000.
- (d) 12/22/11. Private placement of 10,000,000 units consisting of shares and warrant to purchase on-half of a share to two related investment funds that were accredited investors, with sales to individual funds of 3,075,000 and 1,537,500 unit, respectively. The price per unit was \$1.00.

The warrants have a term of five years and are exercisable for a period of five years. The Company, has an option (the "Call Option") to acquire all or a portion of the warrants; provided, that, the following conditions are met: (a) the VWAP for the 60 consecutive trading days immediately preceding the date on which the Holder receives the Call Notice (as defined below) is in excess of \$2.00 and (b) the closing market price of the Common Stock (the "Market Price") is in excess of \$2.00 on the date immediately preceding the date on which the Call Notice is received; provided further, that, if the Company exercises a Call Option for a portion of this Warrant, the Company may not acquire less than 962,500 warrants.

(e) 8/2/13. Private placement of \$10,500,000 of \$10% PIK–Election Convertible Notes due 2023 ("2023 Notes"). The purchasers were one investment fund of a family office (\$4 million), an investment fund and two related family funds (\$2.5 million) and an investment fund (\$4 million).

The 2023 Notes bear interest at the rate of 10% per annum, payable (including by issuance of additional October 2010 Notes) semi-annually in arrears on February 1 and August 1 with payments commencing on February 1, 2014. The 2023 Notes were convertible at the option of the noteholder at any time. The 2023 Notes were mandatorily convertible on the earliest date that is one year after the Issue Date when each of the following conditions have been satisfied: (i) the average closing bid price or market price of Company common stock for the preceding 5 trading days is above the Strike Price (as defined below), and (iii) a registration statement is effective and available for resale of all of the converted shares or the noteholder may sell such shares under Rule 144 under the Securities Act.

The number of shares issued on conversion of the 2023 Notes was derived by dividing the principal and accrued interest on the 2023 Notes by \$1.40 (the "Strike Price"). The Strike Price was subject to adjustment in the event of a dividend or distribution on Company's common stock in shares of common stock, subdivision or combination of Company outstanding common stock, or reclassification of Company's outstanding common stock. The note holders may accelerate the entire amount due under the 2023 Notes upon the occurrence of certain events of default.

2. Compensatory grants of shares or options

The grants were made in exchange for services and the services did not relate to raising capital. No payments of cash were made to the Company in connection with the grants. No underwriter or placement agent was used and no underwriting, placement agent fee or commission was paid. All of the issuances described in this section were exempt from registration pursuant to Section 4(2) of the Securities Act, as transactions not involving a public offering. With respect to each transaction listed above, no general solicitation was made by either the Company or any person acting

on our behalf; the securities sold are subject to transfer restrictions; each purchaser was an accredited investor or sophisticated; each purchaser had access to the Company's public filings and could ask questions of management; and the certificates for the shares contained an appropriate legend stating such securities have not been registered under the Securities Act and may not be offered or sold absent registration or pursuant to an exemption therefrom. Only one person of those listed below has sold stock.

(i) Grants to Consultants

(a) On the dates set forth below, shares of common stock were issued to Amit Dharia, Ph.D pursuant to a consulting agreement for research and development and testing of halloysite clay (the Company's product) in plastics.

Grant Date	Number of Shares	Stock Price on Grant
		Date
9/30/10	3,125	\$0.84
10/29/10	2,941	0.85
12/28/10	4,430	0.79
01/03/11	3,472	0.72
01/31/11	3,165	0.79
01/31/11	4,992	0.79
02/28/11	3,125	0.80
03/31/11	3,086	0.81
04/29/11	3,333	1.50
06/30/11	1,786	1.40
07/01/11	1,404	1.78
08/01/11	1,190	2.10
09/01/11	1,471	1.70
10/01/11	1,923	1.30
11/01/11	1,761	1.42
12/01/11	1,522	1.15
01/03/12	1,969	1.27
02/01/12	1,724	1.45

(b) On the dates set forth below, shares of common stock were issued to Yash Khanna, Ph.D pursuant to a consulting agreement for research and development into plastics, functional fillers, and additives using the Company's halloysite clay.

		Stock Price on Gran
Grant Date	Number of Shares	Date
09/24/10	4,167	\$0.84
11/19/10	4,795	0.73
12/01/10	2,941	0.85
01/27/11	4,430	0.79
02/28/11	4,375	0.80
03/31/11	4,321	0.81
04/29/11	2,333	1.50
06/03/11	2,500	1.40
07/01/11	1,966	1.78
08/01/11	1,667	2.10
09/01/11	2,059	1.70
10/01/11	2,692	1.30
11/01/11	2,465	1.42
12/01/11	3,043	1.15
01/03/12	2,756	1.27
02/01/12	2,414	1.45
03/01/12	2,397	1.46
04/01/12	2,365	1.48
05/01/12	1,872	1.87
06/01/12	2,258	1.55
07/02/12	2,593	1.35
08/01/12	2,518	1.39
09/12/12	2,536	1.38
10/01/12	2,692	1.30
11/05/12	2,121	1.65
12/03/12	2,071	1.69
01/04/13	2,273	1.54
02/07/13	2,215	1.58
03/01/13	2,121	1.65
04/01/13	2,500	1.40
05/01/13	2,448	1.43
06/03/13	2,713	1.29
07/01/13	2,941	1.19
08/01/13	3,500	1.00

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(c) On the dates set forth below, shares of common stock were issued to Edward Volk, pursuant to an agreement relating to selling the Company's products.

		Stock Price on Grant
Grant Date	Number of Shares	Date
09/01/11	6,176	\$1.70
10/01/11	2,692	1.30
11/01/11	2,465	1.42
12/01/11	3,043	1.15
01/03/12	2,756	1.27
02/01/12	2,414	1.45
03/01/12	2,397	1.46
04/12/12	2,365	1.48
05/01/12	1,872	1.87
06/01/12	2,258	1.55
07/02/12	2,593	1.35
08/01/12	2,518	1.39
09/01/12	2,536	1.38
10/01/12	2,692	1.30
11/05/12	2,121	1.65
12/03/12	2,071	1.69
01/04/13	2,273	1.54
02/07/13	2,215	1.58
03/01/13	2,121	1.65
04/01/13	2,500	1.40
05/01/13	2,448	1.43
06/03/13	2,713	1.29
07/01/13	2,941	1.19
08/01/13	3,500	1.00
09/03/13	3,302	1.06
10/01/13	3,211	1.09
11/01/13	2,941	1.19
12/02/13	3,182	1.10
01/01/14	3,182	1.10

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(d) On the dates set forth below, shares of common stock were issued to Eric Wisnefsky, pursuant to an agreement relating to selling the Company's products..

		Stock Price on Grant
Grant Date	Number of Shares	Date
05/15/12	7,234	\$1.87
06/11/12	6,774	1.55
08/30/12	7,609	1.38
12/03/12	6,213	1.69
03/07/13	6,364	1.65
06/03/13	8,140	1.29
09/03/13	9,907	1.06
12/02/13	9,545	1.10

(e) On the dates set forth below, five-year options to purchase shares of common stock were issued to Victor Lazarovici pursuant to a brokerage agreement relating to preparing a sales document and to selling activities concerning the Company's unused Atlas Mine property in Idaho.

Grant Date	Shares subject to Options	Exercise Price
10/01/10	139,340	\$0.75
01/03/11	124,481	0.80

(f) On the date set forth below, a five-year options to purchase shares of common stock were issued to Crossways Consulting, the consulting vehicle for Tavia Barak, for consulting services relating to sales leads.

Grant Date	Shares subject to Options	Exercise Price
5/29/13	50.000	\$1.35

- (ii) Grants to investment bankers
- (a) On the date set forth below, the Company granted to Dahlman Rose & Co. a five-year option to purchase shares of common stock in connection with an agreement to provide financial advisory services.

Grant Date	Shares subject to Options	Exercise Price
4/28/11	461,340	\$1.15

(b) On the date set forth below, the Company granted to Tejas Securities, Inc. shares of common stock as payment for termination of an financial advisory agreement.

		Stock Price on Grant
Grant Date	Number of Shares	Date
05/05/11	37,500	\$0.80

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(iii) Grants to Directors in their capacity as such

On the dates set forth below, the Company granted to Evan Stone, a director of the Company and an accredited investor, the following shares as payment for director's fees, except for the grant on 2/08/11, which was a five year option to purchase common stock at an exercise price equal to the stock price on the date of grant and which was granted for extra work as a director.

	Stock Price on Grant
Number of Shares	Date
12,500	\$0.80
6,944	0.72
200,481	0.83
5,556	0.90
2,809	1.78
3,846	1.30
3,937	1.27
3,378	1.48
3,704	1.35
3,846	1.30
4,464	1.54
4,911	1.40
5,777	1.19
9,518	1.09
	12,500 6,944 200,481 5,556 2,809 3,846 3,937 3,378 3,704 3,846 4,464 4,911 5,777

(b) On the dates set forth below, the Company granted to John Levy, director of the Company and an accredited investor, the following options to purchase shares of common stock as payment for director's fees (including service as chairman The first two options were five year options and the third is a ten year option. The exercise price was the market price on the date of grant.

Grant Date	Number of Shares	Exercise price
02/08/11	100,000	\$0.83
01/01/12	100,000	1.24
11/22/12	100,000	1.66

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(iv) Grants to Employees

(a) On the dates set forth below, the Company granted compensatory ten-year options to purchase shares of common stock to Chris DeArmitt, Ph.D, the Chief Technology Officer of the Company at the time, for the share amounts and the exercise prices set forth below

Grant Date	Number of Shares	ExercisePrice
02/01/11	213,402	\$0.78
08/30/11	54,367	1.90
02/01/12	125,000	1.45
02/01/13	11,467	1.58

(b) On the date set forth below, the Company granted a compensatory ten-year option to purchase shares of common stock to Material Advisors, LLC, which had a management agreement with the Company and all of whose equity owners are accredited investors, for the share amount and the exercise price set forth below

Grant Date	Number of Shares	Exercise price
02/08/11	2,904,653	\$0.83

(c) On the dates set forth below, the Company granted compensatory ten-year options to purchase shares of common stock to Nat Krishnamurti, the Chief Financial Officer of the Company and an accredited investor, for the share amount and the exercise price set forth below

Grant Date	Number of Shares	Exercise price	
05/17/12	300,000	\$1.55	
05/29/13	65.000	1.35	

(d) On the date set forth below, the Company granted a compensatory ten-year option to purchase shares of common stock to Chris Carney, a vice-president of the Company and an accredited investor, for the share amount and the exercise price set forth below

Grant Date	Number of Shares	Exercise price
11/20/12	580,931	\$1.66

(e) On the date set forth below, the Company granted a compensatory ten-year option to purchase shares of common stock to Eric Basroon, a vice-president of the Company and an accredited investor, for the share amount and the exercise price set forth below

Grant Date	Number of Shares	Exercise price
11/20/12	580,931	\$1.66

(f) On the date set forth below, the Company granted a compensatory ten-year option to purchase shares of common stock to Eric Basroon, a vice-president of the Company and an accredited investor, for the share amount and the exercise price set forth below

Grant Date	Number of Shares	Exercise price
11/20/12	1,742,792	\$1.66

(g) On the dates set forth below, the Company granted compensatory ten-year options to purchase shares of common stock to William Gleeson, the General Counsel of the Company and an accredited investor, for the share amount and the exercise price set forth below

Grant Date	Number of Shares	Exercise price
09/15/11	900,000	\$1.90
11/22/12	72,405	1.66

(h) On the date set forth below, the Company granted a compensatory ten-year option to purchase shares of common stock to Yash Khanna, Chief Technology Officer of the Company, in the share amount and the exercise price set forth below

Grant Date	Number of Shares	Exercise price
6/24/13	300,000	\$1.15

(i) On the date set forth below, the Company granted a compensatory ten-year option to purchase shares of common stock to Rogerio Galante, Head of Iron Oxide Operations of the Company and previously a consultant, for the share amount and the exercise price set forth below

Grant Date	Number of Shares	Exercise price
8/20/13	300,000	\$1.10

(v) Issuance to compensate for opting out of class action settlement

On the date set forth below, the Company granted shares of common stock to persons named below. The first three are officers of the Company and accredited investors. The fourth is the manager of investment funds holding the Company's stock, is owned by a director who is the largest beneficial holder of the Company's common stock and is an accredited investor. The Company had been a defendant in a securities law class action lawsuit and each of the grantees was a member of the plaintiff class. The Company determined that the cost of the settlement could be significantly reduced if the named persons opted out of the class and received in stock from the Company what was believed to be equal to the amount they would have received in cash as part of the settlement of the lawsuit.

		Stock price on
Grantee	Number of Shares	date of grant
Andre Zeitoun	46,975	\$0.84
Chris Carney	22,707	0.84
Eric Basroon	8,745	0.84
IBS Capital	349,287	0.84
	Andre Zeitoun Chris Carney Eric Basroon	Andre Zeitoun 46,975 Chris Carney 22,707 Eric Basroon 8,745

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ITEM 4. INDEX TO EXHIBITS

Exhibit		
Number	Description of Exhibit	
3.1	Articles of Incorporation, as amended	(1)
3.2	Bylaws, as amended	(2)
5	Opinion of William Gleeson	(14)
10.1	Form of investment agreement used in connection with capital	(3)
	raise in September, 2012	
10.2	Form of Investment Agreement used in connection with January, 2013 capital raise	(4)
10.3	Amended Agreement with Material Advisors LLC for 2012	(5)
10.4	2012 Long Term Incentive Plan and Short Term Incentive Plan	(6)
10.5	Terms of private placements of securities	(7)
10.6	2013 employment agreement for Andre Zeitoun	(8)
10.7	2013 employment agreement for William Gleeson	(9)
10.8	Form of investment agreement used in connection with August, 2013 capital raise	
10.9	Form of PIK Note issued in connection with August, 2013 capital raise	(11)
10.10	Form of registration rights agreement used in connection with August, 2013 capital raise.	(12)
23.1	Consent of EisnerAmper LLP, Independent Registered Public Accounting Firm dated March 31, 2014	*
23.2	Consent of PMB Helin Donovan LLP, Independent Registered Public Accounting Firm dated March 31, 2014	*
23.3	Consent of William Gleeson	(14)

* filed herewith

- 1. Incorporated by reference to exhibit 3(i)(a)1included in the Registrant's Current Report on Form 8-K, filed on November 26, 2012.
- 2. Incorporated by reference to exhibit 3(i)(b) included in the Registrant's Current Report on Form 8-K filed November 26, 2012.
- 3. Incorporated by reference to exhibit 99.1 included in the Registrant's Current Report on Form 8-K filed October 1, 2012
- 4. Incorporated by reference to exhibit 99.1 included in the Registrant's Current Report on Form 8-K filed January 23, 2012.
- 5. Incorporated by reference to exhibits 10.15 .2 included in the Registrant's Annual Report on Form 10-K/A filed August 9, 2012
- 6. Incorporated by reference to Exhibits 99.1 and 99.2 1included in the Registrant's Current Report on Form 8-K filed on November 26, 2012

- 7. Incorporated by reference to Items 3.02, 8.01, 8.01, 2.03, 2.03, 2.03 and 2.03 included in the Registrant's Current Reports on Form 8-K filed on January 16, 2009, May 29, 2008, September 29, 2008, January 7, 2009, April 10, 2009, May 4, 2009, October 26, 2009, May 20, 2010, October 28, 2010, March 31, 2011, April 18, 2011, June 27, 2011, and December 27, 2011.
- 8. Incorporated by reference to Item 99.1 in the Current Report of Form 8-K filed on March 15, 2013.
- 9. Incorporated by reference to Item 99.2 in the Current Report of Form 8-K filed on March 15, 2013.
- 10. Incorporated by reference to Item 99.1 in the Current Report of Form 8-K filed on August 5, 2013.
- 11. Incorporated by reference to Item 99.2 in the Current Report of Form 8-K filed on August 5, 2013.
- 12. Incorporated by reference to Item 99.3 in the Current Report of Form 8-K filed on August 5, 2013.
- 13. Filed as exhibits 23.1 and 23.2 to the registration statement filed on October 2, 2013

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ITEM 5. UNDERTAKINGS.

The undersigned registrant hereby undertakes:

- 1. to file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement to:
 - i. include any prospectus required by section 10(a)(3) of the Securities Act:
 - ii. reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - iii . include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.
 - 2. that, for the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
 - to remove from registration by means of post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
 - 4. that, for the purpose of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser

with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

- 5. that insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person to the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.
- 2, The undersigned registrant hereby undertakes to deliver or cause to be delivered with the prospectus, to each person to whom the prospectus is sent or given, the latest annual report to security holders that is incorporated by reference in the prospectus and furnished pursuant to and meeting the requirements of Rule 14a-3 or Rule 14c-3 under the Securities Exchange Act of 1934; and, where interim financial information required to be presented by Article 3 of Regulation S-X are not set forth in the prospectus, to deliver, or cause to be delivered to each person to whom the prospectus is sent or given, the latest quarterly report that is specifically incorporated by reference in the prospectus to provide such interim financial information.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this amendment to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of New York, New York, on April 11, 2014.

APPLIED MINERALS, INC .

April 11, 2014 By: /s/ ANDRE ZEITOUN

Andre Zeitoun

Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this amendment to the registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Andre Zeitoun	Director and Chief Executive Officer	April 11 , 2014
/s/ Nat Krishnamurti	Chief Financial Officer (Principal Financial and Accounting Officer)	April 11, 2014
/s/ John F. Levy*	Director, Chairman of the Board of Directors	April 11 , 2014
/s/ David Taft*	Director	April 11, 2014
/s/ Mario Concha*	Director	April 11, 2014
/s/ Robert Betz *	Director	April 11, 2014
/s/ Ali Zamani *	Director	April 11, 2014

^{*} by Andre Zeitoun , Attorney-in-Fact.